

2025 price list Structures/Facade

Valid from 1 February 2025



Product categories

Overview

Sealing

page 5

Sealing

Fastening

page 45

Fastening

Reinforcement

page 83

Reinforcement

Facade fastening

page 117

Facade fastening

Sound insulation

page 129

Sound insulation

Formwork

page 137

Formwork

Connection

page 159

Connection

Thermal insulation

page 169

Thermal insulation

Sealing

PENTAFLEX®

PENTAFLEX KB® 167	6
PENTAFLEX KB® corner	6
PENTAFLEX KB® 80	6
PENTAFLEX® tape	7
PENTAFLEX KB® 167 Agrar	7
PENTAFLEX® stirrups & clips	7
PENTAFLEX® Modul	7
PENTAFLEX® ABS	8
Retaining reinforcement	9
PENTAFLEX® FBA joint tape connection	10
PENTAFLEX® STK sound-insulating cage	10
PENTAFLEX® sound-insulation joint tape	10
PENTAFLEX® FTS joint	11
PENTAFLEX® FTS corner	11
PENTAFLEX® OBS floor slab	12
PENTAFLEX® OBS	13
PENTAFLEX® OPTI wall strengtheners	13
PENTAFLEX® KG DM wall lead-through	14
PENTAFLEX® KG wall lead-through	14
PENTAFLEX® PP wall lead-through	14
PENTAFLEX® PP DM wall lead-through	15

PENTAFLEX® KG protective tube	15
PENTAFLEX® PP protective tube	15
PENTAFLEX® KG floor lead-through	16
PENTAFLEX® PP floor lead-through	16
PENTAFLEX® floor drain	16
PENTAFLEX® extension piece	16

KUNEX®

KUNEX® interior construction joint tape	17
KUNEX® construction joint tape, steel-reinforced	18
KUNEX® exterior construction joint tape	19
KUNEX® corner joint tape for construction joints	19
KUNEX® interior expansion joint tape	20
KUNEX® exterior expansion joint tape	21
KUNEX® corner joint tape for expansion joints	22
KUNEX® joint closing tape	22
KUNEX® joint sealing strip	23
KUNEX® star tube	23
KUNEX® TPE joint tape	24
KUNEX® clamp joint	25

KUNEX® clamp joint tape	25
KUNEX® clamp joint tape accessories	25
KUNEX® ABS construction joints	27
KUNEX® ABS expansion joints	28
KUNEX® welded structures	29
KUNEX® pre-cut parts	30
KUNEX® welding tools	30
KUNEX® welding tape	30

KUNEX® fastening accessories	30
KUNEX® joint tape connector	30
KUNEX® MK puddle flange	31
KUNEX® MK EF/ER puddle flange	31

PLURAFLEX®

PLURAFLEX® C11	32
PLURAFLEX® P11	32
PLURAFLEX® P19	32
PLURAFLEX® C11 active	32
PLURAFLEX® plastic clips	33
PLURAFLEX® seam sheet clip	33
PLURAFLEX® joint tape clip	33
PLURAFLEX® spider fitting	34

PLURAFLEX® nail packers	34
PLURAFLEX® hose clip	34
PLURAFLEX® foam rubber	34
PLURAFLEX® M8 injection nipple	34
PLURAFLEX® protective box	35
PLURAFLEX® filling/venting hose	35
PLURAFLEX® plug	35
PLURAFLEX® C11 coupling	35
PLURAFLEX® nozzle	36
PLURAFLEX® heat-shrink hose	36
PLURAFLEX® injection nozzle	36
PLURAFLEX® M6 injection nipple	36
PLURAFLEX® XL C11 set	37
PLURAFLEX® S C11/P11 set	37
PLURAFLEX® V C11 set	37
PLURAFLEX® P C11 set	37
PLURAFLEX® PUR injection foam resin 50	38
PLURAFLEX® PUR injection resin 05	38
PLURAFLEX® EP injection resin	38

SWELLFLEX®

SWELLFLEX® BS	39
SWELLFLEX® BT	39
SWELLFLEX® RB	39
SWELLFLEX® mounting channel	39
SWELLFLEX® mesh	40
SWELLFLEX® assembly adhesive & sealant	40

SECUFLEX®

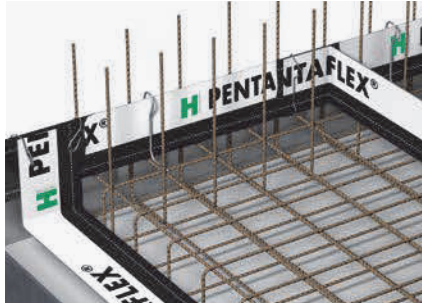
SECUFLEX® SMT	41
SECUFLEX® ST	41
SECUFLEX® ST Patch	41
SECUFLEX® MT	42
SECUFLEX® PT	42
SECUFLEX® DT	42
SECUFLEX® PR	42
SECUFLEX® Accessories	43

PENTAFLEX®



PENTAFLEX KB® 167

With guide marking



PENTAFLEX KB® elements are fully coated on both sides with a special coating.

The bond between the special coating and the fresh concrete reliably prevents water from infiltrating the joint system. An anchoring depth of at least 30 mm

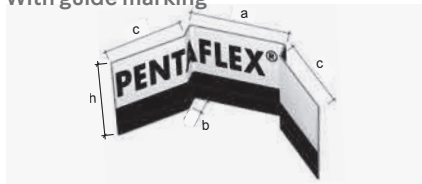
is enough to withstand a tested water pressure of up to 5.0 bar (2.0 bar permitted in accordance with the German building code test certificate (**abP**)). The guide markings make it easy to check that the PENTAFLEX KB® elements are correctly positioned at their minimum embedding depth while pouring the concrete without constantly having to remeasure. The high elasticity of the coating maintains a reliable seal if concrete components shrink.

- ETA-15/0003
- **abP**
- Radon-proof
- Includes joint clips and cross clips

Article number	Height [mm]	Element length [mm]	Weight [kg/m]	PU [m]	PU [m/pal.]	Price per m [€]
110100005565	167	2.000	0.90	100 (box)	-	10.90
110100005567	167	25.000	0.90	25 (roll)	600	11.50

PENTAFLEX KB® corner

With guide marking



PENTAFLEX KB® corner element for corner areas of construction joints. Waterproof – tested up to 5.0 bar, 2.0 bar permitted in accordance with **abP**.

- ETA-15/0003
- **abP**

Essential when using PENTAFLEX® FTS corner elements.

- For a technical description, see PENTAFLEX KB®
- Includes joint clips

Article number	Dimensions [mm]				Weight [kg/pc.]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
	a	b	c	h				
110100013968	170	30	135	167	0.45	4	200	13.30
110100013969	170	30	135	80	0.20	4	200	19.90

PENTAFLEX KB® 80

With guide marking



For sealing wall/ceiling construction joints. Waterproof to 1.0 bar according to **abP**.

- ETA-15/0003
- **abP**
- Includes joint clips

Article number	Height [mm]	Element length [mm]	Weight [kg/m]	PU [m/box]	Price per m [€]
110100005569	80	2.000	0.45	100	12.00
110100005572	80	25.000	0.45	roll	12.60

PENTAFLEX® tape



Special tape for additional protection e.g. of intersection points in special constructions.

Article number	Width [mm]	Length [m/roll]	Weight [kg/roll]	PU [rolls/box]	Price per roll [€]
110300014851	40	10	0.30	14	42.60

PENTAFLEX KB® 167 Agrar

With guide marking

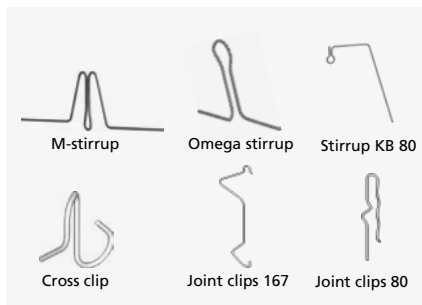


PENTAFLEX KB® 167 Agrar elements are metal seam sheets with a special coating on both sides. They are suitable for applications in contact with slurry, liquid manure and silage effluent (JGS). The seam sheets are regulated by the German national technical approval (abZ) Z-74.101-175 concerning Pentaflex KB® 167 Agrar metal seam sheets for use in biogas and JGS storage and filling facilities. The seam sheets may be used in storage and filling facilities of JGS plants (as specified by section 2 (13) of the German Ordinance on Facilities for Handling Substances Hazardous to Water (AwSV)) and in biogas plants in which fermentation substrates of agricultural origin (as specified by section 2 (8) of the AwSV), except fermentation substrates containing vegetable oil, are stored or used. **CAUTION: After the AwSV comes into force, only products approved by the building authorities may be used for this area of application.**

- National technical approval Z-74.101-175
- Includes 3 x joint clips, 20 x omega stirrups, 2 strips of PENTAFLEX® tape
- Tested up to 2.0 bar: DIBt approval to 0.8 bar (safety factor of 2.5).

Article number	Height [mm]	Element length [mm]	Weight [kg/m]	PU [rolls/box]	Price per m [€]
110100020287	167	Rolls, 10 m each	1.1	2	15.30

PENTAFLEX® stirrups & clips



Stirrups and clips for fastening PENTAFLEX® elements.

Article number	Type	Weight [kg/pc.]	PU [pcs.]	Price per piece [€]
110300013976	M stirrup	0.06	25	1.15
110300004791	Omega stirrup	0.12	25 ¹⁾	1.15
110300013973	KB 80 stirrup	0.08	25	1.15
110300013975	Cross clip	0.02	25	1.15
110300014104	Joint clip 167	0.02	25	1.15
110300014105	Joint clip 80	0.02	25	0.95

¹⁾ Or 4.200 pcs./pallet

PENTAFLEX® Modul



PENTAFLEX® Modul for sealing construction joints with continuous formwork, e.g. between walls and underground car park ramps or between light wells and basement walls. The element consists of a protective box and integrated PENTAFLEX KB® seam sheet 60 mm wide. The structure of the module guarantees that the seam sheet is embedded 30 mm into the components being connected in accordance with the abP.

- Element can be installed with FERBOX® E types
- Element length: 800 mm or 1.200 mm; other lengths available on request

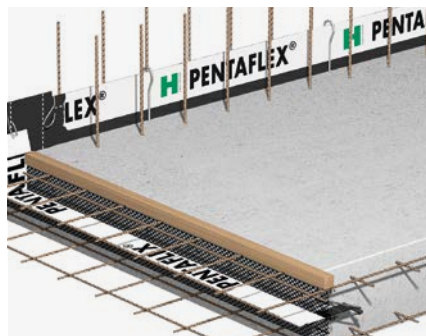
Article number	Type	Price per m [€]
110400022083	PENTAFLEX® Modul 1.200 mm	24.90
110400024200	PENTAFLEX® Modul 800 mm	24.90

Article number	Type	Price per piece [€]
110400024201	PENTAFLEX® Modul corner element 200x200	17.40

Extension product for Modul	Surcharge [€]
Surcharge for special lengths	10 %



PENTAFLEX® ABS



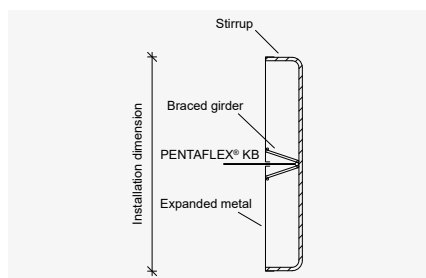
Shuttering element for creating waterproof construction joints in reinforced concrete components. Please specify connection area (floor/floor, ceiling/ceiling or wall/wall) when ordering.

Version with bracing lattice beam structure available as rough (ABS R) or interlocking (ABS V) joint in line with DIN EN 1992-1-1/NA. The lattice beam structure is reinforced in the interlocking ABS V-S variant. It is sealed with the included PENTAFLEX KB® seam sheet. Waterproof – tested up to 5.0 bar (2.0 bar permitted in accordance with **abP**).

- ETA-15/0003
- **abP**
- E dimension = clearance between upper and lower reinforcement [mm]
- Element length: 2.400 mm; other dimensions and versions available on request

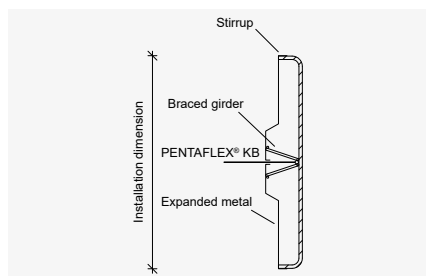
Specify joint length, installation height (E dimension) and connection points when ordering.

PENTAFLEX® ABS R – rough joint in line with EC2 (wall/wall: version with shortened lattice beam)



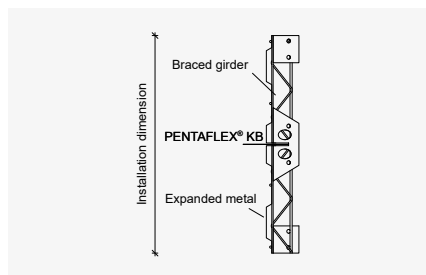
Article number Floor/floor	Article number Wall/wall	Installation height [mm]	Weight [kg/m]	Price per m [€]
111700022084	111900022862	80-200	2.37	46.00
111700022085	111900022863	210-250	2.60	47.50
111700022086	111900022864	260-300	2.82	48.80
111700022087	111900022865	310-350	3.26	55.40
111700022088	111900022866	360-400	3.50	56.80
111700022089	111900022867	410-500	3.99	62.70
111700022090	111900022868	510-590	4.92	73.10

PENTAFLEX® ABS V – interlocking joint in line with EC2 (wall/wall: version with shortened lattice beam)



Article number Floor/floor	Article number Wall/wall	Installation height [mm]	Weight [kg/m]	Price per m [€]
111800022091	112000022869	140-200	2.61	56.60
111800022092	112000022870	210-250	2.74	58.40
111800022093	112000022871	260-300	2.96	60.00
111800022094	112000022872	310-350	3.34	66.70
111800022095	112000022873	360-400	3.59	68.20
111800022096	112000022874	410-500	4.08	74.10
111800022097	112000022875	510-590	5.46	84.50

PENTAFLEX® ABS V-S – interlocking joint in line with EC2, reinforced version

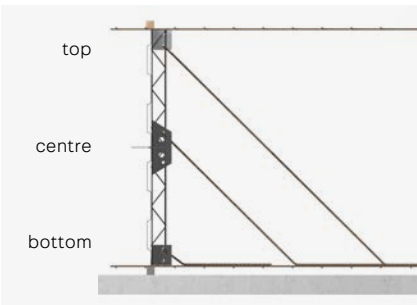
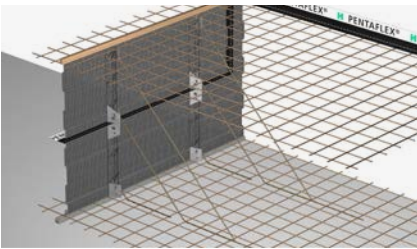


Article number Floor/floor & wall/wall	Installation height [mm]	Weight [kg/m]	Price per m [€]
112200022098	600-690	4.82	87.80
112200022099	700-790	5.21	90.70
112200022100	800-890	6.78	93.90
112200022101	900-990	7.15	96.90
112200022102	1.000-1.090	8.96	106.60
112200022103	1.100-1.190	9.40	117.20
112200022104	1.200-1.290	9.84	127.80
112200022105	1.300-1.390	10.94	138.50
112200022106	1.400-1.490	11.38	149.10
112200022107	1.500-1.590	11.82	159.70
112200022108	1.600-1.690	14.01	170.40
112200022109	1.700-1.790	14.49	181.00
112200022110	1.800-1.890	14.98	191.60
112200022111	1.900-1.990	16.81	202.30

Corner surcharge	Per piece	17.20
Surcharge for Cone cut		10 %
Surcharge for Tapered cut	Per m	9.50
Surcharge for notching in expanded metal	Per piece	17.20
Surcharge for short pieces		10 %
Off-centre joints		10 %

Retaining reinforcement

NEW



Delivery form

Set of 3 brackets (top, centre, bottom),
diameter: 12, B500B

Accessories for PENTAFLEX® ABS V-S and shuttering elements A V-S.

Scope of application

- Stirrups (B500B) in 3 different lengths for fastening the ABS V-S page 8 or A V-S elements page 147 to the on-site reinforcement
- Stirrups must be welded to the upper layer of the slab reinforcement
- Stirrup sets per unit in relation to unit length $l = 2.40 \text{ m}$

Artikelnummer	E-Maß ABS [mm]	Bügelsets je Element ¹⁾ [Stück]	Bügelsets je m ¹⁾ [Stück]	Gewicht [kg]	Preis je Set [€]
112200026033	600-690	4	1.6		7.20
112200025718	700-790	4	1.6		7.50
112200025719	800-890	5	2.0		7.80
112200025720	900-990	5	2.0		8.30
112200025721	1.000-1.090	5	2.0		8.40
112200025722	1.100-1.190	5	2.0		8.90
112200025723	1.200-1.290	5	2.0		9.30
112200025724	1.300-1.390	5	2.0		9.50
112200025725	1.400-1.490	5	2.0		10.10
112200025726	1.500-1.590	5	2.0		10.30
112200025727	1.600-1.640	5	2.0		10.80
112200025727	1.650-1.690	6	2.5		10.80
112200025728	1.700-1.790	6	2.5		11.00
112200025729	1.800-1.890	6	2.5		11.10
112200025730	1.900-1.990	6	2.5		11.70
112200025731	2.000-2.090	6	2.5		11.70

¹⁾ zur Ermittlung der Gesamtmenge aufrunden

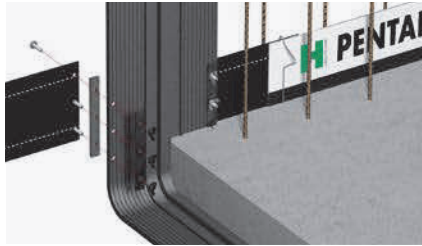


As accessories for the lower reinforcement layer,
we recommend our spacers at page 148.
Shuttering elements without PENTAFLEX® sealing elements
can be found in the "Formwork" chapter at page 145.



ABS elements can be individually customised to the needs
of a project. Just ask us.

PENTAFLEX® FBA joint tape connection



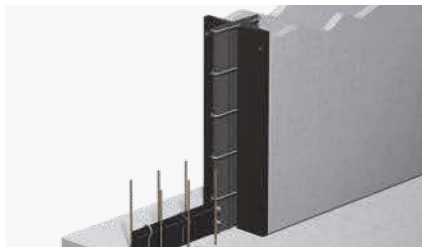
Element for connecting PENTAFLEX KB® with joint tapes.

Waterproof – tested up to 5.0 bar.

- Consumption per connection: 1 set (consisting of 2 pcs.)

Article number	Weight [kg/box]	PU [Set/box]	Price per set [€]
110100005614	0.88	1	74.70

PENTAFLEX® STK sound-insulating cage



Prefabricated joint cage element for creating water-impermeable sound-insulation joints in double precast wall elements.

- Element length: 3.000 mm
- For walls 240 mm wide and above
- Joint width: 30 mm
- Includes knock-in fastening anchors (6 pcs./set)
- Please order sound-insulation joint tape separately
- Other dimensions and versions available on request

Article number	Wall thickness [mm]	Tape width [mm]	Weight [kg/set]	PU [set/pal.]	Price per set [€]
111500004774	240 / 250	240	8.68	20	166.10
111500004775	300	240	9.83	20	174.40
111500004776	365	240	10.86	10	182.80
111500019816	240 / 250	320	8.59	20	191.00
111500019818	300	320	9.60	20	200.60
111500019817	365	320	10.16	10	210.30

PENTAFLEX® sound-insulation joint tape



For use with STK sound-insulating cages with pre-assembled PENTAFLEX® joint tape connection for connecting to PENTAFLEX KB® 167.

- Element length: 3.000 mm
- Bitumen-compatible joint tape
- PENTAFLEX® coating in the area where the element is embedded into the floor slab

Article number	Tape width [mm]	Weight [kg/pc.]	PU [pcs./box]	Price per piece [€]
111600004788	240	4.72	1	209.30
111600004792	320	6.85	1	220.80

PENTAFLEX® sound-insulation joint tape

For movement joints



For use with STK sound-insulating cages. Includes PENTAFLEX® joint tape connection for connecting to PENTAFLEX KB® 167.

- Element length: depending on building
- Please use order form BK 02 for KUNEX welded constructions.
- The order forms can be found at www.pohlcon.com

Price on request.

PENTAFLEX® FTS joint



The precast crack control element PENTAFLEX® FTS joint creates a predetermined breaking point at butt joints between precast walls and seals the resulting crack reliably. No further sealing measures are required. Waterproof – tested up to 5.0 bar (**2.0 bar permitted in accordance with abP**).

- **ETA-15/0003**
- **abP**
- Element length: 2.500, 2.750 or 3.000 mm
- Includes cross clips and knock-in fastening anchors

Article number	Wall width [mm]	Element length [mm]	Weight [kg/m]	PU [pcs./pal.]	Price per m [€]
110600004406	240–280	2.500	1.84	28	34.00
110600004407	240–280	2.750	1.84	28	34.00
110600004408	240–280	3.000	1.84	28	34.00
110600004409	290–340	2.500	2.00	28	34.00
110600004410	290–340	2.750	2.00	28	34.00
110600004411	290–340	3.000	2.00	28	34.00
110600004412	350–400	2.500	2.20	28	39.00
110600004413	350–400	2.750	2.20	28	39.00
110600004414	350–400	3.000	2.20	28	39.00

Extension products for FTS joint	Surcharge [€]
Cutting surcharge	Per piece 17.20
Wall width > 400 mm ¹⁾	Per 100 mm of width per m 5.20

¹⁾ Other wall widths available on request

PENTAFLEX® FTS corner



The precast crack control element PENTAFLEX® FTS corner creates a predetermined breaking point at butt joints between double precast walls and seals the resulting crack reliably. No further sealing measures are required. Waterproof – tested up to 5.0 bar (**2.0 bar permitted in accordance with abP**).

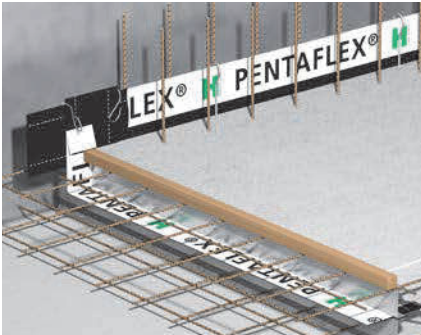
- **ETA-15/0003**
- **abP**
- **PENTAFLEX KB® corner (page 6) must be installed in the floor slab to connect the floor/wall joint.**
- Element length: 2.500, 2.750 or 3.000 mm
- Includes cross clips and knock-in fastening anchors

Article number	Wall width [mm]	Element length [mm]	Weight [kg/m]	PU [pcs./pal.]	Price per m [€]
110600004396	240–280	2.500	2.00	28	35.90
110600004397	240–280	2.750	2.00	28	35.90
110600004398	240–280	3.000	2.00	28	35.90
110600004399	290–340	2.500	2.15	28	35.90
110600004400	290–340	2.750	2.15	28	35.90
110600004401	290–340	3.000	2.15	28	35.90
110600004402	350–400	2.500	2.30	28	40.70
110600004403	350–400	2.750	2.30	28	40.70
110600004404	350–400	3.000	2.30	28	40.70

Extension products for FTS corner	Surcharge [€]
Cutting surcharge	Per piece 17.20
Wall width > 400 mm ¹⁾	Per 100 mm of width per m 5.20

¹⁾ Other wall widths available on request

PENTAFLEX® OBS floor slab



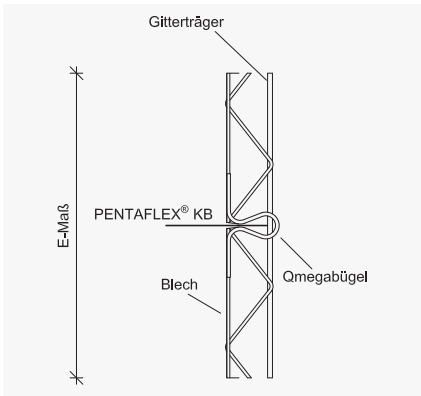
The cast-in-place crack control element PENTAFLEX® OBS floor slab creates a predetermined crack in floor slabs and simultaneously seals the crack. Versions available for very smooth or interlocking joints in line with DIN EN 1992-1-1/NA.

Waterproof – tested up to 5.0 bar (**2.0 bar permitted in accordance with abP**).

- **ETA-15/0003**
- **abP**
- **Surveyor report**
- E dimension = clearance between upper and lower reinforcement [mm]
- Element length: 2.500 mm; other dimensions and versions available on request

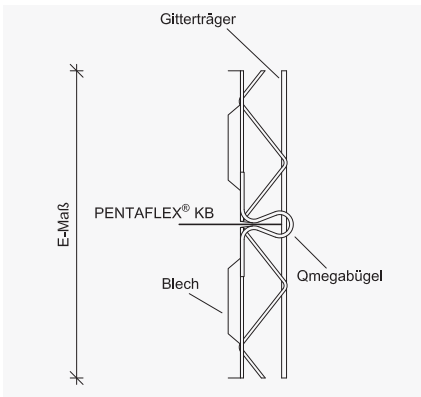
Please state joint length, installation height (E dimension) and connection points when ordering.

PENTAFLEX® OBS G-S – very smooth joint in line with EC2



Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
110700020328	80–200	2.37	44.70
110700020330	210–250	2.60	46.10
110700020325	260–300	2.82	47.50
110700020326	310–350	3.26	53.90
110700020327	360–400	3.50	55.10
110700020332	410–500	3.99	61.00
110700020329	510–600	4.92	70.90
110700020316	610–700	5.41	73.80
110700020320	710–800	9.87	76.60
110700020317	810–900	10.39	79.50
110700020318	910–1.000	10.92	82.20

PENTAFLEX® OBS V-S – interlocking joint in line with EC2



Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
110700019961	140–200	2.61	55.00
110700019962	210–250	2.74	56.70
110700019963	260–300	2.96	58.40
110700019964	310–350	3.34	64.70
110700019965	360–400	3.59	66.40
110700020319	410–500	4.08	72.00
110700020331	510–600	5.46	82.20
110700020322	610–700	5.95	85.30
110700020321	710–800	8.90	88.20
110700020323	810–900	9.39	91.20
110700020324	910–1.000	9.88	94.20

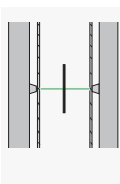
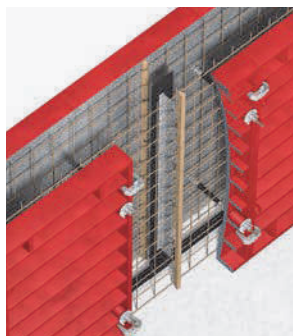
Extension products for OBS floor slab		Surcharge [€]
Corner surcharge	Per piece	16.90
Surcharge for tapered cuts	Per m	8.70
Surcharge for short pieces		10%
Off-centre joints		10%



Shuttering elements without PENTAFLEX® sealing elements can be found in the Formwork section starting on page 145.

To support the lower reinforcement layer, we recommend our spacers on page 148.

PENTAFLEX® OBS



The cast-in-place crack control element PENTAFLEX® OBS creates a predetermined crack in cast-in-place walls and simultaneously seals the crack.

Waterproof – tested up to 5.0 bar (**2.0 bar permitted in accordance with abP**).

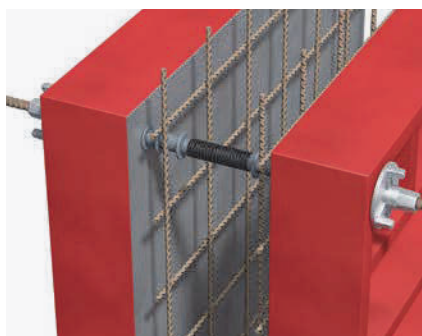
- **ETA-15/0003**
- **abP**
- **Surveyor report**
- Element length: 2.500, 2.750 or 3.000 m
- E dimension = Clearance between inner and outer reinforcement [mm]
- Other E dimensions available on request
- Includes cross clips for fastening
- Max. E dimension = 320 mm, for larger E dimensions use OBS G-S page 12.

Specify joint length and installation height (E dimension) when ordering.

Article number [...]	E dimension [mm]	Weight [kg/m]	PU [pcs./pal.] l = 2.500 m	PU [pcs./pal.] l = 2.750 m	PU [pcs./pal.] l = 3.000 m	Price per m [€]
1107...	140	2.45	28	28	28	39.00
1107...	180	2.60	28	28	28	39.00

Extension products for OBS				Surcharge [€]
Cutting surcharge		Per piece		20.80
E dimension 150–170 mm		Per m		5.20
E dimension ≥190–320 mm		Per 100 mm of width per m		5.20

PENTAFLEX® OPTI wall strengtheners



Waterproof tie points. **Waterproof – tested up to 5.0 bar.**

- Includes sealing plugs and OPTI plugs
- Other lengths available on request

PENTAFLEX® OPTI wall strengtheners

Article number	Inside diameter [mm]	Length [mm]	Weight [kg/pc.]	PU [pcs./box]	PU [box/pal.]	Price per piece [€]
111400002312	22	240	0.06	50	20	1.80
111400002313	22	250	0.06	50	20	1.80
111400002315	22	300	0.07	50	20	1.80
111400002317	22	350	0.08	50	20	1.90
111400002318	22	365	0.08	50	20	1.90
111400002319	22	400	0.09	50	20	1.90
111400002320	22	450 ¹⁾	0.10	50	20	2.00
111400002321	22	500 ¹⁾	0.10	50	20	2.40

¹⁾ Connected version

PENTAFLEX® OPTI wall strengtheners with *Agrar* coating

Article number	Inside diameter [mm]	Length [mm]	Weight [kg/pc.]	PU [pcs./box]	PU [box/pal.]	Price per piece [€]
111400026121	22	240 - 400	0.06	50	20	a. A.

¹⁾ Connected version

PENTAFLEX® KG DM wall lead-through



Waterproof wall lead-throughs for in cast-in-place or precast walls.

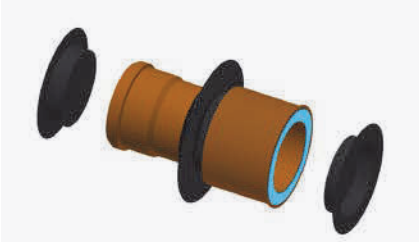
Version with double sleeve.

- Pipe material: PVC
- Waterproof version tested up to 5.0 bar
- DN 125; for DN 160, see wall lead-through DM-PP

Specify length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1109...	110	240-500	1	60	49.50

PENTAFLEX® KG wall lead-through



Waterproof wall lead-throughs for in cast-in-place or precast walls.

Version with sleeve and pull-over sleeve.

- Pipe material: PVC
- Waterproof version tested up to 5.0 bar
- Wall thickness 310- 500 mm with polystyrene ring instead of pull-over sleeve
- Foam insert prevents fine particles from running in during concreting

Specify DN and length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1109...	110	240-500	1	60	57.50
1109...	125	240-500	1	20	66.70
1109...	160	240-500	1	20	76.10
1109...	200	240-500	1	10	111.30

PENTAFLEX® PP wall lead-through



Waterproof wall lead-throughs for in cast-in-place or precast walls.

With sleeve and polystyrene ring.

- Pipe material: PP
- Waterproof version tested up to 5.0 bar

Specify DN and length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1109...	110	240-500	1	60	57.50
1109...	125	240-500	1	20	66.70
1109...	160	240-500	1	20	76.10
1109...	200	300-500	1	20	111.30

PENTAFLEX® PP DM wall lead-through



Waterproof wall lead-throughs for in cast-in-place or precast walls.

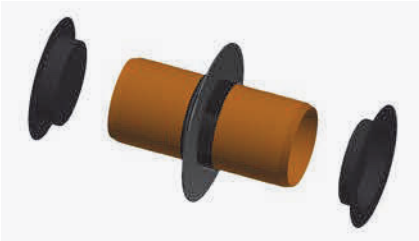
Version with double sleeve.

- Pipe material: PP
- Waterproof version tested up to 5.0 bar

Specify DN and length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1109...	110	240-500	1	60	55.30
1109...	125	240-500	1	20	60.80
1109...	160	300-500	1	20	70.00

PENTAFLEX® KG protective tube



Waterproof protective tubes for cast-in-place or precast walls.

- Pipe material: PVC
- Waterproof version tested up to 5.0 bar
- With polystyrene plug instead of cover from DN 200 upwards

Specify DN and length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1110...	110	240-500	1	60	38.90
1110...	125	240-500	1	20	43.60
1110...	160	240-500	1	20	48.50
1110...	200	240-500	1	-	54.10
1110...	250	240-500	1	-	68.90

PENTAFLEX® PP protective tube



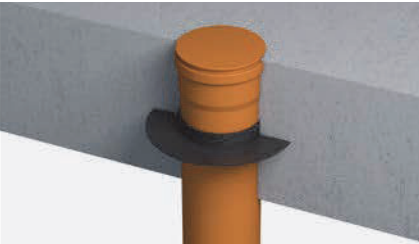
Waterproof protective tubes for cast-in-place or precast walls.

- Pipe material: PP
- Waterproof version tested up to 5.0 bar
- With polystyrene plug instead of cover from DN 200 upwards

Specify DN and length [mm] when ordering.

Article number [...]	DN [mm]	Wall thickness [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
1110...	110	240-500	1	60	45.70
1110...	125	240-500	1	20	53.60
1110...	160	240-500	1	20	67.80
1110...	200	240-500	1	-	92.90
1110...	250	240-500	1	-	150.00

PENTAFLEX® KG floor lead-through

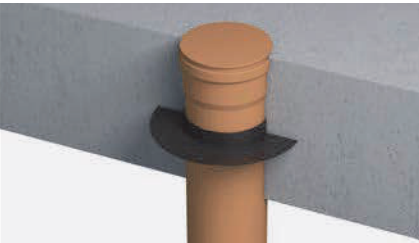


- Waterproof floor lead-throughs.
- Pipe material: PVC
 - Waterproof version tested up to 5.0 bar
 - For other diameters, see PENTAFLEX® PP floor lead-through

Specify length [mm] when ordering.

Article number	DN [mm]	Length [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
111100004284	110	500	1	40	49.50

PENTAFLEX® PP floor lead-through



- Waterproof floor lead-throughs.
- Pipe material: PP
 - Waterproof version tested up to 5.0 bar
 - With polystyrene cover from DN 125 upwards

Specify DN and length [mm] when ordering.

Article number	DN [mm]	Length [mm]	PU [pcs./box]	PU [pcs./pal.]	Price per piece [€]
111100004295	110	500	1	40	54.30
111100004296	125	500	1	24	60.40
111100004297	160	500	1	12	73.10
111100004298	200	500	1	-	114.60

PENTAFLEX® floor drain



- For use with waterproof reinforced concrete slabs (white tank construction).
Removable odour trap.
- Versions with R 90 or Multistop available on request
 - Top section height-adjustable by 50 mm
 - Other dimensions, versions and load capacities available on request

Article number	DN [mm]	Dimensions of cover [mm]	Slotted grating version	Max. load [t]	PU [pcs./box]	Price per piece [€]
111200004236	110	138 x 138	ABS	0.3	1	90.10
111200004235	110	138 x 138	Stainless steel	1.5	1	241.90
111200004238	110	138 x 138	Stainless steel	0.3	1	121.90

PENTAFLEX® extension piece

Article number	DN [mm]	Dimensions [mm]	PU [pcs./box]	Price per piece [€]
111200004255	110	100	1	32.20

KUNEX® interior construction joint tape



KUNEX® interior construction joint tape made from PVC-P for sealing construction joints in concrete structures. Installed in the centre of the concrete cross-section.

Joint tapes in line with DIN 18541 or factory standard with German building code test certificate (abP).

- Material: Soft, black PVC
- Version with eyelets available on request, eyelet spacing ≥ 200 mm

Interior construction joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120100002662	A240 DIN BV	240	15	80	3.5	25	500	1.40	10.70
120100002677	A320 DIN BV	320	15	100	4.5	25	400	1.84	14.60

Interior construction joint tape in line with DIN (not compatible with bitumen)

Article number	Type	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120100002661	A240 DIN	240	15	80	3.5	25	500	1.35	7.20
120100002676	A320 DIN	320	15	100	4.5	25	400	1.86	9.70

Interior construction joint tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120100002634	A100	100	8	47	2.0	25	1.000	0.37	2.80
120200002640	A150	150	15	55	3.0	25	600	0.94	3.50
120100002647	A190	190	15	70	3.0	25	500	1.10	3.80
120100002659	A240	240	15	80	3.5	25	500	1.40	4.90
120100002674	A320	320	15	100	4.5	25	400	2.10	7.80
120100002681	A500	500	20	150	6.0	20	40	4.00	14.70

KUNEX® construction joint tape, steel-reinforced



KUNEX® interior construction joint tape made from PVC-P with spring steel reinforcement for sealing construction joints in concrete structures.

Joint tapes in line with factory standard with German building code test certificate (abP).

- Material: Soft, black PVC
- Version with eyelets available on request, eyelet spacing ≥ 200 mm

Interior construction joint tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thick- ness [mm]	External thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120200002636	A100S	100	15	40	3.5	11	25	500	0.74	4.00
120200002637	A100SL	100	15	40	3.5	11	25	500	0.73	3.80
120200002642	A150S	150	15	58	3.5	11	25	600	0.99	4.20
120200002649	A190S	190	15	78	4.0	11	25	500	1.50	5.90
120200002650	A190SL	190	15	78	4.0	11	25	500	1.47	5.70
120200002656	A190SL7	190	15	78	4.0	11	25	500	1.46	5.30
120200002653	A190SL6	190	15	78	4.0	11	25	500	1.44	5.10
120200002651	A190SL5	190	15	78	4.0	11	25	500	1.43	4.80
120200002663	A240S	240	15	85	4.0	11	25	500	1.63	7.10
120200002664	A240SL	240	15	85	4.0	11	25	500	1.59	6.70
120200002670	A240SL7	240	15	85	4.0	11	25	500	1.62	6.60
120200002667	A240SL6	240	15	85	4.0	11	25	500	1.60	6.30
120200002665	A240SL5	240	15	85	4.0	11	25	500	1.59	6.00
120200002678	A320S	320	15	100	4.5	11	25	400	2.23	8.60
120200002679	A320SL	320	15	100	4.5	11	25	400	2.18	8.20

Bar spacing

100 mm (S)

=

10 x spring steel insert/m

(example type: A190S)

125 mm (SL)

=

8 x spring steel insert/m

(example type: A190SL)

150 mm (SL7)

=

7 x spring steel insert/m

(example type: A190SL7)

75 mm (SL6)

=

6 x spring steel insert/m

(example type: A190SL6)

200 mm (SL5)

=

5 x spring steel insert/m

(example type: A190SL5)

KUNEX® exterior construction joint tape



KUNEX® exterior construction joint tape made from PVC-P for sealing construction joints in concrete structures. Installed flush with the surface of the concrete component.

Joint tapes in line with DIN 18541 or factory standard with German building code test certificate (abP).

- Material: Soft, black PVC

Exterior construction joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Width [mm]	Height of profile [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120400002698	AA240/20 DIN BV	240	20	4	80	4.0	25	100	1.90	15.40
120400002701	AA240/25 DIN BV	240	25	4	80	4.0	25	100	1.94	16.20
120400002705	AA240/35 DIN BV	240	35	4	84	4.0	25	100	2.90	22.60
120400002711	AA320/25 DIN BV	320	25	6	100	4.0	25	50	2.65	20.70
120400002715	AA320/35 DIN BV	320	35	6	100	4.0	25	50	3.91	29.90
120400002719	AA500/35 DIN BV	500	35	8	120	4.0	20	20	5.90	42.60

Exterior construction joint tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Width [mm]	Height of profile [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120400002693	AA190/17	190	17	4	80	3.7	25	125	1.54	6.10
120400002695	AA240/20	240	20	4	80	4.0	25	100	2.06	7.70
120400002699	AA240/25	240	25	4	80	4.0	25	100	2.15	8.10
120400002702	AA240/35	240	35	4	85	4.0	25	100	2.90	10.20
120400002706	AA320/20	320	20	6	100	4.0	25	100	2.86	9.80
120400002708	AA320/25	320	25	6	100	4.0	25	100	2.80	10.10
120400002712	AA320/35	320	35	6	100	4.0	25	100	4.35	14.60
120400002716	AA500/35	500	35	8	120	4.0	20	40	5.48	19.80

KUNEX® corner joint tape for construction joints



KUNEX® corner joint tape made from PVC-P for sealing construction joints in offset concrete components.

Joint tapes in line with DIN 18541-2 or factory standard.

- Material: Soft, black PVC

Corner joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Height [mm]	Width [mm]	Height of profile [mm]	No. of stop anchors	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120400002688	AA120/120EA DIN BV	120	120	25	4	20	60	2.00	18.70
120400002692	AA165/165EA DIN BV	165	165	25	6	20	60	2.84	26.70

Corner joint tape in line with factory standard (not compatible with bitumen)

Article number	Type	Height [mm]	Width [mm]	Height of profile [mm]	No. of stop anchors	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120400002689	AA165/165EA	165	165	25	6	20	60	3.03	12.00

KUNEX® interior expansion joint tape



KUNEX® interior expansion joint tape made from PVC-P for sealing expansion joints in concrete structures. The joint tape absorbs expansions and shear movements. Installed in the centre of the concrete cross-section.

Joint tapes in line with DIN 18541 or factory standard with German building code test certificate (abP).

- Material: Soft, black PVC
- Version with eyelets available on request, eyelet spacing ≥ 200 mm

Interior expansion joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow section [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion ele- ment thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120500002738	D240 DIN BV	240	20	15	80	4.0	25	100	1.75	14.70
120500002744	D320 DIN BV	320	20	15	100	5.0	25	75	2.60	21.30
120500002753	D500 DIN BV	500	20	20	150	6.0	20	40	4.77	41.90

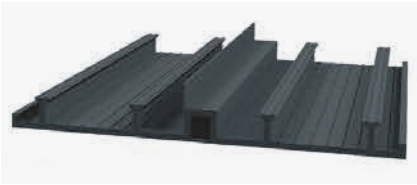
Interior expansion joint tape in line with DIN (not compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow section [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion ele- ment thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120500002737	D240 DIN	240	20	15	80	4.0	25	100	1.75	9.80
120500002743	D320 DIN	320	20	15	100	5.0	25	75	2.60	14.10
120500002752	D500 DIN	500	20	20	150	6.0	20	40	4.77	28.10

Interior expansion joint tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow section [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion ele- ment thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120500002728	D150	150	10	15	55	3.5	25	150	1.12	5.60
120500002732	D190	190	10	15	70	3.5	25	125	1.25	6.50
120500002735	D240	240	20	15	80	4.0	25	100	1.70	7.40
120500002741	D320	320	20	15	100	5.0	25	75	2.80	11.40
120500002750	D500	500	20	20	150	6.0	20	40	4.77	21.50

KUNEX® exterior expansion joint tape



KUNEX® exterior expansion joint tape made from PVC-P for sealing expansion joints in concrete structures. The joint tape absorbs expansions and shear movements. Installed flush with the surface of the concrete component.

Joint tapes in line with DIN 18541-1 or DIN 18541-2 or factory standard with German building code test certificate (abP).

- Material: Soft, black PVC

Exterior expansion joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow sec- tion [mm]	Height of profile [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120600002768	DA240/20 DIN BV	240	20	20	4	80	4.0	25	100	2.20	18.10
120600002772	DA240/35 DIN BV	240	20	35	4	84	4.0	25	100	2.97	25.90
120600016747	DA320/25 DIN BV	320	20	25	6	100	4.0	25	50	3.20	26.20
120600002778	DA320/35 DIN BV	320	20	35	6	100	4.0	25	50	4.18	30.90
120600002786	DA500/35 DIN BV	500	20	35	8	120	4.0	20	20	4.95	41.90

Exterior expansion joint tape in line with DIN (not compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow sec- tion [mm]	Height of profile [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120600002777	DA320/35 DIN	320	20	35	6	100	4.0	25	50	4.18	20.60
120600002785	DA500/35 DIN	500	20	35	8	120	4.0	20	20	4.85	28.10

Exterior expansion joint tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Width [mm]	Width of hollow sec- tion [mm]	Height of profile [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120600002764	DA190/17	190	20	17	4	80	3.7	25	125	1.70	7.20
120600002766	DA240/20	240	20	20	4	80	4.0	25	100	2.30	9.50
120600002769	DA240/35	240	20	35	4	84	4.0	25	100	3.30	13.60
120600002773	DA320/20	320	20	20	6	100	4.0	25	100	2.98	12.10
120600016745	DA320/25	320	20	25	6	100	4.0	25	100	3.18	13.20
120600002775	DA320/35	320	20	35	6	100	4.0	25	100	4.42	16.50
120600002783	DA500/35	500	20	35	8	120	4.0	20	40	5.34	22.10

KUNEX® corner joint tape for expansion joints



KUNEX® corner joint tape made from PVC-P for sealing expansion joints in offset concrete components.

Joint tapes in line with DIN 18541-2 or factory standard.

- Material: Soft, black PVC

Corner joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Width/ height [mm]	Width of hollow section [mm]	Height of stop anchors [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120600002757	DA120/120EA DIN BV	120/120	20	25	4	50/50	4.0	20	60	2.40	22.40
120600002761	DA165/165EA DIN BV	165/165	20	25	6	50/50	4.0	20	60	3.10	30.00

Corner joint tape in line with factory standard (not compatible with bitumen)

Article number	Type	Width/ height [mm]	Width of hollow section [mm]	Height of stop anchors [mm]	No. of stop anchors	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120600002754	DA120/120EA	120/120	20	25	4	50/50	4.0	20	60	2.40	10.80
120600002758	DA165/165EA	165/165	20	25	6	50/50	4.0	20	60	3.25	16.10



KUNEX® joint closing tape

KUNEX® joint closing tapes made from PVC-P for closing the surfaces of movement joints. Joint tapes in line with DIN 18541 or factory standard with German building code test certificate (abP).

- Material: Soft, grey PVC

Joint closing tape in line with DIN BV (compatible with bitumen)

Article number	Type	Height [mm]	Height of stop anchors [mm]	No. of stop anchors	Width [mm]	Joint width [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
121100002796	FA50/20 DIN BV	50	20	2	30	20	15	150	1.30	11.60
121100002799	FA50/30 DIN BV	50	30	2	30	20	15	150	1.24	14.60
121100002808	FA90/20 DIN BV	90	20	4	30	20	15	90	2.40	20.60
121100002812	FA95/30 DIN BV	95	30	4	30	20	15	75	2.40	22.50
121100002792	FA130/20 DIN BV	130	20	6	30	20	15	60	3.00	28.80

Joint closing tape in line with factory standard with abP (not compatible with bitumen)

Article number	Type	Height [mm]	Height of stop anchors [mm]	No. of stop anchors	Width [mm]	Joint width [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
121100002798	FA50/20	50	20	2	30	20	15	150	1.30	6.00
121100002801	FA50/30	50	30	2	30	20	15	150	1.22	6.90
121100002810	FA90/20	90	20	4	30	20	15	90	2.20	9.90
121100002814	FA95/30	95	30	4	30	20	15	75	2.40	11.00
121100002794	FA130/20	130	20	6	30	20	15	60	3.04	13.70

KUNEX® joint sealing strip



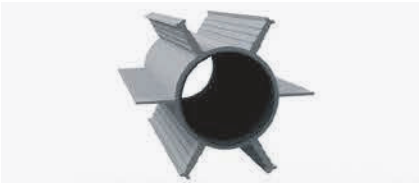
KUNEX® joint sealing strip made from PVC-P for closing the surfaces of movement joints.

- Material: Soft, grey PVC

Article number	Type	Height [mm]	Cover width [mm]	Joint width [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
121300002820	FV40/42	40	42	11	25	100	0.51	3.20

KUNEX® star tube

With German building code test certificate (abP)



KUNEX® star tube for sealing crack control joints.

With German building code test certificate (abP).

- Casing with four stop anchors (soft PVC), dust grey

Article number	Type	Length [mm]	Diameter [mm]	For wall thick- ness [mm]	Total width [mm]	PU [pcs./pal.]	Weight [kg/m]	Price per m [€]
120300002901	Q60	2,500	60	≤ 240	100	50	1.90	11.80
120300002902	Q60	3,000	60	≤ 240	100	50	1.90	11.80
120300002903	Q60	4,000	60	≤ 240	100	50	1.90	11.80
120300002905	Q88	2,500	88	≤ 350	150	50	3.06	16.10
120300002906	Q88	3,000	88	≤ 350	150	50	3.06	16.10
120300002907	Q88	4,000	88	≤ 350	150	50	3.06	16.10
120300002898	Q175	2,500	175	350-500	235	25	7.30	31.20
120300002899	Q175	3,000	175	350-500	235	25	7.30	31.20
120300002900	Q175	4,000	175	350-500	235	25	7.30	31.20

KUNEX® TPE joint tape



KUNEX® TPE joint tapes made from thermoplastic elastomers for sealing construction and expansion joints in concrete structures. **Joint tapes in line with factory standard with German building code test certificate (abP).**

- Material: thermoplastic elastomers (TPE), natural
- Compatible with bitumen
- PVC-free and halogen-free
- Completely recyclable

Interior construction joint tape

Article number	Type	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
123100019837	A240 TPE	240	14	80	3.5	25	500	0.94	12.00

Steel-reinforced interior construction joint tape

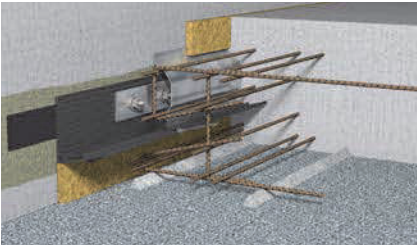
Article number	Type ¹⁾	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120200019023	A240SL7 TPE	240	15	85	4.0	25	500	1.25	16.00
123200019842	A320SL7 TPE	320	15	100	4.0	25	400	1.54	19.40

¹⁾ Bar spacing
150 mm (SL7) = 7 x spring steel insert/m (example type: A240SL7 TPE)

Interior expansion joint tape

Article number	Type	Width [mm]	Width of hollow section [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
123500019829	D240 TPE	240	20	15	80	4.0	25	100	1.30	16.00

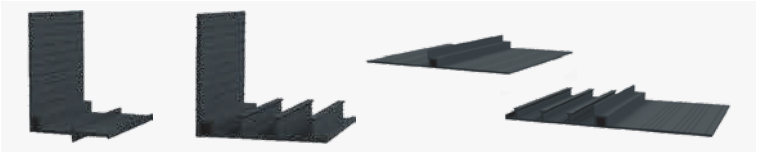
KUNEX® clamp joint



KUNEX® clamp joints are the ideal solution to the complex problems posed by joining new buildings to old buildings. The system consists of primer, joint tapes according to DIN 18541-2, steel profiles, anchors and a crepe rubber strip. The clamp joint works by pressing the joint tape onto the existing stock using clamp profiles and integrating the joint tape into the newly cast concrete components.

With German building code test certificate (abP).

KUNEX® clamp joint tape



D180/170K DIN DA180/170K DIN DA320 KB DIN DA320 KE DIN

KUNEX® clamp joint tape made from PVC-P for sealing the joints between new concrete components and existing buildings.

Joint tapes in line with DIN 18541-2.

- Material: Soft, black PVC

Clamp joint tape in line with DIN BV (compatible with bitumen)

Article number	Type	Height/width [mm]	Width of hollow section [mm]	Height [mm]	No. of stop anchors	Expansion element width [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120500002731	D180/170K DIN BV	180/170	25	26	–	95	20	40	3.20	33.40
120600002763	DA180/170K DIN BV	180/170	25	35	3	60	20	40	3.90	36.90
120600002780	DA320 KB DIN BV	320	20	4	–	100	20	40	1.99	22.80
120600002782	DA320 KE DIN BV	320	20	20	3	100	20	40	2.30	24.50

Clamp joint tape in line with DIN (not compatible with bitumen)

Article number	Type	Height/width [mm]	Width of hollow section [mm]	Height [mm]	No. of stop anchors	Expansion element width [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120500002730	D180/170K DIN	180/170	25	26	–	95	20	40	3.10	22.20
120600002762	DA180/170K DIN	180/170	25	35	3	60	20	40	3.60	24.50

KUNEX® clamp joint tape accessories

Primer

Article number	Type	Consumption [kg/m²]	PU [kg/bag]	Price per kg [€]
121000002816	Franko Pur ¹⁾	Approx. 0.3 - 0.5	1	55.30

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/ 14 MPA-BS.

Shear connector

Article number	Type [mm]	Bore dia. [mm]	PU [pcs./box]	Weight [kg/pc.]	Price per piece [€]
121000002913	M12	14	10	0.02	2.00
121000002914	M16 ¹⁾	18	10	0.04	2.50

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/ 14 MPA-BS.

Anchor rods with nut and U washer, galvanised or V4A (minimum purchase 1 PU)

Article number	Type [mm]	Design	PU [pcs./box]	Weight [kg/pc.]	Price per piece [€]
121000002629	M12/160	Galvanised	10	0.13	2.00
121000002631	M16/190 ¹⁾	Galvanised	10	0.29	3.60
121000002628	M12/160	V4A	10	0.14	6.00
121000002630	M16/190 ¹⁾	V4A	10	0.29	12.10

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/14 MPA-BS.

Concrete bolt with nut and U washer, galvanised or V4A (minimum purchase 1 PU)

Article number	Type [mm]	Design	PU [pcs./box]	Weight [kg/pc.]	Price per piece [€]
121000004053	TSM B14x165 M16x35 ¹⁾	Galvanised	25	0.30	6.90
121000019294	TSM 10x140 M12x35 ¹⁾	V4A	25	0.12	12.20

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/14 MPA-BS.

Crepe rubber strip

Article number	Type [mm]	PU [m/roll]	Weight [kg/m]	Price per m [€]
121000002832	80 x 4 ¹⁾	10	0.37	10.30

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/14 MPA-BS.

Clamping rail with slot, galvanised or V4A

Article number	Type [mm]	Design	Slot		PU [pcs.]	Weight [kg/m]	Price per m [€]
			Dia. [mm]	No./pcs.			
121000002826	1,450 x 80 x 8	Galvanised	16/30	10	1	6.80	58.40
121000002824	1,450 x 80 x 8 ¹⁾	Galvanised	20/30	10	1	6.80	58.40
121000002825	1,300 x 80 x 8	V4A	16/30	9	1	6.80	124.80
121000002823	1,300 x 80 x 8 ¹⁾	V4A	20/30	9	1	6.80	124.80

¹⁾ The components marked with ¹⁾ must be used if you are creating a KUNEX® clamp construction in accordance with the German building code test certificate P-5316/053/14 MPA-BS.

Special profile, galvanised or VA4

Article number	Type	Design	Dimensions [mm]	PU [pcs.]	Weight [kg/m]	Price per piece [€]
121000002837	Inner corner	Galvanised	80 x 10 x 80	1	1.20	95.60
121000002835	Outer corner	Galvanised	80 x 10 x 200	1	2.88	139.50
121000002836	Inner corner	V4A	80 x 10 x 80	1	1.20	162.40
121000002834	Outer corner	V4A	80 x 10 x 200	1	2.88	225.10

Clamping protection profile made of galvanised sheet metal, comes with fastening accessories.

Article number	Profile length [mm]	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121000002829	2,000	1	1.50	19.40

KUNEX® ABS construction joints



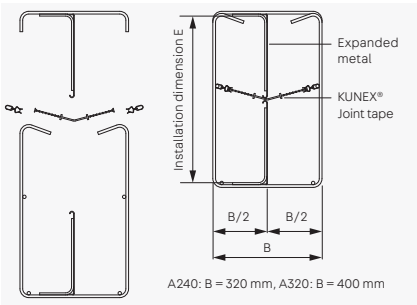
Shuttering element for installing interior KUNEX® joint tapes in waterproof construction joints in reinforced concrete construction. Version for forming rough and interlocking joints in line with EC2.

Please order the KUNEX® joint tape separately.

- Element length: 2,400 mm

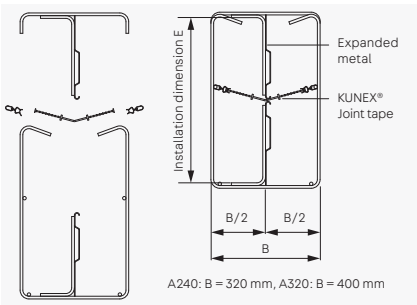
Other dimensions and versions available on request.

KUNEX® ABS A-R / rough joint in line with EC2



Article number	For KUNEX® type	Installation height [mm]	Weight [kg/m]	Price per m [€]
121700013926	A240	150-300	4.45	45.30
121700013927	A240	310-500	6.32	55.90
121700013928	A320	150-300	4.55	46.90
121700013929	A320	310-500	6.42	57.60

KUNEX® ABS A-V / interlocking joint in line with EC2



Article number	For KUNEX® type	Installation height [mm]	Weight [kg/m]	Price per m [€]
121800013932	A240	150-300	4.65	55.20
121800013933	A240	310-500	6.82	66.70
121800013934	A320	150-300	4.75	57.00
121800013935	A320	310-500	6.95	68.50

Extension products for ABS construction joints		Surcharge [€]
Surcharge for short pieces		10 %
Surcharge for off-centre joints		10 %

KUNEX® ABS expansion joints



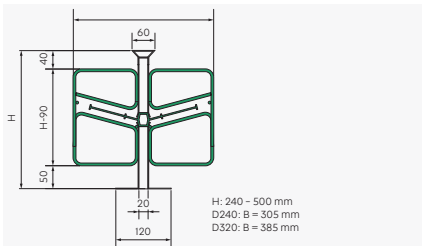
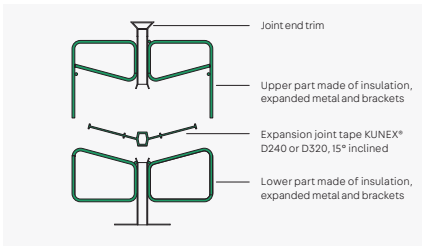
Two-part shuttering element for easy installation of interior KUNEX® joint tapes in waterproof expansion joints with a width of 20 mm in reinforced concrete construction. The elements are suitable for KUNEX® D240 expansion joint tapes in combination with floor slabs from 240 mm to 500 mm thick.

Please order the KUNEX® joint tape separately.

- Element length: 2,400 mm

Other dimensions and versions available on request.

KUNEX® ABS D



Article number	For KUNEX® type	Installation height [mm]	Weight [kg/m]	Price per m [€]
122200021901	D240	240-300	3.99	94.40
122200021902	D240	310-350	4.53	102.70
122200021903	D240	360-400	4.99	111.70
122200021904	D240	410-450	5.44	121.60
122200021905	D240	460-500	5.89	132.40

Article number	For KUNEX® type	Installation height [mm]	Weight [kg/m]	Price per m [€]
122200021906	D320	240-300	4.19	108.60
122200021907	D320	310-350	4.64	118.00
122200021908	D320	360-400	5.19	128.40
122200021909	D320	410-450	5.56	139.90
122200021910	D320	460-500	6.01	152.30

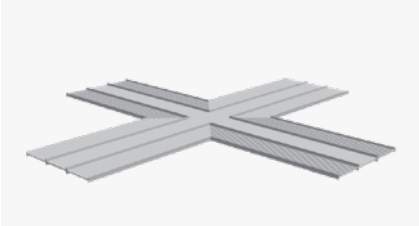
Extension products for ABS expansion joints	Surcharge [€]
Surcharge for short pieces	10 %

KUNEX® welded structures

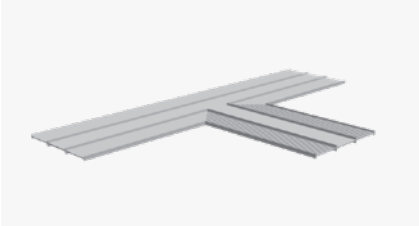
In addition to standard moulded parts made of construction and expansion joint tapes, we also design and produce customised products according to customer requirements. We can produce formwork according to your drawings and specifications. Please get in touch.

