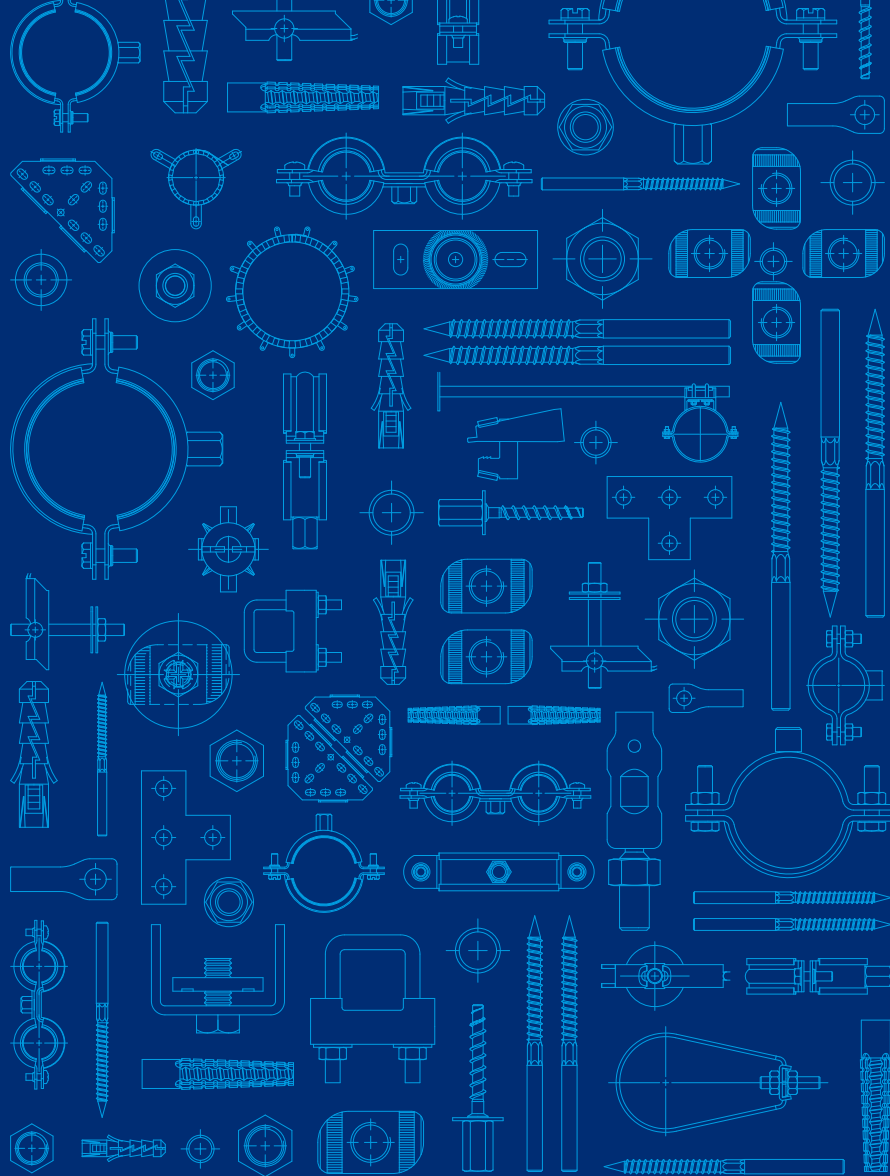




FASTENING SYSTEMS

Product catalogue
edition 8.6

Customer service

+48 538 238 866
export@niczuk.pl

Technical consultant

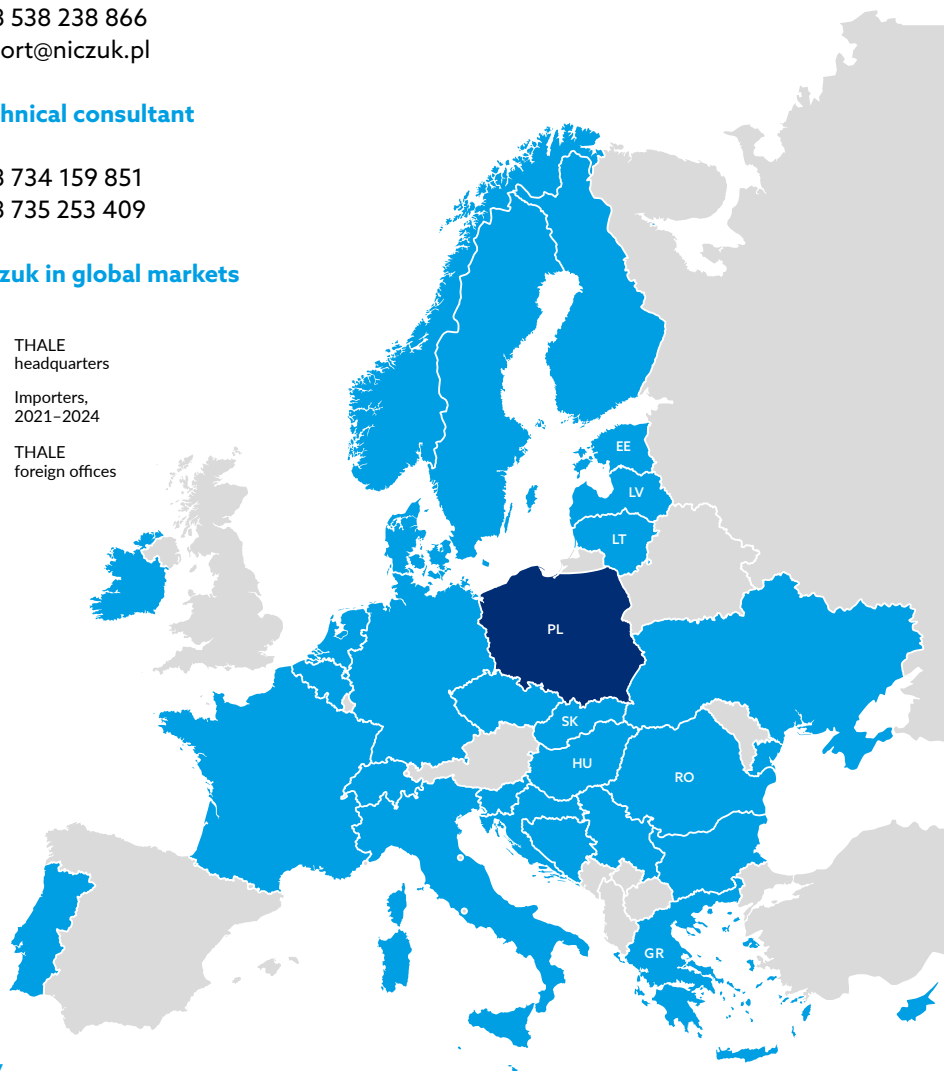
+48 734 159 851
+48 735 253 409

Niczuk in global markets

PL THALE
headquarters

Importers,
2021–2024

RO THALE
foreign offices



Key

 anti-corrosion
protection

 installation
method

 connection
type

 lining
material

 material
(tapes)

 substrate
material type

 external
material

 connection
screws

 closure
type

CHAPTERS

0

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with lining

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without lining

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Fixed points
and sliding
plates

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and ventilation
accessories

7

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Roof support
system and
service platforms

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support
kits

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Be with the best.

Our strength and high position in the installation industry is the result of 66 years of experience and persisting will for dynamic development. We care for details. We think multidirectionally. We assist with technical and design advice. We continuously develop our products in order to meet the market requirements and needs. We improve not only their ergonomics and quality of materials but we also care for their aesthetics and compatibility. Going beyond borders gives us a lot of satisfaction. This is why we are not afraid to do it and we operate in the foreign market with success. Find out our possibilities and join the best!



These are the values that make us stand out.

We are proud of what we are doing. We can and we like to distinguish. Our success in the market of fastening systems originates from our advantages. Long-term experience and will for development make us achieve better and better results and sales results year by year. We like challenges and want to be pioneers in the market. This drives us to action.



POLISH MANUFACTURER

Due to national production, we are more competitive. We manufacture, sell, and invest in Poland. The developed network of well-supplied warehouses ensures that we are always on time and in the right place.



QUALITY GUARANTEE

We have been offering the highest quality products for over 66 years which is confirmed by Quality Management System ISO 9001 applied in the company.



MARKETING SUPPORT

We act according to individually prepared strategies which aim at building a coherent image of the brand. In terms of marketing support we organize trainings, events for Customers and we also prepare communication plans and all types of promotional actions.



TECHNICAL SUPPORT

We provide technical support. We offer consultations at convenient time and place. We provide advisory services both in the company registered offices as well as directly at the construction sites.



PROJECT SUPPORT

In case of complex projects, our engineers support design offices, investors and contractors. Experience and know-how which we have at our disposal is the guarantee of our Customers' satisfaction.



FAST DELIVERY

The network of logistics and distribution warehouses as well as many sales points in Poland and abroad guarantee quick and efficient delivery of orders. The addresses of all distribution points are available in our Customer Service Office.



We are ECO-friendly.

Natural environment protection is an important element of the company policy. We realize a series of ecological undertakings and we carry out actions aiming at reducing the consumption of power factors, maintenance of the machine park in a perfect condition and strict supervision over the processes which take place with the use of chemical substances (varnishes, paints, solvents). The ecological awareness of the company employees and periodical trainings are significant elements of the company functioning.





WASTE MANAGEMENT

We plan, design and implement measures to reduce waste and its negative impact on the environment. Our waste management is very effective – we minimize waste generation “at the source.” All the waste we produce is transferred to specialized units for use in secondary production or disposal. We recycle 97% of the waste we generate.



SECONDARY RAW MATERIALS

A significant portion of the waste generated in the company's operations is used as secondary raw materials obtained from post-production and post-consumer waste. Scrap metal, waste paper, plastic waste and used oils are the plant's main secondary raw materials.



GREEN SUPPLIER

The principles of environmental responsibility that guide us are also applied at the supplier level. In cooperation with our business partners, it is crucial for us that their approach to environmental protection aligns with ecological standards.



MODERN CARDBOARD TECHNOLOGIES

In 2018, we made the decision to replace plastic packaging with eco-friendly alternatives. This process continues to date and yields tangible results. In 2022 alone, we replaced 300,000 plastic packages with cardboard ones. We strive to primarily use cardboard made from recycled materials, thereby reducing waste and the need for tree cutting, which is fundamental to the production of traditional cardboard packaging.



SELECTION OF CLEAN MATERIALS

We make every effort to use environmentally friendly raw materials and supplies. The standard in our company is the use of unbleached ecological paper. Produced through recycling, it is non-toxic, containing neither chlorine nor petroleum-based components. Independent laboratory studies have confirmed that the unbleached paper we use poses no environmental or health risks to users.



ECONOMICAL PRINTING

We feel responsible for our environment, therefore we pay particular attention to economical printing, the use of environmentally friendly printing paper, envelopes and recyclable packaging that does not harm the environment. We significantly reduce paper consumption by implementing an electronic document workflow system. We are equipping workstations with dual monitors, making it easier to compare documents without printing them.



Technical support.

Do you have a question regarding the selection of products? On each stage of cooperation, we offer professional know-how and time of our Technical Advisers who operate on the whole territory of the country.

Project support.

You are an important partner for us, regardless of the fact whether you are an installer, a general contractor or a designer. We support everyone and on each stage of the investment.

CONTRACTORS



We advise on costs optimization. Knowledge and experience make quality and safety the basis of our actions and do not increase the investment costs. Due to our solutions you will get the optimum selection of fixing systems without additional financial expenditures.

DESIGN OFFICES



We offer preparation of projects presenting proper use of our products taking into account the specificity of an object ensuring the observance of safety principles. Cooperation at the design stage is based on proven solutions and rich experience.

CAD LIBRARY IN 2D/3D



In terms of support, we provide CAD library covering all our products, both in 2D and 3D format.

Details?

Feel free to ask!

 **GoBeam**

 **GoFrame**

 **GoSterm**

Calculation software.



And life becomes easier.

Using our innovative calculation software:
GoBeam, GoFrame, GoSterm you will receive support
in terms of selecting the elements of Niczuk system.
We guarantee safety of solutions and conformity
with Polish and European standards and construction
regulations.

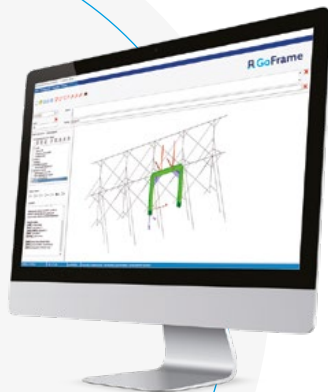


GoBeam

The module determines the tension values and bend arrows in the mounting channel depending on the element support and value of forces applied. GoBeam allows for the analysis of single- and multi-span systems up to 10 support points and selection of the mounting channel which meets the set static system.

GoFrame

GoFrame software with the set loads selects applicable elements needed to build a 3D frame.



GoSterm

The module is used for determining forces which act on fixed points and thermal expansions as well as tensions in the pipeline. Calculations are performed for one of 5 natural compensation schemes and for flexible joints. The program takes into account various pipe types within the diameters of up to DN500.

Save your time!

Check our software
available at [niczuk.eu](http://www.niczuk.eu)



MXD fittings in ultra-thin anti-corrosion coating Ultra Cover XP.

- Designed to create spatial connections from 41 mm wide mounting profiles
- Special ribbing that guarantees stability and strength of created structures
- Adjustable in position when used with torsion elements such as EZP and ESZ
- Available in zinc plated and ultra Cover XP coating for outdoor applications



MORE INFORMATION

CHAPTER 18

Products in UltraCover XP coating

p. 260

 **Ultra
Cover XP**

Trainings.

We are experts in our sector. We are very anxious to share our knowledge with all those who are interested in modern solutions in installation techniques.

We organize a series of trainings for installers, designers and specialists from various construction sectors across the country. Trainings are free of charge both for installers working for us permanently and also for companies which are starting their adventure with Niczuk systems.

The implementation of an effective program of free product trainings in terms of installation technique or fire protection allows broadening knowledge about fixing systems. Training covers also trade and marketing information but most of all expert's technical knowledge. Training allow training allows us to obtain new skills, make up the element of development, and raise the qualifications necessary for everyday work. Trainings are carried out by experienced and qualified engineering and technical personnel.

PRODUCT TRAININGS

Trainings dedicated to distribution companies aim, most of all, at broadening knowledge about the company's products and newly implemented solutions. During product trainings, we not only provide general information about the whole range of products but also teach how to use them optimally.

TRAININGS ON PROPER AND EFFECTIVE ASSEMBLY

For installers, we offer training in installation techniques and fixing systems with special consideration for proper assembly, the universality of its use, and time-saving.

TRAININGS ON FIRE PROTECTION

We offer specialist trainings in fire protection. Get information about the most modern techniques for preparing fire protection systems taking into account binding standards and regulations. We are aware that even the best quality protection systems will not be functional in the event of improper assembly. We train contracting companies in cooperation with National Fire Brigade preventers and fire protection experts. We adjust the systems to specific fire hazard zones and the useful nature of the given object. Our system solutions ensure the contractor that the protection systems conform to the valid construction law and fire safety of buildings.

Please contact us
to set up all the details
regarding training



+48 538 238 866



Technical documentation.

All our products are the synonyms of quality, safety and reliability. Detailed control over the realization process and continuous supervision over technical documentation are one of our priorities. System solutions which we offer conform to the binding construction law.

EN ISO 9001 CERTIFICATE

Technical approvals, national technical assessments, and certificates held by our suspension system are evidence of their reliability. The quality management system EN ISO 9001 confirms compliance with standards in the design, production, and sale of fastening systems for the installation industry.

EN ISO 14001 CERTIFICATE

ISO 14001 is an international standard that defines the principles for minimizing pollution caused by the economic activities of businesses. It aids in monitoring and improving environmental performance, including reducing energy and paper consumption, as well as limiting waste and greenhouse gas emissions. It confirms that our company operates in accordance with the principles of sustainable development.

EN 1090-1 CERTIFICATE

In response to our customers' expectations, we have reorganized our existing Factory Production Control (FPC) system to comply with the European harmonized standard EN 1090-1. Continuous supervision at all production stages and its certification ensures the quality and safety of using our products at the highest level. The placement of CE marking on our products confirms the declared properties of our steel elements and constructions.

EN ISO 3834-2 CERTIFICATE

For further improvement, we have implemented a comprehensive quality management system in welding, in accordance with the standard EN ISO 3834-2. We guarantee the stability of the welding process, ensuring high-quality products for our customers.

ENVIRONMENTAL DECLARATION

The EPD is a third-party-verified certificate assessing product's environmental impact at various stages of its production and lifecycle: from raw material acquisition through production, transportation, assembly, usage, disposal and recycling. Possessing an environmental declaration ensures that our company operates sustainably focusing on reducing carbon dioxide emissions and consuming natural resources.

NATIONAL TECHNICAL ASSESSMENTS

Niczuk's fastening system holds national technical assessments and national declarations of performance, which are confirmed by certificates from the Institute of Building Technology, allowing the products to be marketed and used in construction.



FM Approvals is an international leader in testing and certification, particularly for fire protection products. They certify products and services, contributing to the prevention of losses related to fires in warehouse and production facilities. FM provides comprehensive global solutions backed by laboratory research and testing. The products undergo annual audits. Their certification is often required by insurance companies for facilities.



VdS is among the leading organizations in expert appraisals and certifications in the field of fire protection and safety. The effectiveness of fire protection and anti-burglary measures is a primary task from the perspective of insurers, along with the technical assessment of installations. Devices tested and approved by VdS carry certification and undergo annual audits. Their certification is often required by insurance companies for facilities.



D Ultra
Cover XP | **21 years**
of guarantee

Coatings.

Anti-corrosion coatings applied in the course of manufacturing of our products is the highest quality protection against surface and installation elements corrosion, which operate in the environments that require increased resistance to the impact of chemical environment, UV and water influence, guaranteeing high parameters of the quality of realization.



25 years of guarantee

ANTIQ

Elements in Antiq coating are a perfect solution for historical objects.

We have introduced the highest quality products in our offer which will not only create perfect composition with the elevation of historical buildings but are also durable and functional. Technologies and modern solutions applied by us allow for adjusting the products to the needs of historical buildings at the same time maintaining high anti-corrosion parameters.



The elements in Antiq coating add character and constitute important accents in the reconstructed and subject to renovation buildings. Aesthetics, high quality and useful values are the most important features which shall characterize materials applied for the type of buildings renovation. There are two types of anti-corrosion coatings applied in the production of elements in Antiq coating. The first one, applied directly on the handle, is flake coating in black shade, then the pipe clamps are covered by powder painting coating. The coating obtained in such a way is resistant to corrosion, chemical substances, high temperature and mechanical damage. It protects steel surfaces used in direct exposure to atmospheric conditions for a long time.

STAINLESS STEEL

Exceptional resistance of stainless steel to corrosion results from the process of material passivation. The oxide layer formed, despite small thickness, resists the permeability of corrosion factors and decides about the resistance to the impact of aggressive environments.

HOT-DIP GALVANIZATION

The thickness of zinc coating is from 45 to 150 microns. Hot-dip galvanization is an exceptional protection against corrosion and impact of atmospheric conditions. Hot-dip galvanized products are intended for application, most of all, outside, where they are in contact with atmospheric conditions.

ELECTRIC GALVANIZATION

It is the most frequently applied way of metal surface protection. Electro-galvanized metal products are intended for assembly inside buildings.



ULTRA COVER XP

Our most modern achievement is ultra-thin anti-corrosion layer Ultra Cover XP which protects products leaving behind the hitherto applied electric and hot-dip galvanization technologies. Ultra Cover XP characterizes with high resistance to external factors and belongs to the group of lamellar (flake) coatings.

The innovative technology of non-electrolytic application of anti-corrosion coatings is resistant to temperature and chemical agents with high corrosion resistance. Tests showed that Ultra Cover XP coating resists over 1,000 h in a salt chamber according to PN-EN ISO 9227:2012. The corrosion resistance of Ultra Cover XP is much higher than in classically hot-dip galvanized coatings with much smaller thickness, while it is thin enough not to change the geometry of connection elements and as opposed to hot-dip galvanization, zinc-plated elements do not require calibration, which has a positive impact on the resistance of joints.

Main advantages and benefits of Ultra Cover XP:

- perfect resistance to corrosion,
- high resistance to temperature and chemical agents,
- limited white corrosion and other corrosion products appearing in the course of use,
- resistance to many mild chemical substances and solvents, including petrol and brake fluid,
- no hydrogen embrittlement in the material,
- possibility of covering complicated shapes, recessions and openings,
- small thickness of Ultra Cover XP coating has greater corrosion resistance than higher thickness of traditional coating.

Ultra Cover XP coating is composed of a few layers. At first, the product is covered by a base layer which reacts with steel surface creating, after applicable processing, very well adhering, specific shell. Then, the base is covered by a sealer which ensures the required durability. Ultra Cover XP makes the product more repeatable, resistant to atmospheric conditions. Modern coating lacks any discoloration and sags which essentially improves aesthetic values.

Ultra Cover XP coating is eco-friendly!

Ultra Cover XP does not contain any harmful chromates, is safe to the surrounding and its production is energy-saving and undemanding. The process in which products are covered with the coating ensures smaller, in comparison to other similar ones, energy consumption and low water consumption.

GUARANTEE

All the products

Ultra Cover XP®

21
years
of guarantee



New products and innovations.

All our products are the synonyms of quality, safety and reliability. Detailed control over the realization process and continuous supervision over technical documentation are one of our priorities. System solutions which we offer conform to the binding construction law.

CERTA

Heavy duty construction.

NEW

S355 structural steel

Hole layout, allowing full adjustment

Slotted holes for through-hole mounting

Ribbing increasing resistance to buckling, deformation and eccentric torsion

Anti-corrosion coating — hot-dip galvanizing with coating thickness $\geq 55 \mu\text{m}$

CERTA heavy channels

CERTA channels are available in two sizes: 82x82x3 mm (KE) and 100x100x4 mm (KJ) and a length of 3 and 6 meters. Their closed structure makes it possible to create horizontal beams, columns and a variety of spatial structures with relatively low dead weight.

MORE INFORMATION

CHAPTER 19

CERTA – heavy channel system

pages 267-294

Pipe clamps HOBBY.

- New revolutionary product
- Unique geometry of lugs ensures stability and high resistance
- No need to apply double-threaded screws with a flange
- Washers made of plastic secure bolts against falling out
- Damping insert made of EPDM elastomer with thermal resistance from -40°C to +120°C



hobby

MORE INFORMATION

CHAPTER 1
Pipe Clamps
with lining
page 34

CHAPTER 2
Pipe Clamps
without lining
page 57

Sprinkler pipe clamps FM and VdS approved.

NEW

- Pipe clamps for sprinkler systems with FM and VdS certificate
- Fixing nuts replaced with integrated thread in lugs
- Easy assembly - no risk of losing the nut
- Washers made of plastics securing bolts against falling out
- Bolts of 8.8 class
- Full embossing increases the clamp resistance extending to lugs increasing the rigidity of the critical bending location



Sprinkler pipe loop FM & VdS approved.

MORE INFORMATION

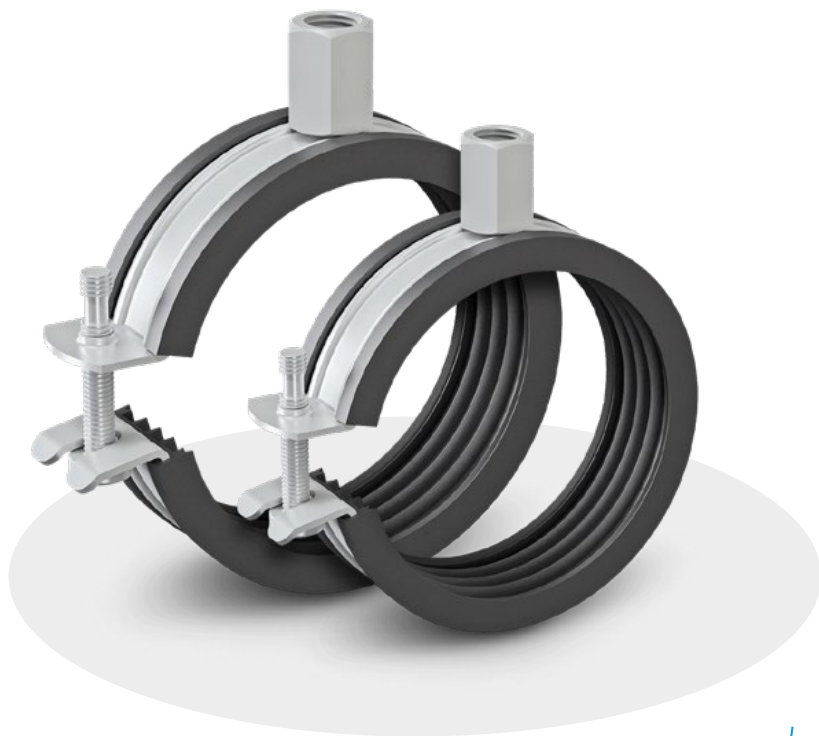
CHAPTER 9
Fire protection
system
pages 110-115

- FM certificates
- Fast and comfortable assembly thanks to the cage nut
- Smooth and easy height adjustment

Quick installation pipe clamps WESTA.

NEW

- Innovative clamp closure solution for easy installation
- Quick assembly thanks to one-sided clamp closure
- Ideal for fixing plastic, copper, or steel pipes with small diameters
- Two-thread M8/M10 connection
- Fully protected by an anti-corrosion coating
- Damping insert made of EPDM elastomer with thermal resistance from -40°C to +120°C

**MORE INFORMATION****CHAPTER 1**

Pipe Clamps with lining

pages 37

westa

UWG clamps in ultra-thin Ultra Cover XP anti-corrosion coating.

- Intended for use outside and in environments with corrosivity class up to C4, inside industrial, power, and chemical facilities
- Diameter range from 100 to 400
- Double-threaded M8/M10 connection
- EPDM damping insert

NEW



MORE INFORMATION

CHAPTER 18

Products in UltraCover XP coating

page 253

 **Ultra
Cover XP**





Gloves.

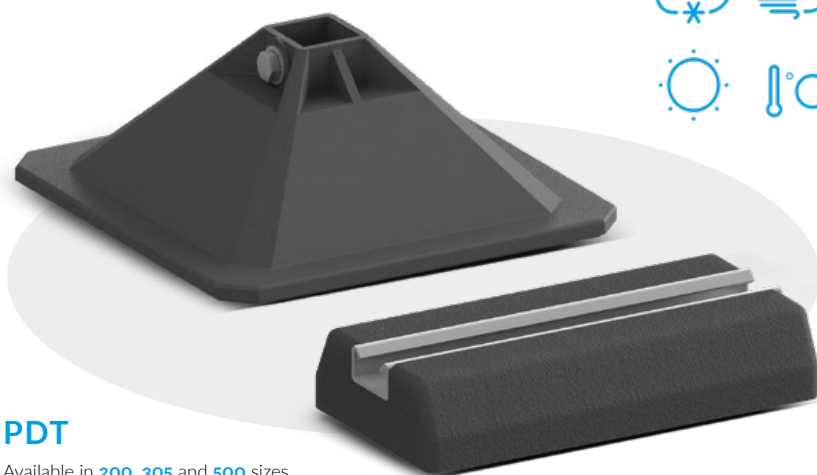
High quality leather gloves. Designed especially for fitters. They have a perfect contact surface which increases the comfort of work. A wide strap ensures the glove stabilization on the hand.

**MORE
INFORMATION**

CHAPTER 15
Installer's work
ergonomics
page 206

Roof support PDT and PDE.

A new series of products made of plastics intended for flat roofs with membrane coating. Available also in sets with mounting channels and connection elements.



PDT

Available in **200, 305** and **500** sizes. Perfect reliability and full resistance to the impact of adverse atmospheric conditions. Stable installation. Intended for all types of bases, also flat roofs and low slope roofs with membrane coating.

PDE

Available in **250, 400, 600, 1000** sizes. The supports are applied while assembling smaller devices of external units, pipes, ventilation ducts and bunches of cables as well as for the purposes of constructing servicing platforms.

MORE INFORMATION

CHAPTER 7

Roof support system

pages 96-104

01 Pipe clamps with lining

01. Pipe clamps with lining

- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

1.1. Pipe clamps with lining



Pipe clamps EXPERT

31



Pipe clamps DUO

33



Pipe clamps HOBBY

34



Pipe clamps BINCO

35



Pipe clamps ANTIQ

36



Pipe clamps WESTA UPGSW

37



Pipe clamps BACO UPGSB

38



Double pipe clamps UDG

39

1.2. Clamps for copper pipes



Clamps for copper pipes UPGM

40



Double clamps for copper pipes UDGM

40

01

Pipe clamps with lining

1.3. Thermal insulation clamps



Thermal insulation clamps
L2

42



Thermal insulation clamps
L4

43



Thermal insulation clamps
L6

44



Thermal insulation clamps
LX-13

45



Thermal insulation clamps
LX-19

46



Thermal insulation clamps
LX-25

47



Thermal insulation clamps
PX-13

48



Thermal insulation clamps
PX-20

49



Thermal insulation clamps
PX-30

50



Thermal insulation clamps
PX-50

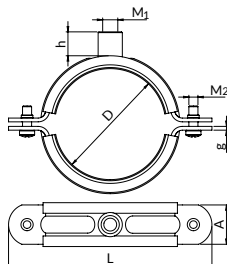
51



Thermal insulation clamps
PX-30, PX-50 with a flange

52

PIPE CLAMPS EXPERT UPG



Permissible load

Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

expert



electro-galvanized



cross recessed (from UPG-3/8" to UPG-5") or hexagonal head (from UPG-139 to UPG-500)

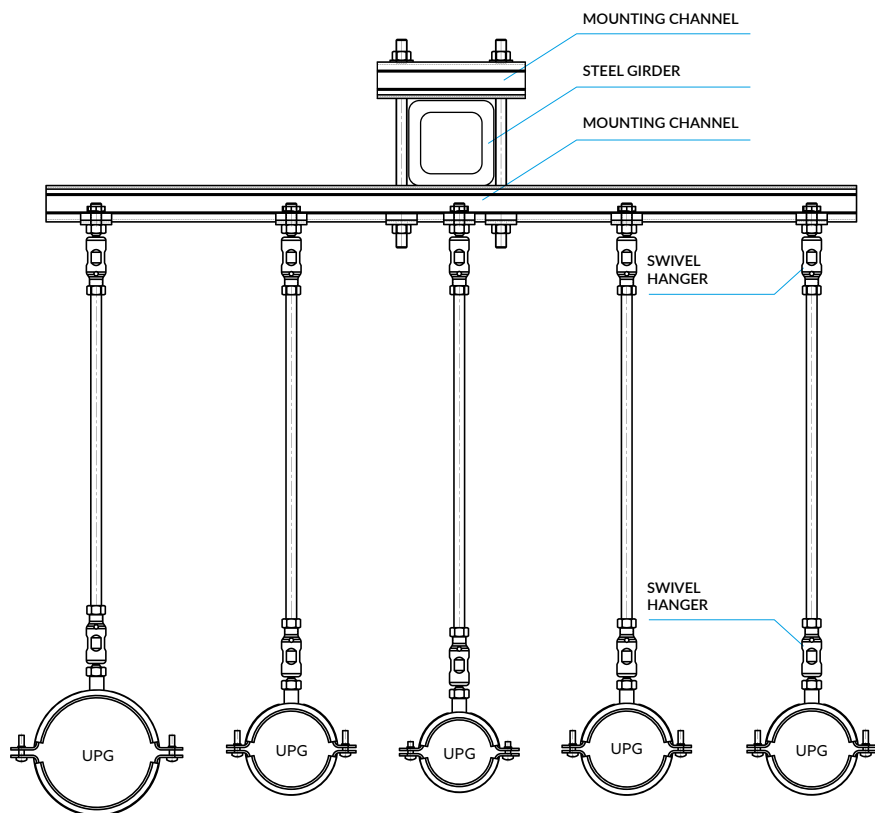


material: EPDM elastomer; thermal resistance: -40°C to +120°C,
possibility of ordering with silicone lining with thermal resistance of: -60°C to +250°C

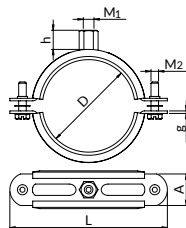
Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version							
16-20	62.5	19,8x2,0	M8	5,3	A	M6	2,00	0,0537	100	UPG-3/8	80130201700
20-24	69.8	19,8x2,0	M8	5,3	A	M6	2,00	0,0606	100	UPG-1/2	80130202100
26-30	75.1	19,8x2,0	M8	5,3	A	M6	2,00	0,0676	100	UPG-3/4	80130202600
34-39	90.5	23,3x2,0	M8	5,3	A	M6	2,00	0,0983	50	UPG-1	80130203300
41-46	100.2	23,4x2,0	M8	5,3	A	M6	2,00	0,1096	50	UPG-11/4	80130204200
48-53	101.5	23,5x2,0	M8	5,3	A	M6	2,00	0,1187	50	UPG-11/2	80130204800
52-57	109.5	23,5x2,0	M8	5,3	A	M6	2,00	0,1348	50	UPG-54	80130205400
59-64	114	24x2,0	M8	5,3	A	M6	2,00	0,1349	50	UPG-2	80130206000
74-79	134.5	26x2,5	M10/M12	17,5	B	M6	2,15	0,2192	25	UPG-21/2	80130207600
78-84	152	26x2,5	M10/M12	17,5	B	M6	2,15	0,2455	25	UPG-80	80130208000
85-91	146.3	26x2,5	M10/M12	17,5	B	M6	2,15	0,2434	25	UPG-3	80130208900
102-108	166	26x2,5	M10/M12	17,5	B	M6	2,15	0,2801	25	UPG-100	80130210000
107-113	166.2	26x2,5	M10/M12	17,5	B	M6	2,15	0,2838	25	UPG-4	80130211000
112-118	175.7	26x2,5	M10/M12	17,5	B	M6	2,15	0,3022	25	UPG-114	80130211400
124-131	194.3	26x2,5	M10/M12	17,5	B	M6	2,15	0,3322	25	UPG-125	80130212500
130-138	194	26x2,5	M10/M12	17,5	B	M6	2,15	0,3327	20	UPG-5	80130213300
141-148	221	35x3,0	M10/M12	25,0	C	M8	3,90	0,6194	10	UPG-139	80130213900
158-166	235	35x3,0	M10/M12	25,0	C	M8	3,90	0,6580	10	UPG-6	80130216000
164-172	236	35x3,0	M10/M12	25,0	C	M8	3,90	0,6604	10	UPG-168	80130216800
175-188	252	35x3,0	M10/M12	25,0	C	M8	3,90	0,7570	10	UPG-188	80130218800
200-208	286	35x3,0	M10/M12	25,0	C	M8	3,90	0,7901	10	UPG-200	80130220000
206-214	298	35x3,0	M12/M16	25,0	C	M8	3,90	0,8361	10	UPG-210	80130221000
214-222	305	35x3,0	M12/M16	25,0	C	M8	3,90	0,8471	5	UPG-8	80130221900
244-259	334	35x3,0	M12/M16	25,0	C	M8	3,90	0,9518	5	UPG-250	80130225000
264-273	338	35x4,0	M12/M16	26,0	C	M10	4,50	1,3797	5	UPG-273	80130227300
278-296	356	35x4,0	M12/M16	26,0	C	M10	4,50	1,4000	5	UPG-280	80131228000
317-326	390	35x4,0	M12/M16	26,0	C	M10	4,50	1,6690	5	UPG-324	80130232400
346-358	423	35x4,0	M12/M16	26,0	C	M10	4,50	1,5920	5	UPG-355	80131235500
395-410	467	35x4,0	M12/M16	26,0	C	M10	4,50	1,8000	5	UPG-400	80130240000
442-456	523	35x4,0	M12/M16	26,0	C	M10	4,50	2,1000	5	UPG-450	80131245000
495-505	569	35x4,0	M12/M16	26,0	C	M10	4,50	2,1600	5	UPG-500	80130250000



EXAMPLES OF PIPELINE FASTENING WITH THE USE OF SINGLE PIPE CLAMPS



PIPE CLAMPS DUO UPGD



- Permissible load
- Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

duo



electro-galvanized



with hexagonal head with cross and groove recession + washers which prevent from bolts falling out



material: EPDM elastomer; thermal resistance: -40°C to +120°C

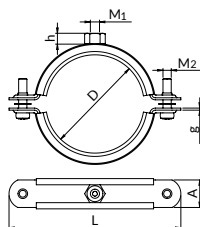
Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version							
10-12	58	20x1,25	M8/M10	17,0	D	M6	0,80	0,0502	100	UPGD-12	80120201200
13-16	62	20x1,25	M8/M10	17,0	D	M6	0,80	0,0525	100	UPGD-1/4	80120201300
17-20	66	20x1,25	M8/M10	17,0	D	M6	0,80	0,0534	100	UPGD-3/8	80120201700
21-25	70	20x1,25	M8/M10	17,0	D	M6	0,80	0,0602	100	UPGD-1/2	80120202100
26-30	76	20x1,25	M8/M10	17,0	D	M6	0,80	0,0655	100	UPGD-3/4	80120202600
31-36	83	20x1,25	M8/M10	17,0	D	M6	0,80	0,0753	100	UPGD-1	80120203300
36-41	88	20x1,25	M8/M10	17,0	D	M6	0,80	0,0778	50	UPGD-40	80120204000
41-46	93	20x1,25	M8/M10	17,0	D	M6	0,80	0,0850	50	UPGD-11/4	80120204200
46-52	103	20x1,25	M8/M10	17,0	D	M6	0,80	0,0887	50	UPGD-11/2	80120204800
53-58	105	20x1,25	M8/M10	17,0	D	M6	0,80	0,0834	50	UPGD-54	80120205400
59-64	116	20x1,5	M8/M10	17,0	D	M6	0,80	0,1039	50	UPGD-2	80120206000
65-71	118	20x1,5	M8/M10	17,0	D	M6	1,40	0,1646	25	UPGD-70	80120207000
72-78	125	20x1,8	M8/M10	17,0	D	M6	1,40	0,1760	25	UPGD-2 1/2	80120207600
79-85	132	20x1,8	M8/M10	17,0	D	M6	1,40	0,1881	25	UPGD-80	80120208000
86-92	139	25x2,0	M8/M10	17,0	D	M6	1,40	0,2019	25	UPGD-3	80120208900
93-99	146	25x2,0	M8/M10	17,0	D	M6	1,40	0,2144	25	UPGD-95	80120209500
100-107	154	25x2,0	M8/M10	17,0	D	M6	1,40	0,2232	25	UPGD-105	80120210500
108-115	162	25x2,0	M8/M10	17,0	D	M6	1,80	0,2473	25	UPGD-4	80120201000
116-124	171	25x2,0	M8/M10	17,0	D	M6	1,80	0,2592	25	UPGD-120	80120212000
125-133	180	25x2,0	M8/M10	17,0	D	M6	1,80	0,2654	25	UPGD-125	80120212500
133-141	191	25x2,5	M8/M10	17,0	D	M6	2,10	0,3255	20	UPGD-5	80120213300
142-150	200	25x2,5	M8/M10	17,0	D	M6	2,10	0,3460	25	UPGD-145	80120214500
151-160	209	25x2,5	M8/M10	17,0	D	M6	2,10	0,3570	10	UPGD-160	80120215900
160-169	218	25x2,5	M8/M10	17,0	D	M6	2,10	0,3755	10	UPGD-6	80120216000
200-210	258	25x2,5	M8/M10	17,0	D	M6	2,10	0,4541	10	UPGD-200	80120220000



PIPE CLAMPS HOBBY HUPG

CLAMPS
WITH LINING

PIPE CLAMPS HOBBY HUPG



hobby



electro-galvanized



with cross recession + washers which prevent from bolts falling out



material: EPDM elastomer; thermal resistance: -40°C to +120°C

HOBBY in the new version!



Permissible load



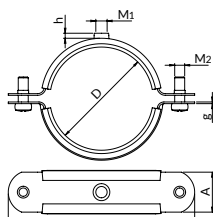
Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

Scope of diameters D [mm]	Clamp dimensions L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Connection Version	Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
16-20	64	20x1,25	M8	7.9	D	M6	0,80	0,045	100	HUPG-3/8	80110201700
20-25	69	20x1,25	M8	7.9	D	M6	0,80	0,049	100	HUPG-1/2	80110202100
25-30	77	20x1,25	M8	7.9	D	M6	0,80	0,056	100	HUPG-3/4	80110202600
31-36	83	20x1,25	M8	7.9	D	M6	0,80	0,064	50	HUPG-1	80110203300
40-45	92	20x1,25	M8	7.9	D	M6	0,80	0,072	50	HUPG-11/4	80110204200
48-52	98	20x1,25	M8	7.9	D	M6	0,80	0,078	50	HUPG-11/2	80110204800
53-58	105	20x1,25	M8	7.9	D	M6	0,80	0,083	50	HUPG-54	80110205400
59-64	112	20x1,25	M8	7.9	D	M6	0,80	0,091	50	HUPG-2	80110206000
73-78	125	20x1,5	M8	7.9	D	M6	1,10	0,115	25	HUPG-21/2	80110207600
87-93	139	20x1,5	M8	7.9	D	M6	1,10	0,129	25	HUPG-3	80110208900
107-114	159	20x1,5	M8	7.9	D	M6	1,10	0,150	25	HUPG-4	80110211000
125-133	178	20x1,5	M8	7.9	D	M6	1,10	0,172	10	HUPG-125	80110212500
133-140	185	20x1,5	M8	7.9	D	M6	1,10	0,183	20	HUPG-5	80110213300
158-165	209	20x2,0	M8	7.9	D	M6	1,30	0,235	10	HUPG-6	80110216000

PIPE CLAMPS BINCO UPGB

ALMOST THE
LAST PIECES



-  Permissible load
-  Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

binco

 electro-galvanized

 cross recessed

 material: soft PVC; thermal resistance: -30°C to +90°C

CLAMPS
WITH LINING

PIPE CLAMPS BINCO UPGB

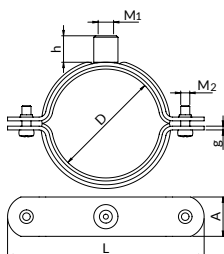
Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
13-16	47	15x1,0	M6	4,0	A	M5	0,7	0,015	100	UPGB-1/4	80111201300
16-20	63	20x1,0	M8	5,3	A	M6	0,7	0,020	100	UPGB-3/8	80111201700
20-24	70	20x1,0	M8	5,3	A	M6	0,7	0,040	100	UPGB-1/2	80111202100
25-30	75	20x1,0	M8	5,3	A	M6	0,7	0,050	100	UPGB-3/4	80111202600
34-39	90	24x1,0	M8	5,3	A	M6	0,7	0,060	50	UPGB-1	80111203300
59-65	113	24x1,0	M8	5,3	A	M6	0,7	0,100	50	UPGB-2	80111206000

PIPE CLAMPS ANTIQ

25 years
of guarantee

CLAMPS
WITH LINING

PIPE CLAMPS ANTIQ



ANTIQ

Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

zinc-lamellar galvanized finished with mat layer of varnish coating (RAL 9005 color) applied using powder painting method

cross recessed (from ANTIQ-2" to ANTIQ-5") or hexagonal head (from ANTIQ-6 to ANTIQ-210)

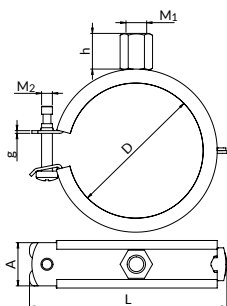
material: closed-cell rubber HH/EPDM. Thermal resistance: -40°C to +100°C

Permissible load
 Thermal resistance

Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
59-63	110	23.5x2,0	M8	5,3	A	M6	2,40	0,11	1	ANTIQ-2	8020206000
75-80	130	26x2,5	M10/M12	17,5	B	M6	2,40	0,18	1	ANTIQ-2 1/2	8020276000
109-114	170	26x2,5	M10/M12	17,5	B	M6	2,40	0,24	1	ANTIQ-4	8020211000
123-130	183	26x2,5	M10/M12	17,5	B	M6	2,40	0,27	1	ANTIQ-125	8020212500
131-138	194	26x2,5	M10/M12	17,5	B	M6	2,40	0,28	1	ANTIQ-5	8020213300
160-169	235	35x3,0	M10/M12	25,0	C	M8	3,90	0,55	1	ANTIQ-6	8020216000
197-206	284	35x3,0	M10/M12	25,0	C	M8	3,90	0,70	1	ANTIQ-200	8020220000
206-214	297	35x3,0	M12/M16	25,0	C	M8	3,90	0,75	1	ANTIQ-210	8020221000

Pipe clamps of different diameters are also available on request.

PIPE CLAMPS WESTA UPGSW



||| Permissible load
||| Thermal resistance

westa



electro-galvanized



single-side screw closure



M5 screw



material: EPDM. Thermal resistance: -40°C do +120°C

Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
11-15	42,4	20x1,0	M8/M10	17,0	D	M5	0,35	0,032	50	UPGSW-1/4"	80140221300
16-20	46,1	20x1,0	M8/M10	17,0	D	M5	0,35	0,034	50	UPGSW-3/8"	80140221700
21-25	51,2	20x1,0	M8/M10	17,0	D	M5	0,35	0,038	50	UPGSW-1/2"	80140222200
26-30	56,3	20x1,0	M8/M10	17,0	D	M5	0,35	0,04	50	UPGSW-3/4"	80140222700
31-36	63,2	20x1,0	M8/M10	17,0	D	M5	0,40	0,046	50	UPGSW-1"	80140223300
38-43	71,2	20x1,25	M8/M10	17,0	D	M5	0,40	0,056	50	UPGSW-1 1/4"	80140224000
46-51	79,8	20x1,25	M8/M10	17,0	D	M5	0,40	0,064	50	UPGSW-1 1/2"	80140222000
52-57	85,2	20x1,25	M8/M10	17,0	D	M5	0,40	0,068	50	UPGSW-54	80140225400
58-64	91,2	20x1,25	M8/M10	17,0	D	M5	0,40	0,072	50	UPGSW-2"	80140226000



PIPE CLAMPS BACO UPGSB

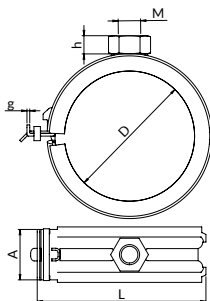
ALMOST THE
LAST PIECES

CLAMPS
WITH LINING

PIPE CLAMPS BACO UPGSB



baco



||| Permissible load

||| Thermal resistance



electro-galvanized



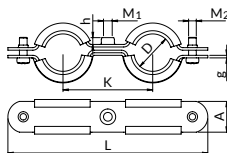
material: EPDM. Thermal resistance: -40°C do +120°C



single-side snap closure

Scope of diameters D [mm]	Clamp dimensions		Connection			Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version					
9-10	26,8	16x0,8	M8	6,5	D	0,25	0,014	50	UPGSB-10	80140211000
11-12	28,8	16x0,8	M8	6,5	D	0,25	0,016	50	UPGSB-12	80140211200
15	32,4	16x0,8	M8	6,5	D	0,25	0,016	50	UPGSB-15	80140211500
16-17	34	16x0,8	M8	6,5	D	0,25	0,018	50	UPGSB-3/8	80140211800
20-21	38,1	16x0,8	M8	6,5	D	0,25	0,02	50	UPGSB-1/2	80140211200
25-26	43,7	16x0,8	M8	6,5	D	0,25	0,022	50	UPGSB-3/4	80140212600
31	52	20x1,0	M8	6,5	D	0,33	0,036	50	UPGSB-1	80140213100
42-43	60,7	20x1,0	M8	6,5	D	0,33	0,042	50	UPGSB-1 1/4	80140214100
48-49	66,6	20x1,0	M8	6,5	D	0,33	0,046	50	UPGSB-1 1/2	80140214800

DOUBLE PIPE CLAMPS UDG



electro-galvanized



material: EPDM elastomer.
Thermal resistance: -40°C
to +120°C



Permissible load

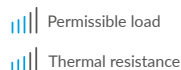
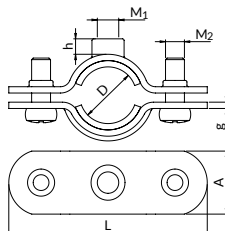
Thermal resistance

Pipe clamps in standard option
available without a pin and
a screw (BK). Description of
other options - [page 320](#).

Scope of diameters [mm]	Clamp dimensions			Connection			Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	K [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
15-18	116.1	48	19.8x2,0	M8	5,3	A	M6	0,30	0,093	50	UDG-3/8	80150201700
20-23	128.8	54	19.8x2,0	M8	5,3	A	M6	0,30	0,111	50	UDG-1/2	80150202100
26-29	155.6	70	24x2,0	M8	5,3	A	M6	0,30	0,161	50	UDG-3/4	80150202600
31-34	156.8	70	24x2,0	M8	5,3	A	M6	0,30	0,171	50	UDG-1	80150203300



CLAMPS FOR COPPER PIPES UPGM



Permissible load

Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

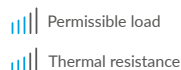
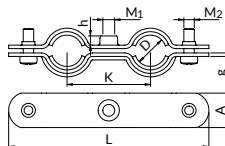
anti-corrosion protection: electro-galvanisation (yellow passivation is used to make the color similar to copper elements)

with cross recession

material: foamed polyethylene. Thermal resistance: -30°C to +100°C

Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
12-14	46	14.8x1,5	M6	4,0	A	M5	1,00	0,021	100	UPGM-12	80160201200
15-17	46,8	14.2x1,5	M6	4,0	A	M5	1,00	0,022	100	UPGM-15	80160201500
17-20	51	14.8x1,5	M6	4,0	A	M5	1,00	0,025	100	UPGM-18	80160201800
20-23	63	20x1,5	M8	44078,0	A	M6	1,00	0,049	100	UPGM-22	80166202200

DOUBLE CLAMPS FOR COPPER PIPES UDGM



Permissible load

Thermal resistance

Pipe clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

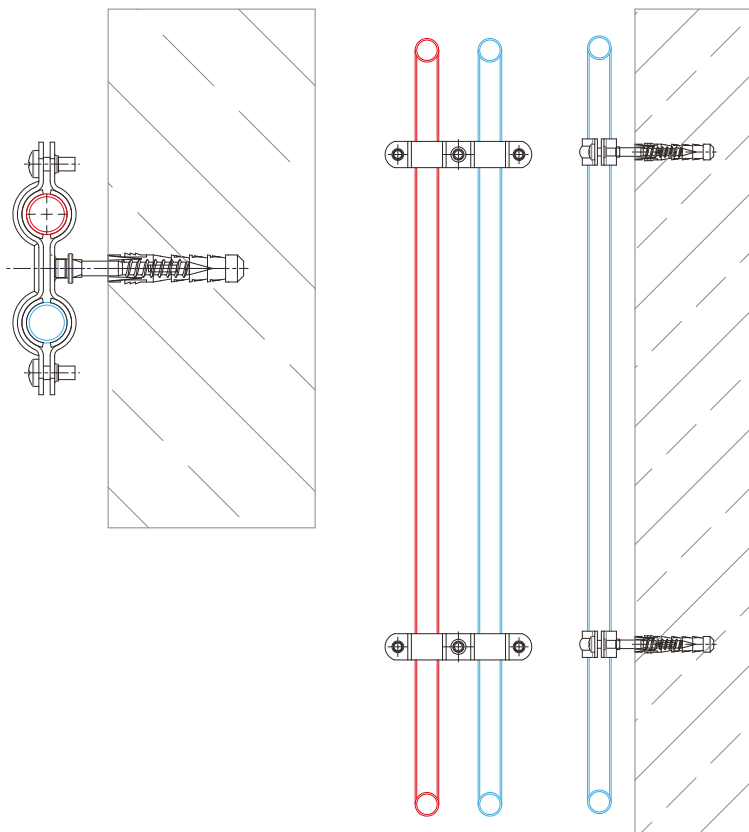
anti-corrosion protection: electro-galvanisation (yellow passivation is used to make the color similar to copper elements)

material: foamed polyethylene
thermal resistance: -30°C to +100°C

with cross recession

Scope of diameters D [mm]	Clamp dimensions			Connection			Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	K [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
15-17	89.9	36	14.8x1,5	M ₆	4.5	A	M ₅	0,30	0,040	100	UDGM-15	8170201500
17-20	93.4	40	14.8x1,5	M ₆	4.5	A	M ₅	0,30	0,042	100	UDGM-18	8170201800
20-23	115.2	48	19.8x2,0	M ₈	5,3	A	M ₆	0,30	0,085	100	UDGM-22	8170202200

ASSEMBLING THE PIPELINES WITH DOUBLE CLAMP FOR COPPER PIPES



Advantages of copper systems:

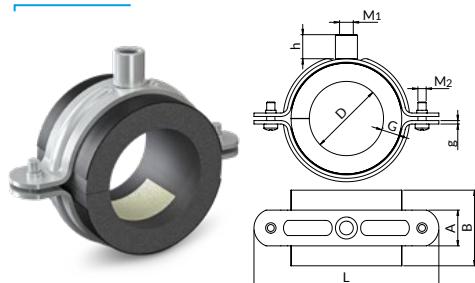
- system durability (pipes do not undergo ageing)
- bacteriostatic properties (no viruses or bacteria develop on the pipes' internal walls, water flowing through the copper pipe does not change its odor or taste)
- relatively low weight (makes assembly easier)
- gas tightness (oxygen does not penetrate through the pipe walls which protects the system elements from corrosion)
- overall look of the installation



THERMAL INSULATION CLAMPS L2

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS L2



Permissible load



Thermal resistance



material: load-bearing elements made of PET with the density of 100 kg/m³, set in rubber foam, external load-bearing coatings made of painted aluminium sheet metal with the thickness of 0.8mm, outside zinc-plated steel clamp. Thermal resistance: -50°C to +110°C.



electro-galvanized



bilateral screw
closure



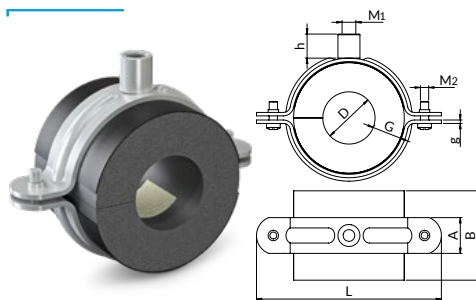
installation method
- Chapter 20

Thermal conductivity coefficient:
0,033 W/(m x K)

L2 insulation thickness 12,0 mm - 16,0 mm

External pipe diameter D [mm]	Insulation thickness G [mm]	Insu- lation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
12-12	12	45	M8/M10	17,0	D	M6	76	20x1,25	1,20	0,07	L2-12	80220001200
15-15	12	45	M8/M10	17,0	D	M6	83	20x1,25	1,20	0,1	L2-15	80220001500
21-22	12	45	M8/M10	17,0	D	M6	93	20x1,25	1,20	0,1	L2-21/22	80220002100
26-28	12	45	M8/M10	17,0	D	M6	103	20x1,25	1,20	0,12	L2-26/28	80220002600
33-35	14	50	M8/M10	17,0	D	M6	105	20x1,5	1,20	0,13	L2-33/35	80220003300
42-42	14	50	M8/M10	17,0	D	M6	116	20x1,5	1,60	0,17	L2-42	80220004200
48-49	14	55	M10/M12	17,5	B	M6	130	26x2,5	2,40	0,22	L2-48	80220004800
54-54	14	55	M10/M12	17,5	B	M6	134,5	26x2,5	2,40	0,23	L2-54	80220005400
57-57	14	55	M10/M12	17,5	B	M6	130	26x2,5	2,40	0,25	L2-57	80220005700
60-64	14	65	M10/M12	17,5	B	M6	151	26x2,5	2,40	0,27	L2-60	80220006000
70-70	14	65	M10/M12	17,5	B	M6	155	26x2,5	2,40	0,28	L2-70	80220007000
76-80	15	75	M10/M12	17,5	B	M6	168	26x2,5	2,40	0,33	L2-76	80220007600
88-89	15	95	M10/M12	17,5	B	M6	170	26x2,5	2,40	0,36	L2-89	80220008900
101-102	16	95	M10/M12	17,5	B	M6	197	26x2,5	2,40	0,4	L2-101	80220010100
108-108	15	95	M10/M12	17,5	B	M6	194	26x2,5	2,40	0,54	L2-108	80220010800
114-115	15	115	M10/M12	17,5	B	M6	194	26x2,5	2,40	0,61	L2-114	80220011400
125-125	15	115	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,8	L2-125	80220012500
133-133	16	115	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,78	L2-133	80220013300
139-140	16	115	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,76	L2-139	80220013900
159-160	16	115	M10/M12	25,0	C	M8	284	35x3,0	3,90	0,95	L2-159/160	80220016000
165-168	16	125	M10/M12	25,0	C	M8	286	35x3,0	3,90	0,93	L2-168	80220016800

THERMAL INSULATION CLAMPS L4



Permissible load



Thermal resistance



material: load-bearing elements made of PET with the density of 100 kg/m³, set in rubber foam, external load-bearing coatings made of painted aluminium sheet metal with the thickness of 0.8 mm, outside a zinc-plated steel clamp. Thermal resistance: -50°C to +110°C.



electro-galvanized



bilateral screw closure

installation method
- Chapter 20Thermal conductivity coefficient:
0,033 W/(m x K)

L4 insulation thickness 18,0 mm - 27,0 mm

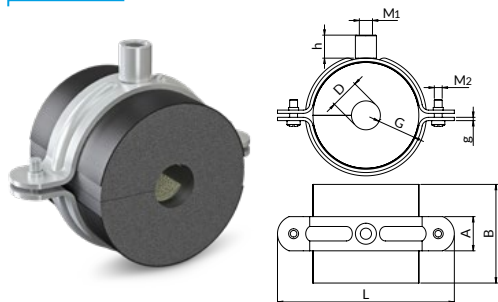
L4 insulation thickness 18,0 mm - 27,0 mm												
External pipe diameter D [mm]	Insulation thickness G [mm]	Insulation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Wys. h [mm]	Version		L [mm]	A x g [mm]				
12-12	18	55	M8/M10	17,0	D	M6	93	20x1,25	1,20	0,1	L4-12	80240001200
15-18	18	55	M8/M10	17,0	D	M6	93	20x1,25	1,20	0,11	L4-15/18	80240001500
17-18	18	55	M8	5,3	A	M6	101,5	23,4x2,0	2,00	0,12	L4-17/18	80240001700
21-22	19	55	M8/M10	17,0	D	M6	103	20x1,25	1,20	0,14	L4-21/22	80240002100
26-28	20	55	M8/M10	17,0	D	M6	116	20x1,5	1,60	0,18	L4-26/28	80240002600
33-35	22	65	M10/M12	17,5	B	M6	130	26x2,5	2,40	0,23	L4-33/35	80240003300
38-38	22	65	M10/M12	17,5	B	M6	134,5	26x2,5	2,40	0,24	L4-38	80240003800
42-45	22	65	M10/M12	17,5	B	M6	134,5	26x2,5	2,40	0,3	L4-42	80240004200
48-49	22	65	M10/M12	17,5	B	M6	151	26x2,5	2,40	0,27	L4-48	80240004800
54-57	22	65	M10/M12	17,5	B	M6	155	26x2,5	2,40	0,29	L4-54	80240005400
60-61	23	75	M10/M12	17,5	B	M6	168	26x2,5	2,40	0,33	L4-60	80240006000
63-64	23	75	M10/M12	17,5	B	M6	166,2	26x2,5	2,40	0,32	L4-63/64	80240006300
70-70	23	75	M10/M12	17,5	B	M6	166	26x2,5	2,40	0,33	L4-70	80240007000
76-77	23	85	M10/M12	17,5	B	M6	170	26x2,5	2,40	0,37	L4-76	80240007600
80-80	23	85	M10/M12	17,5	B	M6	187	26x2,5	2,40	0,39	L4-80	80240008000
88-89	24	100	M10/M12	17,5	B	M6	197	26x2,5	2,40	0,43	L4-89	80240008900
101-102	25	100	M10/M12	25,0	C	M8	221	35x3,0	3,90	0,72	L4-101	80240010100
108-108	24	100	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,78	L-108	80240010800
114-115	24	115	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,81	L4-114	80240011400
125-125	24	115	M10/M12	25,0	C	M8	235	35x3,0	3,90	0,81	L4-125	80240012500
133-133	25	115	M10/M12	25,0	C	M8	261	35x3,0	3,90	0,94	L4-133	80240013300
139-140	25	115	M10/M12	25,0	C	M8	252	35x3,0	3,90	0,92	L4-139	80240013900
159-160	25	115	M10/M12	25,0	C	M8	286	35x3,0	3,90	0,96	L4-159/160	80240016000
165-169	25	125	M10/M12	25,0	C	M8	305	35x3,0	3,90	1,09	L4-168	80240016800
200-200	27	170	M10/M12	25,0	C	M8	334	35x3,0	3,90	1,41	L4-204	80240020400
216-220	25	165	M12/M16	26,0	C	M12	376	35x4,0	4,50	1,8	L4-219	80240021900
250-250	27	170	M12/M16	26,0	C	M12	420	35x4,0	4,50	2,01	L4-254	80240025400
267-267	25	165	M12/M16	26,0	C	M12	420	35x4,0	4,50	2,1	L-267	80240026700
273-273	25	165	M12/M16	26,0	C	M12	428	35x4,0	4,50	2,13	L4-273	80240027300



THERMAL INSULATION CLAMPS L6

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS L6



Permissible load



Thermal resistance



material: load-bearing elements made of PET with the density of 100 kg/m³, set in rubber vfoam, external load-bearing coatings made of painted aluminium sheet metal with the thickness of 0.8 mm, outside a zinc-plated steel clamp. Thermal resistance: -50°C to +110°C.



electro-galvanized



bilateral screw
closure



installation method
- Chapter 20

Thermal conductivity coefficient:
0,036 W/(m x K)

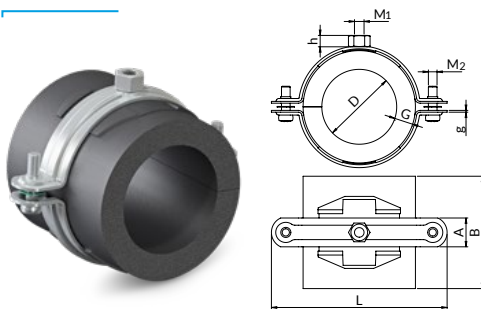
L6 insulation thickness 30 mm - 50 mm												
External pipe diameter D [mm]	Insulation thickness G [mm]	Insulation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
15-18	30	75	M10/M12	17,5	B	M6	130	26x2,5	2,15	0,250	L6-15	80260001500
21-22	30	75	M10/M12	17,5	B	M6	134,5	26x2,5	2,15	0,260	L6-21/22	80260002100
25-25	30	75	M10/M12	17,5	B	M6	151	26x2,5	2,15	0,280	L6-25	80260002500
26-28	32	75	M10/M12	17,5	B	M6	151	26x2,5	2,15	0,290	L6-26/28	80260002600
30-30	33	75	M10/M12	17,5	B	M6	146,3	26x2,5	2,15	0,300	L6-30	80260003000
33-35	35	85	M10/M12	17,5	B	M6	146,3	26x2,5	2,15	0,300	L6-33/35	80260003300
38-38	35	85	M10/M12	17,5	B	M6	168	26x2,5	2,15	0,360	L6-38	80260003800
42-45	35	85	M10/M12	17,5	B	M6	166	26x2,5	2,15	0,360	L6-42	80260004200
48-49	35	85	M10/M12	17,5	B	M6	170	26x2,5	2,15	0,390	L6-48	80260004800
54-54	36	85	M10/M12	17,5	B	M6	187	26x2,5	2,15	0,420	L6-54	80260005400
57-57	36	85	M10/M12	17,5	B	M6	196	26x2,5	2,15	0,430	L6-57	80260005700
60-61	37	100	M10/M12	17,5	B	M6	196	26x2,5	2,15	0,460	L6-60	80260006000
63-64	37	100	M10/M12	17,5	B	M6	194	26x2,5	2,15	0,480	L6-63/64	80260006300
70-70	37	100	M10/M12	17,5	B	M6	194	26x2,5	2,15	0,490	L6-70	80260007000
76-77	38	115	M10/M12	25,0	C	M8	221	35x3,0	3,90	0,800	L6-76	80260007600
80-80	38	115	M10/M12	25,0	C	M8	236	35x3,0	3,90	0,860	L6-80	80260008000
88-90	39	125	M10/M12	25,0	C	M8	235	35x3,0	3,90	0,890	L6-89	80260008900
101-102	40	125	M10/M12	25,0	C	M8	261	35x3,0	3,90	1,010	L6-101	80260010100
108-108	40	125	M10/M12	25,0	C	M8	284	35x3,0	3,90	1,060	L6-108	80260010800
114-115	41	145	M10/M12	25,0	C	M8	286	35x3,0	3,90	1,100	L6-114	80260011400
125-125	41	145	M10/M12	25,0	C	M8	286	35x3,0	3,90	1,130	L6-125	80260012500
133-140	43	145	M12/M16	25,0	C	M8	305	35x3,0	3,90	1,260	L6-139	80260013900
159-160	44	145	M12/M16	25,0	C	M8	334	35x3,0	3,90	1,400	L6-159/160	80260016000
165-169	45	165	M12/M16	25,0	C	M8	334	35x3,0	3,90	1,500	L6-168	80260016800
200-200	50	215	M12/M16	26,0	C	M12	420	35x4,0	4,50	2,480	L6-204	80260020400
216-216	50	210	M12/M16	26,0	C	M12	420	35x4,0	4,50	2,540	L6-216	80260021600
219-220	50	210	M12/M16	26,0	C	M12	428	35x4,0	4,50	2,570	L6-219	80260021900

THERMAL INSULATION CLAMPS LX-13

ALMOST THE
LAST PIECES

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS LX-13



Permissible load



Thermal resistance



material: load-bearing elements made of plastics glued with rubber foam, it does not contain CFC, outside a zinc-plated steel clamp. Thermal resistance: 0°C to +110°C.



electro-galvanized



bilateral screw
closure



installation method
- Chapter 20

Thermal conductivity coefficient:
0,035 W/(m x K)

LX pipe clamps with inserts made of rubber foam with the insulation thickness of 13 mm

LX pipe clamps with inserts made of rubber foam with the insulation thickness of 13 mm												
External pipe diameter D [mm]	Insulation thickness G [mm]	Insula- tion length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
15-15	13	78	M8	7,9	D	M6	83	20x1,25	0,8	0,080	LX-13-015	80221301500
25-25	13	78	M8	7,9	D	M6	92	20x1,25	0,8	0,100	LX-13-025	80221302500
30-30	13	78	M8	7,9	D	M6	98	20x1,25	0,8	0,100	LX-13-030	80221303000
48-49	13	78	M8	7,9	D	M6	112	20x1,25	0,8	0,190	LX-13-048	80221304800
54-54	13	78	M8	7,9	D	M6	122	20x1,5	1,4	0,190	LX-13-054	80221305400
63-64	13	78	M8	7,9	D	M6	134	20x1,5	1,4	0,220	LX-13-064	80221306400
70-70	13	78	M8	7,9	D	M6	134	20x1,5	1,4	0,220	LX-13-070	80221307000
76-77	13	78	M8	7,9	D	M6	139	20x1,5	1,4	0,270	LX-13-076	80221307600

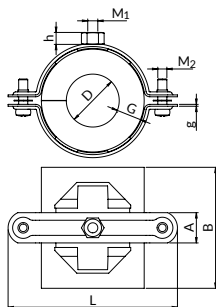


THERMAL INSULATION CLAMPS LX-19

ALMOST THE
LAST PIECES

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS LX-19



Permissible load



Thermal resistance



material: load-bearing elements made of plastics glued with rubber foam, it does not contain CFC, outside a zinc-plated steel clamp. Thermal resistance: 0°C to +110°C.



electro-galvanized



bilateral screw
closure



installation method
- Chapter 20

Thermal conductivity coefficient:
0,035 W/(m x K)

LX pipe clamps with inserts made of rubber foam with the insulation thickness of 19 mm

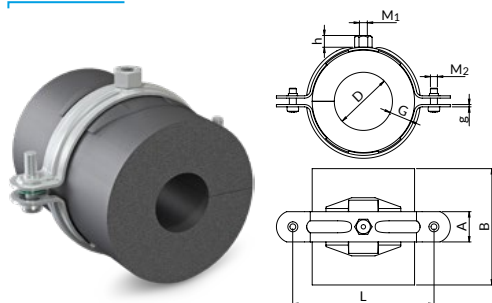
External pipe diameter D [mm]	Insulation thickness G [mm]	Insu- lation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
21-22	19	80	M8	7,9	D	M6	105	20x1,25	0,8	0,120	LX-19-022	80221902200
25-25	19	80	M8	7,9	D	M6	105	20x1,25	0,8	0,130	LX-19-025	80221902500
33-35	19	80	M8	7,9	D	M6	112	20x1,25	0,8	0,190	LX-19-035	80221903500
48-49	19	92	M8	7,9	D	M6	125	20x1,5	1,4	0,230	LX-19-048	80221904800
54-54	19	92	M8	7,9	D	M6	134	20x1,5	1,4	0,230	LX-19-054	80221905400
60-61	19	92	M8	7,9	D	M6	139	20x1,5	1,4	0,290	LX-19-060	80221906000
63-64	19	92	M8	7,9	D	M6	139	20x1,5	1,4	0,300	LX-19-064	80221906400
88-90	19	92	M8	7,9	D	M6	178	20x1,5	1,8	0,380	LX-19-089	80221908900

THERMAL INSULATION CLAMPS LX-25

ALMOST THE
LAST PIECES

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS LX-25



Permissible load



Thermal resistance



material: load-bearing elements made of plastics glued with rubber foam, it does not contain CFC, outside a zinc-plated steel clamp. Thermal resistance: 0°C to +110°C.



electro-galvanized



bilateral screw
closure



installation method
- Chapter 20

Thermal conductivity coefficient:
0,035 W/(m x K)

LX clamps with inserts made of rubber foam with the insulation thickness of 25 mm

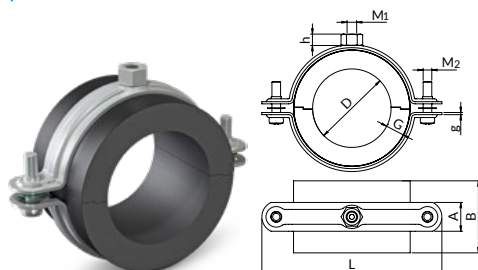
External pipe diameter D [mm]	Insulation thickness G [mm]	Insu- lation length B [mm]	Size M ₁	Height h [mm]	Version	Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
							L [mm]	A x g [mm]				
21-22	25	100	M8	7,9	D	M6	112	20x1,25	0,8	0,210	LX-25-022	80222502200
48-49	25	115	M8	7,9	D	M6	134	20x1,5	1,4	0,320	LX-25-048	80222504800
60-61	25	115	M8	7,9	D	M6	155	20x1,5	1,8	0,310	LX-25-060	80222506000
63-64	25	115	M8	7,9	D	M6	155	20x1,5	1,8	0,310	LX-25-064	80222506400
88-90	25	115	M8	7,9	D	M6	178	20x1,5	1,8	0,440	LX-25-089	80222508900



THERMAL INSULATION CLAMPS PX-13

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS PX-13



Permissible load



Thermal resistance



material: PIR foam with the density of 80 kg/m³ in a shield made of black acoustic foil, outside a zinc-plated steel clamp. Thermal resistance: -50°C to +105°C.

Thermal conductivity coefficient: 0,019 for -100°C; 0,025 for -50°C; 0,028 for 0°C; 0,030 for +10°C; 0,036 for +50°C W/(mK)



electro-galvanized



bilateral screw closure

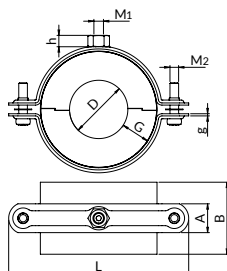


installation method
- Chapter 20

Pipe clamps with inserts made of PUR foam with the insulation thickness of 13 mm

External pipe diameter D [mm]	Insulation thickness G [mm]	Insulation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
10-11	13	50	M8	7,9	D	M6	77	20x1,25	0,80	0,050	PX-13-010	80211301000
12-12	13	50	M8	7,9	D	M6	83	20x1,25	0,80	0,080	PX-13-012	80211301200
15-15	13	50	M8	7,9	D	M6	83	20x1,25	0,80	0,090	PX-13-015	80211301500
17-18	13	50	M8	7,9	D	M6	83	20x1,25	0,80	0,090	PX-13-017	80211301700
21-22	13	50	M8	7,9	D	M6	92	20x1,25	0,80	0,090	PX-13-021	80211302100
26-28	13	50	M8	7,9	D	M6	98	20x1,25	0,80	0,110	PX-13-026	80211302600
33-35	13	50	M8	7,9	D	M6	105	20x1,25	0,80	0,120	PX-13-033	80211303300
42-43	13	50	M8	7,9	D	M6	112	20x1,25	0,80	0,120	PX-13-042	80211304200
48-49	13	50	M8	7,9	D	M6	122	20x1,5	1,40	0,200	PX-13-048	80211304800
54-54	13	50	M8	7,9	D	M6	122	20x1,5	1,40	0,200	PX-13-054	80211305400
60-61	13	50	M8	7,9	D	M6	134	20x1,5	1,40	0,230	PX-13-060	80211306000
63-64	13	50	M8	7,9	D	M6	134	20x1,5	1,40	0,230	PX-13-063	80211306300
76-77	13	75	M8/M10	17,0	D	M6	146	25x2,0	1,40	0,250	PX-13-076	80211307600
88-90	13	75	M8	7,9	D	M6	155	20x1,5	1,80	0,270	PX-13-088	80211308800
108-108	13	75	M8/M10	17,0	D	M6	180	25x2,0	1,80	0,310	PX-13-108	80211310800
114-115	13	75	M8/M10	17,0	D	M6	180	25x2,0	1,80	0,340	PX-13-114	80211311400
133-133	13	100	M8/M10	17,0	D	M6	209	25x2,5	2,10	0,660	PX-13-133	80211313300
139-140	13	100	M8/M10	17,0	D	M6	218	25x2,5	2,10	0,660	PX-13-139	80211313900

THERMAL INSULATION CLAMPS PX-20



Permissible load



Thermal resistance



material: PIR foam with the density of 80 kg/m³
in a shield made of black acoustic foil, outside
a zinc-plated steel clamp. Thermal resistance:
-50°C to +105°C.

