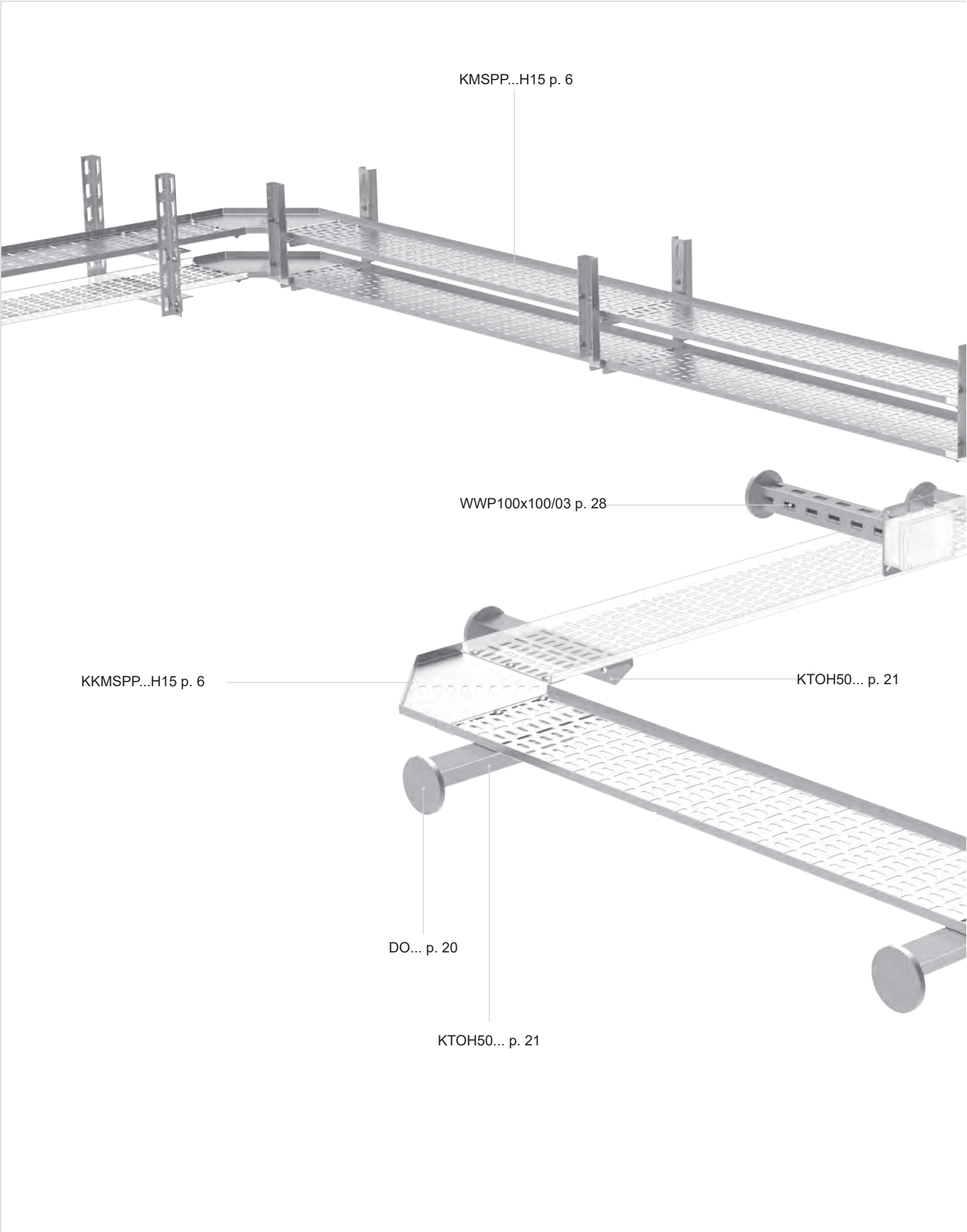


## ADVANTAGES OF THE MARINE TRAY AND LADDER SYSTEM

Marine trays and ladders are used in floating facilities such as ships, vessels, submarines, in facilities stationed in open water, such as oil rigs, and in shipyard and port buildings and infrastructure. Features of the system:

- small dimensions of the height of cable routes (from 15 to 40 mm), which allows the installation of equipment in very tight spaces, typical for ships, vessels and boats
  - high strength parameters that allow the cable route to maintain adequate load-bearing capacity with cyclic movements of floating objects
1. A standard hot-dip galvanised marine tray and ladder system designed specifically for use on marine facilities such as ships, platforms, shipyards.
  2. It is possible to achieve a zinc coating thickness of up to 100 µm - a guarantee of long service life even in the harshest conditions.
  3. The trays and ladders have dense perforations that allow easy clipping of cables and significantly improve the thermal exchange between the cables and the environment.
  4. The system is made of 1.2 and 1.5 mm thick sheets for trays and 3, 4 and 5 mm for ladders - high mechanical strength and impact resistance.
  5. A wide range of route dimensions: heights in the range of 15-50 mm and widths of 50-1000 mm enable the installation of routes in any location, depending on the space available for the cable route and the number of cables.
  6. A complete system containing shaped elements, such as: elbows, tees, cross-overs, bends, by-passes, reductions, etc., allowing any formation of cable routes - this ensures speed and professionalism in installation, aesthetic qualities of the cable route.
  7. The system is equipped with a number of accessories to facilitate routing at different angles (vertical and horizontal connectors).
  8. Ensured electrical continuity of all types of trays of the marine tray and ladder system KMSPP, DOZCP, DOPZE, DOZ, DOZE, DOZCP and all dimensions of trays confirmed by VDE certificates according to standards: PN-EN 61537:2007, DIN EN 61537:2007-9.
  9. Calculation modules on the website - the ability to quickly and optimally select a tray based on load and fill.
  10. Possibility of manufacture in various coatings and materials: hot-dip galvanised steel according to PN-EN ISO 1461:2023-02 (up to 100 µm), electroplated (galvanised steel) according to PN-EN ISO 2081:2011, powder-coated galvanised steel, stainless steel 1.4301, 1.4044, 1.4571 (AISI grades: 304, 304L, 316, 316L, 316Ti and others), thanks to such a wide range of materials and coatings, there is unlimited possibility of application in any environment.
  11. Fully automated production process of cable trays and all system elements - thus ensuring high quality and repeatability of production with an accuracy of 0.1 mm
  12. Technology and production quality at the highest level globally, thanks to the use of machinery from the best manufacturers on the market.
  13. We produce from high quality materials, sheet metal, manufactured in Western European steel mills (Arcelor Mittal Eisenhüttenstadt, Arcelor Mittal Bremen, Arcelor Mittal Liege, Arcelor Mittal Gent, SSAB, DUNAFER, Marcegaglia) - high quality materials guarantee trouble-free and fast installation, long service life, uniform appearance of all products as well as conformity with safety standards in accordance with obtained certificates.
  14. Design and manufacture of custom, non-standard trays and even entire systems complete with fittings and support structures. Any length, width, height, perforation, thickness, type of material and use of any colour do not limit the possibilities in creating aesthetically pleasing and innovative solutions. We are flexible and open to customer needs.
  15. All production located in one place and our own hot-dip galvanising plant, flake galvanising plant and powder coating plant - this allows us to fully control the entire production process, maintain the highest quality of the product and reduce lead times.
  16. BAKS has been specialising in the production of cable routes for almost 40 years. Our extensive experience enables the design and manufacture of customised cable routes for use in all weather conditions.
  17. All necessary certifications and approvals of KMSPP, DOZCP, DOPZE, DOZ, DOZE, DOZCP trays:
    - DNV GL certificate confirming possibility of use on off-shore facilities
    - TÜV Rheinland certification for mechanical strength
    - VDE certification for electrical continuity
    - TÜV Rheinland certification confirming compliance of the production quality management system with the ISO 9001:2015 standard
    - EC Declaration of Conformity
    - TÜV Rheinland certification confirming com



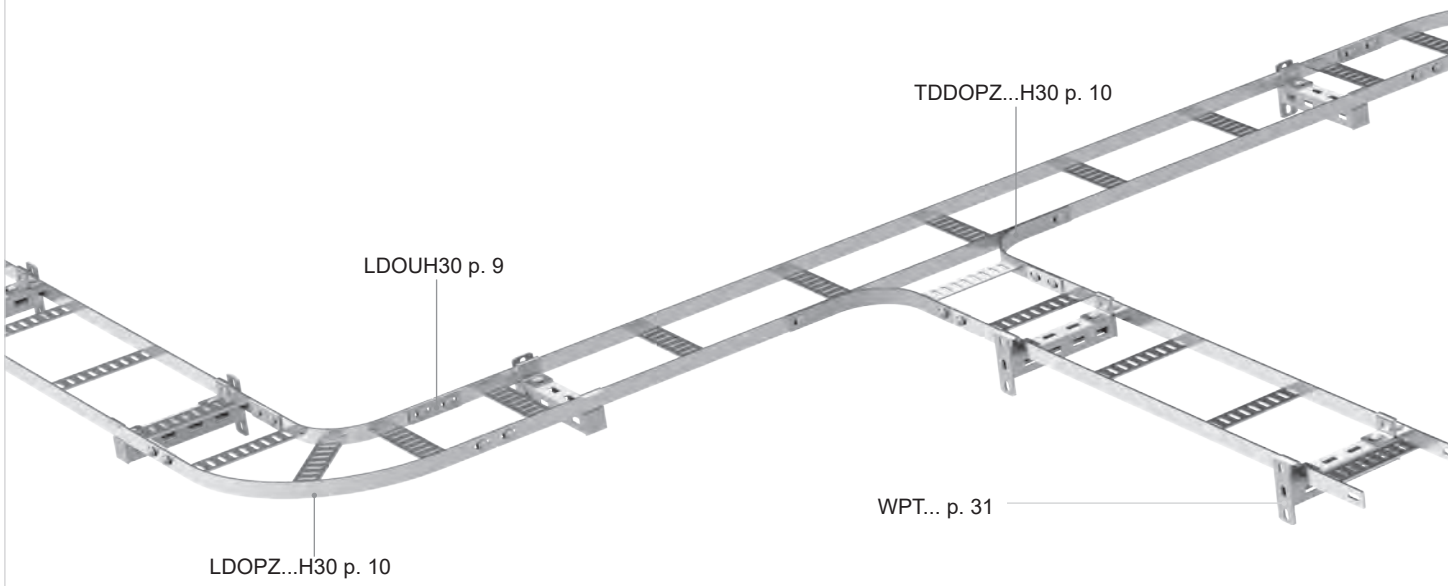
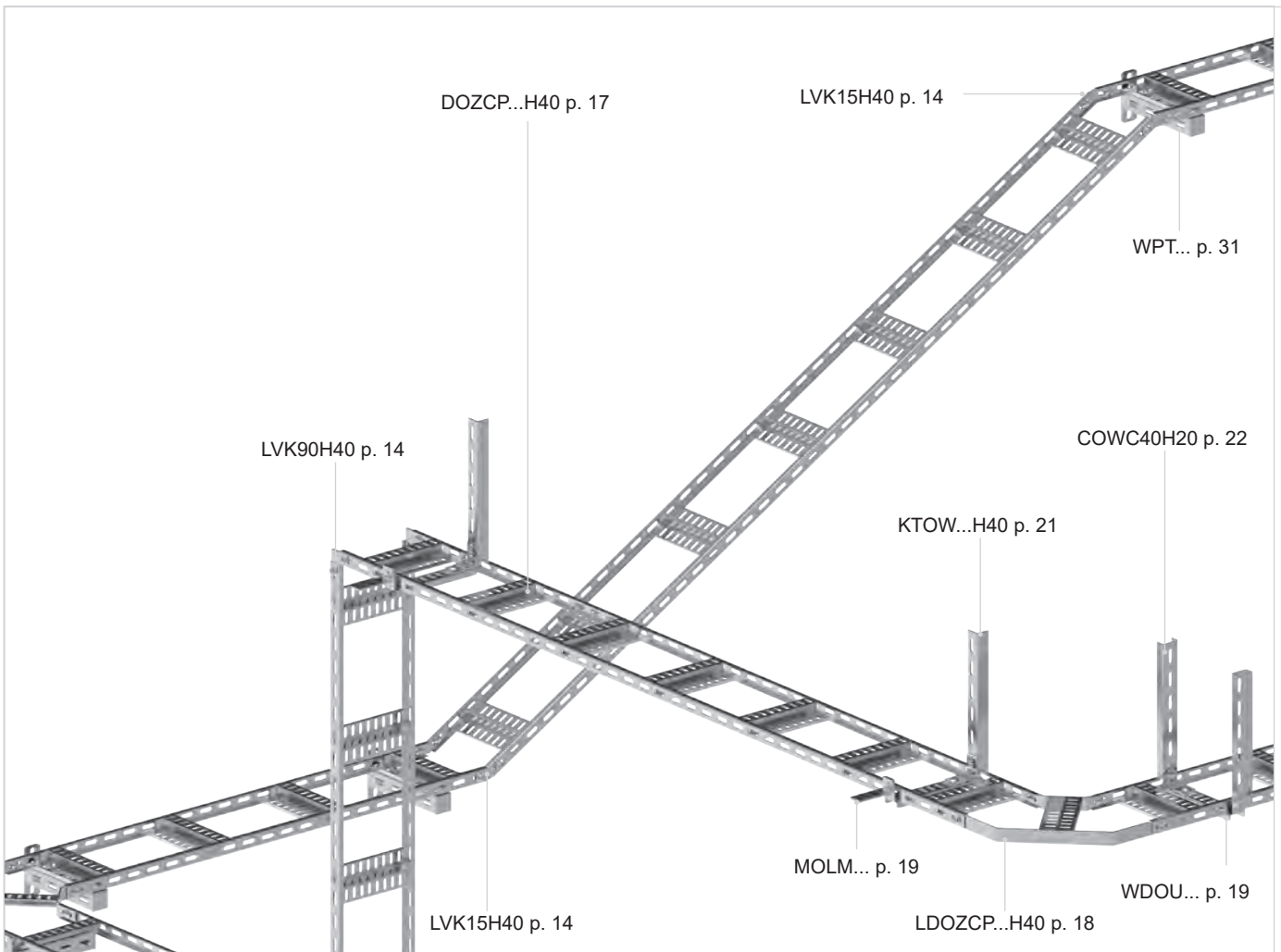