Article number	Type	Price [€]
122000002842	KUNEX® welded structures, guide price for service plus material costs per welded joint	42.10

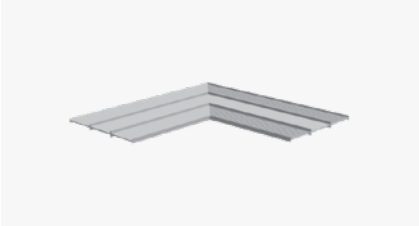
Shape 1 – flat cross



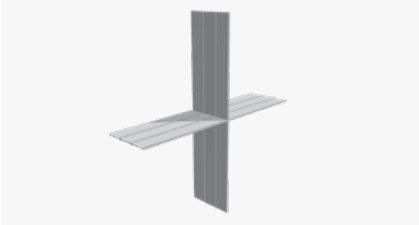
Shape 2 – flat T



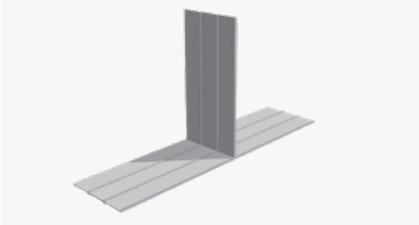
Shape 3 – flat corner



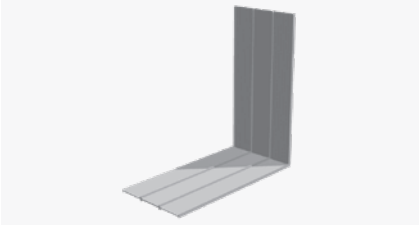
Shape 4 – vertical cross



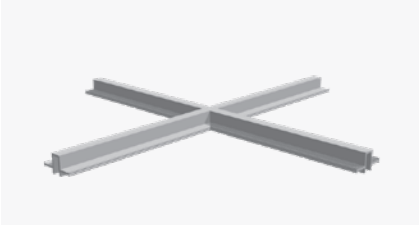
Shape 5 – vertical T



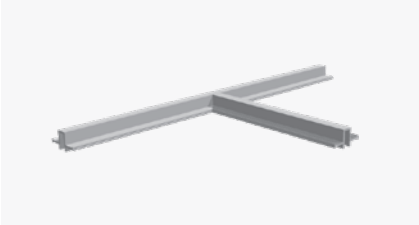
Shape 6 – vertical corner



Shape 7 – vertical cross



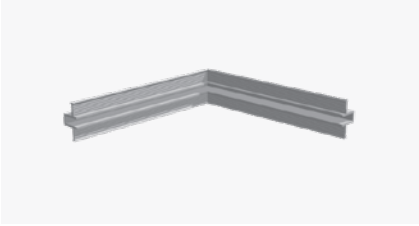
Shape 8 – vertical T



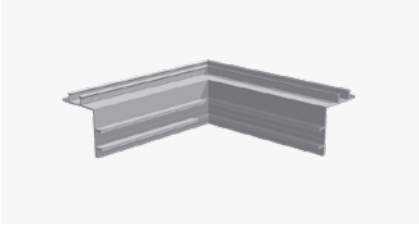
Shape 9 – vertical corner



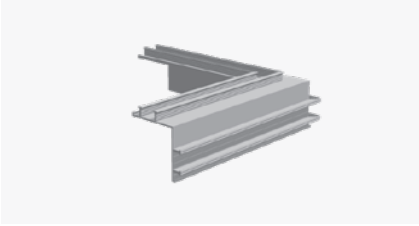
Shape 10 – flat corner



Shape 11 – mirrored corner



Shape 12 – double-angled corner



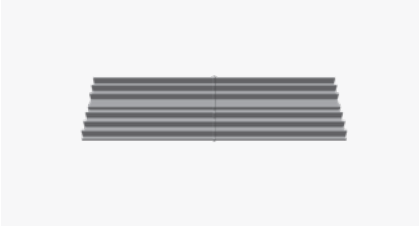
Shape 13 – joint tape lock



Shape 14 – joint tape closure



Shape 15 – butt joint



KUNEX® pre-cut parts

Design	Price [€]
Cost per cut	19.50
Reduced quantity surcharge per cut	POA

KUNEX® welding tools

Article number	Type	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121500002818	Quarter moon knife	1	0.09	59.20
121500002822	Hot air gun 1,600 watts / 230 volts	1	1.30	604.60
121500004055	Tubular nozzle H 5 mm	1	0.10	87.90
121500020357	Wide slot nozzle 20 mm	1	0.30	87.90

KUNEX® welding tape

KUNEX® welding tape made from PVC-P (compatible with bitumen) for reinforcing the weld seams of moulded parts.

Article number	Type	Width [mm]	Thickness [mm]	PU [m/roll]	Weight [kg/m]	Price per m [€]
121500002841	BV welding tape	25	3	30	0.1	1.00
121500002840	BV welding tape	30	2	30	0.1	1.00

KUNEX® fastening accessories

Article number	Type	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121500002817	Joint tape clips ¹⁾	100	0.01	0.40
121500002830	Omega stirrup	25	0.12	1.20

¹⁾ Joint tape clip consumption: 8 pcs./m when fastened on both sides

KUNEX® joint tape connector



Joint tape connector for connecting PVC-P or TPE construction joint tapes.

- Waterproof – tested up to 1.0 bar water pressure
- No welding necessary
- Mount directly whilst installing the tape
- Material: Black steel, swelling rubber

Article number	Type	Joint tape width [mm]	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121500020044	FBV 100	100	1	0.305	28.50
121500020043	FBV 150	150	1	0.455	32.20
121500020041	FBV 190	190	1	0.575	36.10
121500020045	FBV 240	240	1	0.725	40.10
121500020042	FBV 320	320	1	0.975	44.00



Joint tape connections to PENTAFLEX KB® 167
see page 6.

KUNEX® MK puddle flange



- Puddle flange for sealing PVC, PP and SML pipes.
- Installed before casting
 - With 2 V2A clamps
 - Waterproof – tested up to 5.0 bar water pressure
 - Material: Black TPE



Installation example

Article number	Type	Clamping range [mm]	PU [pcs./sack]	Weight [kg/pc.]	Price per piece [€]
121600019859	MK 40	38 - 42	25	0.193	16.40
121600019865	MK 50	48 - 53	25	0.227	16.40
121600019860	MK 63	60 - 64	25	0.255	17.00
121600019861	MK 75	71 - 80	25	0.290	18.00
121600019862	MK 90	84 - 92	25	0.325	19.30
121600019767	MK 110	105 - 116	25	0.460	20.30
121600019771	MK 125	120 - 130	20	0.520	27.50
121600019772	MK 160	154 - 166	15	0.630	31.90
121600019773	MK 200	195 - 210	10	0.770	41.00

KUNEX® MK EF/ER puddle flange



- Puddle flange for sealing flat and round earthing strips.
- Installed before casting
 - With 2 V2A clamps
 - Material: Black TPE

Article number	Type	Clamping range [mm]	PU [pcs./sack]	Weight [kg/pc.]	Price per piece [€]
121600019863	MK EF	30x3 - 3.5	25	0.156	19.30
121600019864	MK ER	8 - 10	25	0.127	19.30

PLURAFLEX®



PLURAFLEX® C11



- Injection hose for low-viscosity injection materials:
PU resins, PU foams
- **abP**
 - Filling quantity per metre of hose approx. 0.20 kg + 1-3 kg for injection (guidelines)
 - Maximum injection length: 10 m
 - Easy to inject
 - Sold and delivered only in full packaging units

Article number	Exterior dimensions [mm]	Interior dimensions [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130100005012	11	6	1 / 50	50 / 2,500	5.50	4.00

PLURAFLEX® P11



- Injection hose for injection grout, fine-grain cements and low-viscosity injection materials:
PU resins, PU foams
- **abP**
 - Filling quantity per metre of hose approx. 0.20 kg + 1-3 kg for injection (guidelines)
 - Maximum injection length: 10 m
 - For multiple injection
 - Sold and delivered only in full packaging units

Article number	Exterior dimensions [mm]	Interior dimensions [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130100005014	11	6	1 / 100	25 / 2,500	11.00	9.00

PLURAFLEX® P19



- Injection hose for Portland cements, injection grouts, fine-grain cements and low-viscosity injection materials: PU resins, PU foams
- **abP**
 - Filling quantity per metre of hose approx. 0.38 kg + 1-3 kg for injection (guidelines)
 - Maximum injection length: 10 m
 - For multiple injection
 - Sold and delivered only in full packaging units

Article number	Exterior dimensions [mm]	Interior dimensions [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130100005015	19	11	1 / 100	10 / 1,000	20.00	11.20

PLURAFLEX® C11 active



- Injection hose with rubber waterstop tape for low-viscosity injection materials:
PU resins, PU foams
- Hose dimensions: exterior 11 mm / interior 6 mm
 - Filling quantity per metre of hose approx. 0.20 kg + 1-3 kg for injection (guidelines)
 - Delivery consists of injection hose and rubber waterstop tape
 - Maximum injection length: 10 m
 - Sold and delivered only in full packaging units

Article number	Hose PU [roll/m]	Tape PU [roll/m]	Complete PU Per [m]	Weight [kg/PU]	Price per m [€]
130100005013	1 / 50	10 / 5	50	21.50	18.60

PLURAFLEX® plastic clips



For fastening PLURAFLEX® injection hoses and PLURAFLEX® C11 active to concrete.

- Bore: dia. 6 mm
- Consumption per m of PLURAFLEX® injection hose:
Approx. 7 clips/m depending on substrate
- C11 active clip without fasteners

Article number	For hose dia. [mm]	PU [pcs./bag]	PU [bag/box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005076	11	100	20 / 2,000	3.50	41.10
130200005078	19	100	20 / 2,000	3.50	47.50
130200005079	C11 active	100	20 / 2,000	0.80	34.70

PLURAFLEX® seam sheet clip



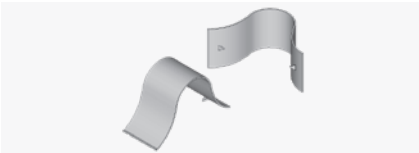
For fastening PLURAFLEX® injection hoses to seam sheets.

The PLURAFLEX® injection hose is clamped to the seam sheet using seam sheet clips.

- Consumption per metre: approx. 7 clips

Article number	For hose dia. [mm]	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005061	11	100	1.50	47.70

PLURAFLEX® joint tape clip



For fastening PLURAFLEX® injection hoses to joint tape.

The PLURAFLEX® injection hose is clamped to the joint tape using joint tape clips.

- Consumption per metre: approx. 7 clips

Article number	For hose dia. [mm]	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005060	11	100	1.50	88.70

PLURAFLEX® spider fitting



Reinforcement mount for attaching 2 PLURAFLEX® nail packers.

Article number	PU [pcs./box]	Weight [kg/box]	Price per piece [€]
130200005047	25	3.00	5.40

PLURAFLEX® nail packers

2-part



Packers for mounting injection hoses on the spider fitting.

Article number	PU [pcs./box]	Weight [kg/box]	Price per piece [€]
130200005090	25	2.00	4.00

PLURAFLEX® hose clip



For attaching the nail packers and injection nozzles to the hoses.

Article number	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130100005033	100	1.00	252.20

PLURAFLEX® foam rubber

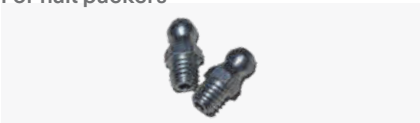


Foam rubber with adhesive on one side for sticking to PLURAFLEX® nail packers.

Article number	Type	Colour/thickness [mm]	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005084	MW 10	White / 10	50	0.50	163.70

PLURAFLEX® M8 injection nipple

For nail packers



Injection nipple for connecting to PLURAFLEX® nail packers.

Article number	Type	For injection material	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005072	IVH	Resin	100	1.00	68.30

PLURAFLEX® protective box



For protecting the filling and venting hoses in the concrete component.

Article number	Length [mm]	Width [mm]	Height [mm]	PU [pcs./box]	Weight [kg/box]	Price per piece [€]
130200005099	100	100	50	10	6.50	12.40

PLURAFLEX® filling/venting hose



Textile-reinforced PVC-hose for filling and venting the injection hoses.

- Max. pressure: 120 bar

Article number	Colour	Exterior dimensions [mm]	Interior dimensions [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130200005051	Red	11	7	1 / 50	16 / 800	6.50	2.70
130200005052	White	11	7	1 / 50	16 / 800	6.50	2.70

PLURAFLEX® plug

Yellow



For closing the filling and venting hoses.

Article number	PU [pcs./bag]	Box [bag/pcs.]	Weight [kg/box]	Price per 100 pcs. [€]
130200005048	100	10 / 1,000	1.00	20.50

PLURAFLEX® C11 coupling



For connecting PLURAFLEX® C11 with filling and venting hoses.

Article number	PU [pcs./box]	Weight [kg/box]	Price per piece [€]
130200005080	100	1.00	1.40

PLURAFLEX® nozzle



Plastic hose for connecting PLURAFLEX® P11 with filling and venting hose (PVC red/white).

Article number	Exterior dimensions [mm]	Interior dimensions [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130200005049	6	4	1 / 50	16 / 800	2.00	3.10

PLURAFLEX® heat-shrink hose



Heat-shrink hose for securing the connection between PLURAFLEX® P11 and P19 and the filling and venting hose (PVC red/white).

Article number	Type	Dia. [mm]	PU [roll/m]	Pallet [roll/m]	Weight [kg/roll]	Price per m [€]
130200005063	HSS 11	12	1 / 50	16 / 800	2.00	5.80
130200005064	HSS 19	21	1 / 30	10 / 300	2.00	7.50

PLURAFLEX® injection nozzle



For connecting to the filling and venting hose.

Article number	PU [pcs.]	Weight [kg/box]	Price per piece [€]
130200005095	100	1.00	2.60

PLURAFLEX® M6 injection nipple

For injection nozzles



Injection nipple for connecting to PLURAFLEX® injection nozzle.

Article number	Type	For injection material	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005067	IVH	Resin	100	1.00	68.30

PLURAFLEX® XL C11 set



Service pack, set consisting of:

- PLURAFLEX® C11 injection hose 50 m
- Plastic clips 200 pcs., nail packer 12 pcs., foam rubber 12 pcs., hose clip 36 pcs., coupling C11 12 pcs., yellow plug 12 pcs.
- Filling hose red 6 x 40 cm, venting hose white 6 x 40 cm

Delivery within 24 hours on request (plus express delivery fee)

Article number	For injection hose type	PU [box]	Weight [kg/box]	Price per set [€]
130200024504	C11	1	13.69	441.60

PLURAFLEX® S C11/P11 set



Service pack:

Package of packers and spider fittings for PLURAFLEX® C11 and P11.

Set consisting of:

- 1 pc. spider fitting II, 2 pcs. 2-part packer, 2 pcs. hose clip, 1 pc. foam rubber red / 10 mm,
- 1 pc. foam rubber grey / 10 mm

Article number	For injection hose type	PU [box]	Weight [kg/box]	Price per set [€]
130200005041	C11	1	1.00	34.60

PLURAFLEX® V C11 set



Service pack:

package of PVC hose and protective box for PLURAFLEX® C11.

Set consisting of:

- 1 pc. protective box, 1 pc. filling hose red / 500 mm, 1 pc. venting hose white / 500 mm, 2 pcs. coupling C11, 2 pcs. yellow plug

Article number	For injection hose type	PU [box]	Weight [kg/box]	Price per set [€]
130200005043	C11	1	1.00	34.60

PLURAFLEX® P C11 set



Service pack:

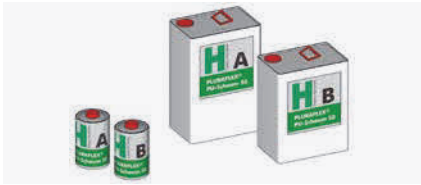
package of PVC hose and protective box for PLURAFLEX® C11.

Set consisting of:

- 1 pc. protective box, 1 pc. filling hose red / 500 mm, 1 pc. venting hose white / 500 mm, 2 pcs. yellow plugs, 1 pcs. grommet, 1 pc. heat-shrink tubing HSS11, 1 pc. superglue

Article number	For injection hose type	PU [box]	Weight [kg/box]	Price per set [€]
130200005043	C11	1	1.00	34.60

PLURAFLEX® PUR injection foam resin 50

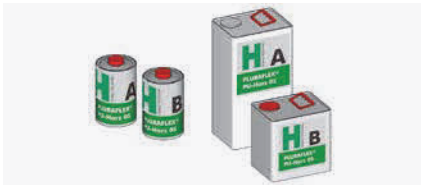


WEBAC® 150
Moisture-reactive 2-component injection foam resin for sealing water-bearing cracks and leaks. Quick-foaming.

- Suitable for use in drinking water areas (KTW)
- Combination product: **abP** in line with Rili-SIB and ZTV-ING (RISS) (concrete construction and repair guidelines); on the BAST list of tested materials and systems.

Article number	PU	Comp. A [kg]	Comp. B [kg]	Total weight [kg]	Price per kg [€]
130300005024	Can	0.45	0.55	1.00	42.00
130300019087	Canister	5.00	6.20	11.20	34.10
130300005025	Canister	10.50	13.00	23.50	31.60

PLURAFLEX® PUR injection resin 05



WEBAC® 1405
Highly effective 2-component injection resin for sealing cracks and injection of injection hoses. For sealing cracks with a specific level of elasticity. Low foam formation on contact with moisture. Pre-inject with PLURAFLEX® PU foam 50 in the presence of flowing water under hydrostatic pressure.

- Suitable for use in drinking water areas (KTW). Fulfils the requirements of DIN EN 1504-5 (conformity assessment procedure 2+)
- Combination product: **abP** in line with Rili-SIB and ZTV-ING (RISS) (concrete construction and repair guidelines); on the BAST list of tested materials and systems.

Article number	PU	Comp. A [kg]	Comp. B [kg]	Total weight [kg]	Price per kg [€]
130300005019	Can	0.65	0.355	1.00	40.80
130300005023	Canister	5.00	2.75	7.75	30.20
130300005020	Canister	10.00	5.50	15.50	28.20

PLURAFLEX® EP injection resin



WEBAC® 4110
Two-component EP injection resin for friction-locked bonds. Combination product: **abP** in line with Rili-SIB and ZTV-ING (RISS) (concrete construction and repair guidelines); on the BAST list of tested materials and systems. External inspection: fulfils the requirements of DIN EN 1504-5 (conformity assessment procedure 2+)

Article number	PU	Comp. A [kg]	Comp. B [kg]	Total weight [kg]	Price per kg [€]
130300005053	Can	0.71	0.29	1.00	45.60
130300005054	Canister	1.00	0.40	1.40	37.60
130300019547	Canister	5.00	2.00	7.00	32.10

SWELLFLEX®



SWELLFLEX® BS



- Bentonite waterstop tape
- **abP**
 - Sold and delivered only in full boxes.

Article number	Type	Width [mm]	Height [mm]	PU [m/roll]	PU [m/box]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
140100021827	BS 16/21	21	16	6	30	900	0.60	4.90
140100021828	BS 18/24	24	18	6	30	900	0.90	5.70

SWELLFLEX® BT



- Bentonite waterstop tape with anti-moisture protective coating
- **abP**
 - Sold and delivered only in full boxes.

Article number	Type	Width [mm]	Height [mm]	PU [m/roll]	PU [m/box]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
140100021829	BT 16/21	21	16	6	30	900	0.60	8.00
140100021830	BT 18/24	24	18	6	30	900	0.90	8.80

SWELLFLEX® RB



- Rubber waterstop tape
- **abP**
 - Sold and delivered only in full boxes.

Article number	Type	Width [mm]	Height [mm]	PU [m/roll]	PU [m/box]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
140100005105	RB 18/7	18	7	12	72	3,600	0.19	8.50
140100005107	RB 23/15	23	15	6	30	540	0.22	17.00
140100005108	RB round	Dia. 23	Dia. 23	5	20	360	0.28	21.20

SWELLFLEX® mounting channel

Metal

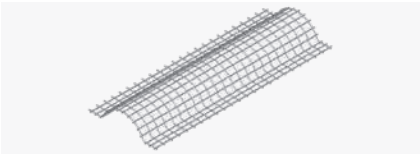


- For fastening SWELLFLEX® bentonite waterstop tape to concrete. The channel is fixed in place using conventional fasteners.
- Consumption per m of SWELLFLEX® mounting channel: approx. 5 nails

Darstellung mit Quellband

Article number	Element length [mm]	PU [m/bundle]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
140200005113	1,000	30	360	0.50	2.10

SWELLFLEX® mesh



For fastening SWELLFLEX® bentonite and rubber waterstop tapes.

Article number	Mesh length [mm]	PU [pcs./bundle]	PU [pcs./pal.]	Weight [kg/bundle]	Price per m [€]
140200005110	1,000	30	720	1.80	2.00

SWELLFLEX® assembly adhesive & sealant



For fastening SWELLFLEX® bentonite and rubber waterstop tapes.

- High yield of approx. 10 m depending on substrate

Article number	PU [ml/pc.]	PU [pcs./box]	Weight [kg/pc.]	Price per piece [€]
140200018575	290	20	0.53	15.80

SECUFLEX®



SECUFLEX® pre-applied waterproofing system is a full-surface sealing system consisting of HDPE waterproofing membranes and various waterproofing tapes. It is used in combination with a waterstop system (e.g. PENTAFLEX®) in watertight concrete constructions as an additional measure to keep out water under hydrostatic pressure. An adhesive layer combined with a special granulate creates an anti-tracking bond between the waterproofing layer and the concrete so that any unexpected cracks which occur in the watertight concrete construction are reliably bridged and remain permanently dry.

With German building code test certificate (abP) and ETA.

SECUFLEX® SMT



HDPE waterproofing membrane as pre-applied waterproofing membrane with adhesive layer and special granulate.

- **With 75 mm wide integrated longitudinal adhesive strip**
- Highly flexible, crack-bridging and with anti-tracking properties
- Quick, easy and reliable installation of pre-applied waterproofing membranes
- Radon-tight

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [m²/Rolle]	PU [rolls/pal.]	Weight [kg/m²]	Price per m² [€]
160100019586	SMT 1212	20	1,200	1.2	24	16	1.70	27.00

SECUFLEX® ST



HDPE sealing strip with adhesive layer and without special granulate for subsequently gluing over joints or for subsequent application on prefabricated parts such as lift shafts.

- Highly flexible, crack-bridging and with anti-tracking properties
- Radon-tight

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [m²/Rolle]	PU [rolls/pal.]	Weight [kg/m²]	Price per m² [€]
160100022299	ST 1200	20	1,200	1.2	24	16	0.85	32.70

SECUFLEX® ST Patch



One-sided self-adhesive patches for subsequent water-side repair, e.g. of clamping point penetrations and for use on prefabricated parts such as manholes.

- **Self-adhesive**
- Highly flexible, crack-bridging and with anti-tracking properties
- Radon-tight

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [pcs./box]	Weight [kg/m²]	Price per m² [€]
160100020289	ST 150x150	150	150	1,2	50	1.35	65.10

SECUFLEX® MT



One-sided self-adhesive sealing tape with laminated HDPE film for connecting butt joints on the positive side, for correcting defects or closing clamping point penetrations.

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [rolls/box]	Weight [kg/m]	Price per m [€]
160100025675	MT 160	20	160	1.2	1	0.2	6.90

SECUFLEX® PT



One-sided self-adhesive sealing tape with special granulate for application on the negative side, e.g. for protecting butt joints or to secure corners.

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [rolls/box]	Weight [kg/m]	Price per m [€]
160100025713	PT 100	20	100	1.0	1	0.13	6.00
160100019825	PT 150	20	150	1.0	1	0.20	6.20

SECUFLEX® DT



Double-sided self-adhesive sealing tape for bonding membrane to membrane as a replacement or supplement for the adhesive strips of the SMT waterproofing membrane.

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [rolls/box]	Weight [kg/m]	Price per m [€]
160100019819	DT 75	30	75	1.0	4	0.12	3.90

SECUFLEX® PR



Roller for pressing down adhesive seams.

Article number	Type	Width [mm]	PU [pcs./box]	Weight [kg/pc.]	Price per piece [€]
160100019822	PR 50	50	1.0	0.80	57.80
160100019823	PR 100	100	1.0	1.70	95.50
160100019824	PR 120 L	120	1.0	3.20	287.20

SECUFLEX® Accessories

1-component, solvent-free liquid sealant for surfaces and connections, e.g. floor slab overhang or pipe penetrations.
Tested watertight to 5 bar in the system.

Article number	Type	PU	Weight	Price per piece [€]
160100019821	Frankosil® 1K FBV	14kg bucket	14.00	POA
160100026832	TH 610 (cleaner)	1l tin bottle	0.90	POA
160100026833	PR 115 (Multi Plastic Primer)	0,5 l im carton	0.45	POA
160100026835	PR 130 (SL adhesion promoter)	250 ml	0.20	POA
160100026836	Fleece	60m roll	2.00	POA
160100026837	Frankosil Speedfix	2kg bucket	2.20	POA
160100026838	Quartz sand	25 kg bag	25.00	POA

Fastening

Anchor channels

Anchor channels JTA K, cold-formed	46
Anchor channels JTA W, hot-rolled	48
Anchor channels JXA W, hot-rolled, toothed	50
Anchor channels JXA-PC W, hot-rolled, toothed	51
Anchor channels JXA W, cold-formed, toothed	52
Curved anchor channels JTA, JXA	53
Facade fastening channels JTA-RT	54
Facade fastening channels JTA-RF	54
Anchor channels JSA K	54

Handrail connection channels

Handrail connection channels JGB	55
----------------------------------	----

Brick tie channels

Brick tie channel Kt	56
Brick tie channel JTA K 28/15	56
Brick tie channel JTA K 38/17	56

Profiled metal sheet channels

Profiled metal sheet channels JTB uni	57
Profiled metal sheet channels JTB AR	57
Profiled metal sheet channels JTB-LA	57

Mounting channels

Mounting channels JM K, cold-formed	58
Mounting channels JZM K, cold-formed, toothed	59
Mounting channels JM W, hot-rolled	60
Mounting channels JXM W, hot-rolled, toothed	61
Mounting channel JML K, cold-formed, slotted	62
Mounting channel JZML K, cold-formed, toothed, slotted	63
Curved mounting channels JM, JML, JXM	63

Price calculation for channels

T-bolts for channels

Determining the required bolt length	65
Tee-head bolts JD	66
Tee-head bolts JH	67
Hook-head T-bolts JC	68
Hook-head T-bolts JB	69
Hook-head T-bolts JB	70
Hook-head T-bolts JA	70
ETA (European Technical Assessment)	70
Toothed t-bolts JZS	71
Toothed T-bolts JXD	71
Toothed T-bolts JXH	72
Toothed T-bolts JXB	72

Toothed T-bolts JXE	72
Double-notch toothed T-bolt JKC	73
Double-notch toothed T-bolt JKB	73
Breaking point T-bolts JH-SB	73
Breaking point T-bolts JB-SB	73

Stop fastenings

Lift shaft anchor JLF	74
Scaffold shoes JG	74

Edge protection angles

Edge protection angles JKW	75
----------------------------	----

Channel brackets

Channel brackets JKO	76
----------------------	----

Accessories

Brick tie anchors JMA	77
Thin-bed brick tie anchors JMA-D	77
Transverse brick tie anchors JMA-Q / JMA-QE	77
Sliding sleeves JMA-G	78
Nail anchors JNA	78
Hammer-head locking plates JGM D	78
Hammer-head locking plates JGM H	78
Hook-head locking plates JGM C	78
Hook-head locking plates JGM B	78

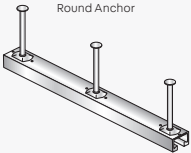
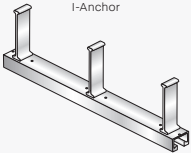
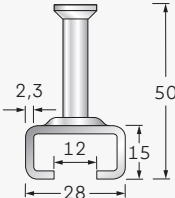
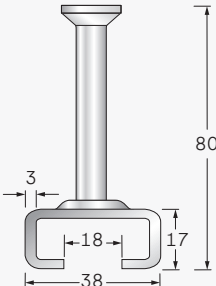
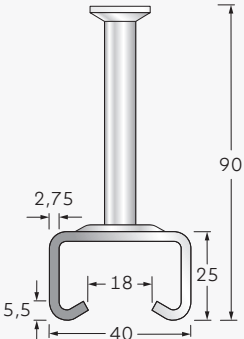
Hook-head locking plates JGM A	79
JAM 22 channel nuts	79
JAM F 22 channel nuts	79
Hexagon nuts	79
Hexagon coupling sleeves VMSK	79
Round coupling sleeves VM	79
Flange nuts SKF	79
Ring nuts RM	79
Square bearing plates JVL	80
Horseshoe shims JVS	80
Washers	80
JKZS notch-toothed shims	80
FR spring washers	80
Gap fillers JGF	80
Installation cones JIC	80
Clamping plates KP	81
Clamping plates KPA for crane rails	81
Clamping claws SPKU	81
Eye sockets ÔM	81
Threaded rods GS	81

Anchor channels



Anchor channels, JTA K, cold-formed

ETA (European Technical Assessment ETA-09/0338)

Profile	JTA K 28/15-CE			JTA K 38/17-CE ¹⁾			JTA K 40/25-CE ¹⁾		
Suitable bolts	JD M6-M12			JH M10-M16			JC M10-M16		
 									
Channel length ²⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
		fv	Design A4/L4		fv	Design A4/L4		fv	Design A4
100	2	6.40	18.20	2	7.90	22.40	2	9.40	-
150	2	7.10	20.40	2	8.70	26.00	2	10.40	29.40
200	2	7.70	22.50	2	9.50	29.40	2	11.40	33.10
250	2	8.40	24.80	2	10.40	32.60	2	12.30	39.00
250	3	-	-	3	-	37.60	3	14.70	42.40
300	2	-	-	2	-	-	2	13.20	44.30
300	3	12.60	31.90	3	12.70	40.60	3	15.60	47.70
350	3	13.50	34.00	3	14.00	44.40	3	16.60	52.70
400	3	14.20	36.50	3	15.20	48.20	3	17.70	57.80
550	4	17.30	44.10	4	19.90	63.00	3	20.80	74.00
800	5	21.90	61.50	5	25.50	83.80	4	28.60	105.20
1.050	6	26.30	80.30	6	33.40	113.50	5	36.80	134.70
3.000	16	70.90	214.20	16	81.30	322.60	13	95.10	367.00
6.000	31	135.00	408.00	31	154.80	614.40	25	181.20	699.00
Per running m ¹⁾	5/m	22.50	68.00	5/m	25.80	102.40	4/m	30.20	116.50
Weight [kg/m] ¹⁾	2,25			2,25			2,25		
Standard cutting surcharge		10%	10%		10%	10%		10%	10%

¹⁾ Hot-dip galvanised version also available with shortened anchors (installation height of JTA K 38/17 approx. 55 mm; not part of the ETA). Prices on request.

²⁾ Calculated based on a channel 6,000 mm long.

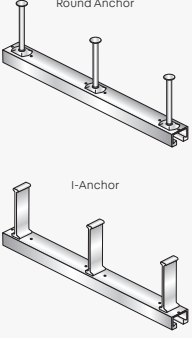
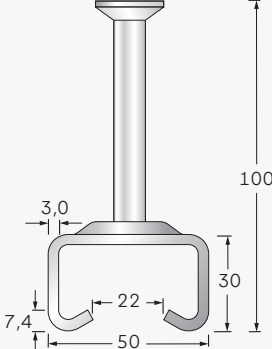
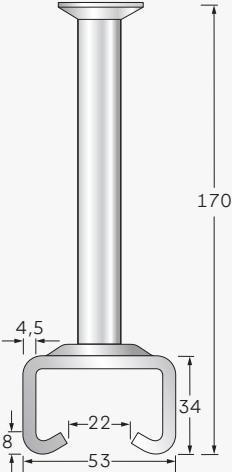
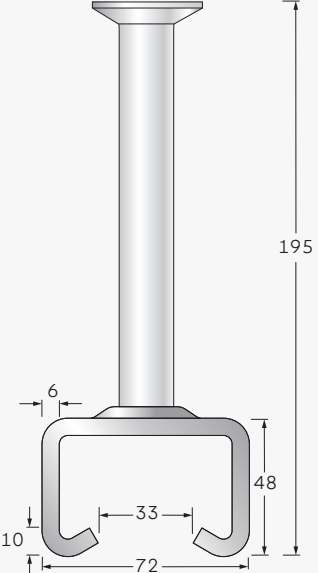
³⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Further information

- All prices include foam filling and nail holes
- Manufactured lengths: 6,000 mm (-0/+50 mm)
- Anchor edge clearances: 25-35 mm
- Cut lengths: 1,050 mm < L < 6,000 mm (+/- 5 mm)
- Special lengths: Special lengths are subject to a 20% surcharge due to increased production costs

Anchor type

- Round anchor = Standard version
- I-anchor = Delivery subject to confirmation
- Weights per meter for mill finish, average anchor weight
(for galvanised profiles: +10%;
for stainless steel profiles: +2%)

Profile	JTA K 50/30-CE			JTA K 53/34-CE			JTA K 72/48-CE		
Suitable bolts	JB M10-M20			JB M10-M20			JA M20-M30		
									
Channel length ²⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
		fv	A4		fv	A4		fv	A4
150	2	13.20	34.50	2	21.20	56.90	2	33.40	108.70
200	2	14.40	40.50	2	23.80	69.60	2	37.30	123.70
250	2	15.50	46.80	2	26.60	80.90	2	41.30	138.50
250	3	19.10	52.10	3	-	-	3	-	-
300	2	16.70	54.10	2	29.30	94.40	2	45.20	153.30
300	3	20.30	-	3	34.20	-	3	-	-
350	3	21.60	65.70	3	36.90	114.60	2	49.20	168.10
400	3	23.20	72.70	3	39.40	127.30	3	62.10	211.90
550	3	26.80	93.80	3	46.60	163.30	3	76.90	256.20
800	4	37.00	132.60	4	67.00	234.20	4	107.70	357.60
1.050	5	45.60	172.90	5	87.80	301.20	5	138.60	453.70
3.000	13	126.00	484.80	13	208.80	757.90	11	388.10	1.215.50
6.000	25	240.00	923.40	25	397.80	1.443.60	21	739.20	2.315.40
Per running m ¹⁾	4/m	40.00	153.90	4/m	66.30	240.60	3,5/m	123.20	385.90
Weight [kg/m] ¹⁾	3,25			5,10			9,05		
Standard cutting surcharge		10%	10%		10%	10%		10%	10%

¹⁾ Hot-dip galvanised version also available with shortened anchors (part of the ETA). Prices on request.

²⁾ Calculated based on a channel 6,000 mm long.

³⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Version and material

- K = Cold-formed
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)

Example order for short anchor channel pieces

Type	Profile size	Channel length	An- chor	Design	ETA- compli- ant
JTA	K 38/17	300	3A	fv	CE

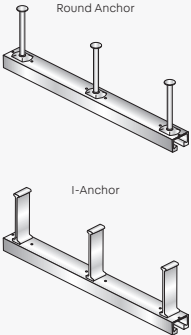
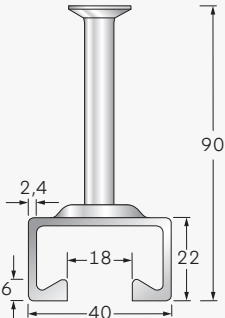
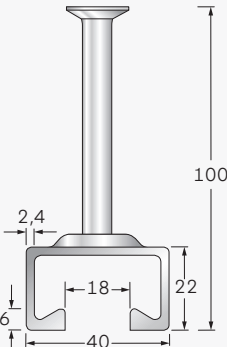
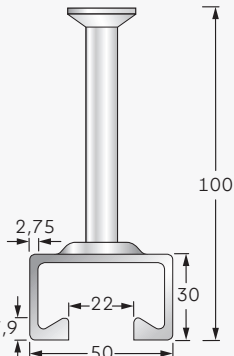
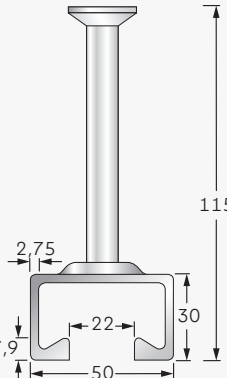


Suitable bolts and various accessories for all channels can be found starting on page 65.

For sample calculations of regular lengths and custom lengths, see page 64.

Anchor channels JTA W, hot-rolled

ETA (European Technical Assessment ETA-09/0338)

Profile	JTA W 40/22-CE ¹⁾				JTA W 40+CE		JTA W 50/30-CE ¹⁾			JTA W 50+CE		
Suitable bolts	JC M10-M16				JC M10-M16		JB M10-M20			JB M10-M20		
												
Channel length ³⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
			Design			Design			Design			Design
			fv			fv			fv			fv
			A4			A4			A4			A4
150	2	11.70	36.50	2	13.00	40.60	2	15.50	53.90	2	17.80	56.80
200	2	12.00	44.60	2	14.60	48.50	2	18.30	65.00	2	20.00	69.90
250	2	14.00	52.80	2	15.90	56.80	2	20.90	76.10	2	22.00	82.80
250	3	17.60	a.A.	3	-	-	3	-	-	3	-	-
300	2	16.10	58.70	2	17.30	65.60	2	23.60	87.30	2	24.50	96.40
300	3	19.20	a.A.	3	-	-	3	27.20	97.40	3	-	-
350	3	19.70	71.50	3	22.50	79.30	3	28.40	108.50	3	30.40	115.20
400	3	21.70	79.50	3	23.90	88.10	3	30.90	119.60	3	32.60	128.30
550	3	27.80	105.40	3	28.20	113.60	3	38.30	152.90	3	39.30	167.80
800	4	37.80	154.40	4	39.00	161.50	4	53.20	218.60	4	54.20	242.60
1050	5	47.30	201.20	5	49.10	209.40	5	68.60	284.20	5	69.20	311.70
1300	6	55.20	-	6	a.A.	-	6	-	-	6	a.A.	-
1550	7	65.80	-	7	a.A.	-	7	92.60	-	7	a.A.	-
1800	8	76.40	-	8	a.A.	-	8	107.50	-	8	a.A.	-
2050	9	87.00	-	9	a.A.	-	9	122.40	-	9	a.A.	-
2300	10	97.70	-	10	a.A.	-	10	137.40	-	10	a.A.	-
3000	13	121.60	556.90	13	131.40	596.30	13	171.00	781.20	13	180.80	887.00
6000	25	231.60	1.060.80	25	248.40	1.135.80	25	325.80	1.488.00	25	344.40	1.689.60
Per running m ²⁾	4/m	38.60	176.80	4/m	41.40	189.30	4/m	54.30	248.00	4/m	57.40	281.60
Weight [kg/m] ²⁾	3,45			5,10			3,45			3,45		
Standard cutting surcharge		10%	10%		10%	10%		10%	10%		10%	10%

¹⁾ Hot-dip galvanised version also available with shortened anchors (part of the ETA). Prices on request.

²⁾ Calculated based on a channel 6,000 mm long.

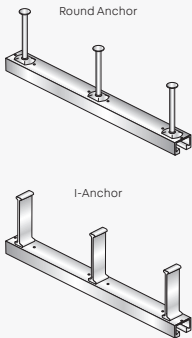
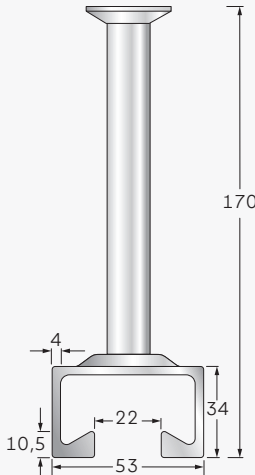
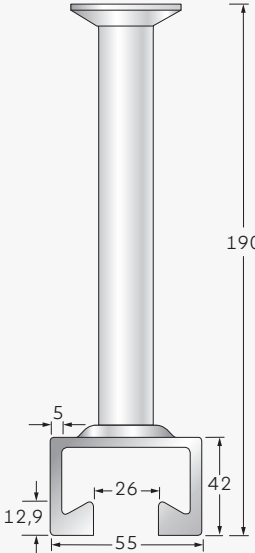
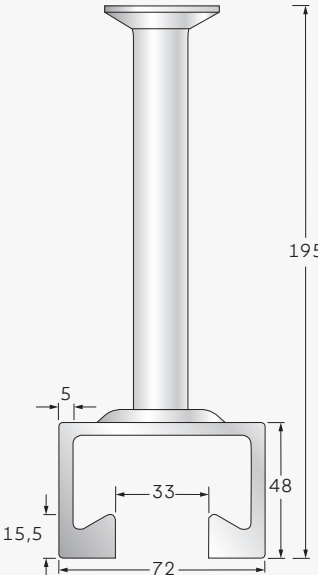
³⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Further information

- All prices include foam filling and nail holes
- Manufactured lengths: 6,000 mm (-0/+50 mm)
- Anchor edge clearances: 25-35 mm
- Cut lengths: 1,050 mm <L <6,000 mm (+/- 5 mm)
- Special lengths: Special lengths are subject to a 20% surcharge due to increased production costs

Anchor type

- Round anchor = Standard version
- I-anchor = Delivery subject to confirmation
- Weights per meter for mill finish, average anchor weight
(for galvanised profiles: +10%;
for stainless steel profiles: +2%)

Profile	JTA W 53/34-CE ¹⁾			JTA W 55/42-CE			JTA W 72/48-CE		
Suitable bolts	JB M10–M20			JB M16–M24			JA M20–M30		
									
Channel length ³⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
		fv	A4		fv			fv	A4
150	2	21.90	69.40	2	25.60		2	35.20	139.10
200	2	24.70	84.40	2	28.90		2	39.30	166.70
250	2	27.80	99.20	2	32.20		2	43.50	192.80
300	2	30.60	114.00	2	35.70		2	47.60	220.60
300	3	36.10	-	3	-		3	-	-
350	3	38.80	137.00	2	39.20		2	51.80	255.60
400	3	41.70	151.70	3	51.50		3	65.40	314.90
550	3	51.60	197.30	3	65.00		3	80.90	420.50
800	4	72.10	278.90	4	79.50		4	113.40	509.00
1.050	5	93.00	362.50	5	103.00		5	145.90	597.40
1.550	7	139.30	-	-	-		-	-	-
2.300	10	206.70	-	-	-		-	-	-
3.000	13	257.40	1.053.40	11	302.10		11	408.60	1.758.60
6.000	25	490.20	2.006.40	21	575.40		21	778.20	3.349.80
Per running m ²⁾	3,5/m	81.70	334.40	3,5/m	95.90		3,5/m	129.70	558.30
Weight [kg/m] ²⁾	9,80			7,70			9,80		
Standard cutting surcharge		10%	10%		10%			10%	10%

¹⁾ Calculated based on a channel 6,000 mm long.

²⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Version and material

- W = Hot-rolled
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Example order for short anchor channel pieces

Type	Profile size	-	Channel length	-	An- chor	-	Design	-	ETA- compli- ant
JTA	W 50/30	-	250	-	2A	-	fv	-	CE

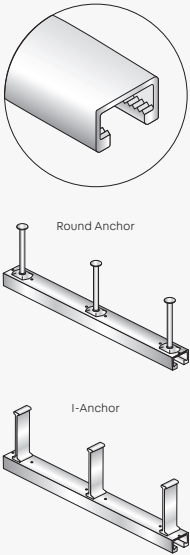
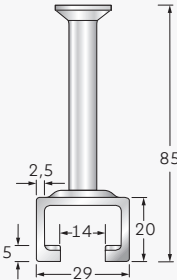
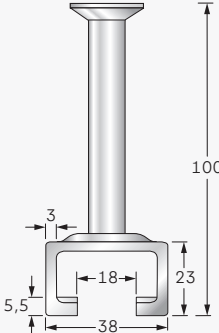
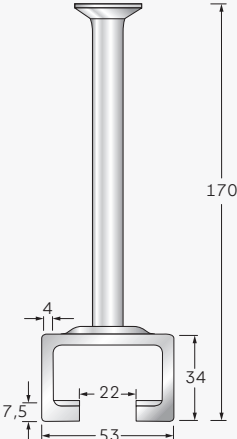
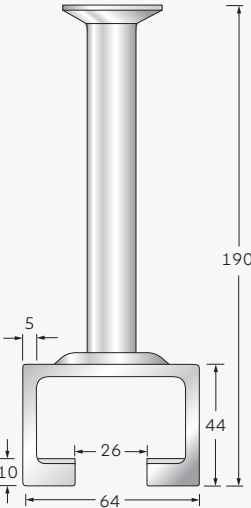


Suitable bolts and various accessories for all channels can be found starting on page 65.

For sample calculations of regular lengths and custom lengths, see page 64.

Anchor channels JXA W, hot-rolled, toothed

ETA (European Technical Assessment ETA-09/0338)

Profile	JXA W 29/20-CE ⁵⁾			JXA W 38/23-CE ¹⁾			JXA W 53/34-CE ¹⁾			JXA W 64/44 ⁴⁾		
Suitable bolts	JXD M10-M12			JXH M12-M16			JXB M16-M20			JXE M20-M24		
												
Channel length ³⁾ [mm]	Number of anchors	Price per piece [€] Design fv		Number of anchors	Price per piece [€] Design fv A4		Number of anchors	Price per piece [€] Design fv A4		Number of anchors	Price per piece [€] Design fv	
150	2	11.40		2	15.30	49.90	2	22.90	138.40	2	69.60	
200	2	12.80		2	17.30	62.40	2	34.50	165.80	2	77.70	
250	2	14.00		2	19.00	74.70	2	42.40	193.40	2	85.90	
300	3	18.30		2	21.00	86.40	2	46.20	221.40	2	93.90	
350	3	19.70		3	26.30	102.20	3	59.40	260.60	3	118.50	
400	3	21.00		3	28.20	115.40	3	63.80	287.50	3	126.10	
550	4	25.00		3	33.90	150.50	3	79.10	369.00	3	149.40	
800	5	33.50		4	46.80	215.10	4	110.70	518.00	4	207.60	
1.050	6	43.00		5	60.00	279.70	5	142.30	667.00	5	298.10	
3.000	16	113.40		13	155.00	779.90	13	401.30	1.763.70	13	791.60	
6.000	31	216.00		25	295.20	1.485.60	25	764.40	3.359.40	25	1.507.80	
Per running m ²⁾	5/m	36.00		4/m	49.20	247.60	4/m	127.40	559.90	4/m	251.30	
Weight [kg/m] ²⁾	1,70			2,70			5,50			8,30		
Standard cutting surcharge		10%			10%	10%		10%	10%		10%	

¹⁾ Hot-dip galvanised version also available with shortened anchors (part of the ETA). Prices on request.

²⁾ Calculated based on a channel 6,000 mm long.

³⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm

⁴⁾ CE profile for fv with I-anchors

⁵⁾ CE profile for fv with round anchors

Further information

- All prices include foam filling and nail holes
- Manufactured lengths: 6,000 mm (-0/+50 mm)
- Anchor edge clearances: 25 - 35 mm
- Cut lengths: 1,050 mm <L <6,000 mm (+/- 5 mm)
- Special lengths: Special lengths are subject to a 20% surcharge due to increased production costs

Version and material

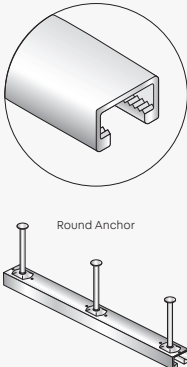
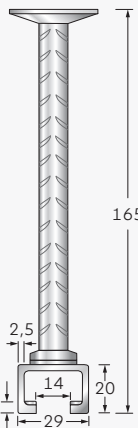
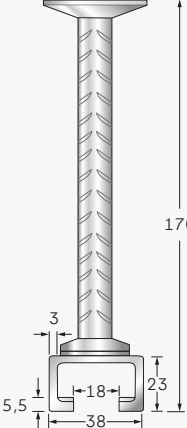
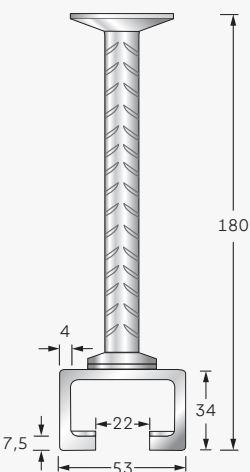
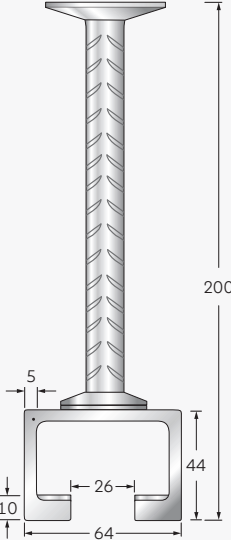
- W = Hot-rolled
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Anchor type

- Round anchor = Standard version (except JXA W 64/44)
- I-anchor = Delivery subject to confirmation
- Weights per meter for mill finish, average anchor weight (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Anchor channels JXA-PC W, hot-rolled, toothed

ETA (European Technical Assessment ETA-09/0338)

Profile	JXA-PC W 29/20	JXA-PC W 38/23	JXA-PC W 53/34	JXA-PC W 64/44				
Suitable bolts	JXD M10-M12	JXH M12-M16	JXB M16-M20	JXE M20-M24				
								
Channel length ¹⁾ [mm]	Number of anchors	Price per piece [€] Design fv	Number of anchors	Price per piece [€] Design fv	Number of anchors	Price per piece [€] Design fv	Number of anchors	Price per piece [€] Design fv
150	2	69.20	2	76.60	2	94.70	2	102.50
200	2	74.90	2	83.20	2	103.40	2	114.00
250	2	80.60	2	89.90	2	115.00	2	125.70
300	3	86.30	2	96.50	2	126.70	2	137.30
350	3	95.30	3	107.50	3	136.30	3	174.90
400	3	106.70	3	114.20	3	144.90	3	185.70
550	4	140.90	3	134.10	3	170.70	3	219.00
800	5	161.10	4	164.40	4	213.90	4	304.20
1.050	6	195.40	5	179.60	5	246.10	5	433.00
3.000	16	480.40	13	494.60	13	683.90	13	1.050.20
6.000	31	915.00	25	942.00	25	1.302.60	25	2.000.40
Per running m ¹⁾	5/m	152.50	4/m	157.00	4/m	217.10	4/m	333.40
Weight [kg/m] ¹⁾	2,46		3,51		5,74		8,76	
Standard cutting surcharge	10%	10%	10%	10%	10%	10%	10%	10%

¹⁾ Calculated based on a channel 6,000 mm long.
²⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm

Version and material

- W = Hot-rolled
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Example order for toothed anchor channels JXA/JXA-PC

Type	Profile size	Channel length	Design
JXA	W 38/23	6,000	fv
JXA-PC	W 38/23	6,000	fv



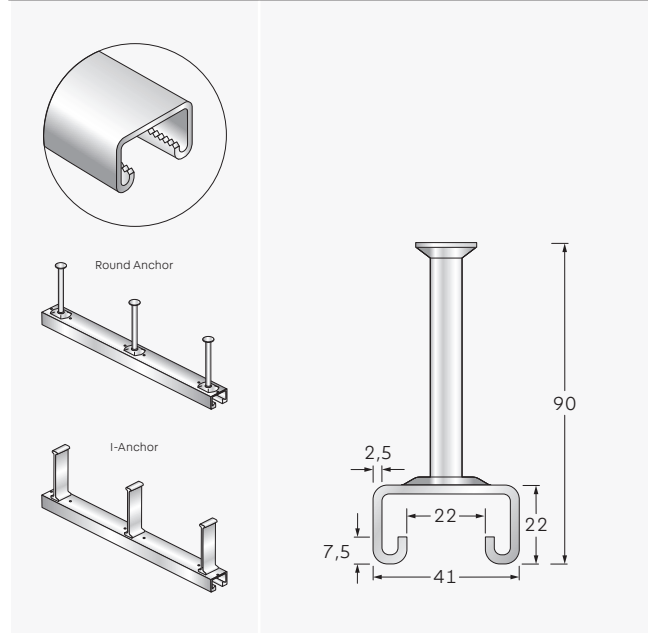
Suitable bolts and various accessories for all channels can be found starting on page 65.

For sample calculations of regular lengths and custom lengths, see page 64.

Anchor channels JXA W, cold-formed, toothed

ETA (European Technical Assessment ETA-09/0338)

Profile	JZA K 41/22-CE ^{1) 4)}
Suitable bolts	JZS M12 – M16



Channel length ³⁾ [mm]	Number of anchors	Price per piece [€]	
		fv	A4
100	2	11.40	32.20
150	2	13.00	37.60
200	2	14.20	43.00
250	2	15.40	48.50
300	2	16.80	53.80
350	3	21.10	67.30
400	3	22.40	73.10
550	3	26.60	88.70
800	4	36.20	124.40
1.050	5	46.20	160.10
3.000	13	121.00	433.40
6.000	25	230.40	825.60
Per running m ²⁾	4/m	38.40	137.60
Weight [kg/m] ²⁾	2,30		
Standard cutting surcharge		10%	10%

¹⁾ Hot-dip galvanised version also available with shortened anchors (installation height approx. 60 mm; not part of the ETA). Prices on request

²⁾ Calculated based on a channel 6,000 mm long.

³⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

⁴⁾ CE profile for fv with round anchors and I-anchors

Version and material

- K = Cold-formed
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Example order for toothed anchor channels JZA

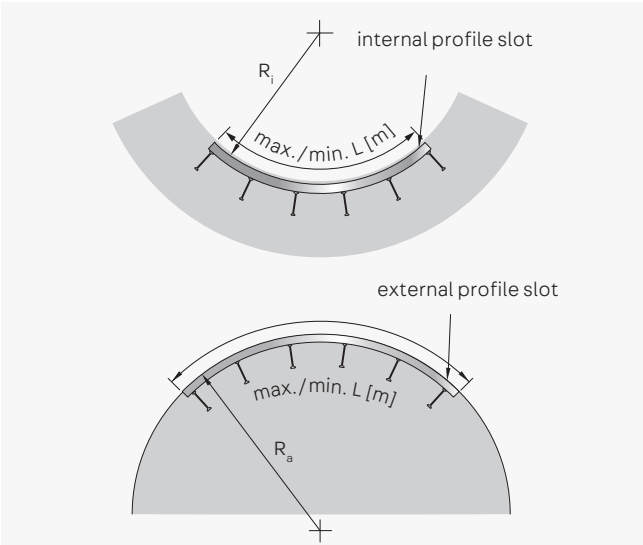
Type	Profile size	–	Channel length	–	Design
JZA	K 41/22	–	6,000	–	fv



Suitable bolts and various accessories for all channels can be found starting on page 65.

For sample calculations of regular lengths and custom lengths, see page 64.

Curved anchor channels JTA, JXA



R_i = internal profile slot; R_a = external profile slot

Version and material

- K = Cold-formed
- W = Hot-rolled
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Dublex, corrosion resistance class III (CRC III)

JTA profile	Design
K 28/15	fv, A4/L4
K 38/17	fv, A4/L4
K 40/25	fv, A4
W 40/22	fv, A4
W 40+	fv, A4
K 50/30	fv, A4
W 50/30	fv, A4
W 50+	fv, A4
K 53/34	fv, A4
W 53/34	fv, A4
W 55/42	fv
K 72/48	fv, A4
W 72/48	fv, A4

Profile JXA	Design
W 29/20	fv
W 38/23	fv, A4

Price per piece [€] on request.

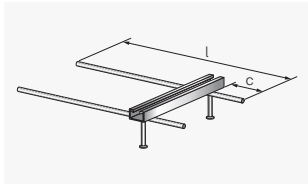
Example order for curved anchor channels JTA

Type	Profile size	Channel length	Design	Bending radius [mm]
JTA	K 38/17	1,050	fv	$R_i = 1,000$



Suitable bolts and various accessories for all channels can be found starting on pagepage 65.

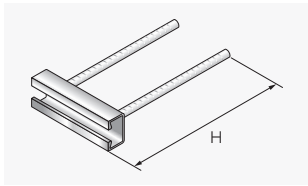
Facade fastening channels JTA-RT



Profile	Variant	Profile length ¹⁾ [mm]	c [mm]	l [mm]	Design	Price per piece [€]
JTA-RT W 40/22	1 - 7	150 - 550	50 - 200	340 - 490	fv	a.A.
JTA-RT W 50/30	1 - 6		75 - 200	365 - 490	fv	a.A.
JTA-RT W 53/34	1 - 5		100 - 200	400 - 500	fv	a.A.
JTA-RT W 55/42	1 - 5		100 - 200	400 - 500	fv	a.A.

¹⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Facade fastening channels JTA-RF



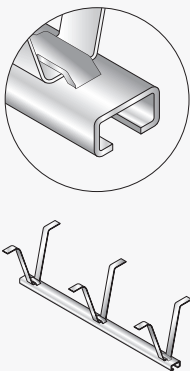
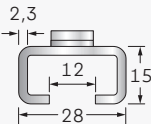
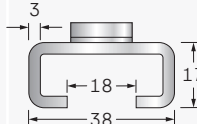
Profile	Profile length ¹⁾ [mm]	Anchor diameter [mm]	Installation height H [mm]	Design	Price per piece [€]
JTA-RF W 40/22	150 - 350	Ø 10	330	fv, A4	a.A.
JTA-RF W 50/30		Ø 12	340	fv, A4	a.A.
JTA-RF W 53/34		Ø 14	420	fv, A4	a.A.
JTA-RF W 55/42		Ø 16	480	fv, A4	a.A.

¹⁾ Tolerance +/- 5 mm for channel lengths <6,000 mm.

Example order for facade fastening channels JTA-RT

Type	Profile size	-	Length l	-	Variant	-	Design
JTA-RT	W 40/22	-	200	-	01	-	fv

Anchor channels JSA K

Profile	JSA K 28/15	JSA K 38/17		
Suitable bolts	JD M6-M12	JH M10-M16		
Stirrup type	1,5 × 15 × 320	2 × 20 × 400		
				
	Price per piece [€]			
	Design			
	fv	fv		
With stirrup	Without stirrup	With stirrup	Without stirrup	
Per running m ²⁾	17.60	15.40	34.80	26.60
Weight [kg/m] ²⁾	1,35	-	2,30	-
Standard cutting surcharge	10%		10%	



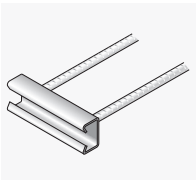
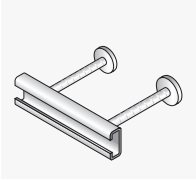
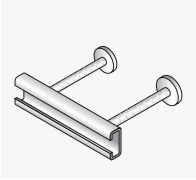
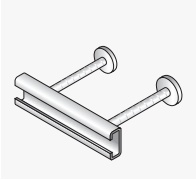
Suitable bolts and various accessories for all channels can be found starting on page 65.

Handrail connection channels



Handrail connection channels JGB

Straight short pieces, National technical approval (abZ Z.-21.4-1913)

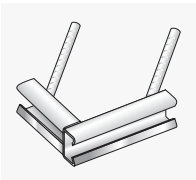
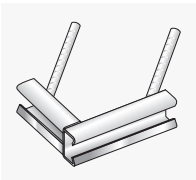
	Profile ²⁾	Anchor diameter [mm]	Design	Price per piece [€][mm]					
				Profillänge ¹⁾ [mm]					
				100	120	150	200	220	250
 JGB ... G	JGB K 38/17 G-...	Ø 10	fV	28.60	29.00	29.30	30.20	30.50	31.20
	Installation height H = 165 mm		A4	53.80	55.20	59.50	62.20	63.40	66.10
	JGB K 40/25 G-...	Ø 12	fV	30.50	31.10	31.40	32.70	33.00	33.60
	Installation height H = 200 mm		A4	56.20	57.60	61.40	66.00	67.20	70.40
 JGB ... DA	JGB K 50/30 G-...	Ø 12	fV	34.40	35.00	35.80	37.50	38.10	38.90
	Installation height H = 225 mm		A4	63.00	64.70	69.40	76.20	78.30	81.00
	JGB K 53/34 G-...	Ø 14	fV	41.20	42.50	43.80	46.50	47.50	48.90
	Installation height H = 320 mm		A4	69.40	73.50	79.50	88.60	92.60	98.10
 JGB ... DA	JGB K 38/17 DA-...	Ø 10	fV	31.40	31.70	32.10	33.00	33.40	34.10
	Installation height H = 120 mm		A4	-	-	-	-	-	-
	JGB K 40/25 DA-...	Ø 10	fV	31.80	32.70	33.00	34.40	34.80	35.30
	Installation height H = 125 mm		A4	59.00	60.50	62.50	66.20	67.80	69.40
 JGB ... DA	JGB K 50/30 DA-...	Ø 12	fV	35.70	36.30	37.40	39.00	39.70	40.50
	Einbauhöhe H = 150 mm		A4	65.00	66.70	70.00	78.40	83.10	83.40
	JGB K 53/34 DA-...	Ø 14	fV	42.50	43.70	45.30	48.00	48.90	50.50
	Einbauhöhe H = 250 mm		A4	71.50	75.70	81.80	91.40	95.40	101.10

¹⁾ Toleranz +/- 5 mm für Schienenlängen < 6.000 mm.

²⁾ W-Profil auf Anfrage.