Thermal conductivity coefficient: 0,019
for -100°C; 0,025 for -50°C; 0,028 for 0°C;
0,030 for +10°C; 0,036 for +50°C W/(mK)



electro-galvanized

bilateral screw
closureinstallation method
- Chapter 20

Pipe clamps with inserts made of PUR foam with the insulation thickness of 20 mm

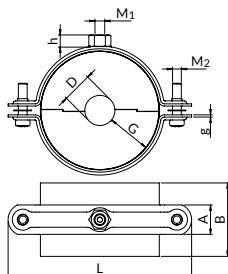
Pipe clamps with inserts made of PUR foam with the insulation thickness of 20 mm												
External pipe diameter D [mm]	Insulation thickness G [mm]	Insu- lation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
10-10	20	50	M8	7,9	D	M6	92	20x1,25	0,80	0,090	PX-20-010	90000010917
12-12	20	50	M8	7,9	D	M6	92	20x1,25	0,80	0,090	PX-20-012	90000011017
15-15	20	50	M8	7,9	D	M6	98	20x1,25	0,80	0,110	PX-20-015	80212001500
17-18	20	50	M8	7,9	D	M6	98	20x1,25	0,80	0,110	PX-20-017	80212001700
21-22	20	50	M8	7,9	D	M6	105	20x1,25	0,80	0,120	PX-20-021	80212002100
26-28	20	50	M8	7,9	D	M6	112	20x1,25	0,80	0,120	PX-20-026	80212002600
33-35	20	50	M8	7,9	D	M6	122	20x1,5	1,40	0,200	PX-20-033	80212003300
42-43	20	50	M8	7,9	D	M6	125	20x1,5	1,40	0,210	PX-20-042	80212004200
48-49	20	50	M8	7,9	D	M6	134	20x1,5	1,40	0,230	PX-20-048	80212004800
54-54	20	50	M8	7,9	D	M6	134	20x1,5	1,40	0,230	PX-20-054	80212005400
57-57	20	50	M8	7,9	D	M6	139	20x1,5	1,40	0,230	PX-20-057	80212005700
60-61	20	50	M8	7,9	D	M6	139	20x1,5	1,40	0,240	PX-20-060	80212006000
63-64	20	50	M8/M10	17,0	D	M6	146	25x2,0	2,2	0,240	PX-20-063	80212006300
76-77	20	75	M8	7,9	D	M6	155	20x1,5	1,8	0,280	PX-20-076	80212007600
88-90	20	75	M8/M10	17,0	D	M6	171	25x2,0	2,2	0,310	PX-20-088	80212008800
108-108	20	75	M8/M10	17,0	D	M6	191	25x2,5	2,1	0,590	PX-20-108	80212010800
114-115	20	75	M8/M10	17,0	D	M6	200	25x2,5	2,2	0,600	PX-20-114	80212011400
133-133	20	100	M8/M10	17,0	D	M6	218	25x2,5	2,1	0,670	PX-20-133	80212013300
139-140	20	100	M10/M12	25,0	C	M8	236	35x3,0	3,9	0,670	PX-20-139	80212013900
159-159	20	100	M10/M12	25,0	C	M8	286	35x3,0	3,9	0,790	PX-20-159	80212015900
168-169	20	100	M10/M12	25,0	C	M8	286	35x3,0	3,9	0,820	PX-20-168	80212016800



THERMAL INSULATION CLAMPS PX-30

CLAMPS
WITH LINING

THERMAL INSULATION CLAMPS PX-30



Permissible load



Thermal resistance



material: PIR foam with the density of 80 kg/m³ in a shield made of black acoustic foil, outside a zinc-plated steel clamp. Thermal resistance: -50°C to +105°C.

Thermal conductivity coefficient: 0,019 for -100°C; 0,025 for -50°C; 0,028 for 0°C; 0,030 for +10°C; 0,036 for +50°C W/(mK)



electro-galvanized



bilateral screw closure

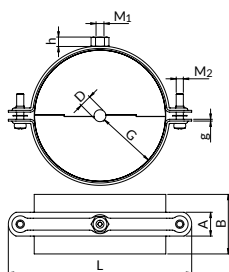


installation method
- Chapter 20

Pipe clamps with inserts made of PUR foam with the insulation thickness of 30 mm

External pipe diameter D [mm]	Insulation thickness G [mm]	Insulation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
15-15	30	50	M8	7,9	D	M6	122	20x1,5	1,4	0,200	PX-30-015	80213001500
17-18	30	50	M8	7,9	D	M6	122	20x1,5	1,4	0,210	PX-30-017	80213001700
21-22	30	50	M8	7,9	D	M6	125	20x1,5	1,4	0,210	PX-30-021	80213002100
26-28	30	50	M8	7,9	D	M6	134	20x1,5	1,4	0,240	PX-30-026	80213002600
33-35	30	50	M8	7,9	D	M6	139	20x1,5	1,4	0,240	PX-30-033	80213003300
42-43	30	50	M8/M10	17,0	D	M6	146	25x2,0	2,2	0,250	PX-30-042	80213004200
48-49	30	50	M8	7,9	D	M6	155	20x1,5	1,8	0,280	PX-30-048	80213004800
54-54	30	50	M8	7,9	D	M6	155	20x1,5	1,8	0,280	PX-30-054	80213005400
57-57	30	50	M8/M10	17,0	D	M6	162	25x2,0	2,2	0,280	PX-30-057	80213005700
60-61	30	50	M8	7,9	D	M6	159	20x1,5	1,8	0,290	PX-30-060	80213006000
63-64	30	50	M8	7,9	D	M6	159	20x1,5	1,8	0,310	PX-30-063	80213006300
76-77	30	75	M8	7,9	D	M6	171	20x1,5	1,8	0,370	PX-30-076	80213007600
88-90	30	75	M8/M10	17,0	D	M6	200	25x2,5	2,1	0,620	PX-30-088	80213008800
108-108	30	75	M8/M10	17,0	D	M6	218	25x2,5	2,2	0,690	PX-30-108	80213010800
114-115	30	75	M8/M10	17,0	D	M6	218	25x2,5	2,1	0,670	PX-30-114	80213011400
133-133	30	100	M10/M12	25,0	C	M8	284	35x3,0	3,9	0,870	PX-30-133	80213013300
139-140	30	100	M10/M12	25,0	C	M8	286	35x3,0	3,9	0,830	PX-30-139	80213013900
159-159	30	100	M12/M16	26,0	C	M8	305	35x3,0	3,9	0,930	PX-30-159	80213015900
168-169	30	100	M12/M16	26,0	C	M8	305	35x3,0	3,9	0,940	PX-30-168	80213016800

THERMAL INSULATION CLAMPS PX-50



Permissible load



Thermal resistance



material: PIR foam with the density of 80 kg/m³ in a shield made of black acoustic foil, outside a zinc-plated steel pipe clamp. Thermal resistance: -50°C to +105°C.

Thermal conductivity coefficient: 0,019 for -100°C; 0,025 for -50°C; 0,028 for 0°C; 0,030 for +10°C; 0,036 for +50°C W/(mK)



electro-galvanized



bilateral screw closure



installation method
- Chapter 20

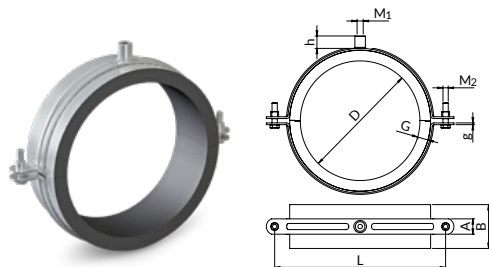
Thermal conductivity coefficient: 0,043-0,045 W/(m x K)

Pipe clamps with inserts made of PUR foam with the insulation thickness of 50 mm

External pipe diameter D [mm]	Insulation thickness G [mm]	Insulation length B [mm]	Connection			Connection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]	Version		L [mm]	A x g [mm]				
15-15	50	50	M8	7,9	D	M6	155	20x1,5	1,8	0,290	PX-50-015	80215001500
17-18	50	50	M8	7,9	D	M6	155	20x1,5	1,8	0,290	PX-50-017	80215001700
26-28	50	50	M8/M10	17,0	D	M6	171	25x2,0	2,2	0,320	PX-50-026	80215002600
33-35	50	50	M8	7,9	D	M6	178	20x1,5	1,8	0,360	PX-50-033	80215003300
42-43	50	50	M8	7,9	D	M6	185	20x1,5	2,1	0,370	PX-50-042	80215004200
48-49	50	50	M8	7,9	D	M6	185	20x1,5	2,1	0,610	PX-50-048	80215004800
54-54	50	50	M8/M10	17,0	D	M6	200	25x2,5	2,2	0,610	PX-50-054	80215005400
57-57	50	50	M8	7,9	D	M6	205	20x2,0	2,1	0,620	PX-50-057	80215005700
60-61	50	50	M8	7,9	D	M6	205	20x2,0	2,1	0,680	PX-50-060	80215006000
63-64	50	50	M8	7,9	D	M6	205	20x2,0	2,1	0,680	PX-50-063	80215006300
76-77	50	75	M8/M10	17,0	D	M6	210	25x2,0	2,2	0,710	PX-50-076	80215007600
88-90	50	75	M10/M12	25,0	C	M8	252	35x3,0	3,9	0,820	PX-50-088	80215008800
108-108	50	75	M10/M12	25,0	C	M8	286	35x3,0	3,9	0,880	PX-50-108	80215010800
114-115	50	75	M12/M16	26,0	C	M8	298	35x3,0	3,9	0,920	PX-50-114	80215011400
133-133	50	100	M10/M12	25,0	C	M8	302	35x3,0	3,9	1,060	PX-50-133	80215013300
139-140	50	100	M10/M12	25,0	C	M8	302	35x3,0	3,9	1,070	PX-50-139	80215013900
159-159	50	100	M12/M16	26,0	C	M8	334	35x3,0	3,9	1,130	PX-50-159	80215015900
168-169	50	100	M12/M16	26,0	C	M12	376	35x4,0	4,5	1,570	PX-50-168	80215016800
168-169	30	100	M12/M16	26,0	C	M8	305	35x3,0	3,9	0,940	PX-30-168	80213016800



THERMAL INSULATION CLAMPS PX-30 AND PX-50 WITH A FLANGE



- Permissible load
- Thermal resistance
- electro-galvanized

- PIR foam with the density of 80 kg/m³ in a shield made of black acoustic foil, outside a zinc-plate steel clamp
- bilateral screw closure

Thermal resistance:
-50°C to +105°C.



installation method - Chapter 20

Thermal conductivity coefficient: 0,019 for -100°C; 0,025 for -50°C; 0,028 for 0°C; 0,030 for +10°C; 0,036 for +50°C W/(mK)

Pipe clamps with inserts made of PUR foam with the insulation thickness of 30 and 50 mm

Diameter D [mm]	Insulation thickness G [mm]	Insu- lation length B [mm]	Connection		Version	Con- nection screws M ₂	Clamp dimensions		Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
			Size M ₁	Height h [mm]			L [mm]	A x g [mm]				
219-220	30	100	M12/M16	26,0	C	M12	376	35x4	4,5	2,054	PX-30-219	80213021900
273-273	30	100	M12/M16	26,0	C	M12	428	35x4	4,5	2,391	PX-30-273	80213027300
219-220	50	100	M12/M16	26,0	C	M12	420	35x4	4,5	2,423	PX-50-219	80215021900
273-273	50	100	M12/M16	26,0	C	M12	459	35x4	4,5	2,785	PX-50-273	80215027300
323-324	50	100	M12/M16	26,0	C	M12	522	35x4	4,5	3,140	PX-50-324	80215032400
355-356	50	100	M12/M16	26,0	C	M12	545	35x4	4,5	4,430	PX-50-356	80215035600

02 Pipe clamps without lining

01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
18. UltraCover XP products
19. CERTA – heavy channel system
20. Projects support

2.1. Pipe clamps



Solid pipe clamps
DN

54



Pipe clamps Expert
UPZ

55



Pipe clamps Duo
UPZD

56



Pipe clamps Hobby
HUPZ

57



Double pipe clamps
UZD

57

2.2. Plastic pipe clamps



Threaded rod pipe clip UZT

58



Underfloor hooks DH

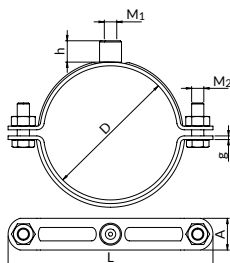
58



SOLID PIPE CLAMPS DN

PIPE CLAMPS
WITHOUT LINING

SOLID PIPE CLAMPS DN



Permissible load

Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).



electro-galvanized

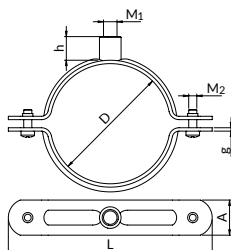


with hexagon head

Application: for attaching installation cables.

Scope of diameters D [mm]	Clamp dimensions			Connection		Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
20-22	64	20x3,0	M8/M10	15,5	B	M8	3,6	0,090	100	DN-1/2-PP	80541002100
24-28	70	20x3,0	M8/M10	15,5	B	M8	5,4	0,100	50	DN-3/4-PP	80541002600
32-34	86	24x3,0	M8/M10	15,5	B	M8	4,4	0,140	50	DN-1-PP	80541003300
41-44	90	24x3,0	M8/M10	15,5	B	M8	4,9	0,150	50	DN-11/4-PP	80541004200
48-52	104	24x3,0	M8/M10	15,5	B	M8	4,3	0,170	50	DN-11/2-PP	80541004800
58-61	111	24x3,0	M8/M10	15,5	B	M8	4,6	0,200	50	DN-2-PP	80541006000
74-78	128	26x3,0	M10/M12	17,5	B	M10	7,4	0,280	25	DN-21/2-PP	80541007600
85-90	148	26x3,0	M10/M12	17,5	B	M10	5,2	0,300	25	DN-3-PP	80541008900
97-103	155	26x3,0	M10/M12	17,5	B	M10	6,4	0,320	25	DN-100-PP	80541010000
107-115	168	26x3,0	M10/M12	17,5	B	M10	6,4	0,360	25	DN-4-PP	80541011000
115-124	178	26x3,0	M10/M12	17,5	B	M10	6,4	0,380	10	DN-120-PP	80541012000
128-136	194	26x3,0	M10/M12	17,5	B	M10	5,1	0,410	10	DN-133-PP	80541013300
133-140	247	40x4,0	M12/M16	26,0	C	M10	3,1	0,990	10	DN-5-PP	80541013900
157-163	234	35x3,0	M10/M12	17,5	B	M10	6,5	0,630	10	DN-159-PP	80541015900
167-173	280	40x4,0	M12/M16	26,0	C	M10	5,4	1,100	10	DN-6-PP	80541016800
219-225	332	40x4,0	M12/M16	26,0	C	M10	6	1,320	5	DN-8-PP	80541021900
267-273	408	60x8,0	M20	16,0	-	M12	14	4,620	1	DN-10-PP	80541027300

PIPE CLAMPS EXPERT UPZ



expert

Permissible load

electro-galvanized (hot-dip galvanized also available on demand)

cross recessed (from UPZ-10 to UPZ-5) or hexagonal head (from UPZ-150 to UPZ-500)

Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

A new version of Expert pipe clamps up to 2" with an M8/M10 connection will be available soon - ask your regional manager for details.

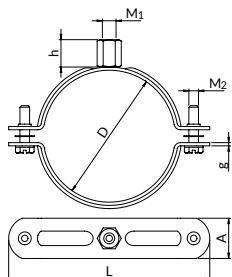
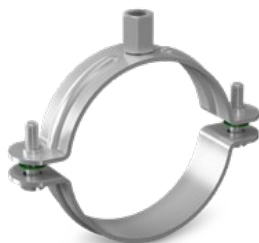
Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
10-11	35	15x1,5	M6	4,0	A	M5	2,00	0,02	100	UPZ-10	80130101000
16-18	47	14x1,5	M6	4,0	A	M5	2,00	0,02	100	UPZ-3/8"	80130101700
21-23	62,5	19,8x2,0	M8	5,3	A	M6	2,00	0,04	100	UPZ-1/2"	80130102100
26-29	69,8	19,8x2,0	M8	5,3	A	M6	2,00	0,05	100	UPZ-3/4"	80130102600
33-36	75,1	19,8x2,0	M8	5,3	A	M6	2,00	0,06	100	UPZ-1"	80130103300
41-45	90,5	23,3x2,0	M8	5,3	A	M6	2,00	0,08	100	UPZ-1 1/4"	80130104200
48-52	100,2	23,4x2,0	M8	5,3	A	M6	2,00	0,09	100	UPZ-1 1/2"	80130104800
59-63	109,5	23,5x2,0	M8	5,3	A	M6	2,00	0,11	100	UPZ-2"	80130106000
75-80	130	26x2,5	M10/M12	17,0	B	M6	2,40	0,18	100	UPZ-2 1/2"	80130107600
87-92	151	26x2,5	M10/M12	17,0	B	M6	2,40	0,21	100	UPZ-3"	80130108900
99-104	155	26x2,5	M10/M12	17,0	B	M6	2,40	0,22	25	UPZ-100	80130110000
109-114	168	26x2,5	M10/M12	17,0	B	M6	2,40	0,24	25	UPZ-4"	80130111000
114-120	166	26x2,5	M10/M12	17,0	B	M6	2,40	0,24	25	UPZ-114	80130111400
119-125	170	26x2,5	M10/M12	17,0	B	M6	2,40	0,26	25	UPZ-120	80130112000
123-130	187	26x2,5	M10/M12	17,0	B	M6	2,40	0,27	25	UPZ-125	80130112500
131-138	197	26x2,5	M10/M12	17,0	B	M6	2,40	0,28	25	UPZ-5"	80130113300
145-155	221	35x3,0	M10/M12	25,0	C	M8	3,90	0,54	10	UPZ-150	80130113900
160-169	235	35x3,0	M10/M12	25,0	C	M8	3,90	0,55	10	UPZ-6"	80130116000
169-178	236	35x3,0	M10/M12	25,0	C	M8	3,90	0,58	10	UPZ-172	80130117200
197-206	286	35x3,0	M10/M12	25,0	C	M8	3,90	0,70	10	UPZ-200	80130120000
219-228	305	35x3,0	M12/M16	25,0	C	M8	3,90	0,75	10	UPZ-8"	80130121900
249-258	334	35x3,0	M12/M16	25,0	C	M8	3,90	0,84	10	UPZ-250	80130125000
269-279	338	35x4,0	M12/M16	26,0	C	M10	4,50	1,28	5	UPZ-273	80131127300
280-298	356	35x4,0	M12/M16	26,0	C	M10	4,50	1,30	5	UPZ-280	80131128000
312-322	380	35x4,0	M12/M16	26,0	C	M10	4,50	1,42	5	UPZ-315	80131131500
322-332	390	35x4,0	M12/M16	26,0	C	M10	4,50	1,47	5	UPZ-324	80131132400
348-360	423	35x4,0	M12/M16	26,0	C	M10	4,50	1,47	5	UPZ-355	80130135500
400-418	467	35x4,0	M12/M16	26,0	C	M10	4,50	1,60	5	UPZ-400	80130140000
444-458	523	35x4,0	M12/M16	26,0	C	M10	4,50	1,93	5	UPZ-450	80131145000
500-510	569	35x4,0	M12/M16	26,0	C	M10	4,50	1,97	5	UPZ-500	80130150000



PIPE CLAMPS DUO UPZD

PIPE CLAMPS
WITHOUT LINING

PIPE CLAMPS DUO UPZD



duo

Permissible load

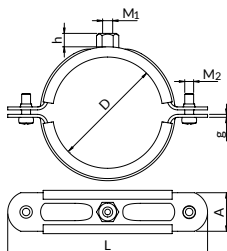
 electro-galvanized

 with hexagonal head with cross and groove recession + washers which prevent from bolts falling out

Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
15-17	58	20x1,25	M8/M10	17,0	D	M6	0,80	0,040	100	UPZD-3/8	80120101600
18-22	62	20x1,25	M8/M10	17,0	D	M6	0,80	0,042	100	UPZD-1/2	80120101800
23-27	66	20x1,25	M8/M10	17,0	D	M6	0,80	0,046	100	UPZD-3/4	80120102600
28-32	70	20x1,25	M8/M10	17,0	D	M6	0,80	0,048	100	UPZD-28	80120103000
33-37	76	20x1,25	M8/M10	17,0	D	M6	0,80	0,052	100	UPZD-1	80120103500
39-44	83	20x1,25	M8/M10	17,0	D	M6	0,80	0,056	50	UPZD-11/4	80120103900
45-49	88	20x1,25	M8/M10	17,0	D	M6	0,80	0,059	50	UPZD-11/2	80120104500
50-54	93	20x1,25	M8/M10	17,0	D	M6	0,80	0,059	50	UPZD-54	80120105000
56-59	103	20x1,25	M8/M10	17,0	D	M6	0,80	0,066	50	UPZD-58	80120105800
60-65	105	20x1,25	M8/M10	17,0	D	M6	0,80	0,068	50	UPZD-2	80120106400
66-71	116	20x1,5	M8/M10	17,0	D	M6	0,80	0,088	50	UPZD-70	80120107000
72-78	118	20x1,5	M8/M10	17,0	D	M6	1,40	0,089	25	UPZD-2 1/2	80120107600
79-84	125	20x1,8	M8/M10	17,0	D	M6	1,40	0,106	25	UPZD-80	80120108400
85-91	132	20x1,8	M8/M10	17,0	D	M6	1,40	0,113	25	UPZD-3	80120109000
92-98	139	25x2,0	M8/M10	17,0	D	M6	1,40	0,153	25	UPZD-95	80120109600
99-105	146	25x2,0	M8/M10	17,0	D	M6	1,40	0,166	25	UPZD-100	80120109900
106-113	154	25x2,0	M8/M10	17,0	D	M6	1,40	0,174	25	UPZD-4	80120111200
114-122	162	25x2,0	M8/M10	17,0	D	M6	1,80	0,183	25	UPZD-114	80120112000
123-131	171	25x2,0	M8/M10	17,0	D	M6	1,80	0,197	25	UPZD-125	80120112800
132-140	180	25x2,0	M8/M10	17,0	D	M6	1,80	0,206	25	UPZD-5	80120113800
141-148	191	25x2,5	M8/M10	17,0	D	M6	2,10	0,255	20	UPZD-145	80120114400
149-157	200	25x2,5	M8/M10	17,0	D	M6	2,10	0,280	10	UPZD-150	80120115600
158-167	209	25x2,5	M8/M10	17,0	D	M6	2,10	0,284	10	UPZD-160	80120116600
168-177	218	25x2,5	M8/M10	17,0	D	M6	2,10	0,302	10	UPZD-6	80120117600

PIPE CLAMPS HOBBY HUPZ



hobby

HOBBY in the new version!

Permissible load

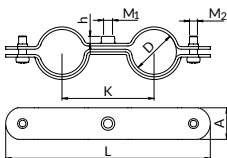
electro-galvanized

with cross recession and washers which prevent from bolts falling out

 Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

Scope of diameters D [mm]	Clamp dimensions		Connection		Version	Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]							
16-20	60	20x1,25	M8	7,9	D	M6	0,8	0,039	100	HUPZ-3/8"	80110101700
21-22	64	20x1,25	M8	7,9	D	M6	0,8	0,045	100	HUPZ-1/2"	80110102100
23-28	69	20x1,25	M8	7,9	D	M6	0,8	0,05	100	HUPZ-3/4"	80110102600
30-36	77	20x1,25	M8	7,9	D	M6	0,8	0,052	100	HUPZ-1"	80110103300
38-43	83	20x1,25	M8	7,9	D	M6	0,8	0,055	50	HUPZ-1 1/4"	80110104200
48-52	92	20x1,25	M8	7,9	D	M6	0,8	0,06	50	HUPZ-1 1/2"	80110104800
53-58	98	20x1,25	M8	7,9	D	M6	0,8	0,068	50	HUPZ- 54	80110105400
59-64	105	20x1,25	M8	7,9	D	M6	0,8	0,071	50	HUPZ-2"	80110106000
75-80	122	20x1,5	M8	7,9	D	M6	1,4	0,076	25	HUPZ-2 1/2"	80110107600
86-92	134	20x1,5	M8	7,9	D	M6	1,4	0,095	25	HUPZ-3"	80110108900
109-116	155	20x1,5	M8	7,9	D	M6	1,8	0,107	25	HUPZ-4"	80110111000
160-167	205	20x2,0	M8	7,9	D	M6	2,1	0,16	10	HUPZ-6"	80110116000

DOUBLE PIPE CLAMPS UDZ



electro-galvanized

cross recessed

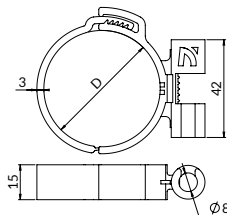
Permissible load

 Pipe clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

Range of diameters D [mm]	Clamp dimensions			Connection		Version	Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number (BK version)
	L [mm]	K [mm]	A x g [mm]	Size M ₁	Height h [mm]							
16-18	88	36	15x1,5	M6	4,0	A	M5	0,30	0,04	100	UDZ-3/8	80150101700
21-23	112	48	20x2,0	M8	5,3	A	M6	0,30	0,08	50	UDZ-1/2	80150102100
26-28	125	54	20x2,0	M8	5,3	A	M6	0,30	0,09	50	UDZ-3/4	80150102600
32-35	156	70	24x2,0	M8	5,3	A	M6	0,30	0,14	50	UDZ-1	80150103300



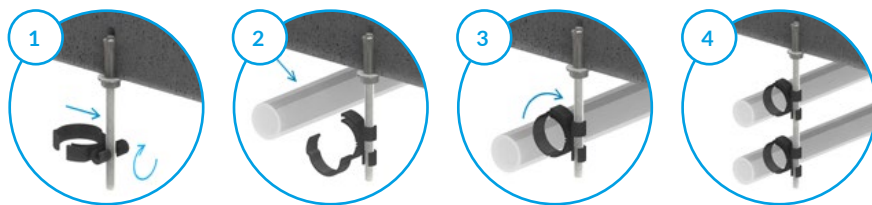
THREADED ROD PIPE CLIP UZT



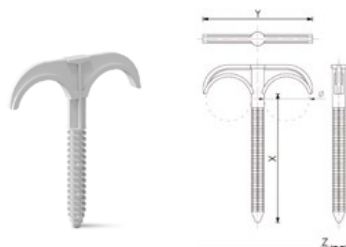
-  Permissible load
-  Thermal resistance
-  mounted on threaded rod
-  polypropylene

Range of diameters D [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
19-21	0,13	0,006	40	UZT-20	80140102005
25-27	0,12	0,007	50	UZT-26	80140102605
27-29	0,11	0,008	50	UZT-28	80140102805
32-34	0,11	0,008	30	UZT-33	80140103305
39-41	0,08	0,01	25	UZT-40	80140104005
49-51	0,07	0,01	25	UZT-50	80140105005

ASSEMBLY METHOD:



UNDERFLOOR HOOKS DH



Usage: intended for fixing and laying pipes with the external diameter of up to 32 mm. Possibility of setting in the floor made of concrete of class not lower than C16/20. The shape of the mandrel ensures easy and quick assembly in the insulation layer at the same time guaranteeing stabilization of pipes laid during the screed realization.

-  Thermal resistance
-  Permissible load
-  directly to the floor
-  polypropylene

Description	Maximum diameter [mm]	Dimensions [mm]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
double floor hook	32	10,0x77	100	DH-77	89060207715
double floor hook	32	10,0x100	50	DH-100	89060210015

03 Fixed points and sliding supports

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

3.1. Heavy duty pipe clamps

	Heavy duty pipe clamps PST		61
	Heavy duty pipe clamps L-PST		62
	Pipe clamps LPSTG	NEW	63
	Metal cladding stabilizing WL		64
	Heavy duty pipe clamps PSF		65
	Heavy duty pipe clamps linings		66
	Angle support for clamps DC/DCL		67

3.2. Fixed point accessories

	Fixed point plates PSPM		68
	Fixed point plates PSST		68
	Threaded pipes RG		68

03

Fixed points and sliding supports

3.3. Sliding supports



Plastic sliding supports
WPS1-M8

70



Sliding support
PSA1

70



Sliding support
PSAH1

71



Sliding support
PSB2

71



Sliding support
PSBH2

72



Universal sliding support
PPS

NEW

72



Two-way sliding support
PSD2

NEW

73



Sliding plates
PEHD

73



Ball swivel hangers
WW

75



Heavy duty swivel
EW

76

3.4. Heavy duty supports



PSFUS

77



PSFUC

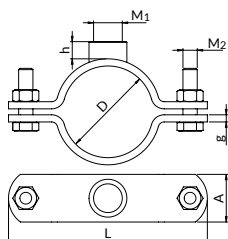
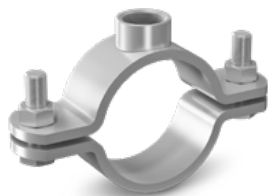
77



U-PSFUC

78

HEAVY DUTY PIPE CLAMPS PST



Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.



electro-galvanized



two bolts with a hexagonal head



Permissible load

Scope of diameters D [mm]	Clamp dimensions		Connection		Weight [kg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height H [mm]			
20-25	108	40x6,0	M20	16,0	M12	PST-15-M20	80310102110
25-29	114	40x6,0	M20	16,0	M12	PST-20-M20	80310102610
32-37	122	40x6,0	M20	16,0	M12	PST-25-M20	80310103310
40-45	132	40x6,0	M20	16,0	M12	PST-32-M20	80310104210
47-52	139	40x6,0	M20	16,0	M12	PST-40-M20	80310104810
53-55	144	40x6,0	M20	16,0	M12	PST-54-M20	80310105410
57-63	150	40x6,0	M20	16,0	M12	PST-50-M20	80310106010
63-65	155	40x6,0	M20	16,0	M12	PST-64-M20	80310106410
67-73	161	40x6,0	M20	16,0	M12	PST-68/72-M20	80310107010
75-79	167	40x6,0	M20	16,0	M12	PST-65-M20	80310107610
88-92	180	40x6,0	M20	16,0	M12	PST-80-M20	80310108910
108-115	220	50x6,0	M20	16,0	M16	PST-110-M20	80310111410
125-127	230	50x6,0	M20	16,0	M16	PST-125/127-M20	80310112510
133-140	247	50x6,0	M20	16,0	M16	PST-125-M20	80310113910
158-161	270	50x8,0	M20	16,0	M16	PST-150-M20	80310116010
164-170	280	50x8,0	M20	16,0	M16	PST-160-M20	80310116810
178-183	291	50x8,0	M20	16,0	M16	PST-180-M20	80310113920
198-203	310	50x8,0	M20	16,0	M16	PST-198/203-M20	80310120010
215-220	332	50x8,0	M20	16,0	M16	PST-200-M20	80310121910
248-253	361	50x8,0	M20	16,0	M16	PST-248/253	80310113970
269-274	408	60x8,0	M20	16,0	M16	PST-250-M20 *	80310127310
320-325	458	60x8,0	M20	16,0	M16	PST-300-M20 *	80310132410
352-357	492	60x8,0	M20	16,0	M16	PST-350-M20 *	80310135010
403-408	570	70x10,0	M20	16,0	M16	PST-400-M20 *	80310140010
453-458	620	70x10,0	M20	16,0	M16	PST-450-M20 *	80310145010
504-509	672	70x10,0	M20	16,0	M16	PST-500-M20 *	80310150010

* Check availability

** Until stocks run out

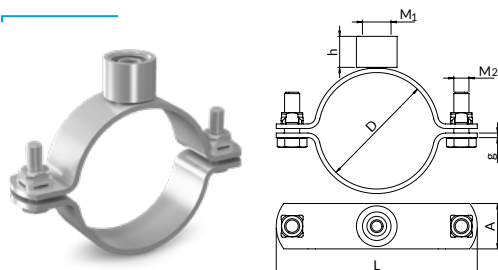
Pipe Clamps with 1/2", 3/4", 1 1/4" connector also available on request

Please use our software **GoSterm** available at **niczuk.eu**





HEAVY DUTY PIPE CLAMPS L-PST



Usage: Temperature differences cause pipes to decrease or increase in size and cause installations to move. By using fixed (and sliding) points we can guide the pipe movement in the desired direction - thus protecting the installation from damage. Properly designed placement of fixed points guarantees trouble-free operation of the installation.

 electro-galvanized

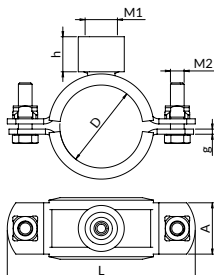
 two bolts with a hexagonal head

 Permissible load

 4 in 1 connection: several assembly possibilities (for threaded rods M8/M10 and threaded pipes G 1/2" - internal and external thread)

Scope of diameters D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]					
16-19	74	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,20	LPST-3/8	80311101720
20-22	78	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,20	LPST-1/2	80311102120
23-25	81	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,21	LPST-25	80311102420
26-30	83	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,21	LPST-3/4	80311102620
32-36	90	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,23	LPST-1	80311103320
37-39	95	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,24	LPST-35	80311103820
40-46	98	30x3,0	M8/M10/1/2"	20,5	M8	3,5	0,24	LPST-1 1/4	80311104120
47-49	105	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,26	LPST-1 1/2	80311104820
50-54	108	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,27	LPST-54	80311105120
55-57	114	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,28	LPST-57	80311105620
58-62	116	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,28	LPST-2	80311105920
63-67	121	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,29	LPST-64	80311106420
68-72	126	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,30	LPST-70	80311102920
75-80	133	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,31	LPST-2 1/2	80311107620
87-92	145	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,35	LPST-3	80311108820
108-111	168	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,39	LPST-4	80311110920
112-118	171	30x3,0	M8/M10/1/2"	20,5	M8	5,2	0,39	LPST-114	80311111320

PIPE CLAMPS LPSTG

NEW


Usage: Temperature differences cause pipes to decrease or increase their dimensions and cause the installation to move. By using fixed (and sliding) points, we can guide the movement of pipes in the desired direction - thus protecting the installation against damage. Properly designed arrangement of fixed points guarantees failure-free operation of the installation. The lining protects pipelines against mechanical damage and additionally provides vibration damping.

Thermal resistance: -40°C - +120°C



electro-galvanized



elastomer EPDM



Heavy-duty locking screws (grade 8.8)
Innovative 4-point welded nuts

FIXED POINTS
AND SLIDING PLATES

PIPE CLAMPS LPSTG

Scope of diameters D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Permissible load [kN]	Weight 1 pc. [kg]	Quantity [pcs./pack]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]						
14-16	74±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,2	2	LPSTG1/4	80311201520
17-19	78±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,21	2	LPSTG3/8	80311201820
21-23	81±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,21	2	LPSTG1/2	80311202220
24-26	83±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,22	2	LPSTG25	80311202520
27-32	90±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,22	2	LPSTG3/4	80311203020
33-36	95±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,24	2	LPSTG1	80311203420
37-43	98±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,25	2	LPSTG11/4	80311204120
44-46	105±1	30x3	M8/M10/1/2"	20,5	M8	2,50	0,26	2	LPSTG45	80311204520
47-51	108±1,5	30x3	M8/M10/1/2"	20,5	M8	2,50	0,28	2	LPSTG11/2	80311204920
52-54	114±1,5	30x3	M8/M10/1/2"	20,5	M8	2,50	0,29	2	LPSTG54	80311205420
55-58	116±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,30	2	LPSTG57	80311205720
60-63	121±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,31	2	LPSTG2	80311206120
64-67	126±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,32	2	LPSTG64	80311206420
73-76	133±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,35	2	LPSTG21/2	80311207420
83-89	145±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,38	2	LPSTG3	80311208620
105-108	168±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,44	2	LPSTG4	80311210720
110-114	171±1,5	30x3	M8/M10/1/2"	20,5	M8	3,00	0,45	2	LPSTG114	80311211420



METAL STABILIZING CLADDING WL

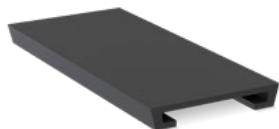


 electro-galvanized

Usage: for creating fixed points with LPST clamps for plastic pipes.

Scope of diameters D [mm]	Intended for pipe clamps	Weight [kg]	Designation for the order	Catalogue number
40-44	L-PST-1 1/4	0,018	WL-42	80312104120
50-54	L-PST-54	0,022	WL-52	80312105120
54-58	L-PST-57	0,025	WL-58	80312105620
63-66	L-PST-64	0,028	WL-65	80312106420
75-78	L-PST-2 1/2	0,033	WL-77	80312107620
87-90	L-PST-3	0,038	WL-89	80312108820
108-112	L-PST-4	0,048	WL-112	80312110920

L-PST LININGS



Lining is sold
in running meters.

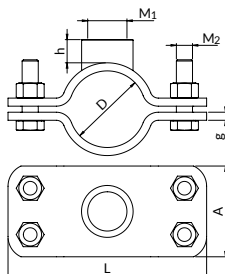
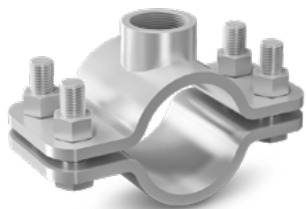
 Material: EPDM with strength
temperature from -40°C to + 120°C

Usage: if necessary, it protects pipelines against
mechanical damage, additionally provides vibration
damping.

Intended for pipe clamps	Unit of measure [mb]	Weight [kg]	Designation for the order	Catalogue number
L-PST	1	0,15	KO-EM30x3,0 1m	80000023030

Intended for pipe clamps	Scope of diameters D [mm]	Scope of diameters with lining D [mm]	Lining type [mm]	Length of the insert [mb]
L-PST-3/8"	16-19	15-18	30x3	0,05
L-PST-1/2"	20-22	19-21	30x3	0,07
L-PST-25	23-25	22-24	30x3	0,08
L-PST-3/4"	26-30	25-29	30x3	0,09
L-PST-1"	32-36	30-34	30x3	0,10
L-PST-35	37-39	35-38	30x3	0,12
L-PST-11/4"	40-46	39-45	30x3	0,13
L-PST-11/2"	47-49	46-48	30x3	0,15
L-PST-54	50-54	49-53	30x3	0,16
L-PST-57	55-57	54-56	30x3	0,18
L-PST-2"	58-62	57-61	30x3	0,19
L-PST-64	63-67	62-66	30x3	0,20
L-PST-70	68-72	67-72	30x3	0,22
L-PST-21/2"	75-80	73-78	30x3	0,24
L-PST-3"	87-92	85-91	30x3	0,28
L-PST-4"	108-111	108-111	30x3	0,34
L-PST-114	112-118	112-117	30x3	0,36

HEAVY DUTY PIPE CLAMPS PSF



Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.



electro-galvanized



four bolts with hexagonal heads



Permissible load

Scope of diameters D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Weight [kg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height H [mm]				
20-25	126	90x6,0	1 1/4"	23,0	M16	1,50	PSF-15-11/4	80320102150
25-29	135	90x6,0	1 1/4"	23,0	M16	1,69	PSF-20-11/4	80320102650
32-37	142	90x6,0	1 1/4"	23,0	M16	1,78	PSF-25-11/4	80320103350
40-45	151	90x6,0	1 1/4"	23,0	M16	1,87	PSF-32-11/4	80320104250
47-52	157	90x6,0	1 1/4"	23,0	M16	1,98	PSF-40-11/4	80320104850
53-55	159	90x6,0	1 1/4"	23,0	M16	2,02	PSF-54-11/4	80320105450
57-63	170	90x6,0	1 1/4"	23,0	M16	2,08	PSF-50-11/4	80320106050
63-67	168	90x6,0	1 1/4"	23,0	M16	2,38	PSF-64-11/4	80320106450
67-76	179	90x6,0	1 1/4"	23,0	M16	2,66	PSF-68/72-11/4	80320107050
75-79	197	90x8,0	1 1/4"	23,0	M16	2,96	PSF-65-11/4	80320107650
88-92	210	90x8,0	1 1/4"	23,0	M16	3,22	PSF-80-11/4	80320108950
108-115	234	90x8,0	1 1/4"	23,0	M16	3,52	PSF-110-11/4	80320111450
125-127	252	90x8,0	1 1/4"	23,0	M16	3,78	PSF-125/127-11/4**	80320112550
133-140	264	90x8,0	1 1/4"	23,0	M16	4,02	PSF-125-11/4	80320113950
158-161	290	90x8,0	1 1/4"	23,0	M16	4,33	PSF-150-11/4	80320116050
164-170	276	90x8,0	1 1/4"	23,0	M16	4,53	PSF-160-11/4	80320116850
198-203	332	90x8,0	1 1/4"	23,0	M16	5,09	PSF-198/203-11/4*	80320120050
215-220	352	90x8,0	1 1/4"	23,0	M16	5,36	PSF-200-11/4	80320121950
269-274	405	90x8,0	1 1/4"	23,0	M16	6,35	PSF-250-11/4*	80320125050
320-325	442	90x8,0	1 1/4"	23,0	M16	7,37	PSF-300-11/4*	80320130050
352-357	476	90x8,0	1 1/4"	23,0	M16	7,96	PSF-350-11/4*	80320135050
403-408	542	90x8,0	1 1/4"	23,0	M16	9,02	PSF-400-11/4*	80320140050
453-458	592	90x8,0	1 1/4"	23,0	M16	9,90	PSF-450-11/4*	80320145050
504-509	644	90x8,0	1 1/4"	23,0	M16	10,81	PSF-500-11/4*	80320150050

* Check availability

** Until stocks run out

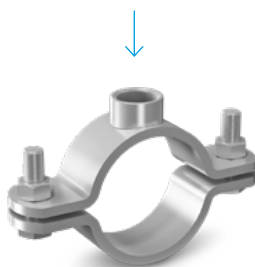
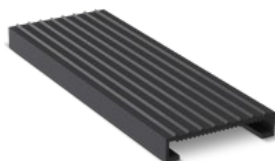
Pipe Clamps with 3/4", 1", M20 connector also available on request



HEAVY DUTY PIPE CLAMP LININGS

FIXED POINTS
AND SLIDING PLATES

HEAVY DUTY PIPE CLAMP LININGS



Thermal resistance



material: EPDM elastomer
or silicone;
thermal resistance: EPDM
elastomer: -40°C to +120°C;
silicone: -60°C to +250°C

Lining sold
in running meters.

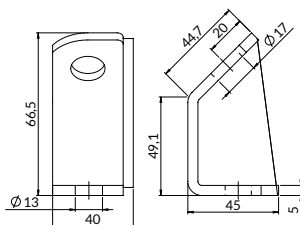
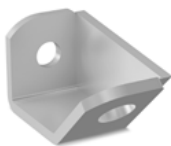
Intended for pipe clamps	Weight [kg]	Designation for the order	Catalogue number
PST 15-80	0,18	KO-EM40x6 1m	80000004060
PST 110-200	0,21	KO-EM50x6 1m	80000005060
PST 250-350	0,25	KO-EM60x8 1m	80000006080
PST 400-500	0,31	KO-EM70x10 1m	80000070100
PST 15-80	0,18	KO-SL40x6 1m	80000004065
PST 110-200	0,21	KO-SL50x6 1m	80000005065
PST 250-350	0,25	KO-SL60x8 1m	80000006085
PST 400-500	0,31	KO-SL70x10 1m	80000070105
PSF	0,35	KO-EM90x10,0 1m	80000090100
PSF	0,35	KO-SL90x8 1m	80000090105

Intended for pipe clamps	Lining type [mm]	Length of the insert [mb]	Lining name Thermal resistance	
			-40°C to +120°C	-60°C to +250°C
PST-15-M20	40x6	0,07	EPDM lining 40x6 (KO-EM40x6 1m)	Silicone lining 40x6 (KO-SL40x6)
PST-20-M20	40x6	0,10		
PST-25-M20	40x6	0,12		
PST-32-M20	40x6	0,14		
PST-40-M20	40x6	0,16		
PST-54-M20	40x6	0,17		
PST-50-M20	40x6	0,20	EPDM lining 50x6 (KO-EM50x6 1m)	Silicone lining 50x6 KO-SL50x6
PST-64-M20	40x6	0,19		
PST-68/72-M20	40x6	0,27		
PST-65-M20	40x6	0,24		
PST-80-M20	40x6	0,28		
PST-110-M20	50x6	0,34		
PST-125/127-M20	50x6	0,38	EPDM lining 60x8 (KO-EM60x8 1m)	Silicone lining 60x8 KO-SL60x8
PST-125-M20	50x6	0,40		
PST-150-M20	50x6	0,50		
PST-160-M20	50x6	0,53		
PST-198/203-M20	50x6	0,62		
PST-200-M20	50x6	0,61		
PST-250-M20 *	60x8	0,75	EPDM lining 70x10 (KO-EM70x10 1m)	Silicone lining 70x10 KO-SL70x10
PST-300-M20 *	60x8	0,90		
PST-350-M20 *	60x8	1,05	EPDM lining 90x10 (KO-EM90x10 1m)	Silicone lining 90x8 KO-SL90x8
PST-400-M20 *	70x10	1,32		
PST-450-M20 *	70x10	1,48		
PST-500-M20 *	70x10	1,67		

Intended for pipe clamps	Lining type [mm]	Length of the insert [mb]	Lining name Thermal resistance	
			-40°C to +120°C	-60°C to +250°C
PSF-15-11/4"	90x10	0,07	EPDM lining 90x10 (KO-EM90x10 1m)	Silicone lining 90x8 KO-SL90x8
PSF-20-11/4"	90x10	0,10		
PSF-25-11/4"	90x10	0,12		
PSF-32-11/4"	90x10	0,14		
PSF-40-11/4"	90x10	0,16		
PSF-54-11/4"	90x10	0,17		
PSF-50-11/4"	90x10	0,20		
PSF-64-11/4"	90x10	0,19		
PSF-68/72-11/4"	90x10	0,27		
PSF-65-11/4"	90x10	0,24		
PSF-80-11/4"	90x10	0,28		
PSF-110-11/4"	90x10	0,34		
PSF-125/127-11/4"	90x10	0,38		
PSF-125-11/4"	90x10	0,40		
PSF-150-11/4"	90x10	0,50		
PSF-160-11/4"	90x10	0,53		
PSF-198/203-11/4"	90x10	0,62		
PSF-200-11/4"	90x10	0,61		
PSF-250-11/4" *	90x10	0,75		
PSF-300-11/4" *	90x10	0,90		
PSF-350-11/4" *	90x10	1,05		
PSF-400-11/4" *	90x10	1,32		
PSF-450-11/4" *	90x10	1,48		
PSF-500-11/4" *	90x10	1,67		

ANGLE SUPPORT FOR CLAMPS DC/DCL

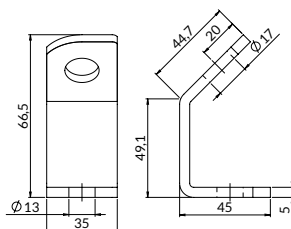
DC



Intended for pipe clamps	Permissible load [kN]	Weight [kg]	Quantity [set/pkg]	Designation for the order	Catalogue number
PST, PSF	5	0.250	5	DC-M12/16 KPL*	81132121600

* on sale as a set (right+left)

DCL



Intended for pipe clamps	Permissible load [kN]	Weight [kg]	Quantity [set/pkg]	Designation for the order	Catalogue number
PST, PSF	1.8	0.160	5	DCL-M12/16 KPL*	81131121600

* on sale as a set (right+left)

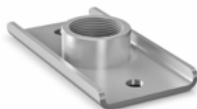


DC



DCL

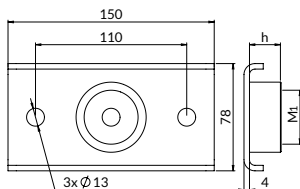
FIXED POINT PLATES PSPM



Usage: for fixed points assembly to the substrate and on the structures made of mounting channels.

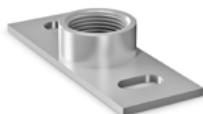
electro-galvanized

Permissible load



Connection M_1	Connection height H [mm]	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
1/2"	15	12,00	0,450	PSPM-1/2	80330081520
3/4"	17	12,00	0,460	PSPM-3/4	80330081530
1"	18	12,00	0,470	PSPM-1	80330081540
1 1/4"	23	12,00	0,520	PSPM-1 1/4	80330081550
M20	16	12,00	0,470	PSPM-M20	80330081510

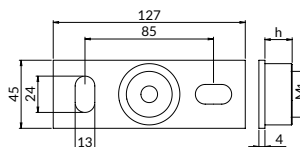
FIXED POINT PLATES PSST



Usage: for fixed points assembly to the substrate and on the structures made of mounting channels.

electro-galvanized

Permissible load



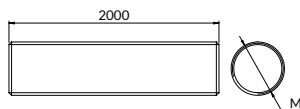
Connection M_1	Connection height H [mm]	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
1/2"	15	6,00	0,220	PSST-1/2	80340041220
3/4"	17	6,00	0,210	PSST-3/4	80340041230
1"	18	6,00	0,200	PSST-1	80340041240
M16	13	6,00	0,220	PSST-M16	80340041260
M20	16	6,00	0,230	PSST-M20	80340041210

THREADED PIPE RG



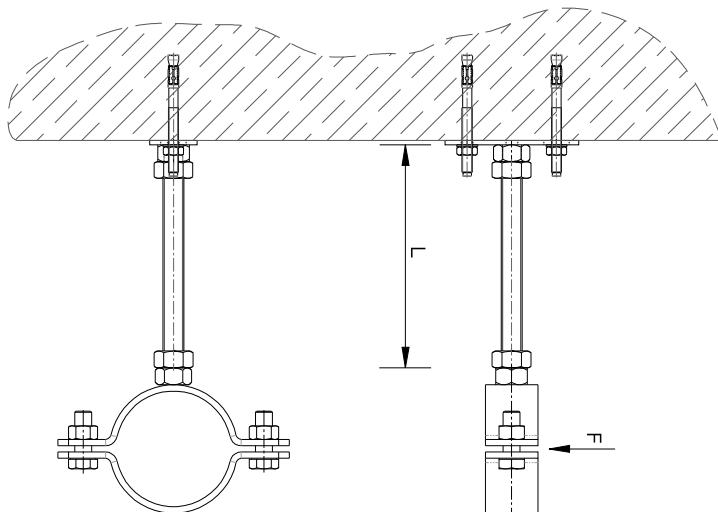
Usage: for joining fixed point plate with the fixed point clamp.

electro-galvanized



Thread M	Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
1/2"	2000	1,660	RG-1/2 X2000	80350200020
3/4"	2000	2,760	RG-3/4 X2000	80350200030
1"	2000	3,940	RG-1 X2000	80350200040
1 1/4"	2000	5,420	RG-1 1/4 X2000	80350200050

STRENGTH OF THREADED PIPES AND THREADED RODS



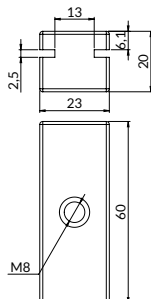
THREADED RODS

	M8	M10	M12	M16	M20
Length L [mm]	Max. bending load F [kN]				
20	0,21	0,42	0,74	1,94	3,76
30	0,14	0,28	0,50	1,29	2,51
40	0,11	0,21	0,37	0,97	1,88
50	0,08	0,17	0,29	0,76	1,51
60	0,07	0,14	0,25	0,65	1,26
70	0,06	0,12	0,21	0,55	1,08
80	0,05	0,11	0,19	0,48	0,95
90	0,04	0,09	0,17	0,43	0,84
100	0,03	0,08	0,15	0,38	0,76
125	0,02	0,05	0,11	0,31	0,61
150	0,02	0,04	0,08	0,25	0,51
175	-	0,03	0,06	0,20	0,43
200	-	0,02	0,04	0,16	0,38
250	-	0,01	0,03	0,10	0,24
300	-	-	0,02	0,07	0,17
350	-	-	0,01	0,05	0,12
400	-	-	0,01	0,04	0,09
450	-	-	-	0,03	0,07
500	-	-	-	0,02	0,06

HOLLOW THREADED PIPES

	1/2"	3/4"	1"	1 1/4"
Length L [mm]	Max. bending load F [kN]			
20	3,08	5,40	10,72	25,60
30	2,05	3,60	7,15	17,09
40	1,53	2,71	5,38	12,85
50	1,25	2,16	4,35	10,36
60	1,03	1,80	3,57	8,50
70	0,88	1,55	3,07	7,30
80	0,77	1,35	2,70	6,48
90	0,68	1,20	2,40	5,75
100	0,62	1,10	2,16	5,18
125	0,49	0,87	1,73	4,14
150	0,41	0,73	1,44	3,45
175	0,36	0,63	1,25	2,97
200	0,32	0,55	1,10	2,59
250	0,24	0,45	0,88	2,07
300	0,17	0,37	0,73	1,72
350	0,13	0,29	0,62	1,48
400	0,10	0,22	0,51	1,30
450	0,08	0,18	0,43	1,15
500	0,06	0,15	0,35	1,04

PLASTIC SLIDING SUPPORT WPS1-M8



- Permissible load
- Thermal resistance

Usage: for the assembly of pipelines with axial operation, to be applied with mounting channels. The threaded rod has to be screwed completely in the sliding insert.

Adhesion coefficient: 0,25-0,30

Friction coefficient: 0,16-0,18

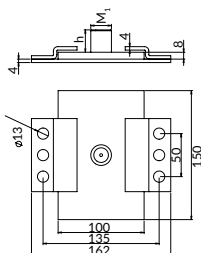
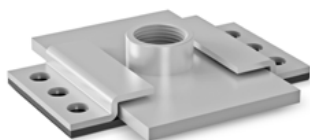
Thermal resistance: -40°C do +120°C

polyamide PA GF20

installation method - Chapter 20

Intended for mounting channels	Thread M	Length L [mm]	Maximum recommended load for the suspended pipe [kN]	Maximum recommended element load in vertical direction [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C, W, X	M8	60	1	1	0,033	25	WPS1-M8	80460080030

SLIDING SUPPORT PSA1



- Permissible load
- Thermal resistance

electro-galvanized

installation method - Chapter 20

Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.

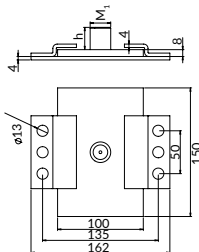
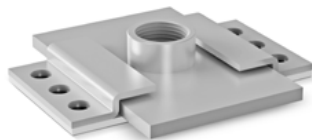
Thermal resistance: 160°C according to ISO75 method B

Connection			Shifting max. [mm]	Designation for the order	Catalogue number
Size M ₂	Height h [mm]	Quantity			
1/2"	15,0	1	65	PSA1-1/2*	80410101200
3/4"	17,0	1	65	PSA1-3/4*	80410103400
1"	18,0	1	65	PSA1-1**	80410110000
1 1/4"	23,0	1	65	PSA1-11/4*	80410111400
M10/12	17,5	1	65	PSA1-M10/12	80410110120
M12/16	26,0	1	65	PSA1-M12/16	80410112160
M20	16,0	1	65	PSA1-M20*	80410100200

* Check availability

** Until stocks run out

SLIDING SUPPORT PSAH1



Permissible load

Thermal resistance

electro-galvanized

Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.

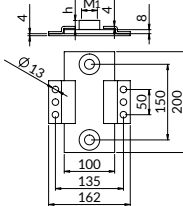
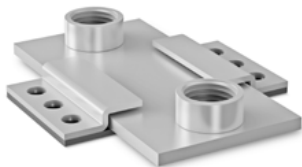
Thermal resistance: 290°C according to ISO75 method B

Connection			Shifting max. [mm]	Designation for the order	Catalogue number
Size M_2	Height h [mm]	Quantity			
1/2"	15,0	1	65	PSAH1-1/2*	80412101200
3/4"	17,0	1	65	PSAH1-3/4*	80412103400
1"	18,0	1	65	PSAH1-1**	80412110000
1 1/4"	23,0	1	65	PSAH1-11/4*	80412111400
M10/12	17,5	1	65	PSAH1-M10/12	80412110120
M12/16	26,0	1	65	PSAH1-M12/16	80412112160
M20	16,0	1	65	PSAH1-M20*	80412100200

* Check availability

** Until stocks run out

SLIDING SUPPORT PSB2



Permissible load

Thermal resistance

electro-galvanized

installation method - Chapter 20

Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.

Thermal resistance: 160°C according to ISO75 method B

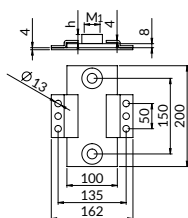
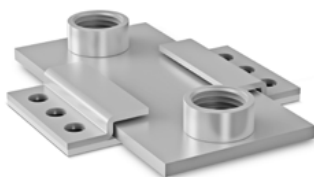
Connection			Shifting max. [mm]	Designation for the order	Catalogue number
Size M_2	Height h [mm]	Quantity			
1/2"	15,0	2	115	PSB2-1/2*	80420101200
3/4"	17,0	2	115	PSB2-3/4*	80420103400
1"	18,0	2	115	PSB2-1**	80420110000
1 1/4"	23,0	2	115	PSB2-11/4*	80420111400
M12/16	26,0	2	115	PSB2-M12/16	80420112160
M20	16,0	2	115	PSB2-M20*	80420100200

* Check availability

** Until stocks run out



SLIDING SUPPORT PSBH2



 electro-galvanized

Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.

Thermal resistance: 290°C according to ISO75 method B

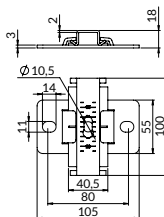
 Permissible load
 Thermal resistance

Size M ₂	Connection Height h [mm]	Quantity	Shifting max. [mm]	Designation for the order	Catalogue number
1/2"	15,0	2	115	PSBH2-1/2"	80422101200
3/4"	17,0	2	115	PSBH2-3/4"	80422103400
1"	18,0	2	115	PSBH2-1"	80422110000
1 1/4"	23,0	2	115	PSBH2-1 1/4"	80422111400
M12/16	26,0	2	115	PSBH2-M12/16	80422112160
M20	16,0	2	115	PSBH2-M20"	80422100200

* Check availability

** Until stocks run out

UNIVERSAL SLIDING SUPPORT PPS1U

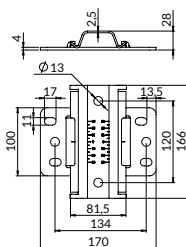


 electro-galvanized

Usage: for installation of pipelines with axial operation, single-point mounting. For pipeline installation as a support and as a suspension.

Shift total [mm]	Max allowed load compressive [kN]	Max allowed load tensile [kN]	Weight [kg]	Quantity [pcs/pack]	Designation for the order	Catalogue number
52	0,67	0,67	0.224	5	PPS1U	80430010500

UNIVERSAL SLIDING SUPPORT PPS2U

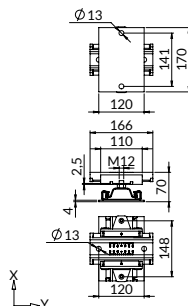
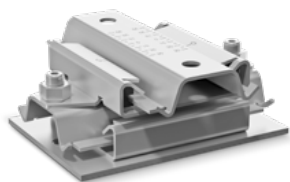


 electro-galvanized

Usage: for installation of pipelines with axial operation, single-point mounting. For pipeline installation as a support and as a suspension.

Shift total [mm]	Max allowed load compressive [kN]	Max allowed load tensile [kN]	Weight [kg]	Quantity [pcs/pack]	Designation for the order	Catalogue number
78	2,6	1,5	0.858	5	PPS2U	80440013000

TWO-WAY SLIDING SUPPORT PPSD2

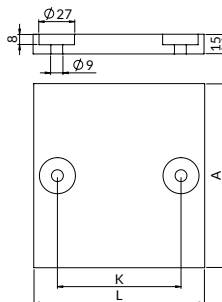
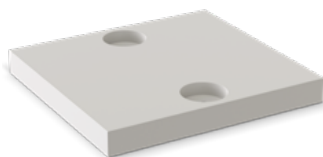
NEW


electro-galvanized

Usage: for installation of pipelines with axial operation, possibility of working in two directions. 1 set consists of two sliding supports.

Hole fi	Max permissible compressive load [kN]	Shift X axis	Shift Y axis	Weight [kg]	Quantity [pcs/pack]	Designation for the order	Catalogue number
13	2,6	43	50	1,629	1	PPSD2	80440213000

SLIDING PLATES PEHD



- ||| Permissible load
- ||| Thermal resistance

Thermal resistance: -30°C do +120°C

Usage: for the free movement of pipes using a directional support.

Dimensions			Weight [kg]	Designation for the order	Catalogue number
A [mm]	K [mm]	L [mm]			
100	39	75	0,120	PEHD-75	80400007515
100	54	90	0,140	PEHD-90	80400009015
100	74	110	0,150	PEHD-110	80400011015
140	94	130	0,250	PEHD-130	80400013015
140	154	190	0,370	PEHD-190	80400019015

THERMAL EXPANSION OF PIPELINES

Under the impact of temperature change, the pipeline length is changed. This phenomenon is referred as thermal expansion, which in general can be described as the physical property of objects that increases in length or volume as the temperature increases. The pipelines are linear expansion.

Fixed points should therefore be installed in neutral locations, so that the pipeline can be operated in both directions. The sliding supports, should be used between fixed point clamps to facilitate the movement of the system.

In order to calculate the forces in the fixed points correctly, the following pipeline information should be prepared:

- the material from which the pipeline is made,
- installation temperature and maximum operating temperature of the system,
- pressure in the installation,
- the diameter and wall thickness of the pipeline

Pipeline thermal expansion depending on the material	
Material	Thermal expansion [mm/m]*
Stainless	0,0100
Cast iron	0,0115
Steel	0,0120
Copper	0,0170
PVC	0,0700
PP	0,1800
PE	0,2000

* with temperature increase of 1°C

The elongations which pipelines undergo may cause system depressurization connected with its buckling and in extreme cases even its breaking. This is why it is necessary to compensate for elongations. It is realized by ensuring:

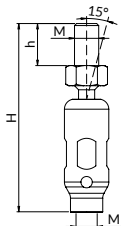
- fixed points which divide the system into sections subject to compensation,
- natural compensation resulting from the system course breaks, e.g. in the corners of the rooms
- shape joints the size and location of which is specified by designers or flexible joints where it is not possible to do any other type of compensation,
- sliding plates which allow for axial movement of pipelines in the places of fixing.

In order to properly calculate forces acting in fixed points and pipeline movement values as a result of thermal expansion, use our software **GoSterm** - available at niczuk.eu, or consult with Design Department.

 **GoSterm**



BALL SWIVEL HANGERS WW



Permissible load



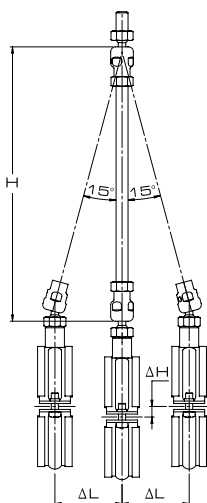
electro-galvanized

Usage: for the assembly of systems which are subject to thermal extension. They allow for shifting fixed elements. They take over the non-axial elongations of pipelines with free rotation of up to 360°. Intended for the assembly directly to the substrate and to the structures made of mounting channels. They have openings which allow for mandrel depth inspection and if the mandrel is screwed in completely, it cannot incline. It is also possible to use it as a fixing for axial shifting - two elements shall be used in that case. Maximum hanger deflection - 15°.

Description	Thread/Connection M	Length H [mm]	Length h [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
long swivel hanger	M12	88	20	2,5	0,100	25	WW50-M12*	80455121200
short swivel hanger	M8	53	20	2,5	0,030	50	WW25-M8	80452080810
short swivel hanger	M10	57	20	2,5	0,050	25	WW25-M10	80452101010
short swivel hanger	M12	73	20	5,0	0,100	25	WW25-M12	80452121210

* Until stocks run out

CALCULATION OF ELONGATIONS



Pipeline elongation (hanger deflection) causes change in the pipeline height ΔH , in accordance with the table [values in mm].

ΔL [mm] \ H [mm]	250	500	750	1000	1500	2000
10	0,2	0,1	0,1	0,1	0,1	0,1
20	0,8	0,4	0,3	0,2	0,1	0,1
30	1,8	0,9	0,6	0,5	0,3	0,2
40	3,2	1,6	1,1	0,8	0,5	0,4
50	4,9	2,5	1,7	1,3	0,8	0,6
60	6,9	3,6	2,4	1,8	1,2	0,9
80	-	6,3	4,3	3,2	2,1	1,6
100	-	9,7	6,6	5,0	3,3	2,5
125	-	14,9	10,2	7,7	5,2	3,9
150	-	-	14,6	11,1	7,5	5,6
200	-	-	19,6	15,0	10,1	7,6
250	-	-	25,3	19,4	13,2	9,9

Minimum lengths of a threaded rod H_{min} , depending on the pipeline elongation ΔL .

ΔL [mm]	H_{min} [mm]
10	37
20	74
30	112
40	150
50	186
60	224
80	298
100	373
125	466
150	560
200	653
250	746

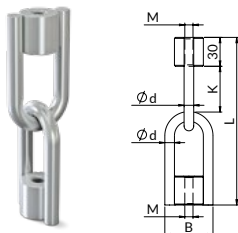
ΔL - pipeline elongation

H - distance between swivel hangers
(Threaded rod length)

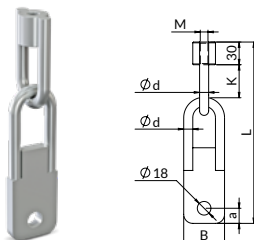


HEAVY DUTY SWIVEL EW

EW1



EW2



electro-galvanized

Usage: for the assembly of heavy systems which are subject to thermal extension. They allow for shifting fixed elements.



Permissible load

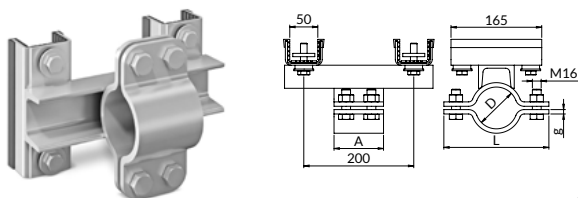
SWIVEL ELEMENT TYPE I (EW1)

Connection	Swivel dimensions		Width	Rod diameter		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Size M	L [mm]	K [mm]	B [mm]	d [mm]						
M10	174	47	50	10		25,0	0,560	1	EW1-M10	82101001000
M12	170	43	54	12		25,0	0,660	1	EW1-M12	82101001200
M16	162	35.5	72	16		25,0	1,180	1	EW1-M16	82101001600
M20	200	50.5	80	20		25,0	1,730	1	EW1-M20	82101002000

SWIVEL ELEMENT TYPE II (EW2)

Connection	Swivel dimensions		Width	Rod diameter	Hole dimension	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Size M	L [mm]	K [mm]	B [mm]	d [mm]	a [mm]					
M10	244	47	50	10	20	25,0	0,730	1	EW2-M10	82102001000
M12	240	43	54	12	20	25,0	0,920	1	EW2-M12	82102001200
M16	232	35	72	16	30	25,0	1,470	1	EW2-M16	82102001600
M20	270	50	80	20	30	25,0	2,090	1	EW2-M20	82102002000

PSFUS



Permissible load
 electro-galvanized
 with a hexagonal head

Fixed point clamp of PSF type welded to the installation kit (clamp data are specified on [page 65](#)).

The set is composed of:

- a fixed point clamp PSF welded to the installation kit

Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.

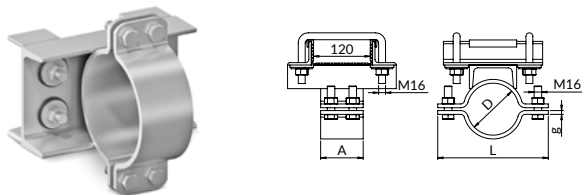
The advantages of using fixed point restraints:

- vibration damping,
- shifting big loads without using struts.

Scope of diameters D [mm]	Designation for the order	Catalogue number
20-25	PSFUS-15*	80360802100
25-29	PSFUS-20*	80360802600
32-37	PSFUS-25*	80360803300
40-45	PSFUS-32*	80360804200
47-52	PSFUS-40*	80360804800
57-63	PSFUS-50*	80360806000
67-73	PSFUS-68/72*	80360807000
75-79	PSFUS-65*	80360807600
88-92	PSFUS-80*	80360808900

* Check availability

PSFUC



Permissible load
 electro-galvanized
 with a hexagonal head

Fixed point clamp of PSF type welded to the installation kit (clamp data are specified on [page 65](#)).

The set is composed of:

- a fixed point clamp PSF welded to the installation kit

Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.

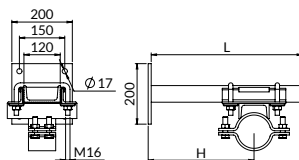
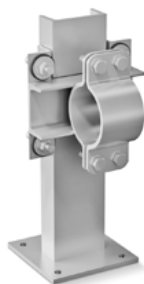
The advantages of using fixed point restraints:

- vibration damping,
- shifting big loads without using struts.

Scope of diameters D [mm]	Designation for the order	Catalogue number
108-115	PSFUC-110*	80370511200
125-127	PSFUC-125/127*	80370512500
133-140	PSFUC-125*	80370513900
164-170	PSFUC-160*	80370516800
215-220	PSFUC-200*	80370521900
269-274	PSFUC-250*	80370527300
320-325	PSFUC-300**	80370530000
403-408	PSFUC-400**	80370540000
504-509	PSFUC-500**	80370550000

* Check availability ** On demand

U-PSFUC



Fixed point clamp of PSF type welded to the installation kit (clamp data are specified on [page 65](#)).



Permissible load



electro-galvanized (hot-dip galvanized also available on demand)



with a hexagonal head

The set is composed of:

- a fixed point clamp PSF welded to the installation kit,
- channel section C120 with a substrate (200 x 200 x 10 mm), length - 500 or 1,000 mm.

Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.

The advantages of using fixed point restraints:

- vibration damping,
- shifting big loads without using the struts,
- smooth fixing height adjustment (from the substrate to the pipe axis) within the range of 117-900 mm.

Scope of diameters D [mm]	Channel section length L [mm]	The scope of fixing height H [mm]	Designation for the order	Catalogue number
108-115	500	117-400	U-PSFUC-110-500*	80370511410
125-127	500	126-400	U-PSFUC-125/127-500*	80370512510
133-140	500	132-400	U-PSFUC-125-500*	80370513910
215-220	500	176-400	U-PSFUC-200-500*	80370521910
269-274	500	203-400	U-PSFUC-250-500*	80370527310
320-325	500	221-400	U-PSFUC-300-500*	80370530010
403-408	500	271-400	U-PSFUC-400-500*	80370540010
504-509	500	322-400	U-PSFUC-500-500*	80370550010
108-115	1000	117-900	U-PSFUC-110-1000*	80371011410
125-127	1000	126-900	U-PSFUC-125/127-1000*	80371012510
133-140	1000	132-900	U-PSFUC-125-1000*	80371013910
158-161	1000	145-900	U-PSFUC-150-1000*	80371016010
164-170	1000	138-900	U-PSFUC-160-1000*	80371016810
215-220	1000	176-900	U-PSFUC-200-1000*	80371021910
269-274	1000	203-900	U-PSFUC-250-1000*	80371027310
320-325	1000	221-900	U-PSFUC-300-1000**	80371030010
403-408	1000	271-900	U-PSFUC-400-1000**	80371040010
504-509	1000	322-900	U-PSFUC-500-1000**	80371050010

* Check availability

** On demand

04 Vibration isolators

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points
and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension
system
- 06. Pipe clamps and
ventilation accessories
- 07. Roof support system
and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire
protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and
connecting accessories
- 14. Anchor fixings
- 15. Installer's work
ergonomics
- 16. Stainless steel
products (A2)
- 17. Hot-dip galvanized
elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel
system
- 20. Projects support

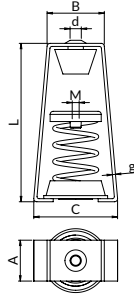
4.1. Vibration isolators



Vibration isolator WSA



VIBRATION ISOLATOR WSA



Epoxy paint 60 µm, according to ISO 19840:2009

Usage: A vibration isolator consisting of a spring element and a steel housing. The suspended element is attached to a threaded connector of the vibration isolator. Used for suspending any piping, ventilation ducts and equipment requiring vibration isolation. It can be used on the threaded rod attaching the mounting profile or directly on a clamp.

Designation for the order	Weight [kg]	Catalogue number
WSA25	0,58	70102515030
WSA50	0,64	70105015030
WSA100	0,64	70110015030
WSA150	0,7	70115015030
WSA200	2,8	70120021530

Designation for the order	Permissible load [kN]	Deflection [mm]	k [N/mm]	A [mm]	B [mm]	C [mm]	L [mm]	d [mm]	M [mm]
WSA25	0,25	25	10	40	56	82	150	11	M10
WSA50	0,5		20						
WSA100	1		40						
WSA150	1,5		60						
WSA200	2	25	80	50	91	137	215	14	M12

05 Wire rope suspension system

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

5.1. Wire rope suspension system



Wire rope suspension for through holes LBT

82



Wire rope suspension with metric connection LS

82



Wire rope suspension with loop LP

82



SL-M8 Adaptor

83



Corner for cables NL

83



Cable sheathing OL

83



Cable shears NC-L

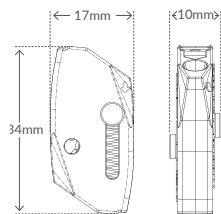
83



WIRE ROPE SUSPENSION PRODUCT

WIRE ROPE SUSPENSION SYSTEM

WIRE ROPE SUSPENSION PRODUCT



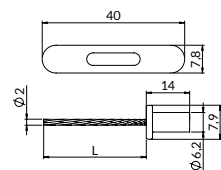
WEDGE GRIP ZKL

(comes in a set with wire rope suspension)

Usage: for the suspension of ventilation systems, installation systems, electric lighting, suspended ceilings, etc.



Material: galvanized steel, weave 7x7, extensibility 1770N/mm²



WIRE ROPE SUSPENSION FOR THROUGH HOLES LBT

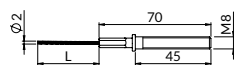


electro-galvanized

Usage: Designed for quick suspension of installations.

Fixing to roof sheathing (e.g. trapezoidal sheets with fi 8mm).