COWC40H20 p. 22

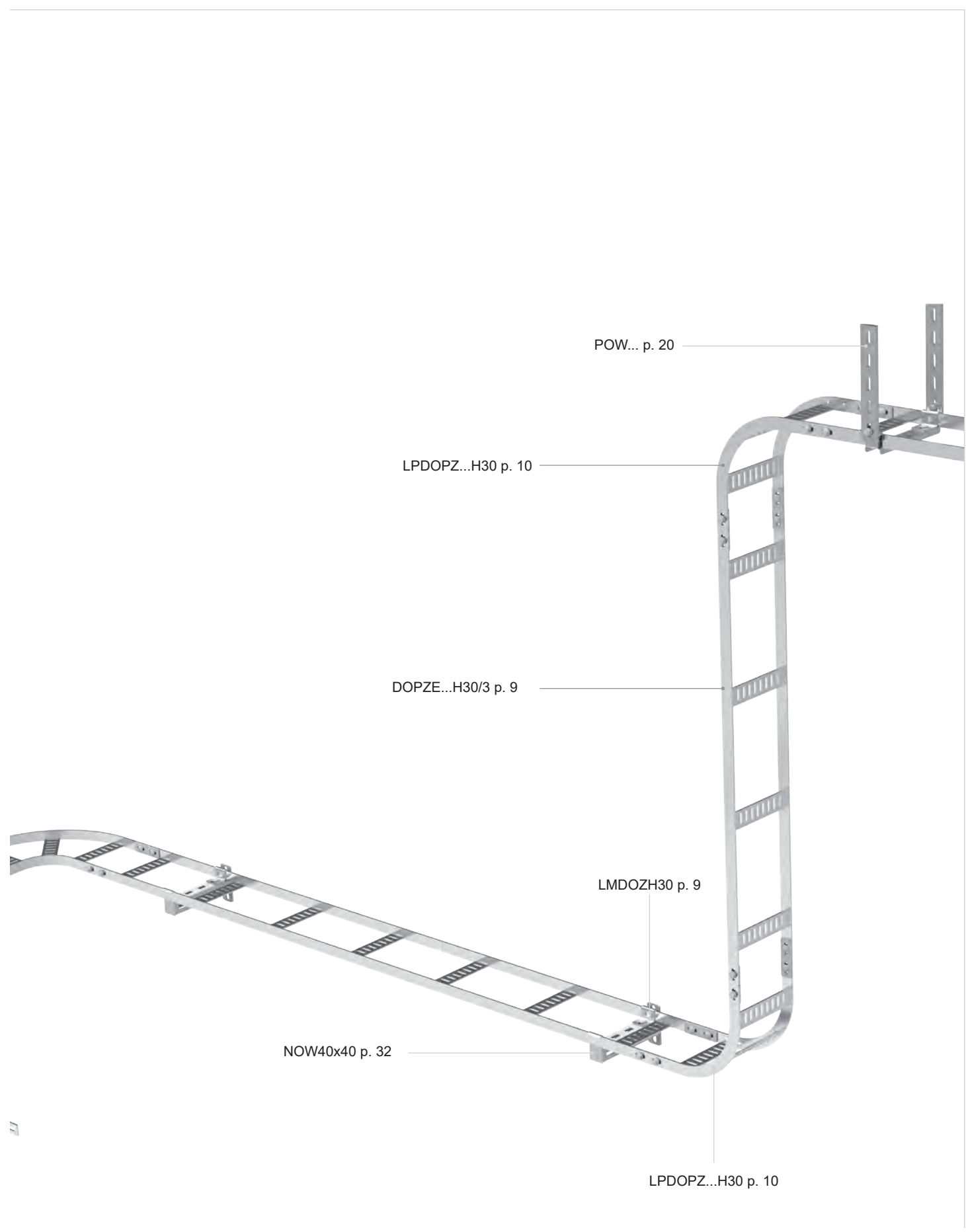
LDKMSPP p. 6

WDOU... p. 19







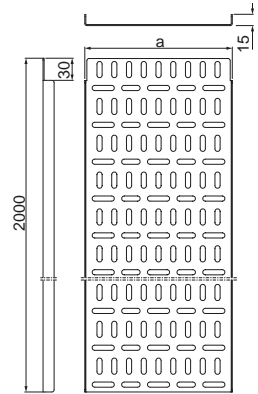


# MARINE CABLE TRAYS - SYSTEM H15



Ship cable tray **KMSPP...H15/2** mat.: F option: E, MC

code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
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**Material thickness = 1.5 mm**

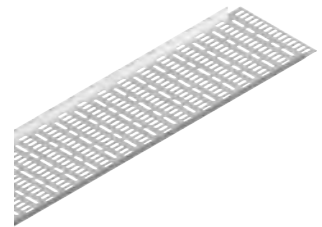
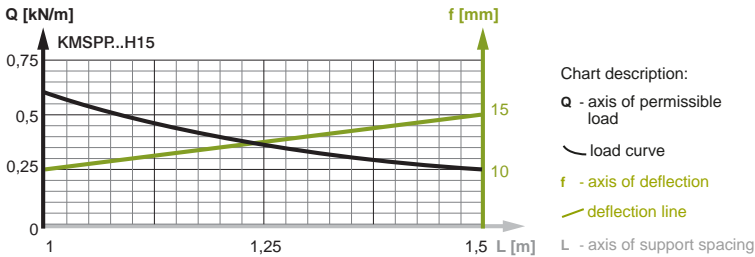
KMSPP75H15/2	815157	75	2.40	2/4
KMSPP100H15/2	815151	100	2.93	2/4
KMSPP125H15/2	815158	125	3.49	2/4
KMSPP150H15/2	815150	150	4.05	2/4
KMSPP200H15/2	815152	200	5.18	2/4
KMSPP250H15/2	815155	250	6.30	2/4
KMSPP300H15/2	815153	300	7.43	2/4

**Use:**

Conducting cable routing on ships, platforms and other marine facilities.

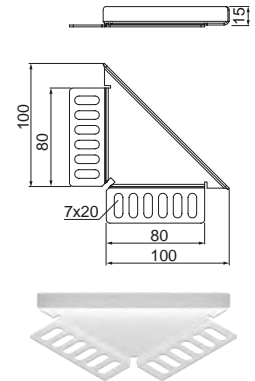
**Additional information:**

- to connect the trays, use SGKFM6x12 bolts



Ship Cable Tray Connector - **LDKMSPP** Attachable mat.: F option: E, MC

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
------	------------------	-------------------	-----------------------------



**Material thickness = 1.5 mm**

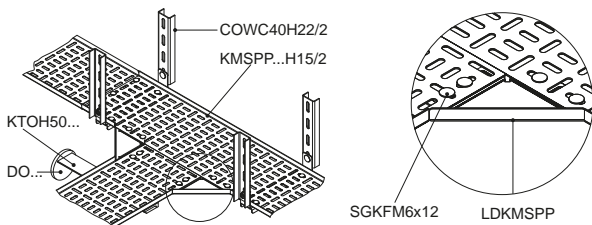
LDKMSPP	435560	0.13	1
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**Use:**

Changing the direction or branching of a cable route.

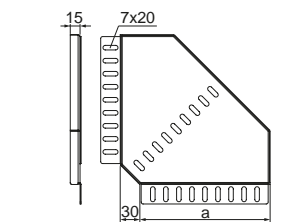
**Additional information:**

- if the cable route is branched, use 2 extension connectors.
- use SGKFM6x12 bolts to connect to the tray



Horizontal Bend 90° **KKMSPP...H15** mat.: F option: E, MC

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
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**Material thickness = 1.5 mm**

KKMSPP75H15	437515	75	0.12	1
KKMSPP100H15	431015	100	0.21	1
KKMSPP125H15	431215	125	0.31	1
KKMSPP150H15	431515	150	0.42	1
KKMSPP200H15	432015	200	0.61	1
KKMSPP250H15	432515	250	0.91	1
KKMSPP300H15	433315	300	1.20	1

**Use:**

Changing the direction of the cable route.

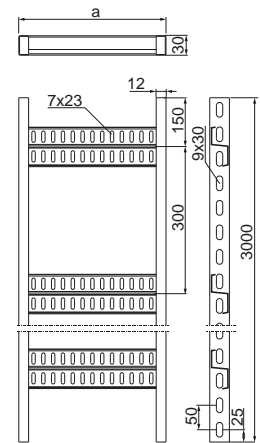
**Additional information:**

- use SGKFM6x12 bolts to connect to the tray



## Ship Cable ladder DOZCP...H30/3 mat.: F option: E

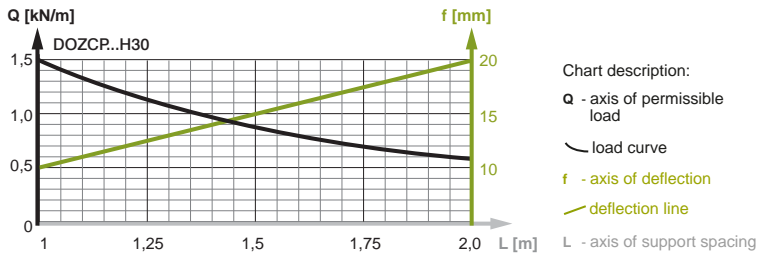
code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
<b>Material thickness = 1.5 mm</b>				
DOZCP100H30/3	413210	100	1.55	1/3
DOZCP150H30/3	412215	150	1.77	1/3
DOZCP200H30/3	413221	200	1.98	1/3
DOZCP250H30/3	413225	250	2.19	1/3
DOZCP300H30/3	412230	300	2.40	1/3
DOZCP350H30/3	412235	350	2.61	1/3
DOZCP400H30/3	412240	400	2.83	1/3
DOZCP500H30/3	412251	500	3.25	1/3
DOZCP600H30/3	412261	600	3.67	1/3



**Use:**  
Conducting cable routing on ships, platforms and other marine facilities.

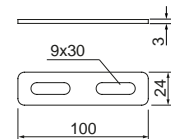
**Additional information:**

- for angled connection use LVKW...H30 connectors and SGKFM8x16 bolts
- on request it is possible to make ladders of 2 m in length
- use LDOWH40 connectors and SGKFM8x16 bolts to connect the ladders



## Connector LDOWH30 mat.: FP option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>			
LDOWH30	428010	0.04	100

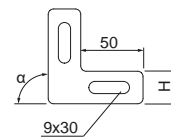


**Use:**  
Connecting ladders.

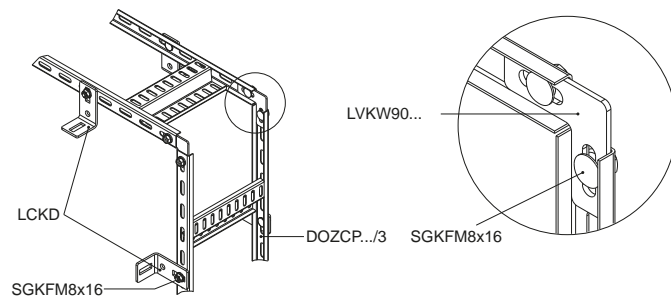


## Angle Connector - vertical LVKW...H30 mat.: FP option: E

code	catalogue number	dimension H [mm]	angle α [°]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>					
LVKW15H30	429001	24	15	0.04	100
LVKW30H30	429002	24	30	0.04	100
LVKW45H30	429003	24	45	0.04	100
LVKW60H30	429004	24	60	0.04	100
LVKW90H30	429005	24	90	0.04	100



**Use:**  
Connecting ladders at an angle.

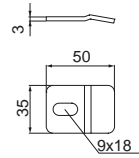
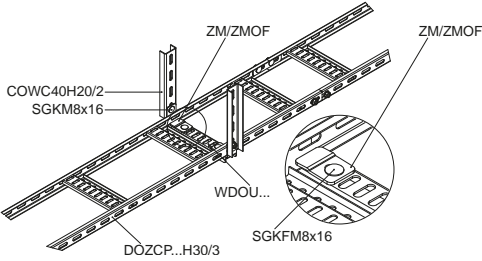


# Marine ladders - H30



code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>			
ZM/ZMOF	4007003	0.04	100