Railing Fastening Channels JGB

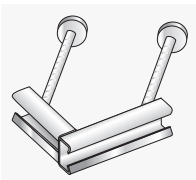
Corner pieces with rebar

	Profile Profile dimensions ¹⁾ l = 170 x 170 mm	Anchor diameter [mm]	Design	Price per piece [€]
 JGB ... G	JGB K 38/17 G-170 x 170	Ø 10	fV	56.50
			A4	113.30
	JGB K 40/25 G-170 x 170	Ø 12	fV	59.90
			A4	123.20
 JGB ... G	JGB K 50/30 G-170 x 170	Ø 12	fV	64.30
			A4	131.40
	JGB K 53/34 G-170 x 170	Ø 14	fV	71.20
			A4	161.40

¹⁾ Tolerance +/- 5 mm for channel lengths < 6,000 mm.

Railing Fastening Channels JGB

Corner piece with headed anchors

	Profile Profile dimensions ¹⁾ l = 170 x 170 mm	Anchor diameter [mm]	Design	Price per piece
 JGB ... DA	JGB K 38/17 DA-170 x 170	Ø 12	fV	a.A.
	JGB K 40/25 DA-170 x 170	Ø 14	fV, A4	a.A.
	JGB K 50/30 DA-170 x 170	Ø 14	fV, A4	a.A.
	JGB K 53/34 DA-170 x 170	Ø 14	fV, A4	a.A.

¹⁾ Tolerance +/- 5 mm for channel lengths < 6,000 mm.

Version and material

- fV = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Further information

All prices including foam filling and 2 anchors

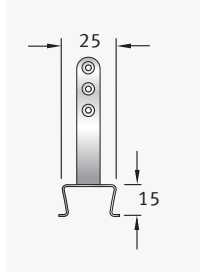
Example order for handrail connection channels JGB

Type	Profile size	-	Type	-	Design	-	Length l
JGB	K 38/17	-	G	-	fV	-	200



Brick tie channels

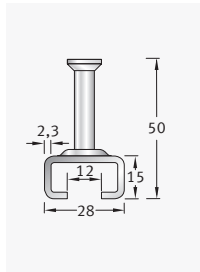
Brick tie channel Kt



- For wall connection anchor JMA: Series 12
- Weight: 0.34 kg/m
- Manufactured lengths: 2,500 and 5,000 mm (-0/+50 mm)
- Not available in cut lengths

Type	Anchor [pcs./m]	VPE [Band]	Price per m [€]	
			Design	
			sv	A4
Kt 25/15-D	6/m	100 Stk.	5.40	23.30

Brick tie channel JTA K 28/15

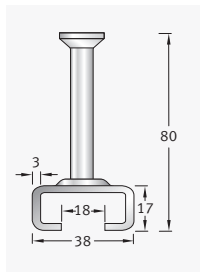


- For wall connection anchor JMA: Series 12
- Weight: 1.20 kg/m

Type	Anchor [pcs./m]	Price per m [€]	
		Design	
		fv	A4
JTA K 28/15	5/m	22.50	68.00
Cutting surcharge		10%	10%

Manufactured lengths: see page 46

Brick tie channel JTA K 38/17



- For wall connection anchor JMA: Series 18
- Weight: 2.05 kg/m

Type	Anchor [pcs./m]	Price per m [€]	
		Design	
		fv	A4
JTA K 38/17	5/m	25.80	102.40
Cutting surcharge		10%	10%

Manufactured lengths: see page 46

For further information and anchor designs

- For details of lengths, weights,
K 38/17 with shortened anchors and much more, see page 46
- All prices include foam filling and nail holes

Werkstoff and Ausführung

- K = kaltgeformt
- sv = sendzimirverzinkt
- fv = feuerverzinkt
- A4 = Edelstahl, Korrosionsbeständigkeitsklasse III (CRC III)

Ordering example for wall connection channels Kt

Type	Profile size	Channel length	Design
Kt	25/15-D	2500	sv



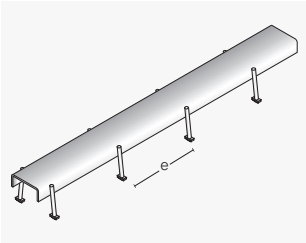
Suitable nail and wall connection anchors and various accessories for all rails can be found from page 77.

Profiled metal sheet channels



Profiled metal sheet channels JTB uni

National technical approval (abZ Z-21.4-161)



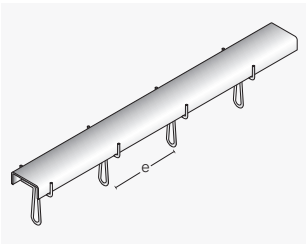
Profile	Material thickness [mm]	Anchor spacing e [mm]	Anchor per 3 m	Weight [kg/m]	Price per m [€]	
					Design	
					fv	A4
JTB 60/22/3.0-uni ¹⁾	3	450	8	2.38	POA	POA
	3	150	20	2.51	POA	POA
JTB 60/22/6.0-uni	6	450	8	3.97	POA	-
	6	150	20	4.10	POA	-

¹⁾ A4 version with 24-mm profile height

Accessories	Price per set [€]	
	Design	
	fv	A4
JTB-EB end anchor	With 4 drilling screws dia. 4.8 × 16 mm	
	POA	

Profiled metal sheet channels JTB AR

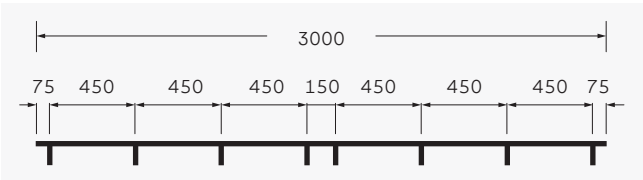
National technical approval (abZ Z-21.4-161)



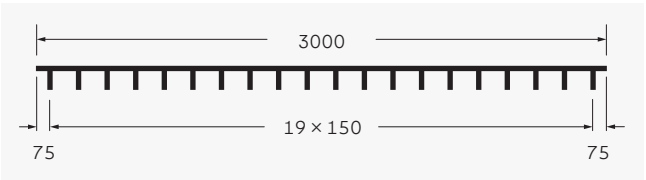
Profile	Material thickness [mm]	Anchor spacing e [mm]	Anchor per 3 m	Weight [kg/m]	Price per m [€]	
					Design	
					fv	A4
JTB 60/22/3.0-AR ¹⁾	3	450	8	2.40	POA	POA
	3	150	20	2.51	POA	POA
JTB 60/22/6.0-AR	6	450	8	3.99	POA	-
	6	150	20	4.30	POA	-

¹⁾ A4 version with 24-mm profile height

Anchor arrangement



If the anchor spacing is not stated, e = 450 mm will be delivered



Alternative anchor spacing e = 150 mm

Profiled metal sheet channels JTB-LA

National technical approval (abZ Z-21.4-2148)

NEW



Profile	Material thickness [mm]	Weight [kg/m]	Price per m [€]	
			Design	
			fv	A4
JTB 60/24/20-LA	2.0	1.50	POA	
JTB 100/24/20-LA	2.0	2.07	POA	
JTB 100/24/25-LA	2.5	2.52	POA	
JTB 100/24/30-LA	3.0	2.96	POA	

Further information

- Prices include foam filling
- Manufactured lengths: 3,000 mm (-0/+50 mm)
- Weights per meter for mill finish version (for galvanised profiles: +10%; for stainless steel profiles: +2%)

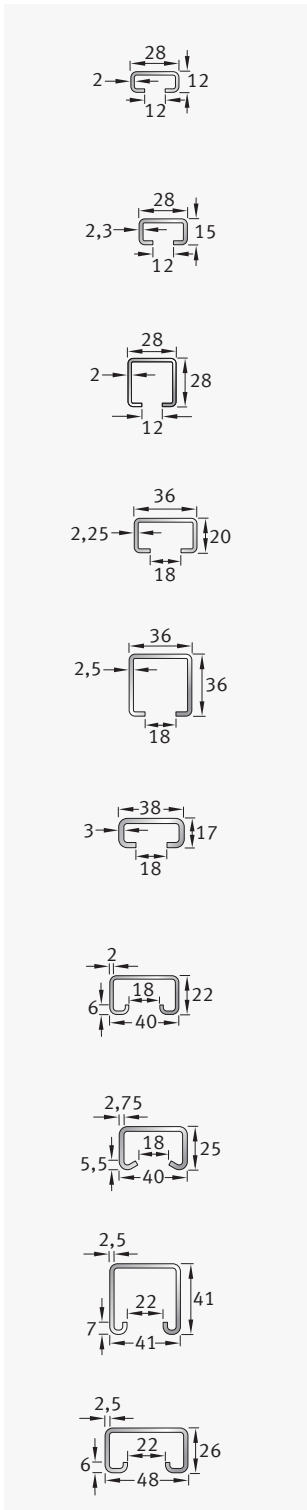
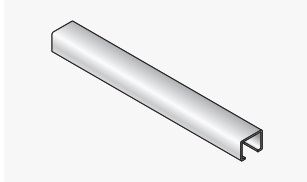
Example order for profiled metal sheet channels JTB

Type	Profile size	Anchor spacing	Anchor shape	Design
JTB	60/22/3,0	450	uni	fv

Mounting channels

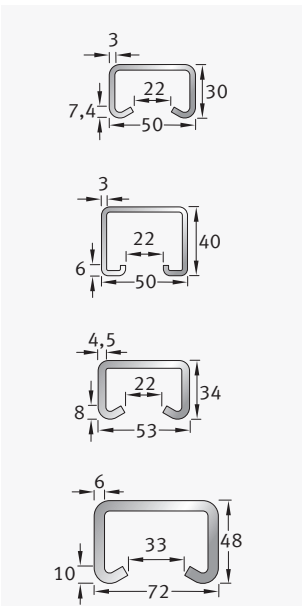


Mounting channels JM K, cold-formed



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JM K 28/12¹⁾	JD M6-M10	0,89	wb	5.30	4.70
			fv	8.80	4.70
			A2	32.80	7.00
			A4	51.50	7.00
JM K 28/15	JD M6-M12	1,08	wb	6.50	4.70
			fv	10.50	4.70
			A4/L4	51.60	7.00
JM K 28/28¹⁾	JD M6-M12	1,39	wb	7.70	-
			fv	13.60	-
			A4	63.50	-
JM K 36/20¹⁾	JH M10-M16	1,44	wb	8.20	-
			fv	14.20	-
JM K 36/36¹⁾	JH M10-M16	2,20	wb	12.20	-
			fv	20.60	-
			A4	97.20	-
JM K 38/17	JH M10-M16	1,77	wb	10.40	4.70
			fv	17.00	4.70
			A4/L4	82.10	7.00
JM K 40/22	JC M10-M16	1,53	wb	8.80	6.50
			fv	15.70	6.50
JM K 40/25	JC M10-M16	2,01	wb	12.00	6.50
			fv	20.50	6.50
			A2	75.90	10.10
JM K 41/41¹⁾	JAM(F) 22 M6-M12 (Ankermuttern)	2,61	A4	99.00	10.10
			wb	14.80	-
			fv	24.60	-
JM K 48/26¹⁾	JB M10-M20	2,25	wb	15.50	-
			fv	25.10	-

¹⁾ Only available in 6,000 mm



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JM K 50/30	JB M10-M20	3,04	wb	16.80	6.50
			fv	29.30	6.50
			A4	146.80	10.10
JM K 50/40 ¹⁾	JB M10-M20	3,41	wb	20.10	-
			fv	35.40	-
JM K 53/34	JB M10-M20	4,47	wb	22.30	10.30
			fv	37.40	10.30
			A4	183.70	15.90
JM K 72/48	JA M20-M30	8,09	wb	59.60	16.30
			fv	86.50	16.30
			A4	364.80	18.60

¹⁾ Only available in 6,000 mm

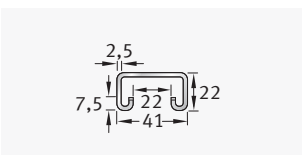
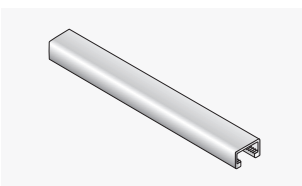
Further information

- Manufactured lengths: 6,000 mm (-0/+50 mm)
- Cut lengths: L < 6,000 mm (+/- 5 mm)
- Short pieces < 1,000 mm on request (+/- 5 mm)
- Cut ends not deburred
- Weights per meter for mill finish version (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Example order for mounting channels JM

Type	Profile size	-	Channel length	-	Design
JM	K 50/30	-	6,000	-	fv

Mounting channels JZM K, cold-formed, toothed



Profile	Bolt/ channel nuts	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JZM K 41/22	JZS M12-M16	1,88	wb	19.40	6.50
			fv	29.10	6.50
			A4	116.60	10.10

Version and material

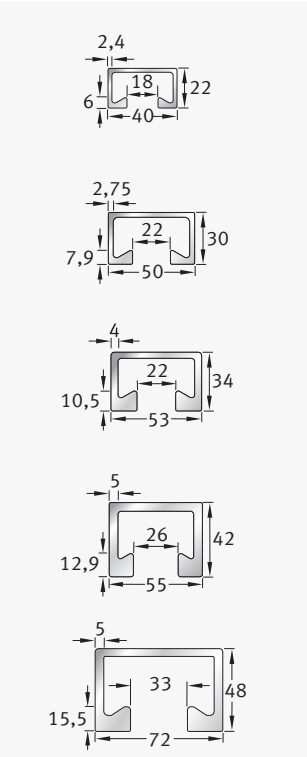
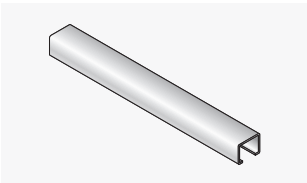
- K = Cold-formed
- wb = Mill finish
- fv = Hot-dip galvanised
- A2 = Stainless steel, corrosion resistance class II (CRC II)
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)



Suitable bolts and various accessories for all channels can be found starting on page 65.

Information on price calculations and cut lengths can be found on page 64.

Mounting channels JM W, hot-rolled
ETA (European Technical Assessment ETA-15/0386)



Profile	Bolt	Weight [kg/m]	Design		Price per m [€]	Cutting surcharge per piece [€]
JM W 40/22-CE	JC M10-M16	2,12	wb		16.70	6.30
			fv		25.60	6.30
			A4		147.20	9.90
JM W 50/30-CE	JB M10-M20	3,25	wb		24.60	10.10
			fv		38.80	10.10
			A4		223.70	12.80
JM W 53/34-CE	JB M10-M20	4,96	wb		36.70	16.00
			fv		55.50	16.00
			A4		320.10	18.00
JM W 55/42-CE	JB M10-M24	6,57	wb		50.40	16.00
			fv		57.70	16.00
JM W 72/48-CE	JA M20-M30	8,85	wb		65.00	16.00
			fv		96.80	16.00
			A4		502.90	32.00

Further information

- Manufactured lengths: 6,000 mm (-0/+50 mm)
- Cut lengths: L <6,000 mm (+/- 5 mm)
- Short pieces <1,000 mm on request (+/- 5 mm)
- Cut ends not deburred
- Weights per meter for mill finish version (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Version and material

- W = Hot-rolled
- wb = Mill finish
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

Example order for mounting channels JM

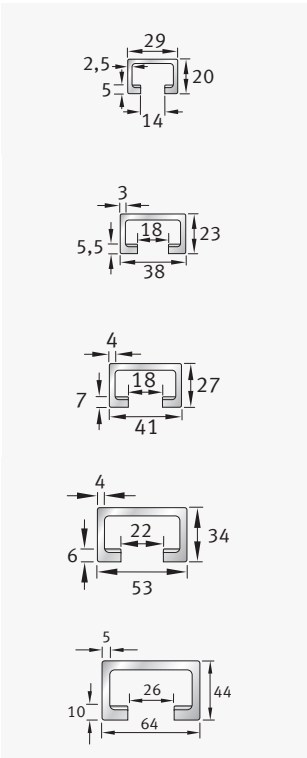
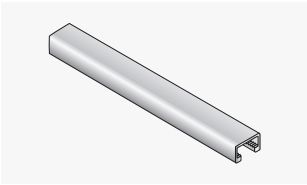
Type	Profile size	Channel length	Design	ETA-compliant
JM	W 50/30	6,000	fv	CE



Suitable bolts and various accessories for all channels can be found starting on page 65.

Information on price calculations and cut lengths can be found on page 64.

Mounting channels JXM W, hot-rolled, toothed



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JXM W 29/20	JXD M12, JD M6-M12	1,55	wb	16.70	6.30
			fv	25.60	6.30
JXM W 38/23	JXH M12-M16, JH M10-M16	2,42	wb	24.60	10.10
			fv	38.80	10.10
			A4	218.30	12.80
JXM W 41/27 ¹⁾	JXH M12-M16, JH M10-M16	3,38	wb	36.60	-
			fv	40.60	-
JXM W 53/34	JXB M16-M20	4,65	wb	64.10	16.00
			fv	95.30	16.00
			A4	515.30	32.00
JXM W 64/44	JXE M20-M24	7,19	wb	94.00	23.10
			fv	140.30	23.10

¹⁾ Only available in 6,000 mm

Version and material

- K = Cold-formed
- wb = Mill finish
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)

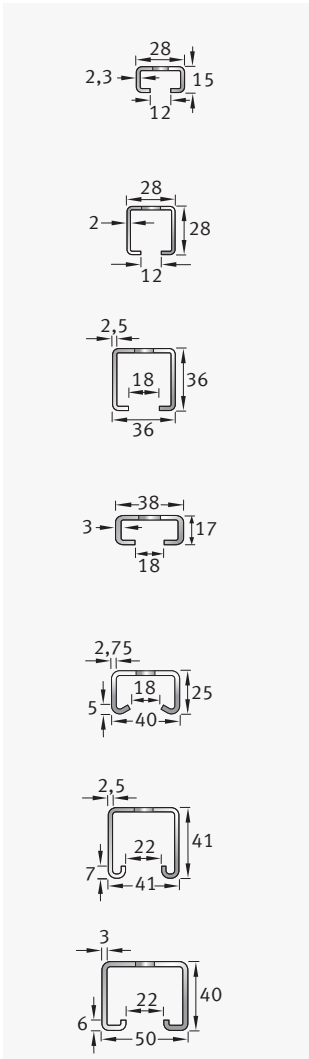
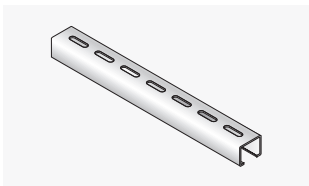
Example order for toothed mounting channels JXM W

Type	Profile size	-	Channel length	-	Design
JXM	W 53/34	-	6,000	-	fv



Information on price calculations and cut lengths can be found on page 64.

Mounting channel JML K, cold-formed, slotted



Profile	Bolt	Slot [mm]	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JML K 28/15	JD M6-M12	9 × 25	1,02	wb	7.70	4.70
				fv	11.80	4.70
				A4/L4	55.90	7.00
JML K 28/28 ¹⁾	JD M6-M12	11 × 40	1,28	wb	8.90	-
				fv	14.80	-
				A4	67.60	-
JML K 36/36 ¹⁾	JH M10-M16	11 × 40	2,09	wb	14.00	-
				fv	21.90	-
				A4	100.00	-
JML K 38/17	JH M10-M16	11 × 40	1,55	fv	19.30	4.70
				A4/L4	86.80	7.00
				wb	14.80	6.50
JML K 40/25	JC M10-M16	11 × 40	1,86	fv	23.40	6.50
				A4	100.50	10.10
JML K 41/41 ¹⁾	JAM (F) 22 M6-M12 (Ankermuttern)	11 × 40	2,47	wb	16.20	-
				fv	26.40	-
				wb	21.90	-
JML K 50/40 ¹⁾	JB M10-M20	11 × 40	3,25	fv	36.10	-

¹⁾ Only available in 6,000 mm

Further information

- Slot centre distance: 60 mm
(other spacings and slots available on request)

Version and material

- K = Cold-formed
- wb = Mill finish
- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel, Lean Duplex, corrosion resistance class II (CRC II)

Example order for slotted back mounting channels JML

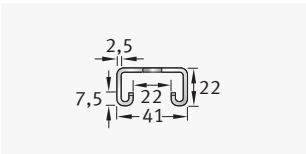
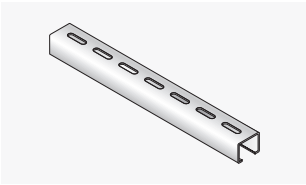
Type	Profile size	Channel length	Design
JML	K 40/25	6,000	fv



Suitable bolts and various accessories for all channels can be found starting on page 65.

Information on price calculations and cut lengths can be found on page 64.

Mounting channel JZML K, cold-formed, toothed, slotted



Profile	Bolt	Slot [mm]	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JZML K 41/22	JZS M12-M16	11 × 40	1,74	wb	20.70	6.50
				fv	30.60	6.50
				A4	121.40	10.10

Further information

- Slot centre distance: 60 mm
(other spacings and slots available on request)



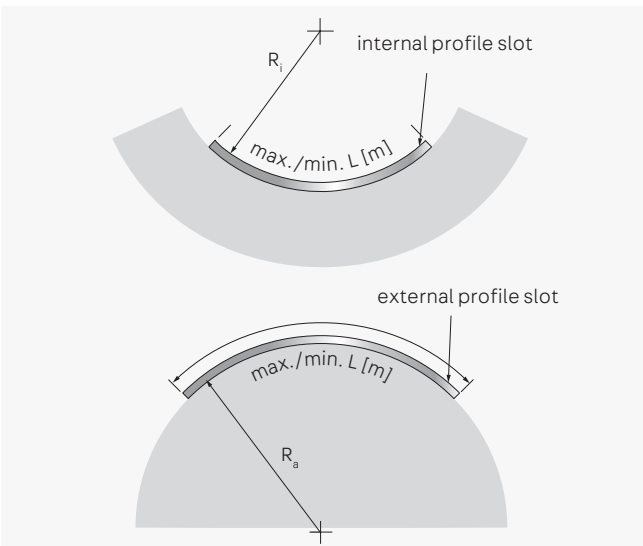
Suitable bolts and various accessories for all channels can be found starting on page 65.

Information on price calculations and cut lengths can be found on page 64.

Example order for slotted back toothed mounting channel JZML

Type	Profile size	–	Channel length	–	Design
JZML	K 41/22	–	6,000	–	fv

Curved mounting channels JM, JML, JXM



R_i = internal profile slot; R_a = external profile slot

Profile JM, JML	Design	Profil JXM	Design
W 72/48	fv, A4	W 38/23	fv, A4
K 72/48	fv, A4	W 29/20	fv
W 55/42	fv		
W 53/34	fv, A4		
K 53/34	fv, A4		
W 50/30	fv, A4		
K 50/30	fv, A4		
W 40/22	fv, A4		
K 40/25	fv, A4		
K 38/17	fv, A4, L4		
K 28/15	fv, A4, L4		

Price per piece [€] on request.

Version and material

- K = Cold-formed
- W = Hot-rolled
- fv = Hot-dip galvanised
- A2 = Stainless steel, corrosion resistance class II (CRC II)
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel, Lean Duplex, corrosion resistance class II (CRC II)

Example order for curved mounting channel JM

Type	Profile size	–	Channel length	–	Design	–	Bending radius [mm]
JM	K 38/17	–	1,050	–	fv	–	$R_i = 1,000$

Price calculation for channels

All prices are gross prices.

Price calculation

Version: mill finish/galvanised

	Gross price
+	Steel surcharge
-	Discount
=	Net total

Design: Stainless steel A2 or A4

	Gross price
+	Steel surcharge
+	Alloy surcharge
-	Discount
=	Net total

Lengths up to 1,050 mm are short pieces.
Lengths over 1,050 mm are cut lengths.

Price calculation for cut lengths
(based on the price per meter)

	Price per meter €/m
×	Length
×	Surcharge, alloy surcharge
×	Cutting surcharge %
-	Discount
=	Net total

Standard cut lengths for anchor channels

The standard cut length surcharge is 10%

Anchor channels with max. anchor spacing of 200 mm:

JTA K 38/17, JTA K 28/15,
JXA W 29/20, JXA-PC W 29/20

Standard cut lengths [mm]

1,250	2,250	3,250	4,250	5,250
1,450	2,450	3,450	4,450	5,450
1,650	2,650	3,650	4,650	5,650
1,850	2,850	3,850	4,850	5,850
2,050	3,050	4,050	5,050	

Anchor channels with max. anchor spacing of 250 mm:

JTA W 53/34, JTA W 50/30, JTA W 40/22, JTA W 40+, JTA W 50+,
JTA K 53/34, JTA K 50/30, JTA K 40/25,
JXA W 64/44, JXA W 53/34, JXA W 38/23,
JXA-PC W 64/44, JXA-PC W 53/34, JXA-PC W 38/23,
JZA K 41/22

Standard cut lengths [mm]

1,300	2,300	3,300	4,300	5,300
1,550	2,550	3,550	4,550	5,550
1,800	2,800	3,800	4,800	5,800
2,050	3,050	4,050	5,050	

Anchor channels with max. anchor spacing of 300 mm:

JTA W 72/48, JTA W 55/42,
JTA K 72/48

Standard cut lengths [mm]

1,250	2,450	3,650	4,850
1,550	2,750	3,950	5,150
1,850	3,050	4,250	5,450
2,150	3,350	4,550	5,750

Special lengths

All other cut lengths are special lengths. This calculation is based on a cutting surcharge of 20% (increased production costs).

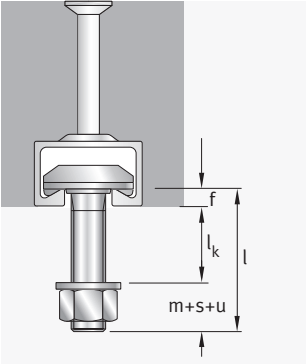
Mounting channels

The cutting surcharge stated in the price list is charged per piece for mounting channels. There are no standard cut lengths of mounting channels.

T-bolts for channels



Determining the required bolt length



- l = T-bolt length
- l_k = Clamping length (thickness of the attached part)
- f = Profile lip, see profile pages
- t = Profile lip, see profile pages
- m = Nut height
EN ISO 4032
- s = Washer thickness
EN ISO 7093-1
- u = T-bolt projection
EN ISO 4753

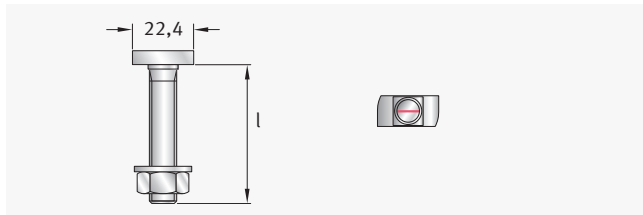
Bolt	Sum $m+s+u$ [mm]
M6	8.8
M8	11.3
M10	13.9
M12	17.3
M16	21.8
M20	27.0
M24	32.5
M27	35.8
M30	38.6

Req. l [mm] = $l_k + f + (m+s+u)$

Example
JORDAHL® anchor channel
JTA K 53/34,
 $f = 8$ mm, avail. clamping length
 $l_k = 65$ mm, T-bolt JB M16 gv
Req. $l = 65 + 8 + 21.8 = 94.8$ mm
Selected:
JB M16 x 100 4.6 gv

Tee-head bolts JD

ETA (European Technical Assessment ETA-09/0338)



For profiles JTA- and JM K 28/28, K 28/15, K 28/12, W 29/20¹⁾

¹⁾ JD bolts in combination with profile W 29/20 are not suitable for supporting longitudinal loads

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JD M6 × 15	4.6 gv	500	98.00
JD M6 × 20	4.6 gv	500	99.80
JD M6 × 25	4.6 gv	500	101.20
JD M6 × 30	4.6 gv	500	106.10
JD M6 × 40	4.6 gv	500	108.10
JD M6 × 50	4.6 gv	500	111.40
JD M6 × 60	4.6 gv	500	114.60
JD M8 × 15	4.6 gv	500	79.50
JD M8 × 20	4.6 gv	500	81.30
JD M8 × 25	4.6 gv	500	82.50
JD M8 × 30	4.6 gv	500	86.10
JD M8 × 40	4.6 gv	500	91.30
JD M8 × 50	4.6 gv	500	94.50
JD M8 × 60	4.6 gv	500	116.60
JD M8 × 80	4.6 gv	500	203.30
JD M8 × 100	4.6 gv	100	275.10
JD M8 × 150	4.6 gv	100	504.80
JD M10 × 15	4.6 gv	500	105.80
JD M10 × 20	4.6 gv	500	109.80
JD M10 × 25	4.6 gv	500	113.00
JD M10 × 30	4.6 gv	500	117.00
JD M10 × 40	4.6 gv	100	133.50
JD M10 × 50	4.6 gv	100	145.10
JD M10 × 60	4.6 gv	100	151.80
JD M10 × 80	4.6 gv	50	219.50
JD M10 × 100	4.6 gv	50	293.60

²⁾ JD M12 not suitable for profile K 28/12

³⁾ Delivery subject to confirmation

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
JD M10 × 125	4.6 gv	50	450.60
JD M10 × 150	4.6 gv	100	548.70
JD M10 × 200	4.6 gv	50	a.A.
JD M12 × 30	4.6 gv ²⁾	200	204.30
JD M12 × 40	4.6 gv ²⁾	100	211.20
JD M12 × 50	4.6 gv ²⁾	100	222.80
JD M12 × 80	4.6 gv ²⁾	100	243.00
Hot-dip galvanised (fv), strength class 4.6			
JD M10 × 30	4.6 fv	500	117.00
JD M10 × 40	4.6 fv	100	133.50
JD M10 × 60	4.6 fv	100	151.80
JD M10 × 80	4.6 fv	50	219.50
JD M10 × 100	4.6 fv	50	293.60
JD M12 × 50	4.6 fv ²⁾	100	222.80
Stainless steel grade A4-50 / A4-70 / FA-70 ³⁾			
JD M8 × 30	A4-50	100	762.60
JD M10 × 20	A4-50	100	782.40
JD M10 × 25	A4-70	100	817.10
JD M10 × 30	A4-70	100	852.60
JD M10 × 40	A4-70	100	919.80
JD M10 × 50	A4-70	100	1.000.00
JD M10 × 60	A4-70	100	1.062.20
JD M10 × 80	A4-50	100	1.307.30
JD M10 × 100	A4-50	50	1.727.70
JD M10 × 125	A4-50	50	a.A.
JD M10 × 150	A4-50	50	a.A.
JD M10 × 200	A4-50	50	a.A.

²⁾ JD M12 not suitable for profile K 28/12

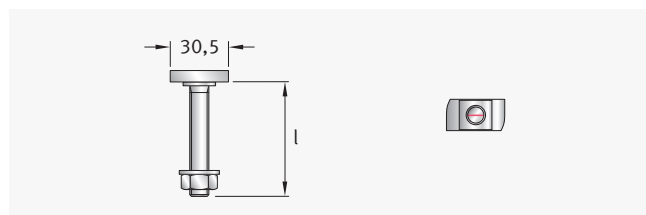
³⁾ Delivery subject to confirmation



Information on determining the screw length
can be found on page 65.

Tee-head bolts JH

ETA (European Technical Assessment ETA-09/0338)



For profiles JTA- and JM K 38/17, K 36/36, K 36/20, W 38/23¹⁾

¹⁾ JH bolts in combination with profile W 38/23 are not suitable for supporting longitudinal loads

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JH M10 × 20	4.6 gv	100	158.60
JH M10 × 30	4.6 gv	100	160.20
JH M10 × 40	4.6 gv	100	170.30
JH M10 × 50	4.6 gv	100	177.80
JH M10 × 60	4.6 gv	100	182.40
JH M10 × 80	4.6 gv	50	244.90
JH M10 × 100	4.6 gv	50	325.70
JH M10 × 150	4.6 gv	50	548.70
JH M12 × 20	4.6 gv	100	168.80
JH M12 × 30	4.6 gv	100	178.20
JH M12 × 40	4.6 gv	100	183.80
JH M12 × 50	4.6 gv	100	196.80
JH M12 × 60	4.6 gv	50	222.50
JH M12 × 80	4.6 gv	50	240.50
JH M12 × 100	4.6 gv	25	359.30
JH M12 × 125	4.6 gv	25	459.60
JH M12 × 150	4.6 gv	25	556.80
JH M12 × 200	4.6 gv	25	919.00
JH M16 × 30	4.6 gv	50	248.10
JH M16 × 40	4.6 gv	50	251.50
JH M16 × 50	4.6 gv	50	275.10
JH M16 × 60	4.6 gv	50	300.40
JH M16 × 80	4.6 gv	50	368.50
JH M16 × 100	4.6 gv	25	439.90
JH M16 × 125	4.6 gv	25	622.70
JH M16 × 150	4.6 gv	25	729.50
JH M16 × 200	4.6 gv	25	1.070.10

²⁾ Designation FA also corresponds to F4 (1.4462)

³⁾ Delivery subject to confirmation.

Further information

- All prices including nuts;
- Please order washers separately

Example order for T-bolts

Type	Thread	x	Length l	–	Design
JH	M12	x	80	–	4.6 fv

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 4.6			
JH M10 × 50	4.6 fv	50	177.80
JH M10 × 60	4.6 fv	50	182.40
JH M10 × 80	4.6 fv	50	244.90
JH M12 × 30	4.6 fv	100	178.20
JH M12 × 40	4.6 fv	100	183.80
JH M12 × 50	4.6 fv	50	196.80
JH M12 × 60	4.6 fv	50	222.50
JH M12 × 80	4.6 fv	50	240.50
JH M12 × 100	4.6 fv	25	359.30
JH M12 × 125	4.6 fv	25	459.60
JH M16 × 50	4.6 fv	50	275.10
JH M16 × 60	4.6 fv	50	300.40
Hot-dip galvanised (fv), strength class 8.8			
JH M12 × 100	8.8 fv	25	450.70
JH M16 × 60	8.8 fv	50	557.50
Stainless steel grade A4-50 / A4-70 / FA-70 ^{2) 3)}			
JH M10 × 30	A4-70	100	1.327.70
JH M10 × 40	A4-70	100	1.489.70
JH M10 × 50	A4-70	100	1.542.30
JH M10 × 60	A4-70	100	1.622.50
JH M12 × 30	A4-70	100	1.302.40
JH M12 × 40	A4-70	100	1.384.50
JH M12 × 50	A4-70	100	1.489.70
JH M12 × 60	A4-70	100	1.647.30
JH M12 × 80	A4-70	100	1.699.50
JH M12 × 100	A4-50	100	2.500.30
JH M12 × 150	A4-50	25	3.627.00
JH M12 × 200	A4-50	50	4.084.10
JH M16 × 40	A4-50	50	1.894.50
JH M16 × 50	A4-50	25	2.094.80
JH M16 × 60	A4-50	25	2.227.30
JH M16 × 80	A4-50	25	2.559.60
JH M16 × 100	A4-50	25	3.216.60
JH M16 × 150	A4-50	25	4.471.80

²⁾ Designation FA also corresponds to F4 (1.4462)

³⁾ Delivery subject to confirmation.

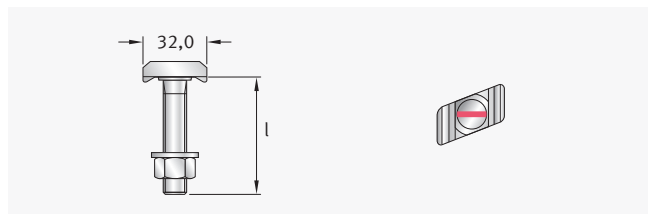


Information on determining the screw length
can be found on page 65.

Hook-head T-bolts JC

ETA (European Technical Assessment

ETA-09/0338, ETA-15/0386)



For profiles JTA- and JM W 40+, W 40/22, K 40/25, K 40/22

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JC M10 × 20	4.6 gv	100	172.20
JC M10 × 30	4.6 gv	100	173.70
JC M10 × 40	4.6 gv	100	183.80
JC M10 × 50	4.6 gv	100	187.40
JC M10 × 60	4.6 gv	100	205.80
JC M10 × 65	4.6 gv	100	233.20
JC M10 × 80	4.6 gv	100	337.40
JC M10 × 100	4.6 gv	100	345.80
JC M12 × 20	4.6 gv	100	214.30
JC M12 × 30	4.6 gv	100	217.40
JC M12 × 40	4.6 gv	100	220.10
JC M12 × 50	4.6 gv	100	231.20
JC M12 × 60	4.6 gv	50	242.50
JC M12 × 80	4.6 gv	50	298.10
JC M12 × 100	4.6 gv	50	349.60
JC M12 × 125	4.6 gv	50	479.40
JC M12 × 150	4.6 gv	25	740.90
JC M12 × 200	4.6 gv	25	a.A.
JC M16 × 30	4.6 gv	50	286.90
JC M16 × 40	4.6 gv	50	310.50
JC M16 × 50	4.6 gv	50	334.20
JC M16 × 60	4.6 gv	50	339.30
JC M16 × 80	4.6 gv	50	398.20
JC M16 × 100	4.6 gv	25	481.30
JC M16 × 125	4.6 gv	25	723.70
JC M16 × 150	4.6 gv	25	828.00
JC M16 × 200	4.6 gv	25	934.80
JC M16 × 250	4.6 gv	25	1.047.70
Galvanised (gv), strength class 8.8			
JC M12 × 30	8.8 gv	100	324.70
JC M12 × 40	8.8 gv	50	317.60
JC M12 × 50	8.8 gv	50	329.20
JC M12 × 60	8.8 gv	50	344.40
JC M12 × 100	8.8 gv	50	518.90
JC M16 × 40	8.8 gv	25	470.80
JC M16 × 50	8.8 gv	25	549.50
JC M16 × 60	8.8 gv	25	561.60
JC M16 × 80	8.8 gv	25	626.20
JC M16 × 100	8.8 gv	25	689.70
JC M16 × 125	8.8 gv	25	972.00
JC M16 × 150	8.8 gv	25	1.244.30

¹⁾ The designation FA also corresponds to F4 (1.4462).

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 4.6			
JC M10 × 30	4.6 fv	100	173.70
JC M10 × 40	4.6 fv	100	183.80
JC M10 × 60	4.6 fv	100	205.80
JC M12 × 40	4.6 fv	100	220.10
JC M12 × 50	4.6 fv	100	231.20
JC M12 × 60	4.6 fv	100	242.50
JC M12 × 80	4.6 fv	50	298.10
JC M12 × 100	4.6 fv	50	349.60
JC M16 × 40	4.6 fv	50	310.50
JC M16 × 50	4.6 fv	50	334.20
JC M16 × 60	4.6 fv	50	339.30
JC M16 × 80	4.6 fv	50	398.20
JC M16 × 100	4.6 fv	25	481.30
Hot-dip galvanised (fv), strength class 8.8			
JC M12 × 40	8.8 fv	100	317.60
JC M12 × 50	8.8 fv	100	329.20
JC M12 × 60	8.8 fv	100	344.40
JC M12 × 80	8.8 fv	50	420.40
JC M12 × 100	8.8 fv	50	518.90
JC M16 × 40	8.8 fv	50	470.80
JC M16 × 50	8.8 fv	50	549.50
JC M16 × 60	8.8 fv	50	561.60
JC M16 × 80	8.8 fv	50	626.20
JC M16 × 100	8.8 fv	25	689.70
JC M16 × 125	8.8 fv	25	972.00
Stainless steel grade FA-70 (1.4462) ¹⁾			
JC M10 × 30	A4-50	50	2.794.30
JC M10 × 40	A4-50	100	2.854.50
JC M10 × 50	A4-50	50	3.207.30
JC M12 × 30	A4-50	100	1.997.80
JC M12 × 40	A4-50	50	2.292.90
JC M12 × 50	A4-50	50	2.408.50
JC M12 × 60	A4-50	50	2.529.70
JC M12 × 80	A4-50	50	2.789.50
JC M12 × 100	A4-50	50	3.131.20
JC M16 × 30	A4-50	50	2.305.50
JC M16 × 40	A4-50	50	2.561.70
JC M16 × 50	A4-50	50	2.774.10
JC M16 × 60	A4-50	25	2.791.20
JC M16 × 80	A4-50	25	3.026.20
JC M16 × 100	A4-50	25	3.542.00
JC M16 × 150	A4-50	25	4.644.10
JC M16 × 200	A4-50	25	5.706.40
Stainless steel grade FA-70 (1.4462) ¹⁾			
JC M12 × 40	FA-70	50	2.517.10
JC M12 × 60	FA-70	50	2.933.40
JC M16 × 50	FA-70	50	2.972.30

¹⁾ The designation FA also corresponds to F4 (1.4462).

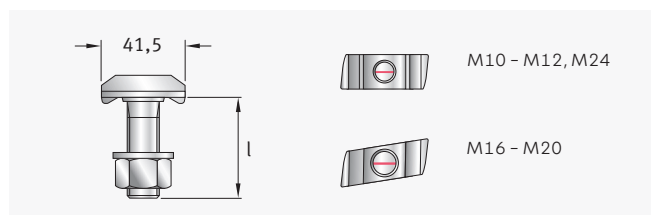


Information on determining the screw length
can be found on page 65.

Hook-head T-bolts JB

ETA (European Technical Assessment)

ETA-09/0338, ETA-15/0386)



For profiles JTA- and JM W 55/42, W 53/34, K 53/34, W 50+, K 50/40, W 50/30, K 50/30, K 48/26

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JB M10 × 30	4.6 gv	100	366.30
JB M10 × 40	4.6 gv	100	368.00
JB M10 × 50	4.6 gv	100	373.00
JB M10 × 60	4.6 gv	100	386.20
JB M10 × 80	4.6 gv	100	452.60
JB M10 × 100	4.6 gv	100	533.90
JB M12 × 30	4.6 gv	100	310.50
JB M12 × 40	4.6 gv	100	324.20
JB M12 × 50	4.6 gv	100	336.90
JB M12 × 60	4.6 gv	50	348.10
JB M12 × 80	4.6 gv	50	419.10
JB M12 × 100	4.6 gv	50	532.80
JB M12 × 125	4.6 gv	50	723.90
JB M12 × 150	4.6 gv	25	855.80
JB M16 × 30	4.6 gv	50	376.30
JB M16 × 40	4.6 gv	50	391.40
JB M16 × 50	4.6 gv	50	406.70
JB M16 × 60	4.6 gv	50	417.80
JB M16 × 80	4.6 gv	50	514.20
JB M16 × 100	4.6 gv	50	562.10
JB M16 × 125	4.6 gv	25	780.30
JB M16 × 150	4.6 gv	25	896.80
JB M16 × 200	4.6 gv	25	988.80
JB M20 × 35	4.6 gv ¹⁾	25	477.60
JB M20 × 45	4.6 gv ¹⁾	25	530.90
JB M20 × 55	4.6 gv ¹⁾	25	566.40
JB M20 × 65	4.6 gv ¹⁾	25	592.60
JB M20 × 75	4.6 gv ¹⁾	25	618.60
JB M20 × 100	4.6 gv ¹⁾	25	651.60
JB M20 × 125	4.6 gv ¹⁾	25	862.50
JB M20 × 150	4.6 gv ¹⁾	25	1.104.50
JB M20 × 200	4.6 gv ¹⁾	25	1.291.10
JB M20 × 300	4.6 gv ¹⁾	25	1.701.30

¹⁾ Bezeichnung FA entspricht auch F4 (1.4462).

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 8.8			
JB M16 × 40	8.8 gv	25	659.20
JB M16 × 50	8.8 gv	25	711.90
JB M16 × 60	8.8 gv	25	765.90
JB M16 × 80	8.8 gv	25	893.10
JB M16 × 100	8.8 gv	25	1.057.00
JB M16 × 125	8.8 gv	25	1.356.60
JB M16 × 150	8.8 gv	25	a.A.
JB M20 × 45	8.8 gv	25	806.70
JB M20 × 55	8.8 gv	25	941.80
JB M20 × 65	8.8 gv	25	990.30
JB M20 × 80	8.8 gv	25	1.051.30
JB M20 × 100	8.8 gv	25	1.138.50
JB M20 × 125	8.8 gv	25	1.435.10
JB M20 × 150	8.8 gv	25	1.760.40
Hot-dip galvanised (fv), strength class 4.6			
JB M10 × 80	4.6 fv	100	452.60
JB M12 × 30	4.6 fv	100	310.50
JB M12 × 40	4.6 fv	100	324.20
JB M12 × 50	4.6 fv	100	336.90
JB M12 × 60	4.6 fv	50	348.10
JB M12 × 80	4.6 fv	50	419.10
JB M12 × 100	4.6 fv	50	532.80
JB M12 × 125	4.6 fv	50	723.90
JB M16 × 40	4.6 fv	50	391.40
JB M16 × 50	4.6 fv	50	406.70
JB M16 × 60	4.6 fv	50	417.80
JB M16 × 80	4.6 fv	50	514.20
JB M16 × 100	4.6 fv	25	562.10
JB M20 × 55	4.6 fv ¹⁾	25	566.40
JB M20 × 65	4.6 fv ¹⁾	25	592.60
JB M20 × 75	4.6 fv ¹⁾	25	618.60
JB M20 × 100	4.6 fv ¹⁾	25	651.60
JB M20 × 125	4.6 fv ¹⁾	25	862.50
JB M20 × 150	4.6 fv ¹⁾	25	1.104.50

¹⁾ Bezeichnung FA entspricht auch F4 (1.4462).

Further information

- All prices including nuts;
- Please order washers separately

Example order for T-bolts

Type	Thread	x	Length l	–	Design
JB	M16	x	80	–	4.6 gv



Information on determining the screw length
can be found on page 65.

Hook-head T-bolts JB

ETA (European Technical Assessment)

ETA-09/0338, ETA-15/0386)

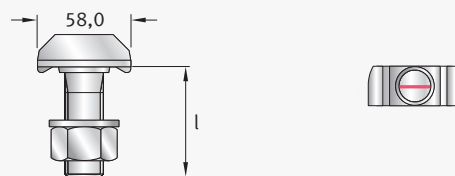
Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JB M12 × 40	8.8 fv	100	467.30
JB M12 × 50	8.8 fv	100	548.40
JB M12 × 60	8.8 fv	50	621.00
JB M12 × 80	8.8 fv	50	660.70
JB M12 × 100	8.8 fv	50	759.50
JB M12 × 125	8.8 fv	50	920.10
JB M16 × 40	8.8 fv	50	659.20
JB M16 × 50	8.8 fv	50	711.90
JB M16 × 60	8.8 fv	50	765.90
JB M16 × 80	8.8 fv	50	893.10
JB M16 × 100	8.8 fv	50	1.057.00
JB M16 × 125	8.8 fv	50	1.356.60
JB M20 × 55	8.8 fv ¹⁾	25	941.80
JB M20 × 60	8.8 fv ¹⁾	25	963.10
JB M20 × 65	8.8 fv ¹⁾	25	990.30
JB M20 × 75	8.8 fv ¹⁾	25	1.026.90
JB M20 × 80	8.8 fv ¹⁾	25	1.051.30
JB M20 × 100	8.8 fv ¹⁾	25	1.138.50
JB M20 × 125	8.8 fv ¹⁾	25	1.435.10
JB M24 × 75	8.8 fv ^{1) 3)}	25	a.A.
JB M24 × 100	8.8 fv ^{1) 3)}	25	a.A.
Stainless steel grade A4-50			
JB M10 × 30	A4-50	50	2.092.40
JB M10 × 80	A4-50	50	3.015.10
JB M12 × 30	A4-50	50	2.397.40
JB M12 × 40	A4-50	50	2.463.70
JB M12 × 50	A4-50	50	2.670.40
JB M12 × 60	A4-50	50	2.831.20
JB M12 × 80	A4-50	50	3.426.90
JB M12 × 100	A4-50	50	4.022.70
JB M12 × 125	A4-50	25	4.751.10
JB M16 × 30	A4-50	50	3.486.90
JB M16 × 40	A4-50	50	3.852.90
JB M16 × 50	A4-50	25	4.105.90
JB M16 × 60	A4-50	25	4.171.80
JB M16 × 80	A4-50	25	5.185.00
JB M16 × 125	A4-50	25	5.897.90
JB M16 × 150	A4-50	25	6.628.40
JB M16 × 200	A4-50	25	7.310.30
JB M20 × 45	A4-50	25	4.171.80
JB M20 × 55	A4-50	25	4.483.90
JB M20 × 65	A4-50	25	4.803.30
JB M20 × 75	A4-50	25	5.114.20
JB M20 × 100	A4-50	25	5.713.00
JB M20 × 125	A4-50	25	6.319.00
JB M20 × 150	A4-50	25	a.A.
Stainless steel grade FA-70 (1.4462) ²⁾			
JB M12 × 40	FA-70	50	2.562.20
JB M12 × 50	FA-70	50	2.777.10
JB M12 × 100	FA-70	25	4.183.50
JB M16 × 50	FA-70	25	4.272.90
JB M16 × 80	FA-70	25	5.432.90
JB M20 × 55	FA-70	25	5.321.60
JB M20 × 100	FA-70	25	6.164.20
JB M20 × 150	FA-70	25	8.566.20

¹⁾ Not for profile K 48/26,²⁾ Description of FA also applies to F4 (1.4462).³⁾ JB M24 only for profile W 55/42.

Hook-head T-bolts JA

ETA (European Technical Assessment)

ETA-09/0338, ETA-15/0386)



For profiles JTA- and JM W 72/48, K 72/48

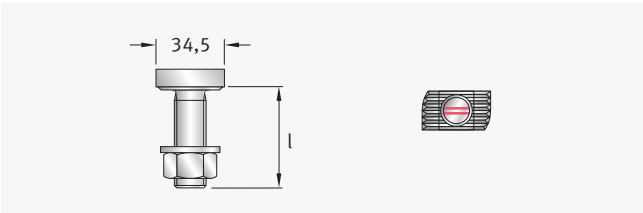
Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 4.6			
JA M20 × 50	4.6 fv	50	1.009.30
JA M20 × 75	4.6 fv	50	1.098.60
JA M20 × 100	4.6 fv	25	1.127.50
JA M20 × 150	4.6 fv	25	1.458.00
JA M20 × 200	4.6 fv	25	1.665.70
JA M24 × 75	4.6 fv	25	1.061.10
JA M24 × 100	4.6 fv	25	1.334.90
JA M24 × 200	4.6 fv	10	1.783.60
JA M27 × 75	4.6 fv	10	1.381.20
JA M27 × 100	4.6 fv	10	1.542.90
JA M30 × 75	4.6 fv	25	1.540.70
JA M30 × 100	4.6 fv	10	1.859.70
JA M30 × 200	4.6 fv	5	2.815.00
Hot-dip galvanised (fv), strength class 8.8			
JA M20 × 50	8.8 fv	50	1.202.10
JA M20 × 60	8.8 fv	50	1.281.50
JA M20 × 75	8.8 fv	50	1.530.70
JA M20 × 100	8.8 fv	25	1.663.40
JA M20 × 125	8.8 fv	25	1.883.40
JA M24 × 75	8.8 fv	25	a.A.
JA M24 × 100	8.8 fv	25	a.A.
JA M24 × 150	8.8 fv	20	a.A.
JA M24 × 200	8.8 fv	10	a.A.
Stainless steel grade A4-50			
JA M24 × 50	A4-50	20	a.A.
JA M24 × 100	A4-50	15	a.A.
Stainless steel grade A4-70			
JA M24 × 150	A4-70	15	a.A.

Information on determining the screw length
can be found on page 65.



Toothed t-bolts JZS

ETA (European Technical Assessment ETA-09/0338)



For profiles JZA- and JZM K 41/22

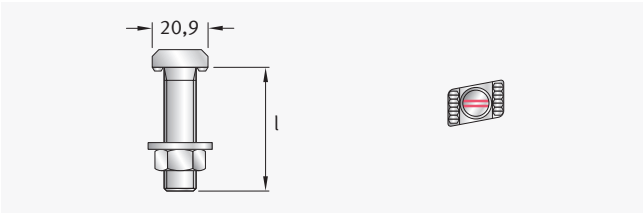
Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JZS M10 × 40	8.8 fv	50	456.90
JZS M12 × 35	8.8 fv	50	508.00
JZS M12 × 50	8.8 fv	50	553.50
JZS M12 × 80	8.8 fv	50	819.20
JZS M16 × 50	8.8 fv	50	847.10
JZS M16 × 80	8.8 fv	50	996.50
JZS M16 × 100	8.8 fv	50	1.178.10
Stainless steel grade A4-50			
JZS M12 × 35	A4-50	50	3.266.80
JZS M12 × 50	A4-50	50	3.555.50
JZS M12 × 80	A4-50	50	3.775.10
JZS M16 × 35	A4-50	25	2.804.60
JZS M16 × 50	A4-50	25	3.334.60
JZS M16 × 80	A4-50	25	4.229.50
JZS M16 × 100	A4-50	25	4.525.00

Further information

- All prices including nuts;
- Please order washers separately

Toothed T-bolts JXD

ETA (European Technical Assessment ETA-09/0338)



For profiles JXA- and JXM W 29/20

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 8.8			
JXD M12 × 30	8.8 gv	100	325.30
JXD M12 × 50	8.8 gv	100	378.60
JXD M12 × 100	8.8 gv	50	547.30
Hot-dip galvanised (fv), strength class 8.8			
JXD M10 × 40	8.8 fv	100	296.10
JXD M12 × 30	8.8 fv	100	325.30
JXD M12 × 40	8.8 fv	100	352.00
JXD M12 × 50	8.8 fv	100	378.60
JXD M12 × 60	8.8 fv	100	431.10
JXD M12 × 80	8.8 fv	100	496.40
JXD M12 × 100	8.8 fv	50	547.30
JXD M12 × 150	8.8 fv	25	1.441.40
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXD M12 × 40	FA-70	50	2.346.60
JXD M12 × 60	FA-70	50	2.564.90
JXD M12 × 80	FA-70	50	2.783.00

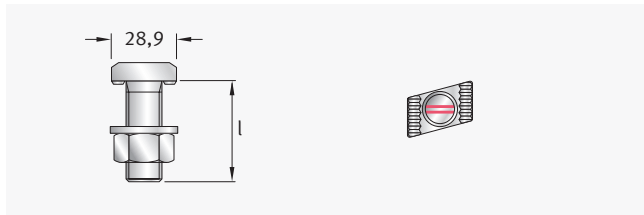
¹⁾ The designation FA corresponds to F4 (1.4462)



Information on determining the screw length
can be found on page 65.

Toothed T-bolts JXH

ETA (European Technical Assessment ETA-09/0338)



For profiles JXA- and JXM W 38/23

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 8.8			
JXH M12 × 30	8.8 gv	100	427.10
JXH M12 × 50	8.8 gv	100	459.30
JXH M12 × 100	8.8 gv	25	977.60
JXH M16 × 40	8.8 gv	50	586.50
JXH M16 × 60	8.8 gv	50	639.90
JXH M16 × 125	8.8 gv	25	1.095.20
Hot-dip galvanised (fv), strength class 8.8			
JXH M12 × 30	8.8 fv	100	427.10
JXH M12 × 40	8.8 fv	100	438.30
JXH M12 × 50	8.8 fv	100	459.30
JXH M12 × 60	8.8 fv	50	508.50
JXH M12 × 80	8.8 fv	50	738.80
JXH M12 × 100	8.8 fv	25	977.60
JXH M16 × 30	8.8 fv	50	539.70
JXH M16 × 40	8.8 fv	50	586.50
JXH M16 × 50	8.8 fv	50	608.60
JXH M16 × 60	8.8 fv	50	639.90
JXH M16 × 80	8.8 fv	50	761.50
JXH M16 × 100	8.8 fv	25	812.60
JXH M16 × 125	8.8 fv	25	1.095.20
JXH M16 × 150	8.8 fv	25	1.842.40
JXH M16 × 200	8.8 fv	25	2.142.80
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXH M12 × 40	FA-70	50	a.A.
JXH M12 × 60	FA-70	50	a.A.
JXH M12 × 80	FA-70	50	a.A.
JXH M16 × 60	FA-70	25	a.A.
JXH M16 × 80	FA-70	25	a.A.
JXH M16 × 100	FA-70	25	a.A.
JXH M16 × 150	FA-70	25	a.A.

¹⁾ The designation FA corresponds to F4 (1.4462)

Bestellbeispiel für Schrauben

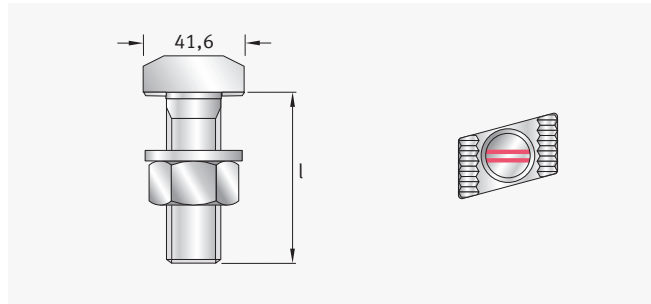
Typ	Gewinde	x	Länge l	–	Ausführung
JXH	M16	x	60	–	8.8 gv



Information on determining the screw length can be found on page 65.

Toothed T-bolts JXB

ETA (European Technical Assessment ETA-09/0338)



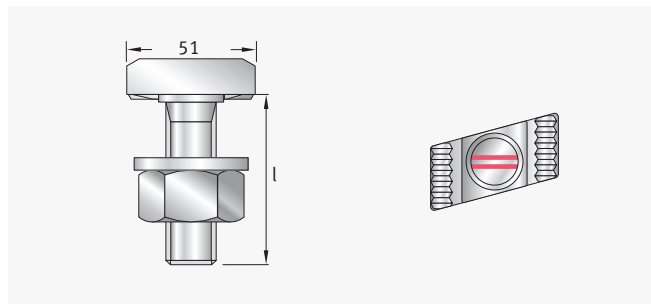
For profiles JXA- and JXM W 53/34

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JXB M16 × 60	8.8 fv	50	1.723.80
JXB M16 × 80	8.8 fv	25	1.777.20
JXB M16 × 100	8.8 fv	25	1.832.20
JXB M20 × 55	8.8 fv	25	1.898.30
JXB M20 × 65	8.8 fv	25	1.996.00
JXB M20 × 80	8.8 fv	25	2.051.50
JXB M20 × 100	8.8 fv	25	2.115.10
JXB M20 × 150	8.8 fv	25	a.A.
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXB M16 × 60	FA-70	25	a.A.
JXB M16 × 100	FA-70	25	a.A.
JXB M20 × 80	FA-70	25	a.A.
JXB M20 × 100	FA-70	25	a.A.
JXB M20 × 125	FA-70	25	a.A.

¹⁾ The designation FA corresponds to F4 (1.4462)

Toothed T-bolts JXE

ETA (European Technical Assessment ETA-09/0338)



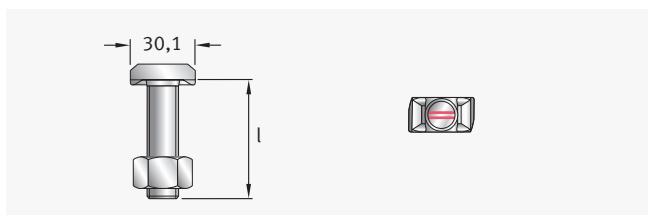
For profiles JXA- and JXM W 64/44

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JXE M20 × 60	8.8 fv	50	2.280.80
JXE M20 × 100	8.8 fv	25	2.704.60
JXE M20 × 150	8.8 fv	25	3.318.20
JXE M24 × 75	8.8 fv	25	a.A.
JXE M24 × 100	8.8 fv	25	a.A.
JXE M24 × 150	8.8 fv	25	a.A.
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXE M20 × 50	FA-70	50	a.A.
JXE M20 × 100	FA-70	25	a.A.