Length [mm]	Diameter of the hole in the ground [mm]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
2 000	8	0,6	10	LBT-2000 ZKL	81101202000
3 000	8	0,6	10	LBT-3000 ZKL	81101203000
4 000	8	0,6	10	LBT-4000 ZKL	81101204000
5 000	8	0,6	10	LBT-5000 ZKL	81101205000
6 000	8	0,6	10	LBT-6000 ZKL	81101206000



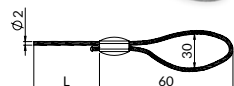
WIRE ROPE SUSPENSION WITH METRIC CONNECTION LS



electro-galvanized

Usage: Designed for quick suspension of installation (piping, cable trays). Anchoring is possible in substrates where screw fixing (concrete, metal coverings) can be used.

Length [mm]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
1 000	0,6	10	LS-1000ZKL	81102201000
2 000	0,6	10	LS-2000ZKL	81102202000
3 000	0,6	10	LS-3000ZKL	81102203000
4 000	0,6	10	LS-4000ZKL	81102204000



WIRE ROPE SUSPENSION WITH LOOP LP

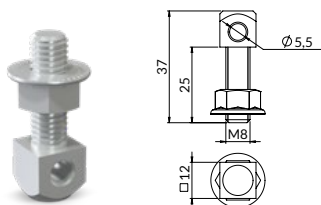


electro-galvanized

Usage: Designed for quick suspension of installations. Loops are wrapped around a structural element. Additional elements such as bolts and nuts are not required for fixing.

Length [mm]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
1 000	0,6	10	LP-1000 ZKL	81103201000
2 000	0,6	10	LP-2000 ZKL	81103202000
3 000	0,6	10	LP-3000 ZKL	81103203000
4 000	0,6	10	LP-4000 ZKL	81103204000
5 000	0,6	10	LP-5000 ZKL	81103205000
6 000	0,6	10	LP-6000 ZKL	81103206000
10 000	0,6	10	LP-10000 ZKL	81103210000

SL-M8 ADAPTOR



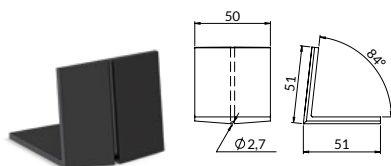
Application: for mounting elements with 8 mm holes (luminaires, mounting channels, cable ladders). The steel wire rope is interlaced through the hole in the adaptor.

Product features:

- Element mounting possible for anchoring sleeves with internal M8 thread
- Maximum recommended load 225 kg at a safety factor of 5:1
- The flange cap can be used in two ways, the location of the flange can be adjusted as required

Thread	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	10	SL-M8	81110000000

CORNER FOR CABLES NL



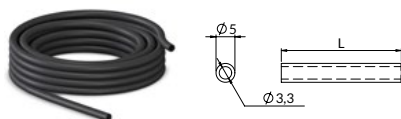
Application: prevents the steel wire rope from rubbing against the edge of the ventilation channel.

Product features:

- Provides nominal wire rope strength
- Lengthens the life of the wire rope
- Prevents damage to channel edges
- Prevents the wire rope from sliding

Quantity [pcs/pkg]	Designation for the order	Catalogue number
10	NL	81120000000

CABLE SHEATHING OL



Application: steel wire rope cover made of plastic (soft PVC). It is designed to isolate the wire rope from the hanging element- thanks to this we avoid possible reactions between different metals (the phenomenon of a corrosive link).

Quantity [rmt/pkg]	Designation for the order	Catalogue number
25	OL	81160000000

CABLE SHEARS NC-L



Application: for precise and fast cutting of steel wire rope up to 3 mm in diameter.

Product features:

- Cutting with scissors prevents the wire rope from untangling
- Non-slip grip coating
- Equipped with springs

Quantity [pcs/pkg]	Designation for the order	Catalogue number
1	NC-L	81140000000

06 Pipe clamps and ventilation accessories

01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
18. UltraCover XP products
19. CERTA - heavy channel system
20. Projects support

6.1. Ventilation pipe clamps



Ventilation pipe clamps
UWG

86



Ventilation pipe clamps
UWX

87

6.2. Ventilation accessories



Duct bracket
UWL, UWZ, UWV

88



Duct bracket
LUW-L, LUW-Z, LUW-V

89



Trapeze hanger with vibration
damper WT-AM

89



Trapeze hanger
WT-BK

90



Trapeze hanger
WTDF11

NEW

90



Vibration damper
AM

90



Channel Lining Strip
TT

90



All purpose perforated bands
UWT

91



Ventilation Duct G Clamp
SW

91

06

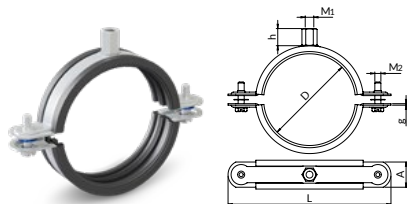
Pipe clamps and ventilation accessories

	Ventilation ducts edgings OW	92
	Ventilation ducts corners NW	93
	Hex washer head self drilling screws WS	93
	Air duct self adhesive insulation foam tape US	93
	Aluminium foil insulation tape TAG	94
	Reinforced aluminium insulation tape TAS	94
	Hose clamps endless band OS-9	94
	Hose clamp head ZOS-9	94

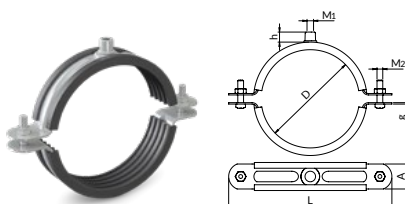


VENTILATION PIPE CLAMPS UWG

Diameter 100-400



Diameter 450-1600



 electro-galvanized

 rivet nut

 material - soft PVC; thermal resistance: -30°C to +90°C

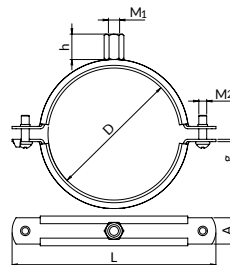
 Permissible load

 Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

Diameter D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height H [mm]						
100	160	25x1,5	M8/M10	17,0	M8	1,9	0,180	25	UWG-100	81211210000
125	185	25x1,5	M8/M10	17,0	M8	1,9	0,220	25	UWG-125	81211212500
150	210	25x1,5	M8/M10	17,0	M8	1,9	0,250	10	UWG-150	81211215000
160	220	25x1,5	M8/M10	17,0	M8	1,9	0,260	10	UWG-160	81211216000
180	240	25x1,5	M8/M10	17,0	M8	1,9	0,300	10	UWG-180	81211218000
200	260	25x1,5	M8/M10	17,0	M8	1,9	0,340	10	UWG-200	81211220000
225	285	25x1,5	M8/M10	17,0	M8	1,9	0,380	10	UWG-225	81211222500
250	310	25x1,5	M8/M10	17,0	M8	1,9	0,420	10	UWG-250	81211225000
280	340	25x1,5	M8/M10	17,0	M8	2,2	0,460	10	UWG-280	81211228000
315	375	25x1,5	M8/M10	17,0	M8	2,2	0,500	5	UWG-315	81211231500
355	415	25x1,5	M8/M10	17,0	M8	2,2	0,550	5	UWG-355	81211235500
400	460	25x2	M8/M10	17,0	M8	2,2	0,740	5	UWG-400	81211240000
450	510	26x2,0	M10	12,0	M8	1,8	0,770	5	UWG-450	81210245000
500	560	26x2,0	M10	12,0	M8	1,8	0,800	5	UWG-500	81210250000
560	620	26x2,0	M10	12,0	M8	1,8	0,890	5	UWG-560	81210256000
630	690	26x2,0	M10	12,0	M8	1,8	1,030	5	UWG-630	81210263000
710	770	26x2,0	M10	12,0	M8	1,8	1,150	5	UWG-710	81210271000
800	860	26x2,0	M10	12,0	M8	1,8	1,400	5	UWG-800	81210280000
900	960	26x2,0	M10	12,0	M8	1,8	1,700	5	UWG-900	81210290000
1000	1060	26x2,0	-	-	M8	1,8	1,800	5	UWG-1000	81210200000
1120	1180	26x2,0	-	-	M8	1,8	1,900	5	UWG-1120	81210201100
1250	1310	26x2,0	-	-	M8	1,8	2,100	5	UWG-1250	81210201200
1400	1460	26x2,0	-	-	M8	1,8	2,400	5	UWG-1400	81210201400
1500	1562	26x2,0	-	-	M8	1,8	2,514	1	UWG-1500	81210201500
1600	1665	26x2,0	-	-	M8	1,8	2,681	1	UWG-1600	81210201600

VENTILATION PIPE CLAMPS UWX



electro-galvanized



double-threaded welded nut



material: soft PVC; thermal resistance: -30°C to +90°C



Permissible load



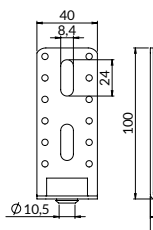
Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

Diameter D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height H [mm]						
80	130	20x1.8	M8/M10	17,0	M6	0,8	0,139	25	UWX-80	81212208000
100	155	20x1.8	M8/M10	17,0	M6	0,8	0,162	25	UWX-100	81212210000
125	180	20x1.8	M8/M10	17,0	M6	0,8	0,188	25	UWX-125	81212212500
150	205	20x1.8	M8/M10	17,0	M6	0,8	0,218	10	UWX-150	81212215000
160	225	20x1.8	M8/M10	17,0	M6	0,8	0,227	10	UWX-160	81212216000
180	240	20x1.8	M8/M10	17,0	M6	0,8	0,250	10	UWX-180	81212218000
200	265	20x1.8	M8/M10	17,0	M6	0,8	0,272	10	UWX-200	81212220000
225	295	20x1.8	M8/M10	17,0	M6	0,8	0,305	10	UWX-225	81212222500
250	320	20x1.8	M8/M10	17,0	M6	0,8	0,326	10	UWX-250	81212225000
280	350	20x1.8	M8/M10	17,0	M6	0,8	0,366	10	UWX-280	81212228000
315	395	20x1.8	M8/M10	17,0	M6	0,8	0,406	10	UWX-315	81212231500
355	420	20x1.8	M8/M10	17,0	M6	0,8	0,452	10	UWX-355	81212235500
400	460	20x1.8	M8/M10	17,0	M6	0,8	0,499	5	UWX-400	81212240000



DUCT BRACKETS UWL, UWZ, UWV



Permissible load



electro-galvanized



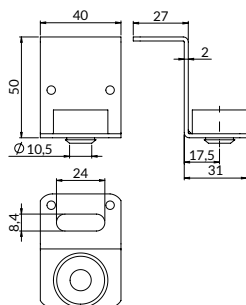
Thermal resistance



material: EPDM elastomer;
thermal resistance:
-40°C to +120°C

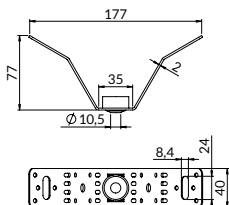
L-TYPE DUCT BRACKET UWL

Diameter of the opening in the shock absorber [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
10,5	0,3	0,090	50	UWL	8125000000



Z-TYPE DUCT BRACKET UWZ

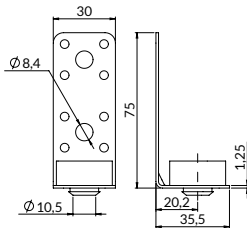
Diameter of the opening in the shock absorber [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
10,5	0,3	0,090	50	UWZ	8126000000



V-HANGER DUCT BRACKET UWV

Diameter of the opening in the shock absorber [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
10,5	0,3	0,090	50	UWV	8127000000

DUCT BRACKETS LUW-L, LUW-Z, LUW-V



Permissible load

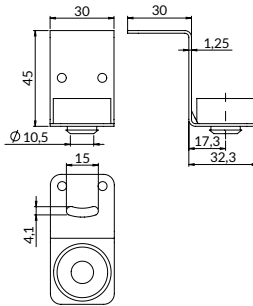
electro-galvanized

Thermal resistance

material: PVC;
thermal resistance:
-30°C to +90°C

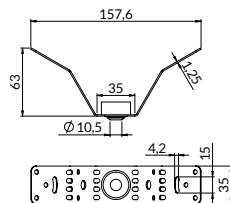
L-TYPE DUCT BRACKET LUW-L

Weight [kg]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,040	0,100	50	LUW-L	81250100000



Z-TYPE DUCT BRACKET LUW-Z

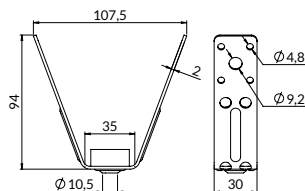
Weight [kg]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,040	0,100	50	LUW-Z	81260100000



V-HANGER DUCT BRACKET LUW-V

Weight [kg]	Permissible load [kN]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,070	0,500	50	LUW-V	81270100000

TRAPEZE HANGER WITH VIBRATION DAMPER WT-AM

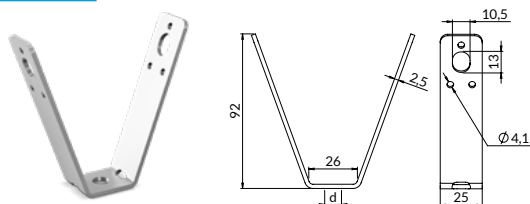


electro-galvanized

Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
2,0	0,1	50	WT-AM	80570002000

Usage: for quick assembly of all types of installations and suspensions of ventilation ducts. Using the WT-AM hanger, various elements can be suspended from the trapezoidal sheet metal roof structure using self-drilling screws, threaded rods or bolts. The hanger has a shock absorber to dampen vibrations.

TRAPEZE HANGER WT-BK



Usage: For quick installation of all types of installations and air duct suspensions. With the WT-BK hanger it is possible to suspend various elements to the roof structure made of trapezoidal sheet metal, using self-drilling screws, threaded rods or screws.



Permissible load

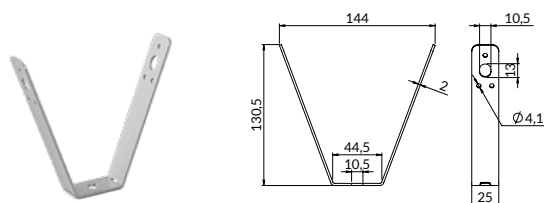


electro-galvanized

d [mm]	Permissible load [kN]	Opening fixing for the bar	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
11.2	4,0	M10	0,107	50	WT-BK-F11	80570001100
13.1	4,0	M12	0,107	50	WT-BK-F13	80570001300

Hangers with M8 and M10 connection are also available - page 115

TRAPEZE HANGER WTDF11



Usage: For quick installation of all types of installations and air duct suspensions. With the WT-BK hanger it is possible to suspend various elements to the roof structure made of trapezoidal sheet metal, using self-drilling screws, threaded rods or screws.



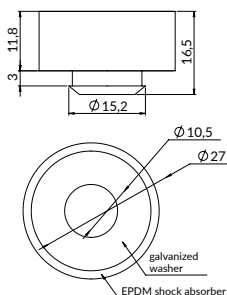
Permissible load



electro-galvanized

Permissible load [kN]	Opening fixing for the bar	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
2,5	M10	0,10	50	WTDBK10	80571001100

VIBRATION DAMPER AM



Thermal resistance



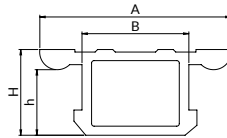
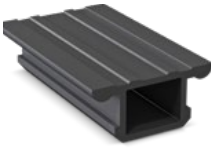
electro-galvanized



material: EPDM elastomer;
thermal resistance:
-40°C to +120°C

Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,010	50	AM-10	81102000000

CHANNEL LINING STRIP TT



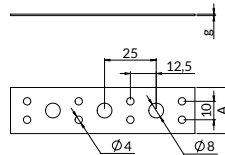
Thermal resistance



material: EPDM elastomer;
thermal resistance: -40°C to +120°C

Intended for mounting channels	Dimensions				Length [running meters/ roll]	Weight [kg/r.m.]	Designation for the order	Catalogue number
	A [mm]	B [mm]	H [mm]	h [mm]				
A, C	27	13	11	7	25	0,150	TT-A	81102303005
MG, MF, MH	38	21	17	13	25	0,250	TT-MF	81102414105
MB, E	46	25	17	13	25	0,310	TT-MB	81102504005

ALL PURPOSE PERFORATED BANDS UWT



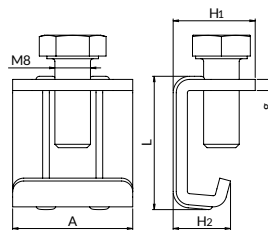
Permissible load



electro-galvanized

Width A [mm]	Thickness g [mm]	Length [running meters/roll]	Weight [kg/running meters]	Designation for the order	Catalogue number
17	0,60	25	0,060	UWT17	81220017005
25	0,80	25	0,150	UWT25	81220025005

VENTILATION DUCT G CLAMP SW

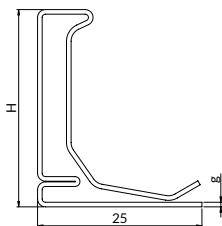


electro-galvanized

Height H1 [mm]	Height H2 [mm]	Width A [mm]	Length L [mm]	Thickness g [mm]	Weight [kg/r.m.]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
18,8	15,5	18,8	32	2,5	0,040	200	SW P3	81280000000



VENTILATION DUCTS EDGINGS OW



electro-galvanized

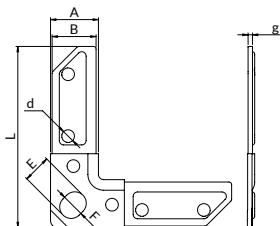
Usage: for connecting ducts and ventilation fittings. Edges and corners should be selected according to duct dimensions and pressure in the ventilation duct.

Height H [mm]	Thickness g [mm]	Length [mm]	Weight [kg]	Quantity [running meters/ packaging]	Designation for the order	Catalogue number
20	0,6	2500	1,06	125	OW-20-2500	81610202500
20	0,6	5000	2,12	125	OW-20-5000	81610205000
30	0,7	2500	1,53	100	OW-30-2500	81610302500
30	0,7	5000	3,06	100	OW-30-5000	81610305000

THE RANGE OF APPLICATION OF VENTILATION EDGINGS

Pressure [Pa]	Duct dimensions - height or width			
	Up to 500 [mm]	500-1000 [mm]	1001-1600 [mm]	1601-2500 [mm]
200	OW-20	OW-20	OW-30	OW-30
400	OW-20	OW-20	OW-30	OW-30
600	OW-20	OW-20	OW-30	OW-30
800	OW-20	OW-20	OW-30	OW-30
1000	OW-20	OW-20	OW-30	OW-30
1200	OW-20	OW-20	OW-30	
1500	OW-20	OW-20	OW-30	

VENTILATION DUCTS CORNERS NW

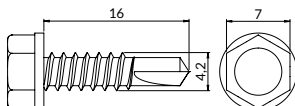


electro-galvanized

Usage: to connect the edges of ventilation ducts. Corners shall be selected according to the types of ventilation edges used in the ventilation line.

For edges	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A [mm]	B [mm]	L [mm]	g [mm]	E [mm]	F [mm]	d [mm]				
For edges OW-20	18,0	15,0	72,0	2,0	11,0	9,0	6,2	0,030	100	NW-20	81620200000
For edges OW-30	27,0	25,0	103,0	2,5	16,0	13,0	7,2	0,070	50	NW-30	81620300000

HEX WASHER HEAD SELF DRILLING SCREWS WS



electro-galvanized



Weight 100 piece [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,200	250	WS-4,2X16	81630421600

AIR DUCT SELF ADHESIVE INSULATION FOAM TAPE US



Width [mm]	Thickness [mm]	Length [running meters/ roll]	Weight [kg /r.m.]	Quantity [roll / packaging]	Designation for the order	Catalogue number
10	4	20	0,010	5	US-4X10	81640041020
15	4	20	0,010	3	US-4X15	81640041520

Usage: for sealing of ventilation duct joints and flat connectors.



Material: polyethylene foam, with glue on one side, substrated on acrylic dispersion, which ensures excellent adhesive properties to various substrates, and resistance to UV radiation. The glue does not contain solvents. The spacer is made of white silicone paper. Density: 25 kg/m³ [PN-EN-ISO 845]. Tensile strength: longitudinal - 230 kPa [PN-N-ISO 1798], transverse - 100 kPa [PN-EN-ISO 1798]. Thermal resistance: -80°C - +100°C. Assembly temperature: min 5°C.

ALUMINIUM FOIL INSULATION TAPE TAG



Usage: for sealing of ventilation duct joints and flat connectors.



Material: plain aluminium foil covered with glue ensuring high adhesion level. Absolute elongation: 3%. Adhesive strength (after 10 minutes): 18 N/25 mm. Water absorption: <1. Storage conditions: 15-25°C. Application temperature from 10 to 40°C. Thermal resistance: -30 to +120°C. Application conditions: clean, dry substrate.

Width [mm]	Thickness [mm]	Length [running meters /roll]	Weight [kg /r.m.]	Quantity [rolls/ packaging]	Designation for the order	Catalogue number
50	0,025	50	0,35	1	TAG-50	81650505000
75	0,025	50	0,53	1	TAG-75	81650755000
100	0,025	50	0,70	1	TAG-100	81650005000

REINFORCED ALUMINIUM INSULATION TAPE TAS



Usage: for sealing of ventilation duct joints and flat connectors.



Material: aluminium foil reinforced with glass mesh, covered with glue which ensures high adhesion level. Absolute elongation: 1%. Adhesive strength (after 10 minutes): 28 N/25 mm. Water absorption: <1. Storage conditions: 15-25°C. Application temperature from 10 to 40°C. Thermal resistance: -30 to +80°C. Application conditions: clean substrate.

Width [mm]	Thickness [mm]	Length [running meters /roll]	Weight [kg /r.m.]	Quantity [rolls/ packaging]	Designation for the order	Catalogue number
50	0,020	50	0,43	1	TAS-50	81650505000
75	0,020	50	0,67	1	TAS-75	81660755000
100	0,020	50	0,92	1	TAS-100	81660005000

HOSE CLAMPS ENDLESS BAND OS-9



Usage: for connecting flexible hoses with flat connectors, joints, etc.



stainless steel

Width [mm]	Length [running meters /roll]	Weight [kg /r.m.]	Quantity [rolls/ packaging]	Designation for the order	Catalogue number
9	30	1,409	1	OS-9	81670093000

HOSE CLAMP HEAD ZOS-9



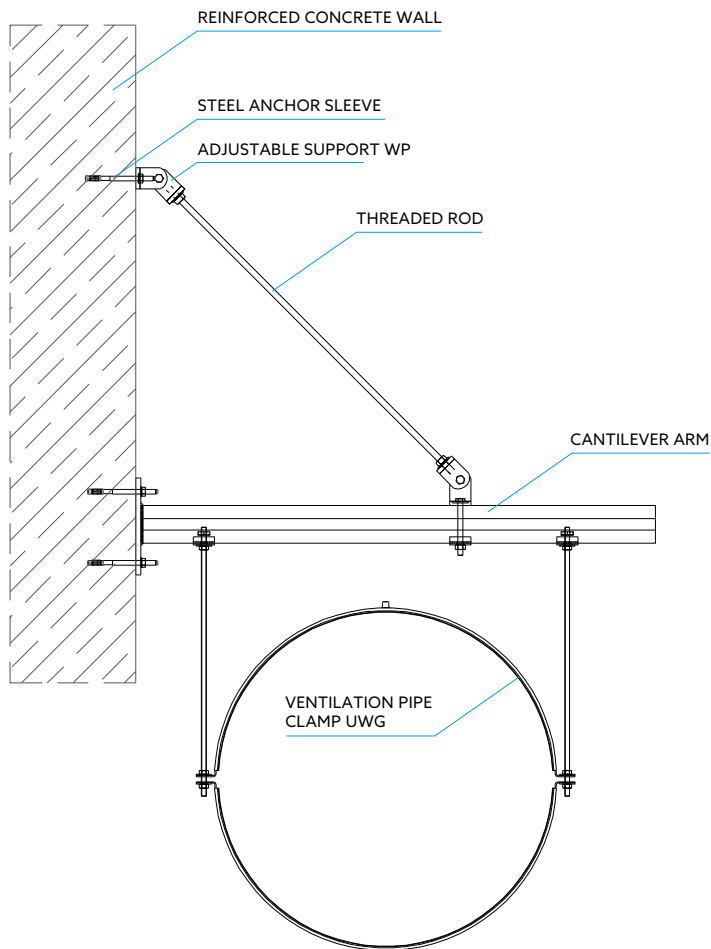
Usage: for the assembly of clips made of steel worm tape.



lock – stainless steel; screw – zinc-plated steel

Weight [kg]	Quantity [pcs/ pkg]	Designation for the order	Catalogue number
0,635	100	ZOS-9	81670000000

ROUND VENTILATION DUCT FIXING



In order to ensure safe installation of the ventilation system for round ducts with large cross-sections, it is recommended to use a bracket fixed to the ground using two threaded rods.

The installation method depends on:

- duct weight,
- distance between the fixing points,
- pressure in the system,
- substrate type.

07 Roof support system and service platforms

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms**
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

7.1. Steel rooftop foot base channel supports

	Rooftop foot base channel support OG-PDG	98
	Adjustable/rotational rooftop foot base channel support OG-PDRG	99
	Adjustable/rotational rooftop foot base channel support OG-PDRG	100
	Protective separation fleece FELT	100
	Closed channel rooftop foot base support OG-PDPZ	101

7.2. Plastic rooftop foot base channel supports

	Fixed strut rubber rooftop support base PDE	101
	Rooftop foot base channel support PDT	102
	Foam mat MP	102
	Adjustable connector XPLRPDT44	NEW 102

07

Roof
support
system
and service
platforms

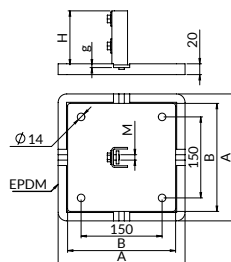
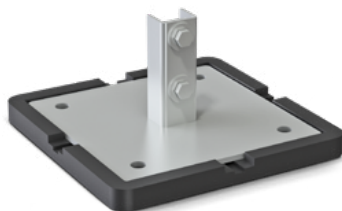
7.3. Components for service platforms

	WEMA grids	NEW	103
	Fastening element UK8	NEW	103
	WEMA steps	NEW	103
	Fastening element UK4M8	NEW	103

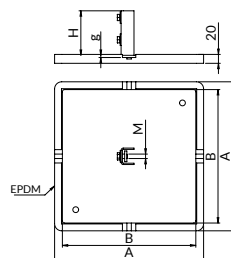


ROOFTOP FOOT BASE CHANNEL SUPPORT OG-PDG

OG-PDG-200



OG-PDG-300



 hot-dip galvanized

Usage: setting up supporting assemblies for installations and devices.
Designed for all types of floors and grounds - including flat rooftops with membrane coating. Large foot area and a EPDM mat ensure stability of the assembly and load distribution across the floor.

 Permissible load

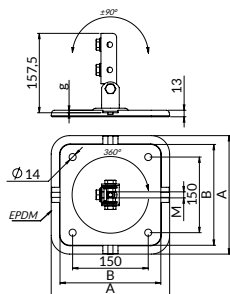
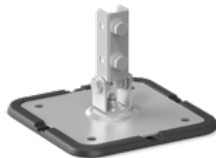
 Thermal resistance

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

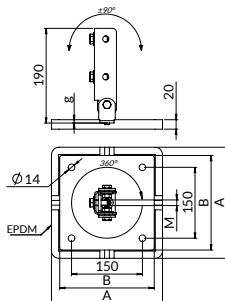
Application for mounting channels	Dimensions					Bolt M	Weight [kg]	Designation for the order	Catalogue number
	A [mm]	B [mm]	G [mm]	g [mm]	H [mm]				
A	235	200	20	5	100	M10x16	2,640	OG-PDG-A-200	81220203011
MG, MF, MH	235	200	20	5	150	M12x30	3,440	OG-PDG-MF-200	81220204111
A	335	300	20	5	100	M10x16	5,560	OG-PDG-A-300	81220303011
MG, MF, MH	335	300	20	5	150	M12x30	6,080	OG-PDG-MF-300	81220304111
MB, ME	335	300	20	5	150	M12x30	6,860	OG-PDG-MB-300	81220305011
MG, MF, MH	485	450	20	8	150	M12x30	16,460	OG-PDG-MF-450	81220454111
MB, ME	485	450	20	8	150	M12x30	16,480	OG-PDG-MB-450	81220455011

ADJUSTABLE/ROTATIONAL ROOFTOP FOOT BASE CHANNEL SUPPORT OG-PDRG

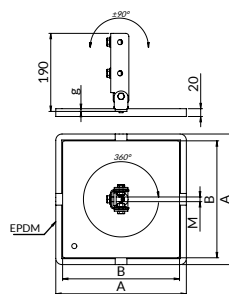
OG-PDRG-A



OG-PDRG-MF-200



OG-PDRG-MF-300



hot-dip galvanized

Usage: to make substructures for installations and devices. The rotation of the support leg makes it easy to install in any direction of inclination. Suitable for all types of substrates, including sloping roofs with diaphragm coating. Large foot area and EPDM mat provides stability of the structure and even distribution of loads on the ground.

Permissible load

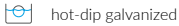
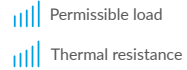
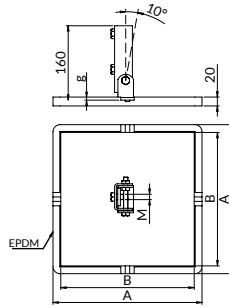
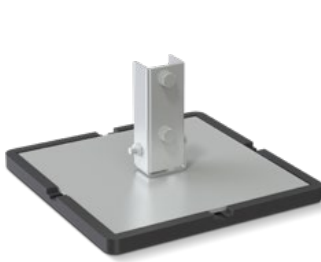
Thermal resistance

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Application for mounting channels	Dimensions			Bolt M	Weight [kg]	Designation for the order	Catalogue number
	A [mm]	B [mm]	g [mm]				
A, C, W, X	235	200	3	M10x16	3,2	OG-PDRG-A-200	81231203011
MG, MF, MH	235	200	5	M12x30	2,60	OG-PDRG-MF-200	81231204111
MG, MF, MH	335	300	5	M12x30	4,70	OG-PDRG-MF-300	81231304111
MG, MF, MH	485	450	8	M12x30	14,20	OG-PDRG-MF-450	81231454111



ADJUSTABLE/ROTATIONAL ROOFTOP FOOT BASE CHANNEL SUPPORT OG-PDRG



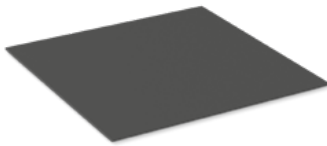
hot-dip galvanized

Usage: to make substructures for installations and devices. Suitable for all types of substrates, including sloping roofs with diaphragm coating. Large foot area and EPDM mat provides stability of the structure and even distribution of loads on the ground.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Application for mounting channels	Adjustment range of angle α [°]	Dimensions					Bolt M	Weight [kg]	Designation for the order	Catalogue number
		A [mm]	B [mm]	G [mm]	g [mm]	H [mm]				
MB, ME	+/- 90	335	300	20	5	160	M12x30	6,320	OG-PDRG-MB-300	81230305011
MB, ME	+/- 90	485	450	20	8	160	M12x30	16,680	OG-PDRG-MB-450	81230455011

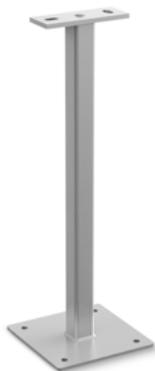
PROTECTIVE SEPARATION FLEECE FELT



synthetic nonwoven

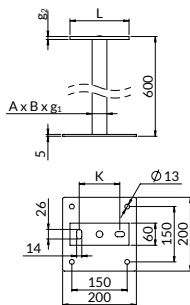
Usage: to be used under roof supports located on EPDM mats. It prevents from vulcanization of the mat with the roof membrane.

Application underneath the mat	Dimensions		Designation for the order	Catalogue number
	L [mm]	B [mm]		
EPDM mat 200x200 mm	250 mm	250 mm	FELT-250	81225255000
EPDM mat 300x300 mm	350 mm	350 mm	FELT-350	81235355000
EPDM mat 450x450 mm	500 mm	500 mm	FELT-500	81250505000
EPDM mat 250x130 mm	270 mm	150 mm	FELT-270	81227155000
EPDM mat 400x130 mm	420 mm	150 mm	FELT-420	81242155000
EPDM mat 600x180 mm	620 mm	200 mm	FELT-620	81262205000
EPDM mat 1000x180 mm	1020 mm	200mm	FELT-1020	81210205000



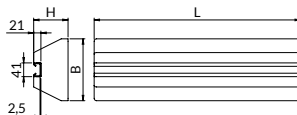
Usage: for roof structures where no thermal insulation has already been performed. Closed channel structure allows further realization of roofing works.

Dimensions				Weight [kg]	Designation for the order	Catalogue number
A x B x g2 [mm]	K [mm]	L [mm]	g1 [mm]			
40x40x3	110	160	8	4,062	OG-PDPZ-200-40	82840304101
60x60x4	150	200	10	6,36	OG-PDPZ-200-60	81260204101



Roof slope angle may be specified in degrees or in percentages. The table below will make it easier to find necessary values.

Slope [°]	Slope [%]
2	4,4
4	8,9
6	13,3
8	17,8
10	22,2
12	26,7
14	31,1
16	35,6
18	40,0
20	44,4



Dimensions			Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
L [mm]	H [mm]	B [mm]				
250	50	130	1,6	1,474	PDE-250	83025011005
400	50	130	2,4	2,320	PDE-400	83040011005
600	100	180	4,5	6,200	PDE-600	83060011005
1000	100	180	6,4	10,600	PDE-1000	83010001105

ROOF SUPPORT SYSTEM AND SERVICE PLATFORMS

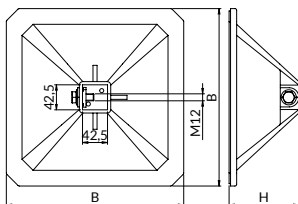
ROOF SLOPE FACTOR

CLOSED CHANEL ROOFTOP FOOT
BASE SUPPORT OG-PDPZ

FIXED STRUT RUBBER ROOFTOP
SUPPORT BASE PDE



ROOFTOP FOOT BASE CHANNEL SUPPORT PDT



Permissible load

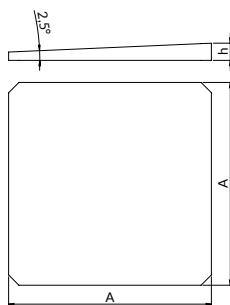
Thermal resistance

- polyethylene of high density (PE-HD, HDPE)

Usage: assembly of support structures for systems and devices. Intended for all types of bases, including flat roofs and slope roofs with membrane coating. Large foot area ensures structure stability and even distribution of loads on the base. It may be applied on slope roofs in connection with foam mat MP-305.

Application for mounting channels	Dimensions		Weight [kg]	Designation for the order	Catalogue number
	B [mm]	H [mm]			
MF	200	114	0,95	PDT-MF-200	83020020415
MF	305	122	1,74	PDT-MF-305	83030520415
MF	500	118,5	4,24	PDT-MF-500	83050020415

FOAM MAT MP



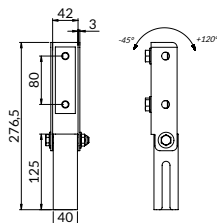
Thermal resistance

- foamed polyethylene EPE

Usage: to be applied with support PDT-MF on roofs with the slope of up to 2.5° (5.5%) using a single mat.

Designation for the order	Dimensions		Weight [kg]	Catalogue number
	A [mm]	h [mm]		
MP-305	296	22,9	0,13	81130505000

ADJUSTABLE CONNECTOR XPLRPDT44



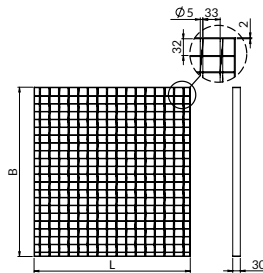
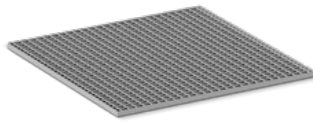
NEW

Already on sale

Usage: A complete element connecting profiles with a width of 41mm with the PDT roof support, intended for creating frame structures from rail profiles, for installations or devices.

Intended for	Unit weight [kg]	Quantity in package	Designation for the order	Catalogue number
PDT-MF-200, PDT-MF-305, PDT-MF-500	1,2	2	XPLRPDT44	81140041418

WEMA GRIDS


NEW

-  hot-dip galvanized
-  S235JR+N steel

Dimensions B [mm]	Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
1000	1500	23,2	KW15X10	8100015001
1000	1000	20,4	KW10X10	8100010001
1000	800	16,6	KW800X1000	81680010001
1000	600	12,8	KW600X1000	81660010001
500	800	8,7	KW800X500	81680050001
500	600	6,7	KW600X500	81660050001

Usage: WEMA steel grids are a special type of gratings which are made of durable steel and have applications mainly in civil engineering, construction and industry.

1. Industrial floors and platforms: WEMA steel grids are widely used for the construction of industrial floors and platforms, especially where it is required to maintain strength and stability while maintaining air and light flow. Examples include platforms in railway stations, pedestrian bridges, floors in production halls and the petrochemical industry.

Installation of grids:

- Place the grids on the prepared place and adjust them to the dimensions of the installation site.
- Make appropriate mounting holes, if necessary, and screw the grids to the ground or structure.
- Make sure the grids are evenly spaced and properly attached to ensure stability and durability.

2. Landings and stairs: WEMA steel grids are used to create non-slip landings and stairs that are safe for use in various weather conditions. Examples include stairs outside buildings, walkways and platforms in public places.

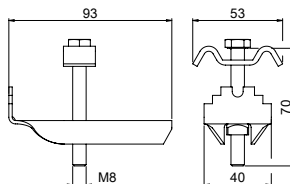
3. Protection of machines and devices: WEMA steel grids can be used to protect machines and devices in industry, preventing access by unauthorized persons and protecting devices against mechanical damage.

Finishing: Depending on your project and needs, you may consider additional steps such as painting or anti-corrosion treatment.

Inspection and testing: Once installation is complete, carefully check that the grids are installed correctly and meet all safety and quality requirements.

Test the strength of the grids as necessary to ensure they can support the anticipated loads.

FASTENING ELEMENTS UK8



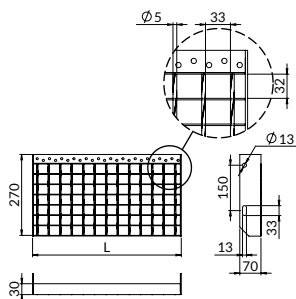
-  hot-dip galvanized
-  S235JR+N steel

Usage:
Fixing grates and steps.

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
4	0,12	UK8	8100008001



WEMA STEPS

**NEW**

hot-dip galvanized



S235JR+N steel

Usage: Used to provide access to various levels of machinery, equipment and industrial installations.

Długość L [mm]	Masa [kg]	Oznaczenia do zamówienia	Numer katalogowy
1000	5,4	SW10X27	8100027001
800	4,2	SW08X27	8080027001
600	3,5	SW600X270	81660027011

Installation of steps:

1. Start by installing the steps from the bottom step and work your way up.
2. Screw the steps to the structure, ensuring even distribution of loads and accuracy of the level of each step.
3. Make sure each step is properly attached and the level and slope are as designed.

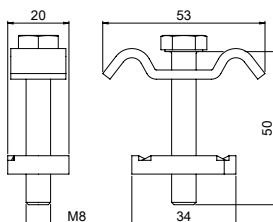
Handrail installation:

If the design includes handrails, install them on the stair steps. Make sure they are stable and provide adequate support and security for users.

Finishing: Depending on your project and needs, you may consider additional steps such as painting, anti-corrosion treatment or covering the steps with an anti-slip material.

Inspection and testing: Once installation is complete, carefully check that the stair treads are installed correctly and meet all safety and quality requirements. Test the strength and stability of the stairs to ensure they are suitable for use.

FASTENING ELEMENTS UK4M8

NEW

hot-dip galvanized



S235JR+N steel

Usage:
Fixing grates and steps.

Quantity [pcs/pkg]	Weight [kg]	Designation for the order	Catalogue number
8	0,07	UK4M8	81040000081

08 Roof support kits

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits**
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support



Support kit for the device with the maximum weight of 50 kg ZW1

106



Support kit for the device with the maximum weight of 100 kg ZW2

106



Support kit for the device with the maximum weight of 2 x 50 kg ZW3

107



Support kit for the device with the maximum weight of 2x50 kg, version II ZW4

107



Support kit for the device with the maximum weight of 2 x 100 kg ZW5

108



Support kit for the device with the maximum weight of 2 x 100 kg, version II ZW6

108



SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 50 KG ZW1



Permissible load

Thermal resistance



electro-galvanized/optionally hot-dip galvanized

Usage: A set dedicated to one device, for small loads. The support for the device with the maximum weight of 50 kg. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

Support set dimensions: length: 1,500 mm, width: 1,500 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW1	8121000000
hot-dip galvanized	OG-ZW1	8121000001

SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 100 KG ZW2



Permissible load

Thermal resistance



electro-galvanized/optionally hot-dip galvanized

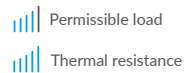
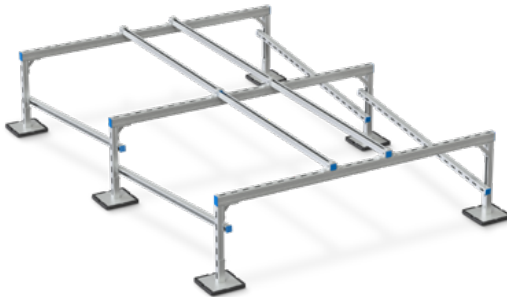
Usage: A set dedicated to one device, for small loads. The support for the device with the maximum weight of 100 kg. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

Support set dimensions: length: 2,000 mm, width: 2,000 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW2	8122000000
hot-dip galvanized	OG-ZW2	8122000001

SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 2 X 50 KG ZW3



electro-galvanized/optionally hot-dip galvanized

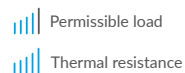
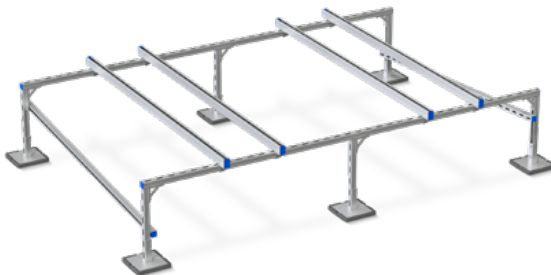
Usage: A set dedicated to two devices, for small loads. The support for the devices with the maximum weight of 2x50 kg. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

Support set dimensions: length: 3000 mm, width: 2,000 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW3	81230000000
hot-dip galvanized	OG-ZW3	81230000001

SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 2X50 KG VERSION II ZW4



electro-galvanized/optionally hot-dip galvanized

Usage: set dedicated to two devices, for small loads. The support for the device with the maximum weight of 2x50 kg. version II. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

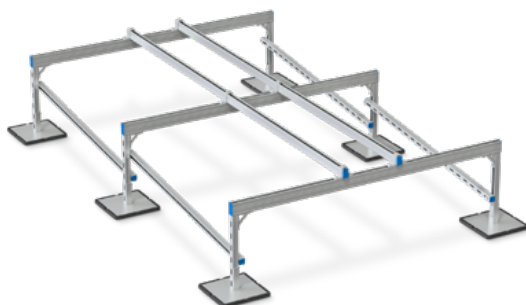
Support set dimensions: length: 3000 mm, width: 2,000 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW4	81240000000
hot-dip galvanized	OG-ZW4	81240000001



SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 2 X 100 KG ZW5

 Permissible load Thermal resistance electro-galvanized/optionally hot-dip galvanized

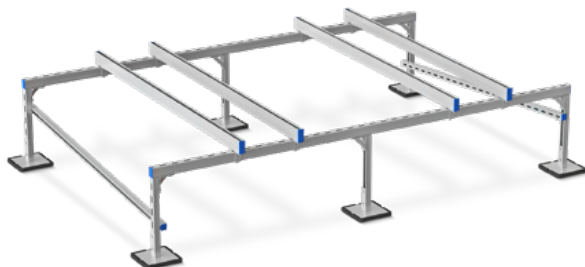
Usage: A set dedicated to two devices, for small loads. The support for the device with the maximum weight of 2x100 kg. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

Support set dimensions: length: 3000 mm, width: 2,000 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW5	8130000000
hot-dip galvanized	OG-ZW5	8125000001

SUPPORT KIT FOR THE DEVICE WITH THE MAXIMUM WEIGHT OF 2 X 100 KG VERSION II ZW6

 Permissible load Thermal resistance electro-galvanized/optionally hot-dip galvanized

Usage: A set dedicated to two devices, for small loads. The support for the device with the maximum weight of 2x100 kg, version II. Wind force and snow load as well as even distribution of forces on the roof area were taken into account.

Support set dimensions: length: 3000 mm, width: 2,000 mm, height: 500 mm.

In order to avoid vulcanization of EPDM mat with roof membrane, it is recommended to use FELT underlay.

Anit-corrosion coating	Designation for the order	Catalogue number
electro-galvanized	ZW6	8129000000
hot-dip galvanized	OG-ZW6	8126000001

09 Fire protection system

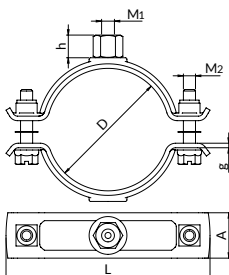
01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
18. UltraCover XP products
19. CERTA – heavy channel system
20. Projects support

9.1. Sprinkler systems

	Sprinkler pipe clamp FM and VdS-approved DN-F-V	110
	Sprinkler Pipe Loop ZP	111
	Sprinkler pipe Loop FM-approved ZPF	112
	Sprinkler pipe Loop FM and VdS-approved ZPFV	NEW 112
	U-bolts KB	113
	Trapeze hangers WTV	114
	Trapeze hangers WT	114
	J angled hook bolt HT	115
	Trapeze sheet pipe support channel SZ-M	115



SPRINKLER PIPE CLAMP FM AND VDS-APPROVED DN-F-V



Permissible load



Products conform to VdS, FM

electro-galvanized

with a hexagonal head

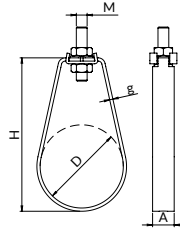
Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

Usage: for the assembly of fixed water extinguishing devices and sprinkler and hydrant systems. Clamps with M8 connection are certified by VdS, Clamps with M10 connection are certified by VdS and FM.

Scope of diameters D [mm]	Connection		Clamp dimensions		Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Certificates	Designation for the order	Catalogue number
	Size M ₁	Height h [mm]	L [mm]	A x g							
20-24	M8	15,0	66	30x2,5	M8	3,1	0,144	50	VdS	DN-V-1/2"-PP	80550002100
25-30	M8	15,0	71,3	30X2,5	M8	3,1	0,151	50	VdS	DN-V-3/4"-PP	80550002600
25-30	M10	15,0	71,3	30X2,5	M8	3,1	0,148	50	FM	DN-F-3/4"-PP*	80560002600
25-30	M10	15,0	71,3	30X2,5	M8	3,1	0,160	50	FM/VdS	DN-F-V-3/4"-PP*	80561002600
31-35	M8	15,0	76,8	30x2,5	M8	3,1	0,174	50	VdS	DN-V-1"-PP	80550003300
31-35	M10	15,0	76,8	30X2,5	M8	3,1	0,174	50	FM/VdS	DN-F-V-1"-PP	80561003300
40-45	M8	15,0	87,5	30x2,5	M8	3,1	0,179	50	VdS	DN-V-1 1/4"-PP	80550004200
40-45	M10	15,0	87,5	30x2,5	M8	3,1	0,185	50	FM/VdS	DN-F-V-1 1/4"-PP	80561004200
48-53	M8	15,0	95,8	30-2,5	M8	3,1	0,196	50	VdS	DN-V-1 1/2"-PP	80550004800
48-53	M10	15,0	95,8	30x2,5	M8	3,1	0,199	50	FM/VdS	DN-F-V-1 1/2"-PP	80561004800
60-65	M10	15,0	108,3	30x2,5	M8	3,1	0,223	25	FM/VdS	DN-F-V-2"-PP	80550006000
76-81	M10	15,0	134,9	30X3	M8	4,5	0,312	25	FM/VdS	DN-F-V-2 1/2"-PP	80550007600
88-93	M10	15,0	147,4	30X3	M8	4,5	0,364	25	FM/VdS	DN-F-V-3"-PP	80550008900
102-108	M12	18,0	162,9	30X3	M8	5,2	0,402	25	VdS	DN-V-100-PP*	80550010000
110-116	M12	18,0	171,1	30x3	M8	5,2	0,632	25	FM/VdS	DN-F-V-4"-PP	80550011000
117-124	M12	18,0	179,3	30x3	M8	5,2	0,658	10	VdS	DN-V-120-PP*	80550012000
133-140	M12	18,0	210,2	40X4	M12	5,8	0,834	10	VdS	DN-V-5"-PP	80550013300
159-165	M16	24,0	235,6	40X4	M12	6,9	0,929	10	VdS	DN-V-159-PP	80550015900
167-173	M16	24,0	243,7	40X4	M12	6,9	0,960	10	FM/VdS	DN-F-V-6"-PP	80550016800
219-225	M16	24,0	296,2	40X4	M12	8,2	1,165	10	FM	DN-F-8"-PP	805600021900

SPRINKLER PIPE LOOP ZP

ALMOST THE
LAST PIECES



Permissible load

electro-galvanized

Usage: for the assembly of fixed water extinguishing devices.

Set includes:

- a loop
- a clasp
- a flat washer
- two hexagonal nuts

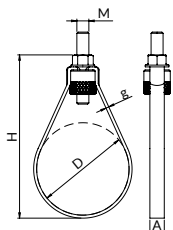
Scope of diameters D [mm]	Connection size M	Clamp dimensions		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
		H [mm]	A x g					
34-35	M8	90	20x2,0	2,6	0,090	100	ZP-M8-1"	80510080330
42-45	M8	94	20x2,0	3,1	0,090	100	ZP-M8-11/4"	80510080420
48-51	M8	100	20x2,0	3,1	0,100	100	ZP-M8-11/2"	80510080480

Scope of diameters D [mm]	Connection size M	Clamp dimensions		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
		H [mm]	A x g					
34-35	M10	90	20x2,0	3,4	0,090	100	ZP-M10-1"	80510100330
42-45	M10	94	20x2,0	2,8	0,090	100	ZP-M10-11/4"	80510100420
48-51	M10	100	20x2,0	3,3	0,100	100	ZP-M10-11/2"	80510100480
70-76	M10	144	20x3,0	3,6	0,200	50	ZP-M10-21/2"	80510100760
108-114	M10	193	20x3,0	3,3	0,260	25	ZP-M10-4"	80510101100

Scope of diameters D [mm]	Connection size M	Clamp dimensions		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
		H [mm]	A x g					
133	M12	223	24x3,0	3,9	0,360	25	ZP-M12-133	80510121330
140	M12	226	24x3,0	4	0,370	25	ZP-M12-5"	80510121390
159	M12	253	24x3,0	3,4	0,410	10	ZP-M12-159	80510121590
165-168	M12	257	24x3,0	4	0,410	10	ZP-M12-6"	80510121680
219	M16	341	35x4,0	5,7	1,020	10	ZP-M16-8"	80510162190



SPRINKLER PIPE LOOP FM-APPROVED ZPF



Permissible load



electro-galvanized

Set includes:

- a loop
- a cage nut
- a hexagonal nut

Usage: for the assembly of fixed water extinguishing devices, FM approved.

Scope of diameters D [mm]	Connection size M	Clamp dimensions		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
		H [mm]	A x g					
33-35	M10	85	12x1,5	4,5	0,08	100	ZPF-M10-1	80511120330
42-45	M10	90	12x1,5	4,5	0,08	100	ZPF-M10-11/4	80511100420
48-50	M10	100	12x1,5	4,5	0,08	50	ZPF-M10-11/2	80511100480
58-62	M10	115	12x1,5	4,5	0,07	50	ZPF-M10-2	80511100600
75-78	M10	138	15x2,5	6,5	0,15	50	ZPF-M10-21/2	80511100760
87-91	M10	160	15x2,5	6,5	0,16	25	ZPF-M10-3	80511100890
110-118	M10	205	15x2,5	6,5	0,18	25	ZPF-M10-4	80511121100
137-147	M12	230	15x2,5	6,5	0,17	20	ZPF-M12-5	80511121390
167-178	M12	272	15x2,5	7	0,27	20	ZPF-M12-6	80511121680
217-224	M16	353	25x2,5	7	0,59	10	ZPF-M16-8	80511162190

* VdS-certified loops coming soon

SPRINKLER PIPE LOOP FM AND VDS-APPROVED ZPVF

NEW



Products conform to VdS, FM



Permissible load

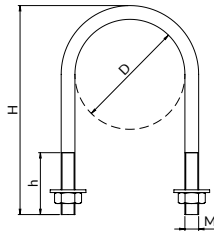


electro-galvanized

Usage: for mounting fixed water fire extinguishing devices. Loops with M8 connection are VdS certified. Loops with M10, M12, M16 connection, VdS and FM certified.

Scope of diameters D [mm]	Connection size M	Clamp dimensions		Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Certificates	Designation for the order	Catalogue number
		H [mm]	A x g						
32-36	M8	83	12 x 1,5	4,5	0,06	100	VdS	ZPV25	80520003300
41-45	M8	87,5	12 x 1,5	4,5	0,062	100	VdS	ZPV32	80520004200
47-51	M8	95,5	12 x 1,5	4,5	0,065	50	VdS	ZPV40	80520004800
59-63	M8	110,5	12 x 1,5	4,5	0,071	50	VdS	ZPV50	80520006000
32-36	M10	85	12 x 1,5	4,5	0,078	10	FM/VdS	ZPFV25	80530003300
41-45	M10	89,5	12 x 1,5	4,5	0,081	100	FM/VdS	ZPFV32	80530004200
47-51	M10	97,5	12 x 1,5	4,5	0,084	50	FM/VdS	ZPFV40	80530004800
59-63	M10	112,5	12 x 1,5	4,5	0,089	50	FM/VdS	ZPFV50	80530006000
75-79	M10	132,5	15 x 2,5	6,5	0,15	50	FM/VdS	ZPFV65	80530007600
88-92	M10	150	15 x 2,5	6,5	0,166	25	FM/VdS	ZPFV80	80530008900
113-117	M10	202,5	15 x 2,5	6,5	0,196	25	FM/VdS	ZPFV100	80530011000
138-142	M12	231,5	15 x 2,5	6,5	0,253	20	FM/VdS	ZPFV125	80531013900
168-172	M12	274,5	15 x 2,5	7	0,286	20	FM/VdS	ZPFV150	80530016800
219-223	M16	351,5	25 x 2,5	7	0,625	10	FM/VdS	ZPFV200	80530021900

U-BOLTS KB



Permissible load



electro-galvanized

Usage: for pipelines fixing.

Set includes:

- an U-bolt
- two round washers
- two hexagonal nuts

Pipe diameter D [mm]	Thread M [mm]	Thread height h [mm]	U-bolt height H [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
21,3	M8	45	75	0,070	100	KB-M8-1/2	80180080210
26,9	M8	45	80	0,070	100	KB-M8-3/4	80180080260
33,7	M8	45	87	0,080	100	KB-M8-1	80180080330
42,4	M8	55	95	0,090	100	KB-M8-11/4	80180080420
48,3	M8	55	100	0,090	100	KB-M8-11/2	80180080480
60,3	M8	55	110	0,100	50	KB-M8-2	80180080600

Pipe diameter D [mm]	Thread M [mm]	Thread height h [mm]	U-bolt height H [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
33,7	M10	60	105	0,140	50	KB-M10-1	80180100330
42,4	M10	60	115	0,150	50	KB-M10-11/4	80180100420
48,3	M10	60	120	0,170	50	KB-M10-11/2	80180100480
60,3	M10	70	130	0,180	50	KB-M10-2	80180100600
76,1	M10	70	147	0,190	25	KB-M10-21/2	80180100760
88,9	M10	70	162	0,210	25	KB-M10-3	80180100890
114,3	M10	70	184	0,240	10	KB-M10-4	80180101100
168,3	M10	70	238	0,300	10	KB-M10-168	80180101680

Pipe diameter D [mm]	Thread M [mm]	Thread height h [mm]	U-bolt height H [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
139	M12	90	240	0,420	1	KB-M12-139	80180121390
168,3	M12	180	352	0,610	10	KB-M12-168	80180121680
200	M12	90	280	0,520	1	KB-M12-200	80180122000
219,1	M12	90	300	0,560	1	KB-M12-8	80180122190
250	M12	90	340	0,600	1	KB-M12-250	80180122500
273	M12	90	355	0,660	1	KB-M12-10	80180122730
323,9	M12	90	395	0,740	1	KB-M12-12	80180123240

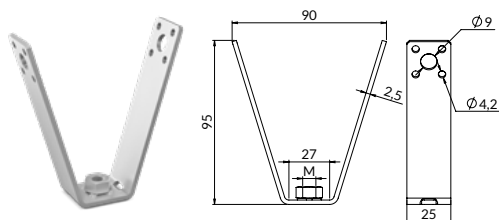
TRAPEZE HANGERS WTV



Products conform to VdS

NEW

Already on sale!



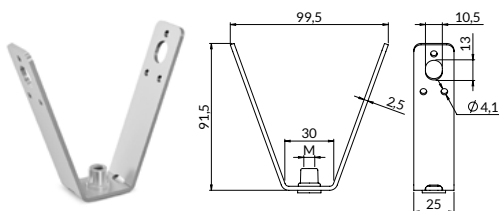
electro-galvanized

Permissible load

Usage: For quick installation of all types of installations and suspension of ventilation ducts. With the WTVM hanger, you can suspend various elements to the roof structure made of made of trapezoidal sheet metal, using self-drilling screws, threaded rods or bolts.

Connection size M_1	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Certificates	Designation for the order	Catalogue number
M8	1,3	0,105	100	(VDS) G 424002	WTVM8	80572000800
M10	1,3	0,112	100	(VDS) G 424002	WTVM10	80572001000

TRAPEZE HANGERS WT



electro-galvanized

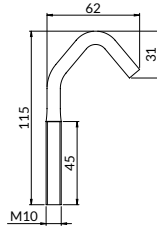
Permissible load

Usage: For quick installation of all types of installations and suspension of ventilation ducts. With the WT hanger, you can suspend various elements to the roof structure made of made of trapezoidal sheet metal, using self-drilling screws, threaded rods or bolts.

Connection size M_1	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	5,0	0,100	50	WT-M8	80570100800
M10	3,5	0,110	50	WT-M10	80571001000

Hangers without blind rivet nut WT-BK are also available ([page 90](#)).

J ANGLED HOOK BOLT HT



Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,077	25	HT-M10	80500000010



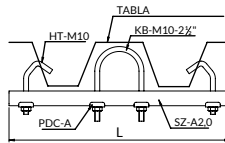
electro-galvanized

Usage: system assembly to trapeze metal sheets.



Permissible load

TRAPEZE SHEET PIPE SUPPORT CHANNEL SZM



electro-galvanized

Usage: system assembly to trapeze metal sheets.



Permissible load

Channel system length L [mm]	U-bolt	Hook thread	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
400	KB-M10-21/2"	M10	0,075	1	SZM-400	80501040010
500	KB-M10-21/2"	M10	0,850	1	SZM-500	80501050010

10 Nipro firestop and fire protection systems

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems**
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

10.1. Fire stop pipe collars



Nipro ECG Collar

117



Nipro ECGCut Collar

119

10.2. Firestop pipe wrap strips



Nipro InStrip Wrap

120

10.3. Firestop endless wrap strip



Nipro InCut Wrap

121

10.4. Firestop paint



Nipro Coating NF5

122

10.5. Firestop cable sealant



Nipro INT-1 Paste

124



Nipro 2D Paste

125

10.6. Firestop Identification plates

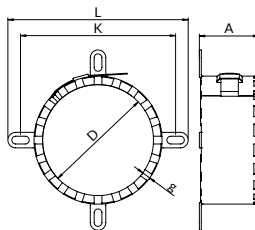


Firestop identification plate
Nipro NTFP

127



NIPRO ECG COLLAR



Usage:

Collar installed outside the wall or ceiling, used for fire-proof sealing of installation passages for plastic and metal pipes with or without fire insulation. The flange is supplied as a finished product.

Designed for fireproofing of penetrations:

- Combustible pipes without insulation or with FEF or PE insulation
- Non-combustible pipes with FEF or PE insulation
- FEF-insulated composite tubes
- Cables in PVC conduit
- Heating and plastic pipe bundles



Assembly:

- Fill the spaces between the pipe and the edge of the hole with mortar gypsum, cement or mineral wool
- Select ECG or ECGCut Collar to the desired diameter and install it on the tube
- Fix the collar to the partition with metal anchors or steel threaded rods washer and nut
- Installation and application details in ETA-22/0020 or from your Nizuk advisor

Multi-segment cover [RM]	Intumescent insert [RM, width, thickness]	Fasteners [pcs]	Connecting components [pcs]	Designation for the order	Catalogue number
2	2 m x 60 mm x 6,5 mm	27	10	NKCL6	80631111000
2	7 m x 60 mm x 4 mm	18	3	NKCL8	80631120000

Diameter range D [mm]	Collar dimensions			Number of fixings	Dowel diameter and length [mm]	Weight [kg]	Designation for the order	Catalogue number
	L [mm]	K [mm]	A x g					
25	111	95	60x2,0	2	M6x60	0,080	NKE25	80628002500
32	120	104	60x2,0	2	M6x60	0,090	NKE32	80628003200
40	124	108	60x2,5	2	M6x60	0,100	NKE40	80628004000
48	135	119	60x4,0	2	M6x60	0,130	NKE48	80628004800
55	140	124	60x6,0	2	M6x60	0,200	NKE55	80628005500
68	150	134	60x6,0	3	M8x80	0,210	NKE68	80628006800
82	166	150	60x6,0	3	M8x80	0,240	NKE82	80628008200
110	176	160	60x9,5	4	M8x80	0,420	NKE110	80628011000
125	196	180	60x9,5	4	M8x80	0,560	NKE125	80628012500
135	208	192	60x9,5	4	M8x80	0,570	NKE135	80628013500
160	250	234	60x17,0	6	M8x80	0,950	NKE160	80628016000
200	331	315	180x18,0	7	M8x80	4,000	NKE200	80628020000
250	381	365	180x24,5	8	M8x80	6,100	NKE250	80628025000
315	431	415	180x28,5	11	M8x80	8,700	NKE315	80628031500
350	480	464	180x28,5	12	M8x80	8,700	NKE350	80628035000
400	532	514	180x28,5	14	M8x80	9,660	NKE400	80628040000

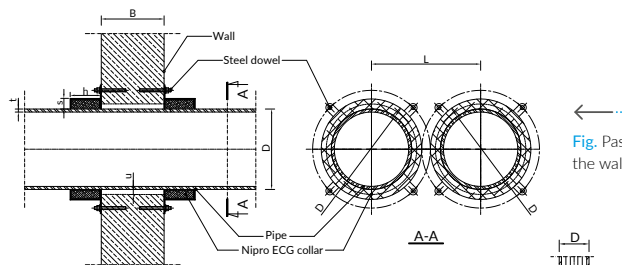


Fig. Passage of combustible pipes through the wall secured with a Nipro ECG collar.

Fig. Passage of cables in PVC pipe through ceiling protected by a Nipro ECG collar.

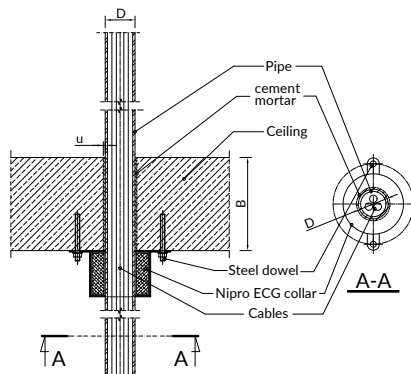


Fig. Flammable pipe passage through the ceiling with a Nipro ECG U-shaped collar placed on the elbow of the pipe.

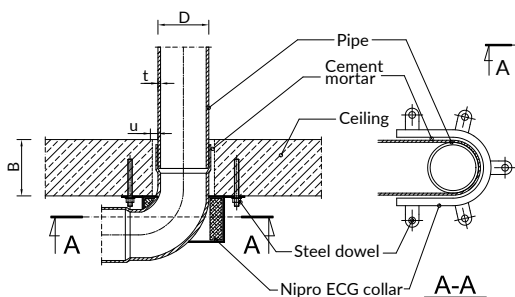


Fig. Passage of a bundle of three combustible pipes through the ceiling secured by a single Nipro ECG collar.

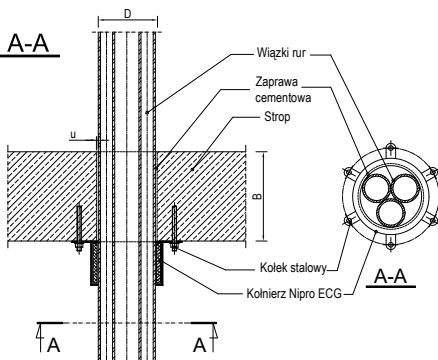
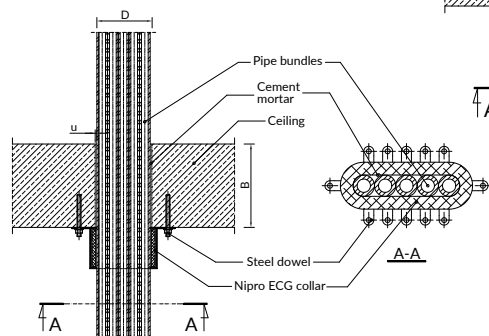
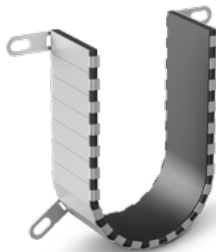


Fig. Passage of a bundle of five combustible pipes through the ceiling secured by a single Nipro ECG collar.





NIPRO ECGCUT COLLAR



Usage:

Collar installed outside the wall or ceiling, used for fireproof sealing of installation passages for plastic and metal pipes with or without fire insulation. The flange is supplied as a finished product.

Designed for fireproofing of penetrations:

- Combustible pipes without insulation or with FEF or PE insulation
- Non-combustible pipes with FEF or PE insulation
- FEF-insulated composite tubes
- Cables in PVC conduit
- Heating and plastic pipe bundles



Assembly:

- Fill the spaces between the pipe and the edge of the hole with mortar gypsum, cement or mineral wool
- Select ECG or ECGCut Collar to the desired diameter and install it on the tube
- Fix the collar to the partition with metal anchors or steel threaded rods washer and nut
- Installation and application details in ETA-22/0020 or from your Niczuk advisor

Multi-segment cover [RM]	Intumescent insert [RM, width, thickness]	Fasteners [pcs]	Connecting components [pcs]	Designation for the order	Catalogue number
2	2 m x 60 mm x 6,5 mm	27	10	NKCL6	80631111000
2	7 m x 60 mm x 4 mm	18	3	NKCL8	80631120000

Diameter range D [mm]	Collar dimensions			Number of fixings	Dowel diameter and length [mm]	Weight [kg]	Designation for the order	Catalogue number
	L [mm]	K [mm]	A x g					
25	111	95	60x2,0	2	M6x60	0,080	NKE25	80628002500
32	120	104	60x2,0	2	M6x60	0,090	NKE32	80628003200
40	124	108	60x2,5	2	M6x60	0,100	NKE40	80628004000
48	135	119	60x4,0	2	M6x60	0,130	NKE48	80628004800
55	140	124	60x6,0	2	M6x60	0,200	NKE55	80628005500
68	150	134	60x6,0	3	M8x80	0,210	NKE68	80628006800
82	166	150	60x6,0	3	M8x80	0,240	NKE82	80628008200
110	176	160	60x9,5	4	M8x80	0,420	NKE110	80628011000
125	196	180	60x9,5	4	M8x80	0,560	NKE125	80628012500
135	208	192	60x9,5	4	M8x80	0,570	NKE135	80628013500
160	250	234	60x17,0	6	M8x80	0,950	NKE160	80628016000
200	331	315	180x18,0	7	M8x80	4,000	NKE200	80628020000
250	381	365	180x24,5	8	M8x80	6,100	NKE250	80628025000
315	431	415	180x28,5	11	M8x80	8,700	NKE315	80628031500
350	480	464	180x28,5	12	M8x80	8,700	NKE350	80628035000
400	532	514	180x28,5	14	M8x80	9,660	NKE400	80628040000

NIPRO INSTRIP WRAP



Assembly:

- Select the tie according to the outer diameter of the pipe or cut to size. The tie must be in one piece, it cannot be combined
- Wrap the band around the pipe and slide into the culvert in the axis of the wall or 1 cm above the lower edge of the ceiling
- Fill the remaining space of the culvert with cement/gypsum mortar or mineral wool
- Installation and application details in ETA-22/0019 or from your Niczuk advisor

Usage: Intumescent band, placed inside a conduit, used for fire sealing of installation passages of plastic pipes passing through walls and ceilings. Supplied as a finished product.

Designed for fireproofing:

- Uninsulated combustible pipes

Outer pipe diameter [mm]	Collar dimensions			Weight [kg]	Designation for the order	Catalogue number
	L [mm]	K [mm]	A x g			
50	290	210	60x6,0	0,100	NOS50	80621005005
82	370	290	60x6,0	0,140	NOS82	80621008205
110	458	388	60x9,5	0,270	NOS110	80621011005
125	540	450	60x9,5	0,700	NOS125	80621012505
160	683	583	100x11,4	0,880	NOS160	80621016005

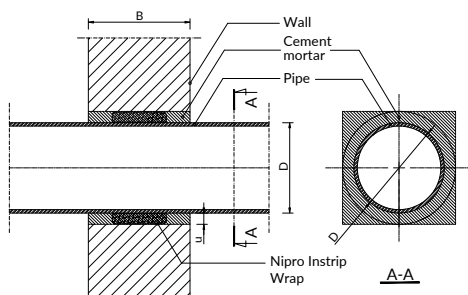


Fig. Securing plastic pipe penetrations through the wall using Nipro InStrip wrap.

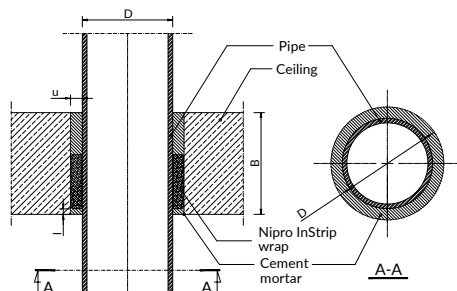


Fig. Securing plastic pipe penetrations through the ceiling using Nipro InStrip wrap.

NIPRO INCUT WRAP



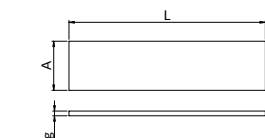
Assembly:

- Select the length, width and thickness of the tie from the table in ETA-22/0021
- Wrap the tie around the pipe or bundle
- Slide the whole into the interior of the partition. The tie should be in the axis of the wall or 10–15mm from the bottom edge of the ceiling
- Fill the space between the pipe and the partition with cement/gypsum mortar or mineral wool
- Installation and application details in ETA-22/0021 or from your Nizuk advisor

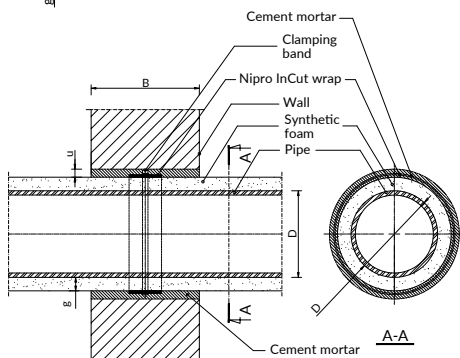
Usage: Intumescent band, placed inside a conduit, used for fire sealing of installation passages of plastic pipes passing through walls and ceilings. Supplied as a finished product.

Designed for fireproofing:

- Combustible pipes without insulation or with FEF, PE or mineral wool insulation
- Steel, cast iron and copper pipes with FEF or PE insulation
- Composite pipes with FEF, PE or mineral wool insulation
- Cable harnesses



Collar dimensions		Weight [kg]	Designation for the order	Catalogue number
L [m]	A x g			
15000	100X4,8	10,000	NOC10P6	80614104830
15000	60X2,5	7,840	NOC6P3	80614602530
15000	60X4,0	9,000	NOC6P6	80614604830



← ..

Fig. Protection of steel pipe penetrations, copper or cast iron pipes with foam insulation synthetic foam insulation through the wall made using Nipro InCut wrap.

→ ..

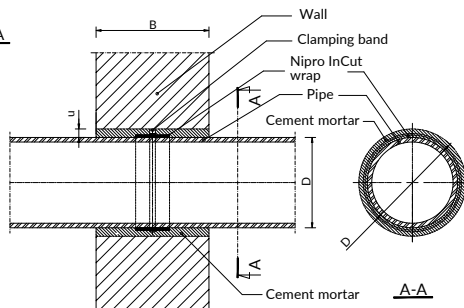


Fig. Protection of plastic pipe penetrations, cable or bundle of cables through the wall made using the Nipro InCut wrap.

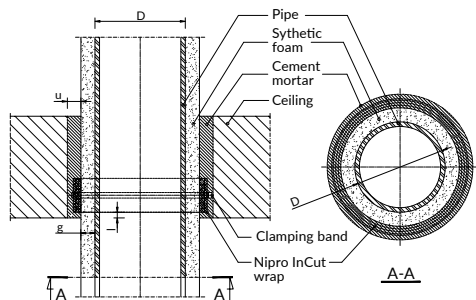


Fig. Protection of steel pipe penetrations, copper or cast iron pipes with synthetic foam insulation through the ceiling made using Nipro InCut wrap.

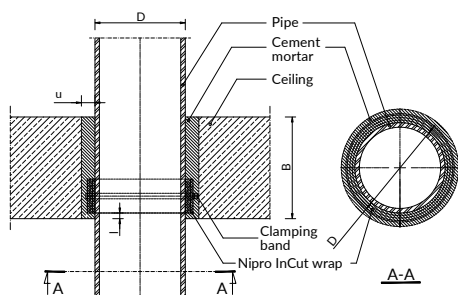


Fig. Protection of plastic pipe penetrations, cable or cable bundle through the ceiling made using Nipro InCut wrap.