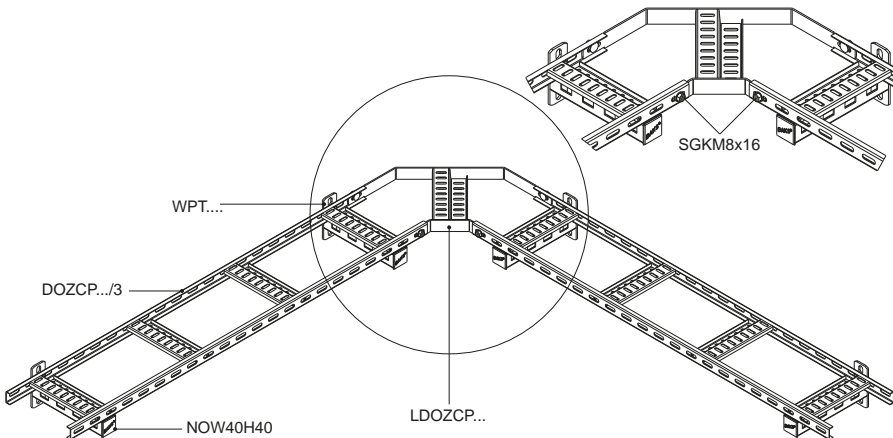
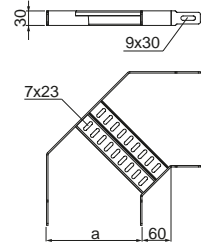
**Use:**  
Mounting ladders to support structures.



code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>				
LDOZCP100H30	431410	96	0.50	1
LDOZCP150H30	431415	146	0.63	1
LDOZCP200H30	431420	196	0.75	1
LDOZCP250H30	431425	246	0.88	1
LDOZCP300H30	431430	296	1.00	1
LDOZCP350H30	431435	346	1.13	1
LDOZCP400H30	431440	396	1.26	1
LDOZCP500H30	431450	496	1.51	1
LDOZCP600H30	431460	596	1.76	1

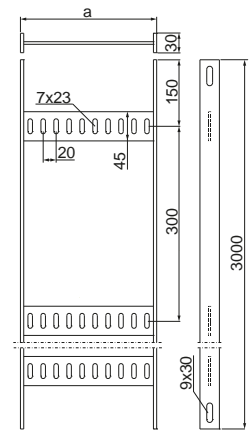
**Use:**  
Changing the direction of the cable route.

**Additional information:**  
- use SGKFM8x16 bolts for mounting



## Ship Cable ladder DOPZE...H30/3 mat.: F option: E

code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
<b>Material thickness = 4.0 mm</b>				
DOPZE100H30/3	424012	100	2.35	1/3
DOPZE150H30/3	424015	150	2.57	1/3
DOPZE200H30/3	424020	200	2.78	1/3
DOPZE250H30/3	424025	250	3.00	1/3
DOPZE300H30/3	424031	300	3.22	1/3
DOPZE350H30/3	424035	350	3.43	1/3

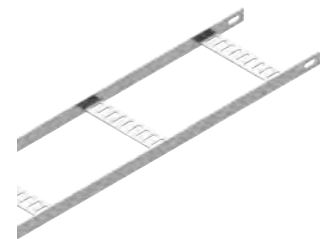
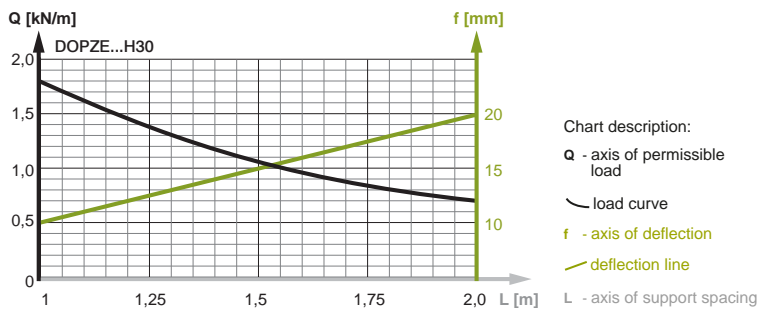


### Use:

Conducting cable routing on ships, platforms and other marine facilities.

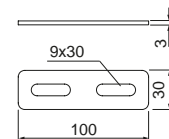
### Additional information:

- rung thickness 4.0 mm
- use LDOUH30 connectors and SGKFM8x16 bolts to connect the ladders
- for angled connection use LVK...H30 connectors and SGKFM8x16 bolts
- use LMDOZH30 mounting clamps to mount the ladders to the free standing structure
- on request it is possible to make ladders of 2 m in length



## Connector LDOUH30 mat.: FP option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>			
LDOUH30	423001	0.06	1



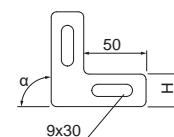
### Use:

Connecting ladders and cable ladders with fittings.



## Angle Connector - vertical LVK...H30 mat.: FP option: E

code	catalogue number	dimension H [mm]	angle $\alpha$ [°]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>					
LVK15H30	429011	30	15	0.06	1
LVK30H30	429012	30	30	0.06	1
LVK45H30	429013	30	45	0.06	1
LVK60H30	429014	30	60	0.06	1
LVK90H30	429015	30	90	0.06	1



### Use:

Connecting ladders at an angle.



## Fixing Clamp

**LMDOZH30**

mat.: FP

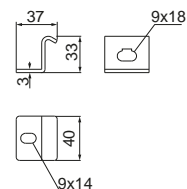
option: E

code

catalogue  
number

weight  
1 pc. [kg]

quantity  
per  
package [pcs.]

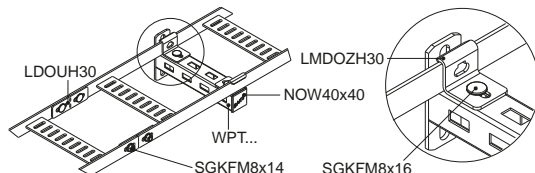


**Material thickness = 3.0 mm**

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
LMDOZH30	423301	0.05	100

### Use:

Mounting ladders to structures.



## Horizontal Bend

**LDOPZ...H30**

mat.: F

option: E

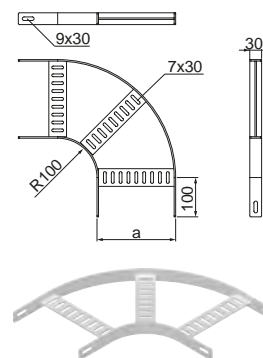
code

catalogue  
number

dimension  
a  
[mm]

weight  
1 pc. [kg]

quantity  
per  
package [pcs.]



**Material thickness = 4.0 mm**

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
LDOPZ100H30	423110	100	1.87	1
LDOPZ150H30	423116	150	2.21	1
LDOPZ200H30	423120	200	2.56	1
LDOPZ250H30	423125	250	2.90	1
LDOPZ300H30	423130	300	3.25	1
LDOPZ350H30	423136	350	3.59	1

### Use:

Changing the direction of the cable route.

### Additional information:

– use LDOUH30 connectors and SGKFM8x16 bolts for mounting

## Add-on Tee

**TDDOPZ...H30**

mat.: F

option: E

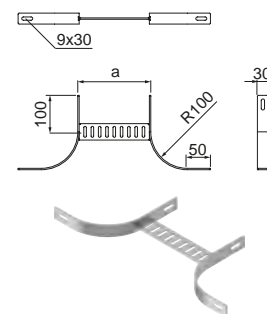
code

catalogue  
number

dimension  
a  
[mm]

weight  
1 pc. [kg]

quantity  
per  
package [pcs.]



**Material thickness = 4.0 mm**

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
TDDOPZ100H30	423210	100	3.85	1
TDDOPZ150H30	423216	150	4.06	1
TDDOPZ200H30	423220	200	4.27	1
TDDOPZ250H30	423226	250	4.48	1
TDDOPZ300H30	423230	300	4.69	1
TDDOPZ350H30	423235	350	4.90	1

### Use:

Cable route branching.

### Additional information:

– use LDOUH30 connectors and SGKFM8x16 bolts for mounting



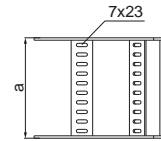
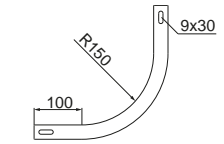
## Vertical Bend

### LPDOPZ...H30

mat.: F

option: E

code                      catalogue number                      dimension a [mm]                      weight 1 pc. [kg]                      quantity per package [pcs.]



**Material thickness = 4.0 mm**

LPDOPZ100H30	423310	100	3.49	1
LPDOPZ150H30	463315	150	3.71	1
LPDOPZ200H30	423320	200	3.92	1
LPDOPZ250H30	423325	250	4.14	1
LPDOPZ300H30	423330	300	4.36	1
LPDOPZ350H30	423335	350	4.58	1

### Use:

Changing the direction of the cable route.

### Additional information:

- use LDOUH30 connectors and SGKFM8x16 bolts for mounting

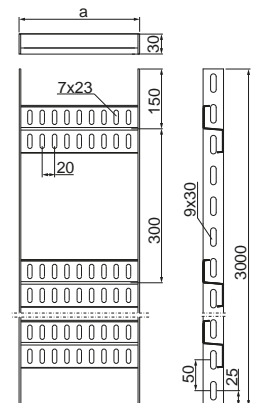
## Ship Cable ladder

### DOZ...H30/3

mat.: F

option: E

code                      catalogue number                      dimension a [mm]                      weight 1 m [kg]                      quantity per package [pcs./m]



**Material thickness = 3.0 mm**

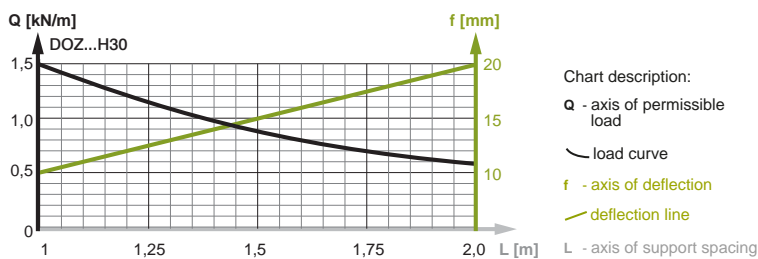
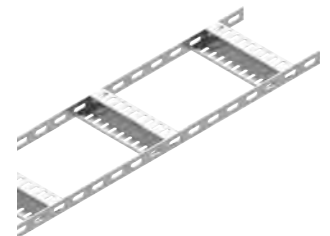
DOZ100H30/3	403010	100	1.66	1/3
DOZ150H30/3	403015	150	1.86	1/3
DOZ200H30/3	403020	200	2.35	1/3
DOZ250H30/3	403025	250	2.59	1/3
DOZ300H30/3	403030	300	2.82	1/3
DOZ350H30/3	403035	350	3.06	1/3
DOZ400H30/3	403040	400	3.29	1/3
DOZ500H30/3	403050	500	3.76	1/3
DOZ600H30/3	403060	600	4.23	1/3
DOZ700H30/3	403070	700	4.70	1/3
DOZ800H30/3	403080	800	5.17	1/3
DOZ900H30/3	403090	900	5.65	1/3
DOZ1000H30/3	403011	1000	6.12	1/3

### Use:

Conducting cable routing on ships, platforms and other marine facilities.

### Additional information:

- rung thickness 1.5 mm
- use LDOUH30 connectors and SGKFM8x16 bolts to connect the ladders
- for angled connection use LVK...H30 connectors and SGKFM8x16 bolts
- on request it is possible to make ladders of 2 m in length



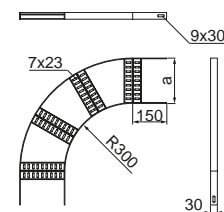
## Horizontal Bend

LDOZ...H30

mat.: F

option: E

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>				
LDOZ100H30	403110	100	2.20	1
LDOZ150H30	403115	150	2.54	1
LDOZ200H30	403120	200	2.89	1
LDOZ250H30	403125	250	3.24	1
LDOZ300H30	403130	300	3.58	1
LDOZ350H30	403135	350	3.93	1
LDOZ400H30	403140	400	4.26	1
LDOZ500H30	403150	500	5.63	1
LDOZ600H30	403160	600	6.45	1
LDOZ700H30	403170	700	7.27	1
LDOZ800H30	403180	800	8.09	1
LDOZ900H30	403190	900	8.92	1
LDOZ1000H30	403111	1000	9.73	1



### Use:

Changing the direction of the cable route.