¹⁾ The designation FA corresponds to F4 (1.4462)

Double-notch toothed T-bolt JKC

ETA (European Technical Assessment ETA-09/0338)

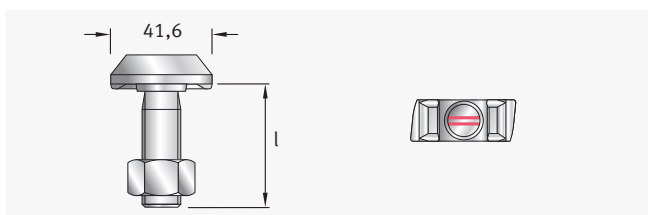


For profiles JTA- and JTM W 40+, W 40/22

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JKC M16 × 40	8.8 fv	50	545.40
JKC M16 × 50	8.8 fv	50	563.40
JKC M16 × 60	8.8 fv	50	617.50
JKC M16 × 80	8.8 fv	25	721.00

Double-notch toothed T-bolt JKB

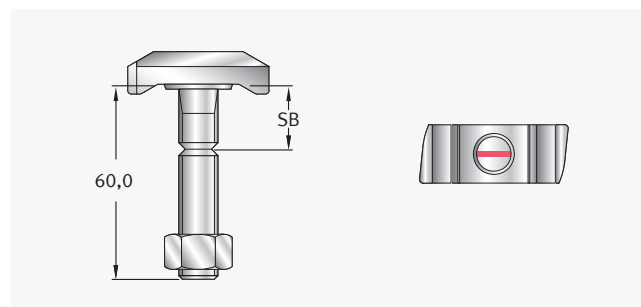
ETA (European Technical Assessment ETA-09/0338)



For profiles JTA- and JTM W 50/30, W 50+, W 53/34

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JKB M16 × 40	8.8 fv	50	769.80
JKB M16 × 50	8.8 fv	50	789.00
JKB M16 × 60	8.8 fv	50	808.00
JKB M16 × 80	8.8 fv	25	869.20
JKB M16 × 100	8.8 fv	25	901.50
JKB M20 × 45	8.8 fv	25	882.50
JKB M20 × 60	8.8 fv	25	897.60
JKB M20 × 70	8.8 fv	25	947.00
JKB M20 × 80	8.8 fv	25	1.056.80

Breaking point T-bolts JH-SB

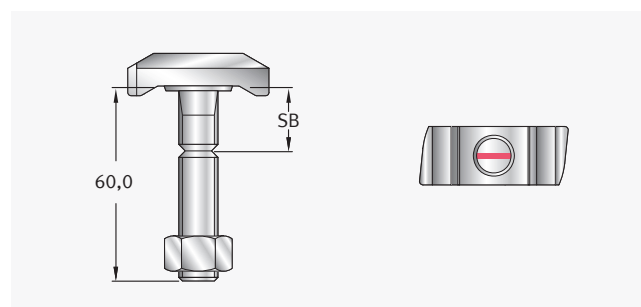


For profiles JTA K 38/17, K 36/36, K 36/20, W 38/23

Thread × length l [mm]		Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6		
JH M12 × 60 - SB 20	4.6 gv	a.A.
JH M12 × 60 - SB 25	4.6 gv	a.A.

With breaking point (SB) for concrete formwork, e.g. for formwork carriages used in tunnel construction

Breaking point T-bolts JB-SB



For profiles JTA W 55/42, W 53/34, K 53/34, K 50/40, W 50+, W 50/30, K 50/30, K 48/26

Gewinde × Länge l [mm]		Preis je 100 Stk. [€]
Galvanised (gv), strength class 4.6		
JB M12 × 60 - SB 20	4.6 gv	a.A.
JB M12 × 60 - SB 25	4.6 gv	a.A.
JB M12 × 100 - SB 20	4.6 gv	a.A.

With breaking point (SB) for concrete formwork, e.g. for formwork carriages used in tunnel construction

Example order for T-bolts

Type	Thread	x	Length l	–	Design
JH	M12	x	60 - SB 20	–	4.6 fv

Further information

- All prices including nuts;
- Please order washers separately



Information on determining the screw length can be found on page 65.

Stop fastenings



Lift shaft anchor JLF

ETA (European Technical Assessment ETA-21/1071)

NEW



Type	Colour	Load capacity [kN]	Shackle diameter [mm]	PU [pcs.]	Price per piece [€]
JLF 20-1	Blue	20	10	1	a.A.
JLF 20-3	Blue	20	10	3	a.A.
JLF 40-1	Red	40	13	1	a.A.

Version and material

- Shackles, stirrups, bolts – steel
- Housing – plastic

Example order for lift shaft anchor JLF

Type	Load capacity	PU
JLF	20	- 1

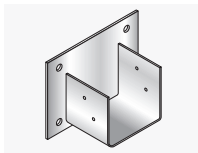
Scaffold shoes



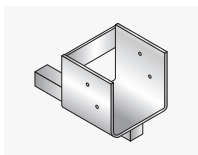
Scaffold shoes JG

(Tested in line with EN 1090)

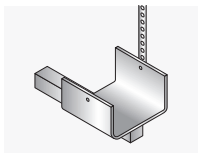
Scaffold shoes for square timber width: 10 cm (12 cm price on request).



Type	Colour	Hole [mm]	Price per piece [€]
JG-K 4-CE	Yellow	2 × dia. 11	31.90
JG-K 9-CE	Blue	4 × dia. 14	36.70
JG-K 12-CE	Red	4 × dia. 14	53.80

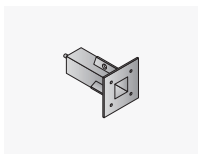


Type	Colour	Suitable sleeve	Price per piece [€]
JG-H 2.5-CE	Grey	GHK 25	36.80
JG-H 5/9-CE	Blue	GHK 30, GHS 30	47.50
JG-H 5/9-CE	Blue	GHK 25	47.50



Type	Colour	Suitable sleeve	Price per piece [€]
JG-L 2.5-CE ¹⁾	Grey	GHK 25	32.10

¹⁾ Scaffold shoe for square timber width: 12 cm
(10 cm price on request)



Sleeve	Dimensions [mm]	Design	Price per piece [€]
GHK 25	25 × 25 × 95	PE	3.80
GHK 30	30 × 30 × 95	PE	4.10
GHS 30	30 × 30 × 105	fv	14.20

Version and material

- Scaffold shoe – paint-coated steel
- Sleeve fv – hot-dip galvanised steel
- Sleeve PE – plastic

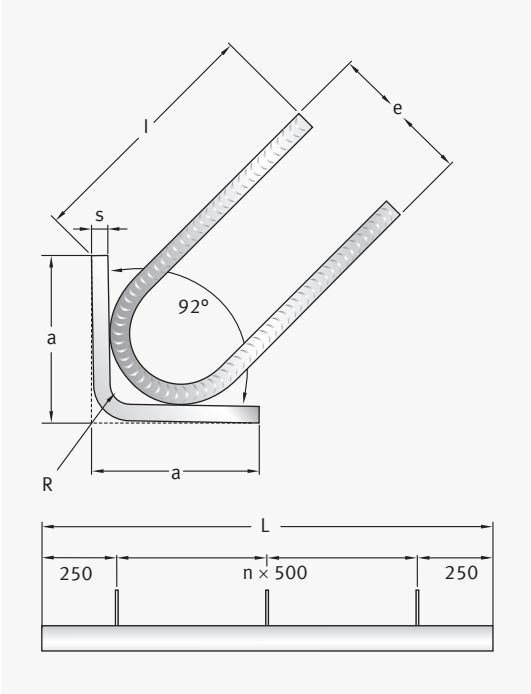
Example order for scaffold shoe JG

Type
JG-K 4-CE

Edge protection angles



Edge protection angles JKW



Version and material

- fv = Hot-dip galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Lean duplex stainless steel, corrosion resistance class III (CRC III)

Type	a/s	Length L [mm]	No. of anchors	Price per piece [€]	
				Design	
				fv	A4/L4/A2
JKW	50/5	500	2	POA	POA
JKW	50/5	750	2		
JKW	50/5	1,000	2		
JKW	50/5	1,500	3		
JKW	50/5	2,000	4		
JKW	80/6	500	2	POA	POA
JKW	80/6	750	2		
JKW	80/6	1,000	2		
JKW	80/6	1,500	3		
JKW	80/6	2,000	4		
JKW	100/6	500	2	POA	POA
JKW	100/6	750	2		
JKW	100/6	1,000	2		
JKW	100/6	1,500	3		
JKW	100/6	2,000	4		
JKW	100/8	500	2	POA	POA
JKW	100/8	750	2		
JKW	100/8	1,000	2		
JKW	100/8	1,500	3		
JKW	100/8	2,000	4		

Example order for JKW edge protection angles

Type	-	a/s	-	Length L	-	Design
JKW	-	50/5	-	2,000	-	fv

Channel brackets



Channel brackets JKO

	Bracket type	Profile	Suitable bolts	Vertical profile for bolts	Cantilever length L [mm]	Total height h [mm]	Price per piece [€]	
							Design	
							fv	A4
	JKO 28/28-1	K 28/28	Type JD, M6-M12	U 36/24 M12	100	120	34.00	POA
					200	120	34.90	POA
					300	120	36.10	POA
					400	120	36.90	POA
	JKO 36/36-1	K 36/36	Type JH, M10-M16	U 45/27 M12	300	180	46.20	POA
					400	180	49.10	POA
					500	180	54.10	POA
					600	180	59.70	POA
	JKO 36/36-2	K 36/36	Type JH, M10-M16	U 45/27 M12	300	208	64.70	POA
					400	238	70.80	POA
					500	269	77.40	POA
					600	300	83.10	POA
					700	330	90.10	POA

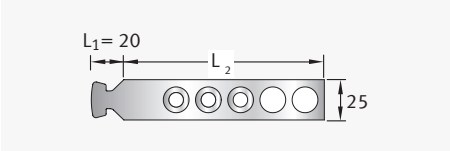
Example order for JKO profile bracket

Type	Profile	-	Cantilever length L	-	Design
JKO	K 28/28-1	-	100	-	fv

Accessories



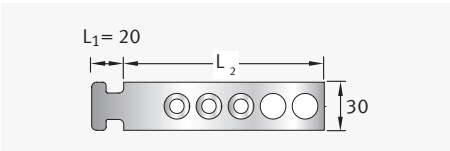
Brick tie anchors JMA



Series: 12

For profiles: Kt 25/15-D, K 28/15

Length L ₂ [mm]	PU [pcs.]	Price per 100 pcs. [€]	
		Design	
		fv	A4
85	100	90.70	405.20
120	100	103.60	494.80
180	100	144.90	610.10
300	100	268.30	897.20

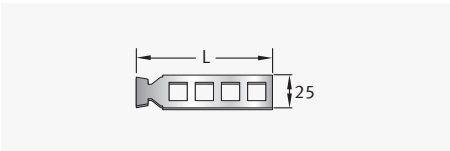


Series: 18

For profile: K 38/17

Length L ₂ [mm]	PU [pcs.]	Price per 100 pcs. [€]	
		Design	
		fv	A4
85	100	108.60	502.50
120	100	131.60	557.40
180	100	176.20	657.70
300	100	312.80	995.20

Thin-bed brick tie anchors JMA-D



Series: D/12

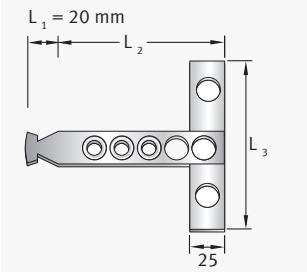
For profiles: Kt 25/15-D, K 28/15

Length L [mm]	PU [pcs.]	Price per 100 pcs. [€]	
		Design	
		A2	
125	100	255.40	
185	100	292.40	
245	100	330.00	

Example order for JMA brick tie anchor

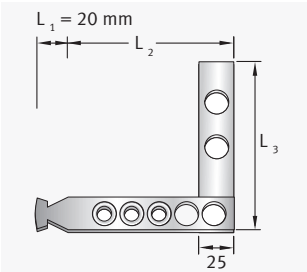
Type	-	Length L ₂	-	Se- ries	-	Design
JMA	-	180	-	12	-	A4

Transverse brick tie anchors JMA-Q / JMA-QE



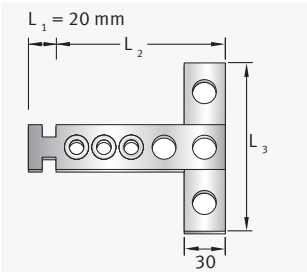
Series: Q/12

For profiles: Kt 25/15-D, K 28/15



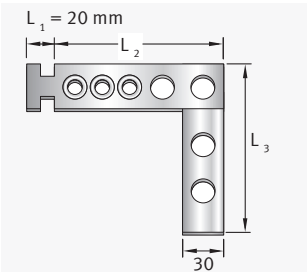
Series: QE/12

For profiles: Kt 25/15-D, K 28/15



Series: Q/18

For profile: K 38/17



Series: QE/18

For profile: K 38/17

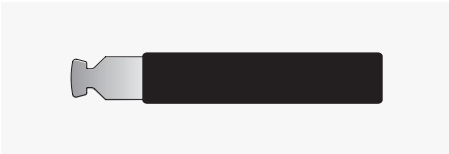
Series 12		Price per 100 pcs. [€]	
Length L ₂ [mm]	Length L ₃ [mm]	Design	
		fv	A4
85	120	1.051.90	1.614.40
120	120	1.078.70	1.700.70
180	120	1.125.60	1.858.60
300	120	1.313.90	2.527.10
85	180	1.105.40	1.779.40
120	180	1.125.60	1.858.60
180	180	1.179.20	2.016.40
300	180	1.341.80	2.639.50
85	300	1.299.10	2.459.30
120	300	1.313.90	2.527.10
180	300	1.341.80	2.626.60
300	300	1.547.40	3.336.50

Series 18		Price per 100 pcs. [€]	
Length L ₂ [mm]	Length L ₃ [mm]	Design	
		fv	A4
85	120	1.127.60	1.829.80
120	120	1.159.30	1.951.40
180	120	1.235.60	2.218.80
300	120	1.378.10	2.684.40
85	180	1.197.40	2.097.20
120	180	1.235.60	2.218.80
180	180	1.312.10	2.480.10
300	180	1.412.50	2.822.10
85	300	1.358.30	2.604.50
120	300	1.378.10	2.684.40
180	300	1.412.50	2.821.90
300	300	1.592.30	3.367.70

Example order for transverse brick tie anchor JMA-Q/-QE

Type	-	Length L ₂	x	Length L ₃	-	Series	-	Design
JMA	-	85	x	120	-	QE/12	-	fv

Sliding sleeves JMA-G

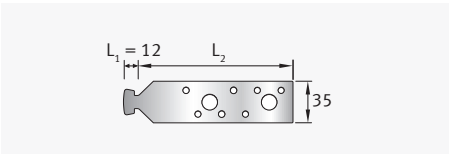


For brick tie anchors: JMA 120/12

Type	Price per 100 pcs. [€]
JMA-G 150/12	173.00

Nail anchors JNA

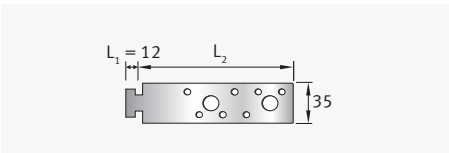
For connecting timber components to adjacent reinforced concrete components



Series: 12

For profiles: Kt 25/15-D, K 28/15

Length L ₂ [mm]	PU [pcs.]	Price per 100 pcs. [€]
		Design fv
100	100	192.60
130	100	223.90
200	100	294.70

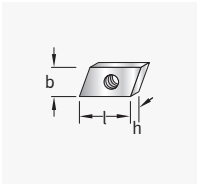


Series: 18

For profile: K 38/17

Length L ₂ [mm]	PU [pcs.]	Price per 100 pcs. [€]
		Design fv
100	100	192.60
130	100	223.90
200	100	294.70

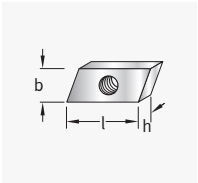
Hammer-head locking plates JGM D (flat steel)



For profiles: K 28/15, K 28/28, K 28/12

Thread	l x w x h [mm]	PU [gv/A4]	Price per 100 pcs. [€]	
			Design	
			gv	A4
M4	22×12×4	1.000/400	57.40	684.90
M5	22×12×4	1.000/400	57.40	684.90
M6	22×12×4	1.000/400	57.40	684.90
M8	22×12×6	1.000/400	57.40	684.90
M10	19×14×6	1.000/1.000	57.40	684.90

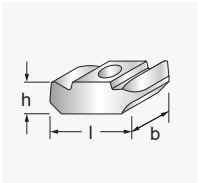
Hammer-head locking plates JGM H (flat steel)



For profiles: K 38/17, K 36/36, K 36/20

Thread	l x w x h [mm]	PU	Price per 100 pcs. [€]	
			Design	
			gv	A4
M5	32×14×6	500	119.70	-
M6	32×14×6	500	119.70	1.037.50
M8	32×14×6	500	119.70	1.037.50
M10	32×18×8	300	119.70	1.037.50
M12	32×18×8	300	119.70	1.037.50

Hook-head locking plates JGM C (forged) ¹⁾

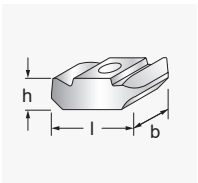


For profiles: W 40+, W 40/22, K 40/25, K 40/22

Thread	l x w x h [mm]	PU	Price per 100 pcs. [€]	
			Design	
			gv	A4
M6	32×17×11	250	266.00	1.931.50
M8	32×17×11	250	266.00	1.931.50
M10	32×17×11	250	266.00	1.931.50
M12	32×17×11	250	293.70	1.964.60
M16	32×23×13	250	413.10	1.964.60

¹⁾ JORDAHL® locking plates for mounting channels on request

Hook-head locking plates JGM B (forged) ¹⁾

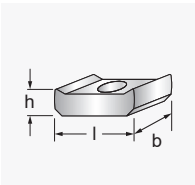


For profiles: W 55/42, W 53/34, W 50+, W 50/30, K 53/34, K 50/40, K 50/30, K 48/26

Thread	l x w x h [mm]	PU	Price per 100 pcs. [€]	
			Design	
			gv	A4
M6	41×21×16	100	335.00	1.997.80
M8	41×21×16	100	335.00	1.997.80
M10	41×21×16	100	335.00	1.997.80
M12	41×21×16	100	335.00	1.997.80
M16	41×26×16	100	505.40	1.997.80

¹⁾ JORDAHL® locking plates for mounting channels on request

Hook-head locking plates JGM A (forged) ¹⁾

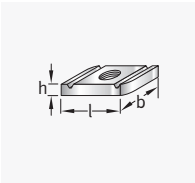


For profiles: W 72/48,
K 72/48

Thread	l × w × h [mm]	pU	Price per 100 pcs. [€]	
			Design	
			gv	A4
M6	-	-		POA
M8	-	-		POA
M10	-	-		POA
M12	57×31×22	50	1.252.60	
M16	57×31×22	50	1.252.60	
M20	57×31×22	50	1.252.60	

¹⁾ JORDAHL® locking plates for mounting channels
on request

JAM 22 channel nuts

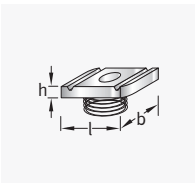


For profiles: K 41/41

Thread	l × w × h [mm]	pU	Price per 100 pcs. [€]	
			Design	
			gv	fv
M6	35×20×6	500	106.10	136.80
M8	35×20×6	500	116.00	146.60
M10	35×20×8	500	133.50	166.00
M12	35×20×9.5	500	148.10	-

JAM F 22 channel nuts

With spring

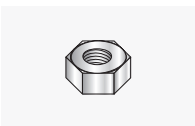


For profiles: K 41/41

Thread	l × w × h [mm]	pU	Price per 100 pcs. [€]	
			Design	
			gv	fv
M6	35×20×6	500	129.10	154.90
M8	35×20×6	500	138.70	164.40
M10	35×20×8	500	149.60	178.40
M12	35×20×9.5	500	169.10	205.70

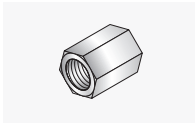
Hexagon nuts

(DIN EN ISO 4032, DIN 934)



Thread	Price per 100 pcs. [€]		
	Design		
	gv	fv	A4
M6	3.70	-	13.00
M8	7.00	-	24.50
M10	13.90	15.50	56.40
M12	22.50	22.50	86.60
M16	44.00	44.70	157.40
M20	89.30	91.30	304.70
M24	157.40	157.40	749.80

Hexagon coupling sleeves VMSK



Thread × length [mm]	Shape	Price per 100 pcs. [€]	
		Design	
		gv	A4
M10 × 25	B6	270.00	POA
M12 × 30	B8	313.80	POA
M16 × 40	B10	477.60	POA
M20 × 50	B12	697.00	POA

Round coupling sleeves VM



Thread × length [mm]	Price per 100 pcs. [€]	
	Design	
	gv	A4
M6 × 20	59.10	-
M8 × 20	81.30	-
M10 × 25	131.80	POA
M12 × 30	209.50	POA
M16 × 40	336.00	POA
M20 × 50	588.90	POA

Flange nuts SKF



Thread	Price per 100 pcs. [€]	
	Design	
	gv	
M12	21.10	
M16	50.60	

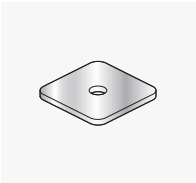
Ring nuts RM

(DIN 582)



Thread	Price per 100 pcs. [€]	
	Design	
	Untreated	gv
M8	251.50	352.80
M10	398.20	467.40
M12	543.50	611.00
M16	734.20	855.80
M20	1.027.40	1.228.60

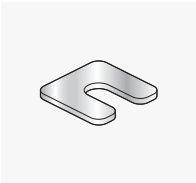
Square bearing plates JVL



Article	Mate- rial	Height x width x dia. [mm]	Price per piece [€]
JVL4003-08	A4	3 × 40 × 8	2.10
JVL6504-08	A4	4 × 65 × 8	5.70
JVL8008-08	A4	8 × 80 × 8	19.20
JVL4006-08	A4	6 × 40 × 8	5.20
JVL6503-08	A4	3 × 65 × 8	4.50
JVL6506-08	A4	6 × 65 × 8	10.10
JVL8003-08	A4	3 × 80 × 8	6.40
JVL8006-08	A4	6 × 80 × 8	13.90

Other sizes available on request

Horseshoe shims JVS



Article	Mate- rial	Height x width x dia. [mm]	Price per piece [€]
JVS4003-13	A4	3 × 40 × 13	2.10
JVS6504-17	A4	4 × 65 × 17	5.80
JVS8008-21	A4	8 × 80 × 21	19.80
JVS4006-13	A4	6 × 40 × 13	5.20
JVS6503-17	A4	3 × 65 × 17	4.60
JVS6506-17	A4	6 × 65 × 17	10.20
JVS8003-21	A4	3 × 80 × 21	6.70
JVS8006-21	A4	6 × 80 × 21	14.20

Other sizes available on request

Washers

(DIN EN ISO 7089, without chamfer)



Matching bolt thread	HV ¹⁾	Price per 100 pcs. [€]		
		Design		
		gv	fv	A4
M6 ²⁾	140	–	–	15.80
M8 ²⁾		–	–	25.90
M10		10.00	14.90	44.50
M12	200	11.80	17.70	75.00
M16		21.50	32.20	136.60
M20		42.00	63.00	201.20
M24		60.70	91.10	283.40
M27		94.60	128.00	422.20
M30		102.40	157.50	506.30

¹⁾ Vickers hardness. ²⁾ In line with DIN 125

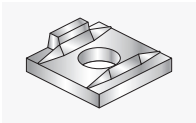
Washers

(DIN EN ISO 7093-1, DIN 9021)



Matching bolt thread	Price per 100 pcs. [€]		
	Design		
	gv	fv	A4
M6	9.70	–	40.60
M8	12.80	–	53.80
M10	17.70	17.70	72.40
M12	31.00	31.00	144.70
M16	52.40	52.40	183.80
M20	157.60	157.60	516.30

JKZS notch-toothed shims



Type	For bolts	Price per 100 pcs. [€]	
		Design	
		fv	
16	M16 8.8	428.60	

FR spring washers

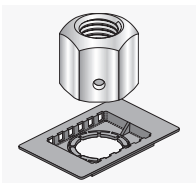
(in line with former DIN 127)



Type	Shape	Price per 100 pcs. [€]	
		Design	
		gv	A4
6	B6	3.70	13.50
8	B8	4.20	26.60
10	B10	6.20	41.90
12	B12	9.50	57.90
16	B16	21.60	141.00
20	B20	34.60	200.30
24	B24	68.10	–

Gap fillers JGF

With utility model protection



Consisting of: special
nut and injection
insert (ABS)

Type	Price per piece [€]	
	Design	
	fv	FA-70
JXH12	POA	POA
JXH16	POA	POA
JXB16	POA	POA
JXB20	POA	POA
JXE20	POA	POA
JXE24	POA	POA

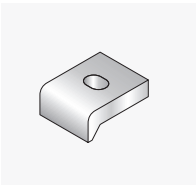
Installation cones JIC



Thread	Price per 100 pcs. [€]	
	Design	
	8.8 steel	
M16	POA	

Clamping plates KP

DIN 3568



Type	Slot LL	Price per 100 pcs. [€]	
		Design	
		fv	
KP 50/7	14 × 20	1.097.90	
KP 60/10	18 × 24	1.117.00	
KP 60/11	18 × 24	1.126.50	
KP 60/12	18 × 24	1.228.50	
KP 60/14	18 × 24	1.251.10	
KP 60/16	18 × 24	1.273.90	
KP 60/18	18 × 24	1.297.10	
KP 60/20	18 × 24	1.321.40	

Other diameters available on request

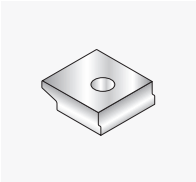
Threaded rods GS

(length l = 1,000 mm)



Thread	Price per 100 pcs. [€]	
	Design	
	gv	A4
M6	163.70	1.107.40
M8	189.30	1.714.60
M10	293.60	2.689.40
M12	418.50	4.054.30
M16	864.10	6.646.20
M20	1.272.30	10.769.70

Clamping plates KPA for crane rails

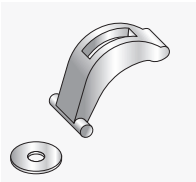


Type	Diameter [mm]	Price per 100 pcs. [€]	
		Design	
		fv	
KPA 45	22	1.169.50	
KPA 55	18 / 22	1.240.30	
KPA 65	22	1.311.30	
KPA 75	22	1.365.00	

Other diameters available on request

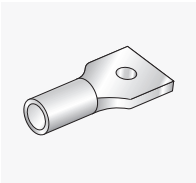
Clamping claws SPKU

With washers



Article	Price per 100 pcs. [€]	
	Design	
	fv	
SPKU	1.074.70	

Eye sockets ÖM



Thread × length [mm]	Price per 100 pcs. [€]	
	Design	
	gv	A4
M8 × 40	148.60	POA
M10 × 50	153.40	POA
M12 × 60	167.20	POA
M16 × 80	359.70	POA

Reinforcement

Punching shear reinforcement

Punching shear reinforcement JDA	84
----------------------------------	----

Shear force reinforcement JDA-S	84
---------------------------------	----

Punching shear reinforcement JDA-FT-KL	88
--	----

Accessories for punching shear reinforcement

Spacers AH-FBA	89
----------------	----

Spacers AH-FT	89
---------------	----

Spacers AH-DA	89
---------------	----

Assembly aids JDA-Q	89
---------------------	----

FERBOX®

FERBOX® Type overview	90
-----------------------	----

FERBOX® type B03	92
------------------	----

FERBOX® type B03	93
------------------	----

FERBOX® type B05	94
------------------	----

FERBOX® type B05	95
------------------	----

FERBOX® type B06	95
------------------	----

FERBOX® type E01	96
------------------	----

FERBOX® type E02	97
------------------	----

FERBOX® type E03	98
------------------	----

FERBOX® type EE	99
-----------------	----

PENTAFLEX® Modul

PENTAFLEX® Modul	100
------------------	-----

GRIPRIP®

GRIPRIP®-A	101
------------	-----

GRIPRIP®-S	101
------------	-----

Stainless steel rebar

Rebar, stainless steel	102
------------------------	-----

FIBERNOX®

FIBERNOX® V-ROD curved shapes	103
-------------------------------	-----

FIBERNOX® V-ROD end anchors	103
-----------------------------	-----

FIBERNOX® V-ROD shear dowels	103
------------------------------	-----

FIBERNOX® V-ROD rockbolt anchors	103
----------------------------------	-----

Rebar accessories

Fibre-reinforced concrete surface spacers	104
---	-----

Concrete spacers type KD	110
--------------------------	-----

Concrete spacers type KO	110
--------------------------	-----

Concrete spacers type TFD	110
---------------------------	-----

Concrete spacers type PRT	111
---------------------------	-----

Concrete spacers type PT/X	111
----------------------------	-----

Concrete spacers type PT/S	111
----------------------------	-----

Clamping spacers type DR	112
--------------------------	-----

Clamping spacers type DI	112
--------------------------	-----

Clamping spacers type MS II	112
-----------------------------	-----

Rectangular spacer	113
--------------------	-----

Rundfix spacers	113
-----------------	-----

Drunterfix spacers with cutouts	113
---------------------------------	-----

Drunterfix spacers no cutouts	114
-------------------------------	-----

Steckfix spacers	114
------------------	-----

Base strips	114
-------------	-----

Punching shear reinforcement



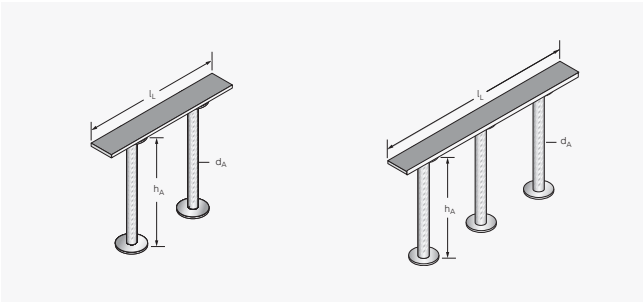
Punching shear reinforcement JDA

ETA (European Technical Assessment ETA-13/0136)

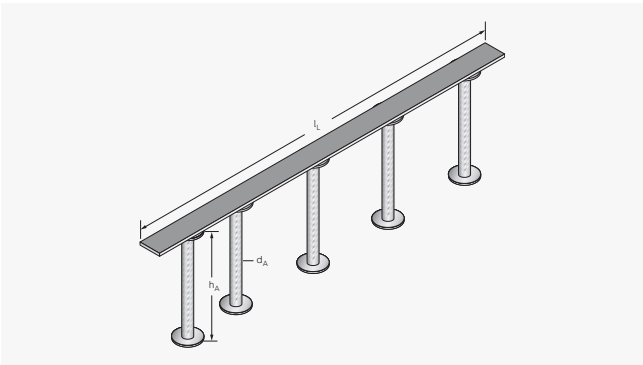
Shear force reinforcement JDA-S

National technical approval (abZ Z-15.1-268)

JDA-S (shear force reinforcement) and JDA (punching shear reinforcement) use the same standard components.



Standard element with 2 or 3 anchors



Continuous elements with 4 or more anchors

Version and material

- Strips made from perforated or smooth structural steel
- Double-headed anchors made from ribbed reinforcing steel

Example order for punching shear reinforcement JDA

Type	No. of anchors	/	Anchor diameter d _A	/	Anchor length h _A	-	Strip length l _L
JDA	2	/	14	/	225	-	320

Grid: 80/160/80

Example order for punching shear reinforcement JDA

Type	No. of anchors	/	Anchor diameter d _A	/	Anchor length h _A	-	Strip length l _L
JDA	5	/	14	/	205	-	725

Grid: 90/110/150/150/150/75



Combinations of other strip and anchor lengths as well as number of anchor variants are available on request.

An overview of strip lengths can be found in the JDA technical information. The table detailing the range of welded JDA elements can be found in the standard element product range.



Suitable accessories can be found on page 89.

Diameter d _A : 10					
Anchor length h _A [mm]	Price per piece [€]				
	No. of anchors				
	2	3	4	5	6
125	10.10	14.95	19.80	24.50	29.10
135	10.20	15.15	20.00	24.75	29.40
145	10.25	15.20	20.10	24.85	29.55
155	10.35	15.40	20.30	25.10	29.85
165	10.45	15.55	20.50	25.35	30.15
175	10.50	15.60	20.60	25.45	30.25
185	10.60	15.75	20.80	25.75	30.55
195	10.70	15.90	21.00	26.00	30.85
205	10.80	16.05	21.20	26.25	31.15
215	10.85	16.15	21.30	26.35	31.30
225	10.95	16.30	21.45	26.60	31.55
235	11.05	16.45	21.65	26.85	31.85
245	11.10	16.50	21.75	26.95	32.00
255	11.20	16.65	21.95	27.20	32.30
265	11.25	16.75	22.10	27.40	32.55
275	11.35	16.85	22.25	27.55	32.75
285	11.40	16.95	22.40	27.70	32.95
295	11.50	17.10	22.60	28.00	33.25
305	11.55	17.20	22.75	28.10	33.40
315	11.65	17.35	22.95	28.35	33.70
325	11.75	17.50	23.15	28.60	33.95
335	11.85	17.70	23.35	28.85	34.25
345	11.90	17.75	23.45	28.95	34.40
355	12.05	17.90	23.65	29.25	34.70
365	12.15	18.05	23.85	29.50	35.00
375	12.20	18.10	23.90	29.60	35.10
385	12.30	18.25	24.10	29.85	35.40
395	12.40	18.40	24.30	30.10	35.70
405	12.45	18.50	24.40	30.20	35.90
415	21.15	31.40	41.45	51.35	60.95
425	21.30	31.65	41.75	51.70	61.40
435	21.40	31.80	41.95	51.95	61.70
445	21.60	32.10	42.35	52.40	62.25
455	21.70	32.25	42.55	52.65	62.55
465	21.85	32.50	42.95	53.10	63.00
475	22.00	32.75	43.25	53.50	63.50
485	22.15	33.00	43.55	53.85	63.95
495	22.30	33.15	43.75	54.10	64.25
505	22.40	33.30	43.95	54.35	64.55
515	22.50	33.45	44.10	54.60	64.80
525	22.60	33.60	44.30	54.80	65.10
535	22.75	33.75	44.50	55.05	65.40
545	22.85	33.90	44.70	55.30	65.70
555	22.95	34.05	44.90	55.55	65.95
565	23.05	34.20	45.10	55.80	66.25
575	23.15	34.35	45.30	56.05	66.55
585	23.25	34.50	45.50	56.30	66.90
595	23.35	34.65	45.70	56.55	67.15
605	23.45	34.80	45.90	56.80	67.45
615	23.55	34.95	46.15	57.05	67.75
625	23.65	35.10	46.35	57.30	68.05
635	23.75	35.25	46.50	57.55	68.35
645	23.85	35.40	46.70	57.80	68.65
655	23.95	35.50	46.90	58.00	68.95
665	24.05	35.65	47.10	58.30	69.25
675	24.15	35.80	47.30	58.55	69.50
685	24.25	36.00	47.50	58.80	69.80
695	24.35	36.15	47.70	59.05	70.15

Diameter d _A : 12					
Anchor length h _A [mm]	Price per piece [€]				
	No. of anchors				
	2	3	4	5	6
125	10.85	16.15	21.30	26.35	31.30
135	10.95	16.30	21.45	26.60	31.55
145	11.00	16.35	21.55	26.70	31.70
155	11.10	16.50	21.75	26.95	32.00
165	11.20	16.65	21.95	27.20	32.30
175	11.25	16.75	22.05	27.35	32.50
185	11.35	16.90	22.30	27.55	32.75
195	11.45	17.05	22.50	27.85	33.10
205	11.50	17.10	22.60	28.00	33.25
215	11.60	17.25	22.85	28.20	33.55
225	11.70	17.40	23.05	28.45	33.85
235	11.75	17.50	23.15	28.60	33.95
245	11.85	17.70	23.35	28.85	34.25
255	12.00	17.80	23.55	29.10	34.55
265	12.05	17.90	23.65	29.25	34.70
275	12.15	18.05	23.85	29.50	35.00
285	12.25	18.20	24.00	29.75	35.25
295	12.30	18.25	24.10	29.85	35.40
305	12.40	18.40	24.30	30.10	35.70
315	12.50	18.55	24.50	30.35	36.05
325	12.55	18.65	24.60	30.45	36.20
335	12.70	18.85	24.80	30.70	36.45
345	12.80	19.00	25.00	30.95	36.75
355	12.85	19.05	25.10	31.05	36.90
365	12.95	19.20	25.30	31.30	37.20
375	13.00	19.30	25.40	31.45	37.35
385	13.10	19.45	25.65	31.65	37.60
395	13.20	19.60	25.85	31.90	37.95
405	13.25	19.65	25.95	32.05	38.10
415	23.15	34.35	45.30	56.05	66.55
425	23.35	34.65	45.70	56.55	67.15
435	23.45	34.80	45.90	56.80	67.45
445	23.60	35.00	46.25	57.20	67.90
455	23.75	35.25	46.50	57.55	68.35
465	23.90	35.45	46.80	57.90	68.80
475	24.05	35.65	47.10	58.30	69.25
485	24.20	35.95	47.40	58.70	69.65
495	24.35	36.15	47.70	59.05	70.15
505	24.50	36.40	48.05	59.40	70.60
515	24.65	36.60	48.35	59.75	71.00
525	24.80	36.85	48.65	60.20	71.45
535	24.95	37.05	48.95	60.55	71.90
545	25.10	37.30	49.20	60.90	72.30
555	25.25	37.50	49.50	61.30	72.75
565	25.40	37.75	49.85	61.65	73.15
575	25.55	38.00	50.15	62.00	73.70
585	25.75	38.20	50.45	62.35	74.15
595	25.90	38.45	50.75	62.75	74.55
605	26.05	38.65	51.05	63.15	75.00
615	26.20	38.90	51.35	63.55	75.45
625	26.35	39.10	51.60	63.90	75.85
635	26.50	39.40	51.90	64.30	76.30
645	26.65	39.60	52.20	64.65	76.75
655	26.80	39.85	52.50	65.00	77.20
665	26.95	40.05	52.80	65.40	77.65
675	27.10	40.30	53.20	65.75	78.10
685	27.25	40.50	53.50	66.10	78.55
695	27.40	40.70	53.80	66.45	79.00

Diameter d _A : 14					
Anchor length h _A [mm]	Price per piece [€]				
	No. of anchors				
	2	3	4	5	6
125	-	-	-	-	-
135	-	-	-	-	-
145	12.10	17.95	23.75	29.35	34.85
155	12.20	18.10	23.90	29.60	35.10
165	12.30	18.25	24.10	29.85	35.40
175	12.40	18.40	24.30	30.10	35.70
185	12.50	18.55	24.50	30.35	36.05
195	12.65	18.70	24.70	30.60	36.30
205	12.80	19.00	25.00	30.95	36.75
215	12.85	19.05	25.10	31.05	36.90
225	12.95	19.20	25.30	31.30	37.20
235	13.10	19.45	25.65	31.65	37.60
245	13.20	19.60	25.85	31.90	37.95
255	13.25	19.65	25.95	32.05	38.10
265	13.40	19.90	26.25	32.40	38.55
275	13.50	20.05	26.40	32.70	38.80
285	13.55	20.10	26.50	32.85	38.95
295	13.70	20.30	26.80	33.20	39.45
305	13.80	20.45	27.00	33.45	39.75
315	13.90	20.60	27.20	33.70	40.00
325	14.00	20.75	27.40	33.95	40.30
335	14.10	20.90	27.60	34.20	40.60
345	14.20	21.05	27.85	34.45	40.90
355	14.30	21.20	28.05	34.70	41.20
365	14.40	21.35	28.25	34.90	41.45
375	14.50	21.50	28.45	35.15	41.75
385	14.60	21.65	28.65	35.40	42.05
395	14.70	21.80	28.85	35.65	42.35
405	14.80	21.95	29.00	35.95	42.60
415	24.05	35.65	47.10	58.30	69.25
425	24.20	35.95	47.40	58.70	69.65
435	24.35	36.15	47.70	59.05	70.15
445	24.55	36.45	48.15	59.55	70.75
455	24.70	36.70	48.45	59.95	71.15
465	24.85	36.90	48.75	60.30	71.60
475	25.00	37.15	49.00	60.65	72.00
485	25.15	37.35	49.30	61.05	72.45
495	25.30	37.60	49.65	61.40	72.90
505	25.45	37.80	49.95	61.75	73.35
515	25.65	38.10	50.25	62.15	73.85
525	25.80	38.30	50.55	62.50	74.30
535	25.95	38.50	50.85	62.85	74.70
545	26.10	38.75	51.15	63.30	75.15
555	26.25	38.95	51.45	63.70	75.60
565	26.40	39.20	51.70	64.05	76.00
575	26.55	39.45	52.00	64.40	76.45
585	26.70	39.70	52.30	64.75	76.90
595	26.85	39.90	52.60	65.15	77.35
605	27.00	40.15	52.90	65.50	77.80
615	27.15	40.35	53.30	65.85	78.20
625	27.30	40.60	53.60	66.25	78.70
635	27.45	40.80	53.90	66.65	79.15
645	27.60	41.00	54.15	67.00	79.55
655	27.80	41.25	54.45	67.35	80.00
665	27.95	41.45	54.75	67.75	80.50
675	28.10	41.70	55.05	68.10	80.90
685	28.25	41.90	55.35	68.50	81.35
695	28.40	42.15	55.65	68.85	81.80

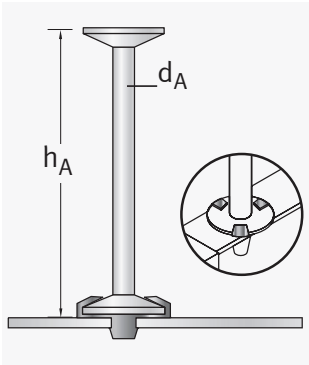
Diameter d _A : 16					
Anchor length h _A [mm]	Price per piece [€]				
	No. of anchors				
	2	3	4	5	6
125	-	-	-	-	-
135	-	-	-	-	-
145	-	-	-	-	-
155	13.05	19.35	25.50	31.55	37.50
165	13.20	19.60	25.85	31.90	37.95
175	13.30	19.75	26.05	32.15	38.25
185	13.45	19.95	26.35	32.55	38.70
195	13.55	20.10	26.50	32.85	38.95
205	13.70	20.30	26.80	33.20	39.45
215	13.80	20.45	27.00	33.45	39.75
225	13.90	20.60	27.20	33.70	40.00
235	14.05	20.85	27.50	34.05	40.45
245	14.15	21.00	27.70	34.30	40.75
255	14.30	21.20	28.05	34.70	41.20
265	14.40	21.35	28.25	34.90	41.45
275	14.55	21.60	28.55	35.30	41.90
285	14.65	21.75	28.75	35.55	42.20
295	14.80	21.95	29.00	35.95	42.60
305	14.90	22.10	29.25	36.20	43.00
315	15.05	22.40	29.55	36.55	43.45
325	15.15	22.55	29.75	36.80	43.70
335	15.25	22.75	29.95	37.05	44.00
345	15.45	22.95	30.25	37.40	44.45
355	15.55	23.10	30.45	37.65	44.75
365	15.70	23.30	30.75	38.05	45.15
375	15.80	23.45	30.95	38.30	45.45
385	15.95	23.70	31.25	38.65	45.90
395	16.05	23.85	31.40	38.90	46.20
405	16.20	24.05	31.70	39.25	46.65
415	25.00	37.15	49.00	60.65	72.00
425	25.15	37.35	49.30	61.05	72.45
435	25.35	37.65	49.75	61.50	73.05
445	25.55	38.00	50.15	62.00	73.70
455	25.80	38.30	50.55	62.50	74.30
465	26.00	38.60	50.95	62.95	74.85
475	26.15	38.80	51.25	63.45	75.30
485	26.35	39.10	51.60	63.90	75.85
495	26.55	39.45	52.00	64.40	76.45
505	26.75	39.75	52.40	64.90	77.05
515	26.95	40.05	52.80	65.40	77.65
525	27.15	40.35	53.30	65.85	78.20
535	27.35	40.65	53.70	66.35	78.85
545	27.55	40.95	54.05	66.90	79.40
555	27.80	41.25	54.45	67.35	80.00
565	28.00	41.55	54.85	67.85	80.60
575	28.20	41.85	55.25	68.40	81.20
585	28.40	42.15	55.65	68.85	81.80
595	28.60	42.45	56.05	69.35	82.35
605	28.80	42.80	56.50	69.85	82.95
615	29.00	43.15	56.85	70.40	83.55
625	29.25	43.40	57.25	70.85	84.20
635	29.45	43.70	57.65	71.35	84.75
645	29.65	44.00	58.10	71.85	85.35
655	29.85	44.30	58.50	72.30	85.90
665	30.05	44.60	58.90	72.80	86.50
675	30.25	44.90	59.25	73.35	87.05
685	30.45	45.20	59.65	73.85	87.70
695	30.65	45.50	60.10	74.35	88.25

Diameter d _A : 20						
Anchor length h _A [mm]	Price per piece [€]					
	No. of anchors					
	2	3	4	5	6	
125	-	-	-	-	-	-
135	-	-	-	-	-	-
145	-	-	-	-	-	-
155	-	-	-	-	-	-
165	-	-	-	-	-	-
175	-	-	-	-	-	-
185	15.60	23.15	30.55	37.75	44.90	
195	15.80	23.45	30.95	38.30	45.45	
205	15.95	23.70	31.25	38.65	45.90	
215	16.15	24.00	31.60	39.15	46.50	
225	16.30	24.20	31.90	39.55	46.95	
235	16.50	24.50	32.30	40.05	47.50	
245	16.70	24.80	32.75	40.55	48.15	
255	16.85	25.05	33.10	40.90	48.60	
265	17.05	25.35	33.50	41.40	49.15	
275	17.20	25.55	33.80	41.75	49.65	
285	17.40	25.90	34.15	42.25	50.20	
295	17.55	26.10	34.45	42.60	50.65	
305	17.80	26.40	34.85	43.15	51.20	
315	17.95	26.65	35.15	43.55	51.65	
325	18.15	26.95	35.55	44.00	52.25	
335	18.30	27.15	35.90	44.40	52.65	
345	18.50	27.45	36.30	44.85	53.35	
355	18.65	27.70	36.55	45.25	53.75	
365	18.90	28.00	36.95	45.70	54.35	
375	19.05	28.25	37.25	46.15	54.75	
385	19.25	28.55	37.65	46.60	55.35	
395	19.45	28.85	38.10	47.10	55.95	
405	19.60	29.10	38.40	47.45	56.40	
415	29.80	44.25	58.40	72.20	85.75	
425	30.10	44.70	59.00	72.90	86.65	
435	30.35	45.05	59.45	73.65	87.40	
445	30.60	45.45	60.00	74.25	88.10	
455	30.90	45.85	60.60	74.95	89.05	
465	31.15	46.30	61.10	75.55	89.75	
475	31.40	46.65	61.55	76.20	90.45	
485	31.70	47.10	62.15	76.95	91.40	
495	31.95	47.50	62.65	77.55	92.10	
505	32.20	47.85	63.20	78.15	92.85	
515	32.35	48.15	63.55	78.60	93.25	
525	32.55	48.35	63.85	78.95	93.75	
535	32.70	48.55	64.10	79.30	94.20	
545	32.90	48.80	64.40	79.65	94.65	
555	33.05	49.00	64.70	80.05	95.10	
565	33.20	49.25	65.00	80.45	95.50	
575	33.35	49.45	65.30	80.80	95.95	
585	33.50	49.75	65.60	81.20	96.40	
595	33.65	49.95	65.90	81.55	96.80	
605	33.80	50.20	66.20	81.90	97.25	
615	33.95	50.40	66.50	82.25	97.75	
625	34.10	50.65	66.80	82.65	98.15	
635	34.25	50.85	67.10	83.00	98.65	
645	34.40	51.05	67.40	83.40	99.05	
655	34.55	51.30	67.70	83.80	99.50	
665	34.70	51.50	68.00	84.20	99.95	
675	34.85	51.75	68.35	84.55	100.35	
685	35.00	51.95	68.65	84.90	100.85	
695	35.15	52.20	68.95	85.30	101.30	

Diameter d _A : 25						
Anchor length h _A [mm]	Price per piece [€]					
	No. of anchors					
	2	3	4	5	6	
125	-	-	-	-	-	-
135	-	-	-	-	-	-
145	-	-	-	-	-	-
155	-	-	-	-	-	-
165	-	-	-	-	-	-
175	-	-	-	-	-	-
185	-	-	-	-	-	-
195	-	-	-	-	-	-
205	-	-	-	-	-	-
215	-	-	-	-	-	-
225	-	-	-	-	-	-
235	-	-	-	-	-	-
245	30.00	44.55	58.80	72.70	86.35	
255	30.40	45.15	59.55	73.75	87.55	
265	30.80	45.70	60.40	74.70	88.75	
275	31.20	46.35	61.20	75.70	89.90	
285	31.60	46.95	61.95	76.65	91.10	
295	32.00	47.55	62.75	77.70	92.25	
305	32.40	48.20	63.65	78.70	93.45	
315	32.90	48.80	64.40	79.65	94.65	
325	33.30	49.40	65.20	80.70	95.80	
335	33.70	50.05	66.00	81.65	96.95	
345	34.10	50.65	66.80	82.65	98.15	
355	34.50	51.20	67.60	83.65	99.35	
365	34.90	51.80	68.45	84.65	100.50	
375	35.30	52.40	69.20	85.65	101.70	
385	35.70	53.10	70.00	86.60	102.85	
395	36.15	53.70	70.85	87.65	104.05	
405	36.55	54.30	71.60	88.65	105.25	
415	36.95	54.90	72.40	89.60	106.40	
425	37.40	55.55	73.35	90.75	107.75	
435	37.90	56.20	74.25	91.85	109.10	
445	38.40	57.00	75.25	93.05	110.55	
455	38.80	57.60	76.05	94.15	111.75	
465	39.25	58.35	76.95	95.25	113.05	
475	39.80	59.05	77.95	96.45	114.60	
485	40.25	59.75	78.90	97.60	115.90	
495	40.70	60.45	79.75	98.70	117.20	
505	41.15	61.10	80.70	99.80	118.55	
515	41.55	61.70	81.50	100.85	119.75	
525	41.95	62.30	82.25	101.80	120.90	
535	42.35	62.90	83.05	102.75	122.10	
545	42.80	63.60	83.95	103.80	123.25	
555	43.25	64.20	84.70	104.80	124.45	
565	43.65	64.80	85.50	105.80	125.65	
575	44.05	65.40	86.30	106.75	126.80	
585	44.45	65.95	87.05	107.75	127.95	
595	44.85	66.55	87.90	108.80	129.20	
605	45.25	67.20	88.75	109.75	130.35	
615	45.65	67.80	89.50	110.75	131.50	
625	46.05	68.45	90.30	111.75	132.70	
635	46.50	69.05	91.15	112.70	133.90	
645	46.90	69.65	91.90	113.75	135.10	
655	47.30	70.30	92.70	114.75	136.25	
665	47.70	70.90	93.55	115.75	137.40	
675	48.15	71.45	94.35	116.70	138.60	
685	48.55	72.05	95.15	117.65	139.80	
695	48.95	72.65	95.95	118.75	140.95	

Punching shear reinforcement JDA-FT-KL

ETA (European Technical Assessment ETA-13/0136)



Anchor length h_A [mm]	Price per piece [€]			
	Anchor diameter d_A [mm]			
	Dia. 10	Dia. 12	Dia. 14	Dia. 16
125–695, In steps of 10 mm	POA	POA	POA	POA

Example order for punching shear reinforcement JDA-FT-KL

Type	No. of anchors	/	Anchor diam- eter d_A	/	Anchor length h_A	–	Strip length l
JDA-FT-KL	2	/	10	/	145	–	200

Grid: 50/100/50



Other lengths
on request.

Delivered with preassembled clip on the anchor. Only available to qualified precast concrete plants

Version and material

- Strip made from perforated structural steel
- Double-headed anchors made from ribbed or smooth reinforcing steel
- Plastic clip (patented fastener)



Suitable accessories can be found on page 89.

Accessories for punching shear reinforcement

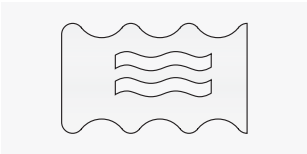


Spacers AH-FBA



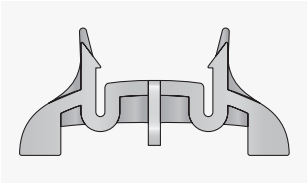
Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-FBA 20	20	Fibre-reinforced concrete (for use in precast ceilings)	0.45
AH-FBA 25	25		0.45
AH-FBA 30	30		0.45

Spacers AH-FT



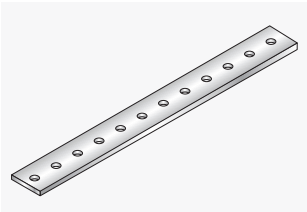
Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-FT	15 / 20 / 25 / 30	Plastic (for use in precast ceilings)	0.30

Spacers AH-DA



Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-DA 20	20	Plastic (for use in cast-in-place elements)	0.35
AH-DA 25	25		0.35
AH-DA 30	30		0.35
AH-DA 35	35		0.35

Assembly aids JDA-Q



Type	Price per piece [€]
JDA-Q	POA

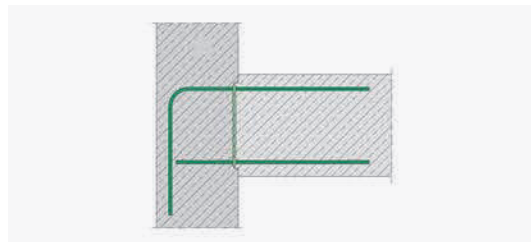
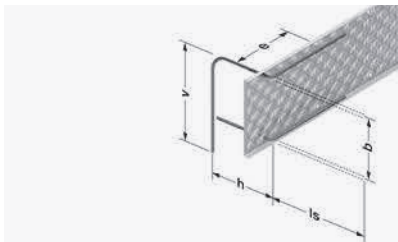
FERBOX®



When used with FERBOX® types B04, B06, B07, B08 and B09, the fold-out stirrup (ls) must be bent into a conical shape in situations that combine closely spaced rebar and large ls dimensions. This is due to production constraints. This situation can make it more difficult to configure the rebar and can complicate the structural design. Stirrups can be closely spaced without having to bend the stirrups into conical shapes by using the S version. To do so, the rods are all bent in one direction and the last stirrups protrude beyond the end of the box.