NIPRO COATING



Usage: Intumescent fire protection paint designed to protect cable trays, cables or combinations of cables passing through walls and ceilings.

Designed for fireproofing of penetrations:

- cables
- cable trays



Assembly:

- Fill the free space of the culvert with mineral wool
- Coat the wool with a layer of Nipro Coating
- Coat the cables and the trough with a layer of Nipro Coating
- Details of installation and application in ETA-22/0018 or from your Niczuk advisor

Name	Packaging	Designation for the order	Catalogue number
NIPRO coating	5 kg	NF5	80631000005

Transport and storage rules - [page 127](#)

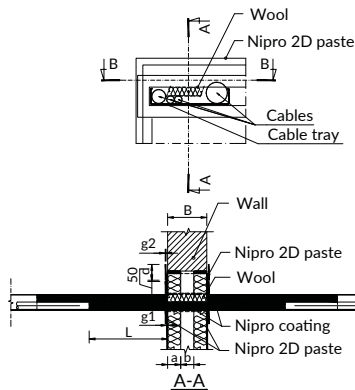


Fig. Protection of single cable or a bundle of cables through wall made using Niprotec coating and 2D paste.

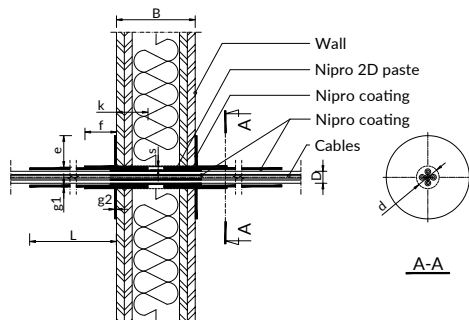


Fig. Protection of single cable or Cable bundle in a cable tray through a ceiling made using Niprotec coating and 2D paste.

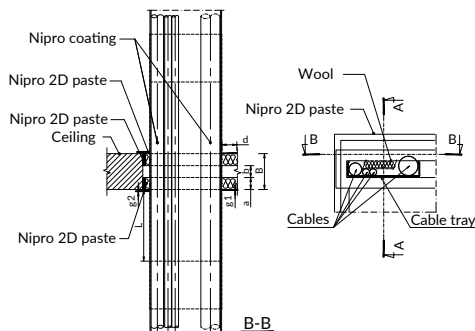
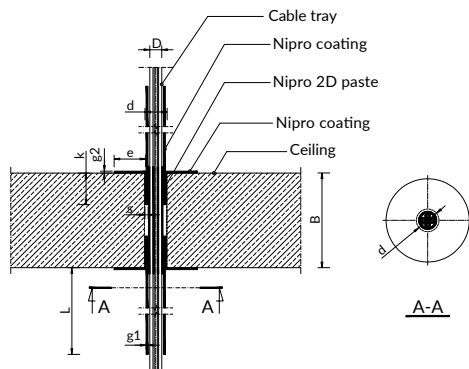


Fig. Protection of single cable or a bundle of cables through ceiling made using Niprotec 2D coating and 2D paste.



NIPRO INT-1 PASTE



Assembly:

- Fill the space between the pipe and the baffle tightly using mineral wool or cement mortar
- Apply Nipro INT-1 fire protection paste to the building partition and pipe as recommended in ETA-22/0018
- Details of installation and application in ETA-22/0018 or from your Niczuk advisor

Usage: Intumescent paste designed for fire protection of steel or cast iron pipes without insulation, plastic pipes passing through walls and ceilings.

Designed for fireproofing of penetrations:

- Steel, cast iron and copper pipes
- Combustible pipes

Name	Packaging	Designation for the order	Catalogue number
NIPRO INT-1 paste	5 kg	NPNT5	80691000005

Transport and storage rules - [page 127](#)

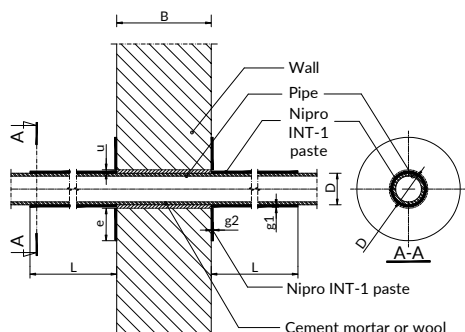


Fig. Protection of steel, cast iron pipe passages or plastic through the wall made using Nipro INT-1 paste.

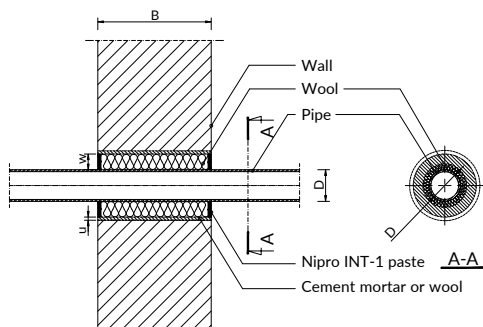


Fig. Protection of plastic pipe penetrations through the wall made using Nipro INT-1 paste.

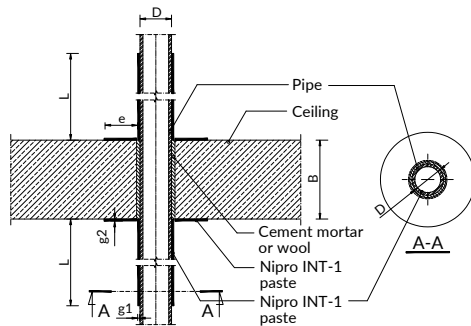


Fig. Protection of plastic pipe penetrations through the ceiling made with the use of Nipro INT-1 paste.

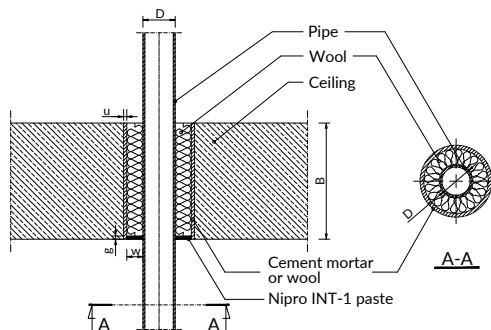


Fig. Protection of steel pipe penetrations, cast iron or copper pipes through the ceiling made using Nipro INT-1 paste.

NIPRO 2D PASTE



Assembly:

- Fill the space between the pipes/cables and the edge of the opening tightly with mineral wool and Nipro 2D paste or cement mortar
- Coat the surface of the mineral wool and the partition with Nipro 2D paste
- Details of installation and application in ETA-22/0018 or from your Niczuk advisor

Usage: A high-density fireproof ablative paste designed to protect pipe penetrations insulated with mineral wool.

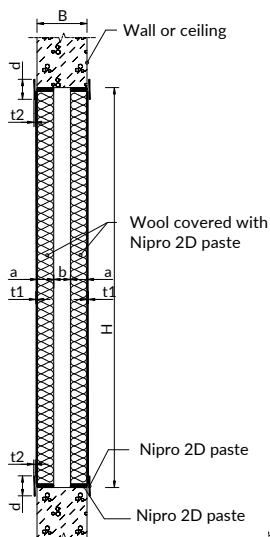
Designed for fireproofing:

- Combustible pipes (with ECG Collar)
- Non-combustible pipes in mineral wool insulation
- Fire barriers (restoration of their continuity)

Name	Packaging	Designation for the order	Catalogue number
NIPRO 2D paste 5kg	5 kg	NP2D5	80681000005
NIPRO 2D paste 310ml	310 ml	NP2D2	80651002005

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ASSEMBLY DIAGRAMS →

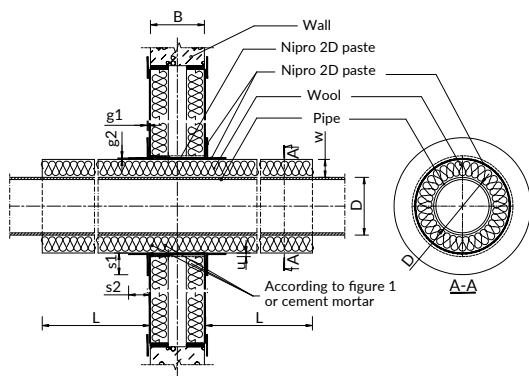


← ..

Fig. Protection of the installation passage used to carry out installations in walls and ceilings using Nipro 2D paste.

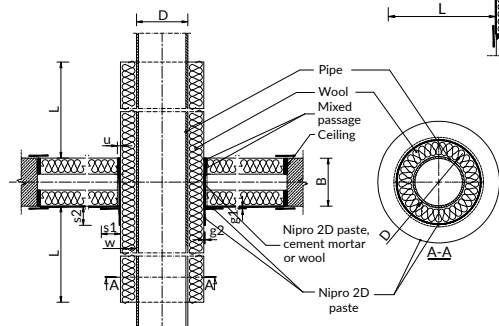
↓

Fig. Protection of wall penetrations, steel, cast iron or copper pipes insulated with mineral wool made using Nipro 2D paste.



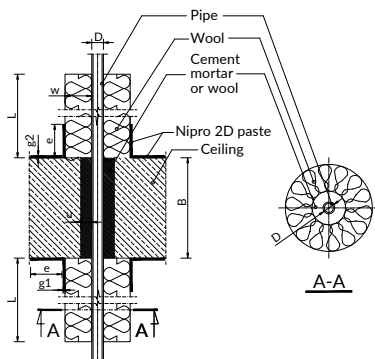
← ..

Fig. Protection of steel pipe penetrations, cast iron or copper pipes insulated with mineral wool insulated through the ceiling protected using Nipro 2D paste.



→ ..

Fig. Protection of steel pipe penetrations, cast iron or copper pipes insulated with mineral wool insulated through the ceiling, made using paste Nipro 2D.





FIRESTOP IDENTIFICATION PLATE NIPRO NTFP

The image shows a sample of the NIPRO NTFP identification plate. It is a rectangular form with a blue header containing the 'niczuk nipro' logo and a shield icon with a flame. The form is divided into several sections for data entry:

- Zastosowane produkty / Products used:** A list of checkboxes for various products: Kuchnia ECG, ECG Cutler, Opaska InCul, InCul Wrap, Opaska InStrip, InStrip Wrap, NiproFasba, Nipro Coating, Pasty 2D, 2D Paste, and Pasty INT-1, INT-1 Paste.
- Odpowiedni opłamek / Fire resistance:** A list of checkboxes for fire resistance classes: EI 60, EI 90, EI 120, EI 150, and EI 240.
- Nyktownia / Execution:** A large rectangular box for handwritten or stamped information.
- Data wykonania / Date of execution:** A line for entering the date.
- Numer projektu / Contract number:** A line for entering the contract number.

At the bottom, the company information is printed: THALE sp. z o.o. sp. k., Wilimów 2, 11-041 Olsztyn, Poland, tel.: +48 89 221 19 60, www.niczuk.eu.

Usage: Plaque to be completed with information on passive fire protection: fire resistance class, name of contractor, date of construction, system used. To be placed in a prominent position next to the fire-protection culvert.

Name	Designation for the order	Catalogue number
NIPRO plate	NTFP	89000119244

SPECIAL CONDITIONS FOR TRANSPORT, STORAGE AND APPLICATION OF FIRE PROTECTION PRODUCTS

Products for passive fire protection such as fire protection paint and paste require special diligence during transportation, storage and application.

NIPRO COATING AND NIPRO 2D PASTE

When applying paint or paste, it is necessary to ensure proper ventilation in the room and avoid high temperature as well as open fire. It is not recommended to apply Nipro Coating and Nipro 2D Paste on the surface with the temperature below 5°C as the surface may not be free from condensed water and frostiness. Paint or paste application shall be carried out at the temperature not lower than 5°C and air relative humidity not higher than 80%.

Nipro Coating and Nipro 2D Paste shall be transported and stored in the way which secures it from damage and change of technical properties, in dry and warm storage rooms in which the temperature is not lower than 5°C but not higher than 30°C. Nipro Coating and Nipro 2D Paste in a container is not resistant to negative temperatures – it shall be protected from freezing.



11 Channels

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels**
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

11.1. Single channels



Channel 28x18 SZ-W	131
Channel 28x35 SZ-X	131
Channel 30x16 SZ-C	131
Channel 30x30 SZ-A	132
Channel 30x30 SZ-L	132
Channel 30x30 SZ-U	133
Channel 41x21 SZ-MG	133
Channel 41x41 SZ-MF	134
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11.2. Double channels



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Double channel 41x82 SD-MF	137
Double channel 41x103 SD-MFH	138
Double channel 41x124 SD-MH	138
Double channel 50x80 SD-MB	138
Double channel 50x160 SD-ME	139

11.3. Cantilever arms



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Cantilever arm 30x30 SS-A	140
Cantilever arm 41x21 SS-MG	140
Cantilever arm 41x41 SS-MF	141
Cantilever arm 41x62 SS-MH	141

11

Channels

11.4. Vertical Cantilever Arm



Vertical Cantilever Arm 30x30
SS90-A

142



Vertical Cantilever Arm 41x41
SS90-MF

142



Cantilever arm 30x30
SS-U

143

11.5. Double cantilever arms



Double cantilever arm 41x82
SSD-MF

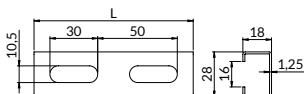
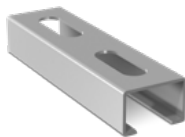
143



Double cantilever arm 41x124
SSD-MH

144

CHANNEL SZ-W1,25 28x18



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

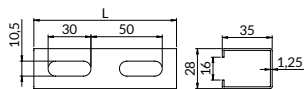
Sendzimir galvanized

S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	1,280	SZ-W1,25-2000	80728181220
3000	1,920	SZ-W1,25-3000	80728181230
4000	2,560	SZ-W1,25-4000	80728181240
6000	3,840	SZ-W1,25-6000	80728181260

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

CHANNEL SZ-X1,25 28x35



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

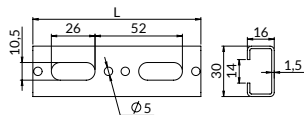
Sendzimir galvanized

S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	1,900	SZ-X1,25-2000	80728351220
3000	2,850	SZ-X1,25-3000	80728351230
4000	3,800	SZ-X1,25-4000	80728351240
6000	5,700	SZ-X1,25-6000	80728351260

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

CHANNEL SZ-C1,5 30x16



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

Sendzimir galvanized

S250GD steel

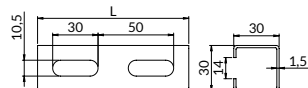
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	1,340	SZ-C1,5-2000	80730161520
3000	2,010	SZ-C1,5-3000	80730161530
4000	2,680	SZ-C1,5-4000	80730161540
6000	4,020	SZ-C1,5-6000	80730161560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



CHANNEL SZ-A1,5 30x30



Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation; with cut centimeter scale on the channel side.

Sendzimir galvanized

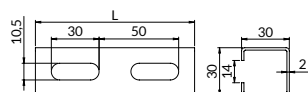
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,000	SZ-A1,5-2000	80730301520
3000	3,000	SZ-A1,5-3000	80730301530
4000	4,000	SZ-A1,5-4000	80730301540
6000	6,000	SZ-A1,5-6000	80730301560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-A2,0 30x30



Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation; with cut centimeter scale on the channel side.

Sendzimir galvanized

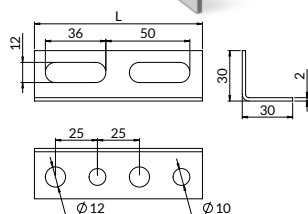
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,720	SZ-A2,0-2000	80730302020
3000	4,080	SZ-A2,0-3000	80730302030
4000	5,044	SZ-A2,0-4000	80730302040
6000	8,160	SZ-A2,0-6000	80730302060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-L2,0 30x30



Usage: universal channel system for building fastening systems; with repeatable perforation.

Sendzimir galvanized

S250GD steel

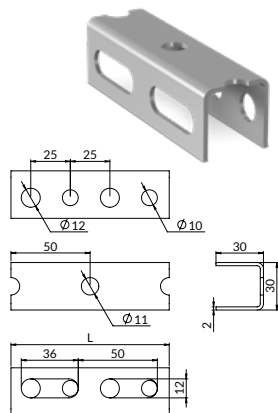
Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	1,370	SZ-L2,0-2000	83730302020
2000	1,780	SZ-L3,0-2000	83730303020

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-U2,0 30x30



Usage: universal channel system for building fastening systems; with repeatable perforation.

Sendzimir galvanized

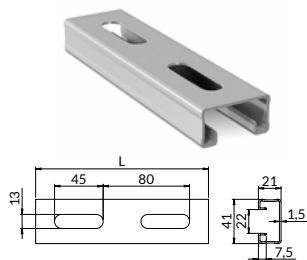
S250GD steel

Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,050	SZ-U2,0-2000	82730302020
2000	2,95	SZ-U3,0-2000	82730303020

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

CHANNEL SZ-MG1,5 41x21



Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

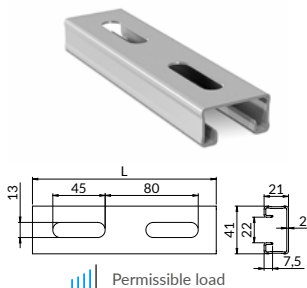
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,100	SZ-MG1,5-2000	80741211520
3000	3,150	SZ-MG1,5-3000	80741211530
4000	4,200	SZ-MG1,5-4000	80741211540
6000	6,300	SZ-MG1,5-6000	80741211560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MG2,0 41x21



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

S250GD steel

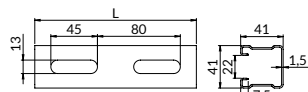
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,860	SZ-MG2,0-2000	80741212020
3000	4,290	SZ-MG2,0-3000	80741212030
4000	5,720	SZ-MG2,0-4000	80741212040
6000	8,560	SZ-MG2,0-6000	80741212060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



CHANNEL SZ-MF1,5 41x41



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

 Sendzimir galvanized

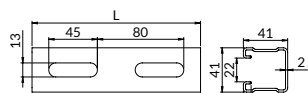
 S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	3,180	SZ-MF1,5-2000	80741411520
3000	4,770	SZ-MF1,5-3000	80741411530
4000	6,360	SZ-MF1,5-4000	80741411540
6000	9,540	SZ-MF1,5-6000	80741411560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MF2,0 41x41



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

 Sendzimir galvanized

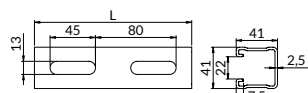
 S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	4,200	SZ-MF2,0-2000	80741412020
3000	6,300	SZ-MF2,0-3000	80741412030
4000	8,400	SZ-MF2,0-4000	80741412040
6000	12,600	SZ-MF2,0-6000	80741412060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MF2,5 41x41



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

 Sendzimir galvanized

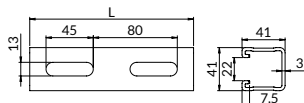
 S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,200	SZ-MF2,5-2000	80741412520
3000	7,800	SZ-MF2,5-3000	80741412530
4000	10,400	SZ-MF2,5-4000	80741412540
6000	15,600	SZ-MF2,5-6000	80741412560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MF3,0 41x41



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

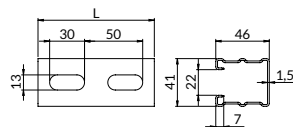
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,500	SZ-MF3,0-2000	80741413020
3000	8,750	SZ-MF3,0-3000	80741413030
4000	11,000	SZ-MF3,0-4000	80741413040
6000	16,500	SZ-MF3,0-6000	80741413060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZMK1,5 41x46



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

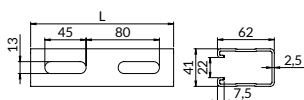
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	3,54	SZMK1,5-2000	80741461520
3000	5,31	SZMK1,5-3000	80741461530
4000	7,08	SZMK1,5-4000	80741461540
6000	10,62	SZMK1,5-6000	80741461560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MH2,5 41x62



||||| Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

S250GD steel

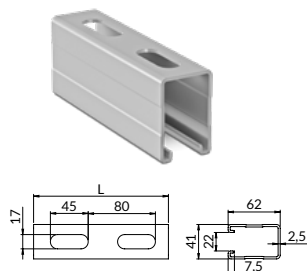
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,800	SZ-MH2,5-2000	80741622520
3000	10,200	SZ-MH2,5-3000	80741622530
4000	13,600	SZ-MH2,5-4000	80741622540
6000	20,400	SZ-MH2,5-6000	80741622560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZMO2,5 41x62

NEW



Permissible load

Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

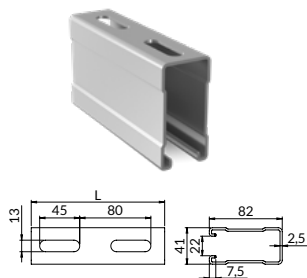
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,6	SZMO2,5-2000	80742622520
3000	9,9	SZMO2,5-3000	80742622530
4000	13,2	SZMO2,5-4000	80742622540
6000	19,8	SZMO2,5-6000	80742622560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MI2,5 41x82



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

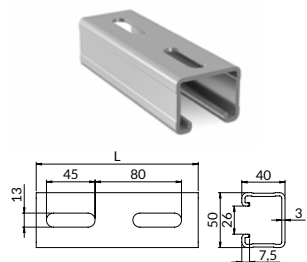
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	8,320	SZ-MI2,5-2000	80741822520
3000	12,480	SZ-MI2,5-3000	80741822530
4000	16,640	SZ-MI2,5-4000	80741822540
6000	24,960	SZ-MI2,5-6000	80741822560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-MB3,0 50x40



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

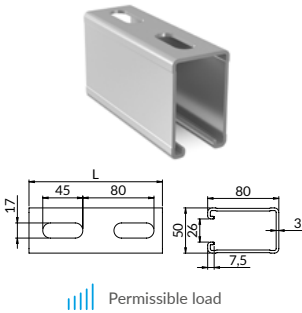
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,400	SZ-MB3,0-2000	80750403020
3000	9,600	SZ-MB3,0-3000	80750403030
4000	12,800	SZ-MB3,0-4000	80750403040
6000	19,200	SZ-MB3,0-6000	80750403060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CHANNEL SZ-ME3,0 50x80



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

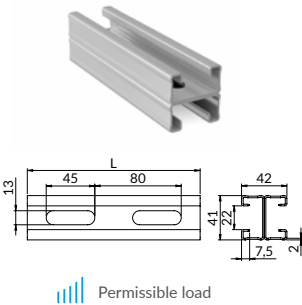
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	9,800	SZ-ME3,0-2000	80750803020
3000	14,700	SZ-ME3,0-3000	80750803030
4000	19,600	SZ-ME3,0-4000	80750803040
6000	29,400	SZ-ME3,0-6000	80750803060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

DOUBLE CHANNEL SD-MG2,0 41x42



Usage: universal channel system for building fastening systems; with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Sendzimir galvanized

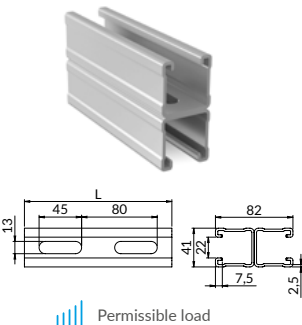
S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,720	SD-MG2,0-2000	80841422020
3000	8,580	SD-MG2,0-3000	80841422030
4000	11,440	SD-MG2,0-4000	80841422040
6000	17,160	SD-MG2,0-6000	80841422060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

DOUBLE CHANNEL SD-MF2,5 41x82



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

S250GD steel

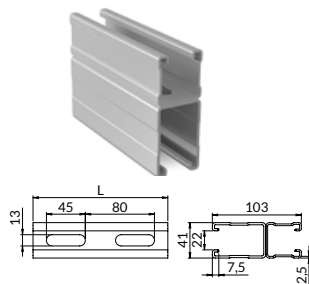
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	10,400	SD-MF2,5-2000	80841822520
3000	15,600	SD-MF2,5-3000	80841822530
4000	20,800	SD-MF2,5-4000	80841822540
6000	31,200	SD-MF2,5-6000	80841822560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



DOUBLE CHANNEL SD-MFH2,5 41x103



 Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

 Sendzimir galvanized

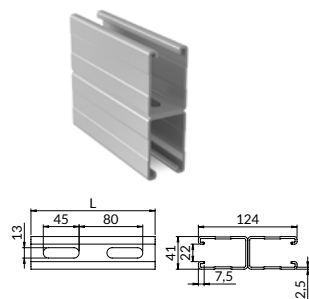
 S250GD steel

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	18,000	SD-MFH2,5-3000	80841032530
4000	24,000	SD-MFH2,5-4000	80841032540
6000	36,000	SD-MFH2,5-6000	80841032560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

DOUBLE CHANNEL SD-MH2,5 41x124



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

 Sendzimir galvanized

 S250GD steel

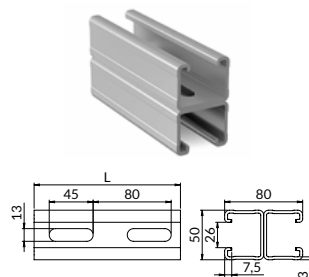
 Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	20,400	SD-MH2,5-3000	80841242530
4000	27,200	SD-MH2,5-4000	80841242540
6000	40,800	SD-MH2,5-6000	80841242560

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

DOUBLE CHANNEL SD-MB3,0 50x80



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

 Sendzimir galvanized

 S250GD steel

 Permissible load

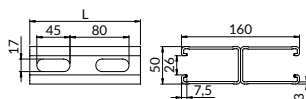
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	19,200	SD-MB3,0-3000	80850803030
4000	25,600	SD-MB3,0-4000	80850803040
6000	38,400	SD-MB3,0-6000	80850803060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



DOUBLE CHANNEL SD-ME3,0 50x160



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

Sendzimir galvanized

S250GD steel

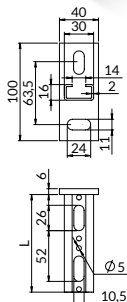
Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	29,400	SD-ME3,0-3000	80850603030
4000	39,200	SD-ME3,0-4000	80850603040
6000	58,800	SD-ME3,0-6000	80850603060

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CANTILEVER ARM SS-C2,0 30x16



Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

electro-galvanized

steel S235JR

Permissible load

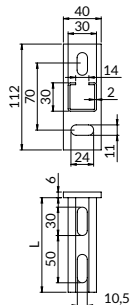
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
208	0,370	SS-C2,0-200	80930162000
260	0,420	SS-C2,0-250	80930162500
312	0,470	SS-C2,0-300	80930163000
416	0,580	SS-C2,0-400	80930164000
520	0,680	SS-C2,0-500	80930165000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



CANTILEVER ARM SS-A2,0 30x30



Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.



electro-galvanized



steel S235JR



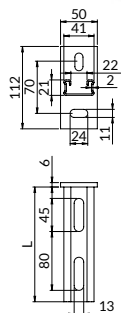
Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
150	0,390	SS-A2,0-150	80930301500
250	0,520	SS-A2,0-250	80930302500
300	0,590	SS-A2,0-300	80930303000
350	0,660	SS-A2,0-350	80930303500
450	0,800	SS-A2,0-450	80930304500
500	0,860	SS-A2,0-500	80930305000
750	1,200	SS-A2,0-750	80930307500
1000	1,540	SS-A2,0-1000	80930300000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

CANTILEVER ARM SS-MG2,0 41x21



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.



electro-galvanized



steel S235JR

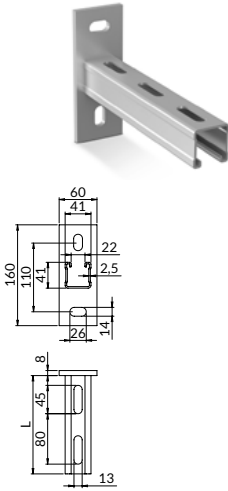


Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
240	0,580	SS-MG2,0-240	80941212400
320	0,690	SS-MG2,0-320	80941213200
400	0,810	SS-MG2,0-400	80941214000
480	0,920	SS-MG2,0-480	80941214800
560	1,040	SS-MG2,0-560	80941215600
800	1,380	SS-MG2,0-800	80941218000

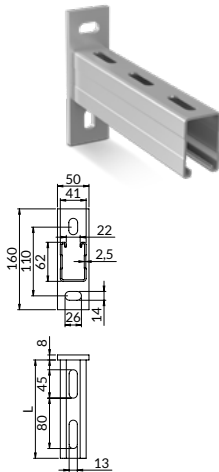
Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



- ☒ electro-galvanized
- ☐ steel S235JR

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
240	1,180	SS-MF2,5-240	80941412400
320	1,380	SS-MF2,5-320	80941413200
480	1,800	SS-MF2,5-480	80941414800
560	2,100	SS-MF2,5-560	80941415600
800	2,630	SS-MF2,5-800	80941418000
1040	3,260	SS-MF2,5-1040	80941410000

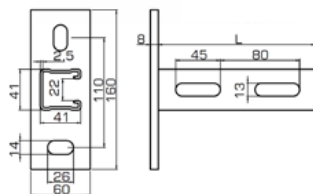


-  electro-galvanized
-  steel S235JR

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
320	1.540	SS-MH2,5-320	80941623200
480	2.080	SS-MH2,5-480	80941624800
560	2.360	SS-MH2,5-560	80941625600
800	3.170	SS-MH2,5-800	80941628000
1040	3.980	SS-MH2,5-1040	80941620000

Lining strip is available for the channel on [page 91](#).

VERTICAL CANTILEVER ARM SS90-A2,0 30x30



Usage: universal channel system for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

electro-galvanized

steel S235JR

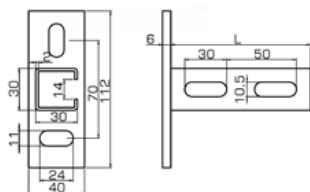
Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
150	0,390	SS90-A2,0-150	81030301500
250	0,520	SS90-A2,0-250	81030302500
300	0,590	SS90-A2,0-300	81030303000
350	0,660	SS90-A2,0-350	81030303500
450	0,800	SS90-A2,0-450	81030304500
500	0,860	SS90-A2,0-500	81030305000
750	1,200	SS90-A2,0-750	81030307500
1000	1,540	SS90-A2,0-1000	81030300000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).

VERTICAL CANTILEVER ARM SS90-MF2,5 41x41



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock accessories better better; with cut centimeter scale on the channel side.

electro-galvanized

steel S235JR

Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
240	1,180	SS90-MF2,5-240	81041412400
320	1,380	SS90-MF2,5-320	81041413200
480	1,800	SS90-MF2,5-480	81041414800
560	2,010	SS90-MF2,5-560	81041415600
800	2,630	SS90-MF2,5-800	81041418000
1040	3,260	SS90-MF2,5-1040	81041410000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

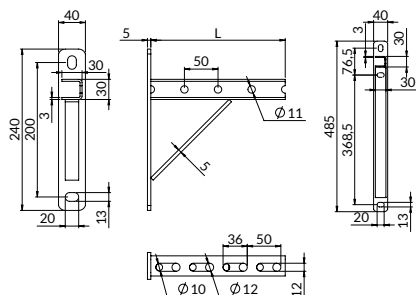
Lining strip is available for the channel on [page 91](#).

CANTILEVER ARM SS-U 30x30



250, 300, 400, 600

800, 1000



Usage: universal channel system for building fastening systems, with repeatable perforation.



electro-galvanized



steel S235JR

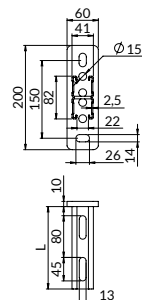


Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
250	0,860	SS-U3,0-250	87230303025
300	0,930	SS-U3,0-300	87230303030
400	1,080	SS-U3,0-400	87230303040
500	1,260	SS-U3,0-500	87230303050
600	1,370	SS-U3,0-600	87230303060
800	2,660	SS-U3,0-800	87230303080
1000	3,060	SS-U3,0-1000	87230303100

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

DOUBLE CANTILEVER ARM SSD-MF2,5 41x82



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.



electro-galvanized



steel S235JR



Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
320	2,700	SSD-MF2,5-320	80941823200
480	3,730	SSD-MF2,5-480	80941824800
560	4,240	SSD-MF2,5-560	80941825600
800	5,770	SSD-MF2,5-800	80941828000
1040	7,310	SSD-MF2,5-1040	80941820000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).



DOUBLE CANTILEVER ARM SSD-MH2,5 41x124



Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; with cut centimeter scale on the channel side.



electro-galvanized



steel S235JR

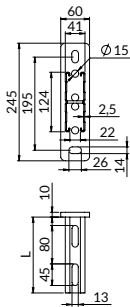


Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
480	3,720	SSD-MH2,5-480	80941244800
560	4,260	SSD-MH2,5-560	80941245600
800	5,890	SSD-MH2,5-800	80941248000
1040	7,520	SSD-MH2,5-1040	80941240000

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Lining strip is available for the channel on [page 91](#).





12 Channels accessories

01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
18. UltraCover XP products
19. CERTA – heavy channel system
20. Projects support

12.1. Channels support



Channels support
ST-S

148



Channels support
ST-SL

148



Pivot hinged rail support
STRG

149



Vertical channel support
ST-S90

149



Doubled channel support
ST-SD

150

12.2. Connectors and threaded plates



Channels connectors
LSE

151



Channels connectors
LS

151



Threaded plates
PG, PGL

152

12.3. Flat and angular connectors



Flat connectors
X-XXX, DC, DCL

153



MXD fittings

NEW

157



Angle support for pipe clamps
DL

158

12

Channels accessories



Angular connectors
KT

158



Corner brackets
TR

159



Angle connectors
WKZ

159



Angle connectors
CWKZ

160

12.4. Tee-bolts and slide nuts



Slide nuts
NSS

160



Slide nuts
NSZ

160



Slide nuts
EZP

161



Slide nuts
EZP3

NEW

161



Slide nuts
EZ

161



Tee-bolts assembly
ESS

162



Tee-bolts assembly
ESZ

162

12.5. U-shaped channel washers



U-shaped channel washers
PDC

163

12.6. End caps

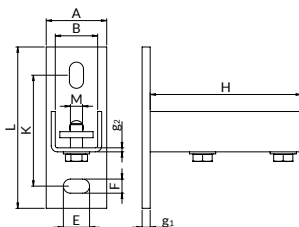
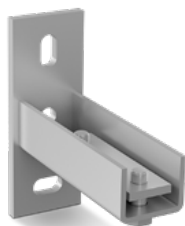


Channel end caps
ZS

163



CHANNELS SUPPORT ST-S



Permissible load



electro-galvanized

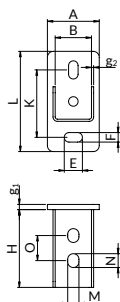
Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems.

Set includes:

- U-profile welded on wall plate
- threaded plate
- two round washers
- two bolts with hexagonal heads, full thread

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
A, C	45x112x6	70	11x24	31	3	100	M10	0,413	10	ST-SA	81125030300
MG, MF, MH	60x160x8	110	14x26	42	4	150	M12	1,190	5	ST-SMF	81125041410
MB	70x160x8	110	14x26	51	4	150	M12	1,250	5	ST-SMB	81125050400
ME	70x200x10	150	14x26	51	4	150	M12	1,410	5	ST-SME	81125050800

CHANNELS SUPPORT ST-SL



electro-galvanized

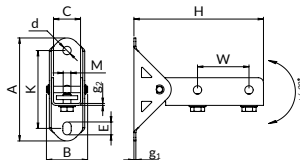


Permissible load

Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems.

For channels	Dimensions								Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M x N [mm]	O [mm]				
A	45x106x4	68	11x21	31	2	67	9x12	18	0,2222	5	ST-SLA	81127030300
C	45x91x4	53	11x21	31	2	57	9x12	18	0,1624	5	ST-SLC	81127030160
MF	60x116x6	78	11x21	42	2,5	90	13x16	29	0,5050	5	ST-SLMF	81127041410
MG	60x96x4	58	11x21	42	2,5	90	13x16	29	0,2991	5	ST-SLMG	81127041210

PIVOT HINGED RAIL SUPPORT STRG



- Permissible load
- electro-galvanized

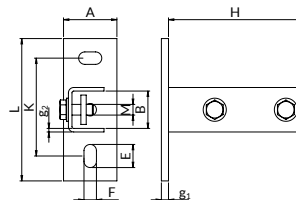
Usage: for connecting channels with the substrate material; allows for building and strengthening structures made of channels and fastening systems; fastening angle adjustment within the range of 180°; the channel may be fixed with its open side to the foot bottom or to its any side what ensures assembly comfort.

Set includes:

- U-profile welded on wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal head, full thread

Application for mounting channels	Adjustment range of angle α [°]	Dimensions										Bolt M	Weight [kg]	Designation for the order	Catalogue number
		A [mm]	B [mm]	K [mm]	E [mm]	C [mm]	g ₁ [mm]	g ₂ [mm]	d [mm]	H [mm]	W [mm]				
A, C	+/- 90	112	55	73	20	31	2,5	2	11	139,4	50	M10x20	0,57	STRG-A	81126030300
MG, MF, MH	+/- 90	160	70	121	20	42	3	3	13	201,4	80	M12x20	1,11	STRG-MF	81126041410

VERTICAL CHANNELS SUPPORT ST-S90



- Permissible load
- electro-galvanized

Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems.

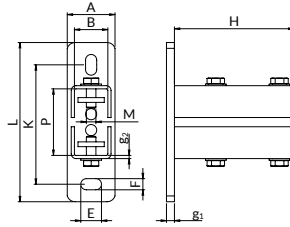
Set includes:

- U-profile welded on wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal head, full thread

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
A, C	45x112x6	70	11x24	31	3	100	M10	0,530	10	ST-SA90	811600303000
MG, MF, MH	60x160x8	110	14x26	42	4	150	M12	1,190	5	ST-SMF90	81160041410
MB, ME	70x160x8	110	14x26	51	4	150	M12	1,220	5	ST-SMB90	81160050400



DOUBLED CHANNELS SUPPORT ST-SD



Permissible load



electro-galvanized

Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems

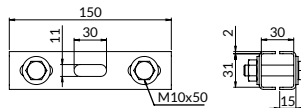
Set includes:

- two U-profiles welded on wall plate,
- two threaded plate,
- four round washers,
- four bolts with hexagonal heads, full thread

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
D-MF	60x200x10	150	14X26	42x83,6	4	150	M12	1,190	5/10	ST-SMF-D	81120041820
D-MH	60x245x10	195	14X26	42x125,6	4	150	M12	2,200	5/10	ST-SMH-D	81120041240
D-MB	70x200x10	150	14X26	51x81,6	4	150	M12	2,200	5/10	ST-SMB-D	81120050800



CHANNEL CONNECTORS LSE

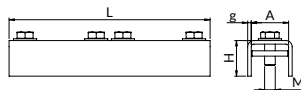
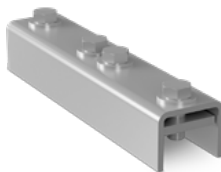


Usage: for creating facial structural connections of channels; it allows for multiple adjustment of the fastening opening location in the channel; it makes professional connection of flat and spatial fastening systems easier.

 electro-galvanized

TO TYPE A CHANNEL

Weight [kg]	Designation for the order	Catalogue number
0,340	LSE-A	81140130300



Set includes:

For LSE-A

- two connectors
- top + bottom
- four round washers
- two hexagonal nuts.
- two bolts with hexagonal heads, full thread

For LSE-MF, LSE-MB

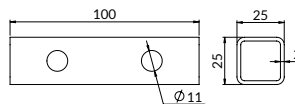
- a connector
- threaded plate
- four round washers
- four bolts with hexagonal heads, full thread

TO MF, MB TYPE CHANNEL

For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	H [mm]	g [mm]	M [mm]			
MG, MF, MH, MI	42	226	40	4	M12	0,810	LSE-MF	81140141410
MB, ME	51	226	40	4	M12	0,880	LSE-MB	81140150400

 Permissible load

CHANNEL CONNECTORS LS



 electro-galvanized

 Permissible load

Usage: for creation of structural connections of channels; it gives the possibility of strengthening channel connections internally; it makes professional connection of flat and spatial fastening systems easier.

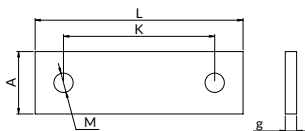
For channels	Weight [kg]	Designation for the order	Catalogue number
A	0,110	LS-A	81140130300



THREADED PLATES PG, PGL



PG



Usage: for slideless connection with channels in various combinations; to be applied when connecting mounting channels with the elements being fixed; for fastening various accessories on the channel

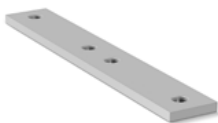


electro-galvanized

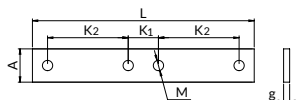


Permissible load

For channels	Dimensions			Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	K [mm]	M [mm]			
A, C, W, X	24x74x5	50	M10	0,060	PG-A-M10	81150301000
MG, MF, MH, MI	33x110x6	80	M12	0,170	PG-MF-M12	81150411200
MB, ME	40x110x6	80	M12	0,190	PG-MB-M12	81150501200



PGL



For channels	Dimensions				Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	M [mm]			
MG, MF, MH, MI	33x220x6	30	80	M12	0,320	PGL-MF-M12	81150411240
MB, ME	40x220x6	30	80	M12	0,390	PGL-MB-M12	81150501240

FLAT CONNECTORS X-XXX, DC, DCL

Usage: for structural connection of mounting channels, it allows for multiple adjustment of the fastening opening location in the channel; they ensure reliable connection of flat and spatial fastening systems.



electro-galvanized



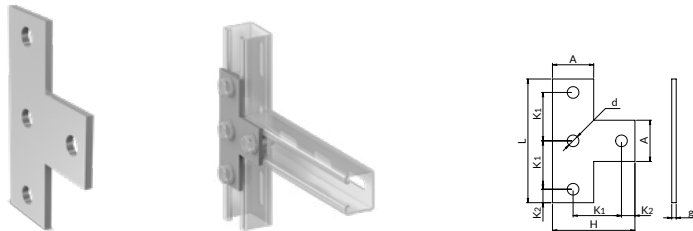
Permissible load

X5



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MB, ME	0,230	10	X5-MB	81150050000

X6



For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
A, C, W, X	28,5x4	85,5x57	31,5	11,25	10,5	0,090	10	X6-A	81130060000
MB, ME	46x5	138x92	54	15	13,0	0,310	10	X6-MB	81150060000

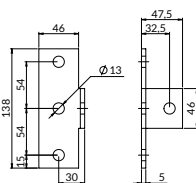
X7



For channels	Dimensions				Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K [mm]	d [mm]	F x E [mm]					
A, C	30x30x3	15	-	8,5x15	0,1	0,040	10	X7-A	81130070000
MG, MF, MH, MI	40x41x4	20,5	-	13x18	0,2	0,080	10	X7-MF	81170070000
MB, ME	46x46,8x5	31,8	13,0	-	-	0,140	10	X7-MB	81150070000

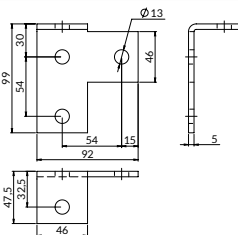


X10



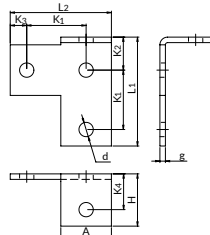
For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MB, ME	0,300	10	X10-MB	81150100000

X11



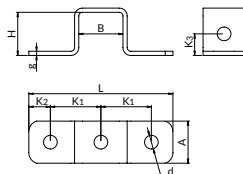
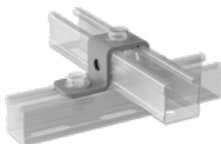
For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MB, ME	0,300	10	X11-MB	81150110000

X12



For channels	A x g [mm]	L x H [mm]	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
			K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	K ₄ [mm]	d [mm]				
A, C, W, X	28,5x4	62x57x30,25	31,5	19,25	11,25	19	10,5	0,090	10	X12-A	81130120000
MB, ME	46x5	99x92x47,5	54	30	15	32,5	13	0,300	10	X12-MB	81150120000

XK



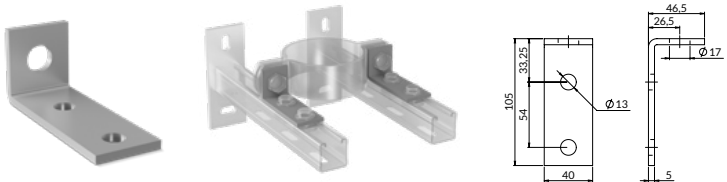
For channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	B x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d [mm]				
A	30x95x3	31x30	33,5	14	15	10,5	0,094	10	XK-A	81130300000
MF	40x138x4	41x41	48,5	20,5	20,5	13	0,240	10	XK-MF	81141410000
MH	40x138x4	41x62	48,5	20,5	20,5	13	0,300	10	XK-MH	81141620000
MH	40x159x4	62x41	59	20,5	20,5	13	0,308	10	XK-MH90	81141629000



XX3



For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number	
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]					
A, C	30x4	114x30	54	45	15,0	10,5	0,090	10	XX3-A90	81130030900
MG, MF, MH	40x5	111x41	54	42	20,5	13,0	0,320	10	XX3-MF90	81141030900
MB, ME	45x5	106x50	54	37	25	13,0	0,320	10	XX3-MB90	81150030900

XX3
-MF90-P

For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH	0,200	10	XX3-MF90-P	81141230900

XX3
-MF135-P

For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH	0,200	10	XX3-MF135-P	81141231350

XX7-90



For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]					
A, C	30x63x4	31	19	10,5	0,090	10	XX7-A90	81130070900	
MG, MF, MH	40x101x5	54	32	13,0	0,278	10	XX7-MF90	81141070900	
MB, ME	45x101x5	54	32	13,0	0,320	10	XX7-MB90	81150070900	

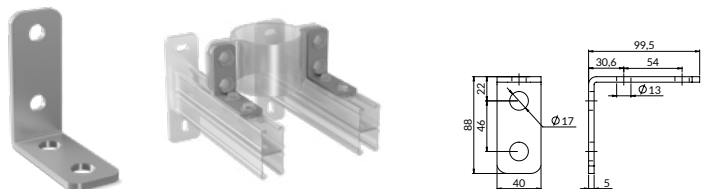


XX7-135



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MG, MF, MH	40x98x5	54	29	13	0,320	10	XX7-MF135	81141071350
MB, ME	45x98x5	54	29	13	0,320	10	XX7-MB135	81150071350

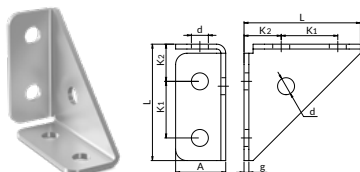
XX7-MF90-P



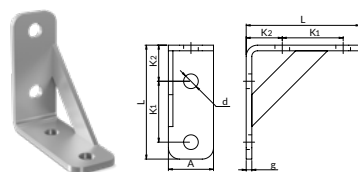
For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH	0,250	10	XX7-MF90-P	81141270900

XZ7

XZ7-A

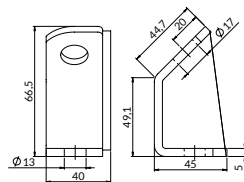
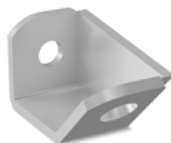


XZ7-MF XZ7-MB



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
A, C, W, X	31x72x3	35	23	10,5	0,14	10	XZ7-A	81130070010
MG, MF, MH	40x101x5	54	32	13	0,370	10	XZ7-MF	81141070010
MB, ME	45x101x5	54	32	13	0,320	10	XZ7-MB	81150070010

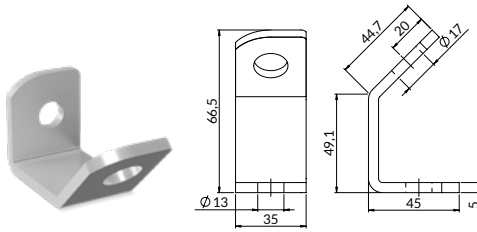
DC



For channels	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
PST, PSF	5	0,250	5	DC-M12/16 KPL	81132121600



DCL



For pipe clamps	Permissible load [kN]	Weight [kg]	Quantity [set/pkg]	Designation for the order	Catalogue number
PST, PSF	1,8	0,160	5	DCL-M12/16 KPL	81131121600

MXD FITTINGS

NEW



electro-galvanized

Usage: For creating spatial structures from mounting profiles. Stresses designed in the opposite direction to the bend increase the strength of the component.

CHANNELS
ACCESSORIES

MX1D4



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,200	10	MX1D4	81141100000

MX2D4



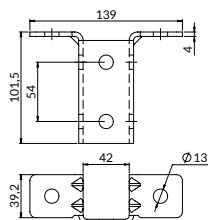
For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,300	10	MX2D4	81141200000

ANGLE SUPPORT FOR CLAMPS DCL

MXD FITTINGS

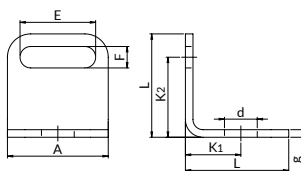


MX3D4



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,500	10	MX3D4	81141300000

ANGLE SUPPORT FOR PIPE CLAMPS DL



Usage: for structural connection of pipe clamps; for fastening risers while fastening behind the pipe clamp side opening.

 electro-galvanized

 Permissible load

For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	E x F [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]			
A, C, W, X	30x30x2	22x6,4	16	22,8	10,5	0,020	DL-A-M6	81130190060
A, C, W, X	30x30x3	22x8,5	16	21,75	10,5	0,030	DL-A-M8	81130190080
MG, MF, MH, MI	40x41x3	30x8,5	22	31,75	13	0,060	DL-MF-M8	81140190080
MG, MF, MH, MI	40x41x4	30x10,5	22	30,75	13	0,080	DL-MF-M10	81140190100

ANGULAR CONNECTORS KT

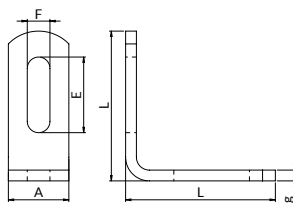
Usage: for building structural connections of channels; for strengthening channel connections; for building fastening systems.

KT-90



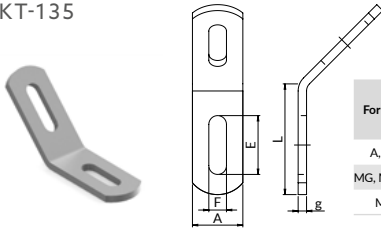
 Permissible load

 electro-galvanized



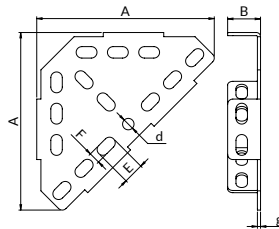
For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]					
A, C	28x5	69	10,5x35		0,110	10	KT-A90	81130090000
MG, MF, MH	40x6	86	13,0x40		0,230	10	KT-MF90	81141090000
MB, ME	45x6	86	13,0x40		0,260	10	KT-MB90	81150090000

KT-135



For channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x B [mm]	L [mm]	F x E [mm]				
A, C, W, X	28x5	69	10,5x35	0,110	10	KT-A135	81130135000
MG, MF, MH, MI	40x6	86	13,0x40	0,230	10	KT-MF135	81141135000
MB, ME	45x6	86	13,0x40	0,260	10	KT-MB135	81150135000

CORNER BRACKETS TR



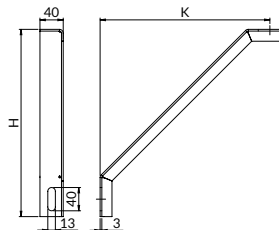
electro-galvanized

Permissible load

Usage: for creation of structural connections of channels; it gives the possibility of strengthening channel connections internally; it makes professional connection of flat and spatial fastening systems easier.

For channels	A x B x g [mm]	Dimensions F x E [mm]	d [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C, W, X	170x31,5x3	11x20	11	0,450	1	TR-A	81170303000
MB, ME	247x47,5x4	13x27	13	1,250	1	TR-MB	81170504000

ANGLE CONNECTORS WKZ



electro-galvanized

Permissible load

H [mm]	K [mm]	Weight [kg]	Designation for the order	Catalogue number
321,9	291,9	0,590	WKZ-300	81100030000
560,2	530,2	1,030	WKZ-500	81100050000

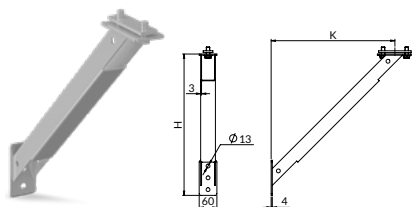
Usage: for increasing load-bearing capacity and stiffening channel structures and cantilever arms; recommended for creating and strengthening channels; the support angle is 45°.



ANGLE CONNECTORS P6 CWKZ

 electro-galvanized

 Permissible load

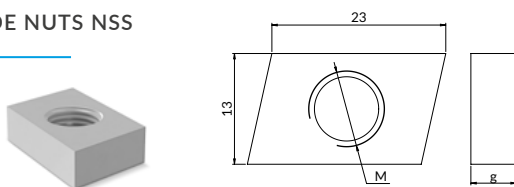


Usage: to increase the load-bearing capacity and stiffening of structures made of mounting channels and cantilever arms; recommended for the creation and reinforcement of structures made of mounting channels; the support angle is 45°.

H [mm]	K [mm]	A [mm]	D [mm]	g1 [mm]	g2 [mm]	Weight [kg]	Designation for the order	Catalogue number
308,5	249	60	13	3	4	1,190	CWKZ-300	81140030000
473,5	414	60	13	3	4	1,860	CWKZ-500	81140050000

SLIDE NUTS NSS

 electro-galvanized



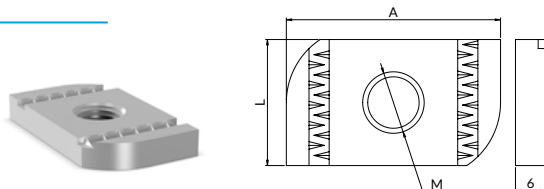
Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms; oblique sides make assembly in the channel easier.

For channels	Thread M	Dimensions AxLxg [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C, W, X	M6	23x13x5	0,010	50	NSS-A-M6	81190300630
A, C, W, X	M8	23x13x5	0,010	50	NSS-A-M8	81190300830
A, C, W, X	M10	23x13x6	0,010	50	NSS-A-M10	81190301030

SLIDE NUTS NSZ

 electro-galvanized

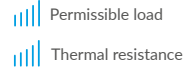
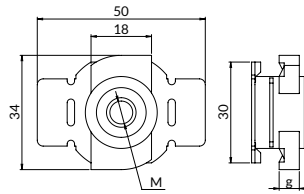
 Permissible load



Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms; the alternating teeth of the nut increase its loadbearing capacity and they better cooperate with the channel teeth.

For channels	Thread M	Dimensions AxLxg [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH, MI	M8	34x20x6	0,023	50	NSZ-MF-M8	81190410810
MG, MF, MH, MI	M10	34x20x6	0,022	50	NSZ-MF-M10	81190411010
MG, MF, MH, MI	M12	34x20x6	0,021	50	NSZ-MF-M12	81190411210
MG, MF, MH, MI	M16	34x25x6	0,023	30/50	NSZ-MF-M16	81190411610
MB, ME	M8	42,5x25x6	0,039	30/50	NSZ-MB-M8	81190500810
MB, ME	M10	42,5x25x6	0,037	50	NSZ-MB-M10	81190501010
MB, ME	M12	42,5x25x6	0,040	50	NSZ-MB-M12	81190501210
MB, ME	M16	42,5x25x6	0,033	30	NSZ-MB-M16	81190501610

SLIDE NUTS EZP



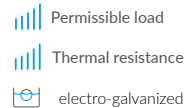
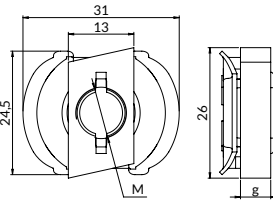
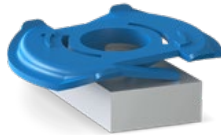
electro-galvanized

Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms ensure quick and stable assembly due to plastic wings; possibility of precise placement of the nut in the channel; time-saving solution.

For channels	Thread M	Thickness g [mm]	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH, MI	M8	6	0,020	50	EZP-MF-M8	81140410800
MG, MF, MH, MI	M10	6	0,020	50	EZP-MF-M10	81140411000
MG, MF, MH, MI	M12	8	0,030	25	EZP-MF-M12	81140411200

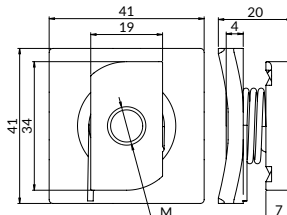
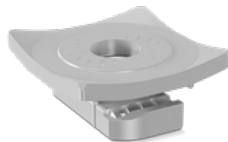
SLIDE NUTS EZP3

NEW

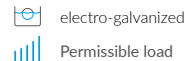


For channels	Thread M	Thickness g [mm]	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C, W, X	M6	5	0,01	25	EZP3M6	81140300600
A, C, W, X	M8	5	0,01	25	EZP3M8	81140300800
A, C, W, X	M10	6	0,01	25	EZP3M10	81140301000

SLIDE NUTS EZ



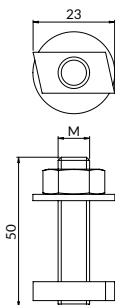
Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms; a finished element with a washer and a spring; a compact solution which ensures quick assembly; multi-part element assembled, ready for use.



For channels	Thread M	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH, MI	M8	0,070	25	EZ-MF-M8	81120410800
MG, MF, MH, MI	M10	0,070	25	EZ-MF-M10	81120411000
MG, MF, MH, MI	M12	0,070	20/50	EZ-MF-M12	81120411200



TEE-BOLTS ASSEMBLY ESS



electro-galvanized

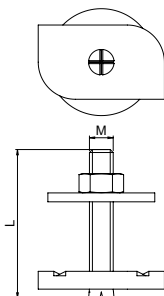


Permissible load

Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms; oblique sides of the nut make assembly in the channel easier; a compact solution which ensures quick assembly; multi-part element assembled, ready for use.

For channels	Thread M	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C	M8	0,030	25	ESS-A-M8	81100300830
A, C	M10	0,050	25	ESS-A-M10	81100301030

TEE-BOLTS ASSEMBLY ESZ



electro-galvanized

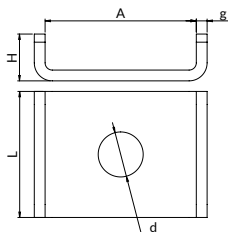
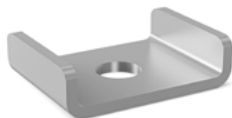


Permissible load

Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms; alternating teeth increase its load-bearing capacity and better cooperate with the channel teeth; a compact solution which ensures quick assembly; multipart element assembled, ready for use.

For channels	Thread M	Length L	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH	M8	50	0,080	50	ESZ-MF-M8	81100410810
MG, MF, MH	M10	50	0,080	50	ESZ-MF-M10	81100411010
MG, MF, MH	M12	50	0,080	50	ESZ-MF-M12	81100411210
MG, MF, MH	M8	80	0,080	15	ESZ-MF-M8x80	81100418810
MG, MF, MH	M10	80	0,090	15	ESZ-MF-M10x80	81100418010
MG, MF, MH	M12	80	0,110	15	ESZ-MF-M12x80	81100418210
MB, ME	M8	50	0,090	50	ESZ-MB-M8	81100500810
MB, ME	M10	50	0,090	50	ESZ-MB-M10	81100501010
MB, ME	M12	50	0,090	50	ESZ-MB-M12	81100501210

U-SHAPED CHANNEL WASHERS PDC



electro-galvanized

Permissible load

Usage: for fastening accessories in the channels and in the cantilever arms; compatible with channels and cantilever arms;

For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	g [mm]	H [mm]	d [mm]				
A, C	31	30	2,5	9,5	10,5	0,030	25	PDC-A	81107303000
MG, MF, MH, MI	42	35	3,0	13	12,5	0,050	25	PDC-MF	81107414100
MB, ME	51	35	3,0	13	12,5	0,060	25	PDC-MB	81107504000

CHANNEL END CAPS ZS



Thermal resistance

Usage: for securing the channel ends; safe and aesthetic blinding of sharp channel edges; compatible with the mounting channel; simple and quick assembly.

For channels	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
W	0,010	25	ZS-W	81101281805
X	0,010	25	ZS-X	81101283505
C	0,010	25	ZS-C	81101301605
A	0,010	25	ZS-A	81101303005
MG	0,010	25/50/100	ZS-MG	81101412105
MF	0,010	25/50/100	ZS-MF	81101414105
MH	0,010	25/50/100	ZS-MH	81101416205
MI	0,010	25/50/100	ZS-MI	81101418205
MB	0,010	25/50/100	ZS-MB	81101504005
ME	0,010	10	ZS-ME	81945400000
U	0,010	25	ZS-U	81191303005

13 Fastening and connecting elements

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories**
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

13.1. Beam fixings

	Beam clamps KLM	166
	Cast iron beam clamps KLM-M	166
	Expansion bracket WR-MF	167
	Cast iron beam clamps KLZ	167
	Cast iron beam clamps KLP	168
	Massive iron cast beam clamps KLPD	168
	Steel beam clamps ZNP	169
	Securing overlays NZ	169
	Trapeze hanger WT	169
	Trapeze hanger WT-BK	170
	Trapeze hanger WTDBK10	170
	Trapeze hanger with a damper WT-AM	170

NEW

13

Fastening and connecting elements

13.2. Threaded rod and threaded rod accessories

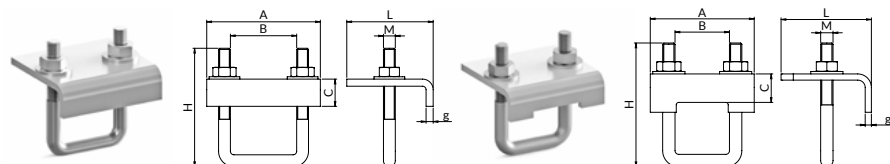
	Threaded rods M	171
	Hex rods coupling ZL	172
	Parallel rods coupling ZM	172
	Hex adapters female/female RWW	172
	Hex reducers male/female RZW	173
	Flat washers PD	173
	Hex head bolts 105/101-M	174
	Hex nuts 144-M	175
	Nylon lock hex nuts NSK-M	175
	Threaded rod base plates ST-M	176
	Sloped angle rod connectors WP	176
	Eye coupling nuts NO	177
	Rod end caps ZS-M	177



BEAM CLAMPS KLM

For channels of MB, ME

For channels MG, MF, MH, D-MF, D-MFH, D-MH, A, C



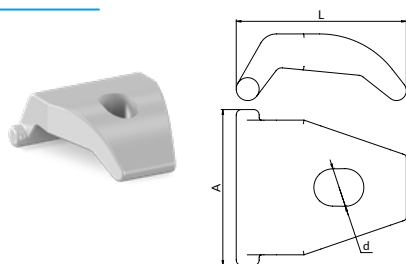
 electro-galvanized

 Permissible load

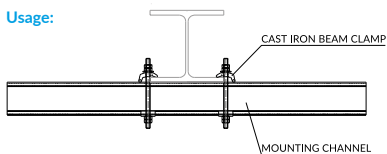
Usage: connecting channels to steel girders; creation of solid fastening on the structures of steel girders without the necessity of drilling or welding; safe fastening with the use of two beam pipe clamps per one fastening; integrated set adjusted to steel girders of channel section and I section type.

For channels	Dimensions						Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x C [mm]	B [mm]	H [mm]	M [mm]						
A, C, W, X	66x3	66x23	32	96	M8		3,1	0,290	4	KLM-A	81310303000
MG, MF	84x5	73x23	44	100	M10		9,0	0,480	4	KLM-MF	81310414100
MH	84x5	73x23	44	120	M10		9,0	0,500	4	KLM-MH	81310416200
MB	96x6	73x23	56	100	M10		10,0	0,520	5	KLM-MB	81310504000
ME	96x6	73x23	56	130	M10		10,0	0,560	5	KLM-ME	81310508000
MI, D-MF, D-MFH	84x5	73x23	44	150	M10		9,0	0,510	4	KLM-MFH-D	81310410300
D-MH	84x5	73x23	44	181	M10		9,0	0,520	4	KLM-MH-D	81310412400

CAST IRON BEAM CLAMPS KLM-M



Usage:



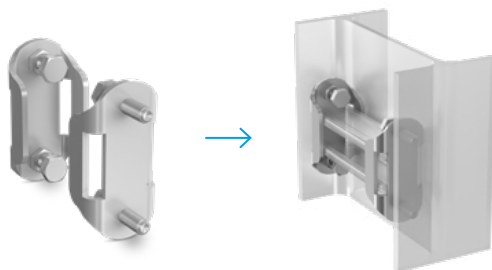
 electro-galvanized

 Permissible load

Usage: connecting channels to steel girders; creation of solid fastening on the structures of steel girders without the necessity of drilling or welding; safe fastening with the use of two beam pipe clamps per one fastening; integrated set adjusted to steel girders of channel section and I section type.

Opening diameter d [mm]	Length L [mm]	Width A [mm]	Permissible load	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
11	47	43,5	7,5	0,100	25	KLM-M10	81315001000
13	66	51	8,5	0,210	15	KLM-M12	81315001200

EXPANSION BRACKET WR-MF



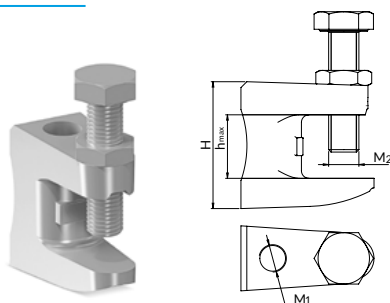
Usage: for use with MF profile; installation inside the channel or I-section with 4 expansion bolts; After tightening the bolts, additionally counter them with a nut; The length of the MF profile should be cut to the internal dimension of the girder.

electro-galvanized

Permissible load

For channels	Weight [kg]	Designation for the order	Catalogue number
MF	0,51	WR-MF	81133004100

CAST IRON BEAM CLAMPS KLZ



VdS

**Approved
Product
Safe**

FM
APPROVED

electro-galvanized

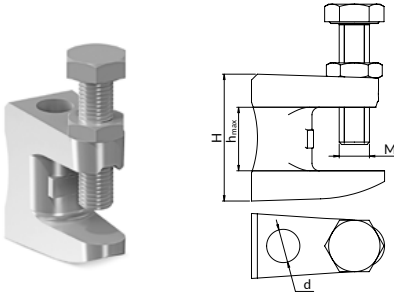
Usage: assembly to steel girders; drilling and welding is not required during the assembly; it has a metric thread.

Permissible load

Thread M_1	Bolt M_2	h_{max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	M8	18,4	36	1,20	0,080	25	KLZ-M8	81330008000
M10	M10	21	42	2,50	0,140	25	KLZ-M10	81330010000
M12	M10	27,8	54	3,50	0,220	20	KLZ-M12	81330012000



CAST IRON BEAM CLAMPS KLP



electro-galvanized

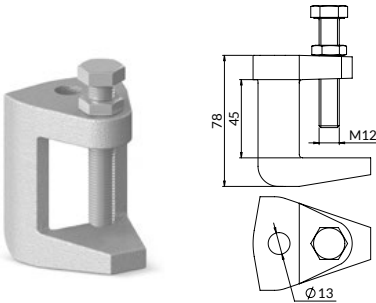
Usage: assembly to steel girders; drilling and welding is not required during the assembly; it has a port.



Permissible load

Opening d [mm]	Bolt M	h_{max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
9	M8	19	35	1,20	0,080	25	KLP-M8	81335008000
11	M10	21	42	2,50	0,140	25	KLP-M10	81335010000
13	M10	23	54	3,50	0,220	20	KLP-M12	81335012000
17	M12	29	58	5,50	0,320	10	KLP-M16	81335016000

MASSIVE IRON CAST BEAM CLAMPS KLDP



electro-galvanized

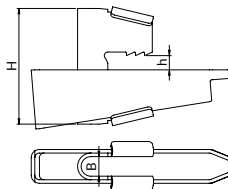
Usage: assembly to steel girders; drilling and welding is not required during the assembly.



Permissible load

Opening d [mm]	Bolt M ₂	h_{max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
13	M12	46	77	3,5	0,56	5	KLDP-M12	81345010002

STEEL BEAM CLAMPS ZNP



electro-galvanized

ALMOST THE
LAST PIECES

Usage: assembly to steel girders; drilling and welding is not required during the assembly.

Permissible
load



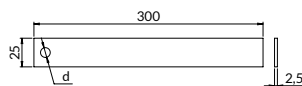
Assembly instructions for steel beam clamp with a through-hole ZNP on [page 178](#).

Intended for rods	d [mm]	h [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6-M8	9	8-20	61	2,0	0,160	25	ZNP-M8	81325008000
M10	11	8-20	61	3,5	0,160	25	ZNP-M10	81325010000
M12	13	8-22	65	5,0	0,160	25	ZNP-M12	81325012000
M16	17	11-27	70	10,0	0,300	10	ZNP-M16	81325016000

SECURING OVERLAYS NZ



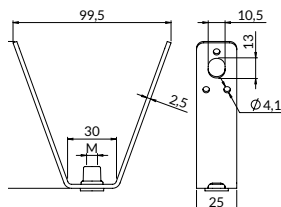
electro-galvanized



Usage: protection of fastening to steel girders; prevents from slipping of fastening on steel structures; increases fastening stability.

Diameter of opening d [mm]	Weight [kg]	Designation for the order	Catalogue number
8,5	0,140	NZ-8	81340008000
10,5	0,140	NZ-10	81340010000

TRAPEZE HANGER WT



electro-galvanized

Permissible load

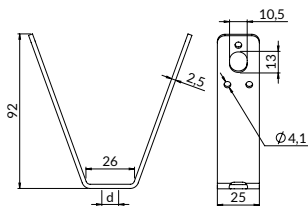
Usage: for quick installation of all types of installations and suspensions of ventilation ducts. Using the WT hanger, you can suspend various elements from the roof structure from trapezoidal sheet metal, using self-drilling screws, threaded rods or screws.

Connection size M _t	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	5,0	0,100	50	WT-M8	80570000800
M10	3,5	0,110	50	WT-M10	80570001000

WT-BK hangers without rivet nut also available - [str. 170](#)



TRAPEZE HANGER WT-BK



Usage: for quick installation of all types of installations and suspensions of ventilation ducts. Using the WT-BK hanger, you can suspend various elements from a roof structure made of trapezoidal sheet metal using self-drilling screws, threaded rods or screws.



Permissible load

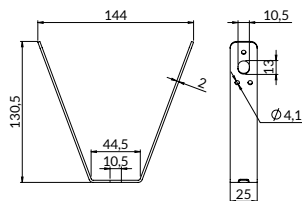


electro-galvanized

d [mm]	Permissible load [kN]	Fixing hole for the rod	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
11,2	4,0	M10	0,107	50	WT-BK-FI11	80570001100
13,1	4,0	M12	0,107	50	WT-BK FI13	80570001300

Also available are hangers with M8 and M10 connections - page 169

TRAPEZE HANGER WTDBK10



Usage: for quick installation of all types of installations and suspensions of ventilation ducts. Using the WTD hanger, you can suspend various elements from a roof structure made of trapezoidal sheet metal using self-drilling screws, threaded rods or screws.



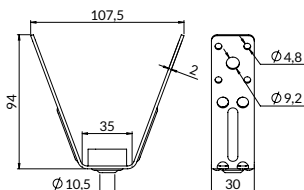
Permissible load



electro-galvanized

Permissible load [kN]	Fixing hole for the rod	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
2,5	M10	0,10	50	WTDBK10	80571001100

TRAPEZE HANGER WITH A DAMPER WT-AM



electro-galvanized

Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
2.0	0,1	50	WT-AM	80570002000

Usage: for quick installation of all types of installations and suspensions of ventilation ducts. Using the WT-AM hanger, you can suspend various elements from a roof structure made of trapezoidal sheet metal using self-drilling screws, threaded rods or screws. The hanger has a shock absorber that dampens vibrations.



THREADED RODS M

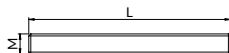


 electro-galvanized

Usage: used in various structural fastening systems; for suspending construction elements.

Rods of 4.8 class

 Permissible load

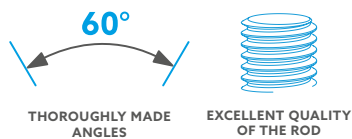


Thread M	Length L[mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	1000	0,160	100	M6X1000	81470061000
M6	2000	0,320	50	M6X2000	81470062000
M8	50	0,015	50	M8x50	81470080050
M8	1000	0,319	50	M8X1000	81470081000
M8	2000	0,638	50	M8X2000	81470082000
M8	3000	0,900	25	M8X3000	81470083000
M10	50	0,025	50	M10x50	81470100050
M10	90	0,055	50	M10L90	81470120090
M10	100	0,060	50	M10L100	81470100100
M10	120	0,070	50	M10L120	81470120120
M10	150	0,090	50	M10L150	81470100150
M10	1000	0,490	25	M10X1000	81470101000
M10	2000	0,980	25	M10X2000	81470102000
M10	3000	1,470	25	M10X3000	81470103000
M12	50	0,035	30	M12x50	81470120050
M12	1000	0,700	20	M12X1000	81470121000
M12	2000	1,400	20	M12X2000	81470122000
M12	3000	2,100	20	M12X3000	81470123000
M14	1000	0,980	20	M14X1000	81470141000
M16	1000	1,300	10	M16X1000	81470161000
M16	2000	2,600	10	M16X2000	81470162000
M16	3000	3,900	10	M16X3000	81470163000
M20	1000	2,080	5	M20X1000	81470201000

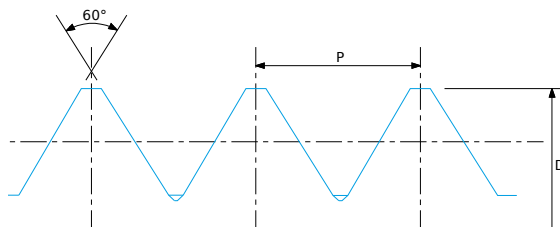
THREADED RODS

Guaranteed reliable rod resistance.

Threaded rods, as joint elements, are one of the neuralgic elements of each structure or joint. This is why their high quality is important and it can be stated only when the angle of 60° is kept and stroke as in the table below.