### Additional information:

– use LDOUH30 connectors and SGKFM8x16 bolts for mounting

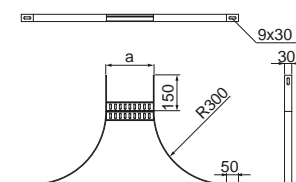
## Add-on Tee

TDDOZ...H30

mat.: F

option: E

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>				
TDDOZ100H30	403210	100	4.76	1
TDDOZ150H30	403215	150	4.98	1
TDDOZ200H30	403220	200	5.18	1
TDDOZ250H30	403225	250	5.39	1
TDDOZ300H30	403230	300	6.01	1
TDDOZ350H30	403235	350	6.29	1
TDDOZ400H30	403240	400	6.57	1
TDDOZ500H30	403250	500	7.13	1
TDDOZ600H30	403260	600	7.68	1
TDDOZ700H30	403270	700	8.24	1
TDDOZ800H30	403280	800	8.80	1
TDDOZ900H30	403290	900	9.35	1
TDDOZ1000H30	403211	1000	9.91	1

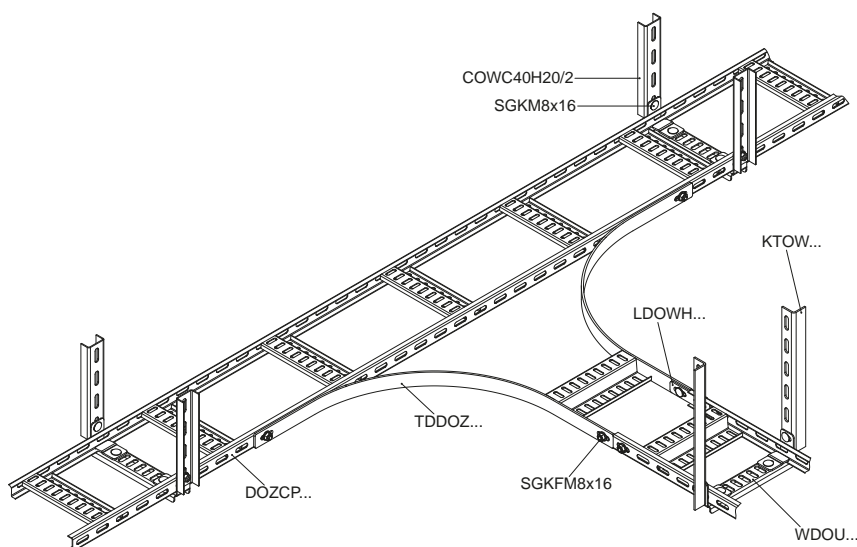


### Use:

Cable route branching.

### Additional information:

– use LDOUH30 connectors and SGKFM8x16 bolts for mounting



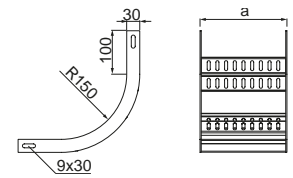
## Vertical Bend

LPDOZ...H30

mat.: F

option: E

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>				
LPDOZ100H30	413110	100	2.87	1
LPDOZ150H30	413115	150	3.09	1
LPDOZ200H30	413320	200	3.25	1
LPDOZ250H30	413125	250	3.52	1
LPDOZ300H30	413130	300	4.17	1
LPDOZ350H30	413135	350	4.46	1
LPDOZ400H30	413140	400	4.74	1
LPDOZ500H30	413150	500	5.32	1
LPDOZ600H30	413160	600	5.90	1
LPDOZ700H30	413170	700	6.47	1
LPDOZ800H30	413180	800	7.05	1
LPDOZ900H30	413190	900	7.62	1
LPDOZ1000H30	413101	1000	8.20	1

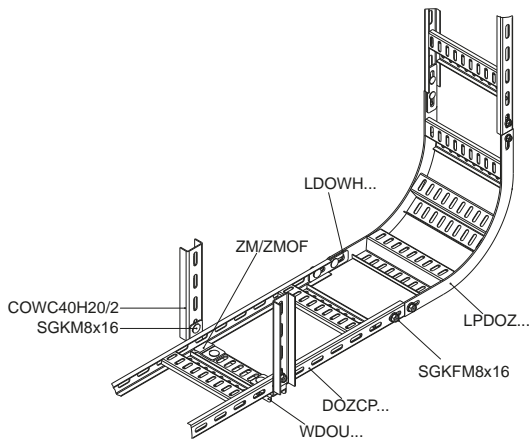


### Use:

Changing the direction of the cable route.

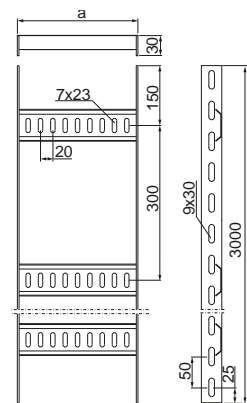
### Additional information:

- use LDOUH30 connectors and SGKFM8x16 bolts for mounting



## Ship Cable ladder DOTT...H30/3 mat.: F option: E

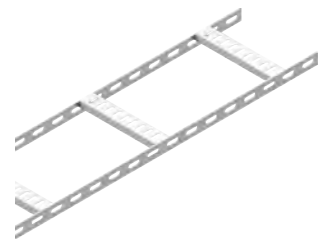
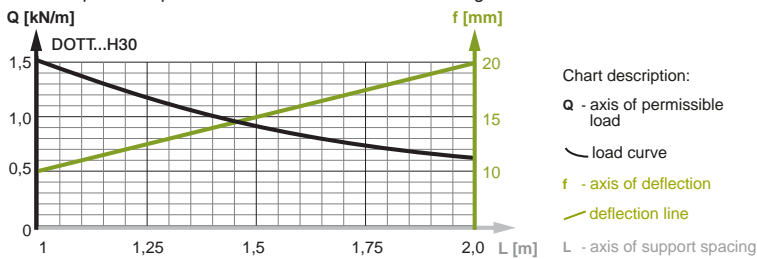
code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
<b>Material thickness = 3.0 mm</b>				
DOTT100H30/3	433010	100	1.66	1/3
DOTT150H30/3	433015	150	1.77	1/3
DOTT200H30/3	433020	200	1.89	1/3
DOTT250H30/3	433125	250	2.00	1/3
DOTT300H30/3	433130	300	2.11	1/3
DOTT350H30/3	433135	350	2.48	1/3
DOTT400H30/3	433140	400	2.63	1/3
DOTT500H30/3	434150	500	2.93	1/3
DOTT600H30/3	433060	600	3.23	1/3



**Use:**  
Conducting cable routing on ships, platforms and other marine facilities.

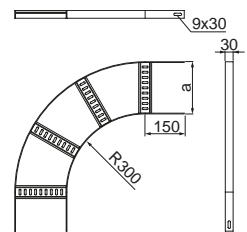
**Additional information:**

- rung thickness 1.5 mm
- use LDOUH30 connectors and SGKFM8x16 bolts to connect the ladders
- for angled connection use LVK...H30 connectors and SGKFM8x16 bolts
- on request it is possible to make ladders of 2 m in length



## Horizontal Bend LDOT...H30 mat.: F option: E

code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>				
LDOT100H30	436110	100	1.28	1
LDOT150H30	436150	150	1.62	1
LDOT200H30	436200	200	1.97	1
LDOT250H30	436250	250	2.11	1
LDOT300H30	436300	300	2.31	1
LDOT350H30	440335	350	2.51	1
LDOT400H30	436400	400	2.70	1
LDOT500H30	436500	500	3.09	1
LDOT600H30	436600	600	3.48	1



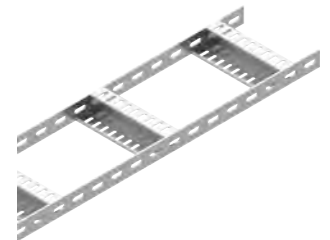
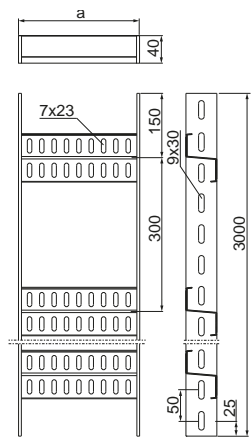
**Use:**  
Changing the direction of the cable route.

**Additional information:**

- use LDOUH30 connectors and SGKFM8x16 bolts for mounting

## Ship Cable ladder DOZE...H40/3 mat.: F option: E

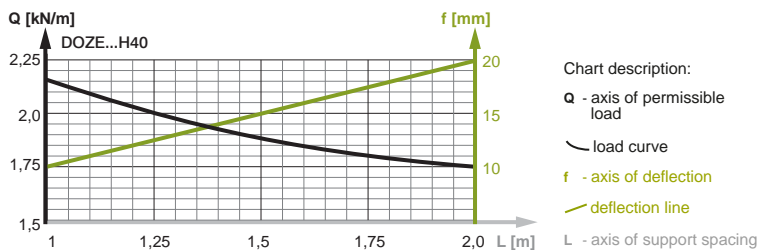
code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
<b>Material thickness = 4.0 mm</b>				
DOZE100H40/3	424011	100	3.03	1/3
DOZE150H40/3	424016	150	3.28	1/3
DOZE200H40/3	414021	200	3.49	1/3
DOZE250H40/3	414251	250	3.73	1/3
DOZE300H40/3	414031	300	4.05	13
DOZE350H40/3	414531	350	4.30	1/3
DOZE400H40/3	414041	400	4.56	1/3
DOZE500H40/3	414051	500	5.07	1/3
DOZE600H40/3	414061	600	5.58	1/3
DOZE700H40/3	414071	700	6.09	1/3
DOZE800H40/3	414081	800	6.60	1/3
DOZE900H40/3	414091	900	7.11	1/3
DOZE1000H40/3	414012	1000	7.62	1/3



**Use:**  
Conducting cable routing on ships, platforms and other marine facilities.

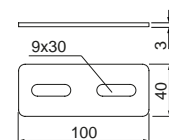
**Additional information:**

- rung thickness 1.5 mm
- use LDOUH40 connectors and SGKFM8x16 bolts to connect the ladders
- for angled connection use LVK...H40 connectors and SGKFM8x16 bolts
- on request it is possible to make ladders of 2 m in length



## Connector LDOUH40 mat.: FP option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>			
LDOUH40	414001	0.08	1

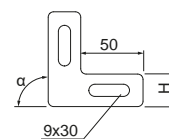


**Use:**  
Connecting ladders and cable ladders with fittings.



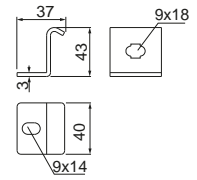
## Angle Connector - vertical LVK...40 mat.: FP option: E

code	catalogue number	dimension H [mm]	angle $\alpha$ [°]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>					
LVK15H40	429016	40	15	0.08	1
LVK30H40	429017	40	30	0.08	1
LVK45H40	429018	40	45	0.08	1
LVK60H40	429019	40	60	0.08	1
LVK90H40	429020	40	90	0.08	1



**Use:**  
Connecting ladders at an angle.

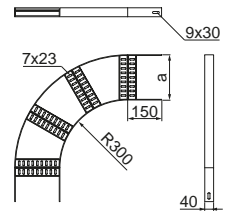
Fixing Clamp	LMDOZH40	mat.: FP	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 3.0 mm</b>				
LMDOZH40	414301	0.08	100	



**Use:**  
Mounting ladders to structures.



Horizontal Bend	LDOZ...H40	mat.: F	option: E	
code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 4.0 mm</b>				
LDOZ100H40	414110	100	4.08	1
LDOZ150H40	414115	150	4.57	1
LDOZ200H40	414120	200	5.03	1
LDOZ250H40	414125	250	5.51	1
LDOZ300H40	414130	300	6.60	1
LDOZ350H40	414135	350	7.16	1
LDOZ400H40	414140	400	7.73	1
LDOZ500H40	414150	500	9.92	1
LDOZ600H40	414160	600	11.28	1
LDOZ700H40	414170	700	12.62	1
LDOZ800H40	414180	800	13.98	1
LDOZ900H40	414190	900	15.34	1
LDOZ1000H40	414111	1000	16.68	1



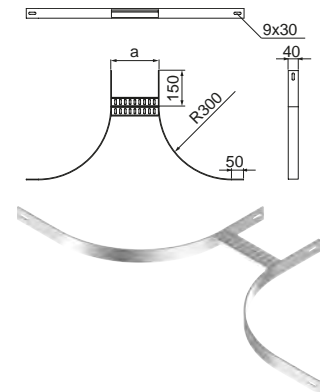
**Use:**  
Changing the direction of the cable route.

**Additional information:**  
– use LDOUH40 connectors and SGKFM8x16 bolts for mounting





Add-on Tee		TDDOZ...H40	mat.: F	option: E	
code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 4.0 mm</b>					
TDDOZ100H40	414210	100	3.28	1	
TDDOZ150H40	414215	150	3.35	1	
TDDOZ200H40	414220	200	3.43	1	
TDDOZ250H40	414225	250	3.51	1	
TDDOZ300H40	414230	300	3.74	1	
TDDOZ350H40	414235	350	3.85	1	
TDDOZ400H40	414240	400	3.95	1	
TDDOZ500H40	414250	500	4.16	1	
TDDOZ600H40	414260	600	4.37	1	
TDDOZ700H40	414270	700	4.58	1	
TDDOZ800H40	414280	800	4.78	1	
TDDOZ900H40	414290	900	4.99	1	
TDDOZ1000H40	414211	1000	5.20	1	



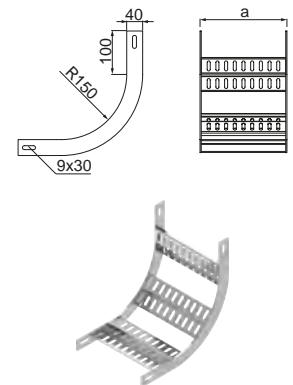
**Use:**

Cable route branching.