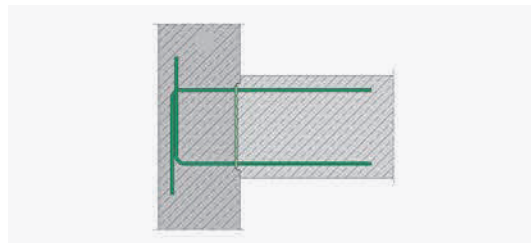
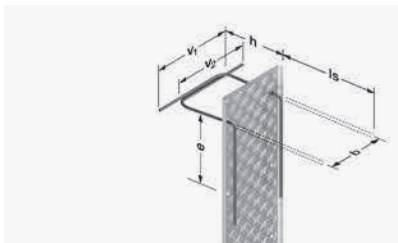
FERBOX® type B01

Bend diameter h/v:
10 ds

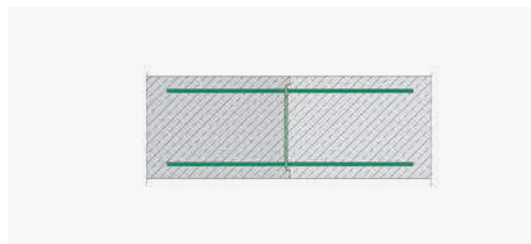
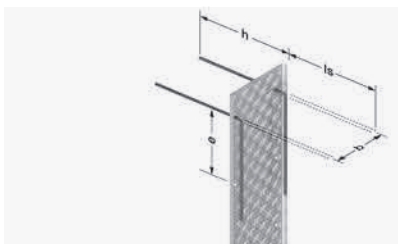


FERBOX® type B02

Bend diameter h/v:
4ds (also available
with h/v = 10 ds)

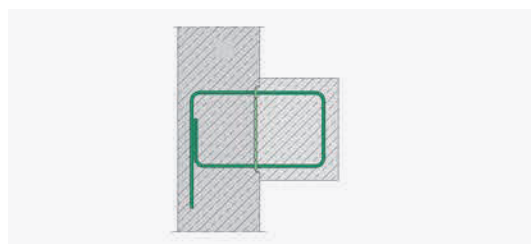
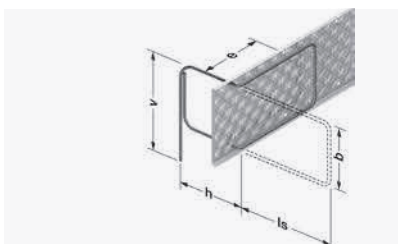


FERBOX® type B03

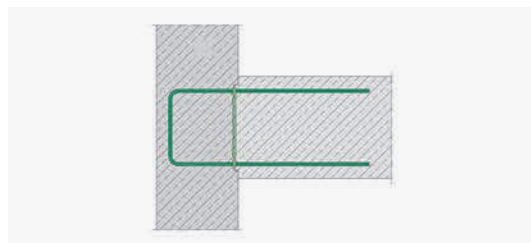
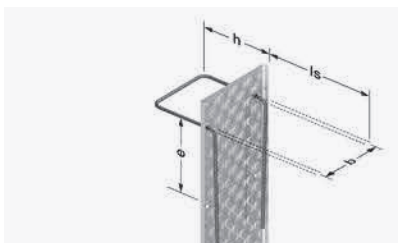


FERBOX® type B04/B04S

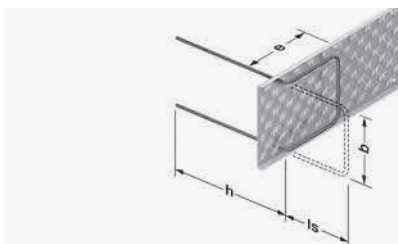
Bend diameter h/v:
4 ds



FERBOX® type B05

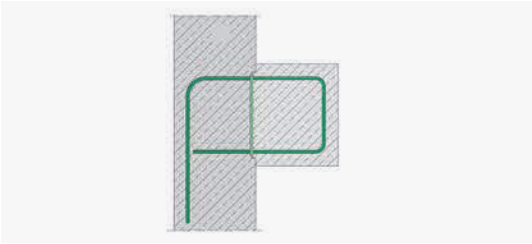
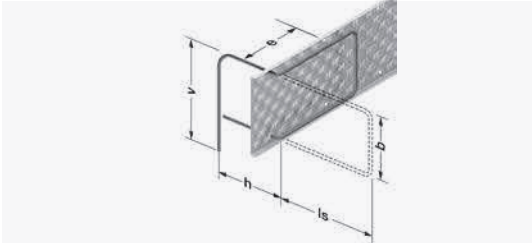


FERBOX® type B06/B06S

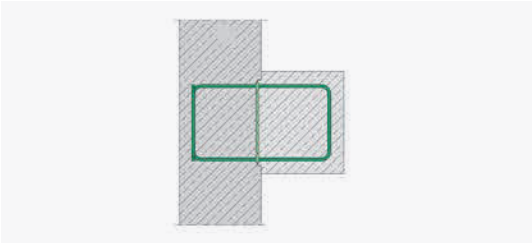


**FERBOX® type
B07/B07S**

Bend diameter h/v: 10
ds (also available with
 $h/v = 4 \text{ ds}$)

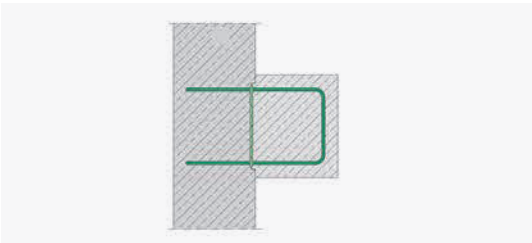
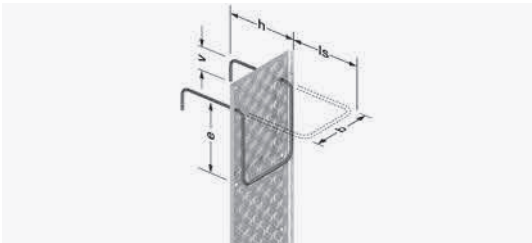


**FERBOX® type
B08/B08S**



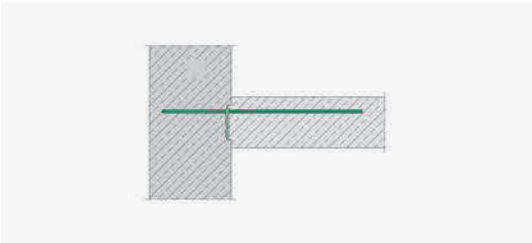
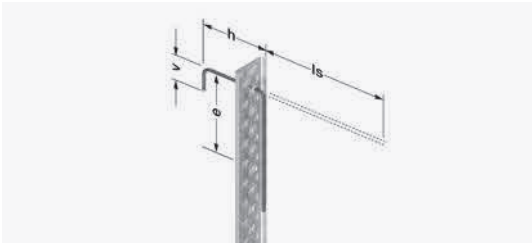
**FERBOX® type
B09/B09S**

Bend diameter h/v:
4 ds



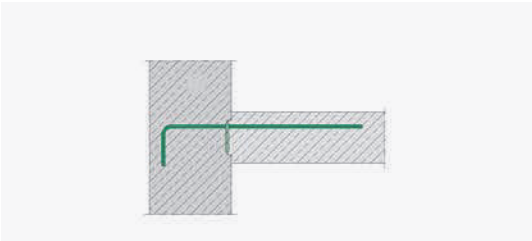
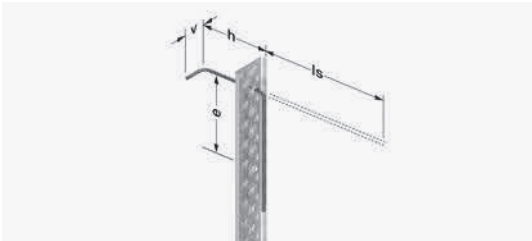
FERBOX® type E01

Bend diameter h/v:
4 ds

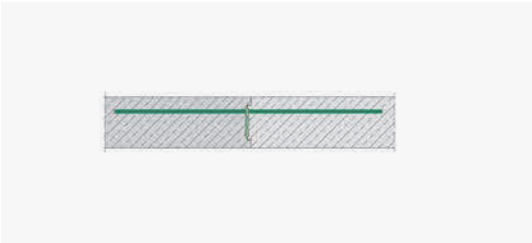
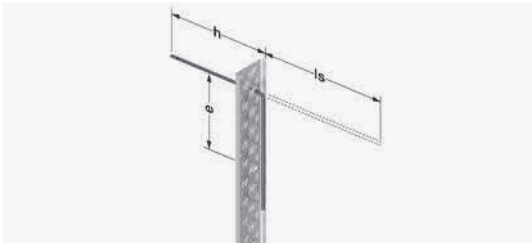


FERBOX® type E02

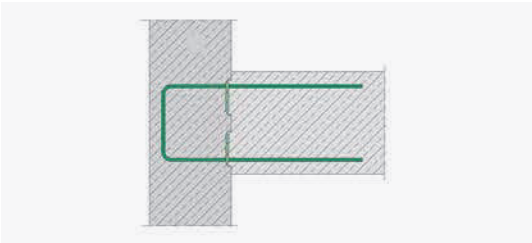
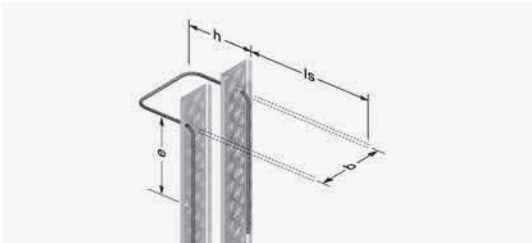
Bend diameter h/v:
4ds (also available
with $h/v = 10 \text{ ds}$)



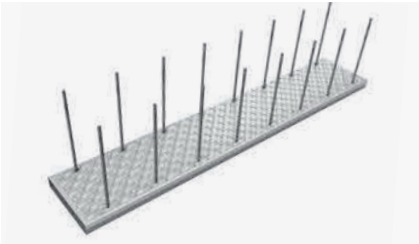
FERBOX® type E03



FERBOX® type EE

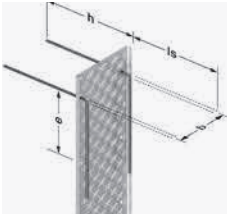


FERBOX® type B03



Double-row rebend connector, box and cover made from galvanised sheet steel, straight rebar, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Type-tested in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



Article number	Type	Dimensions [mm]						from wall width ¹⁾ [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls				
512700026611	B03 85 08 150	85	8	150	60	320	320	120	4,42	54	29.60
512700026613	B03 85 10 150	85	10	150	60	320	320	120	6,32	54	34.60
512700026615	B03 110 08 100	110	8	100	85	320	320	145	6,39	42	39.30
512700026617	B03 110 08 150	110	8	150	85	320	320	145	4,69	42	30.80
512700026619	B03 110 08 200	110	8	200	85	320	320	145	3,85	42	26.60
512700026621	B03 110 10 150	110	10	150	85	390	390	145	7,75	42	35.80
512700026623	B03 110 10 200	110	10	200	85	390	390	145	6,14	42	30.40
512700026625	B03 110 12 150	110	12	150	85	390	390	145	11,55	42	43.00
512700026627	B03 110 12 200	110	12	200	85	460	460	145	9,65	42	35.90
512700026629	B03 135 08 100	135	8	100	110	320	320	170	6,70	36	40.70
512700026631	B03 135 08 150	135	8	150	110	320	320	170	5,01	36	32.30
512700026633	B03 135 08 200	135	8	200	110	320	320	170	4,16	36	28.10
512700026635	B03 135 10 100	135	10	100	110	390	380	170	11,17	36	53.20
512700026637	B03 135 10 150	135	10	150	110	390	390	170	8,07	36	40.70
512700026639	B03 135 10 200	135	10	200	110	390	390	170	6,45	36	34.30
512700026641	B03 135 12 100	135	12	100	110	460	360	170	16,44	24	73.20
512700026643	B03 135 12 150	135	12	150	110	460	460	170	12,76	24	54.30
512700026645	B03 135 12 200	135	12	200	110	460	460	170	10,03	24	44.80
512700026647	B03 160 08 100	160	8	100	135	320	320	195	7,01	30	42.10
512700026649	B03 160 08 150	160	8	150	135	320	320	195	5,32	30	33.70
512700026651	B03 160 08 200	160	8	200	135	320	320	195	4,47	30	29.50
512700026653	B03 160 10 100	160	10	100	135	390	390	195	11,06	30	54.90
512700026655	B03 160 10 150	160	10	150	135	390	390	195	8,38	30	42.40
512700026657	B03 160 10 200	160	10	200	135	390	390	195	6,77	30	36.10
512700026659	B03 160 12 100	160	12	100	135	460	460	195	18,22	20	74.70
512700026661	B03 160 12 150	160	12	150	135	460	460	195	12,76	20	55.70
512700026663	B03 160 12 200	160	12	200	135	460	460	195	10,03	20	46.20
512700026665	B03 185 08 100	185	8	100	160	320	320	220	6,98	24	43.30
512700026667	B03 185 08 150	185	8	150	160	320	320	220	5,28	24	34.90
512700026669	B03 185 08 200	185	8	200	160	320	320	220	4,43	24	30.70
512700026671	B03 185 10 100	185	10	100	160	390	390	220	11,57	24	56.10
512700026673	B03 185 10 150	185	10	150	160	390	390	220	8,34	24	43.50
512700026675	B03 185 10 200	185	10	200	160	390	390	220	6,37	24	37.30
512700026677	B03 185 12 100	185	12	100	160	460	460	220	18,38	16	76.20
512700026679	B03 185 12 150	185	12	150	160	460	460	220	12,92	16	57.20
512700026681	B03 185 12 200	185	12	200	160	460	460	220	10,19	16	47.80

¹⁾ With cv 30
Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

FERBOX® type B03

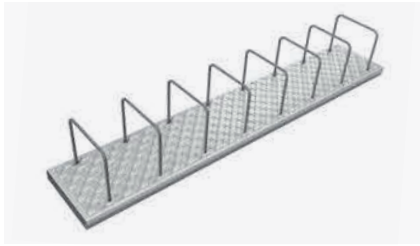
Article number	Type	Dimensions [mm]						from wall width ¹⁾ [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls				
512700026683	B03 210 08 100	210	8	100	185	320	320	245	7,10	24	45.00
512700026685	B03 210 08 150	210	8	150	185	320	320	245	5,40	24	36.60
512700026687	B03 210 08 200	210	8	200	185	320	320	245	4,55	24	32.40
512700026689	B03 210 10 100	210	10	100	185	390	390	245	11,69	24	57.50
512700026691	B03 210 10 150	210	10	150	185	390	390	245	8,46	24	45.00
512700026693	B03 210 10 200	210	10	200	185	390	390	245	6,85	24	38.60
512700026695	B03 210 12 100	210	12	100	185	460	460	245	18,51	16	77.80
512700026697	B03 210 12 150	210	12	150	185	460	460	245	13,05	16	58.90
512700026699	B03 210 12 200	210	12	200	185	460	460	245	10,32	16	49.40
512700026701	B03 235 08 100	235	8	100	210	320	320	270	7,22	18	46.10
512700026703	B03 235 08 150	235	8	150	210	320	320	270	5,52	18	37.70
512700026705	B03 235 08 200	235	8	200	210	320	320	270	4,67	18	33.60
512700026707	B03 235 10 100	235	10	100	210	390	390	270	11,81	18	59.30
512700026709	B03 235 10 150	235	10	150	210	390	390	270	8,58	18	46.70
512700026711	B03 235 10 200	235	10	200	210	390	390	270	6,97	18	40.50
512700026713	B03 235 12 100	235	12	100	210	460	460	270	18,63	12	79.00
512700026715	B03 235 12 150	235	12	150	210	460	460	270	13,17	12	60.00
512700026717	B03 235 12 200	235	12	200	210	460	460	270	10,44	12	50.60
512700026719	B03 260 08 100	260	8	100	235	320	320	295	7,35	12	47.90
512700026721	B03 260 08 150	260	8	150	235	320	320	295	5,66	12	39.50
512700026723	B03 260 08 200	260	8	200	235	320	320	295	4,81	12	35.30
512700026725	B03 260 10 100	260	10	100	235	390	390	295	11,94	12	60.50
512700026727	B03 260 10 150	260	10	150	235	390	390	295	8,72	12	47.90
512700026729	B03 260 10 200	260	10	200	235	390	390	295	7,11	12	41.60
512700026731	B03 260 12 100	260	12	100	235	460	460	295	18,77	12	80.50
512700026733	B03 260 12 150	260	12	150	235	460	460	295	13,31	12	61.60
512700026735	B03 260 12 200	260	12	200	235	460	460	295	10,58	12	52.10

¹⁾ With cv 30
Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® B03

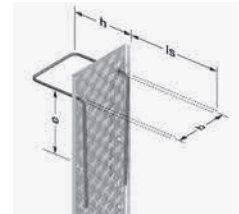
Type	Box width B	Bar diameter Dia.	Bar spacing e	Stirrup width b	Anchoring length h	Overlap length ls	Element length L
B03	235	10	150	210	170	390	1.200

FERBOX® type B05



Double-row rebend connector, box and cover made from galvanised sheet steel, U-shaped rebar, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Type-tested in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



Article number	Type	Dimensions [mm]						from wall width ¹⁾ [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls				
512100026598	B05 85 08 150	85	8	150	60	170	320	120	3,78	108	29.20 €
512100026599	B05 85 08 200	85	8	200	60	170	320	120	3,09	108	25.00 €
512100026600	B05 85 08 250	85	8	250	60	170	320	120	2,75	108	22.90 €
512100026601	B05 85 10 150	85	10	150	60	170	320	120	5,33	108	33.20 €
512100026602	B05 85 10 200	85	10	200	60	170	320	120	4,25	108	28.10 €
512100026603	B05 85 10 250	85	10	250	60	170	320	120	3,72	108	25.40 €
512100021969	B05 110 08 150	110	8	150	85	170	320	145	4,12	129,6	30.60 €
512100021970	B05 110 08 200	110	8	200	85	170	320	145	3,29	129,6	27.30 €
512100021971	B05 110 10 150	110	10	150	85	170	390	145	5,88	129,6	37.30 €
512100021972	B05 110 10 200	110	10	200	85	170	390	145	4,73	129,6	30.60 €
512100021973	B05 110 12 150	110	12	150	85	170	390	145	8,77	129,6	47.00 €
512100021974	B05 110 12 200	110	12	200	85	170	430	145	6,94	129,6	39.20 €
512100021975	B05 135 08 100	135	8	100	110	170	320	170	5,95	115,2	42.80 €
512100021976	B05 135 08 150	135	8	150	110	170	320	170	4,34	115,2	32.30 €
512100021977	B05 135 08 200	135	8	200	110	170	320	170	3,66	115,2	27.70 €
512100021978	B05 135 10 100	135	10	100	110	170	360	170	8,65	115,2	55.90 €
512100021979	B05 135 10 150	135	10	150	110	170	390	170	6,30	115,2	38.90 €
512100021980	B05 135 10 200	135	10	200	110	170	390	170	5,13	115,2	32.50 €
512100021981	B05 135 12 100	135	12	100	110	170	360	170	12,39	115,2	71.80 €
512100021982	B05 135 12 150	135	12	150	110	170	460	170	9,37	115,2	50.20 €
512100021983	B05 135 12 200	135	12	200	110	170	460	170	7,44	115,2	42.80 €
512100021984	B05 160 08 100	160	8	100	135	170	320	195	6,36	96	43.90 €
512100021985	B05 160 08 150	160	8	150	135	170	320	195	4,53	96	33.50 €
512100021986	B05 160 08 200	160	8	200	135	170	320	195	3,83	96	30.60 €
512100021987	B05 160 10 100	160	10	100	135	170	390	195	8,91	96	54.10 €
512100021988	B05 160 10 150	160	10	150	135	170	390	195	6,52	96	40.90 €
512100021989	B05 160 10 200	160	10	200	135	170	390	195	5,33	96	34.50 €
512100021990	B05 160 12 100	160	12	100	135	170	430	195	13,56	96	74.00 €
512100021991	B05 160 12 150	160	12	150	135	170	460	195	9,65	96	52.50 €
512100021992	B05 160 12 200	160	12	200	135	170	460	195	7,69	96	44.70 €
512100021993	B05 185 08 100	185	8	100	160	170	320	210	6,42	96	45.20 €
512100021994	B05 185 08 150	185	8	150	160	170	320	210	4,71	96	36.50 €
512100021995	B05 185 08 200	185	8	200	160	170	320	210	4,00	96	30.60 €
512100021996	B05 185 10 100	185	10	100	160	170	390	210	9,15	96	55.80 €
512100021997	B05 185 10 150	185	10	150	160	170	390	210	6,73	96	41.60 €
512100021998	B05 185 10 200	185	10	200	160	170	390	210	5,52	96	34.70 €
512100021999	B05 185 12 100	185	12	100	160	170	460	210	13,89	96	75.70 €
512100022000	B05 185 12 150	185	12	150	160	170	460	210	9,92	96	53.40 €
512100022001	B05 185 12 200	185	12	200	160	170	460	210	7,94	96	46.10 €
512100022002	B05 210 08 100	210	8	100	185	170	320	245	6,64	72	47.50 €
512100022003	B05 210 08 150	210	8	150	185	170	320	245	4,88	72	38.00 €
512100022004	B05 210 08 200	210	8	200	185	170	320	245	4,16	72	31.90 €
512100022005	B05 210 10 100	210	10	100	185	170	390	245	9,38	72	58.20 €
512100022006	B05 210 10 150	210	10	150	185	170	390	245	6,92	72	42.90 €
512100022007	B05 210 10 200	210	10	200	185	170	390	245	5,69	72	36.90 €
512100022008	B05 210 12 100	210	12	100	185	170	460	245	14,18	72	78.30 €
512100022009	B05 210 12 150	210	12	150	185	170	460	245	10,15	72	55.00 €
512100022010	B05 210 12 200	210	12	200	185	170	460	245	8,14	72	48.20 €

¹⁾ With cv 30

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

FERBOX® type B05

Article number	Type	Dimensions [mm]						from wall width ¹⁾ [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls				
512100022011	B05 235 08 100	235	8	100	210	170	320	270	6,86	57,6	49.30 €
512100022012	B05 235 08 150	235	8	150	210	170	320	270	5,05	57,6	40.80 €
512100022013	B05 235 08 200	235	8	200	210	170	320	270	4,31	57,6	37.50 €
512100022014	B05 235 10 100	235	10	100	210	170	390	270	9,62	57,6	67.40 €
512100022015	B05 235 10 150	235	10	150	210	170	390	270	7,11	57,6	49.30 €
512100022016	B05 235 10 200	235	10	200	210	170	390	270	5,87	57,6	42.40 €
512100022017	B05 235 12 100	235	12	100	210	170	460	270	14,46	57,6	78.80 €
512100022018	B05 235 12 150	235	12	150	210	170	460	270	10,39	57,6	62.80 €
512100022019	B05 235 12 200	235	12	200	210	170	460	270	8,35	57,6	55.60 €
512100022020	B05 260 08 100	260	8	100	235	170	320	295	8,03	43,2	49.00 €
512100022021	B05 260 08 150	260	8	150	235	170	320	295	6,48	43,2	38.90 €
512100022022	B05 260 08 200	260	8	200	235	170	320	295	5,70	43,2	35.90 €
512100022023	B05 260 10 100	260	10	100	235	170	390	295	11,47	43,2	60.10 €
512100022024	B05 260 10 150	260	10	150	235	170	390	295	8,78	43,2	47.10 €
512100022025	B05 260 10 200	260	10	200	235	170	390	295	7,43	43,2	40.60 €
512100022026	B05 260 12 100	260	12	100	235	170	460	295	16,49	43,2	79.80 €
512100022027	B05 260 12 150	260	12	150	235	170	460	295	12,22	43,2	56.00 €
512100022028	B05 260 12 200	260	12	200	235	170	460	295	10,08	43,2	49.70 €

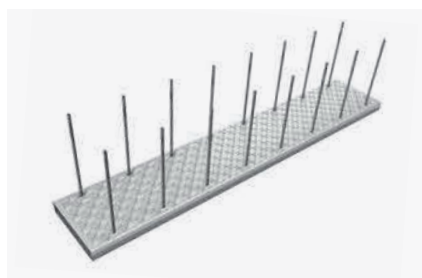
¹⁾ With cv 30

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® B05

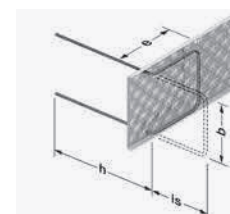
Type	Box width B	Bar diameter Dia.	Bar spacing e	Stirrup width b	Anchoring length h	Overlap length ls	Element length L
B05	225	10	150	185	170	390	1,200

FERBOX® type B06



Double-row rebend connector, box and cover made from galvanised sheet steel, U-shaped rebar, foldable stirrup, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Approved in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



Article number	Type	Dimensions [mm]						from wall width ¹⁾ [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls				
512500022071	B06 85 08 150	85	8	150	60	330	83	120	3,22	96	29.20
512500022072	B06 85 08 200	85	8	200	60	330	83	120	2,67	96	25.00
512500022073	B06 85 08 250	85	8	250	60	330	83	120	2,05	96	23.80
512500022074	B06 85 10 150	85	10	150	60	400	83	120	5,03	96	34.20
512500022075	B06 85 10 200	85	10	200	60	400	83	120	4,02	96	30.10
512500022076	B06 85 10 250	85	10	250	60	400	83	120	2,89	96	28.50

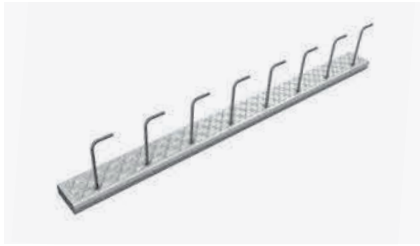
¹⁾ With cv 30

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® B06

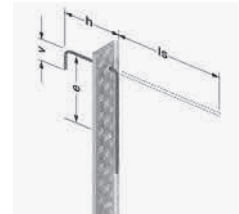
Type	Box width B	Bar diameter Dia.	Bar spacing e	Stirrup width b	Anchoring length h	Overlap length ls	Element length L
B06	85	10	150	60	400	83	1,200

FERBOX® type E01



Single-row rebend connector, box and cover made from galvanised sheet steel, angled hook reinforcement **parallel** to the box, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Type-tested in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



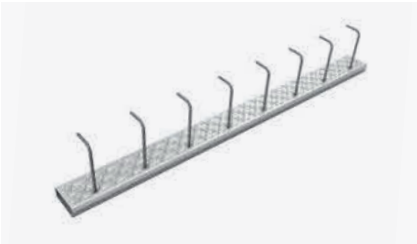
Article number	Type	Dimensions [mm]						Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls	v			
512200022039	E01 60 08 150	60	8	150	170	320	75	2,18	240	17.80
512200022040	E01 60 08 200	60	8	200	170	320	75	1,80	240	16.50
512200022041	E01 60 08 250	60	8	250	170	320	75	1,62	240	16.20
512200022043	E01 60 10 150	60	10	150	170	390	95	3,39	240	21.00
512200022044	E01 60 10 200	60	10	200	170	390	95	2,71	240	19.60
512200022045	E01 60 10 250	60	10	250	170	390	95	2,37	240	18.50
512200022038	E01 85 08 100	85	8	100	170	320	75	3,55	192	23.80
512200022042	E01 85 10 100	85	10	100	170	390	95	5,09	144	28.40
512200026737	E01 85 10 150	85	10	150	170	390	95	3,74	144	25.30
512200026739	E01 85 10 200	85	10	200	170	390	95	3,06	144	22.00
512200026741	E01 85 10 250	85	10	250	170	390	95	2,72	144	20.40
512200022046	E01 85 12 100	85	12	100	170	430	110	7,54	144	36.20
512200022047	E01 85 12 150	85	12	150	170	460	110	5,43	144	29.60
512200022048	E01 85 12 200	85	12	200	170	460	110	4,38	144	25.10
512200022049	E01 85 12 250	85	12	250	170	460	110	3,85	144	23.50
512200026743	E01 110 12 100	110	12	100	170	460	110	8,05	144	40.50

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® E01

Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L	Hook length v
E01	60	8	150	170	320	1,200	75

FERBOX® type E02



Single-row rebend connector, box and cover made from galvanised sheet steel, angled hook reinforcement **perpendicular** to the box, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Type-tested in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



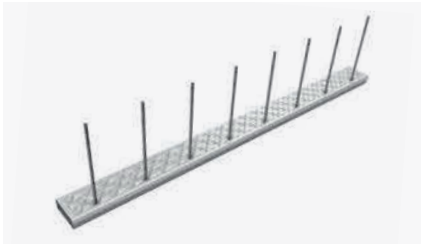
Article number	Type	Dimensions [mm]						Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls	v			
512300022051	E02 60 08 150	60	8	150	170	320	95	1,92	240	18.70 €
512300022052	E02 60 08 200	60	8	200	170	320	95	1,68	240	16.80 €
512300022053	E02 60 08 250	60	8	250	170	320	95	1,44	240	16.60 €
512300022055	E02 60 10 150	60	10	150	170	390	95	2,96	240	22.00 €
512300022056	E02 60 10 200	60	10	200	170	390	95	2,40	240	20.60 €
512300022057	E02 60 10 250	60	10	250	170	390	95	2,30	240	19.10 €
512300022050	E02 85 08 100	85	8	100	170	320	95	2,90	192	25.50 €
512300022054	E02 85 10 100	85	10	100	170	390	95	4,23	144	31.90 €
512300026745	E02 85 10 150	85	10	150	170	390	95	3,74	144	25.60 €
512300026747	E02 85 10 200	85	10	200	170	390	95	3,06	144	22.40 €
512300026749	E02 85 10 250	85	10	250	170	390	95	2,72	144	20.80 €
512300022058	E02 85 12 100	85	12	100	170	430	110	6,48	144	42.00 €
512300022059	E02 85 12 150	85	12	150	170	460	110	4,64	144	30.20 €
512300022060	E02 85 12 200	85	12	200	170	460	110	3,44	144	26.00 €
512300026751	E02 110 12 100	110	12	100	170	460	110	8,05	100	40.80 €

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® E02

Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L	Hook length v
E02	60	8	150	170	320	800	95

FERBOX® type E03



Single-row rebend connector, box and cover made from galvanised sheet steel, straight rebar, reinforcing steel B 500 B

- Highest category of **toothed** joints in transverse and longitudinal directions
- Type-tested in line with ETA and DIN EN 1992-1-1
- ETA (European Technical Assessment ETA-20/0842)
- Standard length: 1,200 mm
- Surcharge for element length 800 mm + 15%
- Other lengths available on request



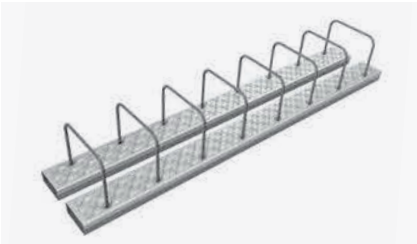
Article number	Type	Dimensions [mm]					Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls			
512400022062	E03 60 08 150	60	8	150	320	320	2,17	168	18.90
512400022063	E03 60 08 200	60	8	200	320	320	1,76	168	16.70
512400022064	E03 60 08 250	60	8	250	320	320	1,56	168	15.80
512400022065	E03 60 10 150	60	10	150	390	390	3,64	144	20.20
512400022066	E03 60 10 200	60	10	200	390	390	2,86	144	19.40
512400022067	E03 60 10 250	60	10	250	390	390	2,48	144	18.10
512400026753	E03 85 08 100	85	8	100	320	320	3,57	120	27.30
512400026839	E03 85 08 150	85	8	150	320	320	5,02	120	22.40
512400026841	E03 85 08 200	85	8	200	320	320	4,07	120	19.90
512400026843	E03 85 08 250	85	8	250	320	320	3,59	120	18.60
512400026757	E03 85 10 150	85	10	150	390	390	3,68	120	24.00
512400026759	E03 85 10 200	85	10	200	390	390	3,01	120	21.10
512400026761	E03 85 10 250	85	10	250	390	390	2,68	120	19.70
512400026763	E03 85 12 100	85	12	100	460	460	6,92	120	35.90
512400022068	E03 85 12 150	85	12	150	460	460	6,46	120	28.30
512400022069	E03 85 12 200	85	12	200	460	460	5,15	120	24.30
512400022070	E03 85 12 250	85	12	250	460	460	4,50	120	22.40
512400026765	E03 110 12 100	110	12	100	460	460	4,50	120	37.90

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

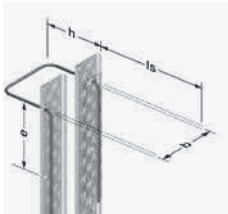
Example order for FERBOX® E03

Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L
E03	85	12	150	460	460	1,200

FERBOX® type EE



- Double-row rebend connector in two separate boxes, box and cover made from galvanised sheet steel, U-shaped rebar, reinforcing steel B 500 B
- Highest category of **toothed** joints in transverse and longitudinal directions
 - Type-tested in line with ETA and DIN EN 1992-1-1
 - ETA (European Technical Assessment ETA-20/0842)
 - Standard length: 1,200 mm
 - Surcharge for element length 800 mm + 15%
 - Other lengths available on request



Article number	Type	Dimensions [mm]						Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	b	h	ls			
512600022077	EE 60 08 150	60	8	150	240	170	320	4,84	43,2	33.80
512600022078	EE 60 08 200	60	8	200	240	170	320	4,13	43,2	28.90
512600022079	EE 60 10 150	60	10	150	240	170	390	6,98	43,2	40.10
512600022080	EE 60 10 200	60	10	200	240	170	390	5,73	43,2	37.10
512600026767	EE 85 08 100	85	8	100	240	170	320	6,90	43,2	42.50
512600026773	EE 85 10 100	85	10	100	240	170	390	10,49	43,2	54.30
512600026775	EE 85 10 150	85	10	150	240	170	390	7,68	43,2	40.80
512600026777	EE 85 10 200	85	10	200	240	170	390	6,27	43,2	34.20
512600026779	EE 85 12 100	85	12	100	240	170	430	15,25	43,2	69.50
512600022081	EE 85 12 150	85	12	150	240	170	460	9,96	43,2	60.20
512600022082	EE 85 12 200	85	12	200	240	170	460	7,63	43,2	42.50
512600026781	EE 110 12 100	110	12	100	240	170	460	16,26	43,2	72.30

Prices are for full packaging units. Surcharges will be added for smaller purchase quantities.

Example order for FERBOX® EE

Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L
EE	60	8	200	170	320	1,200

PENTAFLEX® Modul



PENTAFLEX® Modul



PENTAFLEX® Modul for sealing construction joints with continuous formwork, e.g. between walls and underground car park ramps or between light wells and basement walls. The element consists of a protective box and integrated PENTAFLEX KB® seam sheet 60 mm wide. The structure of the module guarantees that the seam sheet is embedded 30 mm into the components being connected in accordance with the **abP**.

- **Element for all FERBOX® E types**
- Element length: 800 mm or 1,200 mm; other lengths available on request
- Surcharge for special lengths + 10%



Installed element after casting

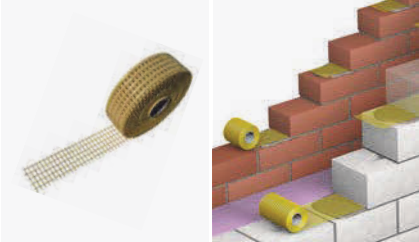
Article number	Design	Price per m [€]
110400022083	PENTAFLEX® Modul 1200 mm	24.90
110400024200	PENTAFLEX® Modul 800 mm	24.90

Article number	Design	Price per piece [€]
110400024201	PENTAFLEX® Modul corner element 200x200	17.40

GRIPRIP®



GRIPRIP®-A



Structural masonry reinforcement made of aramid fabric can be used with any mortar.

- Other widths available on request

Article number	Type	Width [mm]	Weight [kg/100 m]	PU [m/roll]	Price per m [€]
540100002399	A 1	85	2.10	100	3.40
540100002393	A 1.1	150	3.60	100	6.10
540100002394	A 2	170	4.00	100	6.70
540100002395	A 2.1	200	4.40	100	7.90
540100002396	A 3	240	5.60	100	9.50
540100002397	A 3.1	300	6.90	100	11.90
540100002398	A 4	340	8.25	100	13.50

GRIPRIP®-S



Structural butt joint anchoring made of aramid fabric can be used with any mortar.

- Other lengths available on request

Article number	Element length [mm]	Width [mm]	Weight [kg/100 pcs.]	PU [pcs./pack]	PU [pcs./box]	Price per 100 pcs. [€]
540200002402	300	85	0.27	100	2,000	72.00

Stainless steel rebar



Rebar, stainless steel

Material no. 1.4571 with approval



Stainless steel material number 1.4571, antimagnetic, weldable

The weight depends on the particular batch. The actual weight of the delivered quantity is calculated individually.

- The alloy surcharge applicable on the day of delivery is added to the price

Article number	Dia. [mm]	Weight approx. [kg/m]	Price per kg [€]
520100014941	6	0.22	11.60
520100014944	8	0.40	11.60
520100014947	10	0.62	11.60
520100014950	12	0.89	11.60
520100014953	14	1.21	11.60

Rebar, stainless steel

Material no. 1.4482 with approval



The weight depends on the particular batch. The actual weight of the delivered quantity is calculated individually.

- The alloy surcharge applicable on the day of delivery is added to the price

Article number	Dia. [mm]	Weight approx. [kg/m]	Price per kg [€]
520700014943	6	0.222	POA
520700014946	8	0.395	POA
520700014949	10	0.617	POA
520700014952	12	0.888	POA

Rebar, stainless steel

Material no. 1.4362 / 1.4462



The weight depends on the particular batch. The actual weight of the delivered quantity is calculated individually.

- The alloy surcharge applicable on the day of delivery is added to the price
- Other material nos. available on request
- Without approval

Article number	Dia. [mm]	Material no.	Weight approx. [kg/m]	Price per kg [€]
520700014954	16	1.4362	1.58	POA
520700014955	20	1.4362	2.47	POA
520700014956	25	1.4362	3.85	POA
520100014933	32	1.4462	6.31	POA
520100014934	40	1.4462	9.92	POA



Special shapes & structural components

We can produce virtually any shapes or structures.

We can produce rebar according to your drawings.

Approved bending service

Externally monitored by MPA NRW



Please send us your enquiry.

Application technology in Klettgau

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FIBERNOX®



FIBERNOX® V-ROD is a high-quality reinforcement rod made of fibre-reinforced composite designed for maximum strength and durability. The glass-fibre reinforcement is resistant to corrosion and alkalis, has very high tensile strength, is low in weight, resistant to magnetic influences, and has electrical and thermal insulation properties.

- Modulus of elasticity 60,000 N/mm²
- Guaranteed tensile strength 1,000 N/mm²
- Other diameters and lengths available on request

Article number	Type	Dia. [mm]	Stock length [mm]	Weight [kg/m]	Nominal cross-sectional area [mm ²]	Price per m [€]
530100019551	V-ROD 60	6	11,900	0.07	28.3	POA
530100019553	V-ROD 60	8	11,900	0.12	50.3	POA
530100019554	V-ROD 60	10	11,900	0.18	78.5	POA
530100019555	V-ROD 60	12	11,900	0.26	113.1	POA
530100019556	V-ROD 60	16	11,900	0.45	201.1	POA
530100019557	V-ROD 60	20	11,900	0.70	314.2	POA
530100019559	V-ROD 60	25	11,900	1.09	490.9	POA
530100019560	V-ROD 60	32	11,900	1.78	804.2	POA

FIBERNOX® V-ROD curved shapes



We can produce rebar according to your drawings.

- We can produce a variety of shapes of stirrups and coils
- Modulus of elasticity 50,000 N/mm²
- Guaranteed tensile strength 450 N/mm² (in the bent section)
- Guaranteed tensile strength 1,000 N/mm² (in the straight section)
- Curved rods are available in diameters 6, 10, 12, 16, 20, 25 and 32 mm

FIBERNOX® V-ROD end anchors



Reinforcement rods with end anchors are available in diameters 12, 16 and 20 mm.

FIBERNOX® V-ROD shear dowels



- Smooth surface for shear force transmission
- Available in diameters 25 to 45 mm

FIBERNOX® V-ROD rockbolt anchors



Glass fibre rockbolt anchors for tunnel construction and rock stabilisation. Available in diameters 20, 22, 25, 29 and 32 mm.

- Complete system available with pressure plates and nuts

Rebar accessories



Fibre-reinforced concrete surface spacers

Triangular

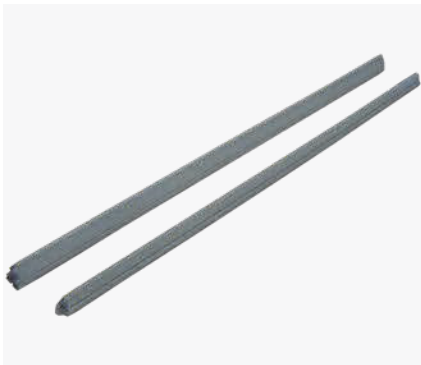


Triangular surface spacers made of fibre-reinforced concrete for horizontal mesh and round steel rebar.

Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

- Surcharge for other colours. Other dimensions available on request

Triangular type, element length approx. 1000 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003489	20	0.70	1,300	104.40
620100003490	25	0.80	1,000	104.40
620100003491	30	1.00	800	127.60
620100003492	35	1.50	700	150.80
620100003493	40	1.90	500	173.90
620100003494	45	2.20	450	208.70
620100003495	50	3.00	350	231.80
620100003496	55	3.50	300	278.20
620100003497	60	4.40	280	313.20
620100022994	65	5.20	240	359.40
620100003498	70	6.00	200	394.20
620100022995	75	7.00	180	440.60

Fibre-reinforced concrete surface spacers

Triangular snake-shaped spacers



Snake-shaped, triangular surface spacers made from fibre-reinforced concrete for horizontal mesh and round steel rebar.

Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

- Surcharge for other colours. Other dimensions available on request

Triangular type snake-shaped spacers, element length approx. 1000 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003581	20	0.70	1,100	104.40
620100003584	25	0.70	1,000	127.60
620100003587	30	0.90	900	127.60
620100003590	35	1.10	850	150.80
620100003594	40	1.20	600	162.30
620100003597	45	1.60	500	197.10
620100003601	50	2.20	400	220.30
620100003604	55	2.30	350	243.50
620100003607	60	2.60	350	278.20
620100022996	65	2.90	300	313.00
620100003610	70	3.40	280	394.20
620100022997	75	3.90	250	429.00

Triangular type snake-shaped spacers, element length approx. 800 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003583	25	0.60	1,400	92.70
620100003586	30	0.70	1,250	104.40
620100003589	35	0.80	1,100	115.90
620100003593	40	1.00	800	127.60
620100003596	45	1.30	700	162.30
620100003600	50	1.70	600	173.90
620100003603	55	1.80	500	197.10
620100022998	60	1.90	500	220.30
620100022999	65	2.30	400	255.00
620100023000	70	2.70	350	313.00
620100023001	75	3.10	300	347.80

Fibre-reinforced concrete surface spacers

Triangular snake-shaped spacers with nubs



Snake-shaped, triangular surface spacers with low contact area made from fibre-reinforced concrete for horizontal mesh and round steel rebar.

Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

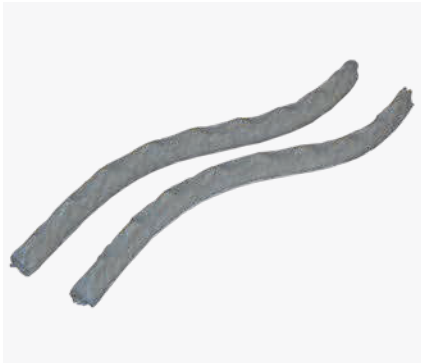
- Surcharge for other colours. Other dimensions available on request

Triangular type, snake-shaped spacers with nubs, element length approx. 1000 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003612	20	0.70	1,100	104.40
620100003614	25	0.70	1,000	127.60
620100003616	30	0.90	900	127.60
620100003619	35	1.10	850	150.80
620100003621	40	1.20	600	162.30
620100003624	45	1.60	500	197.10
620100003627	50	2.20	400	220.30
620100003630	55	2.30	350	243.50
620100003633	60	2.60	350	278.20
620100023002	65	2.90	300	313.00
620100003636	70	3.40	280	394.20
620100003638	75	3.90	250	429.00

Triangular type, snake-shaped spacers with nubs, element length approx. 800 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100023003	25	0.60	1,400	92.70
620100018865	30	0.70	1,250	104.40
620100018866	35	0.80	1,100	115.90
620100018867	40	1.00	800	127.60
620100023004	45	1.30	700	162.30
620100018604	50	1.70	600	173.90
620100023005	55	1.80	500	197.10
620100023006	60	1.90	500	220.30
620100023007	65	2.30	400	255.00
620100023008	70	2.70	350	313.00
620100023009	75	3.10	300	347.80

Fibre-reinforced concrete surface spacers

Triangular curves



Curved, triangular surface spacers made from fibre-reinforced concrete for horizontal mesh and round steel rebar.

Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

Surcharge for other colours. Other dimensions available on request

Triangular type, curved, element length approx. 330 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003464	20	0.23	3,300	46.40
620100003465	25	0.24	3,000	49.20
620100003466	30	0.30	2,700	58.00
620100003467	35	0.37	2,250	62.40
620100003468	40	0.40	1,800	69.60
620100003469	45	0.53	1,500	81.20
620100003470	50	0.74	1,200	81.20
620100003471	55	0.77	1,000	92.70
620100003472	60	0.87	1,050	104.40

Triangular type, curved with nubs, element length approx. 330 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003474	20	0.23	3,300	46.40
620100003476	25	0.24	3,000	49.20
620100003478	30	0.30	2,700	58.00
620100003480	35	0.37	2,250	62.40
620100003482	40	0.40	1,800	69.60
620100003484	45	0.53	1,500	81.20
620100003486	50	0.74	1,200	81.20
620100003487	55	0.77	1,000	92.70
620100003488	60	0.87	1,050	104.40

Fibre-reinforced concrete surface spacers

Triangular hook



Triangular-surface spacers made from fibre-reinforced concrete with hook for vertical rebar.
Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.
Surcharge for other colours. Other dimensions available on request

Triangular type with hook, element length approx. 330 mm



Article number	Concrete cover [mm]	Clamping range [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003507	25	6-12	0.25	3,000	69.60
620100003511	30	6-12	0.28	3,000	74.20
620100003515	35	6-12	0.38	2,400	81.20
620100003519	40	6-12	0.45	2,000	82.50
620100003523	45	6-12	0.50	1,600	92.70
620100003527	50	6-12	0.70	1,280	104.40
620100003531	55	6-12	0.90	1,000	115.90
620100003535	60	6-12	1.00	1,000	139.10
620100023010	65	6-12	1.10	800	150.80
620100003539	70	6-12	1.15	800	154.30
620100023011	75	6-12	1.25	700	173.90

Triangular type with hook, element length approx. 180 mm



Article number	Concrete cover [mm]	Clamping range [mm]	Weight [kg/pc.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003500	20	6-12	0.15	125	5,000	58.00
620100003505	25	6-12	0.16	125	5,000	60.40
620100003509	30	6-12	0.18	125	5,000	63.10
620100003513	35	6-12	0.20	100	4,000	69.60
620100003517	40	6-12	0.30	100	4,000	71.20
620100003521	45	6-12	0.32	80	3,200	72.80
620100003525	50	6-12	0.43	50	2,000	81.20
620100003529	55	6-12	0.45	45	1,800	92.70
620100003533	60	6-12	0.50	40	1,600	92.70
620100023012	65	6-12	0.55	40	1,500	104.40
620100003537	70	6-12	0.60	30	1,200	115.90
620100023013	75	6-12	0.70	25	1,000	127.60

Fibre-reinforced concrete surface spacers

Square



Square surface spacers made from fibre-reinforced concrete for heavy horizontal mesh and round steel rebar.

Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

- Surcharge for other colours. Other dimensions available on request

Square type, element length approx. 1000 mm



Article number	Concrete cover [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003647	25	1.20	1,000	162.30
620100003650	30	1.80	750	197.10
620100003653	35	2.50	500	255.00
620100003656	40	3.70	400	313.00
620100003661	45	4.30	350	370.90
620100003663	50	5.00	300	429.00
620100003667	55	6.00	200	510.20
620100003669	60	7.00	150	614.40
620100023014	65	7.50	150	660.80
620100003671	70	10.00	100	834.70
620100003673	75	11.50	100	857.90
620100003675	80	15.00	80	1.031.90
620100023015	85	17.50	65	1.194.10
620100023016	90	18.50	60	1.275.30
620100023017	95	19.40	55	1.402.80
620100003642	100	21.50	50	1.553.60

Concrete spacers type KD



Single spacers with low contact area made from fibre-reinforced concrete with wire for fastening to horizontal and vertical rebar.
Can be used for concrete coverings of three different depths.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200003726	20/25/30	40.00	500	25,000	123.30
620200003727	35/40/50	100.00	250	10,000	183.10
620200003729	45/55/60	180.00	125	5,000	279.30

Concrete spacers type KO



Single spacers with low contact area made from fibre-reinforced concrete for horizontal rebar layers.
Can be used for concrete coverings of three different depths.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200003730	20/25/30	40.00	500	25,000	74.50
620200003731	35/40/50	100.00	250	10,000	140.60
620200003733	45/55/60	170.00	125	5,000	234.00

Concrete spacers type TFD



Single spacers made from cast concrete with galvanised wire for fastening to horizontal and vertical rebar.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200003763	20	51.25	240	8,640	92.70
620200003764	25	66.70	240	8,640	97.90
620200003765	30	88.00	240	8,640	108.60
620200003766	35	97.50	160	5,760	136.40
620200003767	40	121.00	160	5,760	145.70
620200003769	45	131.25	160	5,760	165.60
620200003770	50	148.00	160	4,800	172.40
620200003771	60	186.00	128	3,840	220.00

Concrete spacers type PRT



Single spacers with low contact area made from cast concrete with plastic clips for fastening to the rebar. No metal or wire parts in the concrete cover.
Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200019868	15	25.00	800	32,000	170.60
620200019869	20	42.00	500	20,000	178.30
620200019870	25	62.00	400	16,000	192.60
620200019871	30	78.00	300	12,000	213.20
620200019872	35	94.00	250	10,000	239.20
620200019873	40	110.00	200	8,000	252.00

Concrete spacers type PT/X



Single spacers with low contact area made from cast concrete with plastic clips for fastening to the rebar. No metal or wire parts in the concrete cover.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200019079	20	42.50	480	14,400	125.40
620200019080	25	45.00	480	14,400	146.00
620200019081	30	53.00	360	12,960	156.40
620200019082	35	63.00	360	12,960	177.20
620200019083	40	74.00	240	8,640	205.40
620200019084	45	92.00	240	8,640	230.20
620200019085	50	104.00	192	6,912	250.80
620200023019	55	124.00	192	6,912	264.30

Concrete spacers type PT/S



Single spacers with low contact area made from cast concrete with plastic clips for fastening to the rebar. No metal or wire parts in the concrete cover.
Tested for resistance to freeze and thaw cycles, water ingress depth, tilt stability and compressive strength in accordance with DBV sheet concerning spacers.

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
620200019874	15	34.00	800	20,000	170.60
620200019875	20	46.00	500	20,000	178.30
620200019876	25	54.00	400	16,000	192.60
620200019877	30	73.00	325	13,000	213.20
620200019878	35	90.00	250	10,000	239.10
620200019879	40	111.00	200	8,000	252.00
620200019880	45	131.00	175	7,000	271.50
620200019881	50	130.00	175	7,000	290.80
620200019882	55	143.00	150	6,000	312.90
620200019883	60	152.00	150	6,000	336.00

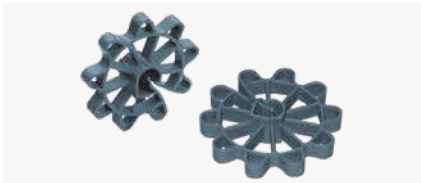
Clamping spacers type DR



Plastic spacers with low contact area for fastening to horizontal rebar with various bar diameters.
Good concrete flow.

Article number	Concrete cover [mm]	Clamping range [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
630200005187	15	5-14	3.60	1,000	5,000	200,000	30.40
630200005188	20	5-14	4.00	500	2,500	100,000	31.70
630200005189	25	5-14	4.40	500	2,500	100,000	36.10
630200005190	30	5-14	4.80	500	2,000	80,000	46.10
630200005191	35	5-14	5.20	250	1,500	60,000	53.30
630200005192	40	5-14	6.00	250	1,250	50,000	59.20
630200005193	50	5-14	6.40	125	1,000	40,000	86.60

Clamping spacers type DI



Single plastic spacers for fastening to horizontal and vertical rebar with various bar diameters. Good concrete flow.

- Other dimensions and clamping ranges available on request

Article number	Concrete cover [mm]	Clamping range [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
630300005202	15	6-12	3.40	1,000	5,000	100,000	23.10
630300005203	20	6-12	3.40	500	5,000	100,000	23.10
630300005204	25	6-12	5.60	500	4,000	48,000	27.30
630300005205	30	6-12	7.80	500	2,500	35,000	34.70
630300005206	35	6-12	11.00	200	1,000	20,000	67.90
630300005207	40	6-12	16.00	125	1,000	20,000	98.00
630300005208	50	6-14	22.00	100	500	10,000	158.60

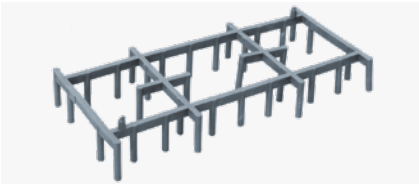
Clamping spacers type MS II



Single plastic spacers for fastening to horizontal and vertical rebar with various bar diameters.
For mounting spacers semi-automatically or fully automatically in precast concrete plants.

Article number	Concrete cover [mm]	Clamping range [mm]	Weight [kg/1,000 pcs.]	PU [pcs./box]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
630400005222	15	6-10	4.00	2,500	100,000	24.50
630400005223	20	6-10	4.80	2,000	80,000	28.80
630400005224	25	6-10	7.25	1,300	52,000	41.90
630400005225	30	6-10	8.00	450	28,800	56.40

Rectangular spacer



Plastic surface spacers supported at specific points for horizontal mesh and round steel rebar.

- Size approx. 200 x 100 mm

Article number	Concrete cover [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bundle]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
630500005234	15	26.40	60	9,240	151.40
630500005235	20	28.00	60	9,240	163.00
630500005236	25	32.00	60	9,240	173.20
630500005237	30	33.60	60	9,240	184.60
630500005238	35	35.00	60	7,920	200.50
630500005239	40	38.50	60	7,920	215.00

Rundfix spacers

Six rings



Large plastic spacers supported at specific points for horizontal mesh and round steel rebar. Consisting of six easily separable rings.

- Outer diameter 300 mm, inner diameter 150 mm

Article number	Concrete cover [mm]	Weight [kg/100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
630100005241	15	2.20	50 x 6 rings	14,400	15.30
630100005242	20	2.30	50 x 6 rings	10,800	16.00
630100005243	25	2.35	50 x 6 rings	10,800	16.70
630100005244	30	2.50	50 x 6 rings	7,200	18.10

Drunterfix spacers

With cutouts



Linear plastic surface spacers with cutouts in the side for large horizontal rebar layers. Good concrete flow.

- Element length: 2,000 mm
- Special lengths available on request

Article number	Concrete cover [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
630600017074	15	13.00	100	7,000	60.60
630600016912	20	15.00	100	6,300	64.50
630600005248	25	17.00	100	4,900	80.60
630600005250	30	18.50	100	4,200	92.60
630600016913	35	21.00	60	3,780	123.50
630600016914	40	24.00	60	2,400	135.80
630600016915	50	35.00	60	1,680	196.20

Drunterfix spacers

No cutouts



Linear plastic spacers for large horizontal rebar layers. Ideal for use on soft surfaces, such as insulation plates. Good concrete flow.

- Element length: 2,000 mm
- Special lengths available on request

Article number	Concrete cover [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
630700005257	15	14.50	100	7,000	67.10
630700005258	20	16.60	100	6,300	70.20
630700005259	25	19.00	100	4,900	86.30
630700005260	30	20.30	100	4,200	99.40
630700005261	35	27.00	60	3,780	133.40
630700005262	40	32.00	60	2,400	146.70
630700005263	50	34.00	60	1,680	212.90

Steckfix spacers



Linear plastic spacers supported at specific points for horizontal mesh and round steel rebar. Ideal for use in precast concrete plants. Good concrete flow.

- Element length: 2,000 mm
- Can be connected and separated in a 500-mm grid

Article number	Concrete cover [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
630900005284	15	9.20	100	6,000	41.90
630900005286	20	9.80	100	4,800	43.20
630900005290	25	10.20	100	4,200	47.70
630900005294	30	10.60	100	3,600	50.50
630900005296	35	11.00	100	3,000	57.70
630900005297	40	12.00	80	2,400	64.80
630900005298	45	12.75	80	2,400	69.20
630900005299	50	13.50	80	1,920	76.40

Base strips



Linear plastic spacers supported at specific points for horizontal mesh and round steel rebar. Ideal for use in precast concrete plants. The upwards-pointing nubs prevent the rebar from slipping out of place. Good concrete flow.

- Element length: 2,000 mm
- Can be connected and separated in a 500-mm grid

Article number	Concrete cover [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
631000005309	15	9.60	100	6,000	43.30
631000005310	20	10.50	100	4,800	46.00
631000005301	25	10.80	100	4,200	49.10
631000005303	30	11.00	100	3,600	51.90
631000005305	35	12.00	80	2,880	59.20
631000005306	40	13.00	80	2,400	66.40
631000005307	45	14.00	60	1,800	75.00
631000005308	50	14.50	60	1,800	77.80

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.

Facade fastening

Systems for facing masonry

Brickwork support brackets JVAeco+	118
Angled brackets L-DF+	119
Angled brackets L-F+	119
Grout-in brackets JMK+	120
Adjustment foot	120
Additional component JVA+ ZB	120
Parapet brick anchors JAV	121
Windposts JWP	121

Accessories for facing masonry

Angled brackets JW	122
Suspension loops JRH	122
Stainless steel wires ESD	122
Prefabricated element holders JFT+	123
Precast lintel brackets JFTW	123
Ring bolts FIG	123
Scaffold anchors JGA+ Q	123
(with interior thread and cap)	123
Scaffold anchors JGA+ Z	123
Installation set (for mounting brickwork support brackets JVAeco+ on anchor channels)	124
Individual parts and installation set (brickwork support brackets JVAeco+ with dowels)	124
Shims AGW	124
Clamping washers KS	124
Wedge adjusters SLP	124
Cavity wall anchors JLA	125
Clamping claws KKP	125
ISO clips	125
Drip discs TS	125

Systems for parapet slabs

Support corbels JBA	126
Installation set for JBA	126

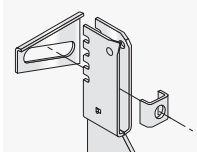
Systems for facing masonry



Brickwork support brackets

National technical approval (abZ Z-21.8-1868), type approval (TP-12-009)

Applies to all products with bracket heads and bracket bodies

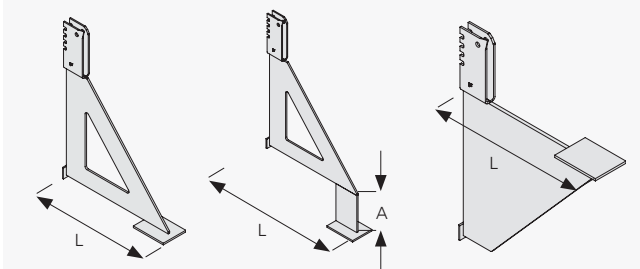


System consisting of:

- JORDAHL® brickwork support bracket
- For wedge adjusters, see page 124
- For clamping washers, see page 124

Brickwork support brackets JVAeco+

Variant JVAeco+ N

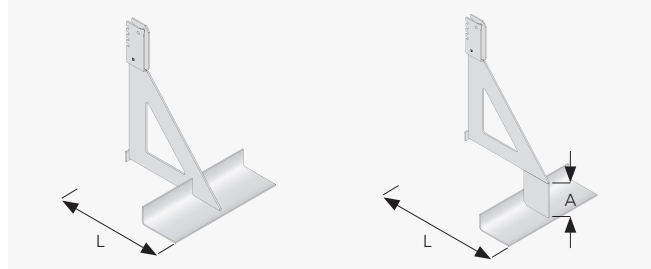


JVAeco+ N

JVAeco+ NA

JVAeco+ NU

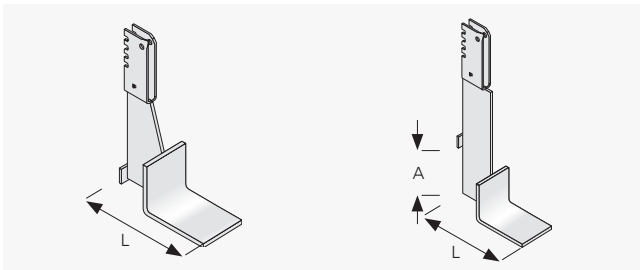
Variant JVAeco+ P



JVAeco+ P

JVAeco+ PAR

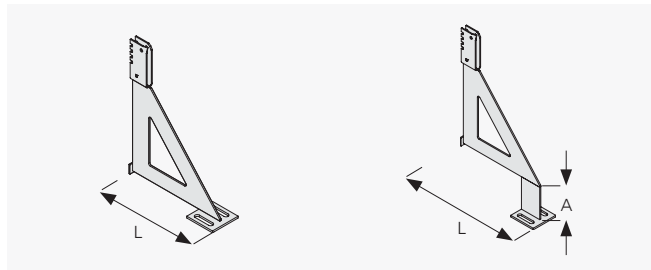
Variant JVAeco+ E



JVAeco+ E

JVAeco+ EA

Variant JVAeco+ NFT



JVAeco+ NFT

JVAeco+ NAFT

Variant	Cantilever length L [mm]	Load level [kN]	Price per piece [€]
N			
NA	130-390	4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA
NU			
P			
PAR	130-390	4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA
E			
EA	130-390	2.5 / 3.5 / 5.0 / 7.5	POA
NFT			
NAFT	130-390	4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA

Intermediate and special sizes are available on request

Example order for brickwork support bracket JVAeco+ NA

Type	Cantilever length	-	Variant	/	Load level	Offset A
JVAeco+	230	-	NA	/	4.5	100

Selected offset A: 100 mm

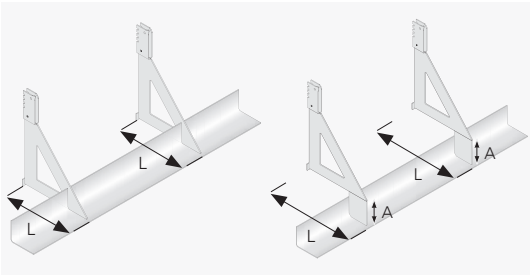
Werkstoff

- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)



Suitable accessories can be found in the section concerning accessories for facing masonry starting from page 122.

Variant JVAeco+ F



JVAeco+ F

JVAeco+ FAR

Variant	Cantilever length L [mm]	Bracket length L _w [mm]	Load level [kN]	Price per piece [€]
F	130–390	490–2,740	4.5 / 7.0 / 9.0 /	POA
FAR			10.5 / 13.5	

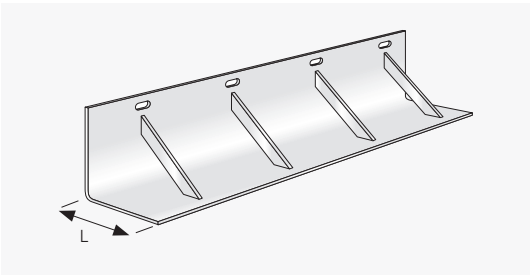
Intermediate and special sizes are available on request

Example order for brickwork support bracket JVAeco+ F

Type	Canti- lever length	-	Bracket length	-	Variant	/	Load level	Angled bracket dimensions
JVAeco+	190	-	1,240	-	F	/	7.0	(L 70 × 100 × 3)

Selected angled support bracket: L 70 × 100 × 3

Angled brackets L-DF+



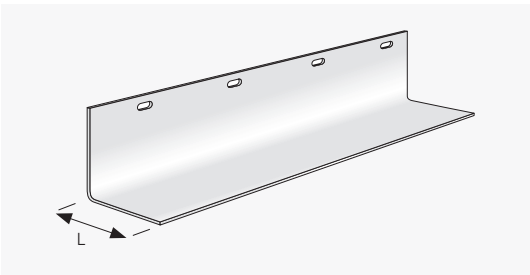
Type	Cantilever length L [mm]	Bracket length ¹⁾ L _w [mm]	Load level [kN]	Price per piece [€]
L-DF+	130–330	490–2,740	1.5 / 3.2	POA

¹⁾ Standard bracket length in 250-mm steps beginning with 490 mm
Intermediate and special sizes are available on request

Example order for angled bracket L-DF+

Type	Cantilever length	-	Bracket length	/	Load level
L-DF+	190	-	990	/	3.2

Angled brackets L-F+



Type	Cantilever length L [mm]	Bracket length ¹⁾ L _w [mm]	Load level [kN]	Price per piece [€]
L-F+	110–130	500–2,750	1.2 / 2.1 / 3.2	POA

¹⁾ Standard bracket length in 250-mm steps beginning at 500 mm
Intermediate and special sizes are available on request

Example order for angled bracket L-DF+

Type	Cantilever length	-	Bracket length	/	Load level
L-F+	120	-	1,000	/	3.2

Werkstoff

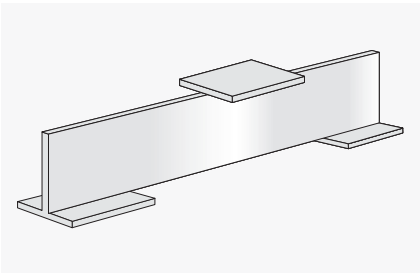
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)



Suitable accessories can be found in the section concerning accessories for facing masonry starting from page 122.

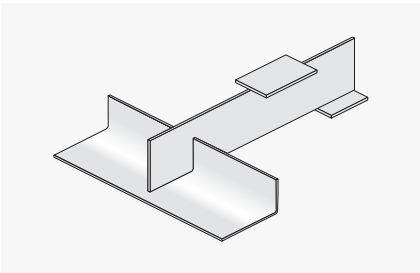
Grout-in brackets JMK+

Variant JMK+ N



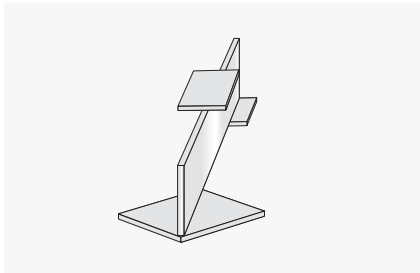
JMK+ N / JMK+ NA
(A dimension not shown)

Variant JMK+ P



JMK+ P / JMK+ PAR
(A dimension not shown)

Variant JMK+ E



JMK+ E / JMK+ EA corner grout-in bracket
(A dimension not shown)

Variant	Cantilever length L [mm]	Load level [kN]	Price per piece [€]
N	110-330	3.5 / 7.0	POA
NA			
P			
PAR			
E			
EA			

Other dimensions and types available on request.

Material

- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)

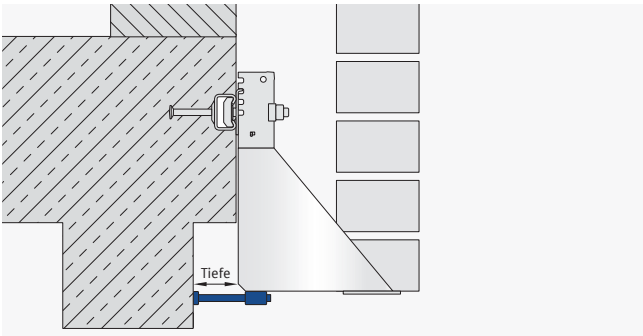
Example order for grout-in bracket JMK+ N

Type	Cantilever length	-	Variant	/	Load level
JMK+	140	-	N	/	3.5



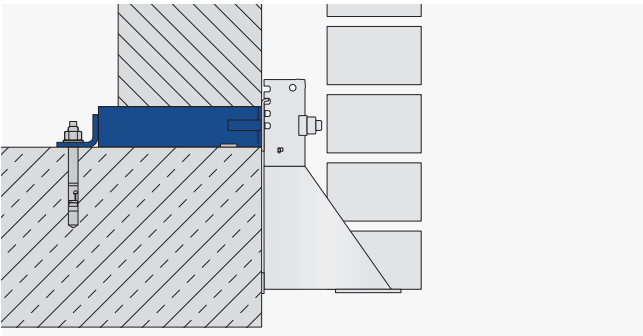
Suitable intermediate brackets can be found on page 124.