Thread	External diameter (D)		Stroke (P)
	min.	max.	
M6	5,794	5,974	1,00
M8	7,760	7,972	1,25
M10	9,732	9,968	1,50
M12	11,701	11,966	1,75
M16	15,682	15,962	2,00
M20	19,623	19,958	2,50



HEX ROD COUPLINGS ZL

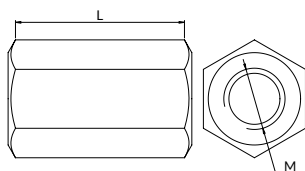


electro-galvanized

Usage: connection of threaded rods located in one axis.

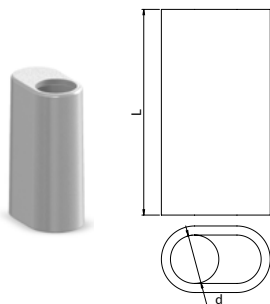


Permissible load



Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	18	0,010	30/50/100	ZL-M6	81400006000
M8	24	0,020	30/50	ZL-M8	81400008000
M10	30	0,040	30/50	ZL-M10	81400010000
M12	36	0,060	15	ZL-M12	81400012000
M16	48	0,100	10	ZL-M16	81400016000
M20	60	0,130	10	ZL-M20	81400020000

PARALLEL ROD COUPLINGS ZM



electro-galvanized

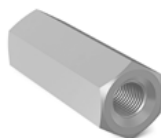
Usage: connection of threaded rods located eccentrically.



Permissible load

Opening for the thread d	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M10	0,0145	25	ZM-M10	81411010000

HEX ADAPTERS FEMALE/FEMALE RWW

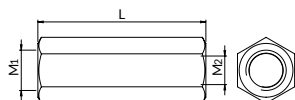


electro-galvanized

Usage: change of the metric thread diameter; connection of two external and various metric threads.

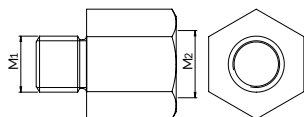
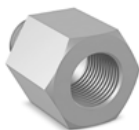


Permissible load



Thread M ₁ /M ₂	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M10/M8	40	0,050	30	RWW-M10/8	81401010080
M12/M10	50	0,060	15	RWW-M12/10	81401012100

HEX REDUCERS MALE/FEMALE RZW



electro-galvanized

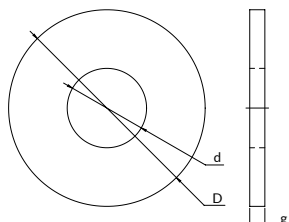
Usage: change of the metric thread diameter; connection of two various threads: external and internal.

Possibility of moving from the metric thread to the pipe thread.

Permissible load

Thread M ₁ /M ₂	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6/M8	0,010	25	RZW-M6/8	81401106080
M8/M6	0,010	25	RZW-M8/6	81401108060
M8/M10	0,010	20	RZW-M8/10	81401108100
M10/M8	0,020	20	RZW-M10/8	81401110080
M10/M12	0,020	20	RZW-M10/12	81401110120
M10/M16	0,060	5	RZW-M10/16	81401110160
M10/1/2"	0,050	5	RZW-M10/G1/2	81401110200
M12/M8	0,018	25	RZW-M12/8	81401112080
M12/M16	0,060	5	RZW-M12/16	81401112160
M12/1/2"	0,050	5	RZW-M12/G1/2	81401112200
M16/1/2"	0,100	5	RZW-M16/G1/2	81401116200

FLAT WASHERS PD



electro-galvanized

Usage: it is an auxiliary element in screw connections; it increases the surface of the joint pressure on the material being connected; it reduces the probability of the joint loosening.

Diameter D [mm]	Diameter d [mm]	Thickness g [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
12,5	6,4	1,5	50	978	PD-6-M	81480000600
17,0	8,4	1,5	50	469	PD-8-M	81480000800
21,0	10,5	1,5	50	335	PD-10-M	81480001000
26,0	6,4	2,0	50	134	PD-6	81480100600
26,0	8,4	2,0	50	169	PD-8	81480100800
26,0	10,5	2,0	50	142	PD-10	81480101000
26,0	13,0	2,0	50	167	PD-12	81480101200
30,0	17,0	3,0	25	95	PD-16	81480101600
36,0	8,5	3,0	50	45	PD-8-P	81480200800
36,0	10,5	3,0	50	47	PD-10-P	81480201000
36,0	12,5	3,0	50	48	PD-12-P	81480201200
50,0	17,0	3,0	30	26	PD-16-P	81480201600
26,0	8,4	2,0	3500	169	PD-8/3500*	81480300800
26,0	10,5	2,0	3700	142	PD-10/3700*	81480301000
26,0	13,0	2,0	3700	167	PD-12/3700*	81480301200

* Collective packaging



HEX HEAD BOLTS 105/101-M

Usage: it is an element of screw connection; for the realization of all connections; the thread is present on the whole length.

Bolts of 5.8 class

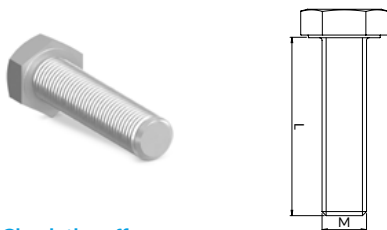


electro-galvanized



Permissible load

BOLTS WITH FULL THREAD



Check the offer for collective packaging!

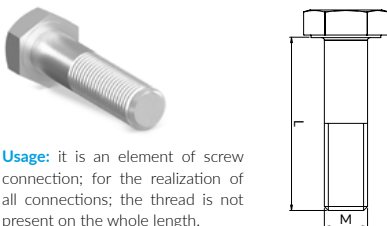
Thread M	Length L [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M10	30	1000	30	105-M10X30/1000	81422100300
M10	60	500	20	105-M10X60/500	81422100600
M12	30	700	28	105-M12X30/700	81422120300
M12	80	300	21	105-M12X80/300	81422120800

Thread M	Length L [mm]	Quantity [kg/pkg]	Designation for the order	Catalogue number
M8	25	10	105-M8X25/KG	81412080250
M8	30	10	105-M8X30/KG	81412080300
M10	25	10	105-M10X25/KG	81412100250
M10	30	10	105-M10X30/KG	81412100300

Thread M	Length L [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	20	50	84	105-M8X20	81402080200
M8	25	50	74	105-M8X25	81402080250
M8	30	50	67	105-M8X30	81402080300
M8	40	50	58	105-M8X40	81402080400
M8	50	50	47	105-M8X50	81402080500
M8	60	50	41	105-M8X60	81402080600
M8	80	50	32	105-M8X80	81402080800
M8	100	30	28	105-M8X100	81402081000
M10	20	50	46	105-M10X20	81402100200
M10	25	50	41	105-M10X25	81402100250
M10	30	50	34	105-M10X30	81402100300
M10	40	25	31	105-M10X40	81402100400
M10	50	25	27	105-M10X50	81402100500
M10	60	25	24	105-M10X60	81402100600
M10	80	20	19	105-M10X80	81402100800
M10	100	20	16	105-M10X100	81402101000
M10	120	15		105-M10X120	81402101200
M12	20	20	31	105-M12X20	81402120200
M12	25	25	28	105-M12X25	81402120250
M12	30	25	25	105-M12X30	81402120300
M12	40	20	21	105-M12X40	81402120400
M12	50	20	18	105-M12X50	81402120500
M12	60	20	16	105-M12X60	81402120600
M12	80	20	13	105-M12X80	81402120800
M12	100	15	11	105-M12X100	81402121000
M16	50	10	9	105-M16X50	81402160500
M16	80	10	7	105-M16X80	81402160800
M16	100	10	6	105-M16X100	81402161000

Other types and sizes are available on demand.

BOLTS WITH PARTIAL THREAD



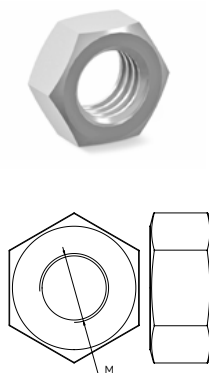
Usage: it is an element of screw connection; for the realization of all connections; the thread is not present on the whole length.

Bolts of 5.8 class

Thread M	Length L [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	100	20	23	101-M8X100	81403081000
M8	110	20	21	101-M8X110	81403081100
M8	120	20	20	101-M8X120	81403081200
M10	100	15	14	101-M10X100	81403101000
M10	120	15	12	101-M10X120	81403101200
M12	120	10	8	101-M12X120	81403121200

Other types and sizes are available on demand.

HEX NUTS 144-M



electro-galvanized

Usage: it is a connector in a screw connection; it is placed on the free end of the screw in accordance with assembly requirements.

Nuts of 6 class

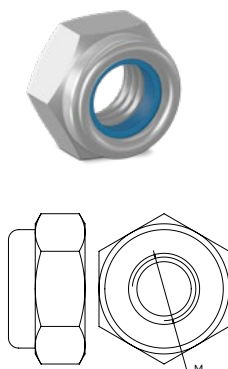
Thread M	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M6	50	460	144-M6	81490006000
M8	50	216	144-M8	81490008000
M10	50	98	144-M10	81490010000
M12	50	62	144-M12	81490012000
M16	30	30	144-M16	81490016000
M20	20	17	144-M20	81490020000

Check the offer for collective packaging!

Thread M	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	5500	55	144-M8/5500	81494008000
M10	2500	25	144-M10/2500	81494010000
M12	1600	16	144-M12/1600	81494012000

Thread M	Package [kg]	Designation for the order	Catalogue number
M8	25	144-M8/25KG	81494218000*
M10	25	144-M10/25KG	81494210000*
M8	1	144-M8/1KG	81494108000
M10	1	144-M10/1KG	81494208000
M12	1	144-M12/1KG	81494308000

NYLON LOCK HEX NUTS NSK-M



electro-galvanized, the nut has a polyamide insert

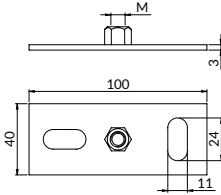
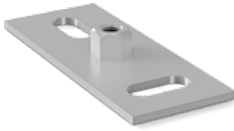
Usage: it protects from independent loosening caused by vibrations.

Nuts of 6 class

Thread M	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	25	NSK-M8	81491008000
M10	50	NSK-M10	81491010000
M12	25	NSK-M12	81491012000
M16	25	NSK-M16	81491016000



THREADED ROD BASE PLATES ST-M



electro-galvanized

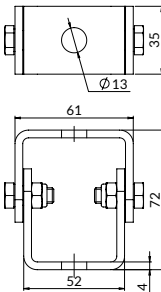
Usage: for universal application with threaded rods and threaded connectors; to be applied with channels as a plate or directly to the base; easy assembly due to the bean-like openings located against each other.



Permissible load

Thread M	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	4	0,090	10	ST-M8	80370000800
M10/M12	4	0,100	10	ST-M10/M12	80370101200

SLOPED ANGLE ROD CONNECTORS WP



electro-galvanized

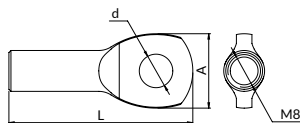
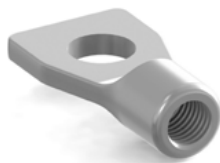
Usage: direct assembly to structural elements and channels, applied for cross beams and lashings; for all applications with inclined building elements; for lashings at any angles (it is possible to set the angle from 0° to 90°); it has two openings $\varnothing$ 13 mm; easy assembly and adjustment of the threaded rod length.



Permissible load

Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
8	0,310	10	WP	81105000000

EYE COUPLINGS NUT NO



electro-galvanized

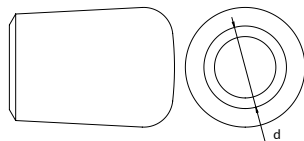
Permissible load

Usage: creation of tiltable suspensions; fastening handles using side connecting screws.

Available in cast iron (NO) and steel (NO-ST) versions.

Threaded opening M	Length L [mm]	Width A [mm]	Opening diameter d [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Cast iron nuts								
M8	44	24	12	3,50	0,030	20	NO-M8	81106008000
M10	44	24	12	3,50	0,020	20	NO-M10	81106010000
Steel nuts								
M8	45	18,2	8,2	4,00	0,03	20/50	NO-ST-M8	81106508000
M10	52	20	10,5	5,00	0,04	50	NO-ST-M10	81106510000

ROD END CAPS ZS-M



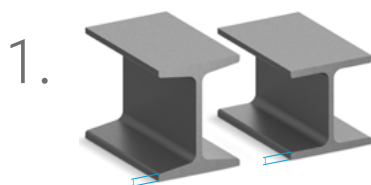
plastics

Usage: protection of threaded rods ends; safe and aesthetic blinding of sharp edges of threaded rods; simple and quick assembly, ensure operational safety.

Thermal resistance

Threaded rod d	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	0,01	25	ZS-M8	81102080005
M10	0,01	25	ZS-M10	81102100005
M12	0,01	25	ZS-M12	81102120005

INSTALLATION INSTRUCTIONS FOR A BEAM CLAMPS WITH A PORT ZNP



min. 8 mm
Max. inclination
14%

min. 8 mm

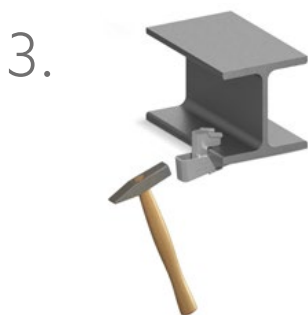
Pay attention to the I-section type and shelf thickness

Pipe clamps may be fixed to normal I-sections (with the inclination of up to 14%) and flat ones with the shelf thickness of min. 8 mm.



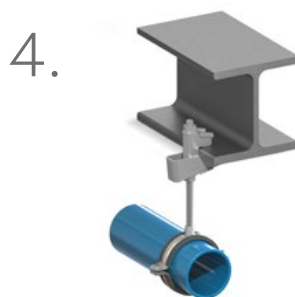
Put the clamp on the I-section

Insert the clamp wedge with a hand as far as possible. The wedge always has to be in contact with the flat side of the I-section.



Tap the clamp with a hammer

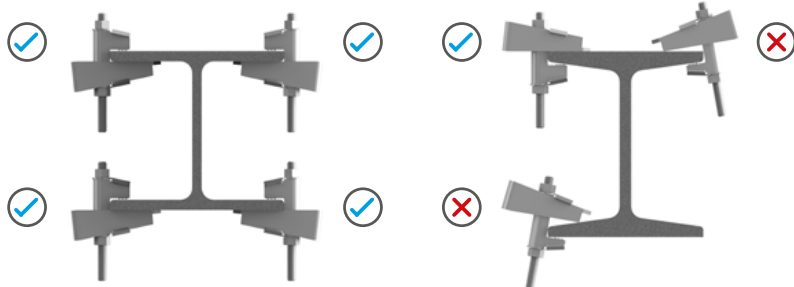
Tap the wedge to the I-section using a hammer. The wedge has to be in contact with I-section.



Put the threaded rod in the port

Insert the threaded rod in the port. Secure it against moving, from the top and from the bottom, using a flat washer PD and a hexagonal nut 144.

THE ASSEMBLY OF A STEEL BEAM CLAMP WITH A THROUGH-HOLE (ZNP) ON THE I-SECTION



14 Anchor fixings

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings**
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA - heavy channel system
- 20. Projects support

14.1. Drop in and brass anchors

	Drop in anchors TRSA, TRSAK	181
	Lipped drop in anchors TRSK	182
	Drop in anchors setting tool ONS Blue	NEW 182
	Drop in anchors setting tool OM	183
	Stop drill bit WOGW	183
	Brass expansion anchors TR-M	184

14.2. Mechanical anchors

	Bolt anchors ULT	185
	Zinc-flake bolt anchors ULS	186
	Nail in ceiling wedge anchors ULK	187
	Shield anchors TTRB	188
	Toggle bolts TRP, TRV	189

14

Anchoring accessories

14.3. Plugs

	Hex head frame anchors KRK	190
	Plastic plugs with metric thread KRG	190
	Plastic plugs KR	191
	Nylon hammer in fixing plugs KSM	191

14.4. Chemical anchors

	Polyester resins ZKC-C	192
	Polyester resins ZKC-B	193
	Mixing nozzles MKC	194
	Resin anchor rods PKC	194
	Mesh sleeves TKC	195
	Blow-Out Pumps PKC	195
	Steel brushes SKC	195

14.5. Screws

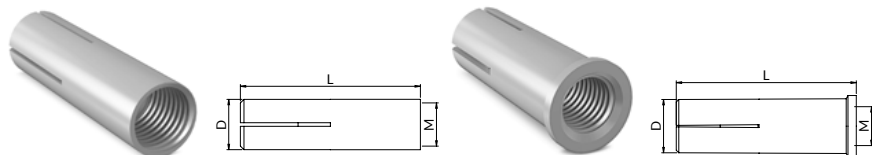
	Hanger bolts WK	196
	Double-threaded screws with a flange WK-KL	196
	Hex head wood screws WK-DR	197

14.6. Concrete screw anchors

	Threaded rod hangers TSMW	198
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DROP IN ANCHORS TRSA, TRSAK



 electro-galvanized

 reinforced or not reinforced concrete of class not smaller than C20/25 and not higher than C50/60; cracked and noncracked concrete

Usage: performance of multi-point non-structural fastening: sizes from M6 to M20; for static or quasi-static loads: sizes from M6 to M20; for fastening systems subject to requirements concerning fire resistance: sizes from M8 to M20.

Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	25	0,010	100	TRSA-M6	81420006000
M8	30	0,010	100	TRSA-M8	81420008000
M8	30	0,010	1000	TRSA-M8/1000	81420008100
M10	40	0,020	50	TRSA-M10	81420010000
M10	40	0,020	500	TRSA-M10/500	81420010050
M12	50	0,050	50	TRSA-M12	81420012000
M16	65	0,100	25	TRSA-M16	81420016000
M20	80	0,194	25	TRSA-M20	81420020000

Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	30	0,012	100	TRSAK-M8	81410011000
M10	40	0,022	50	TRSAK-M10	81410013000
M12	50	0,046	50	TRSAK-M12	81410014000

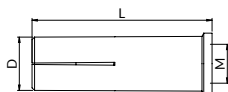
Designation for the order	Nominal drill diameter [mm]	Embedding tool	Minimum thickness of concrete base [mm]	Minimum axial spacing of anchors [mm]	Minimum distance from the edge [mm]	Minimum hole depth [mm]	Effective depth hef anchors [mm]	Moment of screwing [Nm]	Load capacity character- metric [kN] Cracked and non-cracked concrete of class from C20/25 to C50/60
TRSA-M6	8	ONS-M6	100	60	105	27	25	4	2,00
TRSA-M8, TRSAK-M8	10	ONS-M8	100	60	105	33	30	11	3,00
TRSA-M10, TRSAK-M10	12	ONS-M10	100	80	140	43	40	17	5,00
TRSA-M12, TRSAK-M12	15	ONS-M12	100	100	175	54	50	38	7,50
TRSA-M16	20	ONS-M16	130	130	230	70	65	60	12,00
TRSA-M20	25	ONS-M20	160	160	280	86	80	100	20,00

Safety factor 1.2 for TRSA-M6 and TRSA-M8 anchors. Safety factor 1.4 for TRSA-M10 and larger anchors.

Fire resistance class	Thread M	M8	M10	M12	M16	M20
All directions of load action						
R30	* Characteristic load capacity during fire exposure concrete C20/50 to C50/60 [kN]	0,4	0,9	1,7	3,1	4,9
R60		0,3	0,8	1,3	2,4	3,7
R90		0,3	0,6	1,1	2,0	3,2
R120		0,2	0,5	0,8	1,6	2,5
Spacing [mm]	4 x hef					
Distance from edge [mm]	2 x hef					



LIPPED DROP IN ANCHORS TRSK



electro-galvanized

Usage: static and quasi-static loads; only for multi-point fastening systems.



prefabricated, compressed channel plates made of concrete of C30/37 class to C50/60; reinforced or non-reinforced concrete from C12/15 to C50/60 class; cracked or non-cracked concrete.

Thread M	Dimension D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	10	25	0,02	100	TRSKM8	81413008250
M10	12	25	0,01	50	TRSKM10	81413010250
M12	15	25	0,01	50	TRSKM12	81413012250

Designation for the order	Diameter of the opening in the base [mm]	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Moment of screwing [Nm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Minimum thickness of concrete base - distance of drilling in the ceiling [mm]	Characteristics load-bearing capacity - all directions of load impact [kN] Prefabricated, initially compressed channel plates made of concrete from C40/50 to C50/60
TRSK-M8X25	10	27	25	8	200	150	*35	3
TRSK-M10X25	12	27	25	15	200	150	*35	4
TRSK-M12X25	15	27	25	35	200	150	*35	4

* The anchor may be set with the distance from drilling in the ceiling of min. 30 mm with the same characteristic load, when the opening being drilled does not cut the empty space. Safety coefficient: 1.5.

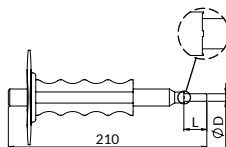
DROP IN ANCHOR SETTING TOOL ONS BLUE

NEW



electro-galvanized

Usage: for manual assembly of expansion sleeves; it has an ergonomic handle which assures comfortable grip; available setting mandrels adjusted to the size of the sleeve being set; easy and fast assembly.



Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
5	15	0,54	1	ONS-M6	81405020010
6,5	18	0,54	1	ONS-M8	81405030010
8	24	0,54	1	ONS-M10	81405040010
10,2	30	0,55	1	ONS-M12	81405050010
13,5	36	0,81	1	ONS-M16	81405060010
16,5	50	0,83	1	ONS-M20	81405070010

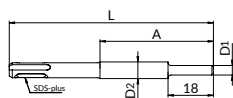


DROP IN ANCHOR SETTING TOOLS OM



electro-galvanized

Usage: serial, mechanical anchor assembly – SDS ending allows for applying a professional hammer drill; it ensures effortless and quick assembly; the mandrel is adjusted to the size of the anchor being set; to be applied with a drill with a limiter WOGW.



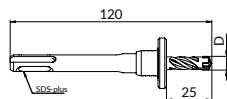
L [mm]	A [mm]	D1 [mm]	D2 [mm]	Weight [kg]	Designation for the order	Catalogue number
135	75	6,3	11	0,077	OM-M8	81405208000
140	80	7,8	13	0,101	OM-M10	81405210000

STOP DRILL BITS WOGW



electro-galvanized

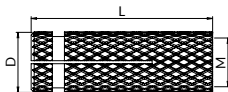
Usage: serial assembly of sleeve anchors; ensures precise preparation of openings; to be applied with manual tool ON or mechanical one OM.



Intended for sleeve	D [mm]	Weight [kg]	Designation for the order	Catalogue number
TRSK-M6	8	0,095	WOGW-8	81864082500
TRSK-M8	10	0,100	WOGW-10	81864102500
TRSK-M10	12	0,105	WOGW-12	81864122500



BRASS EXPANSION ANCHORS TR-M



Usage: realization of non-structural fastening of statically loaded construction elements; to be applied in terms of nonindustrial fastening systems; perforated sleeve surface does not allow for the rotation in the drilled opening.

 non-cracked concrete, reinforced or non-reinforced, of C20/25 to C50/60 class; full ceramic brick with the nominal compression strength not smaller than 20 N/mm² (of class not lower than 20).

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	8	25	0,010	50	TR-M6	81440006000
M8	10	28	0,010	50	TR-M8	81440008000
M10	12	33	0,010	50	TR-M10	81440010000
M12	16	38	0,020	50	TR-M12	81440012000
M16	20	45	0,050	25	TR-M16	81440016000

Diameter of the opening in the base [mm]	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Minimum thickness of the base [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Characteristics load-bearing capacity - all directions of load impact [kN]	
						Non-cracked concrete class from C20/25 to C50/60	Full ceramic brick of class min. 20
8	28	25	80	200	150	1,50	0,90
10	33	28	80	200	150	2,00	2,50
12	38	33	80	200	150	3,00	2,50
16	43	38	86	200	150	5,00	2,50
20	50	45	90	200	150	5,00	2,50

Safety coefficients:

- to tearing out from concrete base 2.52
- to tearing out from ceramic base 2.50
- compressive strength 1.25



BOLT ANCHORS ULT

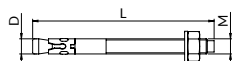


electro-galvanized



plain concrete, reinforced or unreinforced,
uncracked or cracked, C20/25 to C50/60 class

Usage: expansion anchors with controlled deformation, for use in concrete. Static or quasi-static loads, exposed to fire. Seismic actions.



Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation to order	Catalogue number
M8	8	80	0,030	50	ULT8X80	81441080800
M8	8	95	0,040	100	ULT8X95	81441089500
M8	8	115	0,040	100	ULT8X115	81442081150
M10	10	90	0,060	25	ULT10X90	81441100900
M10	10	115	0,070	25	ULT10X115	81441101150
M10	10	135	0,090	25	ULT10X135	81441101350
M12	12	100	0,090	20	ULT12X100	81441121000
M12	12	120	0,110	20	ULT12X120	81441121200
M12	12	150	0,130	25	ULT12X150	81441121500
M12	12	180	0,150	20	ULT12X180	81441121800
M16	16	145	0,230	10	ULT16X145	81441161450
M16	16	220	0,320	10	ULT16X220	81441162200

Designation to order	Nominal drill bit diameter	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Torque tightening [Nm]	Minimum thickness of the substrate concrete [mm]	Fastened element thickness [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]
ULT8	8	60	48	15,0	100	L-67	50	50
ULT10	10	75	60	40,0	120	L-81	60	60
ULT12	12	85	70	60,0	140	L-97	70	70
ULT16	16	105	85	100,0	170	L-118	128	128

Designation to order	Non-cracked concrete of C20/25 class		Cracked concrete of C20/25 class		Seismic category
	Pullout load capacity [kN]	Bearing capacity shear [kN]	Pullout load capacity [kN]	Bearing capacity shear [kN]	
ULT8	7,5	8,8	5,0	8,8	C1
ULT10	16,0	13,9	9,0	13,9	C1, C2
ULT12	25,0	20,2	16,0	20,2	C1, C2
ULT16	35,0	37,7	25,0	37,7	C1

Fire resistance class	Thread M	M8	M10	M12	M16
	All directions of the load impact				
R30	* Bearing capacity characteristic during the action of fire concrete C20/25 to C50/60 [kN]	0,4	0,9	1,7	3,1
R60		0,3	0,8	1,3	2,4
R90		0,3	0,6	1,1	2,0
R120		0,2	0,5	0,8	1,6
Span [mm]	4 x hef				
Distance from the edge [mm]	2 x hef				

* Safety coefficient: 1.0

ZINC-FLAKE BOLT ANCHORS ULS

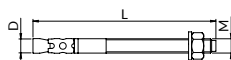


zinc-aluminium coating of increased anti-corrosion resistance



concrete, reinforced or non-reinforced, cracked or non-cracked, of class C20/25 to C50/60.

Usage: for static or quasi-static loads; for fastening systems subject to the requirements regarding fire resistance.



Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	80	0,030	50	ULS-M8X80	81430080800
M8	8	115	0,040	50	ULS-M8X115	81430081150
M10	10	80	0,031	25	ULS-M10X80	81430100800
M10	10	95	0,060	25	ULS-M10X95	81430100950
M10	10	115	0,070	25	ULS-M10X115	81430101150
M10	10	130	0,080	25	ULS-M10X130	81430101300
M12	12	100	0,120	20	ULS-M12X100	81430121000
M12	12	120	0,130	20	ULS-M12X120	81430121200

Designation for the order	Diameter of opening in the base	Minimum depth of opening [mm]	Effective depth of anchoring hef [mm]	Moment of screwing [Nm]	Minimum thickness of concrete base [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Non-cracked concrete of C20/25 class Characteristic loadbearing capacity to tearing-out [kN]	Cracked concrete of C20/25 class Characteristic loadbearing capacity to tearing-out [kN]
ULS-M8	8	65	47	10	100	50	40	9,00	5,00
ULS-M10	10	79	59	20	120	70	45	12,00	9,00
ULS-M12	12	90	68	40	140	90	65	20,00	12,00

Safety coefficient for size M8 is 1.2.

Safety coefficient for size M10 and M12 is 1.0.

Fire resistance class	Thread M	M8	M10	M12
All directions of the load impact				
R30	* Characteristic loadbearing capacity in the case of a fire concrete C20/50 to C50/60 [kN]	1,3	2,3	3,0
R60		1,3	2,3	3,0
R90		1,3	2,3	3,0
R120		1,0	1,8	2,4
Span [mm]	4 x hef			
Distance from the edge [mm]	2 x hef			

* Safety coefficient: 1 - in the case when there are no other national requirements.



NAIL IN CEILING WEDGE ANCHORS ULK



electro-galvanized



reinforced or non-reinforced concrete of C20/25 to C50/60 class; cracked and non-cracked concrete.

Usage: multi-point non-structural fastening systems; static and quasi-static loads; fastening subject to requirements in terms of fire resistance.



Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
6	40	0,108	25	ULK-M6X40	81441060400
6	65	0,157	25	ULK-M6X65	81441060650

Designation for the order	Diameter of the opening in the base [mm]	Minimum depth of opening [mm]	Effective depth of anchoring hef [mm]	Minimum thickness of concrete base [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Characteristics load-bearing capacity - all directions of load impact [kN]
							Cracked and non-cracked concrete of class from C20/25 to C50/60
ULK-M6	6	40	32	100	200	150	3,00

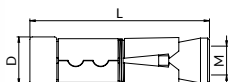
Safety coefficient: 1.5.

Fire resistance class	Thread M	M6
All directions of the load impact		
R30	* Characteristic load-bearing capacity in the case of fire concrete C20/50 to C50/60 [kN]	0,6
R60		0,5
R90		0,3
R120		0,3
Span [mm]	4 x hef	
Distance from the edge [mm]	2 x hef	

* Safety coefficient: 1 - in the case when there are no other national requirements.



SHIELD ANCHORS TTRB



 electro-galvanized

 plain concrete, not cracked or cracked, class C20/25 to C50/60; hollow-core concrete slab, class C40/50, with walls not less than 30 mm thick.

Usage: for multi-point fastening of non-structural, statically loaded building elements.

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	13,3	50	0,020	20	TTRB-M8	81406008000
M10	15,5	60	0,040	20	TTRB-M10	81406010000
M12	18,9	70	0,080	25	TTRB-M12	81406012000
M16	23,7	95	0,120	20	TTRB-M16	81400601600

ASSEMBLY PARAMETERS IN FULL BASES

Designation for the order	Diameter of the hole in the substrate [mm]	Minimum substrate thickness [mm]	Minimum hole depth [mm]	Effective anchorage depth [mm]	Tightening torque [Nm]	Design tensile load [kN]
						Plain, cracked or non-cracked concrete class C20/25
TTRB-M8	14	100	55	40	14	2,60
TTRB-M10	16	100	65	50	27	3,40
TTRB-M12	20	120	85	60	46	4,80
TTRB-M16	25	190	125	85	110	6,00

ASSEMBLY PARAMETERS IN CONCRETE HOLLOW SLABS

Designation for the order	Diameter of the hole in the substrate [mm]	Minimum substrate thickness [mm]	Effective anchorage depth [mm]	Tightening torque [Nm]	Design tensile load [kN]
					Hollow concrete slab class C40/50
TTRB-M8	14	30	30	14	3,80
TTRB-M10	16	30	30	27	5,20
TTRB-M12	20	30	30	46	6,40

FIRE RESISTANCE OF FASTENING SYSTEMS IN THE FULL CONCRETE

Fire resistance class	Thread M	M8	M10	M12	M16
All directions of the load impact					
R30	Design load capacity during impact fire, plain concrete, scratched or uncracked class C20/25 [kN]	0,6	0,8	1,2	1,5
R60		0,6	0,8	1,2	1,5
R90		0,6	0,8	1,2	1,5
R120		0,5	0,6	0,9	1,2
Span [mm]	4 x hef				
Distance from the edge [mm]	2 x hef				

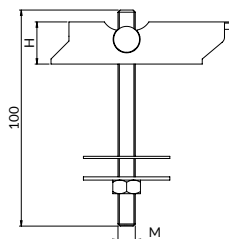
FIRE RESISTANCE OF FASTENING SYSTEMS IN CONCRETE HOLLOW SLABS

Fire resistance class	Thread M	M8	M10	M12
All directions of the load impact				
R30	Design load capacity during fire exposure, hollow core slabs made of ordinary concrete class C40/50 [kN]	0,6	0,8	1,2
R60		0,6	0,8	1,2
R90		0,6	0,8	1,2
R120		0,5	0,6	0,9
Span [mm]	4 x hef			
Distance from the edge [mm]	2 x hef			

Assembly method for anchors TTRB in concrete HOLLOW SLABS on [page 198](#).



TOGGLE BOLTS TRP, TRV



electro-galvanized



for fastening in the base made of plasterboards, ceramic and silicate hollow bricks, layer slabs and trapeze metal sheets.



Usage: for performing fastening systems in the bases with empty spaces; for performing sprinkler system suspensions to trapeze metal sheets - they hold VdS and FM certificates.

TOGGLE BOLTS WITH VDS, FM CERTIFICATES

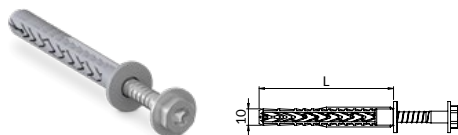
Thread M	Length H [mm]	Weight [kg]	Quantity [pcs/pkg]	Permissible load [kN]	Designation for the order	Catalogue number
M8	100	0,160	10	5,14	TRV-M8X100	81407081000
M10	100	0,160	10	5,14	TRV-M10X100	81407101000

TOGGLE BOLTS

Thread M	Length H [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	100	0,160	10	TRP-M8X100	81408081000
M10	100	0,160	10	TRP-M10X100	81408101000



HEX HEAD FRAME ANCHORS KRK



 reinforced or non-reinforced concrete with the resistance class not lower than C12/15; wall made of full brick; hollow bricks and hollow mold tiles; gas concrete

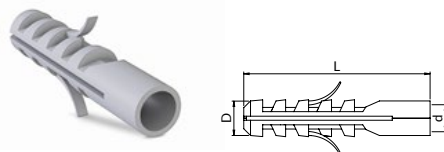
Usage: for multi-point non-structural fastening systems in concrete and walls.

NOTE

Detailed information regarding the load-bearing capacity of fastening systems in various bases is available in the technical approval ETA - 07/0121.

Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
10	80	0,035	50	KRK-10X80	81455010080
10	120	0,050	50	KRK-10X120	81455010120

PLASTIC PLUGS WITH METRIC THREADS KRG



 Cracked or non-cracked concrete of class from 20/25 to C50/60; full ceramic brick with the nominal compression strength not less than 15 N/mm², full silicate brick with the nominal compression not less than 20 N/mm²

Usage: for performing multi-point non-structural fastening systems of statically loaded construction elements.

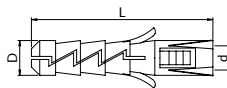
NOTE

Detailed information regarding the load-bearing capacity of fastening systems in various bases is available in the technical approval ITB-KOT-2017/0049 edition 1.

Thread M	D [mm]	Under the screw d [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	4,5-6	40	0,020	50	KRG-M8	81452010085
M10	10	6-8	50	0,050	50	KRG-M10	84520140105
M12	12	8-10	60	0,070	50	KRG-M12	81452010125



PLASTIC PLUGS KR



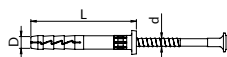
 reinforced or non-reinforced concrete of C20/25 to C50/60 class; full ceramic brick, with compressive strength not smaller than 20 N/mm²; full silicate brick, with compressive strength not smaller than 20 N/mm²; elements made of cellular concrete

Usage: for performing multi-point non-structural fastening systems of statically loaded construction elements.

Diameter D [mm]	Length L [mm]	Under the screw d [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
10	50	5-6	0,002	50	KR-10	81450010005
12	60	6-8	0,004	50	KR-12	81450012005
14	70	10	0,005	25	KR-14	81450014005
16	80	12	0,007	5	KR-16	81450016005

Designation for the order	Diameter of the opening in the base [mm]	Depth of opening [mm]	Anchoring depth [mm]	Load-bearing capacity to tearing out [kN]		
				Concrete of class C20/25	Full ceramic brick of class 20	Cellular concrete variant 700 of class 6
KR-10	10	60	50,000	0,22	0,36	0,45
KR-12	12	70	60,000	0,66	1,60	1,00
KR-14	14	80	70,000	0,66	1,00	0,57
KR-16	16	90	80,000	-	-	-

NYLON HAMMER IN FIXING PLUGS KSM (SET)



 concrete of class not lower than C20/25; full ceramic brick with compressive strength not smaller than 15 N/mm²; silicate brick and silicate blocks with compressive strength not lower than 15 N/mm²; concrete on light aggregate with compressive strength not lower than 20 N/mm²

Usage: for performing multi-point non-structural fastening systems of statically loaded construction elements.

Diameter D [mm]	Length L [mm]	Diameter of the opening in the base [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
6	40	6	0,006	50	KSM-M6	81451006005
8	60	8	0,010	50	KSM-M8	81451008005



POLYESTER STYREN-FREE RESIN ZKC-C



Usage: for static and quasi-static fixings

Material: styrene-free polyester resin

Surface: solid ceramic brick, elements made of autoclaved cellular concrete, solid silicate brick, silicate elements with holes, perforated ceramic elements, elements made of light concrete with holes.

Name	Packaging	Designation for the order	Catalogue number
Polyester styrene-free resin	300 ml	ZKC-C300	81800500006

INSTALLATION PARAMETERS AND LOAD CAPACITY FOR ZKC-C BONDED ANCHOR IN COMBINATION WITH BARS THREADED PKC - SOLID SUBSTRATES

Threaded rod	Installation parameters						Characteristic pullout resistance [kN]			Characteristic shear resistance [kN]		
	Diameter of the hole in the substrate [mm]	Hole depth [mm]	Effective anchorage depth [mm]	Min. anchor spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Solid ceramic brick	Cellular concrete blocks	Silicate brick full	Solid ceramic brick	Cellular concrete blocks	Silicate brick full
M8	10	85	80	50	50	5	6,00	1,50	5,00	3,50	1,50	3,50
M10	12	90	85	50	50	8	7,00	2,00	5,00	5,00	2,00	5,00
M12	14	100	95	50	50	10	7,00	2,50	5,00	7,00	2,50	5,00
M16	18	110	105	54	54	15	7,00	3,00	5,00	7,00	2,5	5

Safety coefficient 2,5

Detailed information on the load capacity in various surfaces is available in ETA-12/0528 approval.

INSTALLATION PARAMETERS AND LOAD CAPACITY FOR ZKC-C RESIN MORTAR IN COMBINATION WITH PKKC THREADED RODS AND TKC-PLASTIC MESH SLEEVES - HOLE-PUNCHED SUBSTRATES

Threaded rod	Designation of the plastic sleeve	Installation parameters						Characteristic pullout resistance [kN]			Characteristic shear resistance [kN]		
		Diameter of the hole in the ground [mm]	Hole depth [mm]	Effective Anchorage Depth [mm]	Min. anchor spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Ceramic blocks with holes	Silicate blocks with opening	Lightweight concrete blocks with openings	Ceramic blocks with holes	Silicate blocks with holes	Lightweight concrete blocks with openings
M8	TKC-12x50	12	55	50	100	100	3	0,9 - 2,0	2,50	1,20	0,9 - 2,0	2,50	0,90
M10	TKC-16x85	16	90	85	100	100	4	1,2 - 3,5	2,50	1,20	0,9 - 2,5	2,20	0,90
M12	TKC-16x130	16	130	125	100	100	6	1,5 - 3,5	3,00	1,50	1,5 - 2,5	2,50	1,50

Safety coefficient 2,5

Detailed information on the load capacity in various surfaces is available in ETA-12/0528 approval.



VINYLESTER STYREN-FREE RESIN ZKC-B



Usage: to make anchorages meeting the requirements of load-bearing capacity and stability within the meaning of the basic requirement 1 according to the Regulation EU305/2011, whose failure may endanger the stability of the structure, may result in conditions endangering human life and/or cause economic effects; to anchorages subject to seismic loads.

Material: styrene-free vinylester resin

Surface: reinforced or unreinforced normal concrete of classes C20/25 to C50/60, cracked and uncracked concrete.

Name	Packaging	Designation for the order	Catalogue number
Vinyl ester non-styrene resin	300 ml	ZKC-B300	81800400006

ASSEMBLY PARAMETERS AND LOAD CAPACITY FOR ZKC-B BONDED ANCHOR IN COMBINATION WITH THREADED RODS

Threaded rod	Diameter of the hole in the substrate [mm]	Hole depth [mm]	Installation parameters					Characteristic pullout resistance [Kn]	
			Effective anchorage depth [mm]	Min. thickness of concrete substrate [mm]	Min. anchor spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Non-cracked concrete class C20/25	Condensed concrete class C20/25
M8	10	hef + 5 mm	60	100	40	40	10	16,00	10,00
M10	12		60	100	40	40	20	15,00	11,00
M12	14		60	100	40	40	40	15,00	11,00
M16	18		60	100	40	40	80	13,00	9,50

Increasing factor for concrete grades above C20/25 to C50/60 1,04 - 1,09

Detailed information on the load capacity in various substrates is available in ETA-17/0594 approval.



MIXING NOZZLE MKC



Usage: for mixing polyester resin ZKC.

Name	Weight	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Agitator for resins	0,010	10	MKC-215	81830400005

RESIN ANCHORS RODS PKC-M



Usage: for polyester resin ZKC

Set includes:

- a threaded rod with a cut ending and hexagonal pivot
- a flat washer
- a hexagonal nut

Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	110	0,040	20	PKCM8L110	81812081100
M10	130	0,080	20	PKCM10L130	81812101300
M12	160	0,140	20	PKCM12L160	81812121600
M16	190	0,280	10	PKCM16L190	81812161900

Steel of class 5.8 electro-galvanized

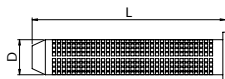
Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M10	130	0,080	10	N-PKC-M10X130	81811101302
M16	190	0,290	10	N-PKC-M16X190	81811161902

MESH SLEEVES TKC



Usage: for polyester resin ZKC; necessary for performing fastening systems in the brick base with opening elements (e.g. porotherm blocks, clinker blocks and silicate blocks with openings).

Intended for rods	Thread D	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	12	50	0,006	10	TKC-12x50	81821120505
M10-M12	16	85	0,010	10	TKC-16x85	81821160855
M10-M12	16	130	0,006	10	TKC-16x130	81821161355





INSTALLATION PARAMETERS AND LOAD CAPACITY FOR ZKC-C BONDED ANCHOR IN COMBINATION WITH BARS THREADED PKC - SOLID SUBSTRATES

Installation parameters							Characteristic pullout resistance [kN]			Characteristic shear resistance [kN]		
Threaded rod	Diameter of the hole in the substrate [mm]	Hole depth [mm]	Effective anchorage depth [mm]	Min. anchor spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Solid ceramic brick	Cellular concrete blocks	Silicate brick full	Solid ceramic brick	Cellular concrete blocks	Silicate brick full
M8	10	85	80	50	50	5	6,00	1,50	5,00	3,50	1,50	3,50
M10	12	90	85	50	50	8	7,00	2,00	5,00	5,00	2,00	5,00
M12	14	100	95	50	50	10	7,00	2,50	5,00	7,00	2,50	5,00
M16	18	110	105	54	54	15	7,00	3,00	5,00	7,00	2,5	5

ASSEMBLY PARAMETERS AND LOAD CAPACITY FOR ZKC-B BONDED ANCHOR IN COMBINATION WITH THREADED RODS

Installation parameters							Characteristic pullout resistance [Kn]		
Threaded rod	Diameter of the hole in the substrate [mm]	Hole depth [mm]	Effective anchorage depth [mm]	Min. thickness of concrete substrate [mm]	Min. anchoring spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Non-cracked concrete class C20/25	Condensed concrete class C20/25
M8	10	hef + 5 mm	60	100	40	40	10	16,00	10,00
M10	12		60	100	40	40	20	15,00	11,00
M12	14		60	100	40	40	40	15,00	11,00
M16	18		60	100	40	40	80	13,00	9,50

INSTALLATION PARAMETERS AND LOAD CAPACITY FOR ZKC-C RESIN MORTAR IN COMBINATION WITH PKCKC THREADED RODS AND TKC-PLASTIC MESH SLEEVES - HOLE-PUNCHED SUBSTRATES

				Installation parameters			Characteristic pullout resistance [Kn]			Characteristic shear resistance [kN]			
Threaded rod	Designation of the plastic sleeve	Diameter of the hole in the ground [mm]	Hole depth [mm]	Effective Anchorage Depth [mm]	Min. anchoring spacing [mm]	Min. distance from ground edge [mm]	Tightening torque [Nm]	Ceramic blocks with holes	Silicate blocks with openings	Lightweight concrete blocks with openings	Ceramic blocks with holes	Silicate blocks with holes	Lightweight concrete blocks with openings
M8	TKC-12x50	12	55	50	100	100	3	0,9 - 2,0	2,50	1,20	0,9 - 2,0	2,50	0,90
M10	TKC-16x85	16	90	85	100	100	4	1,2 - 3,5	2,50	1,20	0,9 - 2,5	2,20	0,90
M12	TKC-16x130	16	130	125	100	100	6	1,5 - 3,5	3,00	1,50	1,5 - 2,5	2,50	1,50

BLOW-OUT PUMP PKC



Usage: preparation of openings for the assembly of chemical and mechanical anchors.

Name	Designation for the order	Catalogue number
Blow-out pump PKC	PKC	81850000008

STEEL BRUSH SKC



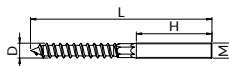
Usage: preparation of openings for the assembly of chemical and mechanical anchors.

Designed use for the openings with the diameter [mm]	Designation for the order	Catalogue number
8-12	SKC-12	81840126304
13-18	SKC-15	81840150001
19-28	SKC-20	81840200001*

* while stocks last



HANGER BOLTS WK



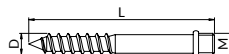
electro-galvanized

Usage: for direct assembly of pipeline clamps to the base, to be applied with pins KRM, KRG or KR.

Thread M	Diameter D [mm]	Length L [mm]	Thread length A [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	80	28	0,020	25	WK-8X80	81460008080
M8	8	100	45	0,020	50	WK-8X100	81460008100
M8	8	120	50	0,030	25	WK-8X120	81460008120
M8	8	140	50	0,040	25	WK-8X140	81460008140
M8	8	160	50	0,050	25	WK-8X160	81460008160
M8	8	200	50	0,060	25	WK-8X200	81460008200
M10	10	100	30	0,050	25	WK-10X100	81460010100
M10	10	120	47	0,050	25	WK-10X120	81460010120
M10	10	140	52	0,060	25	WK-10X140	81460010140
M10	10	160	50	0,060	25	WK-10X160	81460010160
M10	10	180	67	0,060	25	WK-10X180	81460010180*
M10	10	200	78	0,080	20	WK-10X200	81460010200
M12	12	200	73	0,120	5	WK-12X200	81460012200

*Until stocks run out

DOUBLE-THREADED SCREWS WITH A FLANGE WK-KL



electro-galvanized

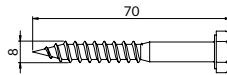
Usage: for direct assembly of pipeline clamps to the base, to be applied with pins KRM, KRG or KR.

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	6	60	0,010	50	WK-6X60-KL	81460106060
M8	8	70	0,018	50	WK-8X70-KL	81460108070
M8	8	120	0,030	25	WK-8X120-KL	81460108120



HEX HEAD WOOD SCREWS WK-DR

UNTIL STOCKS
RUN OUT



electro-galvanized

Usage: direct fixing of NICZUK system elements to a wooden base or with the use of pins KRG, KRM or KR to other base types.

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	70	0,018	50	WK-8X70-DR	81404087000*

*Until stocks run out

CONCRETE SCREW ANCHORS TSMW

electro-galvanized

to be applied in reinforced and nonreinforced concrete, cracked and non-cracked of class C20/25 to C50/60

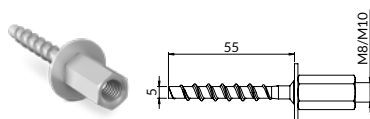
Usage: for static or quasi-static loads; for fastening systems subject to the requirements regarding fire resistance; for fastening systems subject to seismic loads.

ASSEMBLY PARAMETERS IN SOLID CONCRETE

Designation for the order	Diameter of the opening in the base [mm]	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Minimum thickness of concrete base [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Characteristic load-bearing capacity to tearing-out	
							Non-cracked concrete of C20/25 class [kN]	Cracked concrete of C20/25 class
TSMW-6X55	6	50	40	100	40	40	9,00	2,00
TSM-6X60	6	60	40	100	40	40	9,00	2,00
TSMK-8X70	8	70	65	120	50	50	16,00	12,00
TSM-10X90	10	90	85	130	50	50	25,00	-

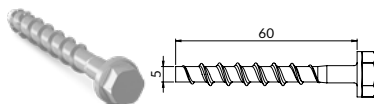
Fire resistance class	Thread M	M6	M8	M10
All directions of the load impact				
R30	* Characteristic load-bearing capacity in the case of a fire concrete C20/50 to C50/60 [kN]	0,9	2,4	4,4
R60		0,8	1,7	3,3
R90		0,6	1,1	2,3
R120		0,4	0,7	1,7
Span [mm]	4 x hef			
Distance from the edge [mm]	2 x hef			

THREADED ROD HANGERS TSMW-6X55



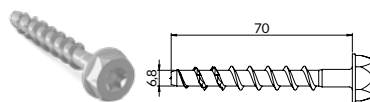
Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8/M10	5,0	55	0,040	25	TSMW-6X55	81444060550

HEX HEAD SCREW ANCHORS TSM-6X60



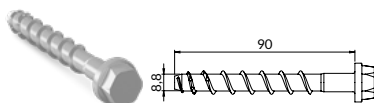
Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
5,0	60	0,020	25	TSM-6X60	81445060600

TORX HEX HEAD SCREW ANCHOR TSMK-8X70



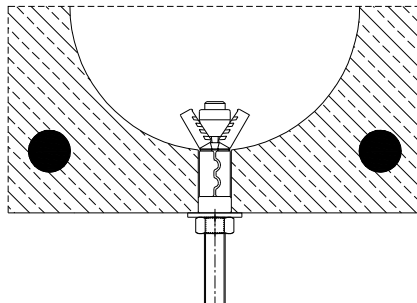
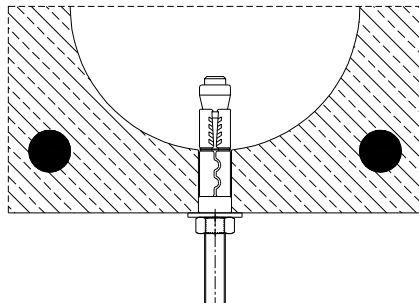
Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
6,8	70	0,030	25	TSMK-8X70	81445080700

HEX HEAD SCREW ANCHORS TSMK-10X90



Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
8,8	90	0,067	20	TSM-10X90	81445100900

INSTALLATION METHOD FOR ANCHORS TTRB IN CONCRETE HOLLOW SLABS



15 Installer's work ergonomics

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics**
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA - heavy channel system
- 20. Projects support

15.1. Zinc spray



Zinc spray
ZN-S

201



Zinc-rich spray for HDG products
OG-ZN-S

201



Zinc-rich paint
ZN-S-OF

201

15.2. Hole punching trapeze plier



Hole punching trapeze plier
KBT

202

15.3. Signboard information and printers



Labelling sign system
SI

202



Label printer for signboard
DE

203



Label tape for printer
9x7000 MM ET

203

15

Installer's
work
ergonomics

15.4. End caps



Channel end caps
ZS

203



Rod end caps
ZS-M

204

15.5. Firestop Identification plates



Identification plates NTFP

204

15.6. Drill bits



Magnetic holders
UM-B

204



Insert bits
B

205



Nutsetter screwdriver bits
NT/NG

205

15.7. Gloves



Gloves
GS1-BC

206

15.8. Setting tools and drills



ONS

NEW

206



OM

NEW

206



WOGW

NEW

206

ZINC SPRAY ZN-S



Usage: repair of zinc layer damage and anti-corrosion protection of products made of carbon steel in the places of cuts; applied as complete anti-corrosion protection of metal surfaces; over 12% of zinc content in dry coating; resistant to 200°C.

Name	Packaging	Designation for the order	Catalogue number
Zinc spray	400 ml	ZN-S	81880400000

ZINC-RICH SPRAY FOR HDG PRODUCTS OG-ZN-S



Usage: repair of zinc layer damages and anti-corrosion protection of products made of carbon steel in the places of cuts; for anti-corrosion protection of damages in the hot-dip galvanized products; for joints protection; active anti-corrosion protection according to DIN 50021; resistance to salt 528 hours according to DIN 20021 SS; protects against variable atmospheric conditions, rust and salt; quick-drying and very efficient.

Name	Packaging	Designation for the order	Catalogue number
Zinc spray preparation for hot-dip galvanized products	400 ml	OG-ZN-S	81881400001

ZINC-RICH PAINT ZN-S-OF

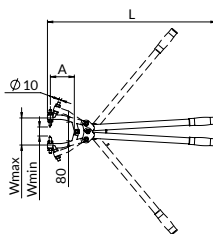


Usage: repair of damages of zinc layer and anti-corrosion protection of products made of carbon steel in the places of cuts; paint of high zinc content; for repairing and renovating joints, damaged places on the zincplated surface; it contains 90% of zinc in the form of metallic dust; resistant to 300°C; it has excellent anti-corrosion properties in contact with atmospheric conditions.

Name	Packaging	Designation for the order	Catalogue number
Zinc paint	1l	ZN-S-OF	81882400002



HOLE PUNCHING TRAPEZE PLIER KBT

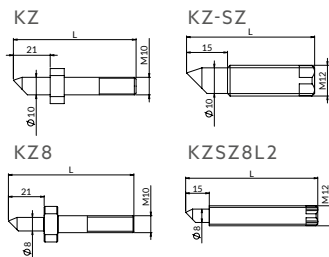


Usage: for performing openings in trapeze metal sheets; there are two types of pliers available with the maximum jaw opening up to 105 mm and up to 145 mm; they ensure speed of operation, time saving.

L [mm]	A [mm]	W min [mm]	W max [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
690	95	50	105	3,220	1	KBT	8058000000
710	115	15	145	3,300	1	KBT-SZ*	80581000000

* KBT-SZ additionally have KZ-SZ L2 replaceable pins

Replacement pins are available for the tongs:



For	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
KBT	10,5	70	0,102	2	KZ	80594000000
KBT-SZ	10,5	50	0,031	2	KZ-SZ L1	80592000000
KBT-SZ	10,5	80	0,051	2	KZ-SZ L2	80593000000
KBT	8	75	0,054	2	KZ8	80595000000
KBT-SZ	8	80	0,061	2	KZSZ8L2	80596000000

LABELLING SIGN SYSTEM SI



Usage: precise identification of medium in the pipeline; in industrial objects and public utility buildings; it makes ongoing servicing and inspection of the system condition easier; it increases safety at the construction site because of proper labelling; possibility of advertising own company.

Name	Colour	Dimensions [mm]	Designation for the order	Catalogue number
Universal information sign 55x36 mm - red	red	55x36 mm	SI-55X36-C	86005503615
Universal information sign 55x36 mm - blue	blue	55x36 mm	SI-55-36-N	86005503625
Universal information sign 105x55 mm - red	red	105x55 mm	SI-105X55-C	86010505515
Universal information sign 105x55 mm - blue	blue	105x55 mm	SI-105-X55-N	86010505525

Tape for signboard
is available in steel version

Name	Length [m]	Designation for the order	Catalogue number
Tape for signboard	5	TSI-5M	98000000017



LABEL PRINTER FOR SIGNBOARD DE



Usage: it makes simple text formatting easier as well as intuitive access to popular edition functions; a graphical display allows for viewing the phrase before printing out; shortcut keys and quick access keys to characters make operation with the printer easier; automatic turning off function ensures battery saving; memory of the last printed label accelerates printing out of repeatable labels.

The printer is sold without a label.

Name	Dimensions (length x width x height) [mm]	Weight [kg]	Designation for the order	Catalogue number
Printer for labels for signboard information	203x118x49	0,35	DE-160	86000016000

LABEL TAPE FOR PRINTER – 9x7000 mm ET



Usage: the label is designed for DE-160 printer; it guarantees durable and legible print with the quality comparable to laser printing.

Name	Dimensions [mm]	Designation for the order	Catalogue number
label cassette for label printer	9x7000	ET-9x7000	86100016000

CHANNEL END CAPS ZS



Usage: for securing the channel ends; safe and aesthetic blinding of sharp channel edges; compatible with the mounting channel; simple and quick assembly.

 plastic

For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
W	0,010	25/50/100	ZS-W	81101281805
X	0,010	25/50/100	ZS-X	81101283505
C	0,010	25/50/100	ZS-C	81101301605
A	0,010	25/50/100	ZS-A	81101303005
MG	0,010	25	ZS-MG	81101412105
MF	0,010	25	ZS-MF	81101414105
MH	0,010	25	ZS-MH	81101416205
MI	0,010	25	ZS-MI	81101418205
MB	0,010	25	ZS-MB	81101504005
ME	0,010	25/50/100	ZS-ME	81945400000



ROD END CAPS ZS-M



Usage: for protection of threaded rods' ends; safe and aesthetic blinding of sharp edges of threaded rods; simple and quick assembly, ensure operational safety.

 plastic

To the bar	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	0,01	25/50/100	ZS-M8	81102080005
M10	0,01	25/50/100	ZS-M10	81102100005
M12	0,01	25/50/100	ZS-M12	81102120005

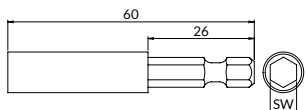
FIRESTOP IDENTIFICATION PLATES NTFP



Usage: Rating plate informing about the realization of fire protection systems and fire resistance class, system passages in the fire division elements.

Name	Designation for the order	Catalogue number
Identification plate	NTFP	89000019244

MAGNETIC HOLDERS UM-B



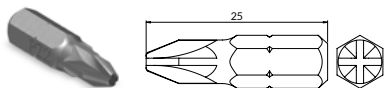
Usage: a magnetic holder designed for screwing tips; a simple structure; solid performance using high resistance steel.

Quantity [pcs/pkg]	Designation for the order	Catalogue number
5	UM-B	81860000000

INSERT BITS B

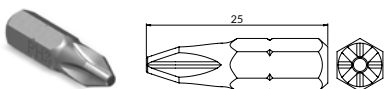
Usage: tips for drillers designed for screwing screws and bolts; universal Usage at the construction site; bits of PH type are designed for screwing screws with a cut in the shape of a traditional cross; bits of PZ type are designed for screwing screws with a cut in the form of a shape with small cuts at the angle of 45° in relation to the cross center.

B-PZ2



Name	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Screwing tip - bit PZ2	5	B-PZ2	81860100200

B-PH3

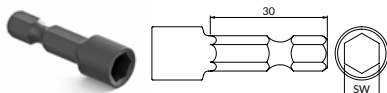


Name	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Screwing tip - bit PH3	5	B-PH3	81860200200

NUTSETTER SCREWDRIVER BITS NT/NG

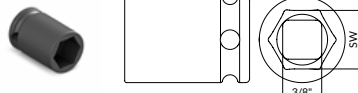
Usage: designed for long-term, professional operation; precise and very resistant; made of the highest quality steel.

NT-SW



Quantity [pcs/pkg]	Designation for the order	Catalogue number
2	NT-SW-7	81860300700
2	NT-SW-10	81860301000
2	NT-SW-13	81860301300
2	NT-SW-17	81860301700
2	NT-SW-19	81860301900

NG-SW



Quantity [pcs/pkg]	Designation for the order	Catalogue number
2	NG-SW-7	81863800700
2	NG-SW-10	81863801000
2	NG-SW-15	81863801500
2	NG-SW-19	81863801900

UNTIL STOCKS
RUN OUT

GLOVES GS1-BC



Usage: for hands protection during all works; in neuralgic places made of light grain leather which ensures high hand protection; good resistance to friction and tearing; aesthetic look.

Name	Quantity [pcs/pkg]	Designation for the order	Catalogue number
Gloves MINMAN size S	1	GS1-BCS	80011010105
Gloves MINMAN size M	1	GS1-BCM	80011010205
Gloves MINMAN size L	1	GS1-BCL	80011010305
Gloves MINMAN size XL	1	GS1-BCXL	80011010405

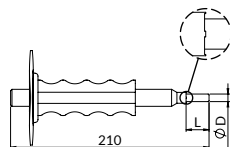
DROP IN ANCHOR SETTING TOOLS AND DRILLS ONS/OM/WOGW

ONS BLUE

NEW

electro-galvanized

Usage: for proper manual assembly of the steel expansion anchor – a sleeve with the internal thread; it has an ergonomic handle which ensures comfortable grip; a protective flange around the handle secures against cutting during the assembly; available setting mandrels adjusted to the size of the anchor being set.

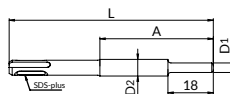


Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
5	15	0,54	1	ONS-M6	81405020010
6,5	18	0,54	1	ONS-M8	81405030010
8	24	0,54	1	ONS-M10	81405040010
10,2	30	0,55	1	ONS-M12	81405050010
13,5	36	0,81	1	ONS-M16	81405060010
16,5	50	0,83	1	ONS-M20	81405070010

OM

electro-galvanized

Usage: a tool for mechanical, serial, mechanical anchor assembly – SDS ending allows for applying a professional hammer drill; it ensures effortless and quick assembly; the mandrel is adjusted to the size of the anchor being set; to be applied with a drill with a limiter WOGW.

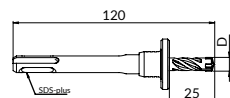


L [mm]	A [mm]	D1 [mm]	D2 [mm]	Weight [kg]	Designation for the order	Catalogue number
135	75	6,3	11	0,077	OM-M8	81405208000
140	80	7,8	13	0,101	OM-M10	81405210000

WOGW

electro-galvanized

Usage: a drill for serial assembly of sleeve anchors; ensures precise preparation of openings; to be applied with manual tool ON or mechanical one OM.



Designed for sleeve	D [mm]	Weight [kg]	Designation for the order	Catalogue number
TRSK- M6	8	0,095	WOGW-8	81864082500
TRSK- M8	10	0,100	WOGW-10	81864102500
TRSK- M10	12	0,105	WOGW-12	81864122500

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)**
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

16

Stainless steel products (A2)

16.1. Pipe clamps

	Pipe clamps Expert N-UPG	210
	Pipe clamps N-UDG	210
	Pipe clamps Duo NPGD	211
	Pipe clamps Expert N-UPZ	212
	Pipe clamps Duo NPZD	213
	Heavy duty pipe clamps N-PST	214
	Sliding support N-PSA1	214
	Sliding support N-PSAH1	214
	Fixed point plates N-PSST	215

16.2. Ventilation pipe clamps and accessories

	Pipe clamps N-UWG	215
	Air duct angels L, V, Z	216
	Trapeze hangers N-WT	216

16 Stainless steel products (A2)



Ventilation Duct
G Clamp N-SW 217



Ventilation ducts corners
N-NW 217



Ventilation ducts
edgings N-OW 217

16.3. Channels



Channels N-SZ 218



Double channels
N-SD-MF2,5 219

16.4. Cantilever arms



Cantilever arms
N-SS 220

16.5. Channels accessories



Channel support
N-ST-S 221



Vertical channel support
N-ST-S90 221



Channel support
N-ST 221



Channel connectors
N-LSE 222



Channel connectors
N-LS 222



Threaded plates
N-PG 222



Flat connectors
N-X 223



Angle support
for clamps N-DCL 225



Angle support
for clamps N-DL 225



Angular connectors
N-KT 226



Slide nuts
N-EZP 227



U-shaped channel
washers N-PDC 227



Beam clamps
N-KLM 228

16.6. Fastening and connecting accessories



Threaded rod base plates
N-ST-M 228



Threaded rods
N-M 228



Hex head bolts
N-105-M 229



Flat washers
N-PD 229



Hex nuts
N-144-M 230

16 Stainless steel products (A2)



Threaded connectors
N-ZL 230



Cast iron beam clamps
N-KLP 230



Beam clamps
N-ZNP 231

15.6. Anchoring accessories



Drop in anchors
N-TRSA 231



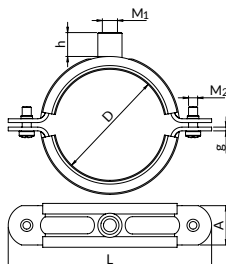
Bolt anchors
N-ULS 232



Hanger bolts
N-WK 232



PIPE CLAMPS EXPERT N-UPG



expert

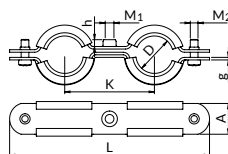
- Permissible load
- Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

- stainless steel 0H18N9
- cross recessed (from N-UPG-54") or hexagonal head (from N-UPG-8)
- Material: EPDM elastomer; thermal resistance: -40°C to +120°C, sound insulation: pursuant to DIN 4109 (low-noise installations).

Scope of diameters D [mm]	Connection			Clamp dimensions			Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	Size M ₁	Height h [mm]	Version	L [mm]	A x g [mm]							
52-57	110,5	23,5x1,5	M8	5,3	A		M6	2,0	0,130	50	N-UPG-54	80130205402
214-222	305	35x3,0	M12/M16	25,0	C		M8	3,60	0,870	5	N-UPG-8	80130221902
244-252	334	35x3,0	M12/M16	25,0	C		M8	3,60	0,940	5	N-UPG-250	80130225002
264-273	338	35x4,0	M12/M16	26,0	C		M10	4,50	1,420	5	N-UPG-273	80130227302
307-316	380	35x4,0	M12/M16	26,0	C		M10	4,50	1,580	5	N-UPG-315	80130231502
317-326	390	35x4,0	M12/M16	26,0	C		M10	4,50	1,620	5	N-UPG-324	80130232402
395-410	467	35x4,0	M12/M16	26	C		M10	4,50	1,800	1	N-UPG-400	80130240002

DOUBLE PIPE CLAMPS N-UDG



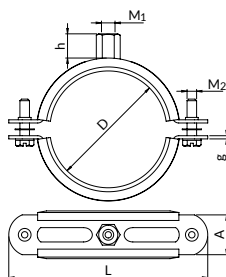
- Permissible load
- Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

- stainless steel 0H18N9
- with cross recession
- Material: EPDM elastomer; thermal resistance: -40°C to +120°C. Sound insulation: pursuant to DIN 4109.

Scope of diameters D [mm]	Connection			Clamp dimensions			Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	Size M ₁	Height h [mm]	Version	L [mm]	K [mm]	A x g [mm]						
14-18	M8	10,1	B	113	48	20x1,5	M6	1,20	0,100	50	N-UDG-3/8	80150201702
18-23	M8	10,1	B	126	54	20x1,5	M6	1,50	0,110	50	N-UDG-1/2	80150202102
26-29	M8	10,1	B	152	70	24x2,0	M6	1,80	0,160	50	N-UDG-3/4	80150202602
31-34	M8	10,1	B	154	70	24x2,0	M6	1,80	0,180	50	N-UDG-1	80150203302

PIPE CLAMPS DUO NPGD



duo

Permissible load

Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

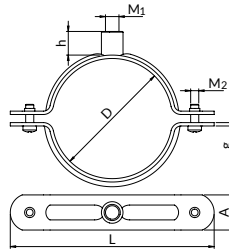
- stainless steel OH18N9
- ⚙ with hexagonal head with cross and groove recession + washers which prevent from bolts falling out
- Material: EPDM elastomer; thermal resistance: -40°C to +120°C

Scope of diameters D [mm]	Size M ₁	Connection Height h [mm]	Version	Clamp dimensions		Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
17-20	M8/M10	17,0	D	66	20x1,25	M6	0,90	0,053	25	NPGD-3/8	80120201702
21-25	M8/M10	17,0	D	70	20x1,25	M6	0,90	0,060	25	NPGD-1/2	80120202102
26-30	M8/M10	17,0	D	76	20x1,25	M6	0,90	0,066	25	NPGD-3/4	80120202602
31-36	M8/M10	17,0	D	83	20x1,25	M6	0,90	0,075	25	NPGD-1	80120203302
41-46	M8/M10	17,0	D	93	20x1,25	M6	0,90	0,085	25	NPGD-11/4	80120204202
47-52	M8/M10	17,0	D	103	20x1,25	M6	0,90	0,089	25	NPGD-11/2	80120204802
59-64	M8/M10	17,0	D	116	20x1,5	M6	0,90	0,104	25	NPGD-2	80120206002
65-71	M8/M10	17,0	D	118	20x1,5	M6	1,3	0,17	25	NPGD-70	80120207002
72-78	M8/M10	17,0	D	125	20x1,8	M6	1,3	0,18	25	NPGD-21/2	80120207602
85-93	M8/M10	17,0	D	132	25x2,0	M6	1,3	0,20	25	NPGD-3	80120208902
79-85	M8/M10	17,0	D	139	20x1,8	M6	1,3	0,19	25	NPGD-80	80120208002
93-99	M8/M10	17,0	D	146	25x2,0	M6	1,6	0,21	25	NPGD-95	80120209502
100-107	M8/M10	17,0	D	154	25x2,0	M6	1,6	0,22	25	NPGD-105	80120210502
108-115	M8/M10	17,0	D	162	25x2,0	M6	1,6	0,24	25	NPGD-4	80120201002
116-124	M8/M10	17,0	D	171	25x2,0	M6	1,6	0,25	25	NPGD-120	80120212002
125-133	M8/M10	17,0	D	180	25x2,0	M6	1,6	0,28	25	NPGD-125	80120212502
133-141	M8/M10	17,0	D	191	25x2,5	M6	1,6	0,32	25	NPGD-5	80120213302
142-150	M8/M10	17,0	D	200	25x2,5	M6	2,1	0,35	25	NPGD-145	80120214502
151-160	M8/M10	17,0	D	209	25x2,5	M6	2,1	0,36	20	NPGD-160	81202015902
160-169	M8/M10	17,0	D	218	25x2,5	M6	2,8	0,38	20	NPGD-6	80120216002
200-210	M8/M10	17,0	D	258	25x2,5	M6	2,8	0,46	10	NPGD-200	80120220002



PIPE CLAMPS EXPERT N-UPZ

UNTIL STOCKS
RUN OUT



expert

|||| Permissible load

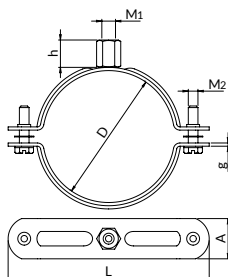
Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

○ stainless steel 0H18N9

⌋ cross recessed (from N-UPZ-3/8" to N-UPZ-5") or hexagonal head (from N-UPZ-150 to N-UPZ-500)

Scope of diameters D [mm]	Connection			Clamp dimensions		Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	Size M ₁	Height h [mm]	Version	L [mm]	A x g [mm]						
41-45	M8	5,3	A	90	23,3x1,5	M6	2,00	0,080	50	N-UPZ-11/4	80130104202
75-80	M10/M12	17,5	B	127	26x2,5	M6	2,40	0,180	25	N-UPZ-21/2	80130107602
197-206	M10/M12	25,0	C	284	35x3,0	M8	3,90	0,700	10	N-UPZ-200	80130120002
322-332	M12/M16	26,0	C	428	35x4,0	M12	4,50	1,470	5	N-UPZ-324	80130132402

PIPE CLAMPS DUO NPZD



duo

Permissible load

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).



stainless steel 0H18N9

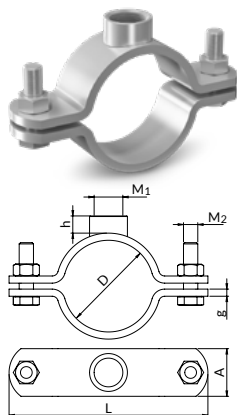


with hexagonal head with cross and groove recession + washers which prevent from bolts falling out

Scope of diameters D [mm]	Clamp dimensions		Connection			Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height h [mm]	Version						
15-17	58	20x1,25	M8/M10	17.0	D	M6	0.80	0.0510	50	NPZD-3/8	80130312002
18-22	62	20x1,25	M8/M10	17.0	D	M6	0.80	0.0540	50	NPZD-1/2	80130301002
23-27	66	20x1,25	M8/M10	17.0	D	M6	1.00	0.0600	50	NPZD-3/4	80130304102
33-37	76	20x1,25	M8/M10	17.0	D	M6	1.00	0.0660	50	NPZD-1	80130310002
39-44	83	20x1,25	M8/M10	17.0	D	M6	1.00	0.0720	50	NPZD-11/4	80130303302
45-49	88	20x1,25	M8/M10	17.0	D	M6	1.00	0.0730	50	NPZD-11/2	80130317202
50-54	93	20x1,25	M8/M10	17.0	D	M6	1.00	0.0770	25	NPZD-54	80130332402
60-65	105	20x1,25	M8/M10	17.0	D	M6	1.00	0.1320	25	NPZD-2	80130304802
72-78	118	20x1,5	M8/M10	17.0	D	M6	1.6	0.1420	25	NPZD-21/2	80130320002
85-91	132	20x1,8	M8/M10	17.0	D	M6	1.6	0.1500	25	NPZD-3	80130311402
99-105	146	25x2,0	M8/M10	17.0	D	M6	1.9	0.1720	25	NPZD-100	80130307602
106-113	154	25x2,0	M8/M10	17.0	D	M6	1.9	0.1820	25	NPZD-4	80130312502
114-122	162	25x2,0	M8/M10	17.0	D	M6	1.9	0.1900	25	NPZD-114	80130325002
123-131	171	25x2,0	M8/M10	17.0	D	M6	1.9	0.2020	25	NPZD-125	80130327102
132-140	180	25x2,0	M8/M10	17.0	D	M6	1.9	0.2120	25	NPZD-5	80130301102
149-157	200	25x2,5	M8/M10	17.0	D	M6	2.1	0.2860	10	NPZD-150	80130306002
158-167	209	25x2,5	M8/M10	17.0	D	M6	2.1	0.3000	10	NPZD-160	80130331502
168-177	218	25x2,5	M8/M10	17.0	D	M6	2.1	0.3120	10	NPZD-6	80130313902



HEAVY DUTY PIPE CLAMPS N-PST



Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.