**Additional information:**

- use LDOUH40 connectors and SGKFM8x16 bolts for mounting

Vertical Bend		LPDOZ...H40	mat.: F	option: E	
code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 4.0 mm</b>					
LPDOZ100H40	424110	100	5.09	1	
LPDOZ150H40	424115	150	5.32	1	
LPDOZ200H40	424120	200	5.56	1	
LPDOZ250H40	424125	250	5.79	1	
LPDOZ300H40	424130	300	6.49	1	
LPDOZ350H40	424136	350	6.80	1	
LPDOZ400H40	424140	400	7.12	1	
LPDOZ500H40	424150	500	7.74	1	
LPDOZ600H40	424160	600	8.36	1	
LPDOZ700H40	424170	700	8.99	1	
LPDOZ800H40	424180	800	9.61	1	
LPDOZ900H40	424190	900	10.24	1	
LPDOZ1000H40	424111	1000	10.86	1	



**Use:**

Changing the direction of the cable route.

**Additional information:**

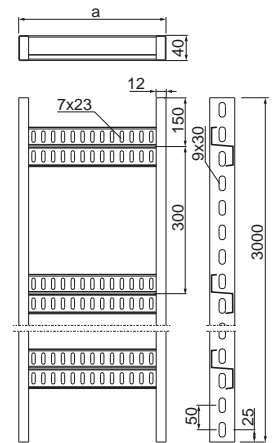
- use LDOUH40 connectors and SGKFM8x16 bolts for mounting

# Marine ladders - H40



## Ship Cable ladder DOZCP...H40/3 mat.: F option: E

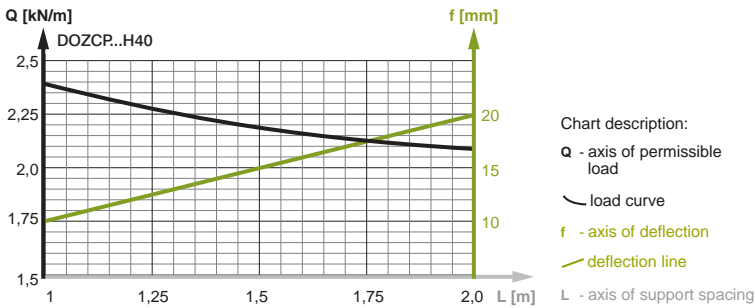
code	catalogue number	dimension a [mm]	weight 1 m [kg]	quantity per package [pcs./m]
<b>Material thickness = 1.5 mm</b>				
DOZCP100H40/3	434021	100	2.11	1/3
DOZCP150H40/3	434015	150	2.36	1/3
DOZCP200H40/3	434011	200	2.62	1/3
DOZCP250H40/3	434025	250	2.87	1/3
DOZCP300H40/3	434031	300	3.12	1/3
DOZCP350H40/3	434035	350	3.38	1/3
DOZCP400H40/3	434041	400	3.63	1/3
DOZCP500H40/3	434051	500	4.16	1/3
DOZCP600H40/3	434061	600	4.65	1/3



**Use:**  
Conducting cable routing on ships, platforms and other marine facilities.

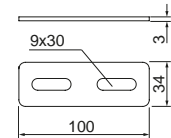
**Additional information:**

- use LDOWNH40 connectors and SGKFM8x16 bolts to connect the ladders
- for angled connection use LVKW...H40 connectors and SGKFM8x16 bolts
- on request it is possible to make ladders of 2 m in length



## Connector LDOWNH40 mat.: FP option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>			
LDOWNH40	428011	0.07	100

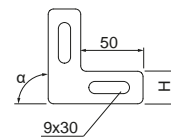


**Use:**  
Connecting ladders.

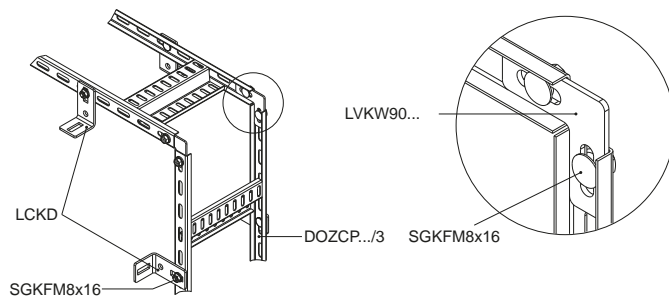


## Angle Connector - vertical LVKW...H40 mat.: FP option: E

code	catalogue number	dimension H [mm]	angle α [°]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 3.0 mm</b>					
LVKW15H40	429006	34	15	0.07	100
LVKW30H40	429007	34	30	0.07	100
LVKW45H40	429008	34	45	0.07	100
LVKW60H40	429009	34	60	0.07	100
LVKW90H40	429010	34	90	0.07	100



**Use:**  
Connecting ladders at an angle.

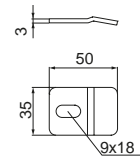


## Hold Down Clamp

ZM/ZMOF

mat.: FP option: E

code catalogue number weight 1 pc. [kg] quantity per package [pcs.]

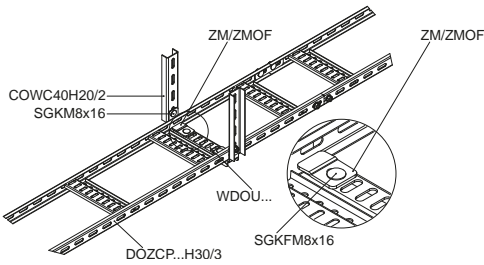


Material thickness = 3.0 mm

ZM/ZMOF	4007003	0.04	100
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### Use:

Mounting ladders to support structures.

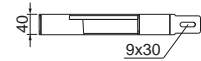


## Horizontal Bend

LDOZCP...H40

mat.: F option: E

code catalogue number dimension a [mm] weight 1 pc. [kg] quantity per package [pcs.]



Material thickness = 3.0 mm

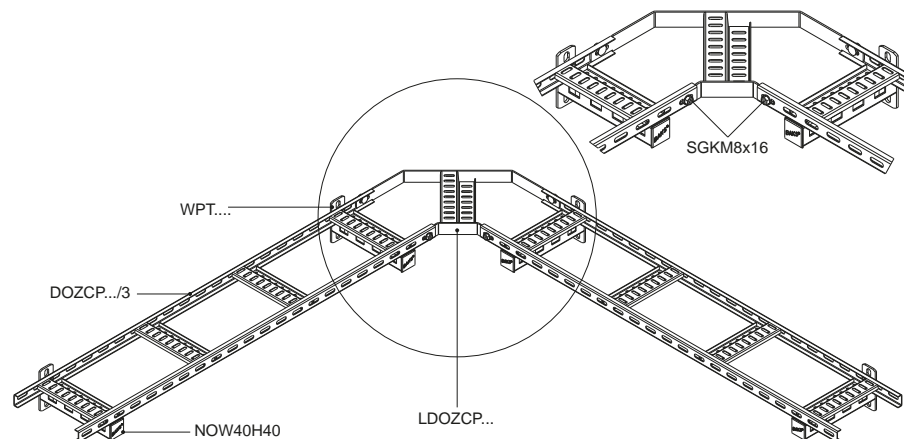
LDOZCP100H40	431510	96	0.62	1
LDOZCP150H40	431516	146	0.77	1
LDOZCP200H40	431520	196	0.93	1
LDOZCP250H40	431525	246	1.08	1
LDOZCP300H40	431530	296	1.23	1
LDOZCP350H40	431535	346	1.38	1
LDOZCP400H40	431540	396	1.54	1
LDOZCP500H40	431550	496	1.84	1
LDOZCP600H40	431560	596	2.14	1

### Use:

Changing the direction of the cable route.

### Additional information:

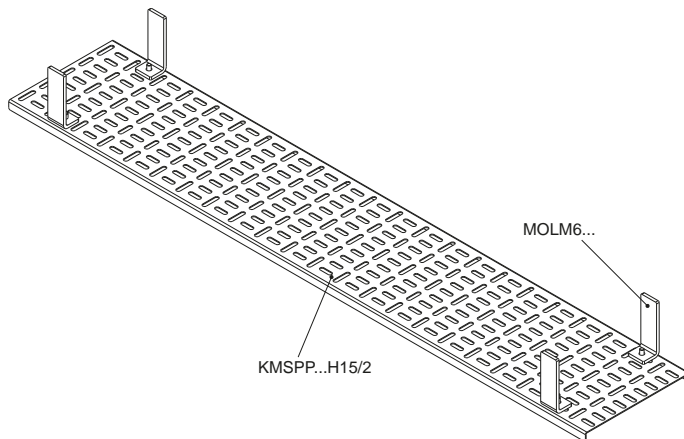
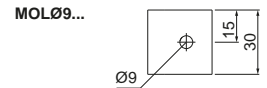
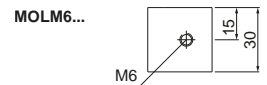
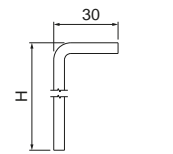
- mounting with SGKFM8x16 bolts



## L-type bracket

MOL.. mat.: FP option: E

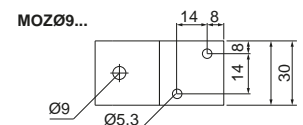
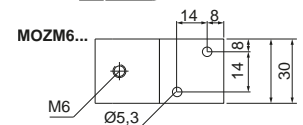
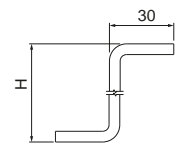
code	catalogue number	dimension H [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 5.0 mm</b>				
MOLM6H30	441608	30	0.06	1
MOLM6H90	441609	90	0.14	1
MOLM6H180	441610	180	0.25	1
MOL9H30	441611	30	0.06	1
MOL9H90	441612	90	0.14	1
MOL9H180	441613	180	0.25	1



## Z-type bracket

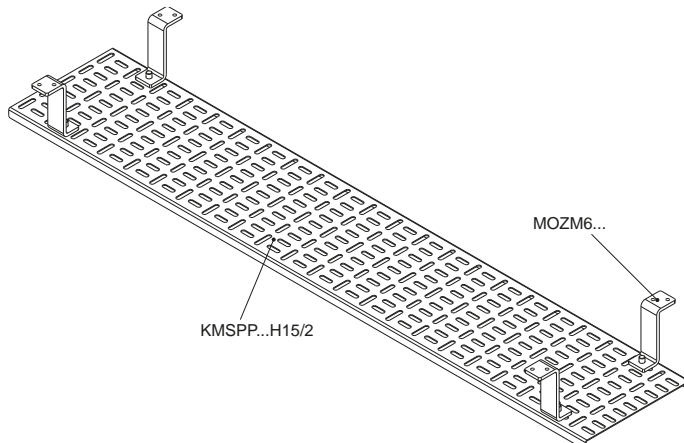
MOZ.. mat.: FP option: E

code	catalogue number	dimension H [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 5.0 mm</b>				
MOZM6H35	441614	35	0.10	1
MOZM6H90	441615	90	0.17	1
MOZM6H180	441616	180	0.28	1
MOZ9H35	441617	35	0.10	1
MOZ9H90	441618	90	0.17	1
MOZ9H180	441619	180	0.28	1

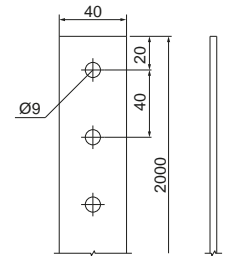


### Use:

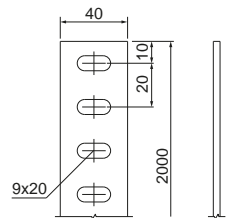
Mounting cable routes.



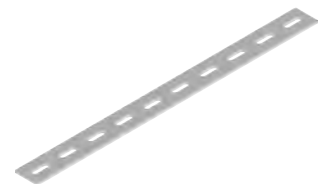
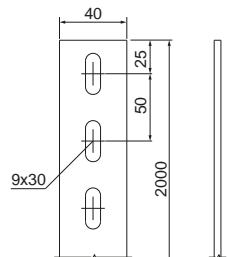
Flat bar	POFI...	mat.: F	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]	
<b>Material thickness = 4.0 mm</b>				
POFIE40/2	414421	2.56	2/4	
<b>Material thickness = 5.0 mm</b>				
POFIV40/2	414520	3.20	2/4	
<b>Material thickness = 8.0 mm</b>				
POFIO40/2	454420	5.12	2/4	



Flat bar	POP...	mat.: F	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]	
<b>Material thickness = 4.0 mm</b>				
POPE40/2	404921	2.56	2/4	
<b>Material thickness = 5.0 mm</b>				
POPV40/2	414420	3.20	2/4	
<b>Material thickness = 8.0 mm</b>				
POPO40/2	424820	5.12	2/4	

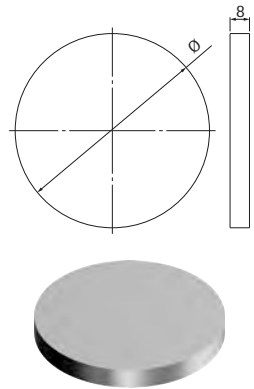


Flat bar	POW...	mat.: F	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]	
<b>Material thickness = 4.0 mm</b>				
POWE40/2	404421	2.56	2/4	
<b>Material thickness = 5.0 mm</b>				
POWV40/2	414530	3.20	2/4	
<b>Material thickness = 8.0 mm</b>				
POWO40/2	434420	5.12	2/4	



**Use:**  
Suspending installation components, making various types of clamps.

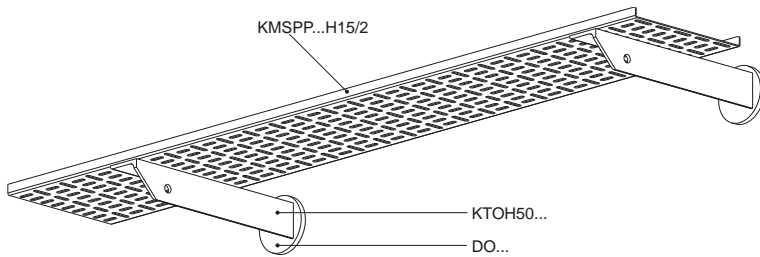
Doubler	DO...	mat.: SW	option: E		
code	catalogue number	dimension $\varnothing$ [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 8.0 mm</b>					
DOØ60/8	436008	60	0.17	1	
DOØ70/8	437008	70	0.24	1	
DOØ80/8	438008	80	0.31	1	



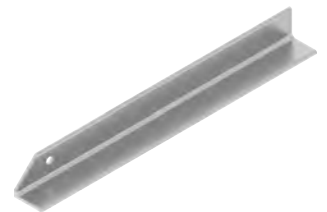
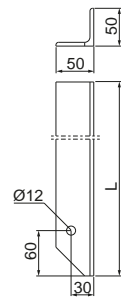
**Use:**  
An intermediate component that allows the welding of electrical fittings to the ship's hull.