Adjustment foot



Load level [kN]	Price per piece [€]
4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA

Additional component JVA+ ZB



Variant	Wall thickness [mm]	Load level [kN]	Price per piece [€]
ZB	175 / 240 / 365	7.0 / 9.0	POA

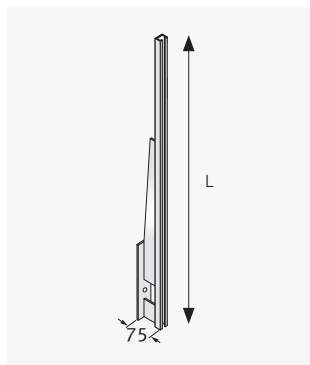
Example order for additional component JVA+ZB

Type	Cantilever length	-	Variant	/	Load level
JVA+	175	-	ZB	/	7.0



Suitable accessories can be found in the section concerning accessories for facing masonry starting from page 122.

Parapet brick anchors JAV



Length L [mm]	Wall distance a [mm]	Installation depth E [mm]	Brick tie anchors ^{1) 2)}		Price per piece [€]
			Quant.	Type	
600	65-205	75	3	JMA 85/12, JMA 120/12, JMA 180/12	POA
600	215-355	225	3		POA
850	65-205	75	4		POA
850	215-355	225	4		POA
1.100	65-205	75	5		POA
1.100	215-355	225	5		POA

¹⁾ Please order brick tie anchors separately; see page 77

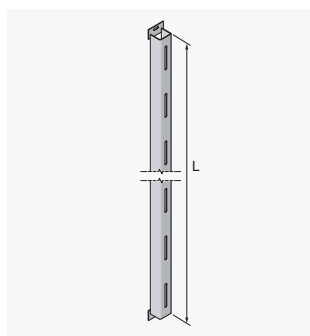
²⁾ For brickwork t = 115 mm thick; other wall spacings and heights available on request

Example order for parapet brick anchor JAV

Type	Installation depth E	/	Length L
JAV	75	/	600

Windposts JWP

JWP standard design

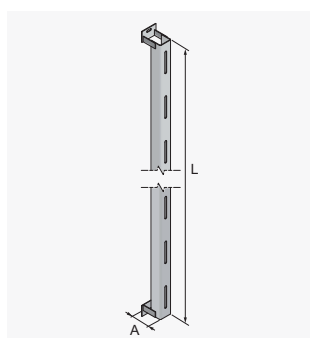


Length L [mm]	Profile dimensions w x h x s [mm]	Wall distance a [mm]	Brick tie anchors ^{1) 2)}		Price per piece [€]
			Quant	Type	
2,500	70 x 60 x 3	65-205	10	JMA 85/12, JMA 120/12, JMA 180/12	POA
2,750	75 x 65 x 3		11		POA
3,000	75 x 65 x 4		12		POA
3,250	80 x 70 x 4		13		POA
3,500	85 x 75 x 4		14		POA
3,750	90 x 80 x 4		15		POA
4,000	95 x 85 x 4		16		POA

¹⁾ Please order brick tie anchors separately; see page 77

²⁾ For brickwork t = 115 mm thick; other heights available on request

JWP-A standard design, offset



Length L [mm]	Profile dimensions w x h x s [mm]	Wall distance a [mm]	Brick tie anchors ^{1) 2)}		Price per piece [€]
			Quant	Type	
2,500	70 x 60 x 3	205-400	10	JMA 85/12, JMA 120/12, JMA 180/12	POA
2,750	75 x 65 x 3		11		POA
3,000	75 x 65 x 4		12		POA
3,250	80 x 70 x 4		13		POA
3,500	85 x 75 x 4		14		POA
3,750	90 x 80 x 4		15		POA
4,000	95 x 85 x 4		16		POA

¹⁾ Please order brick tie anchors separately; see page 77

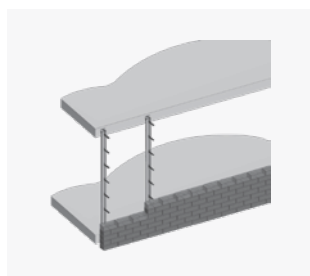
²⁾ For brickwork t = 115 mm thick; other wall spacings and heights available on request

Example order for parapet brick anchor JAV

Type	Profile dimensions	-	Length L
JWP	75 x 65 x 4	-	3,000

Werkstoff

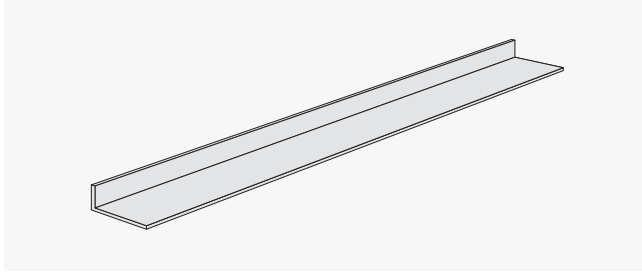
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)



Accessories for facing masonry



Angled brackets JW



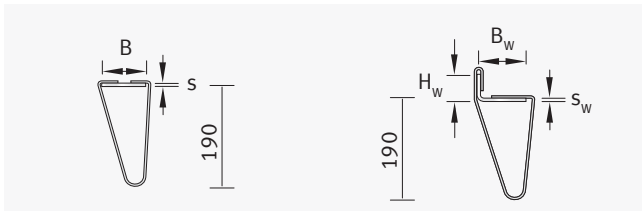
Type	Bracket length [mm]	Angled bracket dimensions $H_w \times W_w \times s_w$ [mm]	Price per piece [€]
JW	480	25 × 90 × 2	POA
JW	730	30 × 90 × 3	POA
JW	980	50 × 90 × 3	POA

Other lengths and bracket dimensions available on request

Example order for angled bracket JW

Type	Bracket length	Angled bracket dimensions
JW	980	50 × 90 × 3

Suspension loops JRH



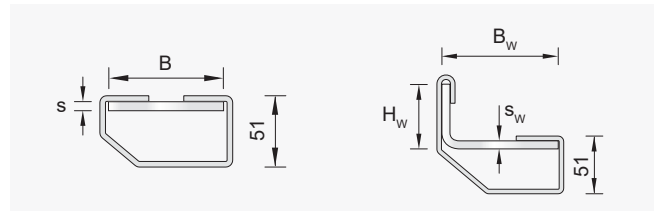
JRH 0

JRH 1-7

Type	Brick-on-edge course thickness [mm]	For bracket dimensions $H_w \times W_w \times s_w$ [mm]	Price per piece [€]
JRH 0	11.5	For JVAeco+ N, NA, NU	POA
JRH 1	11.5	30-35 × 80-100 × 3-8	POA
JRH 2	11.5	40-45 × 80-100 × 3-8	POA
JRH 3	11.5	50-55 × 80-100 × 3-8	POA
JRH 4	11.5	60-65 × 80-100 × 3-8	POA
JRH 5	11.5	70-75 × 80-100 × 3-8	POA
JRH 6	11.5	80-85 × 80-100 × 3-8	POA
JRH 7	11.5	90-95 × 80-100 × 3-8	POA

Other shapes available on request.

Suspension loops JRH (for stretcher lintels)



JRH 20

JRH 21-27

Type	Brick-on-edge course thickness [mm]	For bracket dimensions $H_w \times W_w \times s_w$ [mm]	Price per piece [€]
JRH 20	11.5	For JVAeco+ N, NA, NU	POA
JRH 21	11.5	30-35 × 80-100 × 3-8	POA
JRH 22	11.5	40-45 × 80-100 × 3-8	POA
JRH 23	11.5	50-55 × 80-100 × 3-8	POA
JRH 24	11.5	60-65 × 80-100 × 3-8	POA
JRH 25	11.5	70-75 × 80-100 × 3-8	POA
JRH 26	11.5	80-85 × 80-100 × 3-8	POA
JRH 27	11.5	90-95 × 80-100 × 3-8	POA

Other shapes available on request.

Example order for suspension loop JRH

Type	/	Brick-on-edge course thickness
JRH 5	/	11.5

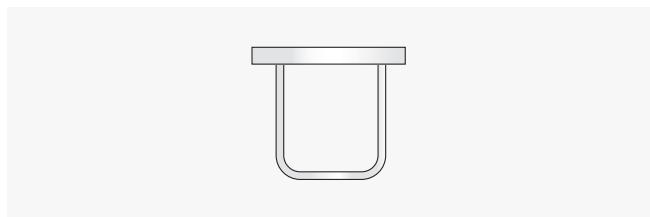
Stainless steel wires ESD

Type	Dia. [mm]	Length [mm]	Price per m [€]
ESD	4	3,000	POA

Werkstoff

- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)

Prefabricated element holders JFT+



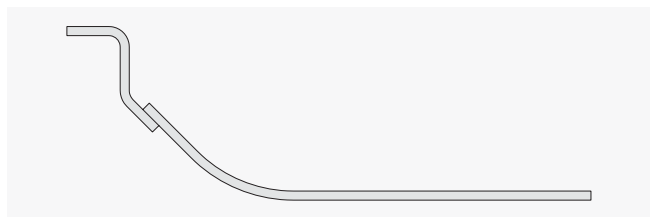
Type	Load level [kN]	Price per piece [€]
JFT 1+ (K28/15)	4.5	POA
JFT 2+ (K38/17) ¹⁾	7.0	POA
JFT 3+ (K38/17) ¹⁾	9.0 / 10.5	POA

¹⁾ Additional reinforcement necessary according to approval Z-21.4-2014
Special shapes available on request.

Example order for prefabricated element holder JFT+

Type	/	Profile type
JFT 1+	/	K28/15

Precast lintel brackets JFTW



Type	Load level [kN]	Price per piece [€]
JFTW-2,6	2.6	POA
JFTW-3,5	3.5	POA
JFTW-4,2	4.2	POA
JFTW-5,5	5.5	POA
JFTW-7,0	7.0	POA

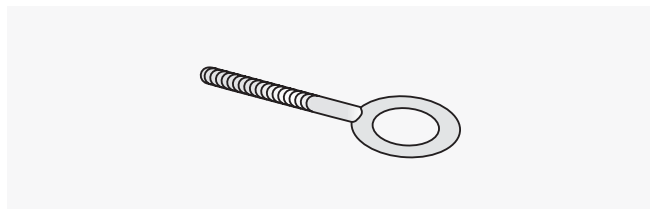
Example order for precast lintel bracket JFTW

Type	-	Load level
JFTW	-	5.5

Werkstoff

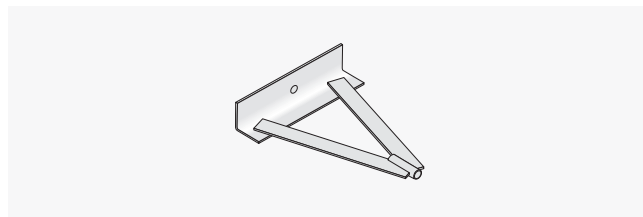
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)

Ring bolts FIG



Scaffold anchors JGA+ Q

(with interior thread and cap)



Type	Length ¹⁾ [mm]	Price per piece [€]
JGA+ Q	150-410	POA

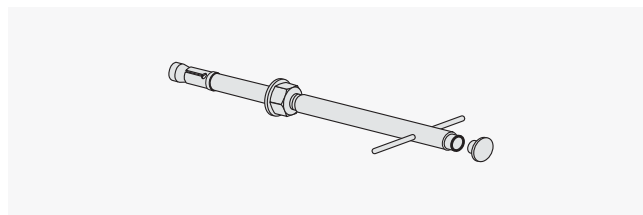
¹⁾ Length in 20-mm steps
Intermediate and special sizes are available on request.

Example order for scaffold anchor JGA+ Q

Type	Length
JGA+ Q	150

Scaffold anchors JGA+ Z

(with interior thread and cap)



Type	Length ¹⁾ [mm]	Price per piece [€]
JGA+ Z	110-350	POA

¹⁾ Length in 20-mm steps
Price includes reinforced concrete dowels and grey cap

Example order for scaffold anchor JGA+ Z

Type	Length
JGA+ Z	110

Type	Price per piece [€]
FIG M12 x 40 gv	POA

Material: galvanised

Installation set (for mounting brickwork support brackets JVAeco+ on anchor channels)

Type ¹⁾	Suitable for		Price per 100 pcs. [€]
	Channel	Bracket load level [kN]	
JH M12 × 70 T A4 set	JTA K 38/17	3.5	POA
JB M12 × 80 T A4–70 set	JTA K 50/30	4.5 / 7.0 / 9.0	POA
JB M16 × 85 T A4 set	JTA K 53/34	10.5	POA
JB M16 × 85 T A4 set	JTA W 50+	13.5	POA

¹⁾ Set consists of T-bolt, nut, wedge adjuster and clamping washer



Further tee-head/hook-head T-bolts can be found in the section concerning T-bolts for channels starting from page 65.

Individual parts and installation set (brickwork support brackets JVAeco+ with dowels)

Type	Facade connection and load level [kN]	Price per piece [€]
Anchor bolts M10/10 A4	Angled brackets L+ [1.2 / 1.5 / 2.1 / 3.2]	POA
Anchor bolts M12/10 A4	Parapet brick anchors JAV, windposts JWP, additional components JVA+ZB [7.0 / 9.0]	POA
Heavy-duty anchors M12 × 75/10 A4 set⁷⁾	Scaffold anchors JGA+ Q	POA
Anchor bolts M12/50 A4 set²⁾		POA
Anchor bolts M12/60 A4 set²⁾		POA
Anchor bolts M16/100 A4 set²⁾	Brickwork support bracket JVAeco+	POA
Heavy-duty anchors M12 × 75/60 A4 set³⁾	[4.5 / 7.0 / 9.0 / 10.5 / 13.5]	POA
Heavy-duty anchors M12 × 120/60 A4 set³⁾		POA
Heavy-duty anchors M16 × 95/60 A4 set³⁾		POA
Heavy-duty anchors M16 × 160/60 A4 set³⁾		POA
Cleaning brush BS 12⁴⁾		POA
Cleaning brush BS 14⁵⁾		POA
Cleaning brush BS 16/18⁶⁾		POA
Blow-out pump		POA

²⁾ Set includes wedge adjuster and clamping washer

³⁾ Set includes mortar cartridge, wedge adjuster and clamping washer

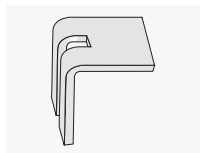
⁴⁾ For heavy-duty anchors M12

⁵⁾ For heavy-duty anchors M12

⁶⁾ For heavy-duty anchors M16

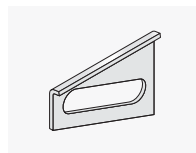
⁷⁾ Set includes mortar cartridge

Shims AGW



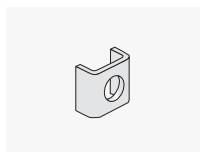
Type	Material thickness [mm]	Price per piece [€]
AGW	2 / 3 / 4 / 5 / 6	POA

Wedge adjusters SLP



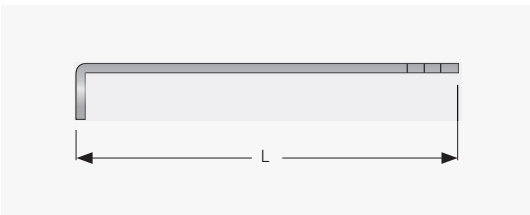
Type	Suitable for load level [kN]	Price per piece [€]
SLP	3.5 / 4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA

Clamping washers KS

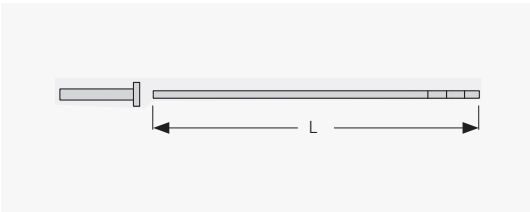


Type	Suitable for load level [kN]	Price per piece [€]
KS11	3.5 / 4.5	POA
KS13	3.5 / 4.5 / 7.0 / 9.0	POA
KS17	10.5 / 13.5	POA

Cavity wall anchors JLA



Cavity wall anchor JLA W-L



Dowel anchor JLA D-ZV

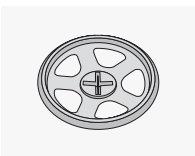
Type	Diameter [mm]	Length L [mm]	Price per piece [€]
JLA W-L	4	225 / 250 / 275 / 300 / 340 / 400	POA
JLA D-ZV	4	180 / 210 / 250 / 275 / 300 / 320 / 350 / 375 / 400	POA
JLA D-ZV	5	350 / 375 / 400 / 425 / 450 / 475 / 500 / 525 / 550	POA

¹⁾ Only sold in whole packaging units. 1 PU = 250 pieces. Other types available on request

Example order for L-shaped cavity wall anchor

Type	Diameter	/	Length
JLA D-ZV	4	/	250

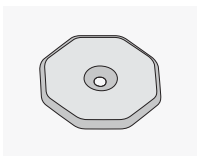
Clamping claws KKP



Type	Price per 100 pcs. [€]
KKP60	POA

Clamping claw plate 60 mm in diameter for cavity wall anchors dia. 3 - 4 mm

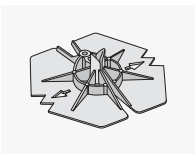
Drip discs TS



Type	Price per 100 pcs. [€]
TS	POA

Drip disc 25 mm in diameter for cavity wall anchors dia. 3 - 4 mm

ISO clips



Type	Price per 100 pcs. [€]
ISO clip	POA

ISO clip with 60 mm diameter for cavity wall anchors dia. 3 - 5 mm

Systems for parapet slabs

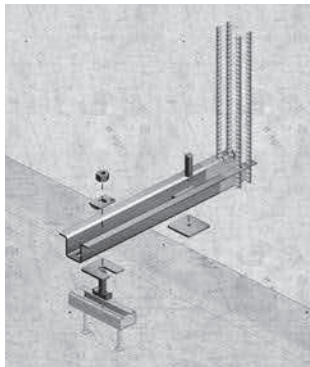


Support corbels JBA

Type approval (TP S-WUE/130261)

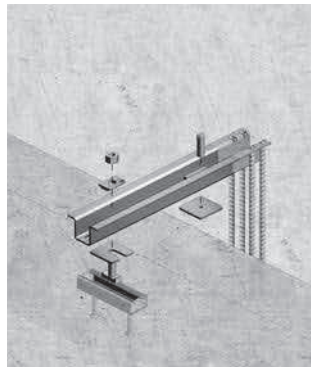
JBA-NJ

Standard version, adjustable



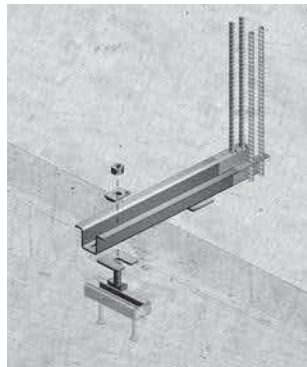
JBA-AJ

Reversed version, adjustable



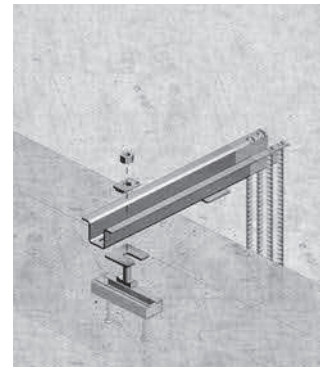
JBA-N

Standard version



JBA-A

Reversed version



Type	Design				Profile size of support corbel	Profile length L ¹⁾ [mm]				Price per piece [€]
	Standard, adjustable	Reversed, adjustable	Standard, not adjustable	Reversed, not adjustable		Possible spacing e ²⁾ [mm]				
						0 – 45	50 – 100	105 – 140	145 – 200	
JBA	NJ	AJ	N	A	1	400	450	500	600	POA
JBA	NJ	AJ	N	A	2	450	500	550	650	POA
JBA	NJ	AJ	N	A	3	500	550	600	700	POA
JBA	NJ	AJ	N	A	4	550	600	650	750	POA
JBA	NJ	AJ	v	A	5	550	600	650	750	POA
JBA	NJ	AJ	N	A	6	600	650	700	800	POA
JBA	NJ	AJ	N	A	7	650	700	750	850	POA
JBA	NJ	AJ	N	A	8	700	750	800	900	POA

¹⁾ Standard lengths [mm] are available in the variants listed above with spacing e for all types; other lengths are also available

²⁾ Spacing between front edge of ceiling slab and inside of facade slab

Installation set for JBA

Type	Profile size of support corbel	Design				Set contents				Price per set [€]
		Standard, adjustable	Reversed, adjustable	Standard, not adjustable	Reversed, not adjustable	Toothed locking plate	Horseshoe shim	Square bearing plate ¹⁾	Levelling pin ¹⁾	
JBA set	1	J 1	J 1	1	1	JXS-D13	JVS-40/3-13	JVL-40/3-8	JGW M16x50	POA
JBA set	2	J 2	J 2	2-4	2-4				JGW M16x50	POA
JBA set	3	J 3	J 3	2-4	2-4	JXS-D17	JVS-65/4-17	JVL-65/4-8	JGW M20x55	POA
JBA set	4	J 4	J 4	2-4	2-4				JGW M24x60	POA
JBA set	5	J 5-6	J 5-6	5-8	5-8				JGW M27x70	POA
JBA set	6	J 5-6	J 5-6	5-8	5-8				JGW M27x70	POA
JBA set	7	J 7-8	J 7-8	5-8	5-8	JXS-D21	JVS-80/8-21	JVL-80/8-8	JGW M30x80	POA
JBA set	8	J 7-8	J 7-8	5-8	5-8				JGW M30x80	POA

¹⁾ Only included in adjustable set

Example order for support corbel JBA

Type	-	Design	-	Profile size	-	Length L	-	Spacing e
JBA	-	NJ	-	5	-	600	-	100

Example order for installation accessories set JBA

Type	-	Design
JBA set	-	J 5-6

Material

- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Stainless steel Lean Duplex, corrosion resistance class III (CRC III)
- Reinforcing steel B500B

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Sound insulation

Elevator insulation

Elevator insulation JAI	130
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SINTON®

SINTON® X	131
SINTON® X-T1 / X-T2	131
SINTON® S	131
SINTON® SDL	132
SINTON® Z	132
SINTON® ZB	133
SINTON® Q	134
Fire-protection collars SQ BRM	134

Elevator insulation



Elevator insulation JAI

With voluntary type approval test (TÜV)



JAI-A



JAI-A1J



JAI-R



JAI-L

Type	Variant	Accessories included	Price per piece [€] net
JAI-A1-JC16 GV	Elevator insulation A1 with round hole	JC M16x80 8.8 GV	245.60
JAI-A1-JB16 GV	Elevator insulation A1 with round hole	JB M16x80 8.8 GV	250.10
JAI-A1-DU16 GV	Elevator insulation A1 with round hole for dowelling	SES M16	POA
JAI-A1J-JC16 GV	Elevator insulation A1J adjustable with slot	JC M16x80 8.8 GV	245.60
JAI-A1J-JB16 GV	Elevator insulation A1J adjustable with slot	JB M16x80 8.8 GV	250.10
JAI-A1J-DU16 GV	Elevator insulation A1J adjustable with slot for dowelling	SES M16	POA
JAI-R1-JC16 GV	Elevator insulation R1 with holder for rucksack suspension	JC M16x80 8.8 GV	368.40
JAI-R1-JB16 GV	Elevator insulation R1 with holder for rucksack suspension	JB M16x80 8.8 GV	372.90
JAI-R1-DU16 GV	Elevator insulation R1 with holder for rucksack suspension for dowelling	SES M16	POA
JAI-L1-JC16 GV	Elevator insulation L1 with round hole	JC M16x80 8.8 GV	491.20
JAI-L1-JB16 GV	Elevator insulation L1 with round hole	JB M16x80 8.8 GV	495.70
JAI-L1J-DU12 GV	Elevator insulation L1 with round hole for dowelling	SES M16	POA

- Version and material
- gv = Galvanised
 - Insulation material: Plastic

Example order for elevator insulation JAI

Type	–	Bolts included	–	Design
JAI-A1J	–	JC16	–	gv

SINTON®



SINTON® X

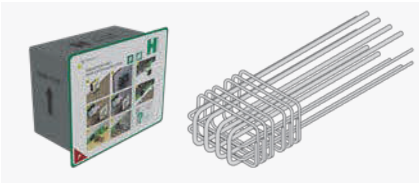


Impact sound insulation element for masonry and concrete walls. Hollow elements for supporting and acoustically isolating landing and staircase walls at the same time. Supplied with packing for stabilisation during casting and frame for fastening to formwork.

- Version 1 = bottom pressure pad
- Version 2 = bottom and top pressure pads
- Version 3 = bottom, top and side pressure pads

Article number	Type	Design	Inner dimensions [mm]			Weight [kg/pc.]	PU [pcs./pal.]	Price per piece [€]
			B	D	H			
410200020313	SINTON® X1	1	245	150	180	1.25	48	98.20
410200020314	SINTON® X2	2	245	150	180	1.25	48	107.30
410200020315	SINTON® X3	3	245	150	180	1.25	48	118.10

SINTON® X-T1 / X-T2

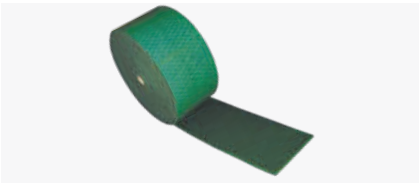


Impact sound insulation element with type-approved reinforcement cage in two load levels (T1 and T2). Hollow element for supporting and acoustically isolating landing and staircase walls at the same time. Supplied with packing for stabilisation during casting and frame for fastening to formwork.

- Version 1 = bottom pressure pad
- Version 2 = bottom and top pressure pads
- Version 3 = bottom, top and side pressure pads

Article number	Type	Design	Inner dimensions [mm]			Weight [kg/pc.]	PU [pcs. set/pal.]	Price per piece [€]
			B	D	H			
410300025052	SINTON® X1-T1	1	245	150	180	5.85	48	167.00
410300025053	SINTON® X2-T1	2	245	150	180	5.85	48	176.10
410300025054	SINTON® X3-T1	3	245	150	180	5.85	48	186.90
410300025055	SINTON® X1-T2	1	245	150	180	6.67	48	213.60
410300025056	SINTON® X2-T2	2	245	150	180	6.67	48	222.70
410300025057	SINTON® X3-T2	3	245	150	180	6.67	48	233.50

SINTON® S

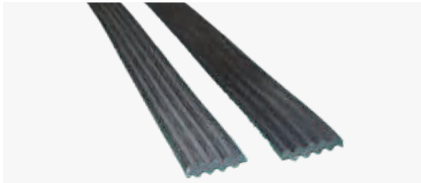


SINTON® S is a self-adhesive, flexible insulation board to prevent sound bridges between the stair flight / landing and the staircase wall.

- Supplied on rolls

Article number	Type	Dimensions [mm]		PU [roll/pal.]	Weight [kg/roll]	PU [m/roll]	Price per m [€]
		b	d				
450100024246	SINTON® S 24	240	15	24	2.30	15.00	16.20
450100024247	SINTON® S 36	360	15	12	3.00	15.00	20.80
450100024248	SINTON® S 42	420	15	8	3.50	15.00	21.90
450100024249	SINTON® S 48	480	15	8	4.00	15.00	23.10

SINTON® SDL



Elastomer pressure pad for sound insulation and load transfer on flights of stairs.

Article number	Type	Dimensions [mm]			Weight [kg/pc.]	Price per piece [€]
		Element length	Width	Thickness		
460100002382	SINTON® SDL 10/50	1,000	50	10	0.45	15.60
460100002386	SINTON® SDL 12/50	1,200	50	10	0.54	18.90
460100002388	SINTON® SDL 15/50	1,500	50	10	0.67	23.50
460100002384	SINTON® SDL 100/50	10,000	50	10	4.46	120.90
460100002383	SINTON® SDL 10/100	1,000	100	10	0.90	28.30
460100002387	SINTON® SDL 12/100	1,200	100	10	1.08	31.90
460100002389	SINTON® SDL 15/100	1,500	100	10	1.34	42.60
460100002385	SINTON® SDL 100/100	10,000	100	10	8.92	219.90

SINTON® Z



Impact sound insulation element for acoustically decoupling and supporting prefabricated staircases on landings and ceilings.

- Other dimensions available on request
- Variable support width

Article number	Type	Pressure pad	Element length [mm]	Weight [kg/pc.]	Price per piece [€]
430100004136	Z 100/4	4 single pressure pads*	1,000	0.30	39.10
430100004134	Z 100/5	5 single pressure pads*	1,000	0.32	44.80
430100022263	Z 110/5	5 single pressure pads*	1,100	0.34	45.50
430100004138	Z 110/6	6 single pressure pads*	1,100	0.34	49.50
430100004139	Z 120/6	6 single pressure pads*	1,200	0.36	53.30
430100019751	Z 130/7	7 single pressure pads*	1,300	0.39	61.60
430100004141	Z 150/6	6 single pressure pads*	1,500	0.45	70.70
430100004143	Z 150/8	8 single pressure pads*	1,500	0.60	74.60
430100004135	Z 100 L	1 linear pressure pad	1,000	0.30	70.60
430100004137	Z 110 L	1 linear pressure pad	1,100	0.57	76.80
430100004140	Z 120 L	1 linear pressure pad	1,200	0.36	83.80
430100019752	Z 130 L	1 linear pressure pad	1,300	0.39	93.20
430100004142	Z 150 L	1 linear pressure pad	1,500	0.45	112.90
*Additional single pressure pad					5.60

SINTON® ZB

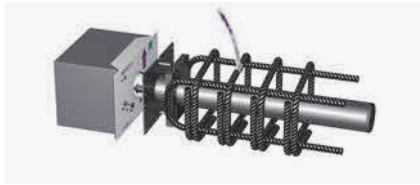


Impact sound insulation element for acoustically decoupling and supporting prefabricated staircases on floor slabs.

- Other dimensions available on request

Article number	Type	Pressure pad	Dimensions l x w [mm]	Weight [kg/pc.]	Price per piece [€]
430200004144	SINTON® ZB 100x36/4	4 single pressure pads*	1,000 x 360	0.30	79.20
430200004146	SINTON® ZB 100x60/4	4 single pressure pads*	1,000 x 600	0.50	82.20
430200004148	SINTON® ZB 100x36/5	5 single pressure pads*	1,000 x 360	0.35	83.30
430200004149	SINTON® ZB 100x60/5	5 single pressure pads*	1,000 x 600	0.55	85.40
430200004150	SINTON® ZB 110x36/6	6 single pressure pads*	1,100 x 360	0.40	84.80
430200004152	SINTON® ZB 110x60/6	6 single pressure pads*	1,100 x 600	0.60	88.30
430200004154	SINTON® ZB 120x36/6	6 single pressure pads*	1,200 x 360	0.36	85.40
430200004156	SINTON® ZB 120x60/6	6 single pressure pads*	1,200 x 600	0.60	89.30
430200019753	SINTON® ZB 130x36/7	7 single pressure pads*	1,300 x 360	0.39	97.80
430200019754	SINTON® ZB 130x60/7	7 single pressure pads*	1,300 x 600	0.65	102.20
430200004158	SINTON® ZB 150x36/6	6 single pressure pads*	1,500 x 360	0.45	98.70
430200004160	SINTON® ZB 150x60/6	6 single pressure pads*	1,500 x 600	0.75	104.10
430200004162	SINTON® ZB 150x36/8	8 single pressure pads*	1,500 x 360	0.60	110.00
430200004164	SINTON® ZB 150x60/8	8 single pressure pads*	1,500 x 600	0.80	115.50
430200004145	SINTON® ZB 100x36 L	Linear pressure pad	1,000 x 360	0.30	113.70
430200004147	SINTON® ZB 100x60 L	Linear pressure pad	1,000 x 600	0.50	119.60
430200004151	SINTON® ZB 110x36 L	Linear pressure pad	1,100 x 360	0.35	119.70
430200004153	SINTON® ZB 110x60 L	Linear pressure pad	1,100 x 600	0.60	125.80
430200004155	SINTON® ZB 120x36 L	Linear pressure pad	1,200 x 360	0.36	125.80
430200004157	SINTON® ZB 120x60 L	Linear pressure pad	1,200 x 600	0.60	131.80
430200024946	SINTON® ZB 130x36 L	Linear pressure pad	1,300 x 360	0.36	137.50
430200024943	SINTON® ZB 130x60 L	Linear pressure pad	1,300 x 600	0.60	142.70
430200004159	SINTON® ZB 150x36 L	Linear pressure pad	1,500 x 360	0.45	158.60
430200004161	SINTON® ZB 150x60 L	Linear pressure pad	1,500 x 600	0.75	164.50
*Additional single pressure pad					5.60

SINTON® Q



The impact sound insulation element SINTON® Q is a shear force connection for the acoustic decoupling of spiralled stairs or landings from staircase walls. The elements are building authority approved up to a joint width of 120 mm by DIBt; Z-15.7-355. SINTON® Q consists of a load-transmitting round mandrel made of high-strength stainless steel, an impact sound insulating wall support and a running sleeve with reinforcement cage.

- Version Q1 for positive shear forces
- Version Q2 for positive and negative shear forces

Article number	Type	Joint width f [mm]	Mandrel length [mm]	Weight [kg/pcs.]	PU [pcs./pal.]	Price per piece [€]
420100025004	SINTON Q1-J50	<50	350	6.37	80	136.90
420100025005	SINTON Q1-J120	51-120	420	6.91	70	146.10
420100025006	SINTON Q2-J50	<50	350	7.07	80	163.50
420100025007	SINTON Q2-J120	51-120	420	7.61	70	172.70

Fire-protection collars SQ BRM

Accessories for SINTON® Q



When using a fire-protection collar and a joint width ≤ 60 mm, the impact sound insulation element SINTON® Q is classified in fire resistance class R 120 according to expert opinion BB-21-056-1. The selection of the respective fire-protection collars SQ BRM depends on the joint width and must be ordered in addition to the impact sound insulation element SINTON® Q. The fire-protection collar must not be less than 10 mm narrower than the joint width.

- If several fire-protection collars are used, a larger joint width can be sealed. For example 60 mm with SQ BRM 3 (23 mm) and + SQ BRM 4 (33 mm).

Article number	Type	Dimensions H x B [mm]	Thickness t [mm]	Joint width f [mm]	Weight [kg/pc.]	Price per piece [€]
900000024991	SQ-BRM1	120 x 145	3	up to 12	0,04	10.40
900000024996	SQ-BRM2	120 x 145	13	13-22	0,08	11.60
900000024997	SQ-BRM3	121 x 145	23	23-32	0,13	12.90
900000024998	SQ-BRM4	122 x 145	33	33-42	0,17	14.00
900000024999	SQ-BRM5	123 x 145	43	43-53	0,21	15.10

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Formwork

RAPIDOBAT®

RAPIDOBAT® unlined	138
RAPIDOBAT® lined	139
RAPIDOBAT® Cretcon HD	139
RAPIDOBAT® square	140
RAPIDOBAT® rectangle	140
RAPIDO-Fix	141
RAPIDOBAT® custom shapes	141
Capitals	142
Bases	142
Release agent for capitals and bases	142
RAPIDO-Clamp type D	143
RAPIDO-Clamp type M	143
RAPIDOBAT® accessories	143

WARMBORD®

WARMBORD® type SE	144
WARMBORD® type SE	144
WARMBORD® accessories	144

Shuttering elements

Shuttering element type R	145
Shuttering elements type A R	145
Shuttering elements type V	146
Shuttering elements type A V	146
Shuttering elements type A V-S	147
Shuttering elements type ADK	147
Spacer	148

Formwork accessories

Fibre-reinforced concrete pipes	149
Fibre-reinforced concrete pipe sections	149
Fibre-reinforced concrete plugs	150
Fibre-reinforced concrete adhesive	150
Spacer tubes	150
Super cones	150
Super plugs	151
Sealing plugs	151
OPTI wall strengtheners	151
OPTI plugs	152
OPTI cones	152
OPTI wall strengtheners combi pack	152
Distance plates	153
Spacer plates type V	153
Mounting plates	153
Spacer plates type S	154
Corner strips	154
Chamfer strips	154
Drip profiles	155
Drip noses	155
T profile	155
Plastic nails	155
Multi-rockets	156
ISI rockets	156

RAPIDOBAT®



RAPIDOBAT® unlined



- Round shuttering tubes in an unlined design.
- Other diameters and lengths available on request
 - Prices apply to lengths of 2,500 mm up to 6,000 mm or 7,000 mm
 - For alignment and fastening accessories, see page 143

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310100001877	150	157	7.000	1,26	16.40
310100001878	200	207	7.000	1,68	18.60
310100001880	240	247	7.000	2,01	22.70
310100001881	250	257	7.000	2,09	23.30
310100001883	300	309	7.000	3,51	28.10
310100001886	350	359	7.000	3,52	37.00
310100001887	360	369	7.000	4,20	40.30
310100001889	400	409	7.000	4,69	45.70
310100001890	435	444	7.000	5,09	52.00
310100001891	450	461	7.000	6,02	53.00
310100001892	500	513	7.000	7,53	56.20
310100013213	550	563	7.000	8,28	63.30
310100001893	560	573	7.000	8,42	64.70
310100001894	600	613	7.000	9,03	67.50
310100001895	650	665	7.000	10,85	77.60
310100001896	700	715	7.000	11,69	100.70
310100001898	750	767	7.000	13,78	118.40
310100001899	800	817	7.000	16,03	126.20
310100001900	900	917	7.000	18,03	256.10
310100001875	1.000	1.019	7.000	21,77	311.30
310100001876	1.200	1.219	6.000	26,07	378.80

RAPIDOBAT® lined

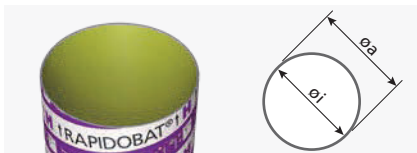


Round shuttering tubes with film liners for producing concrete elements with very smooth surfaces.

- Other diameters and lengths available on request
- Prices apply to lengths of 2,500 mm up to 6,000 mm or 7,000 mm
- Number of film joints: Dia. 150–500 mm 1 joint, dia. 550–1,000 mm 2 joints, > 1,200 mm 3 joints
- For alignment and fastening accessories, see page 143

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310200001851	150	157	7.000	1,49	24.70
310200001852	200	207	7.000	1,98	29.50
310200001854	240	247	7.000	2,37	34.70
310200001855	250	257	7.000	2,47	36.70
310200001857	300	309	7.000	3,96	44.40
310200001860	350	359	7.000	4,05	54.50
310200001861	360	369	7.000	4,74	56.80
310200001863	400	409	7.000	5,40	61.80
310200001864	435	444	7.000	5,89	71.20
310200001865	450	461	7.000	6,82	72.20
310200001866	500	513	7.000	8,66	77.50
3102000013199	550	563	7.000	10,44	101.00
310200001867	560	573	7.000	10,62	102.30
310200001868	600	613	7.000	11,39	104.30
310200001869	650	665	7.000	13,40	131.40
310200001871	700	715	7.000	14,44	149.90
310200001872	750	767	7.000	16,72	168.40
310200001873	800	817	7.000	19,17	179.50
310200001874	900	917	7.000	21,56	315.20
310200001849	1.000	1.019	7.000	25,70	370.50
310200001850	1.200	1.219	6.000	30,78	604.40

RAPIDOBAT® Cretcon HD



Formwork tubes for producing exposed concrete with the highest-quality surface finish. The self-activating hydrogel formwork skin of RAPIDOBAT® Cretcon HD minimises cavity formation and ensures that the finished concrete column is uniform in colour. The finished element is guaranteed to achieve exposed concrete class SB4.

- Other lengths available on request
- Prices apply to lengths from 2,500 mm to 7,000 mm
- For alignment and fastening accessories, see page 143

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310300001830	200	207	7.000	2,21	31.00
310300001832	240	247	7.000	2,65	36.50
310300001833	250	257	7.000	2,76	38.70
310300001835	300	309	7.000	4,31	46.70
310300001837	350	359	7.000	4,45	57.20
310300001838	360	369	7.000	5,16	59.80
310300001839	400	409	7.000	5,76	65.10
310300001840	435	444	7.000	6,25	74.80
310300001841	450	461	7.000	7,22	76.00
310300001842	500	513	7.000	8,87	81.50
3103000013184	550	563	7.000	9,75	106.30
310300001843	560	573	7.000	9,92	107.60
310300001844	600	613	7.000	10,63	109.80
310300001845	650	665	7.000	12,59	138.20
310300001846	700	715	7.000	13,56	157.70
310300001847	750	767	7.000	15,78	177.20
310300001848	800	817	7.000	18,17	188.90

RAPIDOBAT® square

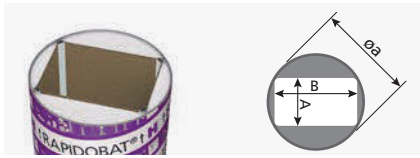


Formwork tube for square reinforced concrete columns.

- Prices apply to stock lengths: 3,000 mm and 4,000 mm
- Up to 4,000 mm in length, or longer on request
- Cutting surcharge for non-stock lengths + 8%
- Net surcharge for short pieces <2,500 mm
- Other dimensions available on request
- For alignment and fastening accessories, see page 141 and 143

Article number	Dimensions [mm]			Chamfer [mm]	Weight [kg/m]	Price per m [€]
	A	B	Outer dia.			
310400001781	200	200	272	24	6,90	46.40
310400001789	240	240	324	24	7,30	58.00
310400001798	250	250	340	24	7,50	59.60
310400001804	300	300	409	24	9,50	69.70
310400001810	350	350	513	24	14,10	85.70
310400001814	400	400	573	24	17,20	96.70
310400001817	450	450	665	24	21,50	167.70
310400001818	500	500	715	24	26,80	177.90

RAPIDOBAT® rectangle



Formwork tubes for rectangular reinforced concrete columns.

- Other dimensions available on request
- Prices apply to stock lengths: 3,000 mm and 4,000 mm
- Up to 4,000 mm in length, or longer on request
- Cutting surcharge for non-stock lengths + 8%
- Net surcharge for short pieces <2,500 mm
- For alignment and fastening accessories, see page 141 and 143

Article number	Dimensions [mm]			Chamfer [mm]	Weight [kg/m]	Price per m [€]
	A	B	Outer dia.			
310400001780	175	240	309	24	7,80	63.30
310400001782	200	240	324	24	8,50	52.50
310400001783	200	250	324	24	8,60	54.00
310400001784	200	300	384	24	9,80	63.50
310400001785	200	350	444	24	9,90	88.60
310400001786	200	400	461	24	13,90	78.90
310400001787	200	450	513	24	14,20	102.80
310400001788	200	500	563	24	15,50	126.50
310400001790	240	300	409	24	9,70	70.80
310400001791	240	350	444	24	11,00	108.50
310400001792	240	365	444	24	12,50	113.20
310400001794	240	400	513	24	14,00	114.50
310400001795	240	450	563	24	15,30	129.60
310400001796	240	500	573	24	15,30	131.30
310400001799	250	300	409	24	10,00	70.80
310400001800	250	350	444	24	11,10	108.50
310400001801	250	400	513	24	14,30	114.50
310400001802	250	450	563	24	15,30	123.50
310400001803	250	500	573	24	18,00	143.90
310400001805	300	350	513	24	13,70	87.00
310400001806	300	400	513	24	16,10	90.30
310400001807	300	450	563	24	15,05	138.90
310400001808	300	500	613	24	17,20	148.40
310400001811	350	400	563	24	17,70	101.70
310400001812	350	450	563	24	17,05	146.80
310400001813	350	500	665	24	20,10	170.90
310400001815	400	450	665	24	20,30	166.20
310400001816	400	500	665	24	20,10	171.30

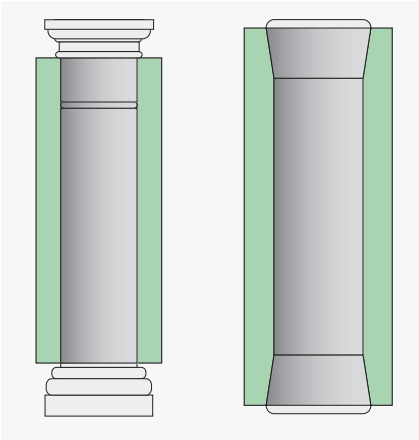
RAPIDO-Fix



Assembly aid for aligning all angular versions.

Article number	For dimensions [mm]	PU [pcs./set]	Weight [kg/pc.]	Price per set [€]
330300001930	All	2	0.28	20.90

RAPIDOBAT® custom shapes



RAPIDOBAT® shuttering elements for custom shapes. Any and all creative and complex custom shapes are possible. From special elliptical shapes to L-shaped columns. We can produce formwork according to your drawings and specifications. Just get in touch!

Type	Price [€]
RAPIDOBAT® custom shape	POA

Oval

Ellipse

L-shaped

Cut-out

Semi-circle

Half-column

Hexagon

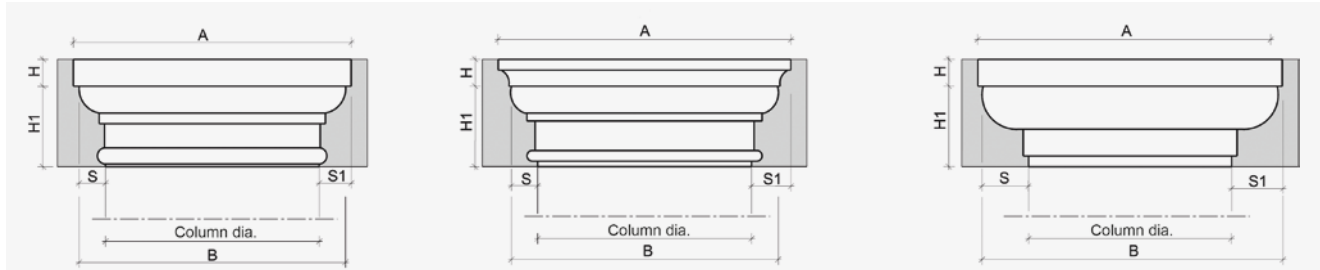
Octagon

Custom-made

Capitals

Capital formwork suitable for use with RAPIDOBAT® formwork tubes.

- Further dimensions and shapes available on request
- Prices apply to column diameters 200–300 mm
- Prices on request for diameters of more than 350 mm



Rome

Parma

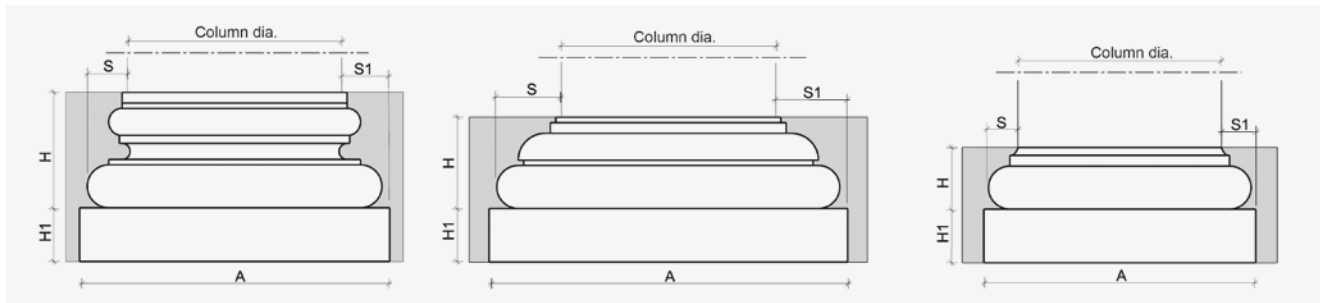
Palermo

Article number	Capital type	Dimensions [mm]					Price per piece [€]
		H	H1	S	S1	A	
3201...	Rome	50	150	50	60	Column dia. + 120	344.50
3201...	Parma / Abakus round	50	150	50	90	Column dia. + 180	336.80
3201...	Palermo	50	150	100	110	Column dia. + 220	334.90

Bases

Base formwork suitable for use with RAPIDOBAT® formwork tubes.

- Further dimensions and shapes available on request
- Prices apply to column diameters 200–300 mm
- Prices on request for diameters of more than 350 mm.



Messina

Verona

Ancona

Article number	Base type	Dimensions [mm]					Price per piece [€]
		H	H1	S	S1	A	
3203...	Messina	200	100	80	90	Column dia. + 180	350.40
3203...	Verona	200	100	70	80	Column dia. + 160	345.00
3203...	Ancona	100	100	55	65	Column dia. + 130	315.80

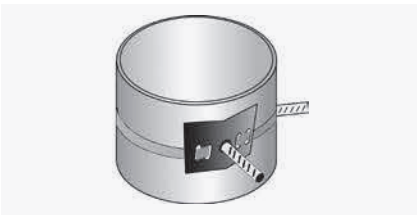
Release agent for capitals and bases

Gelatinous release agent for capitals and bases to simplify stripping the shuttering elements from the finished concrete.

Article number	Contents [litres]	Consumption per capital / base in litres	Weight [kg/bucket]	Price per litre [€]
320300004983	2.5	Approx. 0.65	2.14	53.60

RAPIDO-Clamp type D

Set



Consisting of a tension belt with two brackets and welded-on DYWIDAG anchor rods for aligning with push-pull props.

Article number	For diameter [mm]	Weight [kg/set]	Price per set [€]
330200001937	200-1,200	1.10	64.20
Article number		Weight [kg/pc.]	Price per piece [€]
330200001936	Single anchor plate for RAPIDO-Clamp type D	0.30	25.80

RAPIDO-Clamp type M



Fixed or adjustable steel sheet sleeves with DYWIDAG anchor rods for aligning with push-pull props.

Adjustable steel sleeve

Article number	For diameter [mm]	Variant	Weight [kg/set]	Price per set [€]
330200001926	250-400	Adjust. steel sleeve	2.95	91.30
330200001927	435-600	Adjust. steel sleeve	4.30	102.60
330200001928	650-800	Adjust. steel sleeve	6.75	180.70
330200001929	900-1,000	Adjust. steel sleeve	8.25	232.90
330200001925	1,200	Adjust. steel sleeve	9.90	346.00

RAPIDOBAT® accessories

- Adhesive tape for strengthening shuttering tubes and connecting half-shells
- Adhesive tape reinforced lengthways and across; 50 mm wide

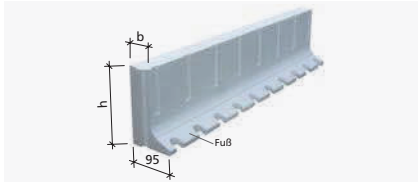
Article number	Function	PU [m/roll]	Weight [kg/roll]	Price per roll [€]
990500000318	Strengthening	50	0.65	16.60
990500019064	Half shells	50	0.78	68.50

WARMBORD®



WARMBORD® type SE

With base

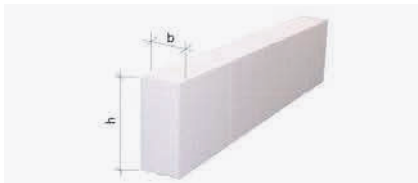


Insulating and ceiling edge shuttering made from expanded polystyrene (EPS) of thermal conductivity group 035.

Article number	Dimensions [mm]			Design	Weight [kg/m]	PU [m/box]	Price per m [€]
	h	l	b				
360100004986	200	1,000	60	With base	0.34	32.0	9,30
360100004987	220	1,000	60	With base	0.35	28.0	10.50
360100004989	250	1,000	60	With base	0.37	25.0	14.90

WARMBORD® type SE

Without base



Insulating and ceiling edge shuttering made from expanded polystyrene (EPS) of thermal conductivity group 035.

- Other dimensions available on request

Article number	Dimensions [mm]			Design	Weight [kg/m]	PU [m/box]	Price per m [€]
	h	l	b				
360100014435	180	1,000	80	Without base	0.28	24.0	9,80
360100014437	200	1,000	80	Without base	0.31	28.0	10.50
360100014439	220	1,000	80	Without base	0.34	21.0	11.30
360100014441	250	1,000	80	Without base	0.39	21.0	15.50
360100014432	160	1,000	100	Without base	0.29	30.0	10.30
360100014434	180	1,000	100	Without base	0.34	24.0	10.80
360100014436	200	1,000	100	Without base	0.38	24.0	13.20
360100014438	220	1,000	100	Without base	0.42	18.0	14.30
360100014440	250	1,000	100	Without base	0.48	21.0	15.90

WARMBORD® accessories

Article number	Type	Consumption [ml/m]	Contents [ml/can]	PU [pcs./box]	Price per can [€]
360200005005	WABO foam	25	750	12	17.80
360200005007	Gun foam	25	750	12	17.80

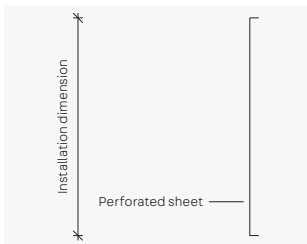
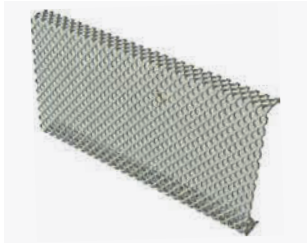
Article number	Type	Weight [kg/pc.]	PU [pcs.]	Price per piece [€]
360200005006	WABO foam gun	0.50	1	86.70

Shuttering elements



Shuttering element type R

Rough joint in line with EC2



Shuttering element used to create lost formwork in construction joints. This version produces rough joints in line with DIN EN 1992-1-1/NA.

Type R shuttering elements are made entirely from expanded metal.

Specify joint length and installation height (E dimension) when ordering.

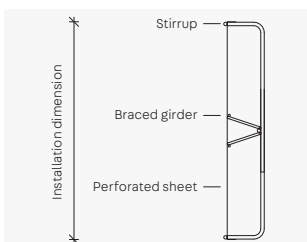
- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request

Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340100013228	80–200	0.96	9.90
340100013229	210–250	1.16	11.30
340100013230	260–300	1.36	12.70
340100013231	310–350	1.56	14.60
340100014960	360–400	1.76	16.30
340100014961	410–500	2.16	21.90
340100013234	510–600	2.56	31.90
340100013235	610–700	2.96	35.50
340100013236	710–800	3.36	38.20
340100013237	810–900	3.76	41.00
340100013238	910–1,000	4.16	44.20

Extension products for shuttering elements type R		Surcharge [€]
Surcharge for short pieces		10%
Surcharge for tapered cuts per metre		8.90

Shuttering elements type A R

Rough joint in line with EC2



Shuttering element used to create lost formwork in construction joints. This version produces rough joints in line with DIN EN 1992-1-1/NA.

The A R version is fitted with a lattice beam structure.

Specify joint length and installation height (E dimension) when ordering.

- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request

Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340300013275	80–200	2.33	27.50
340300013276	210–250	2.56	29.30
340300013277	260–300	2.78	30.90
340300013278	310–350	3.22	35.00
340300014963	360–400	3.46	36.40
340300013280	410–500	3.95	42.60
340300013281	510–600	4.88	52.90

Extension products for shuttering elements type A R		Surcharge [€]
Surcharge for short pieces		10%
Surcharge for tapered cuts per metre		8.90

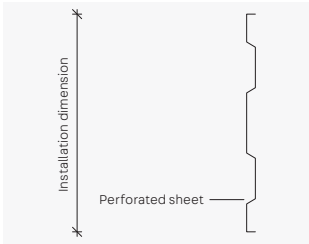


Shuttering elements for waterproof construction joints can be found in the section on Sealing starting on page 8.

You can find the suitable FB spacer (SPACER) for shuttering elements (floor/floor or ceiling/ceiling) at page 148.

Shuttering elements type V

Interlocking joint in line with EC2



Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

Type V shuttering elements are made entirely from expanded metal.

Specify joint length and installation height (E dimension) when ordering.

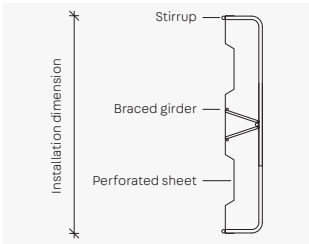
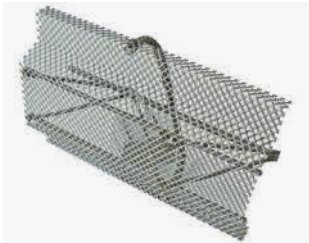
- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request

Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340200013251	140–200	1.20	11.30
340200013252	210–250	1.30	12.80
340200013253	260–300	1.50	14.30
340200013254	310–350	1.70	17.60
340200014962	360–400	1.90	18.00
340200013256	410–500	2.30	23.90
340200013257	510–600	2.70	34.40
340200013258	610–700	3.10	37.60
340200013259	710–800	3.64	40.80
340200013260	810–900	4.04	43.90
340200013261	910–1,000	4.44	46.90

Extension products for shuttering elements type V	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts per metre	8.90

Shuttering elements type A V

(Version with steel construction) – interlocking joint in line with EC2



Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

The A V version is fitted with a lattice beam structure for reinforcement.

Specify joint length and installation height (E dimension) when ordering.

- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request

Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340400013300	140–200	2.57	29.10
340400013301	210–250	2.70	31.00
340400013302	260–300	2.92	32.10
340400013303	310–350	3.36	36.30
340400014964	360–400	3.55	37.30
340400013305	410–500	4.04	43.20
340400013306	510–600	5.42	56.80

Extension products for shuttering elements type A V	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts per metre	8.90

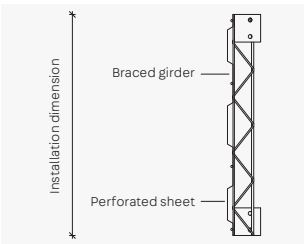


Shuttering elements for waterproof construction joints can be found in the section on Sealing starting on page 8.

You can find the suitable FB spacer (SPACER) for shuttering elements (floor/floor or ceiling/ceiling) at page 148.

Shuttering elements type A V-S

Interlocking joint in line with EC2, reinforced version



Retaining reinforcement
for on-site bracing see on
page 9.

Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

The A V-S version is fitted with a lattice beam structure for reinforcement.

Specify joint length and installation height (E dimension) when ordering.

- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request

Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340400022132	600 - 690	4.82	70.00
340400022133	700 - 790	5.21	72.90
340400022134	800 - 890	6.78	76.10
340400022135	900 - 990	7.15	79.10
340400022136	1,000 - 1,090	8.96	88.70
340400022137	1,100 - 1,190	9.40	99.30
340400022138	1,200 - 1,290	9.84	109.90
340400022139	1,300 - 1,390	10.94	120.70
340400022140	1,400 - 1,490	11.38	131.40
340400022141	1,500 - 1,590	11.82	141.90
340400022142	1,600 - 1,690	14.01	152.60
340400022143	1,700 - 1,790	14.49	163.30
340400022144	1,800 - 1,890	14.98	173.90
340400022145	1,900 - 2,000	16.81	184.60

Extension products for shuttering elements type A V-S		Surcharge [€]
Surcharge for short pieces		10%
Surcharge for tapered cuts per metre		8.90

Shuttering elements type ADK



Shuttering element for floor slabs with upstand. Flexible and fast shuttering with a secure bonding effect thanks to surface profiling.

Specify installation height (E dimension) when ordering.

- Element length: 1,500 mm
- Other dimensions on request

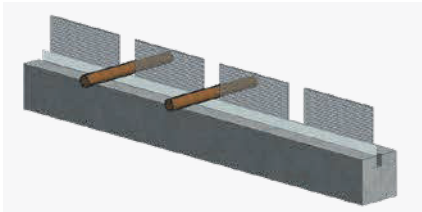
Shuttering element type ADK 6/150 – incl. integrated edge stirrup reinforcement 6/150

Article number	Installation height [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
340100016750	80/160	2.30	75	20.10
340100016751	100/180	2.34	75	20.40
340100016752	120/200	2.45	75	21.70
340100016753	140/220	2.56	75	22.40
340100016754	160/240	2.67	75	23.00

Shuttering element type ADK 8/125 – incl. integrated edge stirrup reinforcement 8/125

Article number	Installation height [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
340100016755	80/160	3.50	75	26.10
340100016756	100/180	3.64	75	26.50
340100016757	120/200	3.77	75	28.00
340100016758	140/220	3.91	75	29.10
340100016759	160/240	4.05	75	30.00

Spacer



Square, fibre-reinforced concrete spacer with integrated expanded metal strips and rebar spacings of 75/100/120/150/200 mm for 30-50 mm concrete cover. Reduces concrete penetration to a minimum in formed construction joints in floor and ceiling areas. For use with PENTAFLEX® ABS (page 8), KUNEX® ABS (page 27) and shuttering elements (starting on page 147).