Permissible load



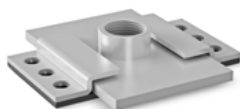
two bolts with a hexagonal head



stainless steel 0H18N9

Scope of diameters D [mm]	Clamp dimensions		Connection		Connection screws M ₂	Weight [kg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M ₁	Height H [mm]				
53-55	123	40x6,0	M20	16,0	M12	0,69	N-PST-54-M20	80310105412
57-63	150	40x6,0	M20	16,0	M12	0,71	N-PST-50-M20	80310106012
75-79	167	40x6,0	M20	16,0	M12	0,81	N-PST-65-M20	80310107612
88-92	180	40x6,0	M20	16,0	M12	0,90	N-PST-80-M20	80310108912
108-115	220	50x6,0	M20	16,0	M16	1,46	N-PST-110-M20	80310111412
133-140	247	50x6,0	M20	16,0	M16	1,66	N-PST-125-M20	80310113912
164-170	280	50x8,0	M20	16,0	M16	2,35	N-PST-160-M20	80310116812

SLIDING SUPPORT N-PSA1



stainless steel 0H18N9



Permissible load

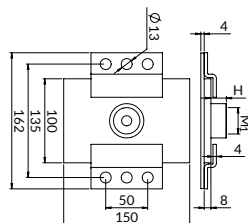


Thermal resistance



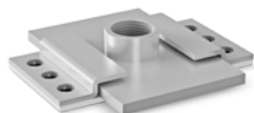
installation method
- Chapter 20

Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.



Connection		Quantity	Shifting max. [mm]	Designation for the order	Catalogue number
Size M ₂	Height h [mm]				
M10	17,5	1	66	N-PSA1-M10	80410110122

SLIDING SUPPORT N-PSAH1



stainless steel 0H18N9



Permissible load

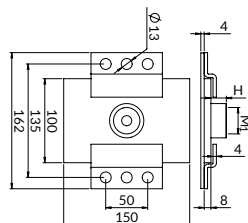


Thermal resistance



installation method
- Chapter 20

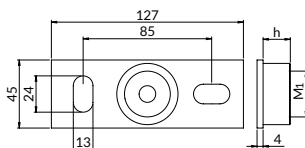
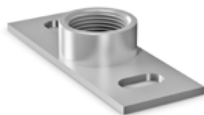
Usage: for the assembly of systems which are subject to thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Intended for the assembly directly to the substrate and to the structures made of mounting channels. Intended for the assembly in the pipeline support version.



Connection		Quantity	Shifting max. [mm]	Designation for the order	Catalogue number
Size M ₂	Height h [mm]				
M10/12	12,6	1	65	N-PSAH1-M10*	80412110122
M12/16	26,0	1	65	N-PSAH1-M12/16*	80412121262

* On request

FIXED POINT PLATES N-PSST



stainless steel 0H18N9

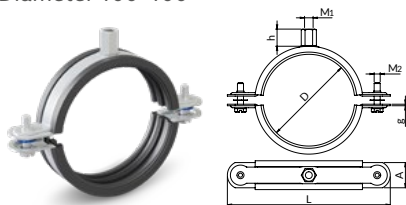
Permissible load

Usage: for fixed points assembly to the substrate and on the structures made of mounting channels.

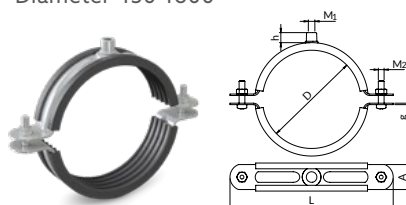
Connection M_1	Connection height H [mm]	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
M20	16	6,00	0,230	N-PSST-M20	80340041212

VENTILATION PIPE CLAMP N-UWG

Diameter 100-400



Diameter 450-1600



Permissible load

stainless steel 0H18N9

soft PVC; thermal resistance:
-30°C to +90°C blind

Thermal resistance

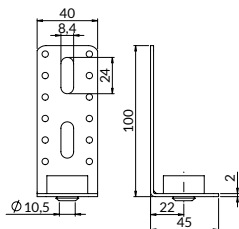
rivet nut

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

Diameter D [mm]	Clamp dimensions		Connection		Connection screws M_2	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	L [mm]	A x g [mm]	Size M_1	Height h [mm]						
100	160	25x1,5	M8/M10	17,0	M8	0,33	0,180	25	N-UWG-100	81211210002
125	185	25x1,5	M8/M10	17,0	M8	0,6	0,220	25	N-UWG-125	81211212502
150	210	25x1,5	M8/M10	17,0	M8	0,6	0,260	10	N-UWG-150	81211215002
160	220	25x1,5	M8/M10	17,0	M8	0,6	0,261	10	N-UWG-160	81211216002
180	240	25x1,5	M8/M10	17,0	M8	0,6	0,300	10	N-UWG-180	81211218002
200	260	25x1,5	M8/M10	17,0	M8	0,6	0,340	10	N-UWG-200	81211220002
225	285	25x1,5	M8/M10	17,0	M8	0,6	0,380	10	N-UWG-225	81211222502
250	310	25x1,5	M8/M10	17,0	M8	0,6	0,420	10	N-UWG-250	81211225002
280	340	25x1,5	M8/M10	17,0	M8	0,6	0,460	10	N-UWG-280	81211228002
315	375	25x1,5	M8/M10	17,0	M8	0,75	0,500	5	N-UWG-315	81211231502
355	415	25x1,5	M8/M10	17,0	M8	0,75	0,550	5	N-UWG-355	81211235502
400	460	25x2	M8/M10	17,0	M8	1,2	0,740	5	N-UWG-400	81211240002
450	510	26x2,0	M10	12,0	M8	1,8	0,770	5	N-UWG-450	801210245000
500	560	26x2,0	M10	12,0	M8	1,8	0,800	5	N-UWG-500	801210250000
560	620	26x2,0	M10	12,0	M8	1,8	0,890	5	N-UWG-560	801210256000
630	690	26x2,0	M10	12,0	M8	1,8	1,030	5	N-UWG-630	801210263000
710	770	26x2,0	M10	12,0	M8	1,8	1,150	5	N-UWG-710	801210271000
800	860	26x2,0	M10	12,0	M8	1,8	1,400	5	N-UWG-800	801210280000
900	960	26x2,0	M10	12,0	M8	1,8	1,700	5	N-UWG-900	801210290000
1000	1060	26x2,0	-	-	M8	1,8	1,800	5	N-UWG-1000	801210200000
1120	1180	26x2,0	-	-	M8	1,8	1,900	5	N-UWG-1120	801210201100
1250	1310	26x2,0	-	-	M8	1,8	2,100	5	N-UWG-1250	801210201200
1400	1460	26x2,0	-	-	M8	1,8	2,400	5	N-UWG-1400	801210201400
1500	1562	26x2,0	-	-	M8	1,8	2,514	1	N-UWG-1500	801210201500
1600	1665	26x2,0	-	-	M8	1,8	2,681	1	N-UWG-1600	801210201600



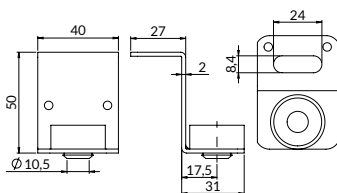
AIR DUCTS ANGELS N-UWL, N-UWZ, N-UWV



- Permissible load
- Thermal resistance

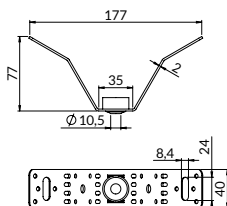
L-TYPE DUCT BRACKET N-UWL

Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,090	50	N-UWL	81250000002



Z-TYPE DUCT BRACKET N-UWZ

Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,090	50	N-UWZ	81260000002



V-HANGER DUCT BRACKET N-UWV

Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,090	50	N-UWV	81270000002



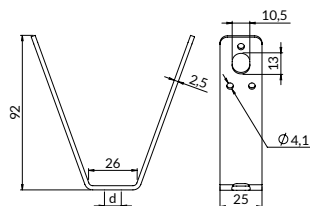
stainless steel 0H18N9



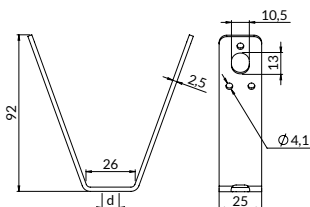
EPDM elastomer; thermal resistance: -40°C to +120°C.

TRAPEZE HANGERS N-WT

N-WT-BK



N-WT



stainless steel 0H18N9

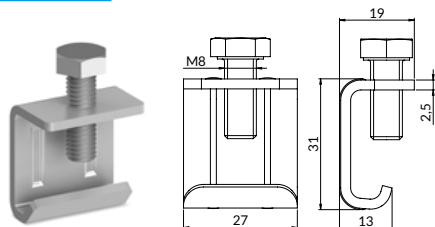


Permissible load

Usage: assembly of fixed water extinguishing devices to trapeze metal sheets.

Connection size M_i	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	4,00	0,100	50	N-WT-M8	80570000802
M10	4,00	0,110	50	N-WT-M10	80570001002
-	4,00	0,110	50	N-WT-BK-Fi11	80570001102

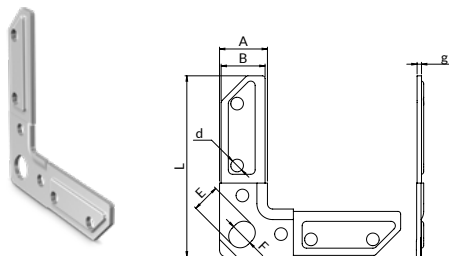
VENTILATION DUCTS G CLAMP N-SW



○ stainless steel 0H18N9

Weight [kg/r.m.]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
0,040	50	N-SW	81280000002

VENTILATION DUCTS CORNERS N-NW

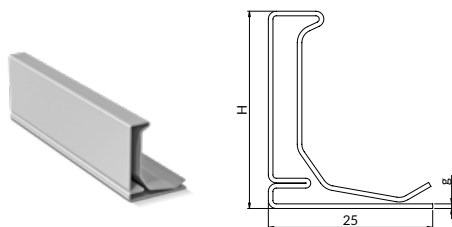


○ stainless steel 0H18N9

Usage: for connecting edges of ventilation ducts with each other. Corners shall be selected applicably to the used types of ventilation edges in the ventilation line.

	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A [mm]	B [mm]	L [mm]	g [mm]	E [mm]	F [mm]	d [mm]				
For edges OW-20	18,0	15,0	72,0	2,0	11,0	9,0	6,2	0,030	10	N-NW-20	81620200002
For edges OW-30	27,0	25,0	103,0	2,5	16,0	13,0	7,2	0,080	10	N-NW-30	81620300002

VENTILATION DUCTS EDGINGS N-OW



○ stainless steel 0H18N9

Usage: for connecting ducts and ventilation fittings. Edges and corners should be selected according to duct dimensions and pressure in the ventilation duct.

Height H [mm]	Thickness g [mm]	Length [mm]	Weight [kg]	Quantity [pcs/bundle]	Designation for the order	Catalogue number
20	0,6	2500	1,05	1	N-OW-20-2500	81610202502
30	0,7	2500	1,6	1	N-OW-30-2500	81610302502

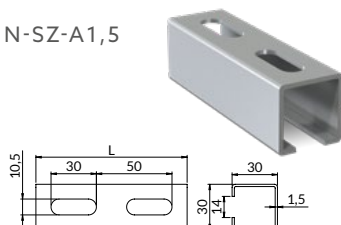


CHANNELS N-SZ

Usage: universal mounting channel for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

○ stainless steel OH18N9

N-SZ-A1,5

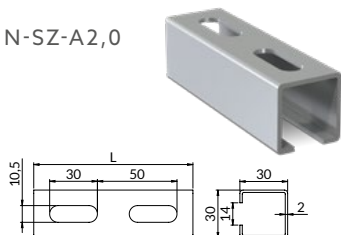


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,120	N-SZ-A1,5-2000	80730301522
3000	3,180	N-SZ-A1,5-3000	80730301532

||| Permissible load

Channel lining strip is available for the channel on [page 91](#).

N-SZ-A2,0

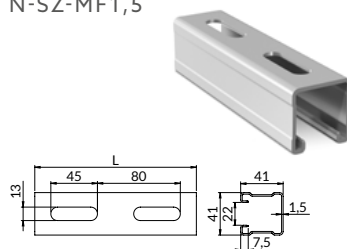


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,540	N-SZ-A2,0-2000	80730302022
3000	3,810	N-SZ-A2,0-3000	80730302032

||| Permissible load

Channel lining strip is available for the channel on [page 91](#).

N-SZ-MF1,5

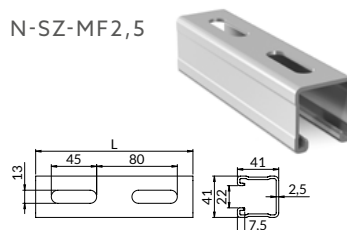


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	3,300	N-SZ-MF1,5-2000	80741411522
3000	4,950	N-SZ-MF1,5-3000	80741411532
6000	9,900	N-SZ-MF1,5-6000	80741411562

||| Permissible load

Channel lining strip is available for the channel on [page 91](#).

N-SZ-MF2,5

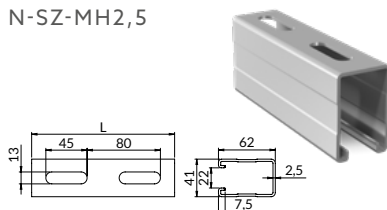


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,200	N-SZ-MF2,5-2000	80741412522
3000	7,800	N-SZ-MF2,5-3000	80741412532
6000	15,600	N-SZ-MF2,5-6000	80741412562

||| Permissible load

Channel lining strip is available for the channel on [page 91](#).

N-SZ-MH2,5

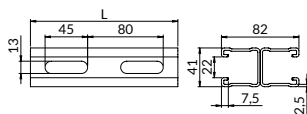


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,800	N-SZ-MH2,5-2000	80741622522
3000	10,200	N-SZ-MH2,5-3000	80741622532
6000	20,400	N-SZ-MH2,5-6000	80741622562

Permissible load

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

DOUBLE CHANNELS N-SD-MF2,5



Permissible load

Usage: universal channel system for building fastening systems, with repeatable perforation and serrated edges in order to lock the accessories better; they have a cut centimeter scale on the channel side.

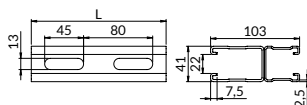
stainless steel 0H18N9

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	15,600	N-SD-MF2,5-3000	80841822532
6000	31,200	N-SD-MF2,5-6000	80841832562

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Channel lining strip is available for the channel on [page 91](#).

DOUBLE CHANNELS N-SD-MFH2,5



stainless steel 0H18N9

Permissible load

Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
6000	36,000	N-SD-MFH2,5-6000	80841032562

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

Channel lining strip is available for the channel on [page 91](#).

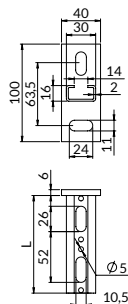


CANTILEVER ARMS N-SS

Usage: universal cantilever arm for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

 stainless steel 0H18N9

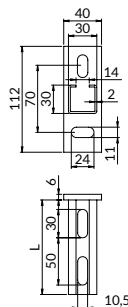
N-SS-C1,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
208	0,350	N-SS-C1,5-200	80930162002
312	0,460	N-SS-C1,5-300	80930163002

 Permissible load

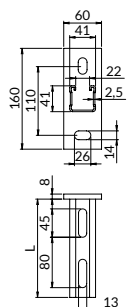
N-SS-A2,0



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
300	0,550	N-SS-A2,0-300	80930303002
500	0,850	N-SS-A2,0-500	80930305002
750	1,200	N-SS-A2,0-750	80930307502

 Permissible load

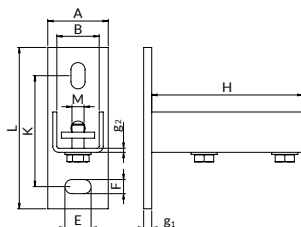
N-SS-MF2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
240	1,250	N-SS-MF2,5-240	80941412402
320	1,460	N-SS-MF2,5-320	80941413202
480	1,900	N-SS-MF2,5-480	80941414802
560	2,070	N-SS-MF2,5-560	80941415602
1040	3,300	N-SS-MF2,5-1040	80941410002

 Permissible load

CHANNELS SUPPORT N-ST-S



stainless steel 0H18N9

Permissible load

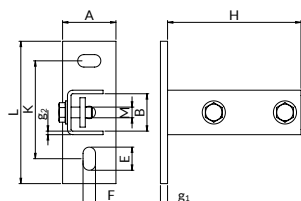
The set is composed of:

- U-profile welded to a wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal heads, full thread

Usage: for connecting channels with the base material; allows for individual creation of cantilever arm and building fastening systems.

For channels	Dimensions										
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C	45x112x6	70	11x24	31,0	3	100	M10	0,420	5	N-ST-SA	81125030302
MF, MH	60x160x8	110	14x26	42,0	4	150	M12	0,950	5	N-ST-SMF	81120041412

VERTICAL CHANNELS SUPPORT N-ST-S90



stainless steel 0H18N9

Permissible load

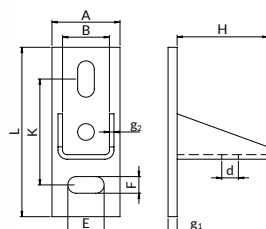
Set includes:

- U-profile welded on wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal head, full thread

Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems

For channels	Dimensions										
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MG, MF, MH, MI	60x160x8	110	14x26	42	4	150	M12	1,190	5/10	N-ST-SMF90	81160041412

CHANNELS SUPPORT N-ST



stainless steel 0H18N9

Permissible load

Usage: for connecting channels with the base material; allows for individual creation of cantilever arm and building fastening systems; reliable and simple usage.

For channels	Dimensions										
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	d [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C	45x112x6	70	11x24	31	3	60	11,0	0,300	5	N-ST-A	81110030302



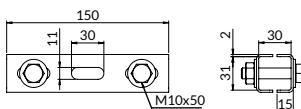
CHANNEL CONNECTORS N-LSE

○ stainless steel
OH18N9

||||| Permissible load



Usage: for creating facial structural connections of channels; it allows for multiple adjustment of the fixing opening location in the channel; it makes professional connection of flat and spatial fixing systems easier.

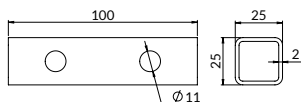


The set is composed of:

- a connector
- a threaded plate
- four round washers
- four bolts with hexagonal heads, full thread

For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	H [mm]	g [mm]	M [mm]			
MF, MH	42	226	40	4	M12	0,810	N-LSE-MF	81140144412

CHANNEL CONNECTORS N-LS



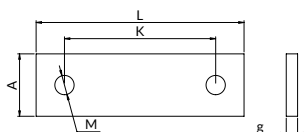
○ stainless steel A2

||||| Permissible load

Designed for mounting channels	Weight [kg]	Designation for the order	Catalogue number
A	0,110	N-LS-A	81140030302

Usage: for creation of structural connections of channels; it gives the possibility of strengthening channel connections internally; it makes professional connection of flat and spatial fixing systems easier.

THREADED PLATES N-PG



○ stainless steel
OH18N9

||||| Permissible load

Usage: for slideless connection with channels in various combinations; for applying with channel connections with fixed elements; for fixing various accessories on channels.

Designed for mounting channels	Dimensions			Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	K [mm]	M [mm]			
A, C	24x74x5	50	M10	0,060	N-PG-A-M10	81150301002
MF, MH	33x110x6	80	M12	0,170	N-PG-MF-M12	81150411202

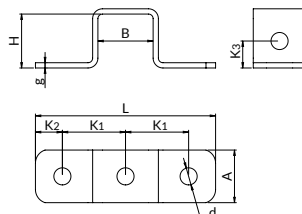
FLAT CONNECTORS N-XX

Usage: for structural connection of mounting channels, it allows for multiple adjustment of the fixing opening location in the channel; they ensure reliable connection of flat and spacious fastening systems.

stainless steel A2

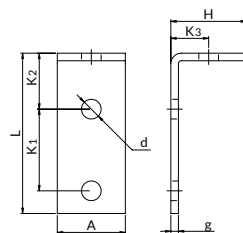
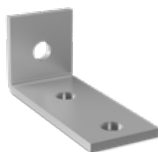
Permissible load

N-XK



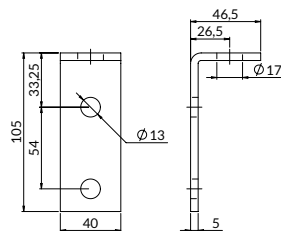
Designed for mounting channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	B x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d [mm]				
MF	40x138x4	41x41	48,5	20,5	20,5	13	0,240	10	N-XK-MF	81141410002

N-XX3



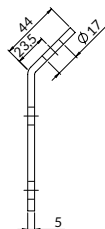
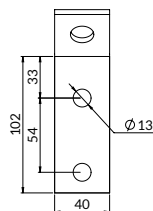
Designed for mounting channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d [mm]				
A,C	30x4	114x30	54	45	15,0	10,5	0,120	10	N-XX3-A90	81130030902
MF, MH	40x5	111x40	54	42	20,5	13,0	0,320	10	N-XX3-MF90	81141030902

N-XX3-MF90-P



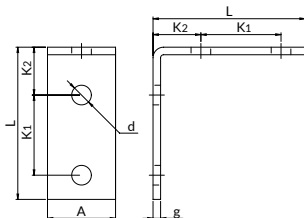
Designed for mounting channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d ₁ [mm]	d ₂ [mm]				
MF, MH	40X5	105X47	54	36	26.0	13.0	17.0	0.098	10	N-XX3-MF90-P	81141230902

N-XX3 -MF135-P



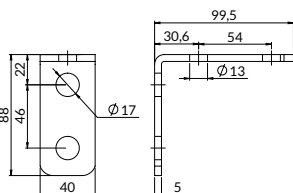
Designed for mounting channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d ₁ [mm]				
MF, MH	40X5	102X44	54	33	23,5	13	0,098	10	N-XX3-MF135-P	81141231352

N-XX7-90



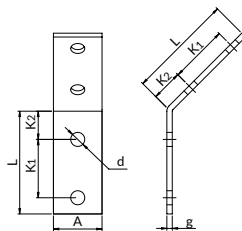
Designed for mounting channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
A, C	30x63x4	31	19	10,5	0,090	10	N-XX7-A90	81130070902
MF, MH	40x101x5	54	32	13,0	0,320	10	N-XX7-MF90	81141070902

N-XX7 -MF90-P



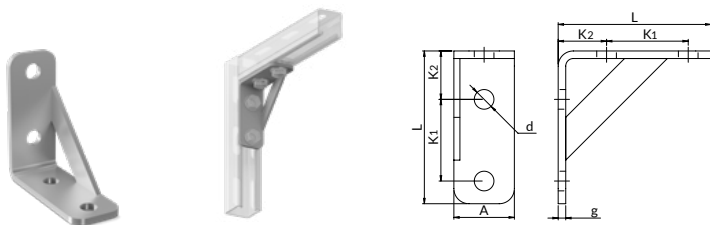
Designed for mounting channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number	
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]					
MF, MH	40x101x5	54	32	13.0	17.0	0,320	10	N-XX7-MF90-P	81141270902

N-XX7 -MF135



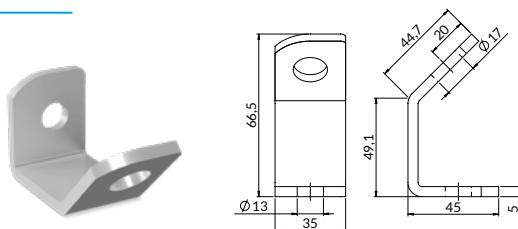
Designed for mounting channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MF, MH	40x98x5	54	29	13	0,320	10	N-XX7-MF135	81141071352

N-XZ7



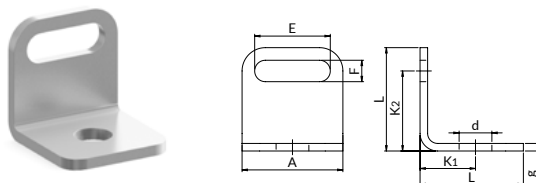
Designed for mounting channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MG, MF, MH, MI	40x101x5	54	32	13	0,370	10	N-XZ7-MF	81141070012

ANGLE SUPPORT FOR CLAMPS N-DCL



Intended for pipe clamps	Dimensions								Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	H ₁ [mm]	H ₂ [mm]	H ₃ [mm]	d ₁ [mm]	d ₂ [mm]					
PST, PSF	35x66,5x5	20	20	44,7	49,1	45	17	13	1,8	0,160	10	N-DCL-M12/16	811311121602

ANGLE SUPPORT FOR CLAMPS N-DL



stainless steel
 OH18N9
 Permissible load

Usage: for structural connection of pipe clamps; for fastening risers while fastening behind the pipe clamp side opening.

For channels	Dimensions				Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	E x F [mm]	K ₁ [mm]	K ₂ [mm]			
MG, MF, MH, MI	40x41x4	30x10,5	22	30,75	13	N-DL-MF-M10	81140190102



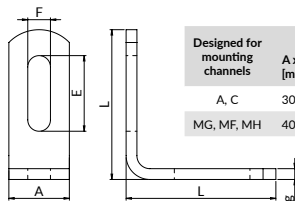
ANGULAR CONNECTORS N-KT

Usage: for building structural connections of channels; for strengthening channel connections; for building fixing systems.

○ stainless steel A2

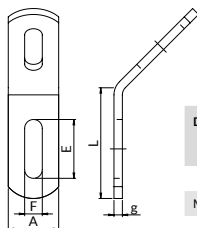
|||| Permissible load

N-KT-90



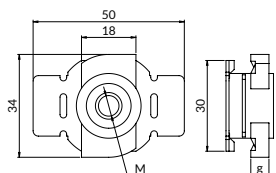
Designed for mounting channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]				
A, C	30x5	69	10,5x35	0,110	10	N-KT-A90	81130090002
MG, MF, MH	40x6	86	13x40	0,230	5/10	N-KT-MF90	81141090002

N-KT-135



Designed for mounting channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]				
A, C	30x5	69	10,5x35	0,110	10	N-KT-A135	81130135002
MG, MF, MH	40x6	86	13x40	0,230	5	N-KT-MF135	81141135002

SLIDE NUTS N-EZP



○ stainless steel OH18N9

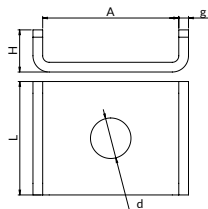
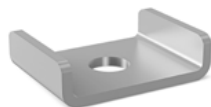
Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet ensure quick and stable assembly due to plastic wings; possibility of precise placement of the nut in the channel; time-saving solution.

|||| Permissible load

|||| Thermal resistance

Intended for mounting channels	Thread M	Thickness g [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MH	M8	6	0,020	30/50	N-EZP-MF-M8	81190410802
MF, MH	M10	6	0,020	30/50	N-EZP-MF-M10	81190411002
MF, MH	M12	8	0,030	30	N-EZP-MF-M12	81140411202

U-SHAPED CHANNEL WASHERS N-PDC



stainless steel 0H18N9

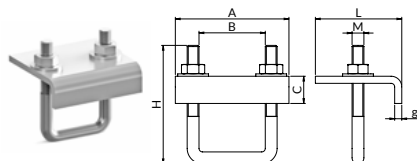
Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet.

Permissible load

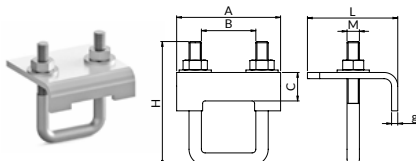
Designed for mounting channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	g [mm]	H [mm]	d [mm]				
A, C	31	30	2,5	10	10,5	0,030	25	N-PDC-A	81107303002
MF, MH	42	35	3,0	13	12,5	0,050	25	N-PDC-MF	81107414102

BEAM CLAMPS N-KLM

For A channels



For MG, MF channels



stainless steel 0H18N9

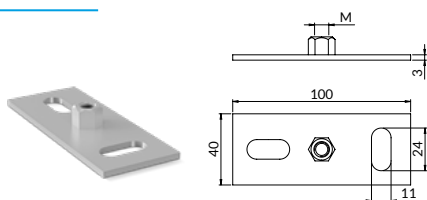
Permissible load

Usage: for connecting channels to steel girders; for creation of solid fixing on the structures of steel girders without the necessity of drilling or welding; safe fixing with the use of two beam pipe clamps per one fixing; integrated set adjusted to steel girders of every type.

Designed for mounting channels	Dimensions					Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x C [mm]	B [mm]	H [mm]	M [mm]					
A	66x5	66x23	32	96	M8	3,1	0,290	5	N-KLM-A	81310303002
MG, MF	84x6	73x23	44	100	M10	9,0	0,480	5	N-KLM-MF	81310414102
MH	84x6	73x23	44	120	M10	9,0	0,500	5	N-KLM-MH	81310416202
D-MFH	84x6	73x23	44	150	M10		0,510	4	N-KLM-MFH-D	81310410302



THREADED ROD BASE PLATES N-ST-M



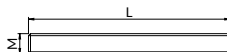
○ stainless steel OH18N9

Usage: for universal use with threaded rods and threaded connectors; to be applied with channels as a plate with a handle of threaded rod; easy assembly due to the bean-like openings located against each other.

||| Permissible load

Thread M	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	0,090	10	N-ST-M8	80370000802
M10	0,100	10	N-ST-M10	80370001002

THREADED RODS N-M



○ stainless steel A2

||| Permissible load

Usage: used in various types of structural fastening systems; for suspending construction elements.

Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M6	1000	0,160	50	N-M6X1000	81470061002
M8	1000	0,300	50	N-M8X1000	81470081002
M8	2000	0,600	50	N-M8X2000	81470082002
M8	3000	0,900	10	N-M8X3000	90000030438
M10	1000	0,490	25	N-M10X1000	81470101002
M10	2000	0,980	25	N-M10X2000	81470102002
M10	3000	1,470	10	N-M10X3000	90000030440
M12	2000	1,400	1	N-M12X2000	81470122002
M12	3000	2,100	10	N-M12X3000	90000030441
M20	1000	1,650	1	N-M20X1000	81470201002

HEX HEAD BOLTS N-105-M



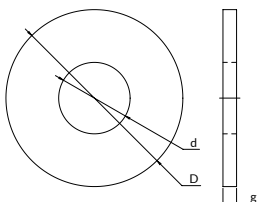
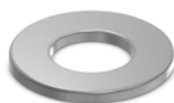
stainless steel A2 cl. 70

Usage: it is an element of screw connection; for the realization of all connections; the thread is present on the whole length.

Permissible load

Thread M	Length L [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	25	50	74	N-105-M8X25	81402080252
M8	30	50	67	N-105-M8X30	81402080302
M8	40	50	58	N-105-M8X40	81402080402
M10	30	50	34	N-105-M10X30	81402100302
M10	20	50	46	N-105-M10X20	81402100202
M10	25	50	41	N-105-M10X25	81402100252
M10	60	25	24	N-105-M10X60	81402100602
M12	30	25	25	N-105-M12X30	81402120302
M12	50	10	18	N-105-M12X50	81402120502

FLAT WASHERS N-PD



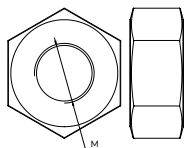
stainless steel 0H18N9

Usage: it is an auxiliary element in screw connections; it increases the surface of the joint pressure on the material being connected; it reduces the probability of the joint loosening.

Diameter D [mm]	Diameter D [mm]	Thickness g [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
16	8,4	1,6	30	469	N-PD-8-M	81480000802
20	10,5	2,0	30	335	N-PD-10-M	81480001002
18	6,4	1,6	30	134	N-PD-6	81480100602
24	8,4	2,0	30	169	N-PD-8	81480100802
30	10,5	2,5	30	142	N-PD-10	81480101002
24	13,0	2,5	30	167	N-PD-12	81480101202
30	17,0	3,0	30	95	N-PD-16	81480101602
35	8,4	3,0	30	45	N-PD-8-P3	81480300802
34	11,0	3,0	30	47	N-PD-10-P3	81480301002
37	13,0	3,0	30	48	N-PD-12-P3	81480301202



HEX NUTS N-144-M

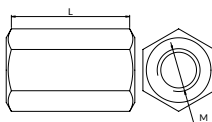
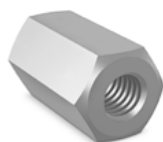


○ stainless steel A2 cl. 70

Usage: it is a connector in a screw connection; it is placed on the free end of the screw in accordance with assembly requirements.

Thread M	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M6	30	460	N-144-M6	81490006002
M8	30	216	N-144-M8	81490008002
M10	30	98	N-144-M10	81490010002
M12	30	62	N-144-M12	81490012002
M16	25	30	N-144-M16	81490016002
M20	20	17	N-144-M20	81490020002

HEX ROD COUPLINGS N-ZL



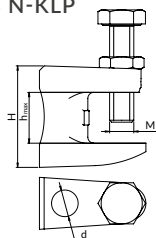
○ stainless steel A2

Usage: for connection of threaded rods located in one axis.

||| Permissible load

Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	24	0,018	25	N-ZL-M8	81400008002
M10	30	0,041	25	N-ZL-M10	81400010002
M12	36	0,060	25	N-ZL-M12	81400012002

CAST IRON BEAM CLAMPS N-KLP



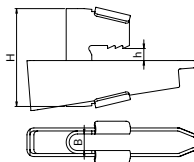
○ stainless steel OH18N9

Usage: assembly to steel girders; drilling and welding is not required during the assembly; it has a port, without a thread.

||| Permissible load

Opening d [mm]	Bolt M	h _{max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
9	M10	17	38	4,60	0,160	25	N-KLP-M8	81335008002
11	M10	17	38	6,10	0,180	25	N-KLP-M10	81335010002

BEAM CLAMPS N-ZNP



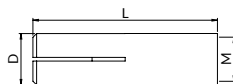
stainless steel OH18N9

Usage: assembly to steel girders; drilling and welding is not required during the assembly.

Permissible load

Opening d [mm]	Bolt M	h _{Max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8-M10	11	8-20	61	3,5	0,160	25	N-ZNP-M10	81325010002

DROP IN ANCHORS N-TRSA



Permissible load

stainless steel A4

reinforced or non-reinforced concrete of class not lower than C20/25 and not higher than C50/60; cracked and non-cracked concrete

Usage: performance of multi-point non-structural fastening systems: sizes from M6 to M20; for static loads or quasi-static loads: sizes from M6 to M20; for fastening systems subject to the requirements in terms of fire resistance: sizes from M8 to M20.

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	10	30	0,010	25	N-TRSA-M8	81410008002
M10	12	40	0,020	25	N-TRSA-M10	81410010002
M12	15	50	0,050	25	N-TRSA-M12	81410012002

Designation to order	Diameter nominal drill bit d _s [mm]	Tool for deposition	Minimum thickness of the substrate concrete [mm]	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Torque tightening [Nm]	Characteristic load capacity [kN] Cracked and uncracked concrete classes C20/25 to C50/60
N-TRSA-M8	10	ONS-M8	80	33	30	11	3,50
N-TRSA-M10	12	ONS-M10	80	43	40	17	3,50
N-TRSA-M12	15	ONS-M12	100	54	50	38	6,50

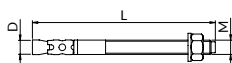
Fire resistance class	Thread M	M6	M8	M10
All directions of the load impact				
R30	* Characteristic loadbearing capacity while fire concrete C20/50 to C50/60 [kN]	0,4	0,9	1,600
R60		0,3	0,8	1,300
R90		0,3	0,6	1,100
R120		0,2	0,5	0,800
Span [mm]	4 x hef			
Distance from the edge [mm]	2 x hef			

Safety coefficient: 1.2.

* Safety coefficient: 1 - in the case when there are no other national requirements.



EXPANSION ANCHORS N-ULS



○ stainless steel class A4

▣ reinforced or non-reinforced concrete of class min. C20/25 to C50/60.

▮ Permissible load

Usage: dfor static or quasi-static loads; to be applied in cracked and noncracked concrete; for fastening systems subject to the requirements regarding.

Thread M	Diameter D [mm]	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	85	0,033	10	N-ULS-M8X85	81430080852
M10	10	115	0,070	10	N-ULS-M10X115	81430101152
M10	10	140	0,083	10	N-ULS-M10X140	81430101402
M12	12	125	0,113	10	N-ULS-M12X125	81430121252
M16	16	140	0,228	10	N-ULS-M16X140	81430161402

Designation for the order	Diameter of opening in the base [mm]	Minimum depth of opening [mm]	Effective depth of anchoring [mm]	Moment of screwing [Nm]	Minimum thickness of the base [mm]	Minimum axial span of anchors [mm]	Minimum distance from the edge [mm]	Non-cracked concrete of class C20/25 Characteristic loadbearing capacity to tearing-out [kN]	Cracked concrete of C20/25 class Characteristic loadbearing capacity to tearing-out [kN]
N-ULS-M8	8	65,000	47	15	100	55,0	40,00	9,00	6,00
N-ULS-M10	10	79,000	59	30	120	70,0	50,00	16,00	9,00
N-ULS-M12	12	90,000	68	50	140	90,0	55,00	25,00	12,00

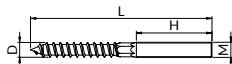
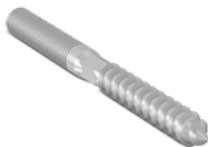
Fire resistance class	Thread M	M8	M10	M12
Load-bearing capacity to tearing out				
R30	* Characteristic load-bearing capacity in the case of fire concrete C20/50 to C50/60 [kN]	1,5	2,3	3,000
R60		1,5	2,3	3,000
R90		1,5	2,3	3,000
R120		1,2	1,8	2,400
Span [mm]		4 x h _{ef}		
Distance from the edge [mm]		2 x h _{ef}		

Safety coefficient for size M8 is 1.2 .

Safety coefficient for sizes M10, M12, M16 is 1.0.

* Safety coefficient: 1 - in the case when there are no other national requirements.

HANGER BOLTS N-WK



○ stainless steel OH18N9

▮ Permissible load

Usage: a connector in the screw pressing location; for fixing the handle to the base; handle pin connector with the base; it has a hexagon between the threads which makes precise adjustment easier.

Thread M	Diameter D [mm]	Length L [mm]	Length of thread A [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	8	70	28	0,020	25	N-WK-8X70	81460008072
M8	8	100	45	0,020	50	N-WK-8X100	81460008102
M10	10	100	30	0,050	25	N-WK-10X100	81460010102

17 Hot-dip galvanized elements

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

17.1. Fixed points and sliding plates



Heavy duty pipe clamps
OG-PST

235



Heavy duty pipe clamps
OG-PSF

236



Fixed point plates
OG-PSPM

237



Fixed point plates
OG-PSST

237



Sliding support
OG-PSA1

237



Sliding support
OG-PSAH1

238



Sliding support
OG-PSB2

238

17.2. Ventilation accessories



Trapeze hangers
OG-WT-BK

239

17.3. Channels



Channels
OG-SZ

239

17.4. Cantilever arms



Cantilever arms
OG-SS

241



Cantilever arms
OG-SSD

242

17

Hot-dip galvanized elements

17.5. Channels accessories



Channels support
OG-ST

242



Channel connectors
OG-LSE

243



Flat connectors
OG-X

244



Angular connectors
OG-KT

246



Corner brackets
OG-TR

246



Beam clamps
OG-KLM

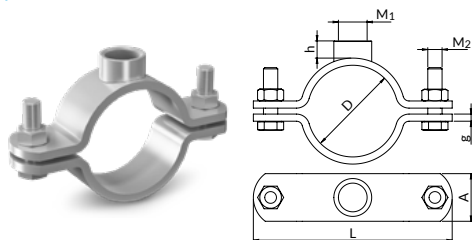
247



Sloped angle rod connectors
OG-WP

247

HEAVY DUTY PIPE CLAMPS OG-PST



hot-dip galvanized



two bolts with hexagonal heads

Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.



Permissible load

Scope of diameters D [mm]	Connection		Clamp dimensions		Connection screws M ₂	Weight [kg]	Designation for the order	Catalogue number
	Size M ₁	Height H [mm]	L [mm]	A x g [mm]				
20-25	M20	16,0	108	40X6,0	M12	0,44	OG-PST-15-M20	80310102111
25-29	M20	16,0	114	40X6,0	M12	0,46	OG-PST-20-M20	80310102611
32-37	M20	16,0	122	40X6,0	M12	0,53	OG-PST-25-M20	80310103311
40-45	M20	16,0	132	40X6,0	M12	0,63	OG-PST-32-M20	80310104211
47-52	M20	16,0	139	40X6,0	M12	0,66	OG-PST-40-M20	80310104811
57-63	M20	16,0	150	40X6,0	M12	0,71	OG-PST-50-M20	80310106011
75-79	M20	16,0	167	40X6,0	M12	0,81	OG-PST-65-M20	80310107611
88-92	M20	16,0	180	40X6,0	M12	0,90	OG-PST-80-M20	80310108911
108-115	M20	16,0	220	50X6,0	M16	1,46	OG-PST-110-M20	80310111411
133-140	M20	16,0	247	50X6,0	M16	1,60	OG-PST-125-M20	80310113911
158-161	M20	16,0	270	50X8,0	M16	2,33	OG-PST-150-M20	80310116011
164-170	M20	16,0	280	50X8,0	M16	2,35	OG-PST-160-M20	80310116811
215-220	M20	16,0	332	50X8,0	M16	2,60	OG-PST-200-M20	80310121911
269-274	M20	16,0	408	60X8,0	M16	3,90	OG-PST-250-M20 *	80310127311
352-357	M20	16,0	492	60X8,0	M16	5,16	OG-PST-350-M20 *	80310135011
403-408	M20	16,0	570	70X10,0	M16	8,51	OG-PST-400-M20 *	80310140011
453-458	M20	16,0	620	70X10,0	M16	9,00	OG-PST-450-M20 *	80310145011
504-509	M20	16,0	672	70X10,0	M16	10,18	OG-PST-500-M20 *	80310150011
453-458	M20	16,0	620	70X10,0	M16	9,00	OG-PST-450-M20 *	80310145011
504-509	M20	16,0	672	70X10,0	M16	10,20	OG-PST-500-M20 *	80310150011

* Check availability

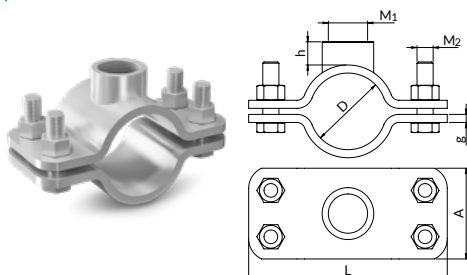
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HEAVY DUTY PIPE CLAMPS OG-PSF



hot-dip galvanized



four bolts with hexagonal heads

Usage: for taking over forces resulting from pipeline elongation and directing the elongations in the desired direction.

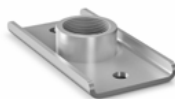


Permissible load

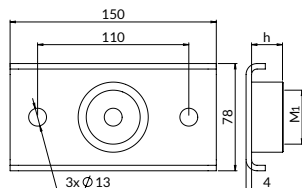
Scope of diameters D [mm]	Connection		Clamp dimensions		Connection screws M ₂	Weight [kg]	Designation for the order	Catalogue number
	Size M ₁	Height H [mm]	L [mm]	A x g [mm]				
20-25	1 1/4"	23.0	126	90x6,0	M16	1.50	OG-PSF-15-M20	80320102111
25-29	1 1/4"	23.0	135	90x6,0	M16	1.69	OG-PSF-20-M20	80320102611
32-37	1 1/4"	23.0	142	90x6,0	M16	1.78	OG-PSF-25-M20	80320103311
40-45	1 1/4"	23.0	151	90x6,0	M16	1.87	OG-PSF-32-M20	80320104211
47-52	1 1/4"	23.0	157	90x6,0	M16	1.98	OG-PSF-40-M20	80320104811
57-63	1 1/4"	23.0	170	90x6,0	M16	2.08	OG-PSF-50-M20	80320106011
67-76	1 1/4"	23.0	179	90x6,0	M16	2.66	OG-PSF-68/72-M20	80320107011
75-79	1 1/4"	23.0	197	90x8,0	M16	2.96	OG-PSF-65-M20	80320107611
88-92	1 1/4"	23.0	210	90x8,0	M16	3.22	OG-PSF-80-M20	80320108911
108-115	1 1/4"	23.0	234	90x8,0	M16	3.52	OG-PSF-110-M20	80320111411
125-127	1 1/4"	23.0	252	90x8,0	M16	3.78	OG-PSF-125/127-M20	80320112511
133-140	1 1/4"	23.0	264	90x8,0	M16	4.02	OG-PSF-125-M20	80320113911
158-161	1 1/4"	23.0	290	90x8,0	M16	4.33	OG-PSF-150-M20	80320116011
164-170	1 1/4"	23.0	276	90x8,0	M16	4.53	OG-PSF-160-M20	80320116811
215-220	1 1/4"	23.0	352	90x8,0	M16	5.36	OG-PSF-200-M20	80320121911
269-274	1 1/4"	23.0	405	90x8,0	M16	6.35	OG-PSF-250-M20*	80320127311
320-325	1 1/4"	23.0	442	90x8,0	M16	7.37	OG-PSF-300-M20*	80320132411
352-357	1 1/4"	23.0	476	90x8,0	M16	7.96	OG-PSF-350-M20*	80321035011
403-408	1 1/4"	23.0	542	90x8,0	M16	9.02	OG-PSF-400-M20*	80320140011
453-458	1 1/4"	23.0	592	90x8,0	M16	9.90	OG-PSF-450-M20*	80320145011
504-509	1 1/4"	23.0	644	90x8,0	M16	10.81	OG-PSF-500-M20*	80320150011

* Check availability

FIXED POINT PLATES OG-PSPM



hot-dip galvanized

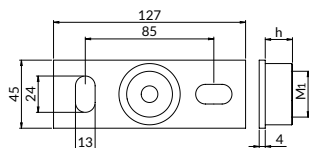
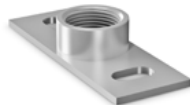


Usage: for fixed points assembly to the base and on the structures made of mounting channels.

Permissible load

Connection M_1	Connection height H [mm]	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
11/4"	23	12,00	0,520	OG-PSPM-11/4"	80330081551

FIXED POINT PLATES OG-PSST



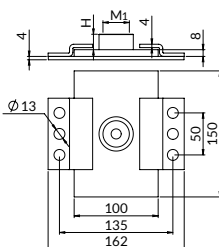
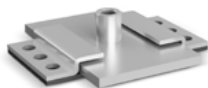
Usage: for fixed points assembly to the base and on the structures made of mounting channels.

Permissible load

hot-dip galvanized

Connection M_1	Connection height H [mm]	Permissible load [kN]	Weight [kg]	Designation for the order	Catalogue number
M16	13	6,00	0,220	OG-PSST-M16	80340041261
M20	16	6,00	0,230	OG-PSST-M20	80340041211

SLIDING SUPPORT OG-PSA1



hot-dip galvanized

Usage: assembly of the systems subject to thermal elongations; they take over axial elongations of the pipelines and level tension in the places of fixing; designed for assembly directly to the base and to the channel structure; designed for assembly in the pipeline support version.

Permissible load

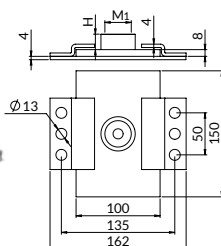
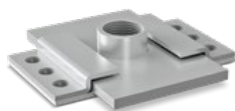
Thermal resistance

Size M_1	Connection Height H [mm]	Quantity [pcs/pkg]	Maximum shifting [mm]	Designation for the order	Catalogue number
M10/12	17,5	1	66	OG-PSA1-M10/12	80410101201
M20	16,0	1	66	OG-PSA1-M20 *	80410100201

*Check availability



SLIDING SUPPORT OG-PSAH1



hot-dip galvanized

Usage: for the assembly of systems which are subject thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Designed for the assembly to the base and to the structures made of mounting channels. Designed for the assembly in the pipeline support version.



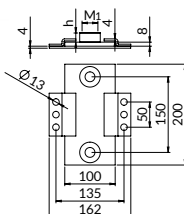
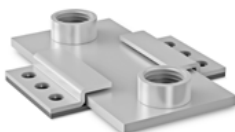
Permissible load



Thermal resistance

Size M_1	Connection Height H [mm]	Quantity [pcs/pkg]	Maximum shifting [mm]	Designation for the order	Catalogue number
M10/12	17,5	1	65	OG-PSAH1-M10/12	80412110121

SLIDING SUPPORT OG-PSB2



hot-dip galvanized

Usage: for the assembly of systems which are subject thermal extension. They take over the pipelines' axial elongations and level the tensions in the places of fixing. Designed for the assembly to the base and to the structures made of mounting channels. Designed for the assembly in the pipeline support version.



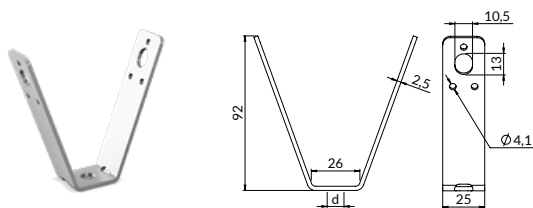
Permissible load



Thermal resistance

Size M_1	Connection Height H [mm]	Quantity [pcs/pkg]	Maximum shifting [mm]	Designation for the order	Catalogue number
M12/16	26,0	2	55	OG-PSB2-M12/16	80420112161

TRAPEZE HANGERS OG-WT-BK



Permissible load

hot-dip galvanized **Usage:** for the assembly to trapeze metal sheets

d [mm]	Permissible load [kN]	Fixing hole for rod	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
11,2	4,0	M10	0,107	50	WT-BK-F11	80570001101

CHANNELS OG-SZ/OG-SD

Usage: universal mounting channel for building fastening systems, with repeatable perforation; with cut centimeter scale on the channel side.

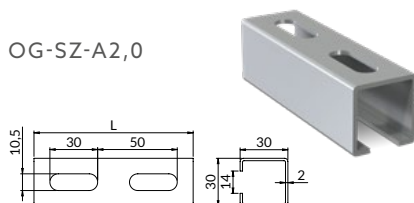
Lining strip is available for the channels on [page 91](#).

hot-dip galvanized

steel S235JR

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

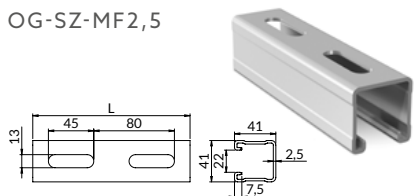
OG-SZ-A2,0



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	3,810	OG-SZ-A2,0-3000	80730302031

Permissible load

OG-SZ-MF2,5



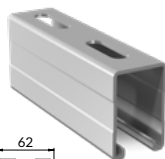
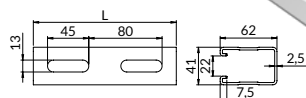
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,200	OG-SZ-MF2,5-2000	80741412521
3000	7,800	OG-SZ-MF2,5-3000	80741412531
4000	10,400	OG-SZ-MF2,5-4000	80741412541
6000	15,600	OG-SZ-MF2,5-6000	80841822561

Permissible load





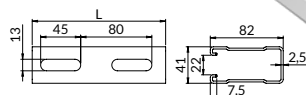
OG-SZ-MH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,800	OG-SZ-MH2,5-2000	80741622521
3000	10,200	OG-SZ-MH2,5-3000	80741622531
4000	13,600	OG-SZ-MH2,5-4000	80741622541
6000	20,400	OG-SZ-MH2,5-6000	80741622561

Permissible load

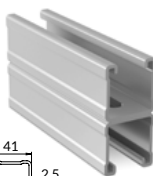
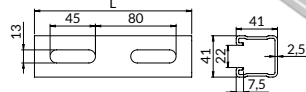
OG-SZ-MI2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	8,440	OG-SZ-MI2,5-2000	80741822521
3000	12,660	OG-SZ-MI2,5-3000	80741822531
4000	16,880	OG-SZ-MI2,5-4000	80741822541
6000	25,320	OG-SZ-MI2,5-6000	80741822561

Permissible load

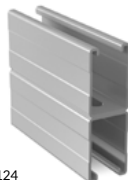
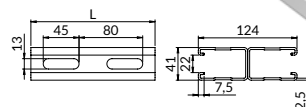
OG-SD-MF2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	10,400	OG-SD-MF2,5-2000	80841822521
3000	15,600	OG-SD-MF2,5-3000	80841832531
4000	20,800	OG-SD-MF2,5-4000	80841832541
6000	31,200	OG-SD-MF2,5-6000	80841822561

Permissible load

OG-SD-MH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	20,400	OG-SD-MH2,5-3000	80841242531
4000	27,200	OG-SD-MH2,5-4000	80841242541
6000	40,800	OG-SD-MH2,5-6000	80841242561

Permissible load

CANTILEVER ARM OG-SS

Usage: construction of fastening systems; they have a repeatable perforation and cut centimeter scale on the channel side.

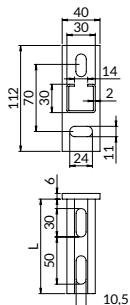
Damping tape is available for the channels on [page 91](#).

hot-dip galvanized

steel S235JR

Detailed information referring to maximum recommended loads are specified in [Chapter 20](#).

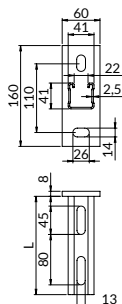
OG-SS-A2,0



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
250	0,520	OG-SS-A2,0-250	80930302501
350	0,660	OG-SS-A2,0-350	80930303501
500	0,860	OG-SS-A2,0-500	80930305001
750	1,200	OG-SS-A2,0-750	80930307501

Permissible load

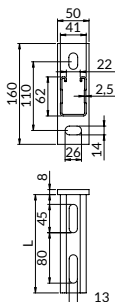
OG-SS-MF2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
320	1,460	OG-SS-MF2,5-320	80941413201
560	2,070	OG-SS-MF2,5-560	80941415601
1040	3,300	OG-SS-MF2,5-1040	80941410001

Permissible load

OG-SS-MH2,5



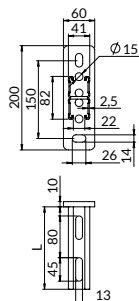
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
480	2,060	OG-SS-MH2,5-480	80941624801
1040	3,720	OG-SS-MH2,5-1040	80941620001

Permissible load





OG-SSD-MF2,5

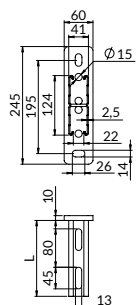


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
480	2,160	OG-SSD-MF2,5-480	80941824801
1040	3,950	OG-SSD-MF2,5-1040	80941820001



Permissible load

OG-SSD-MH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
480	4,330	OG-SSD-MH2,5-480	80941244801
1040	8,140	OG-SSD-MH2,5-1040	80941240001

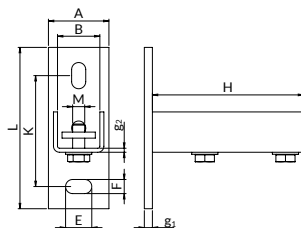


Permissible load

HOT-DIP GALVANIZED
ELEMENTS

CHANNELS SUPPORT OG-ST

OG-ST-S



Usage: connection of channels with the base material;
allows independent creation of channels with feet and
construction of fastening systems.

The set includes:

- U-profile welded on wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal heads, full thread



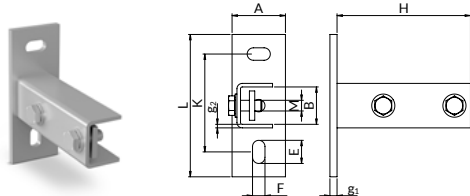
Permissible load



hot-dip galvanized

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
A, C	45x112x6	70	11x24	31	3	100	M10	0,413	5	OG-ST-SA	81125030301
MF, MH, MI	60x160x8	110	14x26	42	4	150	M12	1,190	5	OG-ST-SMF	81120041411

VERTICAL CHANNELS SUPPORT OG-ST-S90



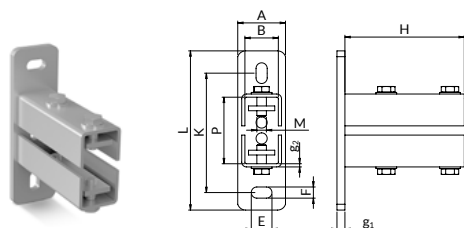
The set includes:

- U-profile welded on a wall plate
- a threaded plate
- two round washers
- two bolts with hexagonal head

Permissible load

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
MF, MH, MI	60x160x8	110	14x26	42	4	150	M12	1,190	5	OG-ST-SMF90	81160041411

DOUBLED CHANNELS SUPPORT OG-ST-SD



Set includes:

- U-profile welded on a wall plate
- two threaded plate
- four round washers
- four bolts with hexagonal heads, full thread head

Permissible load

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]				
D-MF	60x200x10	150	14X26	42x83,6	4	150	M12	1,190	5	OG-ST-SMF-D	81120041821
D-MH	60x245x10	195	14X26	42x125,6	4	150	M12	2,200	5	OG-ST-SMH-D	81120041241

CHANNEL CONNECTORS OG-LSE



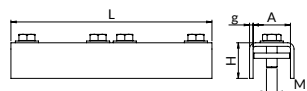
Usage: for creating facial structural connections of channels; it allows for multiple adjustment of the fixing opening location in the channel; it makes professional connection of flat and spatial fixing systems easier.

Set includes:

- connector
- a threaded plate
- four round washers
- four bolts with hexagonal heads, full thread

Permissible load

hot-dip galvanized



For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	H [mm]	g [mm]	M [mm]			
MF, MH, MI	42	226	40	4	M12	0,810	OG-LSE-MF	81140141411



FLAT CONNECTORS OG-X

Usage: for structural connection of mounting channels, it allows for multiple adjustment of the fixing opening location in the channel; they ensure reliable connection of flat and spacious fastening systems.

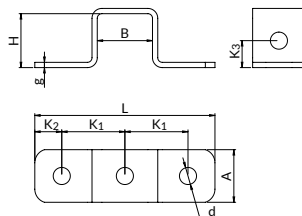
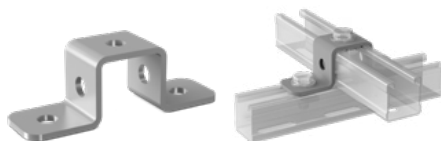


hot-dip galvanized



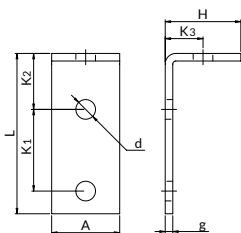
Permissible load

OG-XK



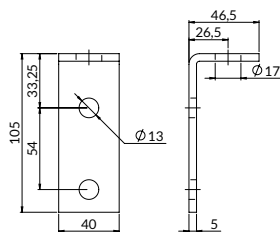
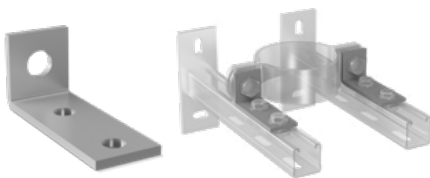
For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	B x H [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MF	40x138x4	41x41	48,5	20,5	13	0,240	10/25	OG-XK-MF	81141410001
MH	40x138x4	41x62	48,5	20,5	13	0,300	10	OG-XK-MH	81141620001

OG-XX3



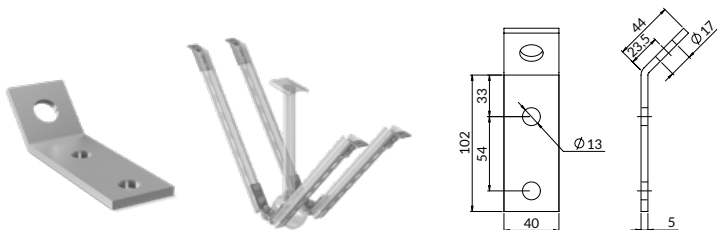
For channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d [mm]				
MF, MH, MI	40x5	111,4x41	54	42,4	20,5	13,0	0,320	10	OG-XX3-MF90	81141030901

OG-XX3-MF90-P



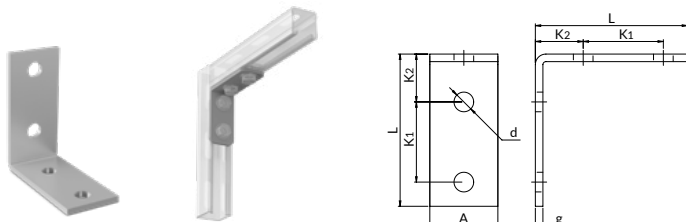
For channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number	
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d ₁ [mm]					d ₂ [mm]
MF, MH, MI	40x5	105x46,5	54	33,25	26,5	13	17	0,200	10	OG-XX3-MF90-P	81141230901

OG-XX3 -MF135-P



For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d ₁ [mm]	d ₂ [mm]				
MF, MH, MI	40x5	102x44	54	33	23.5	13	17	0,200	10	OG-XX3-MF135-P	81141231351

OG-XX7-90



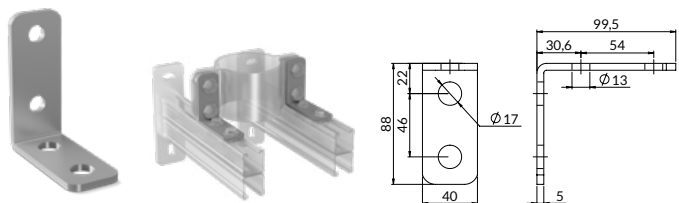
For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
A	30x63x4	31	19	10,5	0,090	10	OG-XX7-A90	81130070901
MF, MH, MI	40x101x5	54	32	13,0	0,278	10	OG-XX7-MF90	81141070901

OG-XX7-135



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MF, MH, MI	40x98x5	54	29	13	0,320	10	OG-XX7-MF135	81141071351

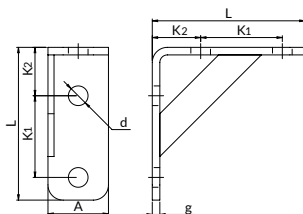
OG-XX7 -MF90-P



For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	K ₄ [mm]	d ₁ [mm]	d ₂ [mm]				
MF, MH, MI	40x99,5x5	54	30,6	22	46	13	17	0.260	10	OG-XX7-MF90-P	81141270901



OG-XZ7



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MB, ME	45x101x5	54	32	13	0,320	10	OG-XZ7-MB	81150070011
MG, MF, MH, MI	45x101x5	54	32	13	0,330	1	OG-XZ7-MF	81141070011

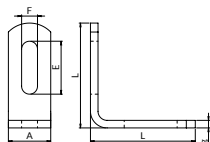
ANGULAR CONNECTORS OG-KT

Usage: building structural connections of channels; strengthening channel connections; building fastening systems.

 hot-dip galvanized

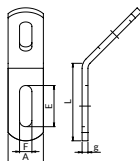
 Permissible load

OG-KT-90



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]					
A	28x5	69	10,5x35		0,110	10	OG-KT-A90	81130090001
MF, MH, MI	40x6	86	13,0x40		0,230	10	OG-KT-MF90	81141090001

OG-KT-135



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]					
MF, MH, MI	40x6	86	13,0x40		0,230	10	OG-KT-MF135	81141135001

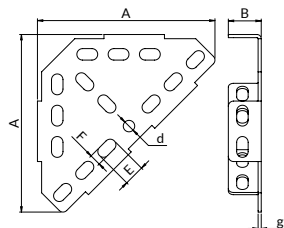
CORNER BRACKETS OG-TR



 hot-dip galvanized

Usage: structural connections of channels; they ensure reliable connection of flat and spacious fastening systems.

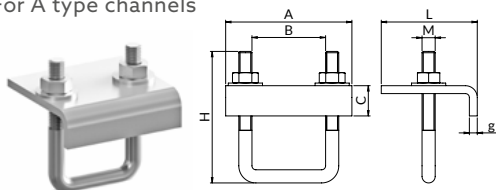
 Permissible load



For channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x B x g [mm]	F x E [mm]	d [mm]				
MB, ME	247x47,5x4	13x27	13	1,250	1	OG-TR-MB	81170504001

BEAM CLAMPS OG-KLM

For A type channels

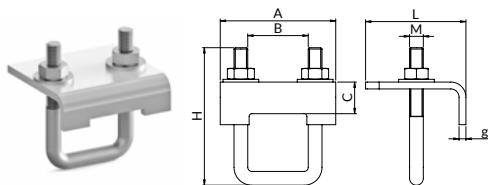


hot-dip galvanized

Usage: connecting channels to steel girders; creation of solid fixing on the structures of steel girders without the necessity of drilling or welding; safe fixing with the use of two beam pipe clamps per one fixing; integrated set adjusted to steel girders of channel section and I section type.

Permissible load

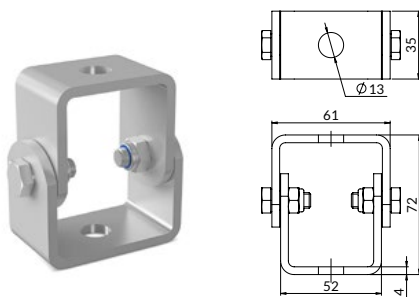
For MF, MH, D-MF type channels
D-MF, MI, D-MH



For channels	Dimensions						Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x C [mm]	B [mm]	H [mm]	M [mm]						
A	66x5	66x23	32	96	M8		3,1	0,290	5	OG-KLM-A	81310303001
MF	84x6	73x23	44	100	M10		9,0	0,480	5	OG-KLM-MF	81310414101
MH	84x6	73x23	44	120	M10		9,0	0,500	5	OG-KLM-MH	81310416201
D-MF, MI	84x6	73x23	44	150	M10		9,0	0,510	5	OG-KLM-MFH-D	81310410301
D-MH	84x6	73x23	44	181	M10		9,0	0,520	5	OG-KLM-MH-D	81310412401

HOT-DIP GALVANIZED
ELEMENTS

SLOPED ANGLE ROD CONNECTORS OG-WP



hot-dip galvanized

Usage: direct assembly to the structural 61 elements and channels, applied for cross beams and lashings; applied with inclined building elements; lashings at any angles (it is possible to set the angle from 0° to 90°); it has two openings ϕ 13 mm; easy assembly and adjustment of the threaded rod height.

Permissible load

Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
4,70	0,310	10	OG-WP	81105000001

BEAM CLAMPS OG-KLM
SLOPED ANGLE ROD CONNECTORS OG-WP

18 Products in UltraCover XP coating

18.1. Pipe clamps



Pipe clamps DUO XPGD

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Pipe clamps DUO XPZD

252



Ventilation pipe clamps XP-UWG

253

18.2. Channels



Channels XP-SZ

254



Channels XPBFMF

NEW

255

18.3. Channels accessories



Channels support XP-ST-S

255



Channels support XP-ST-SL

256



Channels support XP-STRG

256



Channels support XP-ST-SD

256



Channel connectors XP-LSE

257



Threaded plates XP-PG, XP-PGL

257



Flat connectors XP-X

258



Angle support for clamps XP-DL

260

01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
- 18. UltraCover XP products**
19. CERTA - heavy channel system
20. Projects support

18

Products in UltraCover XP coating

	XP-MXD fittings	NEW	260
	Angular connectors XP-KT		261
	Slide nuts XP-NSS		261
	Slide nuts XP-NSZ		262
	Sliding nuts XP-EZP		262
	Beam clamps XP-KLM		262
	U-shaped channel washers XP-PDC		263

18.4. Fastening and connecting elements

	Cast iron beam clamps XP-KLP		263
	Expansion bracket XP-WR-MF	NEW	263
	Threaded rods XP-M		264
	Connectors XP-ZL		264
	Hex reducers female/male XP-RZW		264
	Hex head bolts XP-105-M		265
	Flat washers XP-PD		265
	Hex nuts XP-144-M		266
	U-Bolts XP-KB		266

Ultra Cover XP coating is the technology of chemical application of anti-corrosion coating.

Ultra Cover XP resists **over 1000 h in the salt chamber** according to PN-EN ISO 9227:2012, with the exclusion of connection elements. The coating is dedicated for standard corrosion categories from C1 - C4 in accordance with PN-EN 12500 standard. (The guarantee does not cover very contaminated locations, in the distance smaller than 2 km from the waterside street or locations sprinkled with salty or sweet water). For C5 conditions, it is necessary to individually determine the guarantee period.

What does resistance for at least 1000 h in the salt chamber mean for the user of Ultra Cover XP products scope? It is a research method specified by a standard which checks how long a given element resists in extremely aggressive conditions. The tested products are located in a test chamber where set specified increased temperature is kept and where

sodium chloride solution is sprayed which makes up dense salt mist and thus very corrosive conditions. The number of hours determines the quality of anti-corrosion protection.

Ultra Cover XP coating belongs to a group of lamellar (flake) coatings. About 20 years ago, such a solution was at the early stage of preparation. Creation of such group of coatings resulted from the increasing requirements regarding the anticorrosion resistance in comparison to galvanic zinc resistance and in order to achieve other features, especially important in the case of smaller connection elements. The coatings contain mostly zinc and aluminium flakes. It is important for zinc to have the flake form and not powder or dust as flakes in connection with proper application, drying and hardening, allow for obtaining dense and tight surface of the coating with evenly distributed zinc flakes which essentially increases the coating protective properties.

Ultra Cover XP and connection elements.

Ultra Cover XP coating has the thickness of 5-12 micrometers which makes it a perfect protection for connection elements as opposed to hot-dip coatings, the thread does not require extra calibration. The coating resistance does not result from its thickness, so it is a perfect solution for threaded elements.

The advantages of Ultra Cover XP coating:

- perfect resistance to corrosion - 21-year guarantee (guarantee valid subject to guarantee scope) for normal corrosion categories from C1 to C4, in accordance with PN-EN 12500 standard;
- limited white corrosion and other oxidation products appearing in the course of use;
- resistance to many mild chemical substances and solvents;
- no hydrogen embrittlement (it is extremely important for steel of high compressive strength).

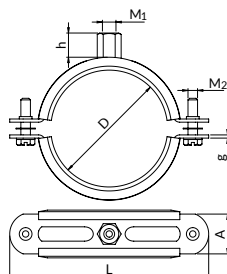
GUARANTEE

All the products

Ultra Cover XP®

21
years
of guarantee

PIPE CLAMPS DUO XPGD



duo

Permissible load

Thermal resistance

Clamps in standard option available without a pin and a screw (BK).

Ultra Cover XP

with hexagonal head with cross and groove recession + washers which prevent from bolts falling out

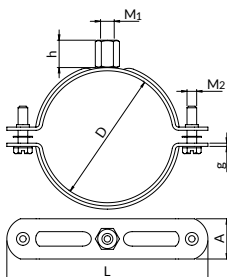
EPDM elastomer; thermal resistance: -40°C to +120°C

Scope of diameters D [mm]	Clamp dimensions		Connection		Version	Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
17-22	66	20x1,25	M8/M10	17,0	D	M6	0,90	0,0534	100	XPGD-3/8	80120201708
20-25	70	20x1,25	M8/M10	17,0	D	M6	0,90	0,0602	100	XPGD-1/2	80120201208
26-30	76	20x1,25	M8/M10	17,0	D	M6	0,90	0,0655	100	XPGD-3/4	80120202608
31-36	83	20x1,25	M8/M10	17,0	D	M6	0,90	0,0753	50	XPGD-1	80120203308
41-46	93	20x1,25	M8/M10	17,0	D	M6	0,90	0,0850	50	XPGD-11/4	80120204208
46-51	103	20x1,25	M8/M10	17,0	D	M6	0,90	0,0887	50	XPGD-11/2	80120204808
59-64	116	20x1,5	M8/M10	17,0	D	M6	0,90	0,1039	50	XPGD-2	80120206008
65-71	118	20x1,5	M8/M10	17,0	D	M6	1,40	0,1646	25	XPGD-70	80120207008
72-78	125	20x1,8	M8/M10	17,0	D	M6	1,40	0,1760	25	XPGD-21/2	80120207608
79-85	132	20x1,8	M8/M10	17,0	D	M6	1,40	0,1881	25	XPGD-80	80120208008
86-92	139	25x2,0	M8/M10	17,0	D	M6	1,40	0,2019	25	XPGD-3	80120208908
93-99	146	25x2,0	M8/M10	17,0	D	M6	1,40	0,2144	25	XPGD-95	80120209508
100-107	154	25x2,0	M8/M10	17,0	D	M6	1,40	0,2232	25	XPGD-105	80120210508
108-115	162	25x2,0	M8/M10	17,0	D	M6	1,80	0,2473	25	XPGD-4	80120201008
116-124	171	25x2,0	M8/M10	17,0	D	M6	1,80	0,2592	25	XPGD-120	80120212008
125-133	180	25x2,0	M8/M10	17,0	D	M6	1,80	0,2654	25	XPGD-125	80120212508
133-141	191	25x2,5	M8/M10	17,0	D	M6	2,10	0,3255	25	XPGD-5	80120213308
142-150	200	25x2,5	M8/M10	17,0	D	M6	2,10	0,3460	10	XPGD-145	80120214508
151-160	209	25x2,5	M8/M10	17,0	D	M6	2,10	0,3570	10	XPGD-160	80120215908
160-169	218	25x2,5	M8/M10	17,0	D	M6	2,10	0,3755	10	XPGD-6	80120216008
200-210	258	25x2,5	M8/M10	17,0	D	M6	2,10	0,4541	10	XPGD-200	80120220008



PIPE CLAMPS DUO XPZD

UNTIL STOCKS
RUN OUT



duo

Permissible load

Thermal resistance

Clamps in standard option available without a pin and a screw (BK).
Description of other options - [page 320](#).