**Additional information:**

- doubler is welded around the perimeter (long weld) to the hull with low current
- fittings welded to the doubler along shorter welds with high current



Steel angle profile	KTOH50...	mat.: F			
code	catalogue number	dimension L [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 3.0 mm</b>					
KTOH50/01	435001	100	0.37	1	
KTOH50/015	435015	150	0.56	1	
KTOH50/02	435002	200	0.74	1	
KTOH50/03	435003	300	1.11	1	
KTOH50/04	435004	400	1.48	1	
KTOH50/05	435005	500	1.86	1	
KTOH50/06	435006	600	2.22	1	
KTOH50/07	435007	700	2.59	1	
KTOH50/08	435008	800	2.96	1	
KTOH50/09	435009	900	3.33	1	
KTOH50/1	435010	1000	3.72	1	





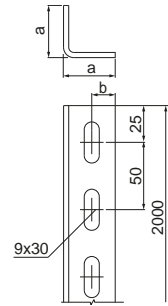
**Angle Profile**

**KTOW...**

mat.: F

option: E

code	catalogue number	dimension a/b [mm]	weight 1 pc. [kg]	quantity per package [pcs./m]
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**Material thickness = 3.0 mm**

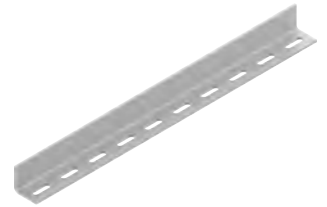
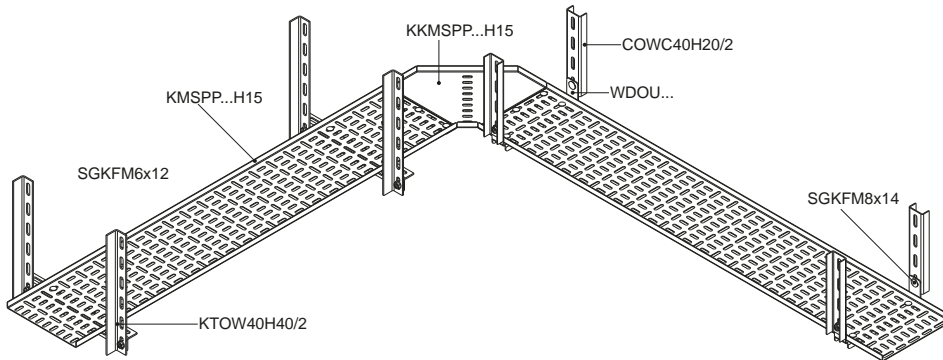
<b>KTOWT30H30/2</b>	<b>443321</b>	30/12	2.88	2/4
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**Material thickness = 4.0 mm**

<b>KTOWE40H40/2</b>	<b>444521</b>	40/16	5.12	2/4
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**Use:**

Suspending installation components.



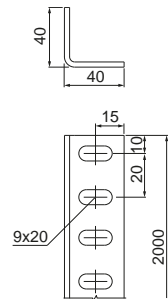
**Angle Profile**

**KTOPE40H40/2**

mat.: F

option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]
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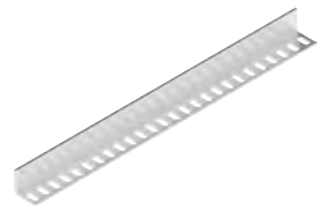


**Material thickness = 4.0 mm**

<b>KTOPE40H40/2</b>	<b>444421</b>	5.12	2/4
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**Use:**

Suspending installation components.



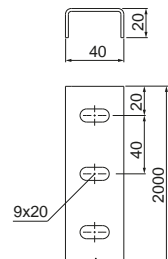
**Channel**

**COPC40H20/2**

mat.: F

option: E

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]
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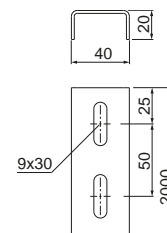
**Material thickness = 2.0 mm**

<b>COPC40H20/2</b>	<b>424202</b>	2.56	2/4
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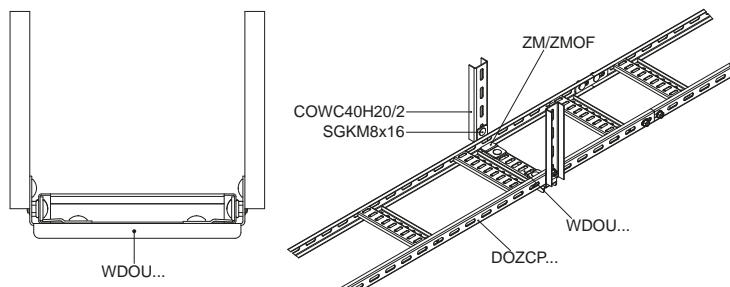
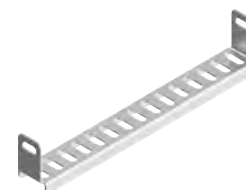
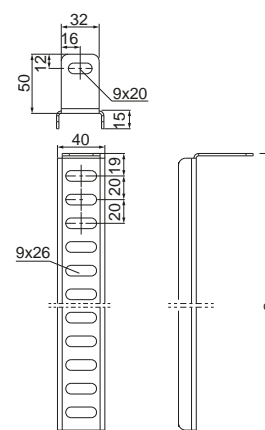
Channel	COWC40H20/2	mat.: F	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs./m]	
<b>Material thickness = 2.0 mm</b>				
COWC40H20/2	424412	2.56	2/4	

**Use:**  
 For hanging lamps and as a structural element for mounting ship trays and ladders.  
 As a support element for wall brackets.



U-type bracket	WDOU...	mat.: F	option: E	
code	catalogue number	dimension a [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>				
WDOU100	443010	118	0.22	1
WDOU150	443015	168	0.26	1
WDOU200	443020	218	0.31	1
WDOU250	443025	268	0.35	1
WDOU300	443030	318	0.39	1
WDOU350	443035	368	0.44	1
WDOU400	443040	418	0.48	1
WDOU500	443050	518	0.57	1
WDOU600	443060	618	0.65	1

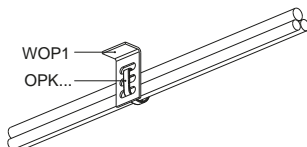
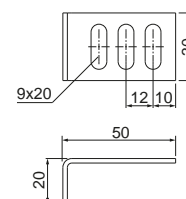
**Use:**  
 Mounting cable routes.



Adapter	WOP1	mat.: FP	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 2.0 mm</b>				
WOP1	498001	0.02	1	

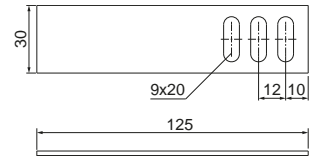
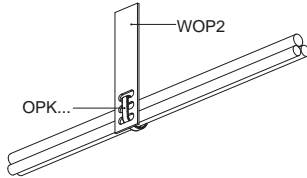
**Use:**  
 Fixing of cables with cable clamps.

**Additional information:**  
 - element welded to the structure



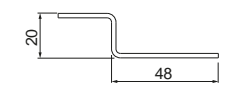
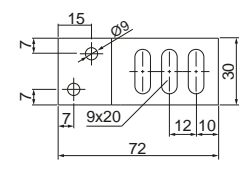
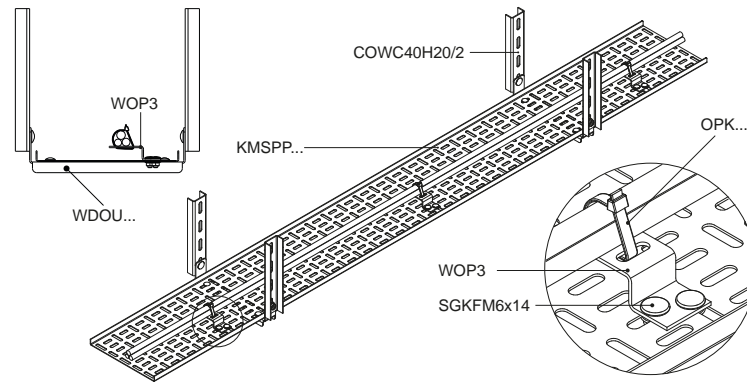
Adapter	WOP2	mat.: FP	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 2.0 mm</b>				
WOP2	498002	0.05	1	

**Additional information:**  
 - element welded to the structure



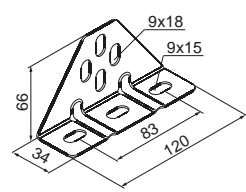
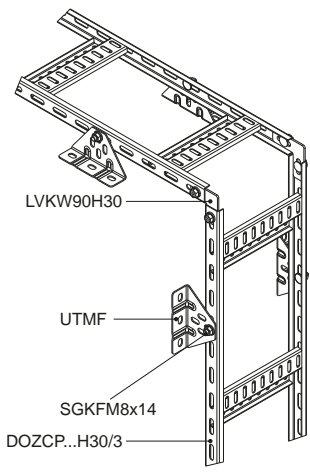
Adapter	WOP3	mat.: FP	option: E	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 2.0 mm</b>				
WOP3	498003	0.03	1	

**Use:**  
 Fixing of cables with cable clamps.

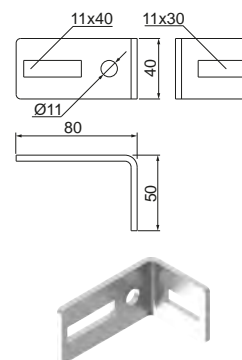


Fastening Bracket	UTMF	mat.: FP	option: E	
code	catalogue number	dimension H [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>				
UTMF	7517003	66	0.17	100

**Use:**  
 Installing trays and ladders at the proper distance from the wall. Mounting vertical ladders.



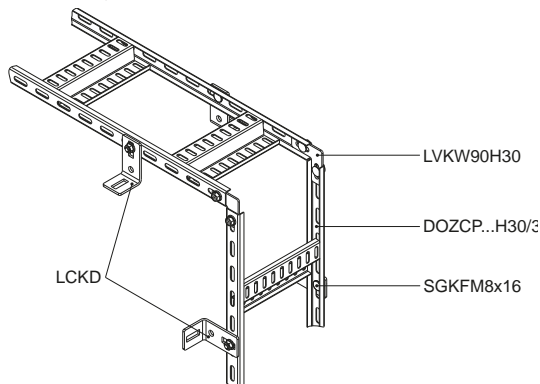
Angle Bracket for Cable Ladder LCKD		mat.: FP	option: F, E, L	
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
<b>Material thickness = 4.0 mm</b>				
LCKD	461005	0.31	10	



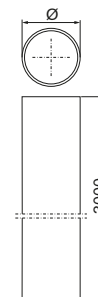
**Use:**  
Mounting cable ladders vertically and horizontally flat to the wall.

**Additional information:**

- mounting with M8x16 bolts



Thin-walled pipe RU...F		mat.: F	option: E, L	
code	catalogue number	dimension Ø [mm]	weight 1 m [kg]	quantity per package [pcs.]
RU16x1,0/3F	800188	16	0.54	10
RU20x1,2/3F	800288	20	0.68	10
RU25x1,2/3F	800388	25	0.87	10
RU32x1,5/3F	800488	32	1.13	10
RU40x1,5/3F	800588	40	1.42	10
RU50x1,5/3F	800688	50	1.79	10
RU60x1,5/3F	800788	60	2.18	10
RU63,5x1,5/3F	800888	63.5	2.30	10

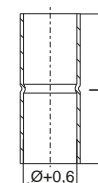
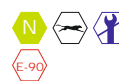


**Use:**  
Routing electrical cables and cables. Protection of the installation from mechanical damage.

**Additional information:**

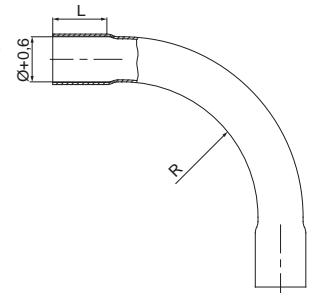
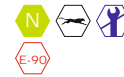
- use LRU...F connectors to connect the pipes

Pipe Channel Connector LRU...F		mat.: F	option: E, L	
code	catalogue number	dimension Ø/L [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
LRU16x1,0F	600216	16/51	0.06	10
LRU20x1,2F	600222	20/61	0.08	10
LRU25x1,2F	600225	25/61	0.10	10
LRU32x1,5F	600232	32/81	0.12	10
LRU40x1,5F	600240	40/101	0.15	10
LRU50x1,5F	600250	50/121	0.19	10
LRU60x1,5F	600260	60/141	0.23	10
LRU63,5x1,5F	600263	63.5/155	0.24	10



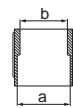
**Use:**  
Connecting pipes.