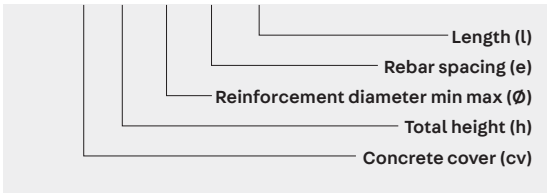
- Other dimensions available on request

Article number	Type	Concrete cover [mm]	Rebar spacing [mm]	Height [mm]	Length [mm]	Diameter [mm]	PU [pcs./pal.]	Weight [kg/pc.]	Price per piece [€]
620400026...	Spacer 35	35	75/100/120/150/200	80	1200	10 - 16	192	2,78	19.40
	Spacer 50	50		120	1200	20 - 28			
Surcharge for deviating cv dimension (35-60 mm)									2.50
Surcharge for deviating height (bis 200 mm)									2.50
Surcharge for deviating reinforcement diameter									2.50
Surcharge for deviating reinforcement grid and/or special length									8.00

The details can be combined as required

Example order for spacer

SPACER 35 / 80 - 10 16 - 150 - 1200



Formwork accessories



Fibre-reinforced concrete pipes



Round fibre-reinforced concrete pipe as formwork spacer for reinforced concrete walls.
Tested for watertightness in waterproof components.

Article number	Inside diameter [mm]	Outside diameter [mm]	Length [mm]	Weight [kg/m]	PU [m/pal.]	Price per m [€]
720100021521	22	40	1,280	1.75	750.08	2.70

Fibre-reinforced concrete pipe sections



Round fibre-reinforced concrete pipe as formwork spacer for reinforced concrete walls.
Tested for watertightness in waterproof components.

- Other dimensions available on request

Article number	Inside diameter [mm]	Outside diameter [mm]	Length [mm]	Weight [kg/pc.]	PU [pcs./bundle]	PU [pcs./pal.]	Price per piece [€]
720100003774	22	40	100	0.18	150	2,100	0.60
720100003775	22	40	120	0.21	50	2,000	0.60
720100003777	22	40	140	0.25	50	2,000	0.70
720100003778	22	40	150	0.26	50	2,000	0.70
720100003779	22	40	160	0.28	50	2,000	0.70
720100003780	22	40	180	0.32	25	1,000	0.80
720100003782	22	40	200	0.35	25	1,000	0.80
720100003783	22	40	220	0.38	25	1,000	0.80
720100003784	22	40	230	0.40	25	1,000	0.80
720100003785	22	40	240	0.42	25	1,000	0.80
720100003786	22	40	250	0.44	25	1,000	0.90
720100003787	22	40	280	0.49	25	1,000	1.00
720100003789	22	40	300	0.53	25	1,000	1.00
720100003791	22	40	330	0.58	30	1,020	1.10
720100003792	22	40	340	0.60	30	1,020	1.10
720100003793	22	40	350	0.62	30	1,020	1.20
720100003794	22	40	360	0.63	30	1,020	1.30
720100003795	22	40	380	0.67	30	1,020	1.30
720100003796	22	40	400	0.70	30	1,020	1.30
720100003798	22	40	450	0.79	30	510	1.70
720100003800	22	40	500	0.88	20	500	1.70
720100003801	22	40	550	0.96	20	500	2.10
720100003802	22	40	600	1.05	20	500	2.10

Fibre-reinforced concrete plugs



Plug made from fibre-reinforced concrete for sealing fibre-reinforced concrete formwork spacers.

- Other dimensions available on request

Article number	Dia. [mm]	Length [mm]	Weight [kg/100 pcs.]	PU [pcs./sack]	Price per 100 pcs. [€]
720200005359	22	20	1.00	1,000	14.90
720200005360	22	40	2.00	1,000	19.30
720200005361	22	50	2.50	500	21.60

Fibre-reinforced concrete adhesive



Two-component adhesive with epoxy resin base for bonding fibre-reinforced concrete plugs to fibre-reinforced concrete pipes.

- Watertightness tested in accordance with DIN 1048
- Mixing ratio of components A:B = 1:1.

Article number	Consumption	Weight [kg/can]	PU [can]	Price per kg [€]
720300005370	2 kg per 1,000 pcs.	1.00	1	36.50

Spacer tubes



Plastic spacer tubes with rough surfaces for producing tie points for wall formwork. Element length: 2,000 mm

- Also available with smooth surfaces
- Combination with super cones recommended
- Other dimensions and lengths available on request

Article number	Inside diameter [mm]	Outside diameter [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
730100002347	20	26	26.00	50	2,450	75.70
730100005377	22	26	18.00	50	2,800	50.40
730100002355	26	32	36.00	50	1,800	110.70
730100003898	32	36	29.50	30	1,260	147.90
730100002361	40	46	54.00	30	900	190.60

Super cones



Cone for extending the area of contact on the formwork and to protect the formwork facing

- To be removed after casting the concrete
- Reusable
- Cones of other heights available on request

Article number	Dia. [mm]	Cone height [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	Price per 1,000 pcs. [€]
730100002410	20	10	5.00	500	3,000	40.00
730100002411	22	10	6.00	500	3,000	29.50
730100002412	26	10	8.00	-	500	66.20
730100002413	32	10	8.40	-	500	79.90
730100002414	40	20	16.00	125	1,000	413.30

Super plugs



Plastic plugs for sealing spacer tubes and drill holes.

- Other dimensions available on request

Article number	Dia. [mm]	Weight [kg/ 1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	Price per 1,000 pcs. [€]
730100002418	20	2.40	1,000	5,000	24.90
730100002419	22	3.60	1,000	4,000	25.40
730100002420	26	4.80	1,000	-	39.30
730100002421	32	8.00	500	-	49.50
730100002422	40	12.00	500	-	258.90

Sealing plugs



Elastic, PVC-free sealing plug for sealing formwork tie points against incoming water.

Article number	Dia. [mm]	Weight [kg/ 1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
990300002334	20	3.00	500	2,500	50,000	92.20
990300002335	22	3.60	500	2,500	50,000	68.90
990300002337	26	5.20	250	1,000	30,000	185.80

OPTI wall strengtheners



Pre-assembled plastic tie point for wall formwork.
We recommend using
PENTAFLEX® OPTI wall strengtheners in watertight components (see page 13).

- Other lengths available on request

Article number	Inside diameter [mm]	Outside diameter [mm]	Length [mm]	Weight [kg/ 100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730100002425	22	26	150	3.5	100	5,000	35.90
730100002426	22	26	180	4.5	100	5,000	33.00
730100002427	22	26	200	5.0	100	4,000	33.70
730100002429	22	26	240	5.6	100	4,000	35.90
730100002430	22	26	250	6.0	100	4,000	36.40
730100002439	22	26	300	6.8	100	4,000	37.30
730100002440	22	26	350	10.5	75	3,000	46.80
730100002441	22	26	365	12.0	75	3,000	47.50
730100002443	22	26	400	14.0	75	3,000	49.50
730100002444	22	26	450 ¹⁾	15.0	50	2,000	56.60
730100002445	22	26	500 ¹⁾	17.0	50	2,000	61.90

¹⁾ Connected version

OPTI plugs



Plastic plugs for sealing OPTI wall strengtheners.

Article number	Dia. [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bag]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
990300002308	22	3.60	500	2,500	100,000	35.90

OPTI cones



Cones with waterstops for extending the spacer tube area of contact on the formwork. Remains in the concrete after casting.

- Other dimensions available on request

Article number	Dia. [mm]	Weight [kg/1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
730100002406	22/26	10.0	500	25,000	75.70
730100002407	22/28	11.0	500	25,000	108.80

OPTI wall strengtheners combi pack



Pre-assembled plastic tie point for wall formwork.
Pack includes OPTI plugs.

- Other lengths available on request

Article number	Inside diameter [mm]	Outside diameter [mm]	Length [mm]	Weight [kg/100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730100002446	22	26	150	3.50	100	5,000	42.70
730100002447	22	26	180	4.50	100	5,000	40.00
730100002448	22	26	200	5.00	100	4,000	40.60
730100002450	22	26	240	5.60	100	4,000	42.00
730100002451	22	26	250	6.00	100	4,000	43.40
730100002453	22	26	300	6.80	100	4,000	44.70
730100002454	22	26	350	10.50	75	3,000	54.90
730100002455	22	26	365	12.00	75	3,000	55.80
730100002305	22	26	400	14.00	75	3,000	57.30
730100002306	22	26	450 ¹⁾	15.00	50	2,000	64.80
730100002307	22	26	500 ¹⁾	17.00	50	2,000	71.60

¹⁾ Connected version

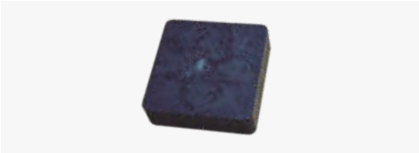
Distance plates



Stackable mounting plates with cutouts for use as assembly aids for aligning and installing precast concrete components, for example.

Article number	Length [mm]	Width [mm]	Thickness [mm]	Weight [kg/ 1,000 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730200005398	45	75	2	4.00	500	30,000	4.80
730200005399	45	75	3	6.00	500	25,000	6.10
730200005400	45	75	5	10.00	500	25,000	8.20
730200005401	45	75	10	20.00	500	20,000	13.90
730200005402	45	75	20	40.00	250	10,000	32.30

Spacer plates type V

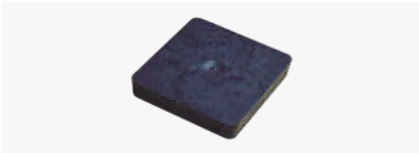


Pressure-resistant spacer plates for use as assembly aids for aligning and installing precast concrete components, for example.

Article number	Length [mm]	Width [mm]	Thickness [mm]	Weight [kg/ 100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730200005405	70	70	2	0.96	1,000	40,000	5.30
730200005408	70	70	3	1.44	1,000	40,000	7.10
730200005410	70	70	4	1.92	500	20,000	10.10
730200005411	70	70	5	2.40	500	20,000	11.80
730200005412	70	70	6	2.88	500	20,000	15.30
730200005413	70	70	7	3.36	500	20,000	21.90
730200005414	70	70	8	3.84	250	10,000	23.30
730200005415	70	70	9	4.32	250	10,000	24.00
730200005403	70	70	10 ¹⁾	4.80	250	10,000	24.80
730200005404	70	70	15 ¹⁾	7.20	200	8,000	49.50
730200005406	70	70	20 ¹⁾	9.60	150	6,000	61.90
730200005407	70	70	25 ¹⁾	12.00	100	4,000	99.00
730200005409	70	70	30 ¹⁾	14.40	100	4,000	126.90

¹⁾ Not solid plates

Mounting plates



Pressure-resistant spacer plates for use as assembly aids for aligning and installing precast concrete components, for example.

Article number	Length [mm]	Width [mm]	Thickness [mm]	Weight [kg/ 100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730200005429	100	100	2	2.28	500	20,000	11.80
730200005430	100	100	3	3.32	500	20,000	14.40
730200005431	100	100	5	5.04	250	10,000	22.00
730200005432	100	100	8	8.20	100	4,000	46.20
730200005433	100	100	10	10.30	100	4,000	54.40
730200005434	100	100	15	15.10	50	2,000	120.40
730200005435	100	100	20	20.50	50	2,000	151.50
730200005436	100	100	30	30.20	50	1,000	225.90

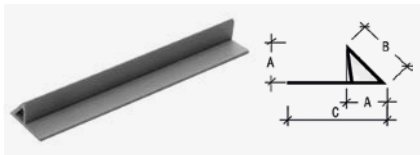
Spacer plates type S



Pressure-resistant spacer plates with slots for use as assembly aids for aligning and installing precast concrete components, for example. Suitable for use between protruding reinforcement bars.

Article number	Length [mm]	Width [mm]	Thickness [mm]	Slot [mm]	Weight [kg/100 pcs.]	PU [pcs./bag]	PU [pcs./sack]	Price per 100 pcs. [€]
730200005418	70	70	2	22	0.76	250	1,000	5.40
730200005421	70	70	3	22	1.16	250	1,000	7.10
730200005423	70	70	4	22	1.52	125	500	10.00
730200005424	70	70	5	22	1.92	125	500	11.90
730200005425	70	70	6	22	2.32	125	500	15.30
730200005426	70	70	7	22	2.72	125	500	19.50
730200005427	70	70	8	22	3.12	125	250	21.60
730200005428	70	70	9	22	3.52	125	250	23.40
730200005416	70	70	10	22	3.84	125	250	25.10
730200005417	70	70	15	22	5.80	50	200	49.50
730200005419	70	70	20	22	7.60	50	150	63.40
730200005420	70	70	25	22	9.60	100	-	99.80
730200005422	70	70	30	22	11.60	100	-	122.40

Corner strips



Triangular plastic strips with nail flange for producing evenly chamfered edges on concrete components. Element length: 2,500 mm.

- Tolerance: ± 1 mm
- Reusable

Article number	Dimensions [mm]			Profile	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
	A	B	C					
730300005454	7	11	23	Solid	7.00	100	6,000	55.90
730300005455	11	15	23	Hollow	8.00	100	5,000	44.70
730300005457	15	22	29	Hollow	11.70	100	4,900	55.90
730300005459	20	27	35	Hollow	21.80	50	3,600	84.90
730300005460	25	36	42	Hollow	29.80	50	3,000	118.30

Chamfer strips



Triangular plastic strips for producing evenly chamfered edges on concrete components. Element length: 2,500 mm.

- Tolerance: ± 1 mm
- Reusable

Article number	Dimensions [mm]		Profile	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
	A	B					
730300005438	10	15	Hollow	5.20	100	7,200	29.50
730300005440	15	21	Hollow	8.00	100	5,400	34.40
730300005442	20	28	Hollow	12.00	100	4,900	45.50
730300005444	25	35	Hollow	16.60	50	2,450	81.40
730300005445	30	40	Hollow	23.60	50	2,400	121.90

Drip profiles



Plastic profile strip with integrated drip profile for drip noses and chamfer strips. Used to produce evenly chamfered edges on concrete components, e.g. for the edges of balconies or porches.
Element length: 2,500 mm.

- Reusable

Article number	Dimensions [mm]			Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
	A	B	C				
730300005446	10	33	10	12.00	100	5,000	88.30
730300005447	10	48	10	16.30	100	4,900	128.90

Drip noses



Plastic profile strip for producing water drip edges on concrete components.
Element length: 2,500 mm.

Article number	Dimensions [mm]	Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
	B				
730300005449	12	8.00	100	5,600	44.70
730300005450	20	9.50	100	4,900	53.30

T profile



Plastic T-profile for covering small formwork joints in concrete components. Element length: 2,500 mm.

Article number	Dimensions [mm]		Weight [kg/100 m]	PU [m/bundle]	PU [m/pal.]	Price per 100 m [€]
	B	H				
730300005452	38	22	15.00	100	4,800	82.80

Plastic nails



Fastening nail with barbs for fixing insulation panels in fresh concrete.

Article number	Length [mm]	Weight [kg/1,000 pcs.]	PU [pcs./bag]	PU [pcs./large sack]	PU [pcs./pal.]	Price per 1,000 pcs. [€]
730900005525	50	1.70	1.000	-	60,000	24.90
730900005527	75	3.60	500	5.000	100,000	18.00
730900005528	90	4.00	500	5.000	100,000	19.30
730900005518	100	4.40	500	3.000	60,000	20.00
730900005519	125	5.20	500	2.500	50,000	22.80
730900005520	150	5.60	500	2.500	50,000	42.00
730900005521	175	7.20	250	2.000	40,000	76.40
730900005522	200	8.00	125	1.000	20,000	89.50
730900005523	250	11.20	250	-	10,000	183.20
730900005524	300	14.00	250	-	10,000	198.40

Multi-rockets



Robust plastic spacer with steel core and integrated waterstop for producing triple-layer walls in precast concrete plants.

- Other dimensions available on request (max. 460 mm)

Article number	Wall thickness [mm]	Weight [kg/100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730600005462	150	7.60	100	5,000	56.60
730600005464	180	9.60	100	5,000	57.90
730600005466	200	10.50	100	5,000	60.70
730600005468	215	12.20	100	4,000	64.90
730600005469	220	11.60	100	4,000	65.30
730600005472	240	12.20	100	4,000	65.40
730600005473	250	12.60	100	4,000	68.80
730600005478	300	22.20	50	2,000	96.30
730600005483	340	24.20	50	2,000	102.00
730600005484	350	25.20	50	1,500	108.80
730600005485	360	26.00	50	1,500	113.00
730600005486	365	26.20	50	1,500	113.20
730600005489	400	28.40	50	1,500	118.40

ISI rockets



Robust steel spacers for producing triple-layer walls in precast concrete plants.

Article number	Wall thickness [mm]	Weight [kg/100 pcs.]	PU [pcs./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
730700005495	120	4.60	100	5,000	51.40
730700005498	150	5.80	100	5,000	52.30
730700005499	160	6.20	100	5,000	54.20
730700005501	180	7.00	100	5,000	54.60
730700005504	200	7.80	100	5,000	55.90
730700005508	220	8.80	100	4,000	58.70
730700005510	240	9.40	100	4,000	60.20
730700005511	250	9.80	100	4,000	60.80
730700005514	280	11.00	100	4,000	65.40
730700005516	300	11.80	50	3,000	65.80

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.

Connection

Shear dowels

Shear dowels type HED-S	160
Shear dowels type HED-P	160

Slide sleeves

Slide sleeves type GK	161
Slide sleeve type GS	161
Slide sleeve type GSQ	161

Fire-protection collars for shear dowels

Fire-protection collars type BRM	162
Fire-protection collars type BRMQ	162

Double shear connectors

Double shear connectors JDSD	163
Double shear connectors JDSDQ	163

Fire-protection collars for double shear connectors

Fire-protection collars JBRM	164
Fire-protection collars JBRMQ	164

Connection straps

Connection straps JVB-N	165
Connection straps JVB-V	165
Connection straps JVB-Z	165
Connection straps JVB-ZS	166
Tilt restraint straps JVB-WRL	166
Tilt restraint straps JVB-WLL	166

Accessories

Clamp connections JSV	167
Turnbuckles SP	167
Pressure bolts JDS	167

Shear dowels



Shear dowels type HED-S



Shear dowels type HED-S, hot-dip galvanised

Article number	Type	Dimensions Dia. x l [mm]	Weight [kg/pc.]	Price per piece [€]
550100003857	HED-S 20/300 ¹⁾	20x300 ²⁾	0,75	4.70
550100003855	HED-S 20/500 ¹⁾	20x500 ²⁾	1,25	6.80
550100003863	HED-S 22/300 ¹⁾	22x300 ²⁾	0,90	5.40
550100003861	HED-S 22/500 ¹⁾	22x500 ²⁾	1,50	8.10
550100003869	HED-S 25/300 ¹⁾	25x300 ²⁾	1,15	6.20
550100003867	HED-S 25/500 ¹⁾	25x500 ²⁾	1,95	9.20
550100003875	HED-S 30/350 ¹⁾	30x350 ²⁾	1,95	9.90
550100003873	HED-S 30/500 ¹⁾	30x500 ²⁾	2,80	13.50

¹⁾ R 90-version with fire-protection collar
²⁾ Other diameters and lengths on request

Shear dowels type HED-S, Stainless steel

Article number	Type	Dimensions Dia. x l [mm]	Weight [kg/pc.]	Price per piece [€]
550100003856	HED-S 20/300 ¹⁾	20x300 ²⁾	0,75	10.20
550100003854	HED-S 20/500 ¹⁾	20x500 ²⁾	1,25	16.10
550100003862	HED-S 22/300 ¹⁾	22x300 ²⁾	0,90	11.20
550100003860	HED-S 22/500 ¹⁾	22x500 ²⁾	1,50	17.60
550100003868	HED-S 25/300 ¹⁾	25x300 ²⁾	1,15	15.20
550100003866	HED-S 25/500 ¹⁾	25x500 ²⁾	1,95	24.20
550100003874	HED-S 30/350 ¹⁾	30x350 ²⁾	1,95	22.50
550100003872	HED-S 30/500 ¹⁾	30x500 ²⁾	2,80	31.50

¹⁾ R 90-version with fire-protection collar
²⁾ Other diameters and lengths on request

Shear dowels type HED-P



Article number	Type	Element length [mm]	Surcharge per piece for HED-S [€]
550200003833	HED-P 20/300 ¹⁾	300 ²⁾	4.30
550200003831	HED-P 20/500 ¹⁾	500 ²⁾	5.20
550200003839	HED-P 22/300 ¹⁾	300 ²⁾	4.30
550200003837	HED-P 22/500 ¹⁾	500 ²⁾	5.20
550200003845	HED-P 25/300 ¹⁾	300 ²⁾	4.30
550200003843	HED-P 25/500 ¹⁾	500 ²⁾	5.20
550200003851	HED-P 30/350 ¹⁾	350 ²⁾	4.30
550200003849	HED-P 30/500 ¹⁾	500 ²⁾	5.20

¹⁾ R 90-version with fire-protection collar
²⁾ Other diameters and lengths on request

Material and design

- fv = Hot-dip galvanised steel
- A4 = Stainless steel, corrosion resistance class III (CRC III)



Suitable accessories can be found from page 167.

Slide sleeves



Slide sleeves type GK

For longitudinal movement



Article number	Type	Material	Element length [mm]	For shear dowel type	Weight [kg/pc.]	Price per piece [€]
550500004970	GK 20/160	Plastic	160 ¹⁾	HED-S 20/300	0,035	3.60
550500004971	GK 20/265	Plastic	265 ¹⁾	HED-S 20/500	0,060	3.90
550500004973	GK 22/160	Plastic	160 ¹⁾	HED-S 22/300	0,040	3.90
550500004974	GK 22/265	Plastic	265 ¹⁾	HED-S 22/500	0,065	4.50
550500004976	GK 25/160	Plastic	160 ¹⁾	HED-S 25/300	0,050	4.70
550500004977	GK 25/265	Plastic	265 ¹⁾	HED-S 25/500	0,085	4.80
550500004979	GK 30/185	Plastic	185 ¹⁾	HED-S 30/350	0,055	5.60
550500004980	GK 30/265	Plastic	265 ¹⁾	HED-S 30/500	0,090	6.10

¹⁾ Other lengths available on request (For type GK max. l = 320 mm)

Slide sleeve type GS

For longitudinal movement



Article number	Type	Material	Element length [mm]	For shear dowel type	Weight [kg/pc.]	Price per piece [€]
550600012748	GS 20/160	A4	160 ¹⁾	HED-S 20/300	0,37	15.80
550600012749	GS 20/265	A4	265 ¹⁾	HED-S 20/500	0,61	18.00
550600012750	GS 22/160	A4	160 ¹⁾	HED-S 22/300	0,38	18.20
550600012751	GS 22/265	A4	265 ¹⁾	HED-S 22/500	0,63	20.30
550600012752	GS 25/160	A4	160 ¹⁾	HED-S 25/300	0,42	23.70
550600012753	GS 25/265	A4	265 ¹⁾	HED-S 25/500	0,69	28.30
550600012754	GS 30/185	A4	185 ¹⁾	HED-S 30/350	0,48	24.30
550600012755	GS 30/265	A4	265 ¹⁾	HED-S 30/500	0,79	26.70

¹⁾ Other lengths available on request

Slide sleeve type GSQ

For longitudinal and transverse movement



Article number	Type	Material	Element length [mm]	For shear dowel type	Weight [kg/pc.]	Price per piece [€]
550700012757	GSQ 20/180	A4	180 ¹⁾	HED-S 20/300	0,82	27.40
550700012758	GSQ 20/265	A4	265 ¹⁾	HED-S 20/500	1,20	33.30
550700012759	GSQ 22/180	A4	180 ¹⁾	HED-S 22/300	0,84	32.40
550700012760	GSQ 22/265	A4	265 ¹⁾	HED-S 22/500	1,24	40.60
550700012761	GSQ 25/180	A4	180 ¹⁾	HED-S 25/300	0,91	38.50
550700012762	GSQ 25/265	A4	265 ¹⁾	HED-S 25/500	1,34	50.30
550700012763	GSQ 30/205	A4	205 ¹⁾	HED-S 30/350	1,26	42.50
550700012764	GSQ 30/265	A4	265 ¹⁾	HED-S 30/500	2,08	50.60

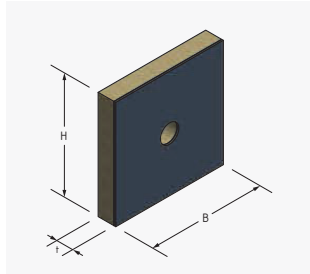
¹⁾ Other lengths available on request

Fire-protection collars for shear dowels



Fire-protection collars type BRM

for HED-P / HED-S, Classification R 90

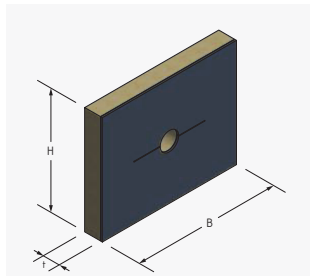


Article number	Type	Dimensions H x W [mm]	Thick- ness t [mm]	Max. joint opening f [mm]	Weight [kg/pc.]	To be used with	Price per piece [€]
550300002477	BRM-20-20	122x122	20	30 ¹⁾	0,09	GK + GS 20	7.40
550300002480	BRM-22-20	122x122	20	30 ¹⁾	0,09	GK + GS 22	7.40
550300002486	BRM-25-20	122x122	20	30 ¹⁾	0,09	GK + GS 25	7.40
550300002492	BRM-30-20	122x122	20	30 ¹⁾	0,09	GK + GS 30	7.40
550300002478	BRM-20-30	122x122	30	40 ¹⁾	0,11	GK + GS 20	8.20
550300002481	BRM-22-30	122x122	30	40 ¹⁾	0,11	GK + GS 22	8.20
550300002487	BRM-25-30	122x122	30	40 ¹⁾	0,11	GK + GS 25	8.20
550300002493	BRM-30-30	122x122	30	40 ¹⁾	0,11	GK + GS 30	8.20
550300002479	BRM-20-40	122x122	40	50 ¹⁾	0,14	GK + GS 20	8.70
550300002482	BRM-22-40	122x122	40	50 ¹⁾	0,14	GK + GS 22	8.70
550300002488	BRM-25-40	122x122	40	50 ¹⁾	0,14	GK + GS 25	8.70
550300002494	BRM-30-40	122x122	40	50 ¹⁾	0,14	GK + GS 30	8.70

¹⁾ Use two BRM collars in larger joint openings

Fire-protection collars type BRMQ

for HED-P / HED-S with GSO



Article number	Type	Dimensions H x W [mm]	Thick- ness t [mm]	Max. joint opening f [mm]	Weight [kg/pc.]	To be used with	Price per piece [€]
550300002495	BRMQ-20-20	152x122	20	30 ¹⁾	0,11	GSQ 20	9.00
550300002498	BRMQ-22-20	152x122	20	30 ¹⁾	0,11	GSQ 22	9.00
550300002501	BRMQ-25-20	152x122	20	30 ¹⁾	0,11	GSQ 25	9.00
550300002504	BRMQ-30-20	152x122	20	30 ¹⁾	0,11	GSQ 30	9.00
550300002496	BRMQ-20-30	152x122	30	40 ¹⁾	0,14	GSQ 20	9.30
550300002499	BRMQ-22-30	152x122	30	40 ¹⁾	0,14	GSQ 22	9.30
550300002502	BRMQ-25-30	152x122	30	40 ¹⁾	0,14	GSQ 25	9.30
550300002505	BRMQ-30-30	152x122	30	40 ¹⁾	0,14	GSQ 30	9.30
550300002497	BRMQ-20-40	152x122	40	50 ¹⁾	0,17	GSQ 20	10.00
550300002500	BRMQ-22-40	152x122	40	50 ¹⁾	0,17	GSQ 22	10.00
550300002503	BRMQ-25-40	152x122	40	50 ¹⁾	0,17	GSQ 25	10.00
550300002506	BRMQ-30-40	152x122	40	50 ¹⁾	0,17	GSQ 30	10.00

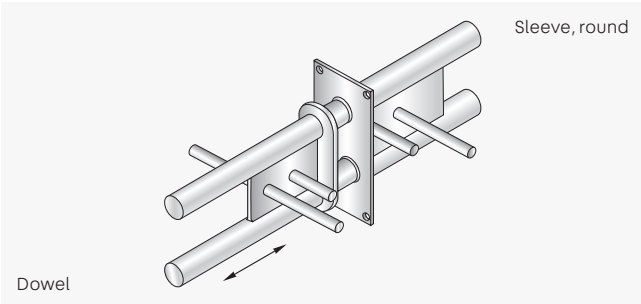
¹⁾ Use two BRM collars in larger joint openings

Double shear connectors



Double shear connectors JDSD

National technical approval (abZ Z-15.7-237)
For longitudinal or transverse movement



Type	Price per piece [€]		
	Dowel	Sleeve (round sliding tube)	Dowel + sleeve
JDSD 20 HF	80.50	35.60	116.10
JDSD 25 HF	101.00	53.10	154.10
JDSD 30 HF	126.30	59.10	185.40
JDSD 45 HF	145.20	62.10	207.30
JDSD 60 HF	184.30	76.50	260.80
JDSD 90 HF	310.50	96.00	406.50
JDSD 120 HF	373.90	145.70	519.60
JDSD 130	431.20	241.10	672.30
JDSD 150	697.90	303.20	1,001.10
JDSD 400	1,575.70	463.80	2,039.50
JDSD 450	2,414.50	493.80	2,908.30

Example order for double shear connector JDSD 60 HF

Complete (dowel element and sleeve)

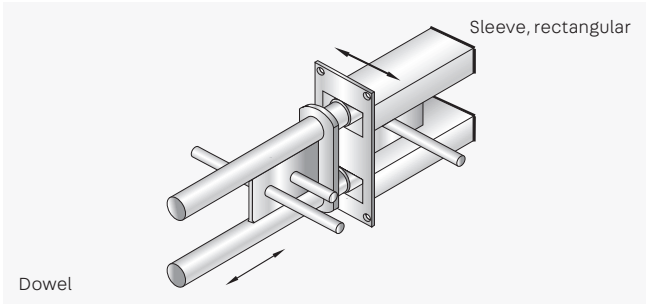
Type	Design
JDSD	60 HF

Version and material

- A4 = Stainless steel, corrosion resistance class III (CRC III)

Double shear connectors JDSDQ

National technical approval (abZ Z-15.7-237)
For longitudinal and transverse movement



Type	Price per piece [€]		
	Dowel	Sleeve (round sliding tube)	Dowel + sleeve
JDSDQ 25 HF	101.00	97.10	198.10
JDSDQ 30 HF	126.30	107.90	234.20
JDSDQ 45 HF	145.20	117.80	263.00
JDSDQ 60 HF	184.30	160.10	344.40
JDSDQ 90 HF	310.50	236.70	547.20
JDSDQ 120 HF	373.90	346.70	720.60
JDSDQ 130	431.20	447.80	879.00
JDSDQ 150	697.90	621.40	1,319.30
JDSDQ 400	1,575.70	1,155.60	2,731.30
JDSDQ 450	2,414.50	1,440.80	3,855.30

Example order for double shear connector JDSDQ 60 HF

Complete (dowel element and sleeve)

Type	Design
JDSDQ	60 HF



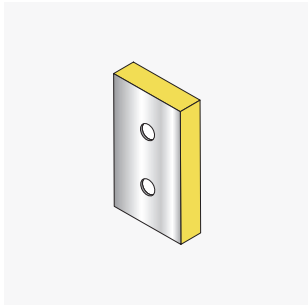
Suitable accessories can be found from page 167.

Fire-protection collars for double shear connectors



Fire-protection collars JBRM

For JDSD, Classification R 120



Type	Price per piece [€]	
	Joint width ¹⁾	
	20 mm	30 mm
JBRM 20	10.70	12.00
JBRM 25	10.70	12.00
JBRM 30	10.70	12.00
JBRM 45	13.20	13.60
JBRM 60	13.60	15.30
JBRM 90	14.90	16.30
JBRM 120	16.80	18.20
JBRM 130	17.90	19.30
JBRM 150	18.80	20.60
JBRM 400	25.70	27.50
JBRM 450	30.50	32.90

¹⁾ Use two JBRM collars in larger joint openings.

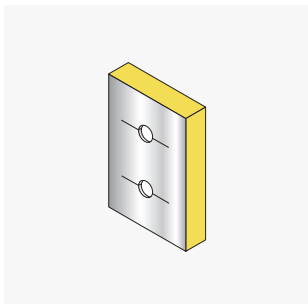
Example order for fire-protection collar JBRM

for double shear connector JDSD 60 HF in a 20-mm construction joint

Type	Dowel size	-	Joint width
JBRM	60	-	20

Fire-protection collars JBRMQ

For JDSDQ, Classification R 120



Type	Price per piece [€]	
	Joint width ¹⁾	
	20 mm	30 mm
JBRMQ 25	12.30	13.20
JBRMQ 30	12.30	13.20
JBRMQ 45	13.60	15.60
JBRMQ 60	18.50	19.40
JBRMQ 90	19.30	20.00
JBRMQ 120	20.00	21.60
JBRMQ 130	21.30	23.90
JBRMQ 150	22.10	26.20
JBRMQ 400	30.20	34.60
JBRMQ 450	35.70	40.20

¹⁾ Use two JBRMQ collars in larger joint openings.

Example order for fire-protection collar JBRMQ

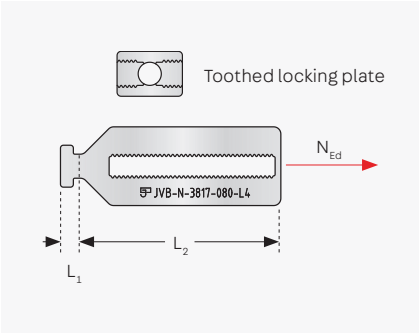
for double shear connector JDSDQ 60 HF in a 20-mm construction joint

Type	Dowel size	-	Joint width
JBRMQ	60	-	20

Connection straps



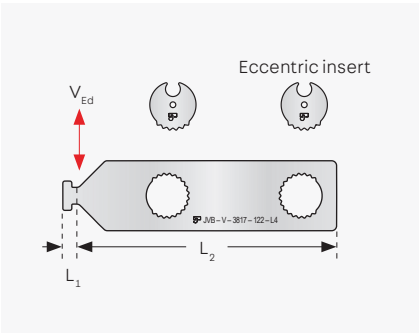
Connection straps JVB-N (for longitudinal tension loads)



Type	Length L ₁ [mm]	Length L ₂ [mm]	Price per piece [€]	
			Design	
			gv	L4
JVB-N-2815-55	10	92	20,50	59.80
JVB-N-2815-60	10	104	20,80	61.70
JVB-N-2815-80	10	143	22,50	68.40
JVB-N-3817-55	12	88	22,20	63.40
JVB-N-3817-65	12	112	24,20	69.10
JVB-N-3817-80	12	142	26,50	75.20
JVB-N-5030-60	22	104	27,10	98.40
JVB-N-5030-70	22	122	29,40	103.30
JVB-N-5030-80	22	143	31,90	108.70

Prices include toothed locking plate

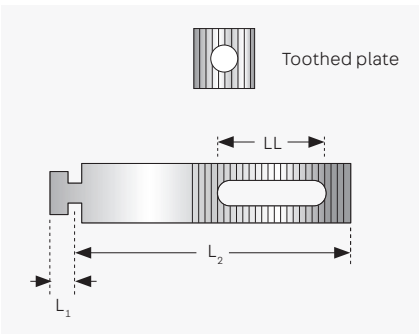
Connection straps JVB-V (for transverse shear loads)



Type	Length L ₁ [mm]	Length L ₂ [mm]	Price per piece [€]	
			Design	
			gv	L4
JVB-V-2815-108	10	273	30.80	57.40
JVB-V-3817-122	12	327	48.30	90.40
JVB-V-5030-152	22	392	65.70	135.00

Prices include 2x eccentric inserts

Connection straps JVB-Z (toothed)



Type	Series/ slot	Length L ₁ [mm]	Length L ₂ [mm]	Price per 100 pcs. [€]	
				Design	
				gv	A4
JVB-90-Z/12	12	10	90	1,191.80	1,779.80
JVB-115-Z/12		10	115	1,218.20	2,043.10
JVB-140-Z/12		10	140	1,231.20	2,118.30
JVB-165-Z/12		10	165	1,244.50	2,187.20
JVB-190-Z/12		10	190	1,264.20	2,199.70
JVB-215-Z/12	LL 11x55	10	215	1,277.30	2,293.90
JVB-240-Z/12		10	240	1,290.40	2,394.00
JVB-115-Z/18	18	12	115	1,382.70	2,488.00
JVB-140-Z/18		12	140	1,389.30	2,544.50
JVB-165-Z/18		12	165	1,395.90	2,600.80
JVB-190-Z/18		12	190	1,409.10	2,719.90
JVB-215-Z/18		12	215	1,455.20	2,795.10
JVB-240-Z/18	LL 13x55	12	240	1,481.70	2,933.10

Prices include toothed plate 30 × 30 mm

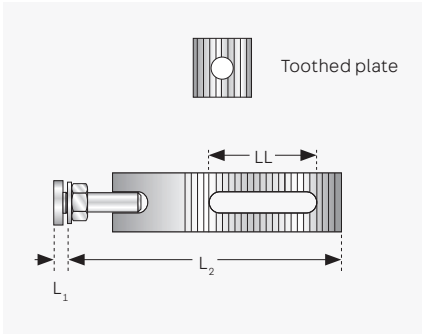
Version and material

- gv = Galvanised
- A4 = Stainless steel, corrosion resistance class III (CRC III)
- L4 = Lean duplex stainless steel, corrosion resistance class III (CRC III)

Example order for connection strap JVB-N

Type	–	Design
JVB-N-3817-55	–	L4

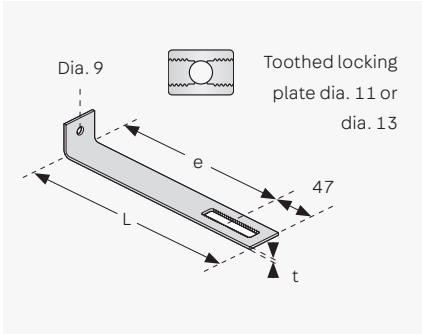
Connection straps JVB-ZS
(toothed with bolt)



Type	Series Series/slot	Length L ₁ [mm]	Length L ₂ [mm]	Price per 100 pcs. [€]	
				Design	
				gv	A4
JVB-115-ZS/12	12 für Profil K 28/15 LL 11x55	7	115	2,067.50	3,860.50
JVB-140-ZS/12		7	140	2,080.70	3,948.20
JVB-165-ZS/12		7	165	2,087.20	4,054.80
JVB-190-ZS/12		7	190	2,133.30	4,098.60
JVB-215-ZS/12		7	215	2,140.00	4,224.00
JVB-140-ZS/18	18 für Profil K 38/17 LL 13x55	10	140	2,377.00	5,164.10
JVB-165-ZS/18		10	165	2,416.60	5,208.00
JVB-190-ZS/18		10	190	2,488.90	5,414.90
JVB-215-ZS/18		10	215	2,495.40	5,477.40

Prices include toothed plate 30 x 30 mm

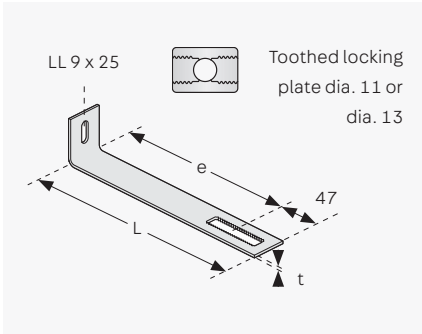
Tilt restraint straps JVB-WRL



Type	Length L [mm]	Thickness t [mm]	Price per piece [€]	
			Design	
			L4	
JVB-WRL3	100 - 395 continuous	3	POA	
JVB-WRL4		4	POA	
JVB-WRL5		5	POA	
JVB-WRL6		6	POA	

Prices include toothed locking plate

Tilt restraint straps JVB-WLL



Type	Length L [mm]	Thickness t [mm]	Price per piece [€]	
			Design	
			L4	
JVB-WLL3	100 - 395 continuous	3	POA	
JVB-WLL4		4	POA	
JVB-WLL5		5	POA	
JVB-WLL6		6	POA	

Prices include toothed locking plate

Example order for tilt restraint strap JVB-WRL

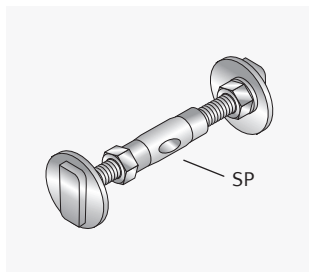
Type	/	Length L	-	Design
JVB-WRL3	/	112	-	L4

Accessories



Clamp connections JSV

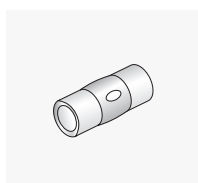
(material A4)



Type	Load level [in kN]	Sleeve	Bolt left-handed thread	Bolt right-handed thread	Price per piece [€]
JSV-28-1	3,5	SP 10 x 50	JDL M10 x 50	JD M10 x 40	51.90
JSV-28-2	3,5	SP 10 x 80	JDL M10 x 50	JD M10 x 60	55.50
JSV-38-1	5,0	SP 12 x 50	JHL M12 x 50	JH M12 x 50	71.40
JSV-38-2	5,0	SP 12 x 80	JHL M12 x 50	JH M12 x 60	75.30
JSV-38-3	5,0	SP 12 x 80	JHL M12 x 50	JH M12 x 100	81.80
JSV-38-4	7,0	SP 16 x 50	JHL M16 x 50	JH M16 x 50	100.70
JSV-38-5	7,0	SP 16 x 80	JHL M16 x 50	JH M16 x 80	110.10
JSV-38-6	7,0	SP 16 x 80	JHL M16 x 50	JH M16 x 100	113.40
JSV-40-1	8,0	SP 16 x 50	JCL M16 x 50	JC M16 x 60	112.30
JSV-40-2	8,0	SP 16 x 80	JCL M16 x 50	JC M16 x 60	116.70
JSV-40-3	8,0	SP 16 x 80	JCL M16 x 50	JC M16 x 100	140.50
JSV-50-1	10,0	SP 16 x 80	JBL M16 x 80	JB M16 x 50	148.60
JSV-50-2	10,0	SP 16 x 80	JBL M16 x 80	JB M16 x 80	154.50
JSV-50-3	10,0	SP 16 x 80	JBL M16 x 80	JB M16 x 100	160.10

Turnbuckles SP

(material A4)

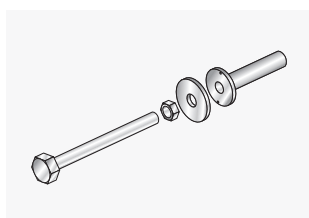


(with right/left-handed thread and hole)

Thread x length [mm]	Price per 100 pcs. [€]
M10 x 50	2,502.00
M10 x 80	2,702.50
M12 x 50	3,014.80
M12 x 80	3,222.10
M16 x 50	4,297.50
M16 x 80	4,721.30

Pressure bolts JDS

(material A4)



Thread										Price per piece [€]
	T-bolt length [mm]									Round plastic sleeve (length = 80 mm)
	80	100	120	140	160	180	200	220 ¹⁾	240 ¹⁾	
M10	12,30	12,30	12,30	12,30	12,80	13,10	14,10	a.A.	a.A.	1.60
M12	14,10	14,10	14,10	14,10	14,10	15,50	15,50	a.A.	a.A.	1.70
M16	22,30	22,30	22,30	22,30	22,30	23,50	23,50	a.A.	a.A.	1.80
M20	39,60	39,60	39,60	39,60	39,60	43,60	43,60	a.A.	a.A.	1.80

¹⁾ Custom designs available on request

Thermal insulation

ISOPRO® 120 Concrete-Concrete

IP 120 M	170
IP 120 C	171
IP 120 var. I	172
IP 120 var. II	172
IP 120 var. III HV	173
IP 120 var. III UV	173
IP 120 Q	174
IP 120 QZ	174
IP 120 QS	175
IP 120 QSZ	175
IP 120 QQ	176
IP 120 QQZ	176
IP 120 QQS	177
IP 120 QQSZ	177
IP 120 H	178
IP 120 D	178
IP 120 Z ISO	179
IP 120 A	179
IP 120 F	179
IP 120 O	180
IP 120 S	180
IP 120 W	181

ISOPRO® Concrete-Concrete

IP	182
IPT	183
IP / IPT corner	184
IP var. I	185
IP var. II	185
IP var. III HV	186
IP var. III UV	186
IPQ	187
IPZQ	187
IPQS	188
IPQZ	188
IPTQQ	189
IPZQQ	189
IPTQQS	190
IPQQZ	190
Horizontal anchors	190
IP 80 H	191
IPTD	191
Z ISO	192
IPTA	192
IPTF	193
IPO	193
IPTS	194
IPTW	194

ISOPRO® Concrete-Steel/ Concrete-Wood

IP 80 SM	195
IP 80 SQ	195
IP 80 HM	195
IP HQ 80	196
IP 120 SM	196
IP 120 SQ	196
IP 120 HM	197
IP 120 HQ	197

Overviews ISOPRO®

Pallet overview ISOPRO® 120	198
Pallet overview ISOPRO®	198

ISOMUR®

ISOMUR® plus wall base element	199
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Sealing

Fastening

Reinforcement

Facade fastening

Sound insulation

Formwork

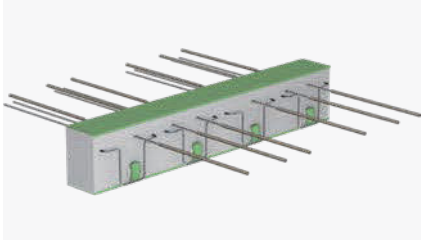
Connection

Thermal insulation

ISOPRO® 120 Concrete-Concrete



IP 120 M



Thermally insulated cantilever slab connection for cantilevered reinforced concrete components. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Pressure plane with thrust bearings
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Two-part version available for installation in precast concrete plants (indicated by a "P" – e.g. type IP 120 M P)
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4	160-250	9.30	226.00
233100020938	M 20 Q4	160-250	11.10	280.00
233100020954	M 30 Q4	160-250	14.27	334.00
233100020962	M 40 Q4	160-250	14.90	379.00
233100020970	M 50 Q4	160-250	15.40	419.00
233100020978	M 60 Q4	160-250	18.66	462.00
233100020986	M 70 Q4	160-250	20.60	523.00
233100020994	M 80 Q4	160-250	21.70	566.00
233100021002	M 90 Q4	160-250	30.30	612.00
233100021010	M 100 Q4	160-250	38.90	659.00
233100021018	M 110 Q4	160-250	42.20	764.00
233100021034	M 120 Q4	160-250	43.70	939.00

Prices apply to concrete cover cv 35 and 50 mm

Extension products for type IP 120 M	Height h [mm]	Design	Surcharge per m [€]
Q6	160-250	Shear force reinforcement	49.00
Q8	160-250	Shear force reinforcement	59.00
Q4Q4	160-250	Shear force reinforcement on both sides	85.00
Q8Q4	160-250	Shear force reinforcement on both sides	96.00
Q6Q6	160-250	Shear force reinforcement on both sides	96.00

IP 120 C



Thermally insulated slab connection for connecting cantilevered reinforced concrete components with exterior corners. Stainless steel rebar for corrosion protection.
Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- The prices are for one corner element consisting of one left part (cv 35), one right part (cv 50 2nd layer) and one corner insulation body
- The left and right (cv 35 / cv 50) subcomponents can also be purchased individually
- With concrete cover cv 50: Minimum height 200 mm
- Pressure plane in concrete thrust bearings or steel compression struts depending on the version
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: R90

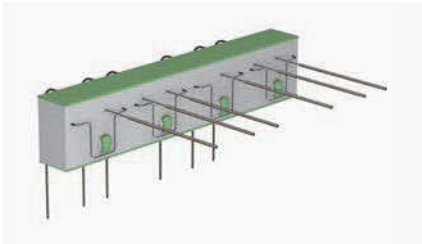
Article number	Type	Element length [mm]		Height h [mm]	Weight [kg/pc.]	Price per piece [€]
		1. layer	2nd layer			
233300021144	C 10 Q10	500 x 500 ¹⁾		180-250	33.01	1.017.00
233300024374	C 10 Q12	500 x 500 ¹⁾		180-250	37.50	1.065.00
233300021145	C 20 Q10	500 x 500 ¹⁾		180-250	44.97	1.288.00
233300024375	C 20 Q12	500 x 500 ¹⁾		180-250	49.50	1.336.00

Prices apply to concrete cover – 1st layer cv 35 mm, and 2nd layer cv 50 mm
¹⁾ l = 500 mm + 120 mm corner insulation body

Article number	Type	Element length [mm]		Height h [mm]	Weight [kg/pc.]	Price per piece [€]
		1. layer	2nd layer			
233300021146	CE 10 Q10	500		180-250	16.51	507.00
233300024378	CE 10 Q12	500		180-250	18.75	533.00
233300021147	CE 20 Q10	500		180-250	22.49	644.00
233300024379	CE 20 Q12	500		180-250	24.75	668.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP 120 var. I



Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls. The rebar is anchored downwards in the reinforced concrete wall.

Fireproof version available.

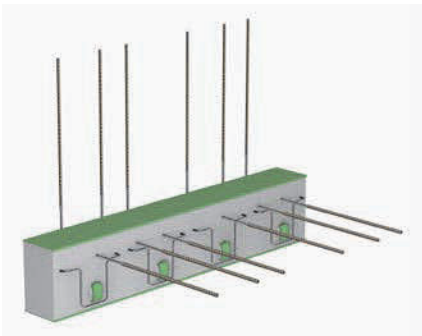
State element height (h) and concrete cover (cv) when ordering.

- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Suitable for walls ≥220 mm thick
- Custom solutions for walls <220 mm thick available on request
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 WU	160-250	9.30	414.00
233100020938	M 20 Q4 WU	160-250	11.10	452.00
233100020954	M 30 Q4 WU	160-250	14.27	605.00
233100020962	M 40 Q4 WU	160-250	14.90	734.00

Prices apply to concrete cover cv 35 mm and cv 50 mm

IP 120 var. II



Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls. The rebar is anchored upwards in the reinforced concrete wall.

Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

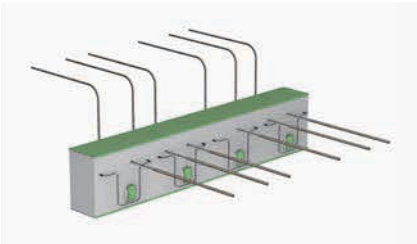
- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Suitable for walls ≥220 mm thick
- Custom solutions for walls <220 mm thick available on request
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 WO	160-250	10.07	414.00
233100020938	M 20 Q4 WO	160-250	12.02	452.00
233100020954	M 30 Q4 WO	160-250	15.45	605.00
233100020962	M 40 Q4 WO	160-250	16.14	734.00

Prices apply to concrete cover cv 35 mm and cv 50 mm

Extension products for type IP 120 variants	Height h [mm]	Design	Surcharge per m [€]
Q6	180-250	Shear force reinforcement	49.00

IP 120 var. III HV



Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights. The reinforced concrete ceiling is above the balcony slab being connected. Fireproof version available.

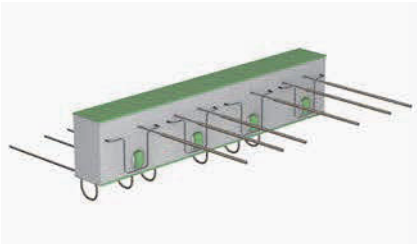
State element height (h) and concrete cover (cv) when ordering.

- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Selection: height offset HV100 (100 mm), HV150 (150 mm), HV200 (200 mm)
- Custom solutions for all height offsets and beam widths available on request
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 HV	160-250	10.37	414.00
233100020938	M 20 Q4 HV	160-250	12.38	452.00
233100020954	M 30 Q4 HV	160-250	15.91	605.00
233100020962	M 40 Q4 HV	160-250	16.62	734.00

Prices apply to concrete cover cv 35 mm and cv 50 mm

IP 120 var. III UV



Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights. The reinforced concrete ceiling is below the balcony slab being connected. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

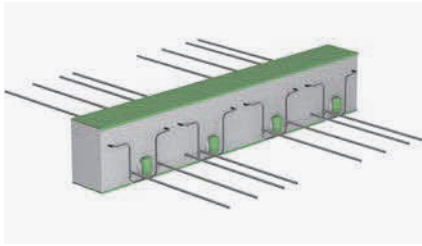
- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Selection: height offset HV100 (100 mm), HV150 (150 mm), HV200 (200 mm)
- Custom solutions for all height offsets and beam widths available on request
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 UV	160-250	10.62	414.00
233100020938	M 20 Q4 UV	160-250	12.68	452.00
233100020954	M 30 Q4 UV	160-250	16.29	605.00
233100020962	M 40 Q4 UV	160-250	17.02	734.00

Prices apply to concrete cover cv 35 mm and cv 50 mm

Extension products for type IP 120 variants	Height h [mm]	Design	Surcharge per m [€]
Q6	180-250	Shear force reinforcement	49.00

IP 120 Q



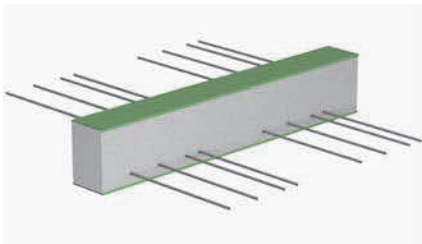
Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233500021042	Q 10	Bent	160-250	5.70	140.00
233500021043	Q 20	Bent	160-250	5.90	156.00
233500021044	Q 30	Bent	160-250	6.20	169.00
233500021045	Q 40	Bent	160-250	6.40	192.00
233500021046	Q 50	Bent	160-250	6.80	214.00
233500021047	Q 60	Straight	160-250	7.50	225.00
233500021048	Q 70	Straight	160-250	7.90	237.00
233500021049	Q 80	Straight	160-250	8.90	261.00
233500021050	Q 90	Straight	160-250	9.70	307.00
233500021051	Q 100	Straight	160-250	11.60	369.00
233500021052	Q 110	Straight	180-250	12.80	431.00
233500021053	Q 120	Straight	180-250	14.20	576.00

IP 120 QZ



Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components. The connection is created without tension. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

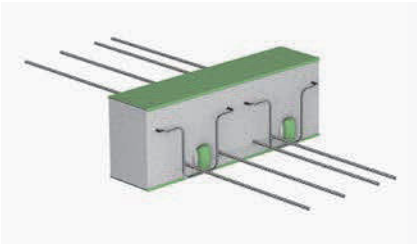
State the element height (h) when ordering.

Type IP 120 QZ can only be used in combination with IP 120 Q.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233600021054	QZ 10	Bent	160-250	1.70	140.00
233600021055	QZ 20	Bent	160-250	1.90	156.00
233600021056	QZ 30	Bent	160-250	2.20	169.00
233600021057	QZ 40	Bent	160-250	2.40	191.00
233600021058	QZ 50	Bent	160-250	2.80	202.00
233600021059	QZ 60	Straight	160-250	3.50	208.00
233600021060	QZ 70	Straight	160-250	3.90	231.00
233600021061	QZ 80	Straight	160-250	4.90	255.00
233600021062	QZ 90	Straight	160-250	5.70	302.00
233600021063	QZ 100	Straight	160-250	7.60	363.00
233600021064	QZ 110	Straight	180-250	8.80	424.00
233600021065	QZ 120	Straight	180-250	9.20	571.00

IP 120 QS



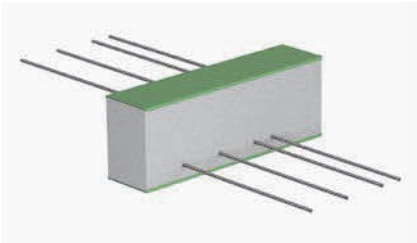
Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components with forces transferred at specific points. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class QS10 to QS90: REI120
- Fire resistance class QS100 to Q120: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
233900021090	QS 10	300	160-250	2.90	111.00
233900021091	QS 20	400	160-250	4.80	168.00
233900021092	QS 30	500	160-250	5.60	210.00
233900021093	QS 40	300	160-250	3.90	121.00
233900021094	QS 50	400	160-250	4.80	178.00
233900021095	QS 60	500	160-250	6.10	213.00
233900021096	QS 70	300	180-250	5.30	186.00
233900021097	QS 80	400	180-250	8.50	227.00
233900021098	QS 90	500	180-250	11.30	221.00
233900021762	QS 100	300	200-250	6.20	212.00
233900021763	QS 110	400	200-250	10.10	305.00
233900021764	QS 120	500	200-250	12.70	350.00

IP 120 QSZ



Thermally insulated slab connection for tension-free connection of inset balconies and loggias. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

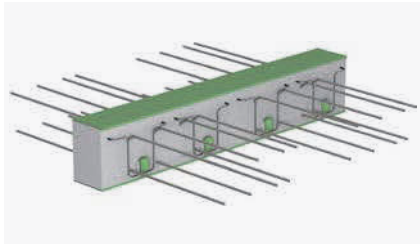
State the element height (h) when ordering.

Type IP 120 QSZ can only be used in combination with IP 120 QS.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class QS10 to QS90: REI120
- Fire resistance class QS100 to Q120: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234000021099	QSZ 10	300	160-250	1.90	77.00
234000021100	QSZ 20	400	160-250	2.80	118.00
234000021101	QSZ 30	500	160-250	3.60	147.00
234000021102	QSZ 40	300	160-250	2.90	85.00
234000021103	QSZ 50	400	160-250	2.80	124.00
234000021104	QSZ 60	500	160-250	4.50	155.00
234000021105	QSZ 70	300	180-250	3.30	131.00
234000021106	QSZ 80	400	180-250	5.80	169.00
234000021107	QSZ 90	500	180-250	7.70	185.00
234000021765	QSZ 100	300	200-250	4.20	148.00
234000021766	QSZ 110	400	200-250	8.10	213.00
234000021767	QSZ 120	500	200-250	10.70	245.00

IP 120 QQ



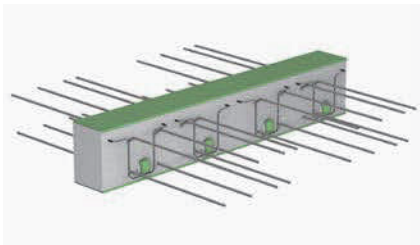
Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233700021066	QQ 10	Bent	160-250	4.66	212.00
233700021067	QQ 20	Bent	160-250	4.92	232.00
233700021068	QQ 30	Bent	160-250	5.43	253.00
233700021069	QQ 40	Bent	160-250	5.69	288.00
233700021070	QQ 50	Bent	160-250	6.70	312.00
233700021071	QQ 60	Straight	160-250	8.70	323.00
233700021072	QQ 70	Straight	160-250	9.60	375.00
233700021073	QQ 80	Straight	160-250	12.10	393.00
233700021074	QQ 90	Straight	170-250	14.20	461.00
233700021075	QQ 100	Straight	170-250	16.30	552.00
233700021076	QQ 110	Straight	180-250	18.40	645.00
233700021077	QQ 120	Straight	180-250	20.10	864.00

IP 120 QQZ



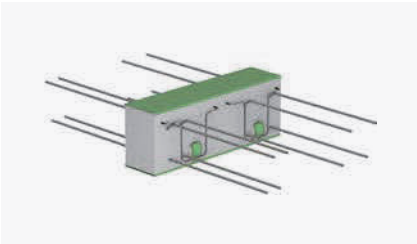
Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components. The connection is created without tension. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233800021078	QQZ 10	Bent	160-250	4.66	212.00
233800021079	QQZ 20	Bent	160-250	4.92	232.00
233800021080	QQZ 30	Bent	160-250	5.43	253.00
233800021081	QQZ 40	Bent	160-250	5.69	288.00
233800021082	QQZ 50	Bent	160-250	6.70	312.00
233800021083	QQZ 60	Straight	160-250	8.70	316.00
233800021084	QQZ 70	Straight	160-250	9.60	370.00
233800021085	QQZ 80	Straight	160-250	12.10	387.00
233800021086	QQZ 90	Straight	170-250	14.20	456.00
233800021087	QQZ 100	Straight	170-250	16.30	547.00
233800021088	QQZ 110	Straight	180-250	18.40	639.00
233800021089	QQZ 120	Straight	180-250	20.10	859.00

IP 120 QQS



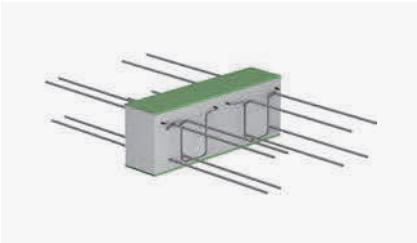
Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components with forces transferred at specific points. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class QS10 to QS90: REI120
- Fire resistance class QS100 to Q120: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234100021108	QQS 10	300	160-250	3.20	146.00
234100021109	QQS 20	400	160-250	4.20	219.00
234100021110	QQS 30	500	160-250	6.40	272.00
234100021111	QQS 40	300	170-250	4.30	157.00
234100021112	QQS 50	400	170-250	7.90	231.00
234100021113	QQS 60	500	170-250	8.30	276.00
234100021114	QQS 70	300	180-250	12.40	241.00
234100021115	QQS 80	400	180-250	11.80	277.00
234100021116	QQS 90	500	180-250	15.70	293.00
234100021756	QQS 100	300	200-250	13.50	276.00
234100021757	QQS 110	400	200-250	15.90	397.00
234100021758	QQS 120	500	200-250	16.20	455.00

IP 120 QQSZ



Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components with forces transferred at specific points. The connection is created without tension. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation.