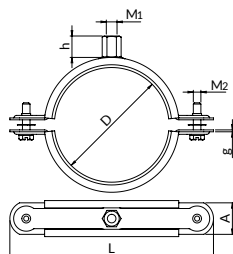
Ultra Cover XP



with hexagonal head with cross and groove recession + washers which prevent from bolts falling out

Scope of diameters D [mm]	Connection		Version	Clamp dimensions		Connection screws M ₂	Permissible load [kN]	Weight 1 pcs [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	Size M ₁	Height h [mm]		L [mm]	A x g [mm]						
15-17	M8/M10	17,0	D	58	20x1,25	M6	0,90	0,051	50	XPZD-3/8"	80130317208
18-22	M8/M10	17,0	D	62	20x1,25	M6	0,90	0,054	50	XPZD-1/2"	80130301008
23-27	M8/M10	17,0	D	66	20x1,25	M6	0,90	0,060	50	XPZD-3/4"	80130303308
39-44	M8/M10	17,0	D	83	20x1,25	M6	1,20	0,072	50	XPZD-11/4"	80130307608
45-49	M8/M10	17,0	D	88	20x1,25	M6	1,20	0,073	50	XPZD-11/2"	80130311408
50-54	M8/M10	17,0	D	93	20x1,25	M6	1,20	0,077	25	XPZD-54	80130325008
60-65	M8/M10	17,0	D	105	20x1,25	M6	1,20	0,132	25	XPZD-2"	80130304108
72-78	M8/M10	17,0	D	118	20x1,5	M6	1,60	0,112	25	XPZD-21/2"	80130312508
85-91	M8/M10	17,0	D	132	20x1,8	M6	1,60	0,150	25	XPZD-3"	80130310008
99-105	M8/M10	17,0	D	146	25x2,0	M6	2,20	0,172	25	XPZD-100	80130327108
106-113	M8/M10	17,0	D	154	25x2,0	M6	2,20	0,182	25	XPZD-4"	80130332408
114-122	M8/M10	17,0	D	162	25x2,0	M6	2,20	0,190	25	XPZD-114	80130301108
123-131	M8/M10	17,0	D	171	25x2,0	M6	2,20	0,202	25	XPZD-125	80130306008
132-140	M8/M10	17,0	D	180	25x2,0	M6	2,20	0,212	25	XPZD-5"	80130304008
168-177	M8/M10	17,0	D	218	25x2,5	M6	2,20	0,312	10	XPZD-6"	80130320008

VENTILATION PIPE CLAMPS XP-UWG



- Permissible load
- Thermal resistance
- Ultra Cover XP
- rivet nut
- material - soft PVC; thermal resistance: -30°C to +90°C

Clamps in standard option available without a pin and a screw (BK). Description of other options - [page 320](#).

Diameter D [mm]	Connection		Clamp dimensions		Connection screws M ₂	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	Size M ₁	Height H [mm]	L [mm]	A x g [mm]						
100	M8/M10	17,0	160	25x1,5	M8	1,9	0,180	25	XP-UWG-100	81211210008
125	M8/M10	17,0	185	25x1,5	M8	1,9	0,220	25	XP-UWG-125	81211212508
150	M8/M10	17,0	210	25x1,5	M8	1,9	0,260	10	XP-UWG-150	81211215008
160	M8/M10	17,0	220	25x1,5	M8	1,9	0,270	10	XP-UWG-160	81211216008
180	M8/M10	17,0	240	25x1,5	M8	1,9	0,300	10	XP-UWG-180	81211218008
200	M8/M10	17,0	260	25x1,5	M8	1,9	0,340	10	XP-UWG-200	81211220008
225	M8/M10	17,0	285	25x1,5	M8	1,9	0,380	10	XP-UWG-225	81211225008
250	M8/M10	17,0	310	25x1,5	M8	1,9	0,420	10	XP-UWG-250	81211225008
280	M8/M10	17,0	340	25x1,5	M8	2,2	0,460	10	XP-UWG-280	81211228008
315	M8/M10	17,0	375	25x1,5	M8	2,2	0,500	5	XP-UWG-315	81211231508
355	M8/M10	17,0	415	25x1,5	M8	2,2	0,550	5	XP-UWG-355	81211235508
400	M8/M10	17,0	460	25x2	M8	2,2	0,740	5	XP-UWG-400	81211240008

 PRODUCTS IN ULTRA
COVER XP COATING

CHANNELS XP-SZ

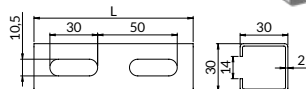
Usage: building fastening systems; with repeatable perforation and grooved edges in order to lock the accessories better; with cut centimeter scale on the channel side.

Ultra Cover XP

Detailed information regarding maximum recommended loads may be found in the Static load table in [chapter 20](#).

Lining strip is available for the channel on [page 91](#).

XP-SZ-A2,0



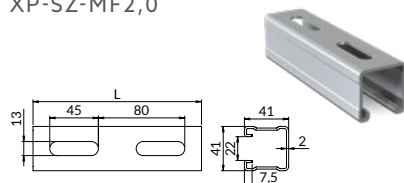
Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,540	XP-SZ-A2,0-2000	80730302028
3000	3,810	XP-SZ-A2,0-3000	80730302038
4000	5,080	XP-SZ-A2,0-4000	80730302048
6000	8,160	XP-SZ-A2,0-6000	80730302068

Permissible load

 VENTILATION PIPE CLAMPS XP-UWG
CHANNELS XP-SZ



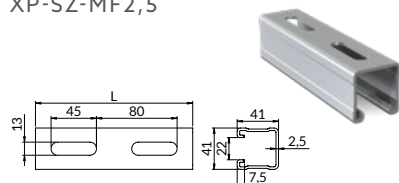
XP-SZ-MF2,0



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	4,20	XP-SZ-MF2,0-2000	80741412028
3000	6,30	XP-SZ-MF2,0-3000	80741412038
4000	8,40	XP-SZ-MF2,0-4000	80741412048
6000	12,60	XP-SZ-MF2,0-6000	80741412068

Permissible load

XP-SZ-MF2,5

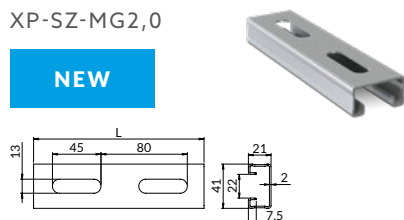


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	5,200	XP-SZ-MF2,5-2000	80741412528
3000	7,800	XP-SZ-MF2,5-3000	80741412538
4000	10,400	XP-SZ-MF2,5-4000	80741412548
6000	15,600	XP-SZ-MF2,5-6000	80741412568

Permissible load

XP-SZ-MG2,0

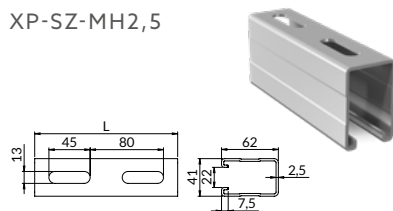
NEW



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	2,860	XP-SZ-MG2,0-2000	80741212028
3000	4,290	XP-SZ-MG2,0-3000	80741212038
4000	5,720	XP-SZ-MG2,0-4000	80741212048
6000	8,580	XP-SZ-MG2,0-6000	80741212068

Permissible load

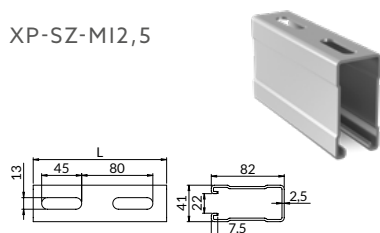
XP-SZ-MH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	6,800	XP-SZ-MH2,5-2000	80741622528
3000	10,200	XP-SZ-MH2,5-3000	80741622538
4000	13,600	XP-SZ-MH2,5-4000	80741622548
6000	20,400	XP-SZ-MH2,5-6000	80741622568

Permissible load

XP-SZ-MI2,5

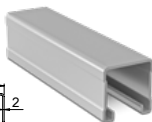
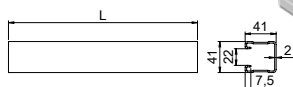


Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	8,320	XP-SZ-MI2,5-2000	80741822528
3000	12,480	XP-SZ-MI2,5-3000	80741822538
4000	16,640	XP-SZ-MI2,5-4000	80741822548
6000	24,960	XP-SZ-MI2,5-6000	80741822568

Permissible load

XPBFMF2,0

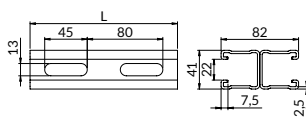
NEW



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	4,38	XPBFMF2,0-2000	80740412028
3000	6,57	XPBFMF2,0-3000	807404120238
4000	8,76	XPBFMF2,0-4000	807404120248
6000	13,14	XPBFMF2,0-6000	807404120268

Permissible load

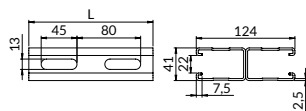
XP-SD-MF2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	10,400	XP-SD-MF2,5-2000	80841822528
3000	15,600	XP-SD-MF2,5-3000	80841822538
4000	20,800	XP-SD-MF2,5-4000	80841822548
6000	31,200	XP-SD-MF2,5-6000	80841822568

Permissible load

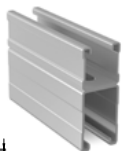
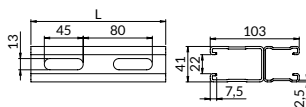
XP-SD-MH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
2000	13,600	XP-SD-MH2,5-2000	80841242528
3000	20,400	XP-SD-MH2,5-3000	80841242538
4000	27,200	XP-SD-MH2,5-4000	80841242548
6000	40,800	XP-SD-MH2,5-6000	80841242568

Permissible load

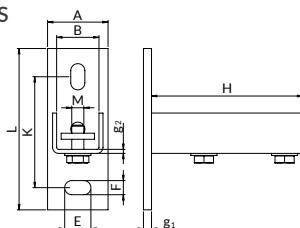
XP-SD-MFH2,5



Length L [mm]	Weight [kg]	Designation for the order	Catalogue number
3000	18,000	XP-SD-MFH2,5-3000	80841032538
6000	36,000	XP-SD-MFH2,5-6000	80841032568

Permissible load

CHANNELS SUPPORT XP-ST-S



Permissible load

Ultra Cover XP

The set includes:

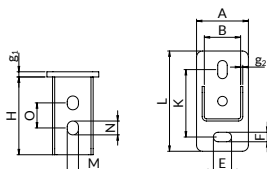
- U-profile welded on wall plate
- threaded plate
- two round washers
- two bolts with hexagonal heads, full thread

Usage: connection of channels with the base material; it allows for independent creation of channels g1 with feet and construction of fastening systems.

For channels	Dimensions							Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g1 [mm]	K [mm]	F x E [mm]	B [mm]	g2 [mm]	H [mm]	M [mm]				
A, C, W, X	45x112x6	70	11x24	31	3	100	M10	0,413	5/10	XP-ST-SA	81125030308
MF, MH	60x160x8	110	14x26	42	4	150	M12	1.190	5	XP-ST-SMF	81125041418



CHANNELS SUPPORT XP-ST-SL



Ultra Cover XP

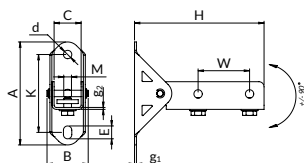


Permissible load

Usage: for connecting channels with the base material; allows for individual creation of channels with a foot and building fastening systems.

For channels	Dimensions										Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M x N [mm]	O [mm]						
A	45x106x4	68	31	31	2	67	9x12	18			0,222	5	XP-ST-SLA	81127030308
MF	60x116x6	78	11x21	42	2,5	90	13x16	29			0,5050	5	XP-ST-SLMF	8127041418

PIVOT HINGED RAIL SUPPORT XP-STRG



Ultra Cover XP

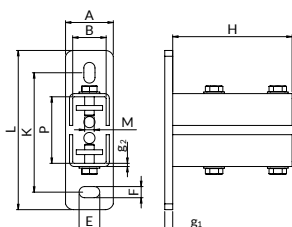


Permissible load

Usage: for connecting channels with the substrate material; allows for building and strengthening structures made of channels and fastening systems; fastening angle adjustment within the range of 180°; the channel may be fixed with its open side to the foot bottom or to its any side what ensures assembly comfort.

Application for mounting channels	Adjustment range of angle α [°]	Dimensions										Bolt M	Weight [kg]	Designation for the order	Catalogue number
		A [mm]	B [mm]	K [mm]	E [mm]	C [mm]	g ₁ [mm]	g ₂ [mm]	d [mm]	H [mm]	W [mm]				
MG, MF, MH, MI	+/- 90	160	70	121	20	42	3	3	13	201,4	80	M12x20	1,08	XP-STRG-MF	81126041418

DOUBLED CHANNELS SUPPORT XP-ST-SD



Permissible load



Ultra Cover XP

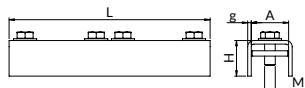
Usage: for connecting channels with the substrate material; allows for individual creation of cantilever arms and building fastening systems.

Set includes:

- two U-profiles welded on wall plate
- two threaded plate
- four round washers
- four bolts with hexagonal heads, full thread

For channels	Dimensions										Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g ₁ [mm]	K [mm]	F x E [mm]	B [mm]	g ₂ [mm]	H [mm]	M [mm]							
D-MF	60x200x10	150	14x26	42x83,6	4	150	M12				1,190	5	XP-ST-SMF-D	81120041828

CHANNEL CONNECTORS XP-LSE



Usage: for creating facial structural connections of channels; it allows for multiple adjustment of the fixing opening location in the channel; it makes professional connection of flat and spatial fixing systems easier.

The set includes:

- a connector
- a threaded plate
- four round washers
- four bolts with hexagonal heads, full thread



Ultra Cover XP



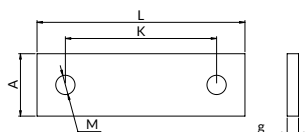
Permissible load

For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	H [mm]	g [mm]	M [mm]			
MF, MH	42	226	40	4	M12	0,810	XP-LSE-MF	81140141418

THREADED PLATES XP-PG, XP-PGL



XP-PG



Usage: for slideless connection with channels in various combinations; to be applied when connecting mounting channels with the elements being fixed; for fastening various accessories on the channel.

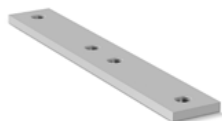


Ultra Cover XP

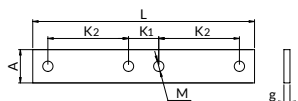


Permissible load

For channels	Dimensions			Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	K [mm]	M [mm]			
MG, MF, MH, MI	33x110x6	80	M12	0,170	XP-PG-MF-M12	81150411208



XP-PGL



For channels	Dimensions				Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	M [mm]			
MG, MF, MH, MI	33x220x6	30	80	M12	0,320	XP-PGL-MF-M12	81150411248



FLAT CONNECTORS XP-X

Usage: for structural connection of mounting channels, it allows for multiple adjustment of the fixing opening location in the channel; they ensure reliable connection of flat and spacious fastening systems.

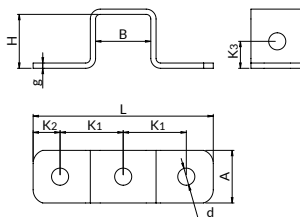


Ultra Cover XP



Permissible load

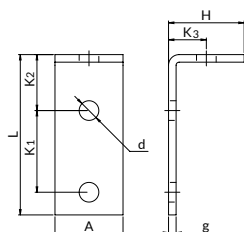
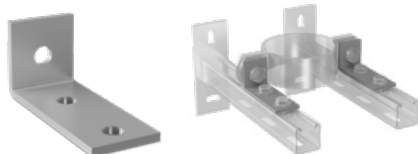
XP-XK



For channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	B x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d [mm]				
A	30x95x3	31x30	33,5	14	15	10,5	0,094	10	XP-XK-A	81130300008
MF	40x138x4	41x41	48,5	20,5	20,5	13	0,240	10	XP-XK-MF	81141410008
MH	40x138x4	41x62	48,5	20,5	-	13	0,300	10	XP-XK-MH	81141620008

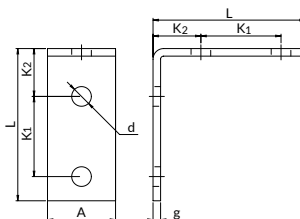
XP-XX3-A90

XP-XX3-MF90-P



For channels	Dimensions						Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x H [mm]	K ₁ [mm]	K ₂ [mm]	K ₃ [mm]	d ₁ [mm]				
A, C	30x4	114x30	54	45	15,0	10,5	0,090	10/25	XP-XX3-A90	81130030908
MG, MF, MH, MI	40x5	111,4x41	54	42,4	20,5	13,0	0,320	10	XP-XX3-MF90	81141030908
MF, MH	40x5	105x46,5	54	33,25	26,5	13	0,200	10	XP-XX3-MF90-P	81141230908

XP-XX7-90



For channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]				
A, C	30x63x4	31	19	10,5	0,090	10/25	XP-XX7-A90
MF, MH	40x101x5	54	32	13,0	0,278	10	XP-XX7-MF90

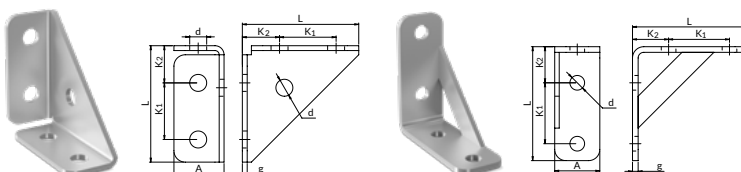
XP-XX7-135



For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MF, MH	40x98x5	54	29	13	0,320	10	XP-XX7-MF135	81141071358

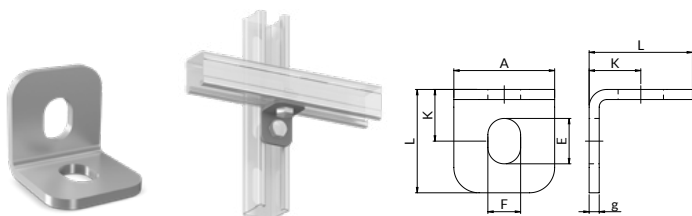
XP-XZ7

XP-XZ7-A

XP-XZ7-MF
XP-XZ7-MB

For channels	Dimensions				Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]				
MG, MF, MH, MI	40x101x5	54	32	13	0,370	10	XP-XZ7-MB	81150070018
MF, MH	40x101x5	54	32	13	0,370	10	XP-XZ7-MF	81141070018

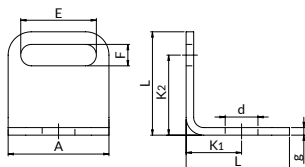
XP-X7-MF



For channels	Dimensions			Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x L x g [mm]	K [mm]	FxE [mm]					
MG, MF, MH, MI	40x41x4	20,5	13x18	0,2	0,080	10	XP-X7-MF	81170070008



ANGLE SUPPORT FOR CLAMPS XP-DL



Usage: for structural connection of pipe clamps; for fastening risers while fastening behind the pipe clamp side opening.

 Ultra Cover XP

 Permissible load

For channels	Dimensions					Weight [kg]	Designation for the order	Catalogue number
	A x L x g [mm]	E x F [mm]	K ₁ [mm]	K ₂ [mm]	d [mm]			
MG, MF, MH, MI	40x41x3	30x8,5	22	31,75	13	0,060	XP-DL-MF-M8	81140190088
MG, MF, MH, MI	40x41x4	30x10,5	22	30,75	13	0,080	XP-DL-MF-M10	81140190108

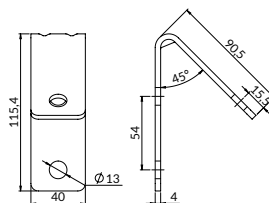
XPMXD FITTINGS

NEW

 Ultra Cover XP

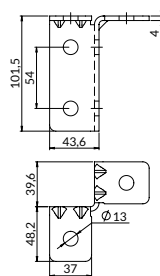
Usage: For creating spatial structures from mounting profiles. Stresses designed in the opposite direction to the bend increase the strength of the component.

XPMX1D4



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,200	10	XPMX1D4	81141100008

XPMX2D4



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,300	10	XPMX2D4	81141200008

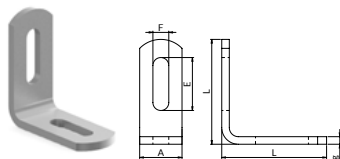
XPMX3D4



For channels	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MG, MH, MI	0,500	10	XPMX3D4	81141300008

ANGULAR CONNECTORS XP-KT

XP-KT-90



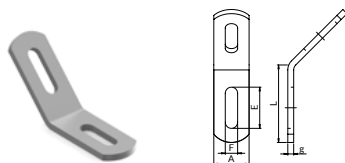
Usage: building structural connections of channels; strengthening channel connections; building fastening systems.

Permissible load

Ultra Cover XP

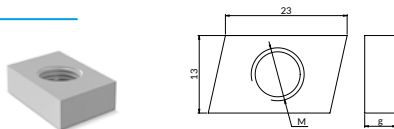
For channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]				
MF, MH	40x6	86	13,0x40	0,230	5/10	XP-KT-MF90	81141090008

XP-KT-135



For channels	Dimensions			Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L [mm]	F x E [mm]				
MF, MH	40x6	86	13,0x40	0,230	5/10	XP-KT-MF135	81141135008

SLIDE NUTS XP-NSS



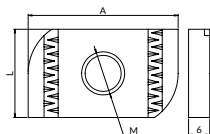
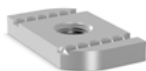
Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet; oblique sides make assembly in the channel easier.

Ultra Cover XP

For channels	Thread M	Dimensions A x L x g [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
A, C	M8x1,25	23x13x5	0,010	25	XP-NSS-A-M8	81190300838
A, C	M10x1,5	23x13x6	0,010	25	XP-NSS-A-M10	81190301038



SLIDE NUTS XP-NSZ



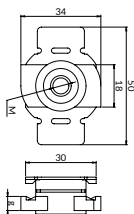
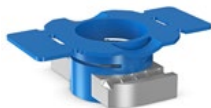
Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet; the alternating teeth of the nut increase its load-bearing capacity and they better cooperate with the channel teeth.

 Permissible load

 Ultra Cover XP

For channels	Thread M	Dimensions A x L x g [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MH	M8	34x20x6	0,023	25	XP-NSZ-MF-M8	81190410818
MF, MH	M10	34x20x6	0,022	25	XP-NSZ-MF-M10	81190411018
MF, MH	M12	34x20x8	0,021	25	XP-NSZ-MF-M12	81190411218

SLIDE NUTS XP-EZP



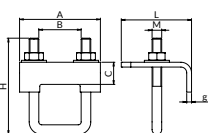
 Ultra Cover XP

Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet ensure quick and stable assembly due to plastic wings.

 Permissible load  Thermal resistance

For channels	Thread M	Thickness g [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
MF, MH	M8	6	0,020	50	XP-EZP-MF-M8	81140410808
MF, MH	M10	6	0,020	50	XP-EZP-MF-M10	81140411008
MF, MH	M12	8	0,030	50	XP-EZP-MF-M12	81140411208

BEAM CLAMPS XP-KLM



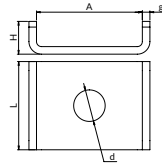
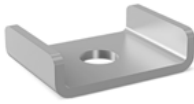
 Ultra Cover XP

Usage: connecting mounting channels to steel girders; creation of solid fastening systems on the structures of steel girders without the necessity of drilling or welding; safe fastening with the use of two pipe clamps per one fixing; integrated set adjusted to steel girders of channel section and I-section type.

 Permissible load

For channels	Dimensions					Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A x g [mm]	L x C [mm]	B [mm]	H [mm]	M [mm]					
MF	84x6	73x23	44	100	M10	9,0	0,480	5	XP-KLM-MF	81310414108
MH	84x6	73x23	44	120	M10	9,0	0,500	4	XP-KLM-MH	81310416208
D-MFH	84x6	73x23	44	150	M10	9,0	0,510	5	XP-KLM-MFH-D	81310410308
D-MH	84x6	73x23	44	181	M10	9,0	0,520	5	XP-KLM-MH-D	81310412408

U-SHAPED CHANNEL WASHERS XP-PDC



Ultra Cover XP

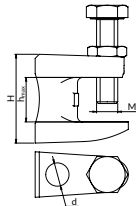
Usage: for fixing accessories in the channels and in the channels with feet; compatible with channels and channels with feet; it has a U-shaped cross-section which secures the surface of channels against bending.



Permissible load

For channels	Dimensions					Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
	A [mm]	L [mm]	g [mm]	H [mm]	d [mm]				
MF, MH	42	35	3,0	13	12,5	0,050	25	XP-PDC-MF	81107414108

CAST IRON BEAM CLAMPS XP-KLP



Ultra Cover XP

Usage: assembly to steel girders; drilling and welding is not required during the assembly; it has a port, without a thread.

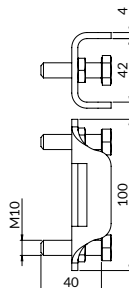


Permissible load

Opening d [mm]	Bolt M	h _{max} [mm]	H [mm]	Permissible load [kN]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
9	M8	19	35	1,20	0,080	25	XP-KLP-M8	81335008008
11	M10	21	42	2,50	0,140	25	XP-KLP-M10	81335010008
13	M12	23	54	3,50	0,220	20	XP-KLP-M12	81335012008

EXPANSION BRACKET XP-WR-MF

NEW



Ultra Cover XP

Usage: for use with the MF profile. Installation inside a channel or I-section using 4 expansion screws. After tightening the screws, tighten them with a nut. The length of the MF profile should be cut to the internal dimension of the beam.



Permissible load

For channels	Weight [kg]	Designation for the order	Catalogue number
MF	0,51	XP-WR-MF	81133004108



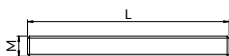
THREADED RODS XP-M

 Ultra Cover XP

Usage: used in various types of structural fastening systems; for suspending construction elements.

Rods of 4.8 class

 Permissible load



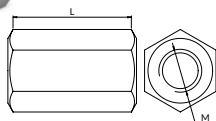
Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	1000	0,300	50	XP-M8X1000	81470081008
M8	2000	0,600	50	XP-M8X2000	81470082008
M10	1000	0,490	25	XP-M10X1000	81470101008
M10	2000	0,980	25	XP-M10X2000	81470102008
M12	1000	0,700	25	XP-M12X1000	81470121008
M12	2000	1,400	20	XP-M12X2000	81470122008
M16	1000	1,300	10	XP-M16X1000	81470161008
M16	2000	2,600	10	XP-M16X2000	81470162008
M20	1000	2,080	10	XP-M20X1000	81470201008

CONNECTORS XP-ZL

 Ultra Cover XP

Usage: connection of threaded rods located in one axis.

 Permissible load



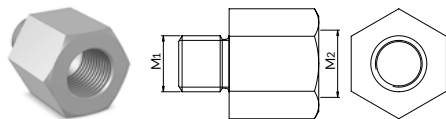
Thread M	Length L [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8	24	0,020	25	XP-ZL-M8	81400008008
M10	30	0,040	25	XP-ZL-M10	81400010008
M12	36	0,060	15	XP-ZL-M12	81400012008

HEX REDUCERS FEMALE/MALE XP-RZW

 Ultra Cover XP

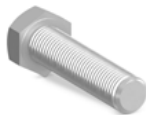
Usage: change of the metric thread diameter; connection of two various metric threads, external and internal.

 Permissible load



Thread M ₁ /M ₂	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
M8/M10	0,010	50	XP-RZW-M8/10	81401108108
M10/M12	0,020	25	XP-RZW-M10/12	81401110128
M10/M16	0,060	5	XP-RZW-M10/16	81401110168
M12/M8	0,018	5	XP-RZW-M12/8	81401112088
M12/M16	0,060	5	XP-RZW-M12/16	81401112168

HEX HEAD BOLTS XP-105-M



Ultra Cover XP

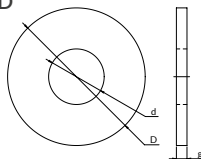
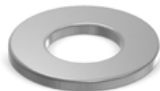
Usage: it is an element of screw connection; for the realization of all connections; the thread is present on the whole length.

Bolts of 5.8 class

Permissible load

Thread M	Length L [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	30	50	67	XP-105-M8X30	81402080308
M8	80	25	32	XP-105-M8X80	81402080808
M10	25	50	42	XP-105-M10X25	81412100258
M10	30	50	34	XP-105-M10X30	81402100308
M10	60	25	24	XP-105-M10X60	81402100608
M10	80	25	19	XP-105-M10X80	81402100808
M12	30	25	25	XP-105-M12X30	81402120308
M12	80	25	13	XP-105-M12X80	81402120808
M12	120	25	9	XP-105-M12X120	81402121208

FLAT WASHERS XP-PD



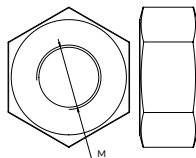
Ultra Cover XP

Usage: it is an auxiliary element in screw connections; it increases the surface of the joint pressure on the material being connected; it reduces the probability of the joint loosening.

Diameter D [mm]	Diameter d [mm]	Thickness g [mm]	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
26,0	8,4	2,0	25	169	XP-PD-8	81480100808
26,0	10,5	2,0	25	142	XP-PD-10	81480101008
26,0	13,0	2,0	25	167	XP-PD-12	81480101208
30,0	17,0	3,0	50	100	XP-PD-16	81480101608
36,0	8,5	3,0	25	45	XP-PD-8-P	81480200808
36,0	10,5	3,0	25	47	XP-PD-10-P	81480201008
36,0	12,5	3,0	25	48	XP-PD-12-P	81480201208



HEX NUTS XP-144-M

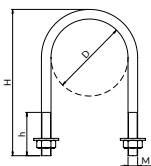


Ultra Cover XP

Usage: it is a connector in a screw connection; it is placed on the free end of the screw in accordance with assembly requirements.

Thread M	Quantity [pcs/pkg]	Quantity [pcs/kg]	Designation for the order	Catalogue number
M8	50	216	XP-144-M8	81490008008
M10	50	98	XP-144-M10	81490010008
M12	50	62	XP-144-M12	81490012008
M16	30	30	XP-144-M16	81490016008
M20	20	17	XP-144-M20	81490020008

U-BOLTS XP-KB



Ultra Cover XP

Set includes:

- an U-bolt
- two round washers
- two hexagonal nuts



Permissible load

Usage: for pipelines fixing.

Pipe diameter D [mm]	Thread M [mm]	Thread height h [mm]	U-bolt height H [mm]	Weight [kg]	Quantity [pcs/pkg]	Designation for the order	Catalogue number
60,3	M10	70	130	0,180	50	XP-KB-M10-2	80180100608
76,1	M10	70	147	0,190	25	XP-KB-M10-21/2	80180100768
88,9	M10	70	162	0,210	25	XP-KB-M10-3	80180100898
114,3	M10	70	184	0,240	10	XP-KB-M10-4	80180101108
168,3	M12	180	352	0,610	1	XP-KB-M12-168	80180121688

- 01. Pipe clamps with lining
- 02. Pipe clamps without lining
- 03. Fixed points and sliding plates
- 04. Vibration isolators
- 05. Wire rope suspension system
- 06. Pipe clamps and ventilation accessories
- 07. Roof support system and service platforms
- 08. Roof support kits
- 09. Fire protection system
- 10. Nipro firestop and fire protection systems
- 11. Channels
- 12. Channels accessories
- 13. Fastening and connecting accessories
- 14. Anchor fixings
- 15. Installer's work ergonomics
- 16. Stainless steel products (A2)
- 17. Hot-dip galvanized elements
- 18. UltraCover XP products
- 19. CERTA – heavy channel system
- 20. Projects support

19.1. KE components for CERTA system

	KE heavy channel	NEW	269
	S support for KE channel	NEW	270
	S200 channel support for KE channel	NEW	271
	Welded SS support for KE channel	NEW	272
	SK45 channel support for KE channel	NEW	273
	Rooftop base PDPZ channel KE	NEW	274
	LKZ corner connector for KE channel	NEW	275
	LT connector for KE channel	NEW	276
	LK connector for KE channel	NEW	277
	Beam clamp KLM for KE channel	NEW	278
	LW channel connector for KE channel	NEW	279
	STS Support for KE channel	NEW	280
	PM threaded rod base plate – M8/10 and M12/16	NEW	281

19

CERTA – heavy channel system



PM threaded rod base plate
– M20 G1/2 and M20

NEW

282



ZP end cap for KE channel

NEW

283

19.2. KJ components for CERTA system



KJ heavy channel

NEW

284



S support for KJ channel

NEW

285



S200 channel support
for KJ channel

NEW

286



SKK45 channel support
for KJ channel

NEW

287



LT connector for KJ channel

NEW

288



LK connector for KJ channel

NEW

289



Beam clamp KLM
for KJ channel

NEW

290



LWK channel connector
for KJ channel

NEW

291



ZP end cap for KJ channel

NEW

292



SP self-threading bolt M10x21

NEW

293

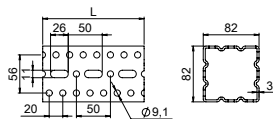


SE strut M16

NEW

294

KE HEAVY CHANNEL

NEW


-  material: S355MC steel
-  protective coating: hot-dip galvanizing
-  CE-marked product

Dimensions L [mm]	Weight [kg]	Designation order	Catalogue number
3000	20,330	OGCKE3	40782823031
6000	40,800	OGCKE6	40782823061

Application:

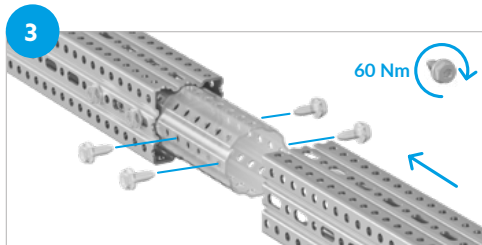
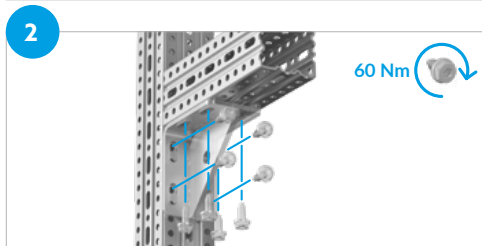
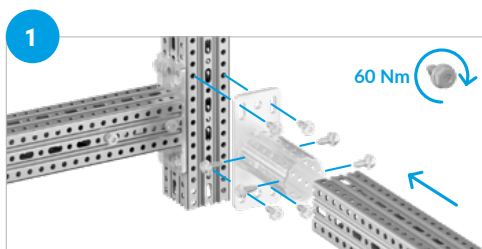
- Construction of (horizontal) beams
- Construction of columns
- Construction of a variety of frames and spatial structures using other system elements (connectors, supports, brackets, clamps)

INSTALLATION METHOD:

Installation of CERTA system components to the KE channel:

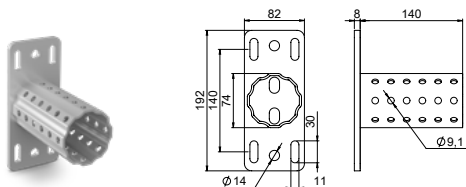
- Through slotted holes for elements mounted inside the channel
- Through Ø 9.1 mm round holes for elements mounted externally

One hole is intended for only one self-threading bolt. Number of bolts used for installation depends on the type of product being installed. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



S SUPPORT FOR KE CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	1,500	OGCSKE	41122082821

Application:

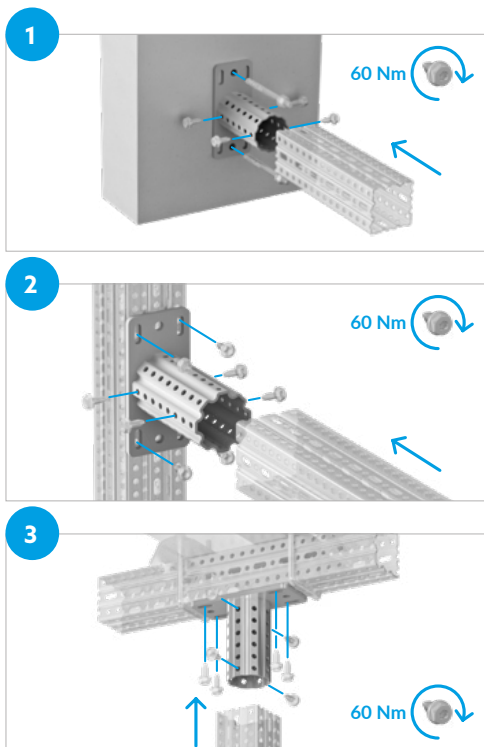
- Assembly with KE heavy channel to the structure (wall, floor, ceiling)
- Installation with KE heavy channel do channel structure
- Construction of a variety of structures (gate type) or spatial, installed to the structure (wall, floor, ceiling) or to other structures from KE channels

INSTALLATION METHOD:

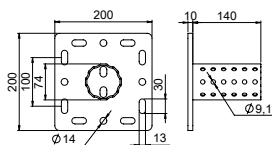
The CERTA system element installed on the outside of the KE channel is bolted through slotted holes (in the support for the element) using XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Products installed on the outside of the channel should be fastened with four bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.

Tightening torque of anchors as per their installation instructions.



S200 CHANNEL SUPPORT FOR KE CHANNEL

NEW


-  material: S355J2 steel
-  protective coating: hot-dip galvanizing
-  CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	3,500	OGCS200KE	41122382821

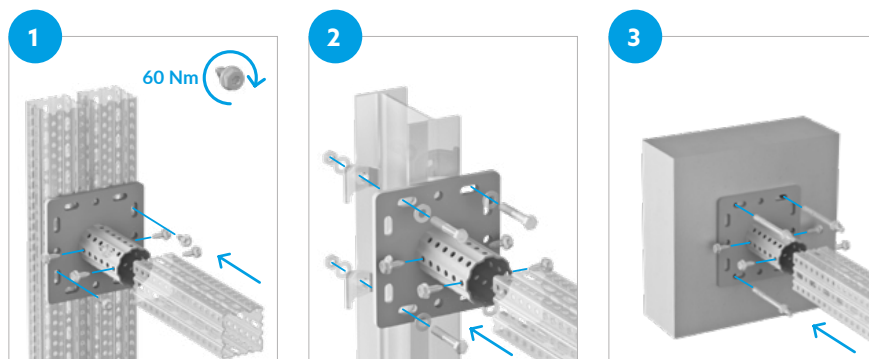
Application:

- Assembly with KE heavy channel to the structure (wall, floor, ceiling)
- Installation with KE heavy channel do channel structure
- Construction of a variety of structures (gate type) or spatial, installed to the structure (wall, floor, ceiling) or to other structures from KE channels

INSTALLATION METHOD:

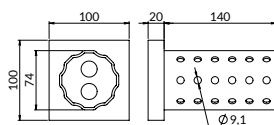
The CERTA system element installed on the outside of the KE channel is bolted through slotted holes (in the support for the element) using XPCSPM10X21 self-threading bolts fastened into $\varnothing 9.1$ mm round holes in the channel.

One hole is intended for only one self-threading bolt. The number of bolts used for installation depends on the type of product being installed. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.



WELDED SS SUPPORT FOR KE CHANNEL

NEW



material: S355J2 steel

Protective coating: hot-dip galvanizing

CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	2,100	OGCSSKE	41122282821

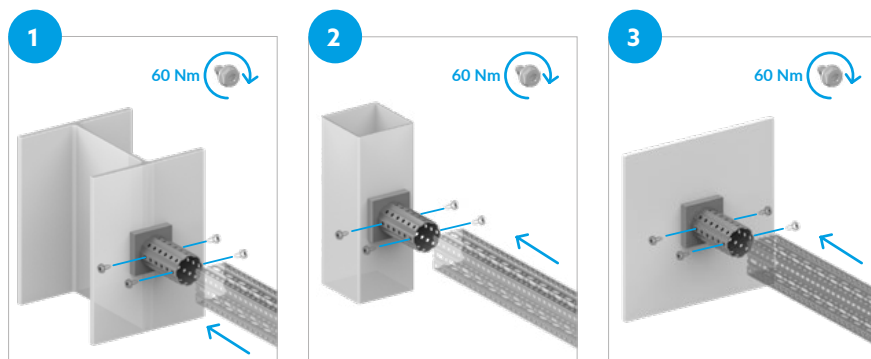
Application:

- Fixing with a heavy channel to existing steel structures of the facility (columns, beams, plate) by welding
- Creating of a variety of structures (gate type) or spatial structures, fixed to the object's steel structure
- (columns, beams, plate) by welding

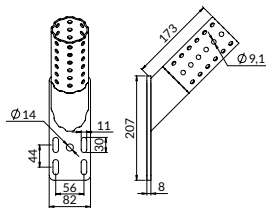
INSTALLATION METHOD:

Fixing to existing steel structures by welding. **Note:** in the installation method take into account preparation of the surface to be welded of the parts to be joined.

Insert the KE heavy channel onto the channel connector as far as it will go and fix it with self-tapping screws (two screws opposite each other).



SK45 CHANNEL SUPPORT FOR KE CHANNEL

NEW


-  material: S355J2 steel
-  Protective coating: hot-dip galvanizing
-  CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	2,000	OGCSK45KE	41122582821

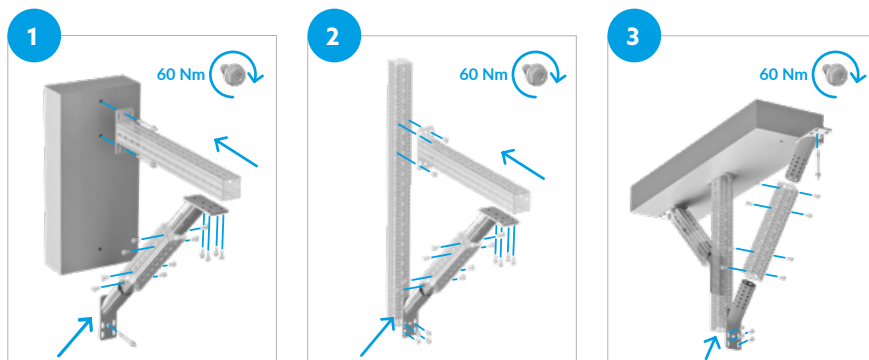
Application:

- Installation with heavy channel to the structure (wall, floor, ceiling), at an angle of 45 degrees
- Installation with heavy channel to channel structure, at an angle of 45 degrees

INSTALLATION METHOD:

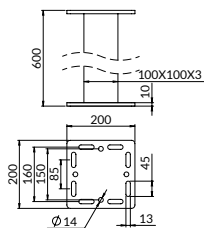
The CERTA system element installed on the outside of the channel is bolted through slotted holes (in the support for the element) with XPCSPM10X21 self-threading bolts fastened into $\varnothing 9.1$ mm round holes in the channel.

One hole is intended for only one self-threading bolt. Products installed on the outside of the channel should be fastened with four bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.



ROOFTOP BASE PDPZ CHANNEL KE

NEW



- material: S355J2 steel
- Protective coating: hot-dip galvanizing
- CE-marked product

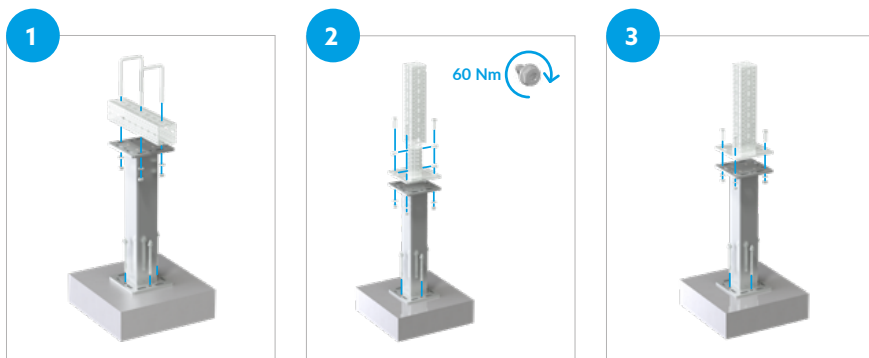
For channel	Weight [kg]	Designation order	Catalogue number
KE	11,200	OGCPDPZKE	42210828201

Application:

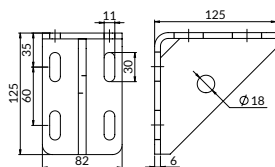
- For the construction of supports from the Certa system channels on roofs not yet insulated.
The closed channel of the foot makes it possible to carry out the roof flashings correctly later on.

INSTALLATION METHOD:

Select the fixing to the ceiling depending on the type of substrate.
Attach the Certa system element to the top of the support.



LKZ CORNER CONNECTOR FOR KE CHANNEL

NEW


-  material: stal S355J2
-  protective coating: hot-dip galvanizing
-  CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	1,300	OGCLKZKE	41142482821

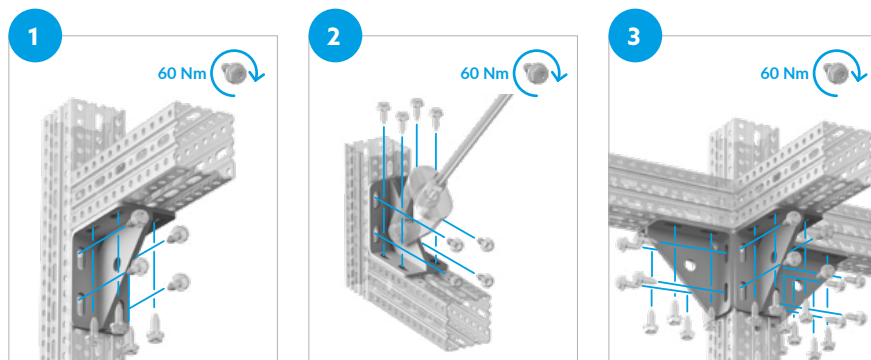
Application:

- For perpendicular joining of KE heavy channels
- Additional hole allows to add strut to stiffen the support
- For perpendicular connection of brackets to KE heavy channels

INSTALLATION METHOD:

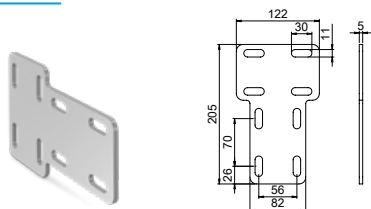
The CERTA system element installed on the outside of the KE channel is bolted through slotted holes (in the support for the element) using XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



LT CONNECTOR FOR KE CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KE	0,690	2,000	OGCLTKE	41142582821

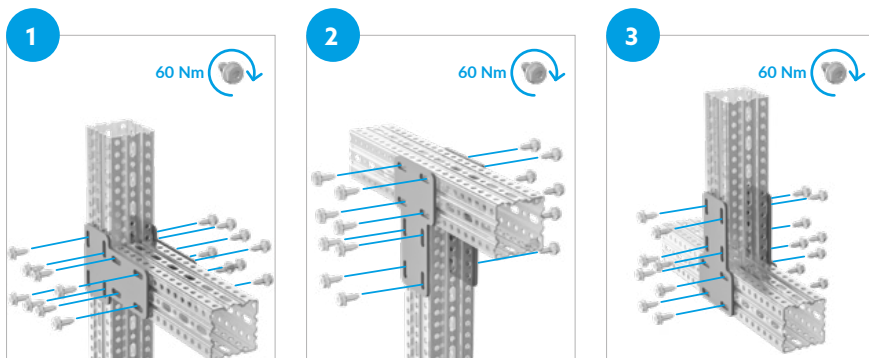
Application:

- For perpendicular joining of KE heavy channels

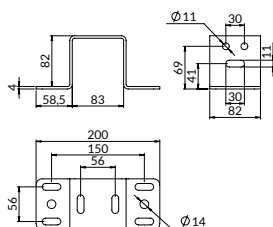
INSTALLATION METHOD:

The CERTA system element installed on the outside of the channel is bolted through slotted holes with XPCSPM10X21 self-threading bolts fastened into $\varnothing 9.1$ mm round holes in the channel.

One hole is intended for only one self-threading bolt. Fasten the fitting to the outside of the channels with eight bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



LK CONNECTOR FOR KE CHANNEL

NEW


- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	0,810	OGCLKKE	41182820001

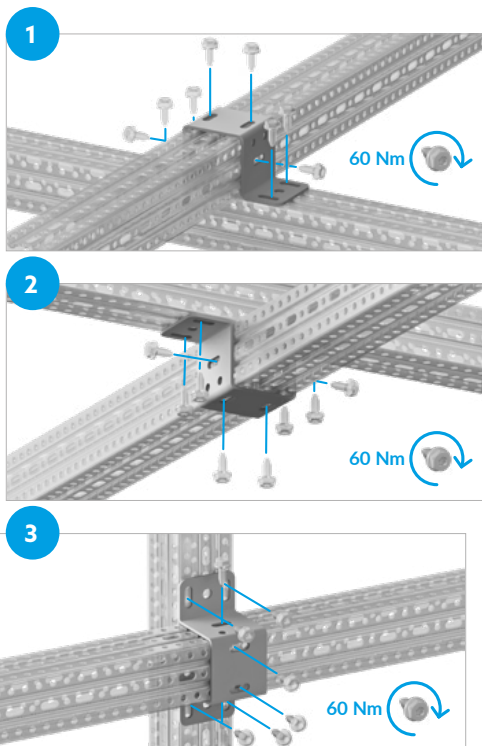
Application:

- For perpendicular joining of KE heavy channels in two planes
- For perpendicular connection of brackets to KE heavy channels

INSTALLATION METHOD:

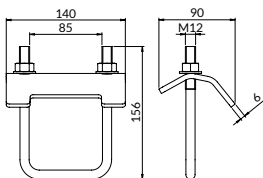
The CERTA system element installed on the outside of the channel is bolted through slotted holes with XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Fasten the bracket with a minimum of six self-threading bolts using the slotted holes. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



BEAM CLAMP KLM FOR KE CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- B-marked product

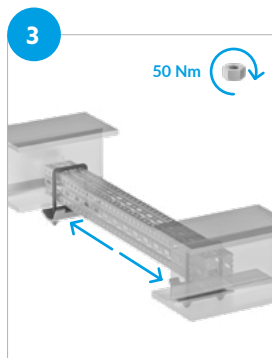
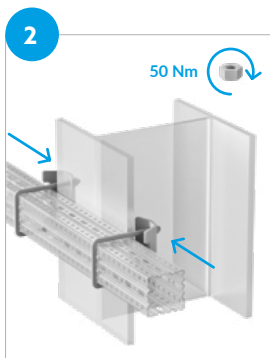
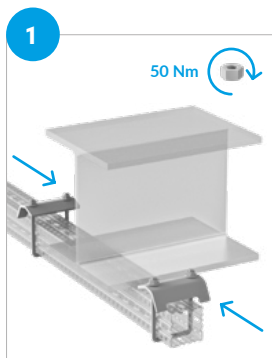
For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KE	1,000	2	OGCKLMKE	41310828201

Application:

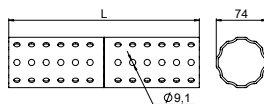
- Assembly with KE heavy channel to the structure (wall, floor, ceiling)
- Installation with KE heavy channel to steel structure

INSTALLATION METHOD:

Place an u-bolt around the KE channel and secure it to the structural profile with a clamp by tightening two nuts.



LW CHANNEL CONNECTOR FOR KE CHANNEL

NEW

 material: S355J2 steel

 protective coating: hot-dip galvanizing

 CE-marked product

For channel	Dimensions L [mm]	Weight [kg]	Designation order	Catalogue number
KE	280	1,310	OGCLWKE	41142082821

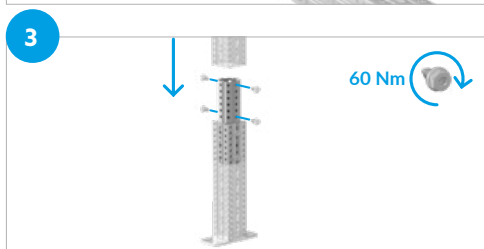
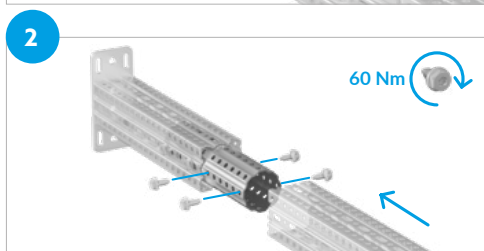
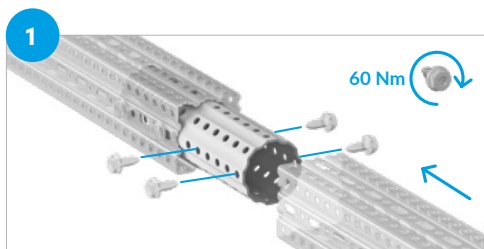
Application:

- Butt connecting of KE heavy channels.
- Butt connecting of brackets to KE heavy channels

INSTALLATION METHOD:

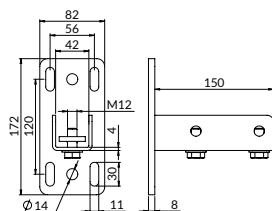
Installed inside the KE channel, it is fastened through slotted holes in the channel to round holes in the connector.

The connector should be evenly distributed within the channel — both channels connected should have the same number of holes with the same length. Bolt each channel with four bolts, two opposite each other.



STS SUPPORT FOR KE CHANNEL

NEW



- material: S235JR steel
- protective coating: lamellar zinc galvanizing
- B-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KE	1,600	XPCSTSKE4	4041000008

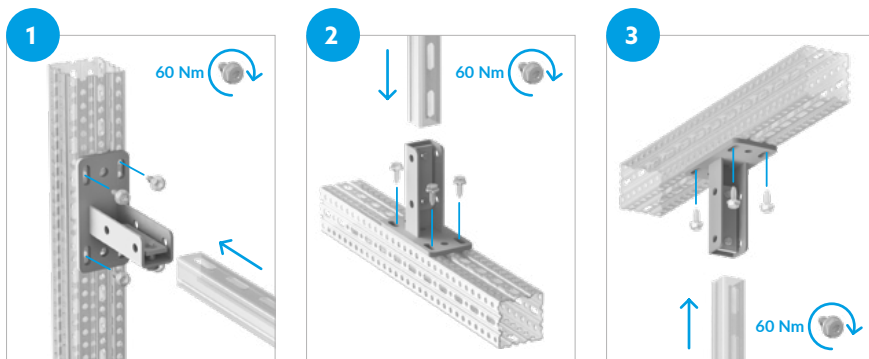
Application:

- For connecting 41 mm wide mounting channels to CERTA channels. Allows for self-assembly of mounting channels with supports (brackets) and construction of fastening systems

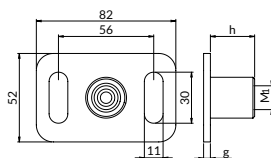
INSTALLATION METHOD:

The CERTA system element installed on the outside of the channel is bolted through slotted holes (in the support for the element) with XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Products installed on the outside of the channel should be fastened with four bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Slide the NICZUK system channel into the saddle section and tighten the fastening bolts.



PM THREADED ROD BASE PLATE – M8/10 AND M12/16

NEW


material: S235JR steel

protective coating: lamellar zinc galvanizing

B-marked product

For channel	Connection size M ₁	Connection height h [mm]	Dimensions g [mm]	Weight [kg]	Designation order	Catalogue number
KE	8/10	15,5	3	0,100	XPCPMKEM8/10	40582810008
KE	12/16	26	4	0,200	XPCPMKEM12/16	40582121608

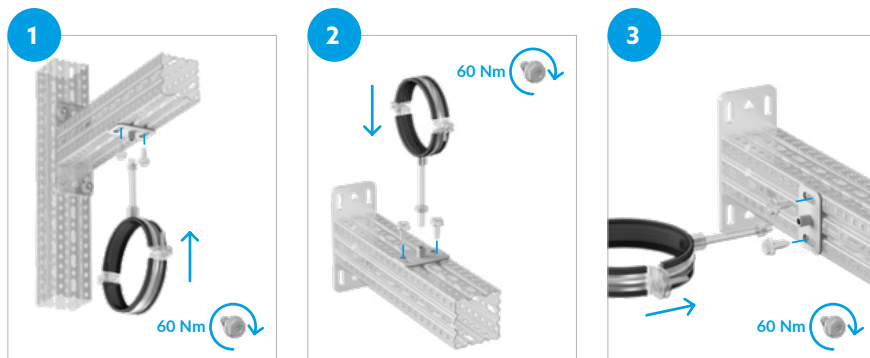
Application:

- For mounting on CERTA channels and universal use with threaded rods

INSTALLATION METHOD:

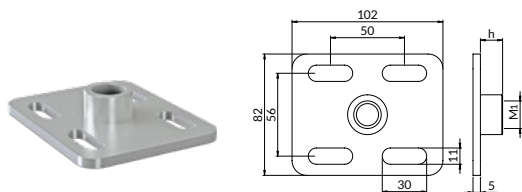
Installed on the outside of the channel, the CERTA system component is bolted through slotted holes (in the component's support) with XPCSPM10X21 self-threading bolts into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Two bolts should be used.



PM THREADED ROD BASE PLATE – M20 G1/2 AND M20

NEW



- material: S235JR steel
- protective coating: lamellar zinc galvanizing
- B-marked product

For channel	Connection size M1	Connection height h [mm]	Weight [kg]	Designation order	Catalogue number
KE	1/2"	15	0,300	XPCPMKEG1/2	40582102008
KE	20	18	0,300	XPCPMKEM20	40582200008

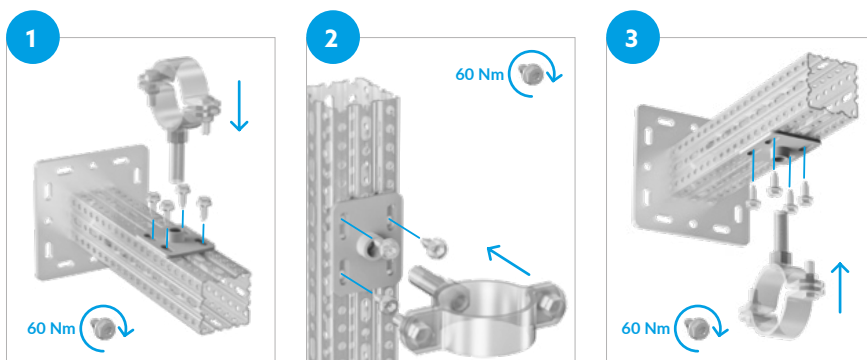
Application:

- For installation of fixed points on Certa channel constructions

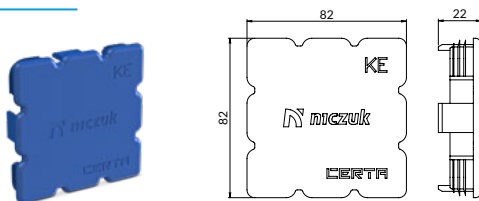
INSTALLATION METHOD:

Installed on the outside of the channel, the CERTA system component is bolted through slotted holes (in the component's support) with XPCSPM10X21 self-threading bolts into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



ZP END CAP FOR KE CHANNEL

NEW

 material: PE-LD

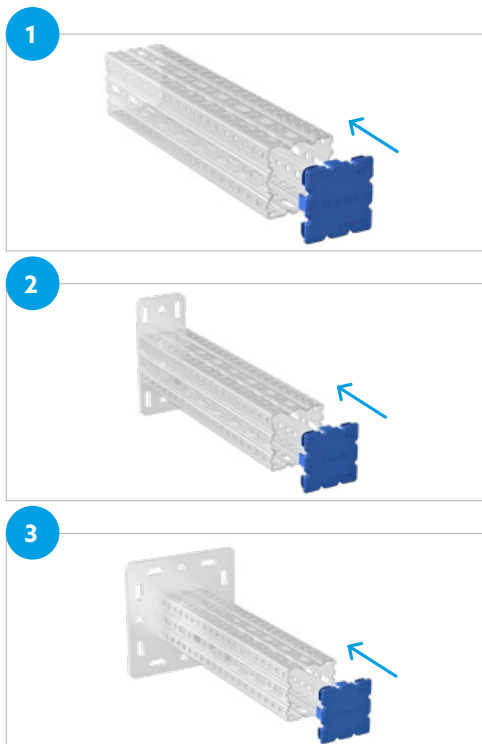
For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KE	0,040	10	CZPKE	41101828205

Application:

- For protecting the ends of mounting channels

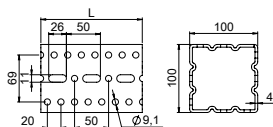
INSTALLATION METHOD:

Place the end cap on the end of the CERTA channel, and then drive the end cap in using a rubber mallet for example.



KJ HEAVY CHANNEL

NEW



- material: S355MC steel
- protective coating: hot-dip galvanizing
- CE-marked product

Dimensions L [mm]	Weight [kg]	Designation order	Catalogue number
3000	34,2	OGCKJ3	40710104031
6000	70,5	OGCKJ6	40710104061

Application:

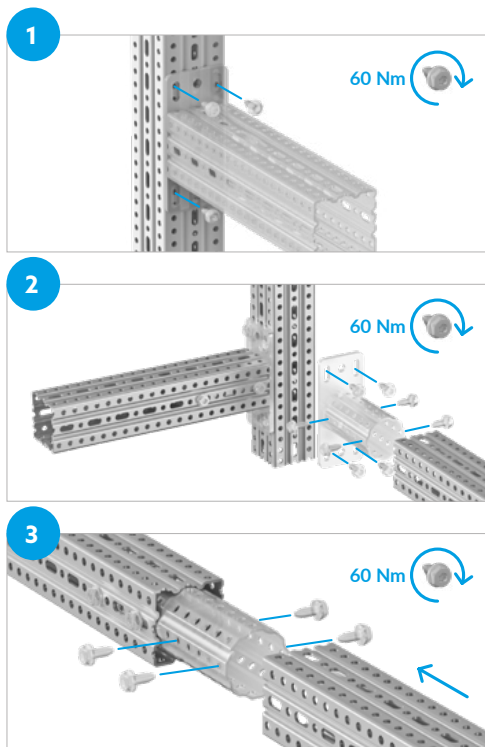
- Construction of (horizontal) beams
- Construction of poles
- Construction of a variety of frames and spatial structures using other system elements (connectors, supports, brackets, clamps)

INSTALLATION METHOD:

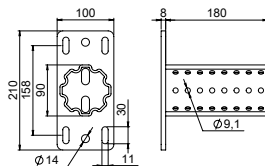
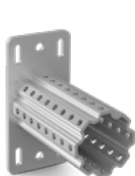
Installation of CERTA system components to the KJ channel:

- Through slotted holes for elements mounted inside the channel
- Through Ø 9.1 mm round holes for elements mounted externally

One hole is intended for only one self-threading bolt. The number of bolts used for installation depends on the type of product being installed. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



S SUPPORT FOR KJ CHANNEL

NEW


-  material: S355J2 steel
-  protective coating: hot-dip galvanizing
-  CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KJ	2,800	OGCSKJ	41122010101

Application:

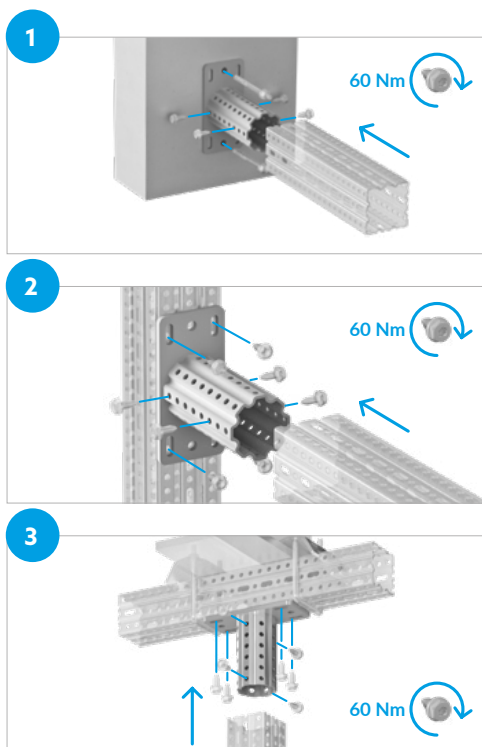
- Assembly with KJ heavy channel to the structure (wall, floor, ceiling)
- Installation with KJ heavy channel do channel structure
- Construction of a variety of structures (gate type) or spatial, installed to the structure (wall, floor, ceiling) or to other structures from channels

INSTALLATION METHOD:

The CERTA system element installed on the outside of the KJ channel is bolted through slotted holes (in the support for the element) using XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

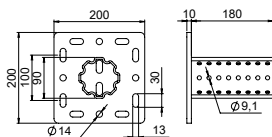
One hole is intended for only one self-threading bolt. Products installed on the outside of the channel should be fastened with four bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.

Tightening torque of anchors as per their installation instructions.



S200 CHANNEL SUPPORT FOR KJ CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KJ	4,400	OGCS200KJ	41122310101

Application:

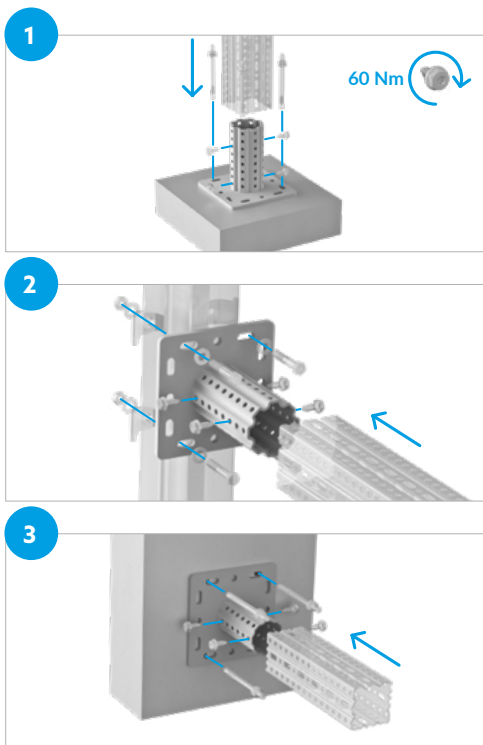
- Assembly with KJ heavy channel to the structure (wall, floor, ceiling)
- Installation with KJ heavy channel do channel structure
- Construction of a variety of structures (gate type) or spatial, installed to the structure (wall, floor, ceiling) or to other structures from channels

INSTALLATION METHOD:

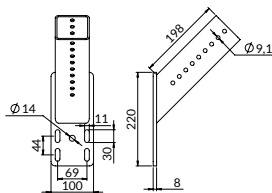
The CERTA system element installed inside the channel is bolted through slotted holes (in the channel) with XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the element being installed.

One hole is intended for only one self-threading bolt. Number of bolts used for installation depends on the type of product being installed. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.

Tightening torque of anchors as per their installation instructions.



SKK45 CHANNEL SUPPORT FOR KJ CHANNEL

NEW


- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KJ	3,400	OGCSKK45KJ	41125082821

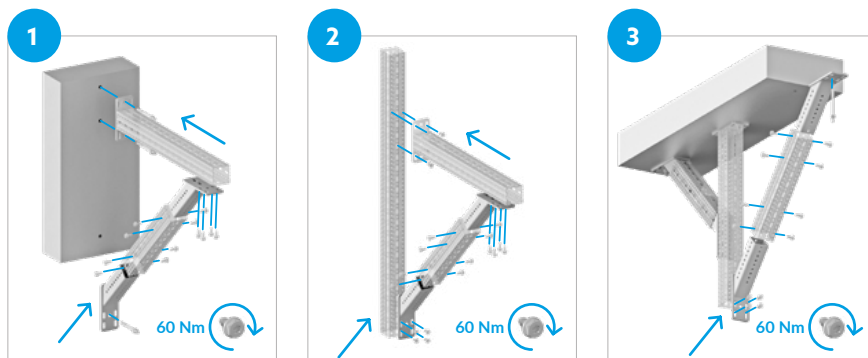
Application:

- Installation with heavy channel to the structure (wall, floor, ceiling), at an angle of 45 degrees
- Installation with heavy channel to channel structure, at an angle of 45 degrees

INSTALLATION METHOD:

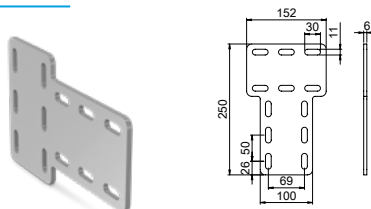
The CERTA system element installed on the outside of the KJ channel is bolted through slotted holes (in the support for the element) using XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Products installed on the outside of the channel should be fastened with four bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm. Use two bolts opposite each other for the fastener mounted inside the channel.



LT CONNECTOR FOR KJ CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Masa [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KJ	1,250	2,000	OGCLTKJ	41142610101

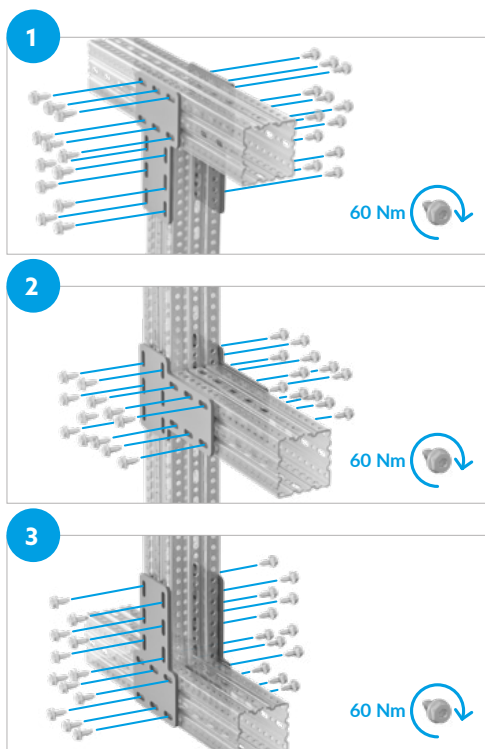
Application:

- For perpendicular joining of KJ heavy channels

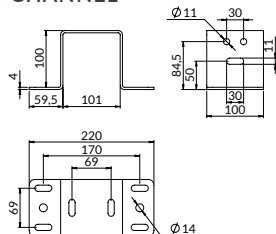
INSTALLATION METHOD:

The CERTA system element installed on the outside of the channel is bolted through slotted holes with XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the KJ channel.

One hole is intended for only one self-threading bolt. Fasten the fitting to the outside of the channels with twelve bolts. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



LK CONNECTOR FOR KJ CHANNEL

NEW


- material: S355J2 steel
- protective coating: hot-dip galvanizing
- CE-marked product

For channel	Weight [kg]	Designation order	Catalogue number
KJ	1,190	OGCLKKJ	41110100001

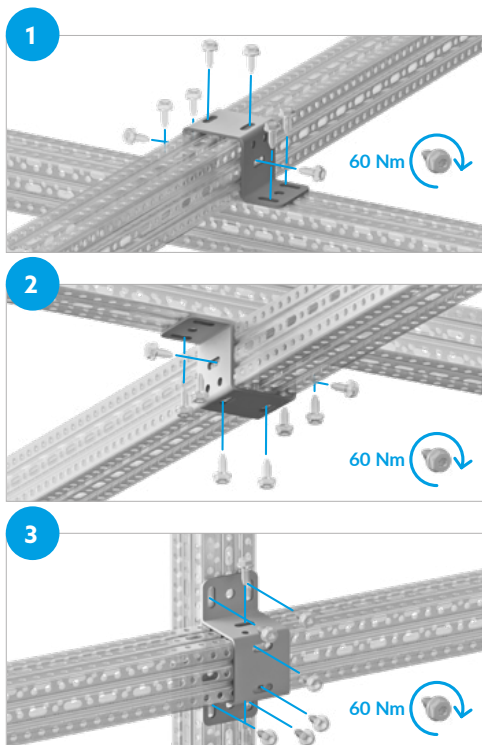
Application:

- For perpendicular joining of KJ heavy channels
- For perpendicular connection of brackets to KJ heavy channels

INSTALLATION METHOD:

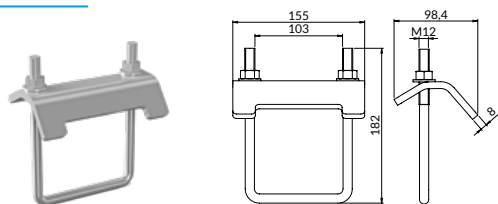
The CERTA system element installed on the outside of the channel is bolted through slotted holes with XPCSPM10X21 self-threading bolts fastened into Ø 9.1 mm round holes in the channel.

One hole is intended for only one self-threading bolt. Fasten the bracket with a minimum of six self-threading bolts using the slotted holes. Tighten the XPCSPM10X21 bolt with a torque of 60 Nm.



BEAM CLAMP KLM FOR KJ CHANNEL

NEW



- material: S355J2 steel
- protective coating: hot-dip galvanizing
- B-marked product

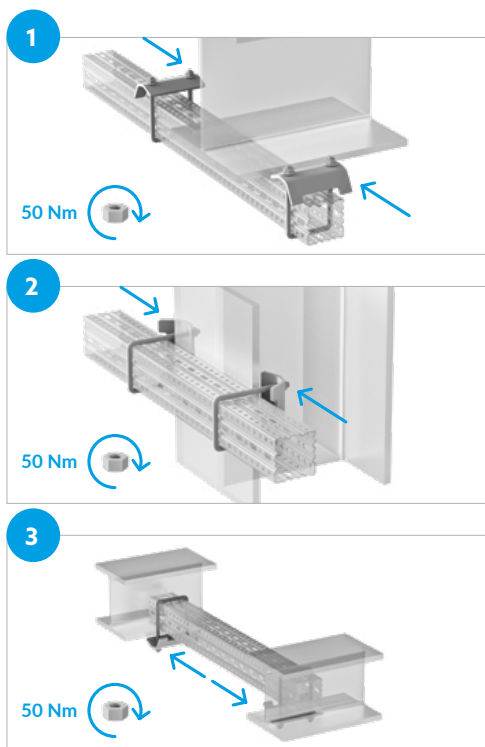
For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KJ	1,100	2	OGCKLMKJ	41310101001

Application:

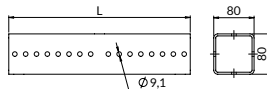
- Assembly with heavy channel to the structure (wall, floor, ceiling)
- Installation with heavy channel to steel structure

INSTALLATION METHOD:

Place an u-bolt around the KJ channel and secure it to the structural profile with a clamp by tightening two nuts.