Pipe elbow		KRUR...F	mat.: F	option: E, L	
code	catalogue number	dimension Ø/L/R [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
KRUR16x1,0F	600316	16/23/90	0.18	10	
KRUR20x1,2F	600320	20/28/90	0.20	10	
KRUR25x1,2F	600325	25/28/120	0.28	10	
KRUR32x1,5F	600332	32/38/150	0.40	10	
KRUR40x1,5F	600340	40/48/170	0.57	10	
KRUR50x1,5F	600350	50/58/200	0.79	10	
KRUR63,5x1,5F	600363	63.5/75/300	1.41	10	



**Use:**  
Changing the direction of cable routing in pipes

Pipe protection cap		NKR...	mat.: PE		
code	catalogue number	dimension a/b [mm]	quantity per package [pcs.]		
NKR16x1,5	600188	16/14	100		
NKR20x1,5	600288	20/18	100		
NKR25x1,5	600388	25/22.5	100		
NKR32x1,5	600488	32/29.5	100		
NKR40x1,5	600588	40/37.5	100		
NKR50x1,5	600688	50/47.5	100		
NKR63,5x1,5	600888	63/60	100		

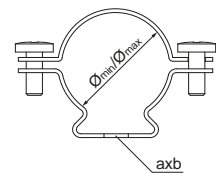


**Use:**  
Protection of cables from damage when they are brought out of the installation pipes.  
Visual aspect improvement

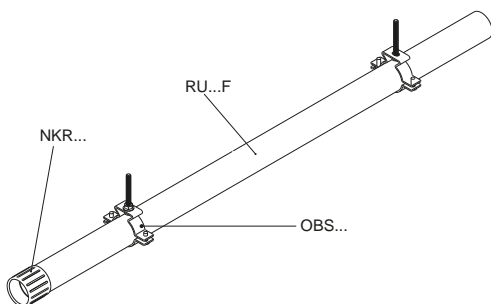
**Additional information:**  
– protective cap in RAL 7035



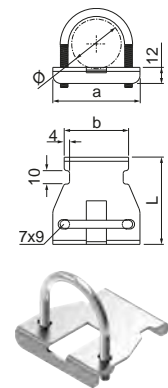
Pipe clamp		OBS...	mat.: G	option: E	
code	catalogue number	dimension axb/Ø <sub>min</sub> /Ø <sub>max</sub> [mm]	quantity per package [pcs.]		
OBS16	800187	6x10/16/19.5	125		
OBS20	800287	6x10/20/23.5	100		
OBS25	800387	6x10/23.5/26	75		
OBS30	800487	6x10/26.5/33	60		
OBS40	800587	6x10/35/40	40		
OBS50	800687	8x14/43/50	30		
OBS60	800787	8x14/54/63	20		



**Use:**  
Direct fixing of cables and pipes to walls and ceilings.



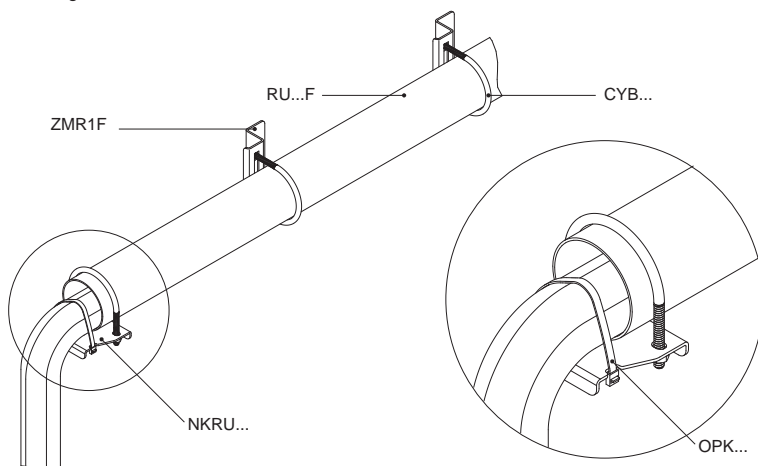
Pipe angle cap	NKRU...	mat.: FP	option: E, L		
code	catalogue number	dimension Ø/a/b/L [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	N
<b>Material thickness = 2.0 mm</b>					
NKRU16	601188	16/41/24/55	0.03	100	
NKRU20	601288	20/45/28/55	0.03	100	
NKRU25	601388	25/50/33/55	0.03	100	
NKRU32	601488	32/57/40/62.5	0.04	100	
NKRU40	601588	40/65/48/65	0.06	100	
NKRU50	601688	50/75/58/65	0.07	100	
NKRU60	601788	60/85/68/65	0.09	100	
NKRU63,5	601888	63.5/88.5/71.5/65	0.09	100	



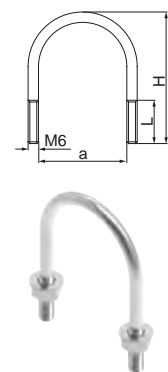
**Use:**  
Protection of cables from damage when they are brought out of the installation pipes.

**Additional information:**

- mounting to pipes with the help of screw clamps
- fixing of cables with elastic bands



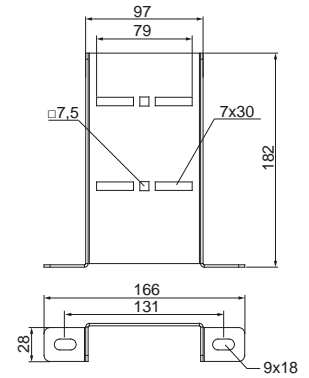
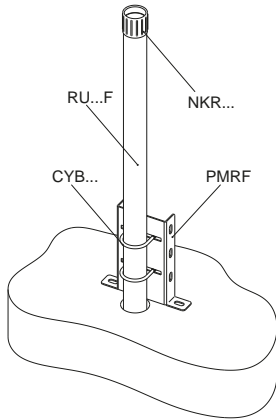
U-bolt	CYB...	mat.: G	option: E		
code	catalogue number	dimension a/H/L [mm]	weight 1 pc. [kg]	quantity per package [pcs.]	
CYB16	810188	18/35/15	0.02	100	
CYB20	810288	22/39/15	0.02	100	
CYB25	810388	27/44/15	0.02	100	
CYB32	810488	34/51/20	0.02	100	
CYB40	810588	42/59/20	0.03	100	
CYB50	810688	52/69/20	0.03	100	
CYB60	810788	62/79/20	0.03	100	
CYB63,5	810888	65.5/82.5/20	0.04	100	



**Use:**  
Mounting pipes.

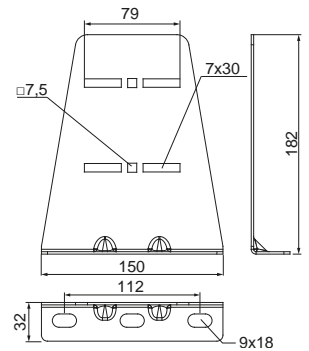
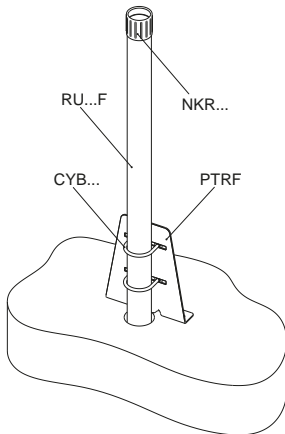


Base Plate	PMRF	mat.: F	option: S, E, L
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>			
PMRF	8122093	0.42	1



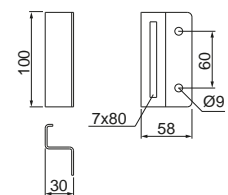
Fastening Bracket	PTRF	mat.: F	option: S, E, L
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>			
PTRF	8122103	0.39	1

**Use:**  
Mounting installation pipes to ceilings or floors at installation penetrations using screw clamps or brackets.

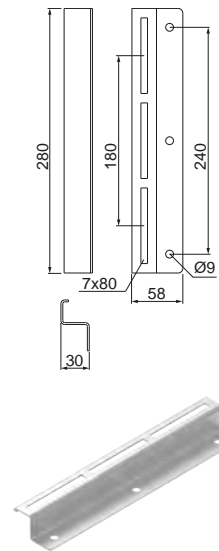
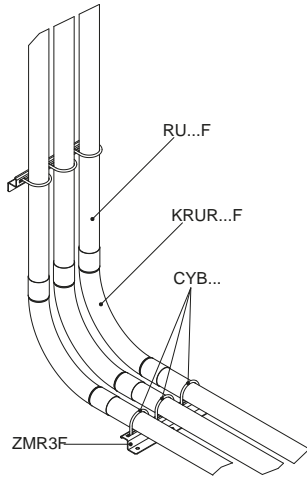


Mounting Z-profile	ZMR1F	mat.: FP	option: S, E, L
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>			
ZMR1F	8122113	0.12	1

**Use:**  
Mounting pipes to walls, ceilings or floors at installation penetrations using screw clamps or brackets.



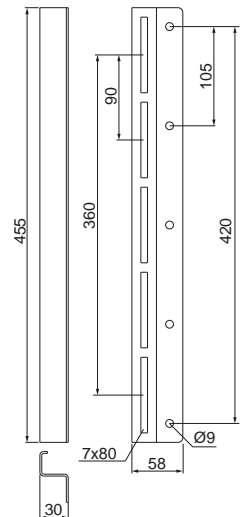
Mounting Z-profile	ZMR3F	mat.: F	option: S, E, L
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
ZMR3F	8122123	0.34	1



Mounting Z-profile	ZMR5F	mat.: F	option: S, E, L
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
<b>Material thickness = 2.0 mm</b>			
ZMR5F	8122133	0.56	1

**Use:**  
Mounting pipes to walls, ceilings or floors at installation penetrations using screw clamps or brackets.

**Additional information:**  
– for tightening the screw clamps use an offset ring spanner

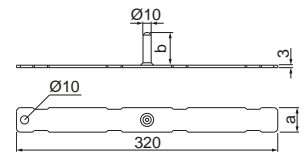


**Cable bracket**

WH...

mat.: F

code	catalogue number	dimension a/b [mm]	weight 1 pc. [kg]	quantity per package [pcs.]
WH320x30/004	3230047	30/40	0.41	1
WH320x30/012	3230127	30/120	0.47	1
WH320x50/004	325004	50/40	0.56	1
WH320x50/012	325012	50/120	0.62	1

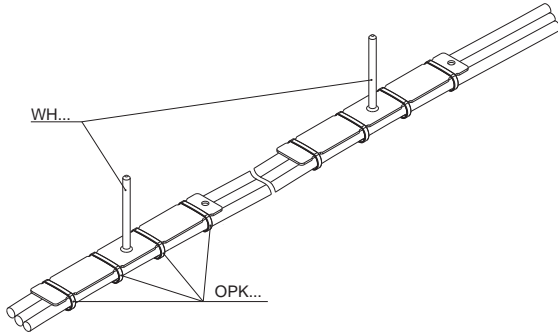


**Use:**

Mounting cables to the ship's structure.

**Additional information:**

- element welded to the structure

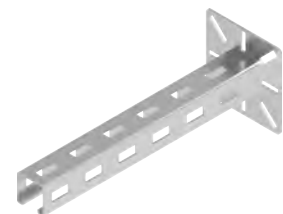
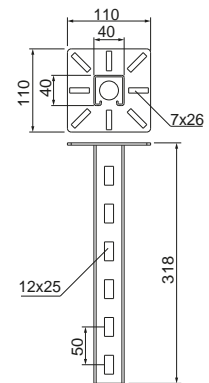


**Box bracket**

WWP100x100/03

mat.: F

code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]
WWP100x100/03	435110	0.81	1

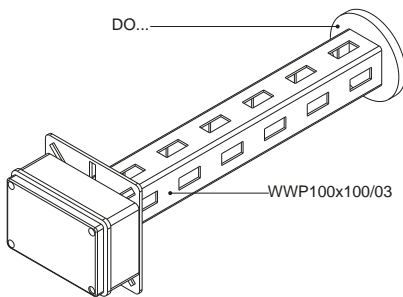


**Use:**

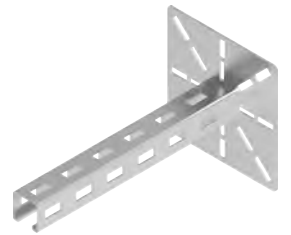
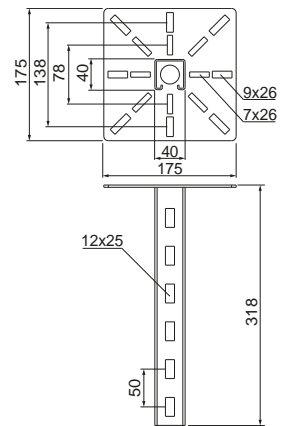
Installation of electrical equipment

**Additional information:**

- element welded to the structure



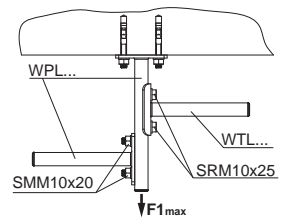
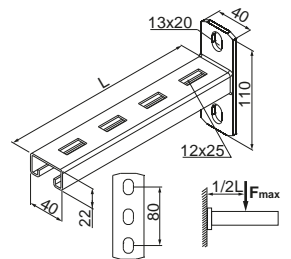
Box bracket	WWP175x175/03	mat.: F		
code	catalogue number	weight 1 pc. [kg]	quantity per package [pcs.]	
WWP175x175/03	435117	1.20	1	



**Use:**  
Installation of electrical equipment

**Additional information:**  
- element welded to the structure

Bracket	WPL...	mat.: F	option: E, L			
code	catalogue number	dimension L [mm]	load max. $F_{max}$ [kN]	load max. $F1_{max}$ [kN]	weight 1 pc. [kg]	quantity per package [pcs.]
WPL100	710710	115	1.90	8.00	0.20	50
WPL150	710715	165	1.80	8.00	0.27	50
WPL200	710720	215	1.70	8.00	0.34	50
WPL300	710730	315	1.30	8.00	0.49	30
WPL400	710740	415	1.00	8.00	0.61	30
WPL500	710750	515	0.80	8.00	0.75	30



**Use:**  
Mounting cable trays, cable ladders, pipes and other elements, especially with limited space for cable routes (e.g. above suspended ceilings).