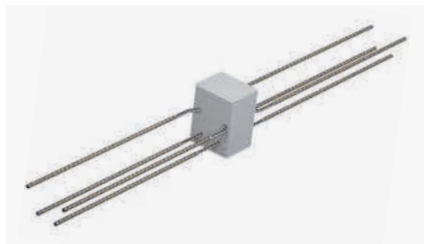
Fireproof version available.

State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class QS10 to QS90: REI120
- Fire resistance class QS100 to Q120: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234200021117	QQSZ 10	300	160-250	3.20	110.00
234200021118	QQSZ 20	400	160-250	4.20	164.00
234200021119	QQSZ 30	500	160-250	6.40	204.00
234200021120	QQSZ 40	300	170-250	4.30	118.00
234200021121	QQSZ 50	400	170-250	7.90	174.00
234200021122	QQSZ 60	500	170-250	8.30	214.00
234200021123	QQSZ 70	300	180-250	12.40	181.00
234200021124	QQSZ 80	400	180-250	11.80	231.00
234200021125	QQSZ 90	500	180-250	15.70	258.00
234200021759	QQSZ 100	300	200-250	13.50	208.00
234200021760	QQSZ 110	400	200-250	15.90	297.00
234200021761	QQSZ 120	500	200-250	16.20	341.00

IP 120 H



Thermally insulated slab connection for transmitting horizontal forces parallel and/or perpendicular to the insulation plane. For use at selected points to supplement the linear connections e.g. types IP 120 M, IP 120 Q. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State the element height (h) when ordering. Circumferential fire protection available on request.

- Element length: 150 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234300021162	H-X1	160-250	0.69	48.00
234300021163	H-X2	160-250	0.54	66.00
234300021164	H-X1Y1	160-250	1.05	64.00
234300021165	H-X2Y2	160-250	1.70	96.00

IP 120 D



Thermally insulated slab connection for continuous reinforced concrete ceilings. Stainless steel rebar for corrosion protection. Insulating material 120 mm thick for improved thermal and acoustic insulation. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- Element length: 500 + 500 mm
- With concrete cover cv 50: Minimum height 200 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: R90

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
234500021126	D 20 Q6	160-250	14.50	409.00
234500021129	D 30 Q6	160-250	22.20	475.00
234500021132	D 50 Q6	160-250	31.90	716.00
234500021135	D 70 Q6	160-250	43.70	867.00
234500021138	D 90 Q6	160-250	59.30	1.009.00
234500021141	D 100 Q6	160-250	66.00	1.106.00

Prices apply to concrete cover cv 35 and 50 mm

Extension products for type IP 120 D	Height h [mm]	Design	Surcharge per m [€]
Q8	160-250	Shear force reinforcement	72.00
Q10	170-250	Shear force reinforcement	145.00

IP 120 Z ISO

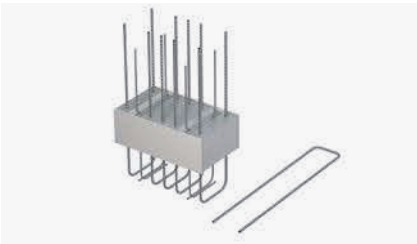


Intermediate insulation to supplement insulated joints in a range of different installation situations

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- FP1 with fireproof panel
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
235100021149	Z ISO FP1	1,000	160–250	2.7	97.00
FP1 = Fire protection panels 10 mm thick that expand in case of fire					
Extension products for type IP 120 Z ISO					Surcharge per piece [€]
Cutting surcharge					14.00

IP 120 A



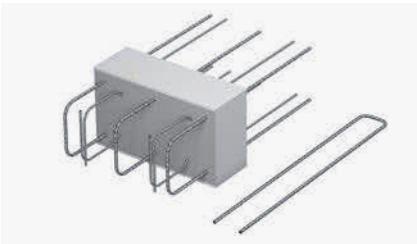
Thermally insulated connector for connecting parapets to ceiling slabs. Stainless steel rebar for corrosion protection. Fireproof version available. For use at selected points to meet structural requirements.

State the parapet thickness (a) when ordering.

- Ceiling thickness: $\geq 160 \text{ mm}$
- Insulation thickness: 120 mm
- Parapet thickness will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other parapet thicknesses available on request
- Fire resistance class: R90

Article number	Type	Element length [mm]	Parapet thickness a [mm]	Weight [kg/pc.]	Price per piece [€]
234600021166	A 1	350	150–250	3.0	157.00
234600021167	A 2	350	150–250	6.0	170.00

IP 120 F



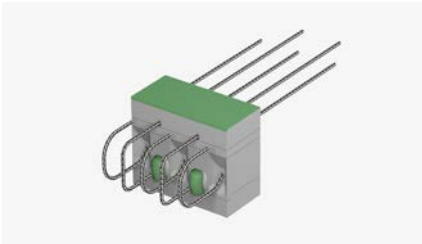
Thermally insulated connector for connecting protruding parapets to ceiling slabs. Stainless steel for corrosion protection. Fireproof version available. For use at selected points to meet structural requirements.

State the element height (h) and parapet width (b) when ordering.

- Parapet width: $\geq 150 \text{ mm}$
- Insulation thickness: 120 mm
- Element height will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234700021168	F	350	160–250	5.70	170.00

IP 120 O



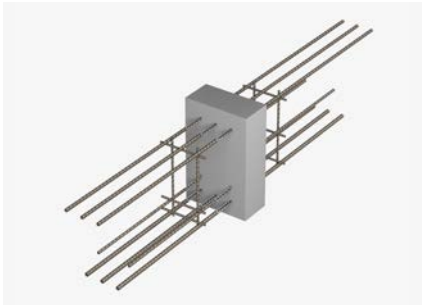
Thermally insulated connector for connecting reinforced concrete corbels to ceiling slabs. Stainless steel rebar for corrosion protection.
Fireproof version available. For use at selected points to meet structural requirements.

State the element height (h) when ordering.

- Corbel width: ≥160 mm
- Insulation thickness: 120 mm
- Element height will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request
- Fire resistance class: REI120

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234800021169	O 1	250	180-250	2.30	198.00
234800021170	O 2	250	180-250	2.40	214.00

IP 120 S



Thermally insulated connector for connecting protruding reinforced concrete beams with ceiling slabs. Stainless steel rebar for corrosion protection.
Fireproof version available.

State height and width when ordering.

- Element length: 220-300 mm
- Standard height: 300-600 mm
- Beam width: 220-300 mm
- Insulation thickness: 120 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: R90

Article number	Type	Weight [kg/pc.]	Price per piece [€]
234900021151	S 1	8.10	381.00
234900021152	S 2	12.70	445.00
234900021154	S 3	19.90	561.00
234900021156	S 4	28.30	743.00

IP 120 W



Thermally insulated connector for connecting wall slabs to partition walls. Stainless steel rebar for corrosion protection. Fireproof version available.

State the wall width and height when ordering.

- Wall width: 150–250 mm
- Wall height: 1,500–3,500 mm
- Insulation thickness: 120 mm
- Fire resistance class: R90

Article number	Type	Weight [kg/pc.]	Price per piece [€]
235000021158	W 1	9.10	561.00
235000021159	W 2	14.40	704.00
235000021160	W 3	26.80	810.00
235000021161	W 4	41.10	929.00

Sealing

Fastening

Reinforcement

Facade fastening

Sound insulation

Formwork

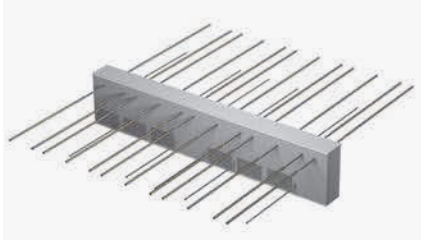
Connection

Thermal insulation

ISOPRO® Concrete-Concrete



IP



Thermally insulated cantilever slab connection for cantilevered reinforced concrete components.
Stainless steel rebar for corrosion protection. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- Element length: IP 10 – IP 75 Q10: 1,000 mm; IP 90 Q10 – IP 100 Q10: 500 + 500 mm
- Special concrete thrust bearing
- With concrete cover cv 50: Minimum height of 180 mm required
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Two-part version available for installation in precast concrete plants
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012312	IP 10	160-250	7.34	206.00
210100012316	IP 15	160-250	8.44	233.00
210100012322	IP 20	160-250	8.89	261.00
210100012330	IP 25	160-250	9.60	311.00
210100018963	IP 35	160-250	11.49	359.00
210100012358	IP 45	160-250	14.26	395.00
210100012366	IP 50	160-250	15.70	438.00
210100012379	IP 55	160-250	19.92	486.00
210100018954	IP 65	160-250	21.09	517.00
210100018955	IP 75 Q10	170-250	22.26	625.00
210100018956	IP 90 Q10	170-250	24.21	696.00
210100018957	IP 100 Q10	170-250	25.38	765.00

Prices apply to concrete cover cv 35 and cv 50 mm

Extension products for type IP 10 - IP 65	Height h [mm]	Design	Surcharge per m [€]
Q8	160-250	Shear force reinforcement	49.00
Q8X	160-250	Shear force reinforcement on both sides	78.00
Q10	170-250	Shear force reinforcement	63.00
Q10X	170-250	Shear force reinforcement on both sides	91.00
Q12	180-250	Shear force reinforcement	78.00

Extension products for type IP 75 Q10 - IP 100 Q10	Height h [mm]	Design	Surcharge per m [€]
Q10X	180-250	Shear force reinforcement on both sides	39.00
Q12	180-250	Shear force reinforcement	15.00

IPT



Thermally insulated cantilever slab connection for cantilevered reinforced concrete components. Stainless steel rebar for corrosion protection with suspended reinforcement integrated into the balcony. Fireproof version available.

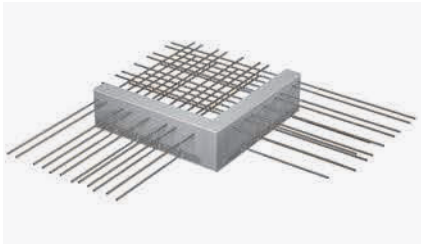
State element height (h) and concrete cover (cv) when ordering.

- Element length: 500 + 500 mm
- Steel pressure plane
- With concrete cover cv 50: Minimum height of 200 mm required
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Two-part version available for installation in precast concrete plants
- Fire resistance class: R90

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210200014990	IPT 110 Q10	180-250	44.00	909.00
210200014991	IPT 110 Q12	180-250	45.50	925.00
210200014992	IPT 110 Q14	180-250	49.10	974.00
210200015002	IPT 150 Q10	180-250	57.40	1.142.00
210200015008	IPT 150 Q12	180-250	59.70	1.159.00
210200015012	IPT 150 Q14	190-250	62.90	1.211.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP / IPT corner



Thermally insulated slab connection for connecting cantilevered reinforced concrete components with exterior corners. Stainless steel rebar for corrosion protection with suspended reinforcement integrated into the balcony. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- The prices are for one corner element consisting of one left and one right part and one corner insulation body
- The left IP(T) EL and right IP(T) ER subcomponents can also be purchased individually
- Pressure plane type IP corner with concrete thrust bearings
- Steel pressure plane type IPT corner
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m K}$
- Fire resistance class IP corner 20/30: REI120
- Fire resistance class IP corner 50: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210300012399	IP corner 20	500 x 500 ¹⁾	180-250	23.79	570.00
210300012401	IP corner 30	620 x 620 ²⁾	180-250	38.30	959.00
210300011842	IPT corner 50	620 x 620 ²⁾	180-250	48.36	1.201.00

Prices apply to concrete cover - 1st layer cv 35 mm. and 2nd layer cv 50 mm

¹⁾ l= 500 mm + 80 mm corner insulation body

²⁾ l= 620 mm + 80 mm corner insulation body

Left subcomponent IP(T) EL

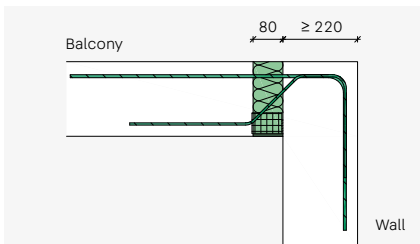
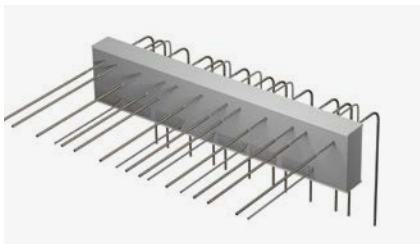
Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210300018948	IP EL 20	500	180-250	11.89	285.00
210300018949	IP EL 30	620	180-250	19.10	480.00
210300018950	IPT EL 50	620	180-250	24.10	601.00

Right subcomponent IP(T) ER

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210300018951	IP ER 20	500	180-250	11.89	285.00
210300018952	IP ER 30	620	180-250	19.10	480.00
210300018953	IPT ER 50	620	180-250	24.10	601.00

Prices apply to concrete cover cv 35 and 50 mm

IP var. I



Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls.
The rebar is anchored downwards in the reinforced concrete wall for var. I or upwards for var. II. Fire-proof version available.

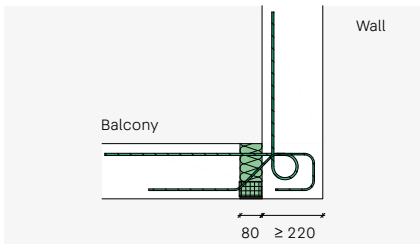
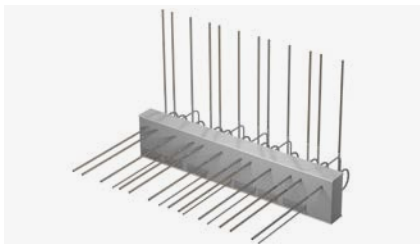
State element height (h) and concrete cover (cv) when ordering.

- Element length: 1,000 mm
- Standard: Wall thickness ≥ 220 mm
- Custom elements available on request. Please state the wall thickness when ordering.
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. I	160–250	8.89	314.00
210100012330	IP 25 var. I	160–250	9.60	355.00
210100012334	IP 30 var. I	160–250	11.49	395.00
210100012358	IP 45 var. I	160–250	14.26	437.00
210100012366	IP 50 var. I	160–250	15.70	510.00
210100012379	IP 55 var. I	160–250	19.92	583.00
210100018964	IP 65 var. I	160–250	21.09	645.00
210100020365	IP 75 var. I	160–250	22.26	705.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP var. II



Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls.
The rebar is anchored downwards in the reinforced concrete wall for var. I or upwards for var. II. Fire-proof version available.

State element height (h) and concrete cover (cv) when ordering.

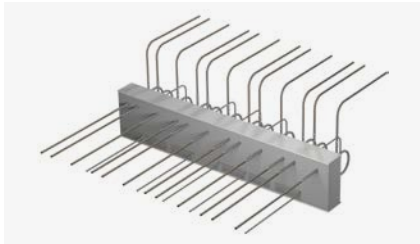
- Element length: 1,000 mm
- Standard: Wall thickness ≥ 220 mm
- Custom elements available on request. Please state the wall thickness when ordering.
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. II	160–250	9.66	314.00
210100012330	IP 25 var. II	160–250	10.44	355.00
210100012334	IP 30 var. II	160–250	12.50	395.00
210100012358	IP 45 var. II	160–250	15.50	437.00
210100012366	IP 50 var. II	160–250	17.07	510.00
210100012379	IP 55 var. II	160–250	21.65	583.00
210100018964	IP 65 var. II	160–250	22.85	645.00
210100020365	IP 75 var. II	160–250	24.20	705.00

Prices apply to concrete cover cv 35 and cv 50 mm

Extension products for type IP variants	Height h [mm]	Design	Surcharge per m [€]
Q8	160–250	Shear force reinforcement	49.00

IP var. III HV

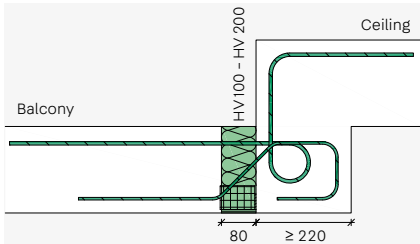


Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights.

The reinforced concrete ceiling is above the balcony slab being connected for var. III HV or under the balcony slab being connected for var. III UV. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

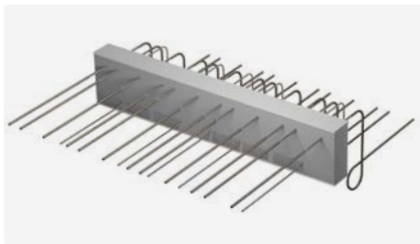
- Element length: 1,000 mm
- Standard: Height offset HV10 (100 mm), HV15 (150 mm), HV20 (200 mm)
- Custom elements available on request. Please state height offset and beam width when ordering.
- Fire resistance class: REI120



Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. III HV	160-250	9.96	314.00
210100012330	IP 25 var. III HV	160-250	10.75	355.00
210100012334	IP 30 var. III HV	160-250	12.87	395.00
210100012358	IP 45 var. III HV	160-250	16.00	437.00
210100012366	IP 50 var. III HV	160-250	17.58	510.00
210100012379	IP 55 var. III HV	160-250	22.30	583.00
210100018964	IP 65 var. III HV	160-250	23.55	645.00
210100020365	IP 75 var. III HV	160-250	24.95	705.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP var. III UV

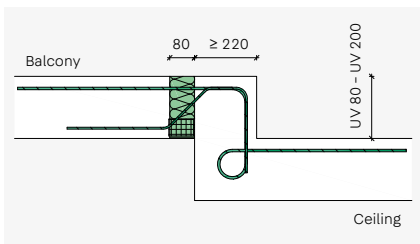


Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights.

The reinforced concrete ceiling is above the balcony slab being connected for var. III HV or under the balcony slab being connected for var. III UV. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- Element length: 1,000 mm
- Standard: Height offset UV10 (100 mm), UV15 (150 mm), UV20 (200 mm)
- Custom elements available on request. Please state height offset and beam width when ordering.
- Fire resistance class: REI120

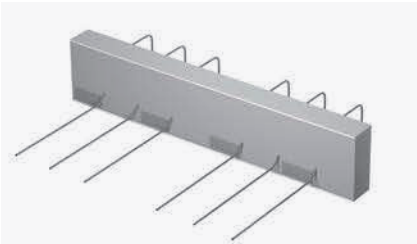


Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. III UV	160-250	10.20	314.00
210100012330	IP 25 var. III UV	160-250	11.00	355.00
210100012334	IP 30 var. III UV	160-250	13.18	395.00
210100012358	IP 45 var. III UV	160-250	16.40	437.00
210100012366	IP 50 var. III UV	160-250	18.01	510.00
210100012379	IP 55 var. III UV	160-250	22.85	583.00
210100018964	IP 65 var. III UV	160-250	24.15	645.00
210100020365	IP 75 var. III UV	160-250	25.55	705.00

Prices apply to concrete cover cv 35 and cv 50 mm

Extension products for type IP variants	Height h [mm]	Design	Surcharge per m [€]
Q8	160-250	Shear force reinforcement	49.00

IPQ



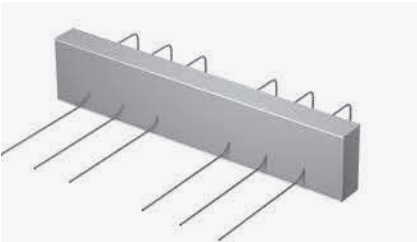
Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection. Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Pressure plane with concrete thrust bearings
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m} \cdot \text{K}$
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
210400012403	IPQ 10	Bent	160-250	5.43	136.00
210400012414	IPQ 20	Bent	160-250	5.61	146.00
210400012421	IPQ 30	Bent	160-250	5.79	159.00
210400012427	IPQ 40	Bent	160-250	6.15	180.00
210400012433	IPQ 50	Bent	160-250	6.50	203.00
210400012442	IPQ 70	Straight	160-250	7.10	226.00
210400012445	IPQ 80	Straight	160-250	7.50	235.00
210400015016	IPQ 85	Straight	160-250	8.50	248.00
210400012448	IPQ 90	Straight	160-250	9.30	269.00
210400017123	IPQ 100	Straight	170-250	11.20	290.00
210400012411	IPQ 110	Straight	170-250	12.50	312.00
210400015018	IPQ 120	Straight	170-250	13.80	418.00

IPZQ



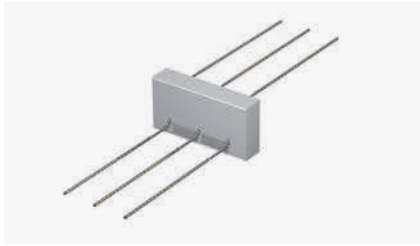
Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components. Version without thrust bearings for tension-free connection. Stainless steel rebar for corrosion protection. Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m} \cdot \text{K}$
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
211900015020	IPZQ 10	Bent	160-250	1.30	128.00
211900015022	IPZQ 20	Bent	160-250	1.50	140.00
211900015024	IPZQ 30	Bent	160-250	1.70	154.00
211900015026	IPZQ 40	Bent	160-250	2.00	175.00
211900015028	IPZQ 50	Bent	160-250	2.40	198.00
211900015030	IPZQ 70	Straight	160-250	3.10	220.00
211900015032	IPZQ 80	Straight	160-250	3.50	230.00
211900015034	IPZQ 85	Straight	160-250	4.50	240.00
211900015036	IPZQ 90	Straight	160-250	5.30	262.00
211900015038	IPZQ 100	Straight	170-250	7.20	284.00
211900015040	IPZQ 110	Straight	170-250	8.50	306.00
211900015042	IPZQ 120	Straight	170-250	9.80	413.00

IPQS



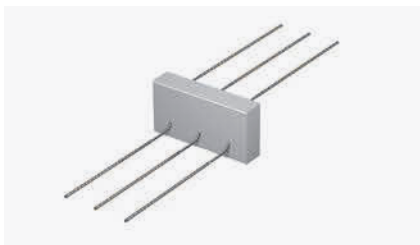
Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components with forces transferred at specific points. Stainless steel rebar for corrosion protection. Fireproof version available.

State the element height (h) when ordering.

- Pressure plane type IPQS with concrete thrust bearings
- Steel pressure plane type IPTQS
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210600015044	IPQS 5	400	160-250	2.80	87.00
210600012481	IPQS 10	300	160-250	1.96	114.00
210600015046	IPQS 15	500	160-250	3.00	142.00
210600012484	IPQS 20	400	160-250	3.50	169.00
210600012487	IPQS 30	500	160-250	4.64	210.00
210600012489	IPQS 40	300	170-250	2.76	176.00
210600012492	IPQS 50	400	170-250	4.37	202.00
210600015050	IPQS 55	500	170-250	5.50	212.00
210600015052	IPTQS 60	300	180-250	4.30	221.00
210600012498	IPQS 70	400	180-250	6.20	290.00
210600018551	IPQS 75	500	180-250	8.80	265.00
210600015054	IPTQS 80	300	190-250	4.80	240.00
210600015056	IPTQS 90	400	190-250	7.20	316.00
210600025047	IPTQS 100	500	190-250	9.10	394.00

IPQZ



Thermally insulated slab connection for tension-free connection of inset balconies and loggias. Stainless steel rebar for corrosion protection.

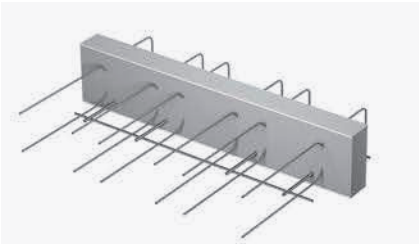
Fireproof version available.

State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210800015058	IPQZ 5	400	160-250	0.80	58.00
210800012505	IPQZ 10	300	160-250	1.00	78.00
210800015060	IPQZ 15	500	160-250	1.00	99.00
210800012506	IPQZ 20	400	160-250	1.50	118.00
210800012508	IPQZ 30	500	160-250	2.00	147.00
210800012510	IPQZ 40	300	170-250	1.80	123.00
210800012512	IPQZ 50	400	170-250	2.60	144.00
210800015064	IPQZ 55	500	170-250	3.50	149.00
210800012513	IPQZ 60	300	180-250	2.80	156.00
210800012516	IPQZ 70	400	180-250	4.20	203.00
210800018552	IPQZ 75	500	180-250	5.80	186.00
210800012518	IPQZ 80	300	190-250	2.80	169.00
210800012520	IPQZ 90	400	190-250	4.20	221.00
210800025048	IPQZ 100	500	190-250	6.10	274.00

IPTQQ



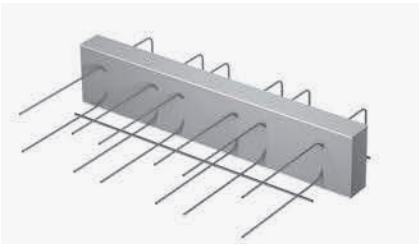
Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection.
Fireproof version available.

State the element height (h) when ordering.

- Element length: 500 + 500 mm
- Steel pressure plane
- Fire resistance class: R90

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
212100019002	IPTQQ 10	Bent	160-250	4.17	201.00
212100019003	IPTQQ 30	Bent	160-250	4.95	220.00
212100019004	IPTQQ 40	Bent	160-250	5.84	271.00
212100019005	IPTQQ 50	Bent	160-250	7.01	305.00
212100019006	IPTQQ 70	Straight	160-250	8.87	337.00
212100019007	IPTQQ 90	Straight	170-250	14.82	371.00
212100019008	IPTQQ 110	Straight	180-250	23.76	435.00

IPZQQ



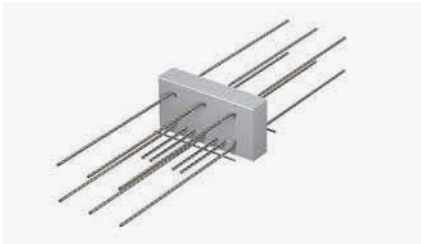
Thermally insulated slab connection for tension-free transmission of positive and negative shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection.
Fireproof version available.

State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
212200022112	IPZQQ 10	Bent	160-250	2.00	196.00
212200022114	IPZQQ 30	Bent	160-250	2.70	213.00
212200022115	IPZQQ 40	Bent	160-250	3.40	264.00
212200022116	IPZQQ 50	Bent	160-250	4.20	299.00
212200022117	IPZQQ 70	Straight	160-250	6.40	332.00
212200022119	IPZQQ 90	Straight	170-250	9.70	363.00
212200022121	IPZQQ 110	Straight	180-250	15.80	428.00

IPTQQS



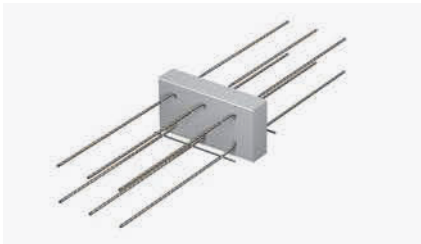
Thermally insulated slab connection for transmitting positive and negative shear forces in supported reinforced concrete components with forces transferred at specific points. Stainless steel rebar for corrosion protection. Fireproof version available.

State the element height (h) when ordering.

- Steel pressure plane
- Fire resistance class: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210700019010	IPTQQS 10	300	160-250	2.95	148.00
210700019011	IPTQQS 20	400	160-250	4.30	220.00
210700019012	IPTQQS 40	300	170-250	4.28	228.00
210700019013	IPTQQS 50	400	170-250	6.66	263.00
210700019014	IPTQQS 60	300	180-250	8.11	288.00
210700019015	IPTQQS 70	400	180-250	11.67	376.00
210700019016	IPTQQS 80	300	190-250	11.61	313.00
210700019017	IPTQQS 90	400	190-250	17.29	412.00
210700025049	IPTQQS 100	400	190-250	25.80	510.00

IPQQZ



Thermally insulated slab connection for tension-free transmission of positive and negative shear forces in supported reinforced concrete components with forces transferred at specific points. Stainless steel rebar for corrosion protection. Fireproof version available.

State the element height (h) when ordering.

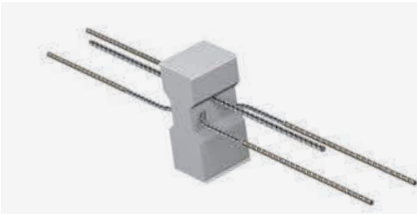
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
212300022122	IPQQZ 10	300	160-250	2.50	142.00
212300022123	IPQQZ 20	400	160-250	3.60	213.00
212300022125	IPQQZ 40	300	170-250	3.20	222.00
212300022126	IPQQZ 50	400	170-250	4.80	258.00
212300022127	IPQQZ 60	300	180-250	5.30	282.00
212300022128	IPQQZ 70	400	180-250	7.90	370.00
212300022129	IPQQZ 80	300	190-250	8.20	308.00
212300022130	IPQQZ 90	400	190-250	12.30	405.00
212300025050	IPQQZ 100	400	190-250	25.80	504.00

Horizontal anchors

Article number	Diameter [mm]	Length [mm]	Weight [kg/pc.]	Price per piece [€]
211800014854	10	620/320/620	0.93	15.00
211800014856	12	740/320/740	1.78	17.00

IP 80 H



Thermally insulated slab connection for transmitting horizontal forces parallel and/or perpendicular to the insulation plane. For use at selected points to supplement the linear connections, e.g. types IP, IPT, IPQ.

Stainless steel rebar for corrosion protection.

Fireproof version available.

State the element height (h) when ordering. Circumferential fire protection available on request.

- Element length: 100 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: REI120

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210900021860	IP 80 H-X1	160 – 250	0.44	36.00
210900021864	IP 80 H-X2	160 – 250	0.59	52.00
210900021862	IP 80 H-X1-Y1	160 – 250	0.95	59.00
210900021866	IP 80 H-X2-Y2	160 – 250	1.50	89.00

IPTD



Thermally insulated slab connection for continuous reinforced concrete ceilings. Stainless steel rebar for corrosion protection. Fireproof version available.

State element height (h) and concrete cover (cv) when ordering.

- Element length: 500 + 500 mm
- With concrete cover cv 50: Minimum height of 200 mm required
- Fire resistance class: R90

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
211100012555	IPTD 20	160-250	18.79	396.00
211100012557	IPTD 30	160-250	24.11	468.00
211100012566	IPTD 50	160-250	30.05	681.00
211100012573	IPTD 70	160-250	44.50	822.00
211100012581	IPTD 90	160-250	60.19	958.00
211100015066	IPTD 100	160-250	62.20	1.095.00

Prices apply to concrete cover cv 35 and 50 mm

Extension products for type IPTD 20-90		Height h [mm]	Design	Surcharge per m [€]
Q8		160-250	Shear force reinforcement	67.00
Q10		170-250	Shear force reinforcement	145.00
Extension products for type IPTD 100		Height h [mm]	Design	Surcharge per m [€]
Q8		170-250	Shear force reinforcement	145.00
Q10		180-250	Shear force reinforcement	162.00

Z ISO



Intermediate insulation to supplement insulated joints in a range of different installation situations

Element length: 1,000 mm

Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

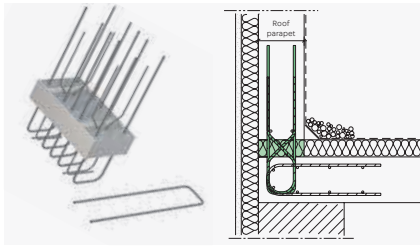
FP1 with fireproof panel

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2117...	IP Z ISO FP1	1,000	160-250	2.2	82.00

FP1 = Fire protection panels 10 mm thick that expand in case of fire

Extension products for type Z ISO				Surcharge per piece [€]	
Cutting surcharge				14.00	

IPTA



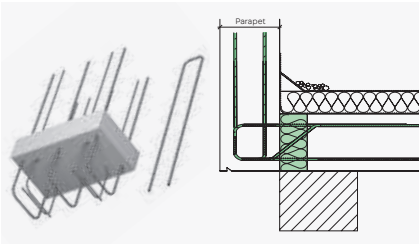
Thermally insulated connector for connecting parapets to ceiling slabs. Stainless steel rebar for corrosion protection. Fireproof version available. These elements are used at specific points depending on the relevant structural requirements.

State the parapet thickness (a) when ordering.

- Ceiling thickness: $\geq 160 \text{ mm}$
- Insulation thickness: 80 mm, optional 60 mm
- Elements with parapets more than 160 mm thick will be evened up by applying additional insulation.
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Fire resistance class: R90

Article number	Type	Element length [mm]	Parapet thickness a [mm]	Weight [kg/pc.]	Price per piece [€]
211200020248	IPTA 1	350	150-250	3.86	154.00
211200020258	IPTA 2	350	150-250	6.47	169.00

IPTF



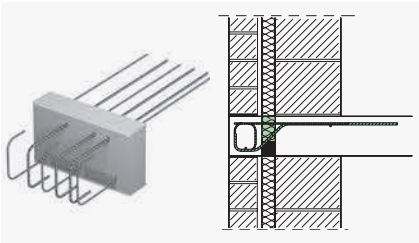
Thermally insulated connector for connecting protruding parapets to ceiling slabs. Stainless steel for corrosion protection. Fireproof version available. These elements are used at specific points depending on the relevant structural requirements.

State the element height (h) and parapet width (b) when ordering.

- Parapet width: ≥ 150 mm
- Insulation thickness: 80 mm, optional 60 mm
- Elements more than 160 mm high will be evened up by applying additional insulation.
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K
- Fire resistance class: R90

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
211300018977	IPTF	350	160-250	2.36	169.00

IPO



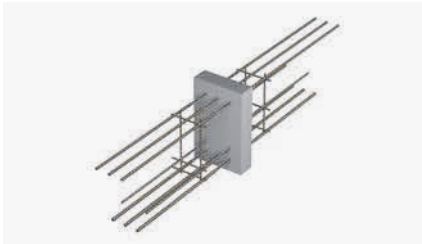
Thermally insulated connector for connecting reinforced concrete corbels to ceiling slabs. Stainless steel rebar for corrosion protection. Fireproof version available. These elements are used at specific points depending on the relevant structural requirements.

State the element height (h) when ordering.

- Corbel width: ≥ 150 mm
- Insulation thickness: 80 mm, optional 60 mm
- Elements more than 180 mm high will be evened up by applying additional insulation.
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K
- Fire resistance class: REI120

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
211400020268	IPO 16	350	180-250	2.22	197.00
211400021507	IPO 20	350	180-250	2.22	212.00

IPTS



Thermally insulated connector for connecting protruding reinforced concrete beams with ceiling slabs. Stainless steel rebar for corrosion protection.
Fireproof version available.

State height and width when ordering.

- Beam width: 220–300 mm
- Standard height: 300–600 mm
- Fire resistance class: R90

Article number	Type	Weight [kg/pc.]	Price per piece [€]
211500018978	IPTS 1	7.13	347.00
211500018979	IPTS 2	11.22	405.00
211500018980	IPTS 3	16.21	510.00
211500018981	IPTS 4	22.64	675.00

IPTW



Thermally insulated connector for connecting wall slabs to partition walls. Stainless steel rebar for corrosion protection.
Fireproof version available.

State wall width and wall height when ordering.

- Wall width: 150–250 mm
- Wall height: made to measure (1,500–3,500 mm)
- Fire resistance class: R90

Article number	Type	Weight [kg/pc.]	Price per piece [€]
211600018982	IPTW 1	8.30	510.00
211600018983	IPTW 2	13.17	640.00
211600018984	IPTW 3	22.04	737.00
211600018985	IPTW 4	36.35	846.00

ISOPRO® Concrete-Steel/Concrete-Wood



IP 80 SM



Thermal insulation element for transmitting bending moment and shear force when connecting protruding steel constructions to reinforced concrete ceiling slabs.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m} \cdot \text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2201000...	SM 14 Q8	180/200/220	7.4	319.00
2201000...	SM 14 Q10	180/200/220	8.4	335.00
2201000...	SM 14 QQ	180/200/220	8.6	353.00
2201000...	SM 20 Q10	180/200/220	18.8	485.00
2201000...	SM 20 Q12	180/200/220	19.6	503.00

Extension products for type SM	Surcharge per pc. [€]
For heights 190, 210, 230–280 mm	19.00

IP 80 SQ



Thermally insulated connector for transmitting shear force when connecting supported steel constructions to reinforced concrete ceiling slabs.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m} \cdot \text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2202000...	SQ 8	180/200/220	5.1	196.00
2202000...	SQ 10	180/200/220	6.6	223.00
2202000...	SQ 12	180/200/220	7.5	250.00

Extension products for type SQ	Surcharge per pc. [€]
For heights 190, 210, 230–280 mm	19.00

IP 80 HM



Thermally insulated connector for transmitting bending moment, shear force and horizontal forces when connecting protruding timber constructions to reinforced concrete components.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m} \cdot \text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
220300011817	HM 14 Q8 (with strut) ¹⁾	180	16.35	422.00
990100014345	Connection strut		8.95	103.00

¹⁾ HM consists of SM 14 Q8 height 180 mm with strut

IP HQ 80



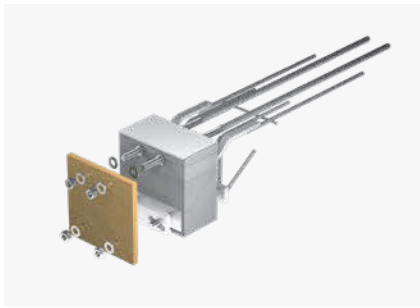
Thermally insulated connector for transmitting shear force and horizontal forces when connecting supported timber constructions to reinforced concrete components.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
220400011818	HQ 10 (with strut) ¹⁾	180	15.15	326.00
990100014345	Connection strut		8.95	103.00

¹⁾ HQ consists of SQ 10 height 180 mm with strut

IP 120 SM



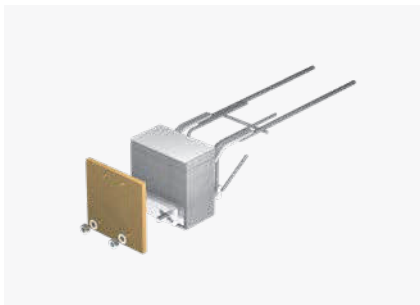
Thermal insulation element for transmitting bending moment and shear force when connecting protruding steel constructions to reinforced concrete ceiling slabs.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Heights 260-280 mm on request

Article number	Type	Height h [mm]	Weight [kg/Stk.]	Price per piece [€]
2201000...	SM 14 Q8	180/200/220	8.90	384.00
2201000...	SM 14 Q10	180/200/220	9.60	400.00
2201000...	SM 14 QQ	180/200/220	9.80	419.00
2201000...	SM 20 Q10	180/200/220	22.00	583.00
2201000...	SM 20 Q12	180/200/220	22.90	602.00

Extension products for type IP 120 SM			Surcharge per pc. [€]	
For heights 190, 210, 230-280 mm			19.00	

IP 120 SQ



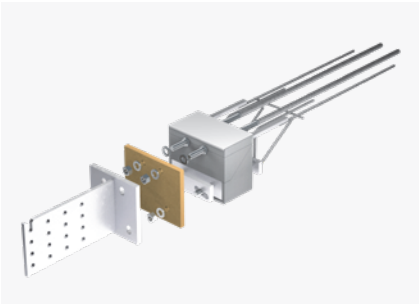
Thermally insulated connector for transmitting shear force when connecting supported steel constructions to reinforced concrete ceiling slabs.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Höhen 260-280 mm auf Anfrage

Article number	Type	Height h [mm]	Weight [kg/Stk.]	Price per piece [€]
2202000...	SQ 8	180/200/220	5.90	253.00
2202000...	SQ 10	180/200/220	7.20	270.00
2202000...	SQ 12	180/200/220	8.60	303.00

Extension products for type IP 120 SM			Surcharge per pc. [€]	
For heights 190, 210, 230-280 mm			19.00	

IP 120 HM



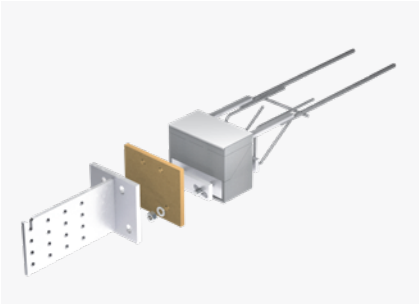
Thermally insulated connector for transmitting bending moment, shear force and horizontal forces when connecting protruding timber constructions to reinforced concrete components.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Height h [mm]	Weight [kg/Stk.]	Price per piece [€]
220300025418	HM 14 Q8 (with strut) ¹⁾	180	18.60	487.00

¹⁾ HM consists of SM 14 Q8 height 180 mm with strut

IP 120 HQ



Thermally insulated connector for transmitting shear force and horizontal forces when connecting supported timber constructions to reinforced concrete components.

- Element length: 220 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Height h [mm]	Weight [kg/Stk.]	Price per piece [€]
220400025419	HQ 10 (with strut) ¹⁾	180	16.20	373.00

¹⁾ HM consists of SM 14 Q8 height 180 mm with strut

Overviews ISOPRO®



Pallet overview ISOPRO® 120

Quantity [m/pal.]

Type	Type length [mm]	Element height h [mm]					
		160	180	200	220	240	250
IP 120 M 10 – M 80	1,000	22	18	18	16	14	14
IP 120 M 10 – M 40 2-part	1,000	20	20	20	20	20	20
IP 120 M 50 – M 80 2-part	1,000	20	20	20	20	20	20
IP 120 M 90 – M 120	1,000	16	16	16	14	12	12
IP 120 M 90 – M 120 2-part	1,000	16	16	16	16	16	16
IP 120 Q 10 – 50	1,000	40	36	36	32	32	28
IP 120 Q 60 – 120	1,000	20	18	18	16	16	14
IP 120 QQ 10 – 50	1,000	30	27	27	24	24	21
IP 120 QQ 60 – 120	1,000	20	18	18	16	14	14
IP 120 QS / QSZ	300	40	36	36	32	28	28
IP 120 QS / QSZ	400	36	36	32	32	28	28
IP 120 QS / QSZ	500	28	28	28	24	24	24
IP 120 D 20 – 100	500 + 500	8	7	6	6	6	4
IP 120 Z ISO	1.000	-	63	63	63	54	54
IP 120 A	350	-	-	84	72	60	60

Pallet overview ISOPRO®

Quantity [m/pal.]

Type	Type length [mm]	Element height h [mm]					
		160	180	200	220	240	250
IP 10 – IP 75	1,000	22	18	18	16	14	14
IP 10 – IP 45 2-part	1,000	24	24	24	20	20	20
IP 50 – IP 75 2-part	1,000	20	20	20	20	20	20
IP 90 – IP 100	500 + 500	16	16	16	14	12	12
IP 90 – IP 100 2-part	500 + 500	16	16	16	16	16	16
IPT 110 – IPT 150	500 + 500	12	12	12	12	10	10
IPQ 10 – 50	1,000	40	36	36	32	32	28
IPQ 70 – 90	1,000	20	18	18	16	16	14
IPQ 100 – 120	1,000	20	18	18	16	14	14
IPQS, IPTQS, IPQZ, IPTQQS	300	40	36	36	32	28	28
IPQS, IPTQS, IPQZ, IPTQQS	400	36	36	32	32	28	28
IPQS, IPQZ, IPTQQS	500	28	28	28	24	24	24
IPTQQ 10 – 50	500 + 500	30	27	27	24	24	21
IPTQQ 70 - 110	500 + 500	20	18	18	16	14	14
IPTD 20 - 90	500 + 500	10	8	8	7	6	6
IPTD 100	500 + 500	8	7	6	5	5	4

ISOMUR®



ISOMUR® plus wall base element



Load-bearing thermal insulation elements in the lower and/or upper section of masonry.
Efficient thermal insulation with a high load-bearing capacity in line with ETA-18/1063.

- Characteristic compressive strength mean value $\geq 25.0 \text{ N/mm}^2$
- Thermal conductivity:
horizontal $\lambda_{eq} = 0.14 \text{ W/(m}\cdot\text{K)}$
vertical $\lambda_{eq} = 0.33 \text{ W/(m}\cdot\text{K)}$
- General type certification (aBG)
- Width: 115–240 mm

Article number	Type / width / height	Element length [mm]	PU [kg/pal.]	PU [pcs./pal.]	PU [m/pal.]	Price per m [€]	Price per piece [€]
290100004824	ISOMUR® plus 11.5 – 11.3	600	930	120	72	32.60	19.60
290100004826	ISOMUR® plus 15.0 – 11.3	600	990	100	60	35.20	21.10
290100004828	ISOMUR® plus 17.5 – 11.3	600	918	80	48	39.40	23.60
290100004830	ISOMUR® plus 20.0 – 11.3	600	990	80	48	42.50	25.60
290100004832	ISOMUR® plus 24.0 – 11.3	600	966	60	36	45.90	27.50

This image shows a full page of blank graph paper. The grid consists of thin, light gray horizontal and vertical lines that intersect to form small squares across the entire surface. There are no margins, text, or other markings on the paper.

Index

A			
Additional component JVA+ ZB	120	Determining the required bolt length	65
Adjustment foot	120	Distance plates	153
Anchor channels JSA K	54	Double-notch toothed T-bolt JKB	73
Anchor channels, JTA K, cold-formed	46	Double-notch toothed T-bolt JKC	73
Anchor channels JTA W, hot-rolled	48	Double shear connectors JDSD	163
Anchor channels JXA-PC W, hot-rolled, toothed	51	Double shear connectors JDSDQ	163
Anchor channels JXA W, cold-formed, toothed	52	Drip discs TS	125
Anchor channels JXA W, hot-rolled, toothed	50	Drip noses	155
Angled brackets JW	122	Drip profiles	155
Angled brackets L-DF+	119	Drunterfix spacers	113
Angled brackets L-F+	119		
Assembly aids JDA-Q	89	E	
		Edge protection angles JKW	75
B		Elevator insulation JAI	130
Bases	142	Eye sockets ÖM	81
Base strips	114		
Breaking point T-bolts JB-SB	73	F	
Breaking point T-bolts JH-SB	73	Facade fastening channels JTA-RF	54
Brick tie anchors JMA	77	Facade fastening channels JTA-RT	54
Brick tie channel JTA K 28/15	56	FERBOX® type B03	92, 93
Brick tie channel JTA K 38/17	56	FERBOX® type B05	94, 95
Brick tie channel Kt	56	FERBOX® type B06	95
Brickwork support brackets JVAeco+	118	FERBOX® type E01	96
		FERBOX® type E02	97
C		FERBOX® type E03	98
Capitals	142	FERBOX® type EE	99
Cavity wall anchors JLA	125	FIBERNOX® V-ROD curved shapes	103
Chamfer strips	154	FIBERNOX® V-ROD end anchors	103
Channel brackets JKO	76	FIBERNOX® V-ROD rockbolt anchors	103
Clamp connections JSV	167	FIBERNOX® V-ROD shear dowels	103
Clamping claws KKP	125	Fibre-reinforced concrete adhesive	150
Clamping claws SPKU	81	Fibre-reinforced concrete pipes	149
Clamping plates KP	81	Fibre-reinforced concrete pipe sections	149
Clamping plates KPA for crane rails	81	Fibre-reinforced concrete plugs	150
Clamping spacers type DI	112	Fibre-reinforced concrete surface spacers	104
Clamping spacers type DR	112	Fire-protection collars JBRM	164
Clamping spacers type MS II	112	Fire-protection collars JBRMQ	164
Clamping washers KS	124	Fire-protection collars SQ BRM	134
Concrete spacers type KD	110	Fire-protection collars type BRM	162
Concrete spacers type KO	110	Fire-protection collars type BRMQ	162
Concrete spacers type PRT	111	Flange nuts SKF	79
Concrete spacers type PT/S	111	FR spring washers	80
Concrete spacers type PT/ X	111		
Concrete spacers type TFD	110	G	
Connection straps JVB-N	165	Gap fillers JGF	80
Connection straps JVB-V	165	Gleithülse Typ GS	161
Connection straps JVB-Z	165	Gleithülse Typ GSQ	161
Connection straps JVB-ZS	166	GRIPRI®-A	101
Corner strips	154	GRIPRI®-S	101
Curved anchor channels JTA, JXA	53	Grout-in brackets JMK+	120
Curved mounting channels JM, JML, JXM	63		
		H	
		Hammer-head locking plates JGM D	78
		Hammer-head locking plates JGM H	78
		Handrail connection channels JGB	55
		Hexagon coupling sleeves VMSK	79
		Hexagon nuts	79
		Hook-head locking plates JGM A	79
		Hook-head locking plates JGM B	78
		Hook-head locking plates JGM C	78
		Hook-head T-bolts JA	70
		Hook-head T-bolts JB	69, 70
		Hook-head T-bolts JC	68
		Horizontal anchors	190
		Horseshoe shims JVS	80
		I	
		Individual parts and installation set (brickwork support brackets JVAeco+ with dowels)	124
		Installation cones JIC	80
		Installation set for JBA	126
		Installation set (for mounting brickwork support brackets JVAeco+ on anchor channels)	124
		ISOPRO® IP	182
		ISOPRO® IP 80 H	191
		ISOPRO® IP 80 HM	195
		ISOPRO® IP 80 SM	195
		ISOPRO® IP 80 SQ	195
		ISOPRO® IP 120 A	179
		ISOPRO® IP 120 C	171
		ISOPRO® IP 120 D	178
		ISOPRO® IP 120 F	179
		ISOPRO® IP 120 H	178
		ISOPRO® IP 120 HM	197
		ISOPRO® IP 120 HQ	197
		ISOPRO® IP 120 M	170
		ISOPRO® IP 120 O	180
		ISOPRO® IP 120 Q	174
		ISOPRO® IP 120 QQ	176
		ISOPRO® IP 120 QQS	177
		ISOPRO® IP 120 QQSZ	177
		ISOPRO® IP 120 QQZ	176
		ISOPRO® IP 120 QS	175
		ISOPRO® IP 120 QSZ	175
		ISOPRO® IP 120 QZ	174
		ISOPRO® IP 120 S	180
		ISOPRO® IP 120 SM	196
		ISOPRO® IP 120 SQ	196
		ISOPRO® IP 120 var. I	172
		ISOPRO® IP 120 var. II	172
		ISOPRO® IP 120 var. III HV	173
		ISOPRO® IP 120 var. III UV	173
		ISOPRO® IP 120 W	181
		ISOPRO® IP 120 Z ISO	179
		ISOPRO® IP HQ 80	196
		ISOPRO® IP / ISOPRO® IPT corner	184
		ISOPRO® IPO	193

ISOPRO® IPQ	187
ISOPRO® IPQQZ	190
ISOPRO® IPQS	188
ISOPRO® IPQZ	188
ISOPRO® IPT	183
ISOPRO® IPTA	192
ISOPRO® IPTD	191
ISOPRO® IPTF	193
ISOPRO® IPTQQ	189
ISOPRO® IPTQQS	190
ISOPRO® IPTS	194
ISOPRO® IPTW	194
ISOPRO® IP var. I	185
ISOPRO® IP var. II	185
ISOPRO® IP var. III HV	186
ISOPRO® IP var. III UV	186
ISOPRO® IPZQ	187
ISOPRO® IPZQQ	189
ISI rockets	156
ISO clips	125
ISOMUR® plus wall base element	199

J

JAM 22 channel nuts	79
JAM F 22 channel nuts	79
JKZS notch-toothed shims	80
JWP-A standard design, offset	121
JWP standard design	121

K

KUNEX® ABS construction joints	27
KUNEX® ABS D	28
KUNEX® ABS expansion joints	28
KUNEX® clamp joint	25
KUNEX® clamp joint tape	25
KUNEX® clamp joint tape accessories	25
KUNEX® construction joint tape, steel-reinforced	18
KUNEX® corner joint tape for construction joints	19
KUNEX® corner joint tape for expansion joints	22
KUNEX® exterior construction joint tape	19
KUNEX® exterior expansion joint tape	21
KUNEX® fastening accessories	30
KUNEX® interior construction joint tape	17
KUNEX® interior expansion joint tape	20
KUNEX® joint closing tape	22
KUNEX® joint sealing strip	23
KUNEX® joint tape connector	30
KUNEX® MK EF/ER puddle flange	31
KUNEX® MK puddle flange	31
KUNEX® pre-cut parts	30
KUNEX® star tube	23
KUNEX® TPE joint tape	24

KUNEX® welded structures	29
KUNEX® welding tape	30
KUNEX® welding tools	30

L

Lift shaft anchor JLF	74
-----------------------	----

M

Mounting channel JML K, cold-formed, slotted	62
Mounting channel JZML K, cold-formed, toothed, slotted	63
Mounting channels JM K, cold-formed	58
Mounting channels JM W, hot-rolled	60
Mounting channels JXM W, hot-rolled, toothed	61
Mounting channels JZM K, cold-formed, toothed	59
Mounting plates	153
Multi-rockets	156

N

Nail anchors JNA	78
------------------	----

O

OPTI cones	152
OPTI plugs	152
OPTI wall strengtheners	151
OPTI wall strengtheners combi pack	152

P

Parapet brick anchors JAV	121
PENTAFLEX® ABS	8
PENTAFLEX® extension piece	16
PENTAFLEX® FBA joint tape connection	10
PENTAFLEX® floor drain	16
PENTAFLEX® FTS corner	11
PENTAFLEX® FTS joint	11
PENTAFLEX® KG DM wall lead-through	14
PENTAFLEX® KG floor lead-through	16
PENTAFLEX® KG protective tube	15
PENTAFLEX® KG wall lead-through	14
PENTAFLEX® Modul	7, 100
PENTAFLEX® OBS	13
PENTAFLEX® OBS floor slab	12
PENTAFLEX® OPTI wall strengtheners	13
PENTAFLEX® PP DM wall lead-through	15
PENTAFLEX® PP floor lead-through	16
PENTAFLEX® PP protective tube	15
PENTAFLEX® PP wall lead-through	14
PENTAFLEX® sound-insulation joint tape	10
PENTAFLEX® stirrups & clips	7
PENTAFLEX® STK sound-insulating cage	10
PENTAFLEX® tape	7

PENTAFLEX KB® 80	6
PENTAFLEX KB® 167	6
PENTAFLEX KB® 167 Agrar	7
PENTAFLEX KB® corner	6
Plastic nails	155
PLURAFLEX® C11	32
PLURAFLEX® C11 active	32
PLURAFLEX® C11 coupling	35
PLURAFLEX® EP injection resin	38
PLURAFLEX® filling/venting hose	35
PLURAFLEX® foam rubber	34
PLURAFLEX® heat-shrink hose	36
PLURAFLEX® hose clip	34
PLURAFLEX® injection nozzle	36
PLURAFLEX® joint tape clip	33
PLURAFLEX® M6 injection nipple	36
PLURAFLEX® M8 injection nipple	34
PLURAFLEX® nail packers	34
PLURAFLEX® nozzle	36
PLURAFLEX® P11	32
PLURAFLEX® P19	32
PLURAFLEX® P C11 set	37
PLURAFLEX® plastic clips	33
PLURAFLEX® plug	35
PLURAFLEX® protective bo X	35
PLURAFLEX® PUR injection foam resin 50	38
PLURAFLEX® PUR injection resin 05	38
PLURAFLEX® S C11/P11 set	37
PLURAFLEX® seam sheet clip	33
PLURAFLEX® spider fitting	34
PLURAFLEX® V C11 set	37
PLURAFLEX® XL C11 set	37
Precast lintel brackets JFTW	123
Prefabricated element holders JFT+	123
Pressure bolts JDS	167
Profiled metal sheet channels JTB AR	57
Profiled metal sheet channels JTB-LA	57
Profiled metal sheet channels JTB uni	57
Punching shear reinforcement JDA	84
Punching shear reinforcement JDA-FT-KL	88

R

Railing Fastening Channels JGB	55
RAPIDOBAT® accessories	143
RAPIDOBAT® Cretcon HD	139
RAPIDOBAT® custom shapes	141
RAPIDOBAT® lined	139
RAPIDOBAT® rectangle	140
RAPIDOBAT® square	140
RAPIDOBAT® unlined	138
RAPIDO-Clamp type DSet	143
RAPIDO-Clamp type M	143
RAPIDO-Fi X	141
Rebar, stainless steel	102

Rectangular spacer

113

Release agent for capitals and bases

142

Retaining reinforcement

9

Ring bolts FIG

123

Ring nuts RM

79

Round coupling sleeves VM

79

Rundfix spacers

113

S

Scaffold anchors JGA+ Q

123

Scaffold anchors JGA+ Z

123

Scaffold shoes JG

74

Sealing plugs

151

SECUFLEX® Accessories

43

SECUFLEX® DT

42

SECUFLEX® MT

42

SECUFLEX® PR

42

SECUFLEX® PT

42

SECUFLEX® SMT

41

SECUFLEX® ST

41

SECUFLEX® ST Patch

41

Shear dowels type HED-P

160

Shear dowels type HED-S

160

Shear force reinforcement JDA-S

84

Shims AGW

124

Shuttering elements type ADK

147

Shuttering elements type A R

145

Shuttering elements type A V

146

Shuttering elements type A V-S

147

Shuttering elements type V

146

Shuttering element type R

145

SINTON® Q

134

SINTON® S

131

SINTON® SDL

132

SINTON® X

131

SINTON® X-T1 / X-T2

131

SINTON® Z

132

SINTON® ZB

133

Slide sleeves type GK

161

Sliding sleeves JMA-G

78

Spacer

148

Spacer plates type S

154

Spacer plates type V

153

Spacers AH-DA

89

Spacers AH-FBA

89

Spacers AH-FT

89

Spacer tubes

150

Square bearing plates JVL

80

Stainless steel wires ESD

122

Steckfix spacers

114

Super cones

150

Super plugs

151

Support corbels JBA

126

Suspension loops JRH

122

SWELLFLEX® assembly adhesive & sealant

40

SWELLFLEX® BS

39

SWELLFLEX® BT

39

SWELLFLEX® mesh

40

SWELLFLEX® mounting channel

39

SWELLFLEX® RB

39

T

Tee-head bolts JD

66

Tee-head bolts JH

67

Thin-bed brick tie anchors JMA-D

77

Threaded rods GS

81

Tilt restraint straps JVB-WLL

166

Tilt restraint straps JVB-WRL

166

Toothed T-bolts JXB

72

Toothed T-bolts JXD

71

Toothed T-bolts JXE

72

Toothed T-bolts JXH

72

Toothed t-bolts JZS

71

T profile

155

Transverse brick tie anchors JMA-Q / JMA-QE

77

Turnbuckles SP

167

W

WARMBORD® accessories

144

WARMBORD® type SE

144

Washers

80

Wedge adjusters SLP

124

Windposts JWP

121

Z

Z ISO

192

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Our synergy concept for your benefit

With us, you can take advantage of the collective experience of three established manufacturers that combine products and expertise in one comprehensive offer. That is the PohlCon synergy concept.



Full service consulting

Our extensive network of consultants is available to answer all of your questions about our products on site. From planning to deployments, enjoy personal support from our qualified professionals.



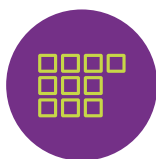
Digital solutions

Our digital offerings offer targeted support in planning with our products. From tender texts through CAD details and BIM data to modern software solutions, we offer you tailored support for your planning.



7 areas of application

We think in holistic solutions, which is why we have grouped our products into seven areas of application for you where you can benefit from the synergy of the PohlCon product portfolio.



10 product categories

To help you find the right product in our extensive range even faster, the products are grouped into ten product categories so you can navigate clearly between our products.



Individual special solutions

There's no mass produced-product on the market that is suitable for your project? We master extraordinary challenges with the many years of expertise of our three manufacturing brands in the sector of individual solutions, allowing us to realize your unique construction projects together.



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