LWK CHANNEL CONNECTOR FOR KJ CHANNEL

NEW

 material: S355J2 steel

 protective coating: hot-dip galvanizing

 CE-marked product

For channel	Length [mm]	Weight [kg]	Designation order	Catalogue number
KJ	360	3,200	OGCLWKJ	41140010101

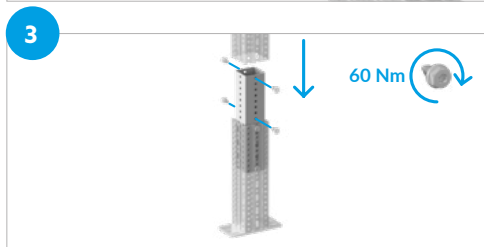
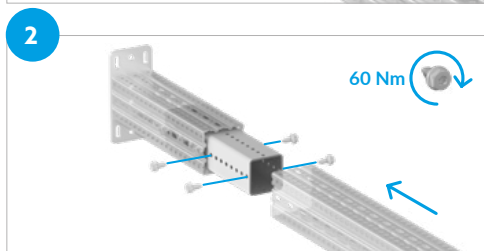
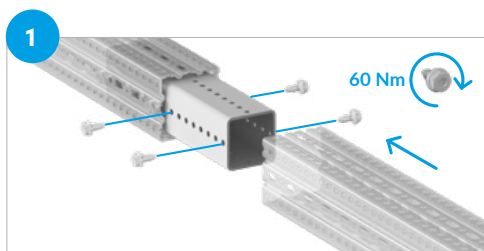
Application:

- Butt connecting of KJ heavy channels.
- Butt connecting of brackets to KJ heavy channels

INSTALLATION METHOD:

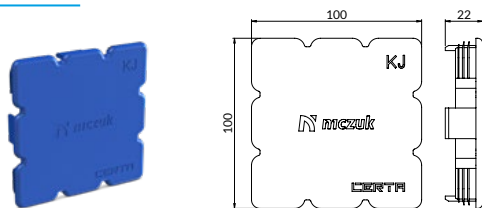
Installed inside the KJ channel, it is fastened through slotted holes in the channel to round holes in the connector.

The connector should be evenly distributed within the channel — both channels connected should have the same number of holes with the same length. Bolt each channel with four bolts, two opposite each other.



ZP END CAP FOR KJ CHANNEL

NEW



material: PE-LD

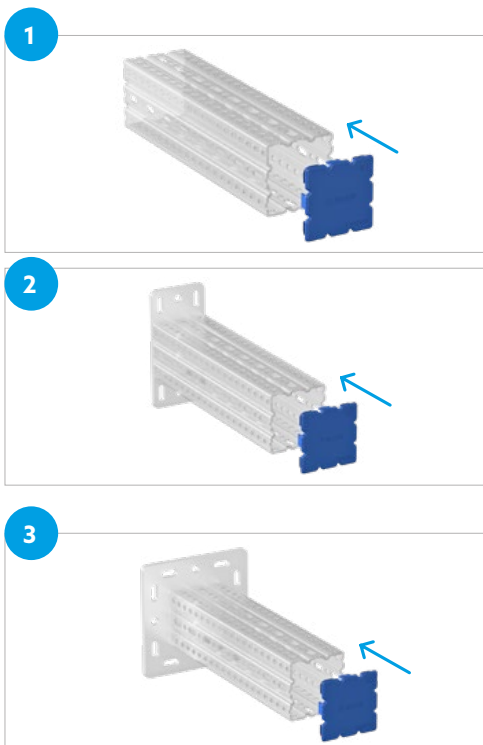
For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KJ	0,057	10	CZPKJ	41101001005

Application:

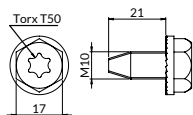
- For protecting the ends of mounting channels

INSTALLATION METHOD:

Place the end cap on the end of the CERTA channel, and then drive the end cap in using a rubber mallet for example.



SP SELF-THREADING BOLT M10X21

NEW

 material: 10B21/17B2(1.5502) steel

 protective coating: lamellar zinc galvanizing

For channel	Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
KE, KJ	0,027	50	XPCSPM10X21	4061000008

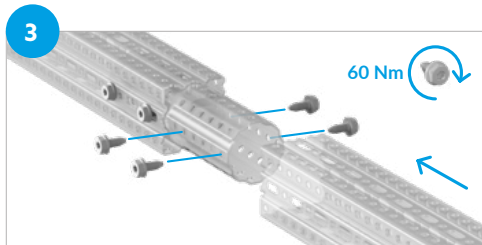
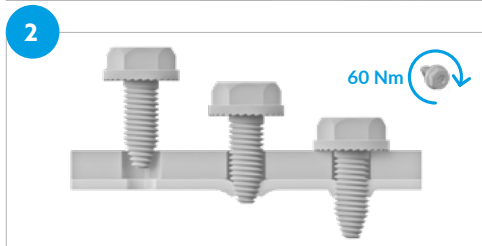
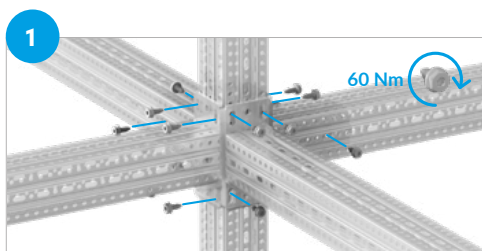
Application:

- For joining CERTA channels and accessories to create steel structures. The bolting process allows the thread to be formed without the formation of chips, resulting in a solid connection. In addition, it is not necessary to use washers

INSTALLATION METHOD:

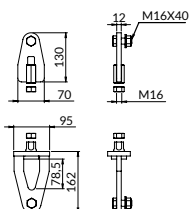
Using a hexagon socket wrench or TORX type bit. Tighten to a torque of 60 Nm.

Installation according to the instructions of the XPCSPM10X21 bolt and the component to be installed.



SE STRUT M16

NEW



- material: S355J2 steel
- protective coating: lamellar zinc galvanizing
- B-marked product

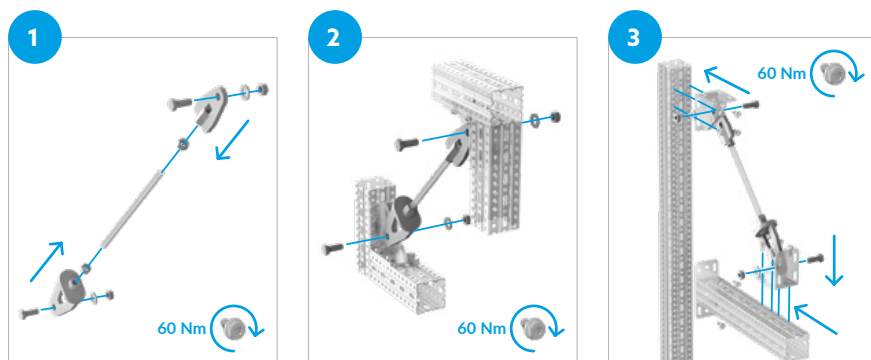
Weight [kg]	Quantity [pcs/pack.]	Designation order	Catalogue number
2,700	1	XPCSEM16	41182821601

Application:

- For making lashings between heavy channels
- For making lashings between heavy channels and the structure (wall, steel structure)
- For making lashings between OGCLKZKE and OGCLKZKJ fittings

INSTALLATION METHOD:

Attach both sides of the SE strut to the LKZ corner connectors using M16x40 bolts. Tighten the tension nut until it feels tight and lock it with the M16 lock nut.



20 Projects support

01. Pipe clamps with lining
02. Pipe clamps without lining
03. Fixed points and sliding plates
04. Vibration isolators
05. Wire rope suspension system
06. Pipe clamps and ventilation accessories
07. Roof support system and service platforms
08. Roof support kits
09. Fire protection system
10. Nipro firestop and fire protection systems
11. Channels
12. Channels accessories
13. Fastening and connecting accessories
14. Anchor fixings
15. Installer's work ergonomics
16. Stainless steel products (A2)
17. Hot-dip galvanized elements
18. UltraCover XP products
19. CERTA – heavy channel system
20. Projects support

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20

Projects support

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Assembly of L type pipe clamp	316
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20.6. Characteristic features of clamps

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SEAMLESS STEEL PIPES (DIN 2448)

No.	DN	Diameter external [mm]	Wall thickness [mm]	Weight			Maximum support span [m]
				Pipe weight [kg/r.m.]	Pipe weight with water kg/r.m.]	Pipe weight with water and insulation 100% [kg/r.m.]	
1	10	17,2	1,8	0,7	0,8	1,1	1,50
2	15	21,3	2,0	1,0	1,2	1,5	1,50
3	20	26,9	2,3	1,4	1,8	2,1	1,50
4	25	33,7	2,6	2,0	2,6	3,4	2,20
5	32	42,4	2,6	2,6	3,6	4,5	2,60
6	40	48,3	2,6	2,9	4,4	5,7	3,00
7		51,0	2,6	3,1	4,8	6,1	3,00
8		57,0	2,9	3,9	5,9	7,9	3,50
9	50	60,3	2,9	4,1	6,4	8,5	3,50
10		63,5	2,9	4,3	7,0	9,1	3,50
11	65	76,1	2,9	5,2	9,1	13,0	3,80
12	80	88,9	3,2	6,8	12,1	17,2	4,00
13		101,6	3,6	8,7	15,7	23,3	4,00
14		108,0	3,6	9,3	17,3	25,1	4,50
15	100	114,3	3,6	9,8	18,8	26,9	4,50
16		127,0	4,0	12,1	23,3	31,8	5,00
17		133,0	4,0	12,7	25,0	33,8	5,00
18	125	139,7	4,0	13,4	27,0	36,0	5,00
19		152,4	4,5	16,4	32,6	42,1	5,00
20		159,0	4,5	17,1	34,8	44,6	5,00
21	150	168,3	4,5	18,2	38,1	48,2	6,00
22		177,8	5,0	21,3	43,4	53,9	6,00
23		193,7	5,6	26,0	52,1	63,2	6,00
24	200	219,1	6,3	33,1	66,6	78,6	6,00
25		244,0	6,3	37,0	79,3	92,2	6,00
26	250	273,0	6,3	41,4	94,7	108,7	6,00
27	300	323,9	7,1	55,5	130,8	146,8	6,00
28	350	355,6	8,0	68,6	159,0	176,3	6,00
29	400	406,4	8,8	86,3	205,0	224,1	6,00
30	500	508,0	11,0	135,0	320,3	343,2	6,00

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps

** Insulation material with the density of 100 kg/m³



THIN-WALL PIPES (E.G. KAN-THERM STEEL OR GEBERIT MAPRESS)

External diameter [mm]	Wall thickness [mm]	Internal diameter [kg/r.m.]	Pipe weight [kg/r.m.]	Pipe weight with water [kg/r.m.]	Pipe weight with water and isolation 100% [kg/r.m.]	Maximum support span [m]
12	1,2	9,6	0,35	0,43	0,63	1,25
15	1,2	12,6	0,41	0,54	0,76	1,25
18	1,2	15,6	0,50	0,70	0,94	1,50
22	1,5	19	0,76	1,06	1,32	2,00
28	1,5	25	0,98	1,50	1,80	2,25
35	1,5	32	1,24	2,06	2,68	2,75
42	1,5	39	1,50	2,72	3,75	3,00
54	1,5	51	1,95	4,02	5,65	3,50
64	1,5	61	2,31	5,23	7,87	3,75
66,7	1,5	63,7	2,41	5,60	8,29	4,00
76,1	2	72,1	3,66	7,80	11,01	4,25
88,9	2	84,9	4,29	10,02	14,26	4,75
108	2	104	5,24	13,81	20,34	5,00

* Insulation material with the density of 100 kg/m³

STEEL PIPES WITH SEAM (DIN 2458)

No.	DN	External diameter [mm]	Wall thickness [mm]	Weight of 1 running meter of pipes			Maximum support span [m] *
				Pipe weight [kg/r.m.]	Pipe weight with water [kg/r.m.]	Pipe weight with water and insulation 100% [kg/r.m.]	
1	8	13,5	1,8	0,5	0,6	0,9	1,50
2		16,0	1,8	0,6	0,8	1,0	1,50
3	10	17,2	1,8	0,7	0,8	1,1	1,50
4	15	21,3	2,0	1,0	1,2	1,5	1,50
5	20	26,9	2,0	1,2	1,6	2,0	1,50
6		31,8	2,0	1,5	2,1	2,8	2,20
7	25	33,7	2,0	1,6	2,3	3,0	2,20
8	32	42,4	2,3	2,3	3,4	4,2	2,60
9		44,5	2,3	2,4	3,6	4,9	3,00
10	40	48,3	2,3	2,6	4,1	5,4	3,00
11		51,0	2,3	2,8	4,5	5,8	3,00
12		57,0	2,3	3,1	5,3	7,3	3,50
13	50	60,3	2,3	3,3	5,7	7,8	3,50
14		63,5	2,3	3,5	6,2	8,3	3,50
15		70,0	2,6	4,3	7,6	10,6	3,80
16	65	76,1	2,6	4,7	8,7	12,5	3,80
17	80	88,9	2,9	6,2	11,6	16,7	4,00
18		101,6	2,9	7,1	14,3	21,9	4,00
19		108,0	2,9	7,5	15,7	23,6	4,50
20	100	114,3	3,2	8,8	17,9	26,0	4,50
21		127,0	3,2	9,8	21,2	29,7	5,00
22		133,0	3,6	11,5	23,9	32,7	5,00
23	125	139,7	3,6	12,1	25,9	34,9	5,00
24		152,4	4,0	14,6	31,0	40,5	5,00
25		159,0	4,0	15,3	33,2	43,0	5,00
26	150	168,3	4,0	16,2	36,4	46,5	6,00
27		177,8	4,5	19,2	41,6	52,1	6,00
28		193,7	4,5	21,0	47,8	58,9	6,00
29	200	219,1	4,5	23,8	58,5	70,5	6,00
30	225	244,5	5,0	29,5	72,7	85,7	6,00
31	250	273,0	5,0	33,1	87,4	101,4	6,00
32	300	323,9	5,6	44,0	120,8	136,7	6,00
33	350	355,6	5,6	48,3	141,5	158,7	6,00
34	400	406,4	6,3	62,2	184,0	203,0	6,00
35	450	457,0	6,3	70,0	225,1	246,1	6,00
36	500	508,0	6,3	78,0	270,7	293,6	6,00
37	525	559,0	6,3	85,9	320,4	345,2	6,00
38	600	610,0	6,3	93,8	374,1	400,8	6,00
39	625	660,0	7,1	114,3	441,9	470,5	6,00

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps

** Insulation material with the density of 100 kg/m³



STAINLESS STEEL PIPES (DIN 17455)

No.	DN	External diameter [mm]	Wall thickness [mm]	Weight of 1 running meter of pipes		Maximum support span [m] *
				Pipe weight [kg/r. m.]	Pipe weight with water [kg/r. m.]	
1	10	17,2	1,0	0,4	0,9	1,25
2	15	21,3	2,0	1,0	1,3	1,50
3	20	26,9	2,0	1,3	1,8	2,00
4	25	33,7	2,0	1,6	2,5	2,25
5	32	42,4	2,0	2,0	3,4	2,75
6	40	48,3	2,0	2,3	4,1	3,00
7	50	60,3	2,0	2,9	5,8	4,00
8	65	76,1	2,0	3,7	8,3	4,25
9	80	88,9	2,0	4,4	10,6	4,75
10	100	114,3	2,6	7,3	17,5	5,00
11	125	139,7	2,6	8,9	24,3	5,00
12	150	168,3	3,0	12,4	34,9	5,00
13	200	219,1	3,0	16,2	54,0	5,00
14	250	273,0	3,0	20,3	79,0	5,00
15	300	323,9	3,0	24,1	106,7	5,00
16	400	406,4	3,0	30,3	160,3	5,00
17	500	508,0	3,0	37,9	240,9	5,00

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps.

COPPER PIPES (PN-EN 1057)

External Diameter	Wall thickness	Pipe weight	Pipe weight with water	Pipe weight with water and insulation 100% *	Maximum span support
[mm]	[mm]	[kg/r.m.]	[kg/r.m.]	[kg/r.m.]	[m]
8,0	1,0	0,20	0,22	0,42	0,60
10,0	1,0	0,25	0,30	0,50	1,00
12,0	1,0	0,31	0,39	0,59	1,25
15,0	1,0	0,39	0,52	0,74	1,25
18,0	1,0	0,48	0,68	0,92	1,50
22,0	1,0	0,59	0,90	1,16	2,00
28,0	1,5	1,11	1,60	2,15	2,25
35,0	1,5	1,41	2,21	2,82	2,75
42,0	1,5	1,70	2,90	4,01	3,00
54,0	2,0	2,91	4,87	6,70	3,50
64,0	2,0	3,47	6,29	8,86	4,00
76,1	2,0	4,14	8,23	12,15	4,25
88,9	2,0	4,86	10,52	15,49	4,75
108,0	2,5	7,37	15,71	22,24	5,00
133,0	3,0	10,90	23,57	30,89	5,00
159,0	3,0	13,09	31,47	39,61	5,00

* Insulation material with the density of 100 kg/m³

CAST IRON PIPES SML (DIN EN 877 I 19522)

No.	DN	External diameter [mm]	Wall thickness [mm]	Weight of 1 running meter of pipes		Support span [m] *
				Pipe weight [kg/r. m.]	Pipe weight with water [kg/r. m.]	
1	40	48,0	3,0	3,1	4,5	Ca. 1,5 m. (Maximum 2,0 m) Each pipe shall be supported in two places (spans shall be equilateral. Maximum 0,75 m from the joint). Moreover, each plate shall be supported.
2	50	58,0	3,5	4,3	6,4	
3	70	78,0	3,5	5,9	9,9	
4	80	83,0	3,5	6,3	10,8	
5	100	110,0	3,5	8,4	16,7	
6	125	135,0	4,0	11,8	24,5	
7	150	160,0	4,0	14,1	32,2	
8	200	210,0	5,0	23,1	54,5	
9	250	274,0	5,5	33,3	87,6	
10	300	326,0	6,0	43,2	120,8	
11	400	429,0	6,3	60,0	193,3	

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps

SEWERAGE SYSTEM PIPES FROM HDPE (GEBERIT)

No.	DN	Diameter internal [mm]	Wall thickness [mm]	Weight of 1 running meter of pipes		Support span [m] *
				Pipe weight [kg/r. m.]	Pipe weight with water [kg/r. m.]	
1	32	26,0	3,0	0,3	0,8	The span of supports shall be adjusted to guidelines from the pipes manufacturer.
2	40	34,0	3,0	0,3	1,2	
3	50	44,0	3,0	0,4	1,9	
4	56	50,0	3,0	0,5	2,4	
5	63	57,0	3,0	0,5	3,1	
6	75	69,0	3,0	0,6	4,4	
7	90	83,0	3,5	0,9	6,3	
8	110	101,4	4,3	1,4	9,4	
9	125	115,2	4,9	1,8	12,2	
10	160	147,6	6,2	2,8	20,0	
11	200	187,6	6,2	3,6	31,2	
12	250	234,4	7,8	5,6	48,8	
13	315	295,4	9,8	8,9	77,4	

HARD PVC PIPES – ROW 3 (DIN 8062)

No.	DN	Diameter internal [mm]	Wall thickness [mm]	Weight of 1 running meter of pipes		Support span [m] *
				Pipe weight [kg/r. m.]	Pipe weight with water [kg/r. m.]	
1	50	46,4	1,8	0,4	2,1	0,50
2	63	59,2	1,9	0,5	3,3	0,60
3	75	70,6	2,2	0,7	4,6	0,75
4	90	84,6	2,7	1,1	6,7	0,90
5	110	103,6	3,2	1,6	10,0	1,10
6	125	117,6	3,7	2,1	12,9	1,25
7	160	150,6	4,7	3,4	21,2	1,60

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps

PIPES PP

KAN-THERM PIPES PP

External diameter	Wall thickness	Internal diameter	Uniform PN20 (S2.5/SDR6)		PN20 Stabi AL		PN20 Glass	
			Pipe weight	Pipe weight with water	Pipe weight	Pipe weight with water	Pipe weight	Pipe weight with water
[mm]	[mm]	[mm]	[kg/r.m.]	[kg/r.m.]	[kg/r.m.]	[kg/r.m.]	[kg/r.m.]	[kg/r.m.]
16	2,7	10,6	0,11	0,20	0,16	0,25	-	-
20	3,4	13,2	0,17	0,31	0,22	0,36	0,18	0,32
25	4,2	16,6	0,27	0,49	0,33	0,55	0,29	0,51
32	5,4	21,2	0,43	0,78	0,52	0,87	0,46	0,81
40	6,7	26,6	0,67	1,22	0,77	1,32	0,68	1,23
50	8,3	33,4	1,05	1,93	1,16	2,04	1,00	1,88
63	10,5	42,0	1,65	3,03	1,77	3,15	1,55	2,94
75	12,5	50,0	2,34	4,30	2,78	4,74	2,34	4,30
90	15,0	60,0	3,36	6,19	3,59	6,42	3,36	6,19
110	18,3	73,4	5,04	9,27	5,34	9,57	4,90	9,13

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps.

MAXIMUM DISTANCES OF THE SUPPORTS FOR UNIFORM PIPES IN KAN-THERM PP SYSTEM

T [°C]	External pipe diameter D [mm]									
	16	20	25	32	40	50	63	75	90	110
Maximum support span [m]										
20	0,50	0,60	0,70	0,90	1,00	1,20	1,40	1,50	1,60	1,80
30	0,50	0,60	0,70	0,90	1,00	1,20	1,40	1,50	1,60	1,80
40	0,50	0,60	0,65	0,80	0,90	1,10	1,30	1,40	1,50	1,70
50	0,50	0,60	0,65	0,80	0,90	1,10	1,30	1,40	1,50	1,70
60	0,50	0,55	0,60	0,75	0,85	1,00	1,15	1,25	1,40	1,60
70	0,50	0,50	0,60	0,70	0,80	0,95	1,05	1,15	1,25	1,40

MAXIMUM DISTANCES OF THE SUPPORTS FOR UNIFORM PIPES IN KAN-THERM PP STABI SYSTEM

T [°C]	External pipe diameter D [mm]									
	16	20	25	32	40	50	63	75	90	110
Maximum support span [m]										
20	1,00	1,20	1,30	1,50	1,70	1,90	2,10	2,20	2,30	2,50
30	1,00	1,20	1,30	1,50	1,70	1,90	2,10	2,20	2,30	2,40
40	1,00	1,10	1,20	1,40	1,60	1,80	2,00	2,10	2,20	2,30
50	1,00	1,10	1,20	1,40	1,60	1,80	2,00	2,10	2,20	2,10
60	0,80	1,00	1,10	1,30	1,50	1,70	1,90	2,00	2,10	2,00
70	0,70	0,90	1,00	1,20	1,40	1,60	1,80	1,90	2,00	2,00

PIPES PP

MAXIMUM DISTANCES OF THE SUPPORTS FOR UNIFORM PIPES IN KAN-THERM PP GLASS SYSTEM

T [°C]	External pipe diameter D [mm]								
	20	25	32	40	50	63	75	90	110
Maximum support span [m]									
0	1,20	1,40	1,60	1,80	2,05	2,30	2,45	2,60	2,90
20	0,90	1,05	1,20	1,35	1,55	1,75	1,85	1,95	2,15
30	0,90	1,05	1,20	1,35	1,55	1,75	1,85	1,95	2,10
40	0,85	0,95	1,10	1,25	1,45	1,65	1,75	1,85	2,00
50	0,85	0,95	1,10	1,25	1,45	1,65	1,75	1,85	1,90
60	0,80	0,90	1,05	1,20	1,35	1,55	1,65	1,75	1,80
70	0,70	0,80	0,95	1,10	1,30	1,45	1,55	1,65	1,70

MULTILAYER PIPES PE-XC/AL/PE (TECEflex)

L.p.	Size	External diameter [mm]	Wall thickness [mm]	1 running meter of pipe weight		Support span [m] *
				Pipe weight [kg/r.m.]	Pipe weight with water [kg/r.m.]	
1	14	15	2,6	0,1	0,2	1,00
2	16	17	2,75	0,1	0,3	1,00
3	20	21	3,45	0,2	0,4	1,15
4	25	26	4,0	0,3	0,5	1,30
5	32	32	4,0	0,4	0,9	1,50
6	40	40	4,0	0,6	1,4	1,80
7	50	50	4,5	0,8	2,1	2,00
8	63	63	6,0	1,3	3,3	2,00

* When selecting supports, it is necessary to take into account the load-bearing capacity of pipe clamps.



VENTILATION ROLL PIPES OF SPIRO TYPE

No.	DN	Metal sheet 0,5 mm [kg/r.m.]	Metal sheet 0,6 mm [kg/r.m.]	Metal sheet 0,8 mm [kg/r.m.]	Metal sheet 1,0 mm [kg/r.m.]	Metal sheet 1,2 mm [kg/r.m.]
1	80	1,12				
2	100	1,41	1,69			
3	125	1,76	2,11			
4	140	1,97	2,36			
5	150	2,11	2,53			
6	160	2,25	2,70			
7	180	2,53	3,04			
8	200	2,81	3,38	4,50		
9	224	3,10	3,78	5,04		
10	250	3,85	4,22	5,63		
11	280		4,73	6,30		
12	300		5,07	6,75		
13	315		5,32	7,09		
14	355		5,99	7,99		
15	400		6,75	9,01	11,26	13,77
16	450			10,13	12,66	15,49
17	500			11,26	14,07	17,21
18	560			13,51	15,76	19,28
19	600			14,18	16,87	20,65
20	630			15,99	17,73	21,69
21	710			18,01	19,98	24,44
22	800				22,55	27,54
23	900				25,33	30,98
24	1000				28,14	31,50
25	1120				31,52	35,20
26	1250				35,18	39,40

ZINC-PLATED VENTILATION DUCTS IN KG/M WITHOUT INSULATION

support span [m]

1

Metal sheet 0,6								Metal sheet 0,8							Metal sheet 1,0						Metal sheet 1,2					
300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2750	3000	Width/height	
5,7	6,6	7,5	8,5	9,4	10,4	11,3	12,2	17,6	18,8	20,1	21,4	22,6	23,9	31,4	33,0	34,5	36,1	37,7	39,3	49,0	50,9	52,8	57,5	62,2	300	
	7,5	8,5	9,4	10,4	11,3	12,2	13,2	18,8	20,1	21,4	22,6	23,9	25,1	33,0	34,5	36,1	37,7	39,3	40,8	50,9	52,8	54,6	59,3	64,1	400	
		9,4	10,4	11,3	12,2	13,2	14,1	20,1	21,4	22,6	23,9	25,1	26,4	34,5	36,1	37,7	39,3	40,8	42,4	52,8	54,6	56,5	61,2	65,9	500	
			11,3	12,2	13,2	14,1	15,1	21,4	22,6	23,9	25,1	26,4	27,6	36,1	37,7	39,3	40,8	42,4	44,0	54,6	56,5	58,4	63,1	67,8	600	
				13,2	14,1	15,1	16,0	22,6	23,9	25,1	26,4	27,6	28,9	37,7	39,3	40,8	42,4	44,0	45,5	56,5	58,4	60,3	65,0	69,7	700	
					15,1	16,0	17,0	23,9	25,1	26,4	27,6	28,9	30,1	39,3	40,8	42,4	44,0	45,5	47,1	58,4	60,3	62,2	66,9	71,6	800	
						17,0	17,9	25,1	26,4	27,6	28,9	30,1	31,4	40,8	42,4	44,0	45,5	47,1	48,7	60,3	62,2	64,1	68,8	73,5	900	
							18,8	26,4	27,6	28,9	30,1	31,4	32,7	42,4	44,0	45,5	47,1	48,7	50,2	62,2	64,1	65,9	70,7	75,4	1000	
								27,6	28,9	30,1	31,4	32,7	33,9	44,0	45,5	47,1	48,7	50,2	51,8	64,1	65,9	67,8	72,5	77,2	1100	
									30,1	31,4	32,7	33,9	35,2	45,5	47,1	48,7	50,2	51,8	53,4	65,9	67,8	69,7	74,4	79,1	1200	
										32,7	33,9	35,2	36,4	47,1	48,7	50,2	51,8	53,4	55,0	67,8	69,7	71,6	76,3	81,0	1300	
											35,2	36,4	37,7	48,7	50,2	51,8	53,4	55,0	56,5	69,7	71,6	73,5	78,2	82,9	1400	
												37,7	38,9	50,2	51,8	53,4	55,0	56,5	58,1	71,6	73,5	75,4	80,1	84,8	1500	
															53,4	55,0	56,5	58,1	59,7	61,2	75,4	77,2	79,1	83,8	1700	
																56,5	58,1	59,7	61,2	62,8	77,2	79,1	81,0	85,7	1800	
																	59,7	61,2	62,8	64,4	79,1	81,0	82,9	87,6	1900	
																		62,8	64,4	65,9	81,0	82,9	84,8	89,5	2000	
																			65,9	67,5	82,9	84,8	86,7	91,4	2100	
																				69,1	84,8	86,7	88,5	93,3	98,0	2200
																					86,7	88,5	90,4	95,1	99,9	2300
																						90,4	92,3	97,0	101,7	2400
																							94,2	98,9	103,6	2500
																								103,6	108,3	2750
																									113,0	3000

The given values shall be treated as approximate ones taking into account the values handed over by the duct supplier.



GALVANISED VENTILATION DUCTS IN KG/M WITH 50 MM THICK INSULATION (37 KG/M³)

metal sheet thickness [mm]								50		insulation weight [kg/m²]								37		support spacing [m]						1		
Metal sheet 0.6								Metal sheet 0.8								Metal sheet 1.0						Metal sheet 1.2						Width/ height
300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2750	3000				
8.2	9.6	10.9	12.2	13.5	14.8	16.1	17.4	23.1	24.8	26.4	28.0	29.6	31.3	39.2	41.1	43.1	45.0	46.9	48.9	59.0	61.2	63.5	69.1	74.8	300			
	10.9	12.2	13.5	14.8	16.1	17.4	18.7	24.8	26.4	28.0	29.6	31.3	32.9	41.1	43.1	45.0	46.9	48.9	50.8	61.2	63.5	65.7	71.4	77.0	400			
		13.5	14.8	16.1	17.4	18.7	20.1	26.4	28.0	29.6	31.3	32.9	34.5	43.1	45.0	46.9	48.9	50.8	52.8	63.5	65.7	68.0	73.6	79.3	500			
			16.1	17.4	18.7	20.1	21.4	28.0	29.6	31.3	32.9	34.5	36.1	45.0	46.9	48.9	50.8	52.8	54.7	65.7	68.0	70.2	75.9	81.5	600			
				18.7	20.1	21.4	22.7	29.6	31.3	32.9	34.5	36.1	37.8	46.9	48.9	50.8	52.8	54.7	56.6	68.0	70.2	72.5	78.1	83.8	700			
					21.4	22.7	24.0	31.3	32.9	34.5	36.1	37.8	39.4	48.9	50.8	52.8	54.7	56.6	58.6	70.2	72.5	74.8	80.4	86.0	800			
						24.0	25.3	32.9	34.5	36.1	37.8	39.4	41.0	50.8	52.8	54.7	56.6	58.6	60.5	72.5	74.8	77.0	82.6	88.3	900			
							26.6	34.5	36.1	37.8	39.4	41.0	42.6	52.8	54.7	56.6	58.6	60.5	62.5	74.8	77.0	79.3	84.9	90.5	1000			
								36.1	37.8	39.4	41.0	42.6	44.3	54.7	56.6	58.6	60.5	62.5	64.4	77.0	79.3	81.5	87.1	92.8	1100			
									39.4	41.0	42.6	44.3	45.9	56.6	58.6	60.5	62.5	64.4	66.3	79.3	81.5	83.8	89.4	95.0	1200			
										42.6	44.3	45.9	47.5	58.6	60.5	62.5	64.4	66.3	68.3	81.5	83.8	86.0	91.7	97.3	1300			
											45.9	47.5	49.2	60.5	62.5	64.4	66.3	68.3	70.2	83.8	86.0	88.3	93.9	99.5	1400			
												49.2	50.8	62.5	64.4	66.3	68.3	70.2	72.2	86.0	88.3	90.5	96.2	101.8	1500			
														52.4	64.4	66.3	68.3	70.2	72.2	74.1	88.3	90.5	92.8	98.4	104.1	1600		
															66.3	68.3	70.2	72.2	74.1	76.0	90.5	92.8	95.0	100.7	106.3	1700		
																70.2	72.2	74.1	76.0	78.0	92.8	95.0	97.3	102.9	108.6	1800		
																	74.1	76.0	78.0	79.9	95.0	97.3	99.5	105.2	110.8	1900		
																		78.0	79.9	81.9	97.3	99.5	101.8	107.4	113.1	2000		
																			81.9	83.8	99.5	101.8	104.1	109.7	115.3	2100		
																				85.7	101.8	104.1	106.3	111.9	117.6	2200		
																					104.1	106.3	108.6	114.2	119.8	2300		
																						108.6	110.8	116.5	122.1	2400		
																							113.1	118.7	124.3	2500		
																								124.3	130.0	2750		
																									135.6	3000		

The values given should be regarded as indicative, taking into account the values provided by the channel supplier.



GALVANISED VENTILATION DUCTS IN KG/M WITH 100 MM THICK INSULATION (37 KG/M³) WITH JACKET 0.5 MM THICK GALVANISED SHEET METAL

metal sheet thickness [mm]				0,6				metal sheet weight [kg/m²]				7850				support spacing [m]				1								
Metal sheet 0,6								Metal sheet 0,8								Metal sheet 1,0						Metal sheet 1,2						Width/ height
300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	2750	3000				
19,1	21,7	24,4	27,0	29,6	32,2	34,9	37,5	44,5	47,4	50,4	53,3	56,2	59,2	68,4	71,7	74,9	78,2	81,4	84,7	96,1	99,6	103,2	112,1	121,0	300			
	24,4	27,0	29,6	32,2	34,9	37,5	40,1	47,4	50,4	53,3	56,2	59,2	62,1	71,7	74,9	78,2	81,4	84,7	87,9	99,6	103,2	106,8	115,7	124,6	400			
		29,6	32,2	34,9	37,5	40,1	42,7	50,4	53,3	56,2	59,2	62,1	65,1	74,9	78,2	81,4	84,7	87,9	91,2	103,2	106,8	110,3	119,3	128,2	500			
			34,9	37,5	40,1	42,7	45,3	53,3	56,2	59,2	62,1	65,1	68,0	78,2	81,4	84,7	87,9	91,2	94,4	106,8	110,3	113,9	122,8	131,7	600			
				40,1	42,7	45,3	48,0	56,2	59,2	62,1	65,1	68,0	70,9	81,4	84,7	87,9	91,2	94,4	97,7	110,3	113,9	117,5	126,4	135,3	700			
					45,3	48,0	50,6	59,2	62,1	65,1	68,0	70,9	73,9	84,7	87,9	91,2	94,4	97,7	100,9	113,9	117,5	121,0	130,0	138,9	800			
						50,6	53,2	62,1	65,1	68,0	70,9	73,9	76,8	87,9	91,2	94,4	97,7	100,9	104,2	117,5	121,0	124,6	133,5	142,4	900			
							55,8	65,1	68,0	70,9	73,9	76,8	79,8	91,2	94,4	97,7	100,9	104,2	107,4	121,0	124,6	128,2	137,1	146,0	1000			
								68,0	70,9	73,9	76,8	79,8	82,7	94,4	97,7	100,9	104,2	107,4	110,7	124,6	128,2	131,7	140,7	149,6	1100			
									73,9	76,8	79,8	82,7	85,6	97,7	100,9	104,2	107,4	110,7	113,9	128,2	131,7	135,3	144,2	153,1	1200			
										79,8	82,7	85,6	88,6	100,9	104,2	107,4	110,7	113,9	117,2	131,7	135,3	138,9	147,8	156,7	1300			
											85,6	88,6	91,5	104,2	107,4	110,7	113,9	117,2	120,4	135,3	138,9	142,4	151,4	160,3	1400			
												91,5	94,4	107,4	110,7	113,9	117,2	120,4	123,7	138,9	142,4	146,0	154,9	163,8	1500			
													97,4	110,7	113,9	117,2	120,4	123,7	126,9	142,4	146,0	149,6	158,5	167,4	1600			
														113,9	117,2	120,4	123,7	126,9	130,2	146,0	149,6	153,1	162,1	171,0	1700			
															120,4	123,7	126,9	130,2	133,4	149,6	153,1	156,7	165,6	174,5	1800			
																126,9	130,2	133,4	136,7	153,1	156,7	160,3	169,2	178,1	1900			
																	133,4	136,7	139,9	156,7	160,3	163,8	172,7	181,7	2000			
																		139,9	143,2	160,3	163,8	167,4	176,3	185,2	2100			
																			146,5	163,8	167,4	171,0	179,9	188,8	2200			
																				167,4	171,0	174,5	183,4	192,4	2300			
																					174,5	178,1	187,0	195,9	2400			
																						181,7	190,6	199,5	2500			
																							199,5	208,4	2750			
																								217,3	3000			

The values given should be regarded as indicative, taking into account the values provided by the channel supplier.



LOAD-BEARING CAPACITY OF CHANNELS LOADED WITH ONE FOCUSED FORCE

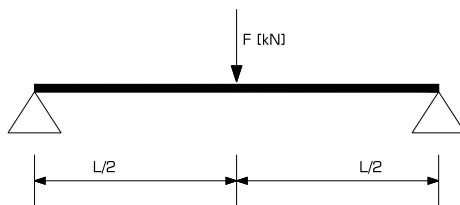
Span of supports L	SZ-W1,25	SZ-X1,25	SZ-C1,5	SZ-A1,5	SZ-A2,0	SZ-MG1,5	SZ-MG2,0	SZ-MF1,5	SZ-MF2,0	SZ-MF2,5	SZ-MF3,0
	28x18x1,25 mm	28x35x1,25 mm	30x16x1,5 mm	30x30x1,5 mm	30x30x2,0 mm	41x21x2,0 mm	41x21x2,0 mm	41x41x1,5 mm	41x41x2,0 mm	41x41x2,5 mm	41x41x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	0,85	2,39	0,95	2,46	3,05	2,00	2,40	5,46	6,75	7,83	8,72
500	0,42	1,19	0,47	1,23	1,53	1,00	1,20	2,73	3,37	3,91	4,36
750	0,28	0,80	0,28	0,82	1,02	0,67	0,80	1,82	2,25	2,61	2,91
1000	0,16	0,60	0,16	0,61	0,76	0,42	0,51	1,36	1,69	1,96	2,18
1250	0,10	0,48	0,10	0,48	0,59	0,27	0,32	1,09	1,35	1,57	1,74
1500	0,07	0,38	0,07	0,33	0,41	0,19	0,23	0,91	1,12	1,30	1,45
1750	0,05	0,28	0,05	0,24	0,30	0,14	0,17	0,71	0,88	1,03	1,16
2000	0,04	0,21	0,04	0,19	0,23	0,11	0,13	0,54	0,68	0,79	0,89
2250	-	-	-	-	-	-	-	0,43	0,53	0,62	0,70
2500	-	-	-	-	-	-	-	0,35	0,43	0,51	0,57
2750	-	-	-	-	-	-	-	0,29	0,36	0,42	0,47
3000	-	-	-	-	-	-	-	0,24	0,30	0,35	0,39
3250	-	-	-	-	-	-	-	-	-	-	-
3500	-	-	-	-	-	-	-	-	-	-	-
3750	-	-	-	-	-	-	-	-	-	-	-
4000	-	-	-	-	-	-	-	-	-	-	-
4250	-	-	-	-	-	-	-	-	-	-	-
4500	-	-	-	-	-	-	-	-	-	-	-
4750	-	-	-	-	-	-	-	-	-	-	-
5000	-	-	-	-	-	-	-	-	-	-	-
5250	-	-	-	-	-	-	-	-	-	-	-
5500	-	-	-	-	-	-	-	-	-	-	-
5750	-	-	-	-	-	-	-	-	-	-	-
6000	-	-	-	-	-	-	-	-	-	-	-

Span of supports L	SZ-MH2,5	SZ-MI2,5	SZ-MB3,0	SZ-ME3,0	SD-MG2,0	SD-MF2,0	SD-MF2,5	SD-MF3,0	SD-MFH2,5	SD-MH2,5	SD-MB3,0	SD-ME3,0
	41x62x2,5 mm	41x82x2,5 mm	50x40x3,0 mm	50x80x3,0 mm	41x42x2,0 mm	41x82x2,0 mm	41x82x2,5 mm	41x82x3,0 mm	41x103x2,5 mm	41x124x2,5 mm	50x80x3,0 mm	50x160x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	15,21	24,17	9,93	29,42	-	-	-	-	-	-	-	-
500	7,61	12,09	4,97	14,71	-	-	-	-	-	-	-	-
750	5,07	8,06	3,31	9,81	-	-	-	-	-	-	-	-
1000	3,80	6,04	2,48	7,36	1,72	5,03	5,94	6,76	8,59	11,98	7,20	23,20
1250	3,04	4,83	1,99	5,89	1,38	4,02	4,75	5,41	6,87	9,58	5,76	18,56
1500	2,54	4,03	1,66	4,90	1,15	3,35	3,96	4,51	5,73	7,99	4,80	15,47
1750	2,17	3,45	1,33	4,20	0,92	2,87	3,39	3,86	4,91	6,85	4,11	13,26
2000	1,90	3,02	1,02	3,68	0,70	2,51	2,97	3,38	4,30	5,99	3,60	11,60
2250	1,69	2,69	0,80	3,27	0,56	2,23	2,64	3,01	3,82	5,32	3,20	10,31
2500	1,48	2,42	0,65	2,94	0,45	2,01	2,38	2,70	3,44	4,79	2,88	9,28
2750	1,22	2,20	0,54	2,68	0,37	1,83	2,16	2,46	3,12	4,36	2,62	8,44
3000	1,03	2,01	0,45	2,45	0,31	1,68	1,98	2,25	2,86	3,99	2,40	7,73
3250	0,87	1,82	0,39	2,19	-	1,51	1,79	2,04	2,64	3,69	2,12	7,14
3500	0,75	1,58	0,33	1,89	-	1,31	1,54	1,76	2,46	3,42	1,83	6,63
3750	0,66	1,37	0,29	1,65	-	1,14	1,34	1,53	2,29	3,20	1,59	6,19
4000	0,58	1,21	0,25	1,45	-	1,00	1,18	1,35	2,15	3,00	1,40	5,80
4250	0,51	1,07	0,23	1,28	-	0,89	1,05	1,19	1,96	2,82	1,24	5,46
4500	0,46	1,95	0,20	1,14	-	0,79	0,93	1,06	1,75	2,66	1,10	5,16
4750	0,41	0,86	0,18	1,03	-	0,71	0,84	0,95	1,57	2,52	0,99	4,88
5000	0,37	0,77	0,16	0,93	-	0,64	0,76	0,86	1,41	2,31	0,89	4,64
5250	0,34	0,70	0,15	0,84	-	0,58	0,69	0,78	1,28	2,09	0,81	4,42
5500	0,31	0,64	0,14	0,77	-	0,53	0,63	0,71	1,17	1,91	0,74	4,22
5750	0,28	0,58	0,12	0,70	-	0,48	0,57	0,65	1,07	1,74	0,68	4,04
6000	0,26	0,54	0,11	0,64	-	0,44	0,53	0,60	0,98	1,60	0,62	3,87

The table was prepared in accordance with the guidelines RAL GZ-655. The given values take into account:

1. Safety coefficient; – 1.54
2. Permissible bending – $L/200$
3. Module E – 210 000 N/mm²

The table of permissible calculated load-bearing capacities of channels supported bilaterally loaded with F force focused in point $L/2$.





LOAD-BEARING CAPACITY OF CHANNELS LOADED WITH TWO FOCUSED FORCES

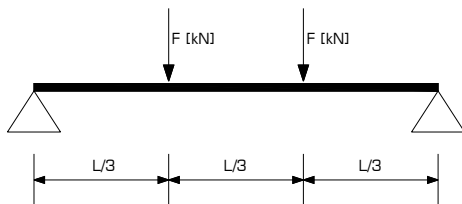
Span of supports L	SZ-W1,25	SZ-X1,25	SZ-C1,5	SZ-A1,5	SZ-A2,0	SZ-MG1,5	SZ-MG2,0	SZ-MF1,5	SZ-MF2,0	SZ-MF2,5	SZ-MF3,0
	28x18x1,25 mm	28x35x1,25 mm	30x16x1,5 mm	30x30x1,5 mm	30x30x2,0 mm	41x21x2,0 mm	41x21x2,0 mm	41x41x1,5 mm	41x41x2,0 mm	41x41x2,5 mm	41x41x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	0,63	1,79	0,71	1,84	2,29	1,50	1,80	4,09	5,06	5,87	6,54
500	0,32	0,89	0,36	0,92	1,14	0,75	0,90	2,05	2,53	2,93	3,27
750	0,18	0,60	0,17	0,61	0,76	0,47	0,57	1,36	1,69	1,96	2,18
1000	0,10	0,45	0,10	0,46	0,57	0,26	0,32	1,02	1,27	1,47	1,64
1250	0,06	0,35	0,06	0,30	0,37	0,17	0,20	0,82	1,01	1,17	1,31
1500	0,05	0,24	0,04	0,21	0,26	0,12	0,14	0,61	0,76	0,89	1,00
1750	0,03	0,18	0,03	0,15	0,19	0,09	0,10	0,45	0,56	0,65	0,73
2000	0,03	0,14	0,02	0,12	0,15	0,07	0,08	0,34	0,43	0,50	0,56
2250	-	-	-	-	-	-	-	0,27	0,34	0,40	0,44
2500	-	-	-	-	-	-	-	0,22	0,27	0,32	0,36
2750	-	-	-	-	-	-	-	0,18	0,23	0,26	0,30
3000	-	-	-	-	-	-	-	0,15	0,19	0,22	0,25
3250	-	-	-	-	-	-	-	-	-	-	-
3500	-	-	-	-	-	-	-	-	-	-	-
3750	-	-	-	-	-	-	-	-	-	-	-
4000	-	-	-	-	-	-	-	-	-	-	-
4250	-	-	-	-	-	-	-	-	-	-	-
4500	-	-	-	-	-	-	-	-	-	-	-
4750	-	-	-	-	-	-	-	-	-	-	-
5000	-	-	-	-	-	-	-	-	-	-	-
5250	-	-	-	-	-	-	-	-	-	-	-
5500	-	-	-	-	-	-	-	-	-	-	-
5750	-	-	-	-	-	-	-	-	-	-	-
6000	-	-	-	-	-	-	-	-	-	-	-

Span of supports L	SZ-MH2,5	SZ-MI2,5	SZ-MB3,0	SZ-ME3,0	SD-MG2,0	SD-MF2,0	SD-MF2,5	SD-MF3,0	SD-MFH2,5	SD-MH2,5	SD-MB3,0	SD-ME3,0
	41x62x2,5 mm	41x82x2,5 mm	50x40x3,0 mm	50x80x3,0 mm	41x42x2,0 mm	41x82x2,0 mm	41x82x2,5 mm	41x82x3,0 mm	41x103x2,5 mm	41x124x2,5 mm	50x80x3,0 mm	50x160x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	11,41	18,13	7,45	22,07	-	-	-	-	-	-	-	-
500	5,70	9,06	3,72	11,03	-	-	-	-	-	-	-	-
750	3,80	6,04	2,48	7,36	-	-	-	-	-	-	-	-
1000	2,85	4,53	1,86	5,52	1,29	3,77	4,45	5,07	6,44	8,98	5,40	17,40
1250	2,28	3,63	1,49	4,41	1,03	3,02	3,56	4,06	5,16	7,19	4,32	13,92
1500	1,90	3,02	1,14	3,68	0,79	2,51	2,97	3,38	4,30	5,99	3,60	11,60
1750	1,63	2,59	0,84	3,15	0,58	2,15	2,55	2,90	3,68	5,13	3,09	9,94
2000	1,43	2,27	0,64	2,76	0,44	1,88	2,23	2,54	3,22	4,49	2,70	8,70
2250	1,15	2,01	0,51	2,45	0,35	1,68	1,98	2,25	2,86	3,99	2,40	7,73
2500	0,93	1,81	0,41	2,21	0,28	1,51	1,78	2,03	2,58	3,59	2,16	6,96
2750	0,77	1,62	0,34	1,94	0,24	1,34	1,58	1,80	2,34	3,27	1,87	6,33
3000	0,65	1,36	0,29	1,63	0,20	1,12	1,33	1,51	2,15	2,99	1,57	5,80
3250	0,55	1,16	0,24	1,39	-	0,96	1,13	1,29	1,98	2,76	1,34	5,35
3500	0,48	1,00	0,21	1,20	-	0,83	0,98	1,11	1,83	2,57	1,15	4,97
3750	0,42	0,87	0,18	1,04	-	0,72	0,85	0,97	1,59	2,40	1,01	4,64
4000	0,36	0,76	0,16	0,92	-	0,63	0,75	0,85	1,40	2,25	0,88	4,35
4250	0,32	0,68	0,14	0,81	-	0,56	0,66	0,75	1,24	2,02	0,78	4,09
4500	0,29	0,60	0,13	0,72	-	0,50	0,59	0,67	1,10	1,80	0,70	3,87
4750	0,26	0,54	0,11	0,65	-	0,45	0,53	0,60	0,99	1,62	0,63	3,66
5000	0,23	0,49	0,10	0,59	-	0,40	0,48	0,54	0,89	1,46	0,57	3,48
5250	0,21	0,44	0,09	0,53	-	0,37	0,43	0,49	0,81	1,32	0,51	3,31
5500	0,19	0,40	0,09	0,48	-	0,33	0,40	0,45	0,74	1,21	0,47	3,01
5750	0,18	0,37	0,08	0,44	-	0,31	0,36	0,41	0,68	1,10	0,43	2,76
6000	0,16	0,34	0,07	0,41	-	0,28	0,33	0,38	0,62	1,01	0,39	2,53

The table was prepared in accordance with the guidelines RAL GZ-655. The given values take into account:

1. Safety coefficient: – 1,54
2. Permissible bending – $L/200$.
3. Module E – 210,000 N/mm²

The table of permissible calculated load-bearing capacities of channels supported bilaterally loaded with two F forces focused in the span $L/3$.





LOAD-BEARING CAPACITY OF CHANNELS LOADED WITH EVELNY DISTRIBUTED FORCE

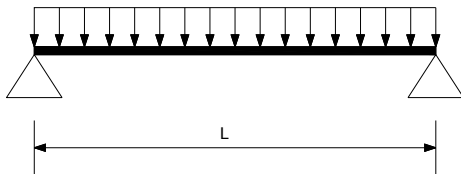
Span of supports L	SZ-W1,25	SZ-X1,25	SZ-C1,5	SZ-A1,5	SZ-A2,0	SZ-MG1,5	SZ-MG2,0	SZ-MF1,5	SZ-MF2,0	SZ-MF2,5	SZ-MF3,0
	28x18x1,25 mm	28x35x1,25 mm	30x16x1,5 mm	30x30x1,5 mm	30x30x2,0 mm	41x21x2,0 mm	41x21x2,0 mm	41x41x1,5 mm	41x41x2,0 mm	41x41x2,5 mm	41x41x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	1,69	4,77	1,90	4,91	6,10	4,00	4,79	10,91	13,49	15,65	17,44
500	0,84	2,39	0,95	2,46	3,05	2,00	2,40	5,46	6,75	7,82	8,72
750	0,46	1,59	0,44	1,64	2,03	1,19	1,44	3,64	4,50	5,22	5,81
1000	0,26	1,19	0,25	1,19	1,48	0,67	0,81	2,73	3,37	3,91	4,36
1250	0,16	0,88	0,16	0,76	0,94	0,43	0,52	2,18	2,70	3,13	3,49
1500	0,11	0,61	0,11	0,53	0,66	0,30	0,36	1,55	1,92	2,25	2,52
1750	0,08	0,45	0,08	0,39	0,48	0,22	0,26	1,14	1,41	1,65	1,85
2000	0,06	0,34	0,06	0,30	0,37	0,17	0,20	0,87	1,08	1,26	1,42
2250	-	-	-	-	-	-	-	0,69	0,85	1,00	1,12
2500	-	-	-	-	-	-	-	0,56	0,69	0,81	0,91
2750	-	-	-	-	-	-	-	0,46	0,57	0,67	0,75
3000	-	-	-	-	-	-	-	0,39	0,48	0,56	0,63
3250	-	-	-	-	-	-	-	-	-	-	-
3500	-	-	-	-	-	-	-	-	-	-	-
3750	-	-	-	-	-	-	-	-	-	-	-
4000	-	-	-	-	-	-	-	-	-	-	-
4250	-	-	-	-	-	-	-	-	-	-	-
4500	-	-	-	-	-	-	-	-	-	-	-
4750	-	-	-	-	-	-	-	-	-	-	-
5000	-	-	-	-	-	-	-	-	-	-	-
5250	-	-	-	-	-	-	-	-	-	-	-
5500	-	-	-	-	-	-	-	-	-	-	-
5750	-	-	-	-	-	-	-	-	-	-	-
6000	-	-	-	-	-	-	-	-	-	-	-

Span of supports L	SZ-MH2,5	SZ-MI2,5	SZ-MB3,0	SZ-ME3,0	SD-MG2,0	SD-MF2,0	SD-MF2,5	SD-MF3,0	SD-MFH2,5	SD-MH2,5	SD-MB3,0	SD-ME3,0
	41x62x2,5 mm	41x82x2,5 mm	50x40x3,0 mm	50x80x3,0 mm	41x42x2,0 mm	41x82x2,0 mm	41x82x2,5 mm	41x82x3,0 mm	41x103x2,5 mm	41x124x2,5 mm	50x80x3,0 mm	50x160x3,0 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	30,42	48,34	19,86	58,85	-	-	-	-	-	-	-	-
500	15,21	24,17	9,93	29,42	-	-	-	-	-	-	-	-
750	10,14	16,11	6,62	19,62	-	-	-	-	-	-	-	-
1000	7,61	12,09	4,97	14,71	3,45	10,05	11,88	13,52	17,18	23,96	14,40	46,40
1250	6,08	9,67	3,97	11,77	2,76	8,04	9,50	10,82	13,75	19,17	11,52	37,12
1500	5,07	8,06	2,89	9,81	2,00	6,70	7,92	9,01	11,46	15,97	9,60	30,93
1750	4,35	6,91	2,13	8,41	1,47	5,74	6,79	7,73	9,82	13,69	8,23	26,51
2000	3,69	6,04	1,63	7,36	1,12	5,03	5,94	6,76	8,59	11,98	7,20	23,20
2250	2,91	5,37	1,29	6,54	0,89	4,47	5,28	6,01	7,64	10,65	6,40	20,62
2500	2,36	4,83	1,04	5,88	0,72	4,02	4,75	5,41	6,87	9,58	5,72	18,56
2750	1,95	4,09	0,86	4,90	0,59	3,38	4,00	4,55	6,25	8,71	4,73	16,87
3000	1,64	3,43	0,72	4,12	0,50	2,84	3,36	3,82	5,73	7,99	3,97	15,47
3250	1,40	2,93	0,62	3,51	-	2,42	2,86	3,26	5,29	7,37	3,39	14,28
3500	1,20	2,52	0,53	3,02	-	2,09	2,47	2,81	4,62	6,85	2,92	13,26
3750	1,05	2,20	0,46	2,63	-	1,82	2,15	2,45	4,02	6,39	2,54	12,37
4000	0,92	1,93	0,41	2,32	-	1,60	1,89	2,15	3,53	5,76	2,24	11,60
4250	0,82	1,71	0,36	2,05	-	1,42	1,67	1,91	3,13	5,11	1,98	10,92
4500	0,73	1,53	0,32	1,83	-	1,26	1,49	1,70	2,79	4,55	1,77	10,31
4750	0,65	1,37	0,29	1,64	-	1,13	1,34	1,53	2,51	4,09	1,59	9,77
5000	0,59	1,24	0,26	1,48	-	1,02	1,21	1,38	2,26	3,69	1,43	9,22
5250	0,54	1,12	0,24	1,34	-	0,93	1,10	1,25	2,05	3,35	1,30	8,36
5500	0,49	1,02	0,22	1,22	-	0,85	1,00	1,14	1,87	3,05	1,18	7,62
5750	0,45	0,93	0,20	1,12	-	0,77	0,91	1,04	1,71	2,79	1,08	6,97
6000	0,41	0,86	0,18	1,03	-	0,71	0,84	0,96	1,57	2,56	0,99	6,40

The table was prepared in accordance with the guidelines RAL GZ-655. The given values take into account:

1. Safety coefficient: – 1.54
2. Permissible bending – $L/200$.
3. Module $E = 210,000 \text{ N/mm}^2$

The table of permissible calculated load-bearing capacities of bilaterally supported sections loaded with evenly distributed force.



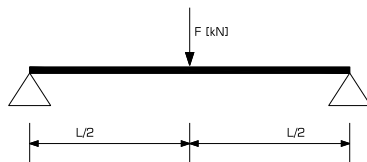
LOAD-BEARING CAPACITY OF STAINLESS STEEL CHANNELS LOADED WITH ONE FOCUSED FORCE

Span of supports L	N-SZ-C1,5	N-SZ-A1,5	N-SZ-A2,0	N-SZ-MF2,5	N-SZ-MH2,5	N-SD-MF2,5	N-SD-MFH2,5	N-SD-MH2,5
	30x16x1,5 mm	30x30x1,5 mm	30x30x2,0 mm	41x41x2,5 mm	41x62x2,5 mm	41x82x2,5 mm	41x103x2,5 mm	41x124x2,5 mm
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
250	0,87	2,26	2,81	7,20	13,99	-	-	-
500	0,44	1,13	1,40	3,60	7,00	-	-	-
750	0,26	0,75	0,94	2,40	4,66	-	-	-
1000	0,15	0,57	0,70	1,80	3,50	5,46	7,90	11,02
1250	0,10	0,45	0,56	1,44	2,80	4,37	6,32	8,82
1500	0,07	0,31	0,39	1,20	2,33	3,64	5,27	7,35
1750	0,05	0,23	0,29	0,98	2,00	3,12	4,52	6,30
2000	0,04	0,18	0,22	0,75	1,75	2,73	3,95	5,51
2250	-	-	-	0,60	1,55	2,43	3,51	4,90
2500	-	-	-	0,48	1,40	2,19	3,16	4,41
2750	-	-	-	0,40	1,16	1,99	2,87	4,01
3000	-	-	-	0,33	0,98	1,82	2,63	3,67
3250	-	-	-	-	0,83	1,68	2,43	3,39
3500	-	-	-	-	0,72	1,47	2,26	3,15
3750	-	-	-	-	0,62	1,28	2,11	2,94
4000	-	-	-	-	0,55	1,12	1,98	2,76
4250	-	-	-	-	0,49	1,00	1,86	2,59
4500	-	-	-	-	0,43	0,89	1,66	2,45
4750	-	-	-	-	0,39	0,80	1,49	2,32
5000	-	-	-	-	0,35	0,72	1,35	2,20
5250	-	-	-	-	0,32	0,65	1,22	1,99
5500	-	-	-	-	0,29	0,59	1,11	1,81
5750	-	-	-	-	0,27	0,54	1,02	1,66
6000	-	-	-	-	0,24	0,50	0,93	1,53

The table was prepared in accordance with the guidelines RAL GZ-655. The given values take into account:

1. Safety coefficient: – 1,54
2. Permissible bending – $L/200$.
3. Module E – 210,000 N/mm²

The table of permissible calculated load-bearing capacities of channels supported bilaterally loaded with F force focused in point $L/2$.



LOAD-BEARING CAPACITY OF CONSOLE OF C2.0 TYPE LOADED WITH ONE CANTILEVER ARM FOCUSED FORCE

Span of supports L	SS-C2,0
	30x16x2,0 mm
[mm]	[kN]
208	0,3
260	0,25
312	0,2
416	0,15
520	0,1

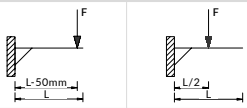
LOAD-BEARING CAPACITY OF CONSOLE OF A2.0 TYPE LOADED WITH ONE FOCUSED FORCE

Span of supports L	SS-A2,0
	30x30x2,0 mm
[mm]	[kN]
150	1,15
250	0,70
300	0,60
350	0,50
450	0,40
500	0,35
750	0,25
1000	0,15

LOAD-BEARING CAPACITY OF CONSOLE OF MG2.0, MF2.5, MH2.5 TYPE LOADED WITH ONE FOCUSED FORCE

Span of supports L	SS-MG2,0	SS-MF2,5	SS-MH2,5
	41x21x2,0 mm	41x41x2,5 mm	41x62x2,5 mm
[mm]	[kN]	[kN]	[kN]
240	0,55	1,90	-
320	0,45	1,40	2,75
400	0,35	-	-
480	0,30	0,95	1,85
560	0,25	0,80	1,60
800	0,10	0,55	1,10
1040	-	0,45	0,85

LOAD-BEARING CAPACITY OF CONSOLE OF U3,0 TYPE LOADED WITH ONE FOCUSED FORCE

Span of supports L	SS-U3,0	
	[kN]	
[mm]		
SS-U3,0-250	1,88	3,28
SS-U3,0-300	1,29	3,22
SS-U3,0-400	0,72	2,38
SS-U3,0-500	0,41	1,32
SS-U3,0-600	0,31	0,92
SS-U3,0-800	0,17	3,22
SS-U3,0-1000	0,11	2,55

The given values take into account:

1. Safety coefficient: - 1.54
2. Permissible bending - $L/150$.
3. Module E - 210,000 N/mm²

The table of permissible load-bearing capacities for channels set from one side loaded with F force focused at the end of the channel length.



LOAD-BEARING CAPACITY OF CERTA SYSTEM

Span L	OGCKE	OGCKJ	OGCKE	OGCKJ
[mm]	82 × 82 × 3,0	100 × 100 × 4,0	82 × 82 × 3,0	100 × 100 × 4,0
	[kN]	[kN]	[kN]	[kN]
1000	17,13	36,03	34,27	72,06
1500	11,42	24,02	22,85	48,04
2000	8,42	18,01	13,46	34,53
2500	5,39	13,81	8,62	22,10
3000	3,74	9,59	5,98	15,35
3500	2,75	7,05	4,40	11,27
4000	2,10	5,39	3,37	8,63
4500	1,66	4,26	2,66	6,82
5000	1,35	3,45	2,15	5,52
5500	1,11	2,85	1,78	4,57
6000	0,94	2,40	1,50	3,84

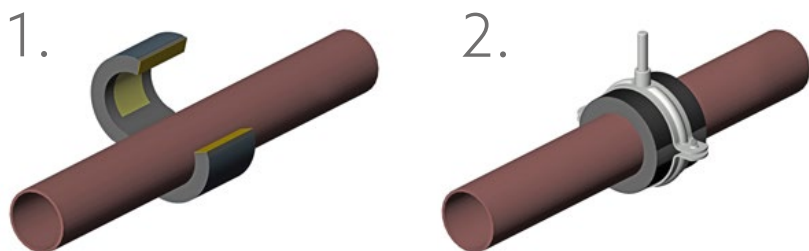
Span L	OGCKE	OGCKJ
[mm]	82 × 82 × 3,0	100 × 100 × 4,0
	[kN]	[kN]
400	6,12	12,87
800	4,99	6,00
1200	2,12	5,44

			82 × 82 × 3,0	100 × 100 × 4,0
Min. cross-sectional area	A_{min}	mm ²	8,01	13,38
Unit weight	m'	kg/m	6,8	11,75
For the y–y bending axis (min. cross section)				
Moment of inertia	I_y	mm ⁴	79,42	196,77
Section modulus	W_y	mm ³	19,37	39,35
For the z–z bending axis (min. cross section)				
Moment of inertia	I_z	mm ⁴	79,42	196,77
Section modulus	W_z	mm ³	19,37	39,35

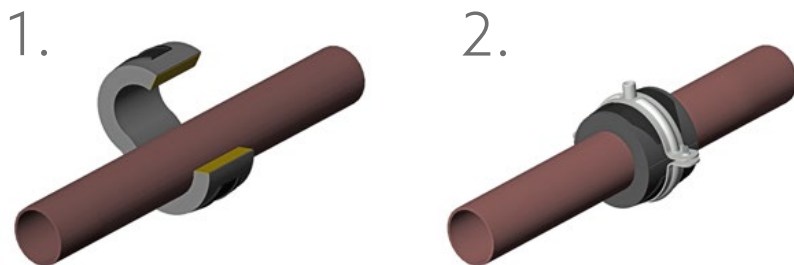
Allowable load values with partial safety factors included:

- factor $\gamma = 1,35$ (SGN)
- factor $\gamma = 1,0$ (SGU)

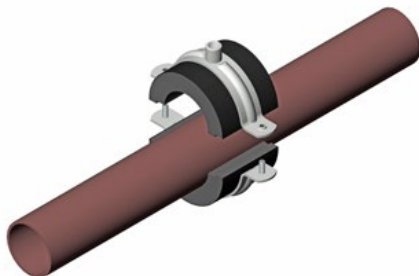
INSTALLATION OF L TYPE PIPE CLAMP



INSTALLATION OF LX TYPE PIPE CLAMP

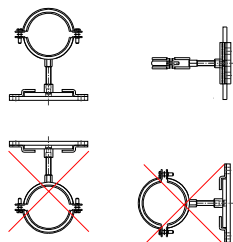


INSTALLATION OF PX TYPE PIPE CLAMP

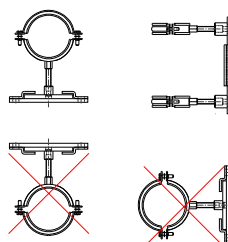


POSITIONS FOR FIXING SLIDING SUPPORTS

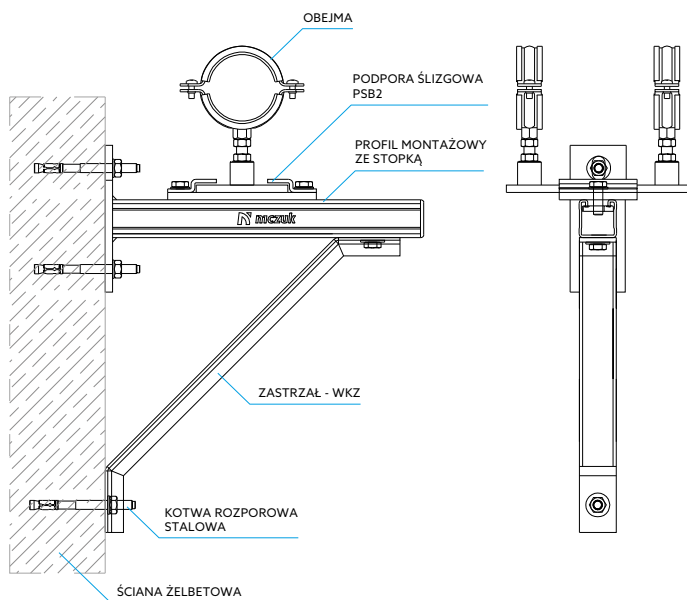
PSA1



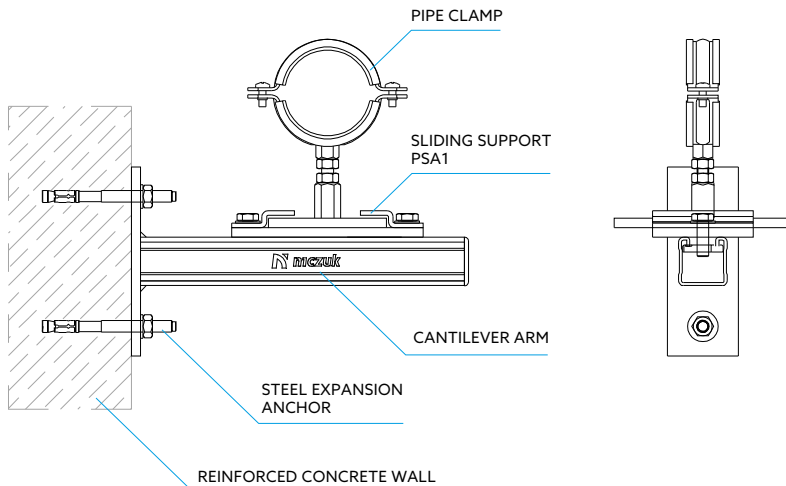
PSB2



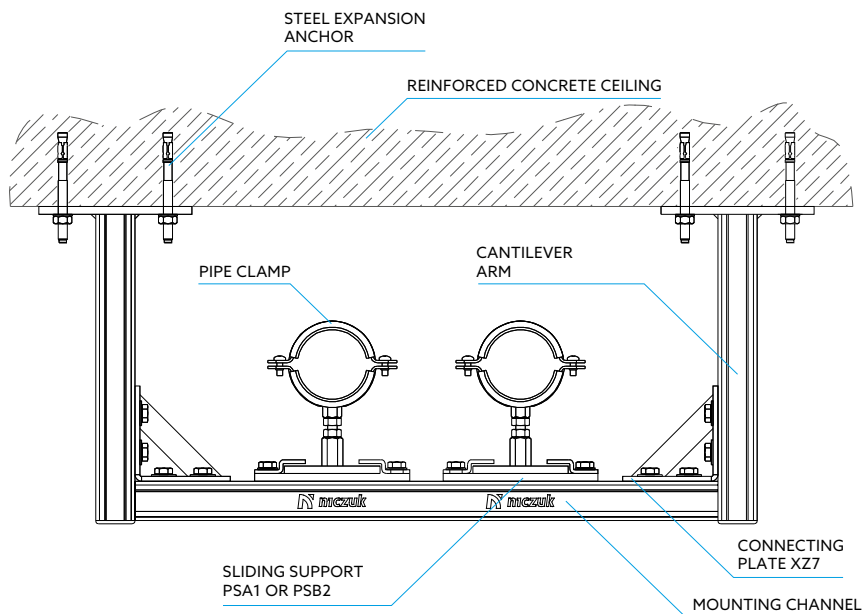
SLIDING SUPPORT WITH THE USE OF SLIDE OF PSB2 TYPE



SLIDING SUPPORT WITH THE USE OF SLIDE OF PSA1 TYPE



SLIDING SUPPORT WITH THE USE OF SLIDE OF PSA1 OR PSB2 TYPE



CHARACTERISTIC FEATURES OF PIPE CLAMPS

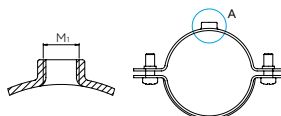
The connection is available in various performance versions.

View A

Connection M_1 Versions of connections



It is made as M6 uniform M8 material swelling.

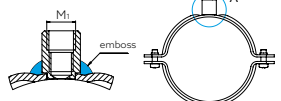


M6
M8

A



It is made as a threaded sleeve joint from the external part of the clamp.



M8/M10
M10/M12
M12/M16

B



It is made as a threaded sleeve joint from the external part of the clamp.

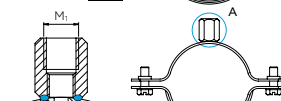


M10/M12
M12/M16

C



It is made as a special hexagonal nut welded from the internal part of the clamp.

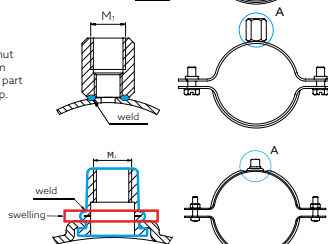


M8
M8/M10

D



It is made as M6 uniform M8 material swelling.



M8/M10

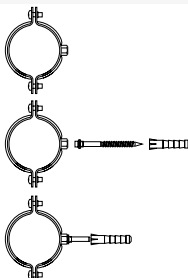
E

SIDE
FIXING



KEY FOR ORDERING PIPE CLAMPS

Pipe clamp	Index	Catalogue number	Description
Without a pin	BK	----- 0	If such a version shall be ordered, it is necessary to add BK index at the end of the designation while in the catalogue number, enter 0 as the next-to-last code digit.
Complete with a pin, not assembled	KPL	----- 1	If such a version shall be ordered, it is necessary to add KPL index at the end of the designation while in the catalogue number, enter 1 as the next-to-last code digit.
Complete with a pin, assembled	SKR	----- 2	If such a version shall be ordered, it is necessary to add SKR index at the end of the designation while in the catalogue number, enter 2 as the next-to-last code digit.



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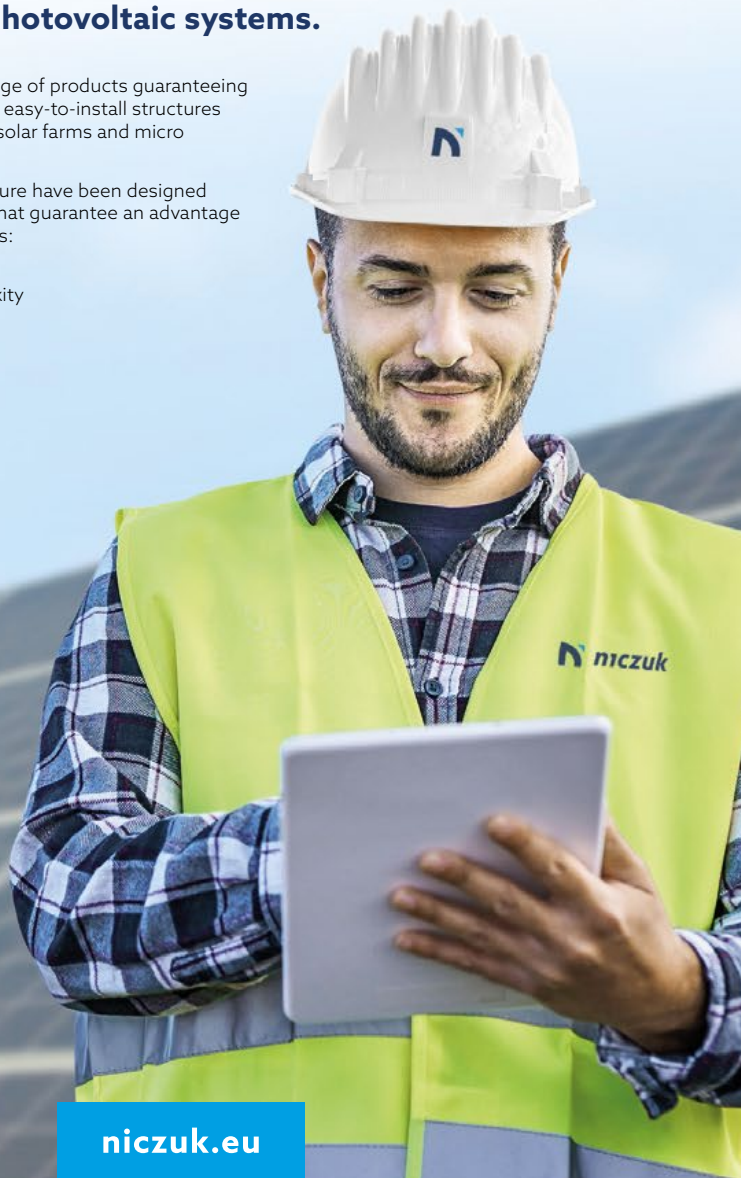
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