**Additional information:**  
- can be used in the form of a wall or ceiling bracket (mounting to the ceiling)  
- on request possible to make wall brackets of non-standard lengths

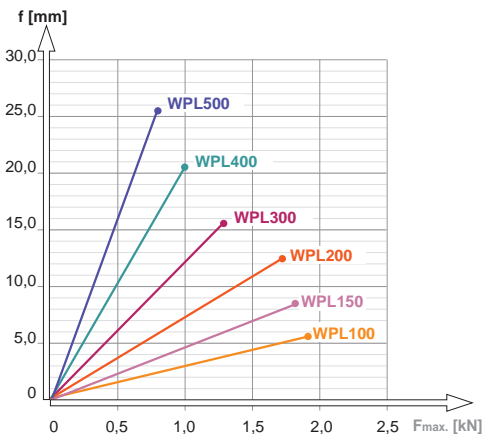
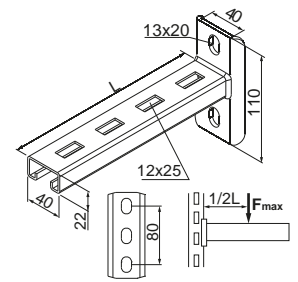


Chart description:  
 $f$  - axis of deflection  
 - deflection line  
 $F_{max}$  - maximum load axis

Bracket code	WTL... catalogue number	WTL... dimension L [mm]	mat.: F load max. $F_{max}$ [kN]	option: E, L weight 1 pc. [kg]	quantity per package [pcs.]
WTL100	710810	115	1.90	0.24	50
WTL150	710815	165	1.80	0.29	50
WTL200	710820	215	1.70	0.38	50
WTL300	710830	315	1.30	0.52	30
WTL400	710840	415	1.00	0.65	30
WTL500	710850	515	0.80	0.79	30



**Use:**

Mounting cable trays, cable ladders, pipes and other elements to steel structures based on channels with the width of ~40 mm, especially with limited space for cable routes (such as above suspended ceilings).

**Additional information:**

- on request possible to make wall brackets of non-standard lengths
- recommended mounting to an open channel wall with the width of ~40 mm using SRM10x25 bolts, which allows stepless adjustment of the position

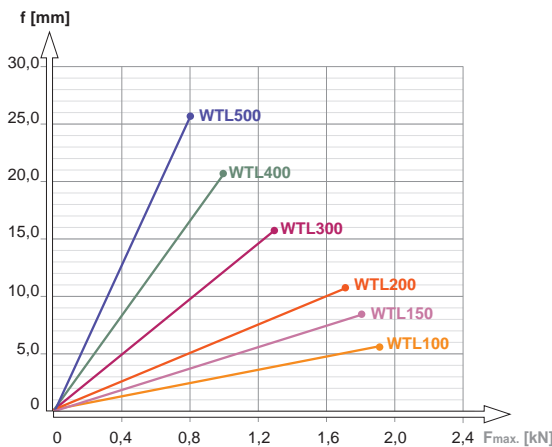
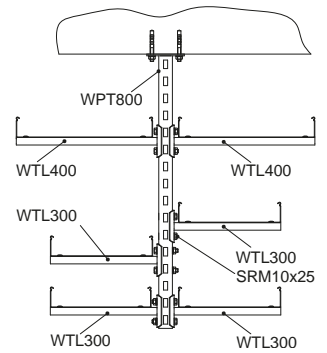


Chart description:  
 f - axis of deflection  
 — deflection line  
 F<sub>max</sub> - maximum load axis



Protective cap code	NOW40x22 catalogue number	mat.: PE quantity per package [pcs.]
NOW40x22	760100	100



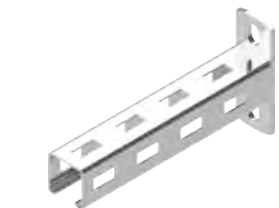
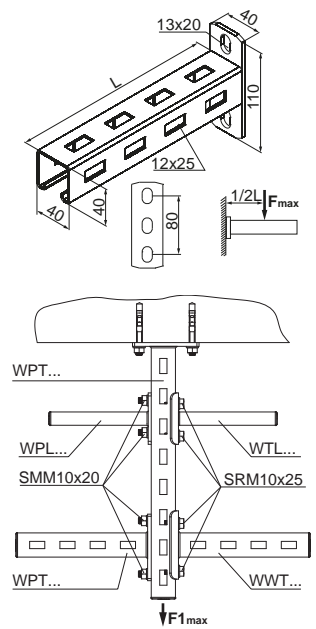
**Use:**

Protection of the fitter from injury from steel edges, improving visual aspect.

**Additional information:**

- covers the edges of the wall brackets, protecting fitters from injury
- thanks to a new secure lock, the caps always stay in place
- provide a visually pleasing end to a channel or wall bracket

Bracket	WPT...	mat.: F	option: E, L			
code	catalogue number	dimension L [mm]	load max. $F_{max}$ [kN]	load max. $F_{1max}$ [kN]	weight 1 pc. [kg]	quantity per package [pcs.]
WPT/WPTO100	710910	115	3.00	10.00	0.48	30
WPT150	710915	165	2.50	10.00	0.57	30
WPT200	710920	215	2.00	10.00	0.65	30
WPT300	710930	315	1.70	10.00	0.92	30
WPT400	710940	415	1.60	10.00	1.12	20
WPT500	710950	515	1.40	10.00	1.33	20
WPT600	710960	615	1.30	10.00	1.39	20
WPT700	710970	700	1.20	10.00	1.78	8
WPT800	710980	800	1.10	10.00	1.93	8
WPT900	710990	900	1.00	10.00	2.16	8
WPT1000	710911	1000	0.90	10.00	2.38	8

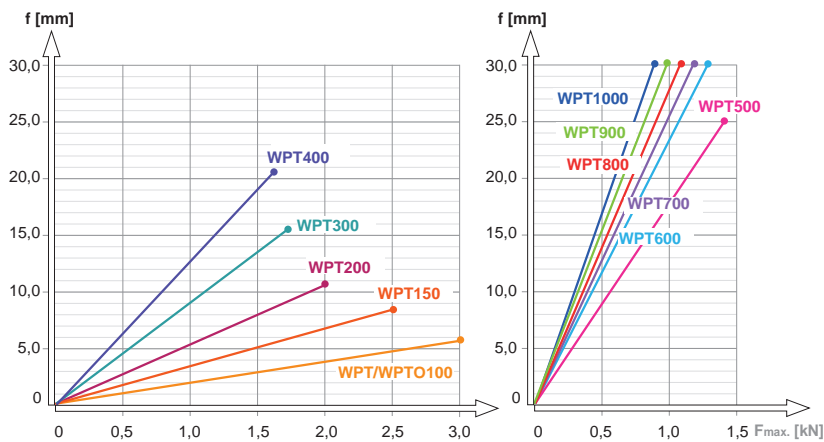


### Use:

Mounting cable trays, cable ladders, pipes and other elements, especially with limited space for cable routes (e.g. above suspended ceilings).

### Additional information:

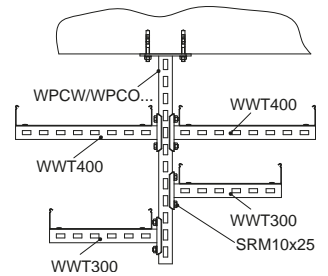
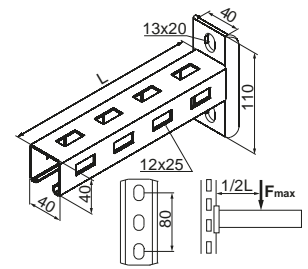
- can be used in the form of a wall or ceiling bracket (mounting to the ceiling)
- on request possible to make wall brackets of non-standard lengths
- option E90 for lengths of 100 mm (see Section XIX for details)



### Chart description:

- $f$  - axis of deflection
- deflection line
- $F_{max}$  - maximum load axis

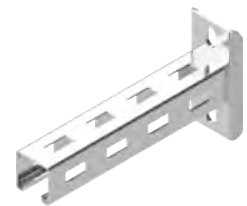
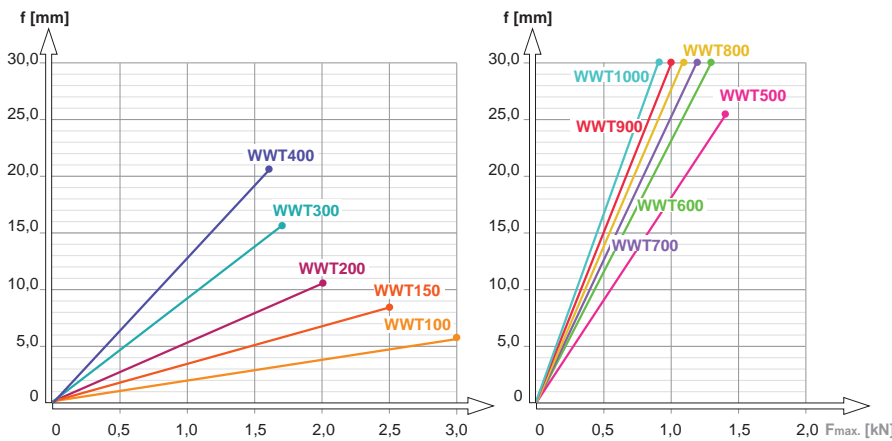
Bracket code	WWT... catalogue number	WWT... dimension L [mm]	mat.: F load max. $F_{max}$ [kN]	option: E, L weight 1 pc. [kg]	quantity per package [pcs.]
WWT100	711010	115	3.00	0.51	30
WWT150	711015	165	2.50	0.60	30
WWT200	711020	215	2.00	0.69	30
WWT300	711030	315	1.70	0.96	30
WWT400	711040	415	1.60	1.15	30
WWT500	711050	515	1.40	1.37	20
WWT600	711060	615	1.30	1.43	10
WWT700	711070	700	1.20	1.82	8
WWT800	711080	800	1.10	1.97	8
WWT900	711090	900	1.00	2.20	8
WWT1000	711011	1000	0.90	2.43	8



**Use:**  
Mounting cable trays, cable ladders, pipes and other elements to steel structures based on channels with the width of ~40 mm, especially with limited space for cable routes (such as above suspended ceilings).

**Additional information:**

- on request possible to make wall brackets of non-standard lengths
- recommended mounting to an open channel wall with the width of ~40 mm using SRM10x25 bolts, which allows stepless adjustment of the position



Protective cap code	NOW40x40 catalogue number	mat.: PE	quantity per package [pcs.]
NOW40x40	760400		100

**Additional information:**

- covers the edges of the wall brackets, protecting fitters from injury
- thanks to a new secure lock, the caps always stay in place
- provide a visually pleasing end to a channel or wall bracket



Protective cap code	NO40x40N catalogue number	mat.: PE	quantity per package [pcs.]
NO40x40N	760510		100

**Use:**

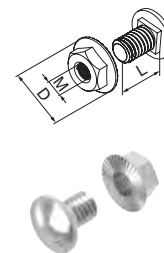
Protection of the fitter from injury from steel edges, improving visual aspect.



[English]: Śruba z łbem grzybkowym + nakrętka kołnierzowa ząbkowana (kpl.)

SGKF...

mat.: FP



code	catalogue number	dimension M/L [mm]	flange D [mm]	quantity per package [pcs.]
SGKFM6x12	651441	6/12	13	100
SGKFM8x14	651541	8/14	17	100
SGKFM8x16	651542	8/16	17	100
SGKFM10x20	651641	10/20	20.5	100
SGKFM10x30	890111	10/30	20.5	100
SGKFM12x30	651330	12/30	26	100

**Use:**

Connecting system components.

**Additional information:**

– 8.8 grade bolt