

2023 price list Structures/Facade

Valid from 1 March 2023



IGUAZURI

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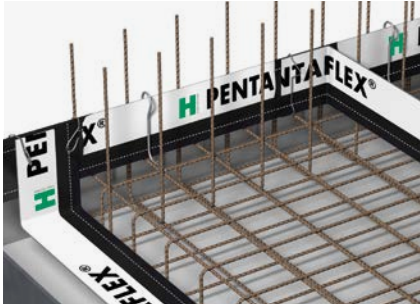
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PENTAFLEX®



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

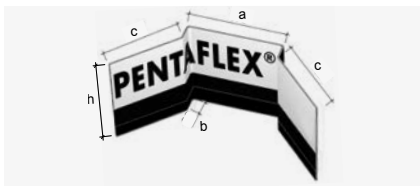
is enough to withstand a tested water pressure of up to 5.0 bar (2.0 bar permitted in accordance with the German building code test certificate (**abP**)). The guide markings make it easy to check that the PENTAFLEX KB® elements are correctly positioned at their minimum embedding depth while pouring 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)	-	10.60
110100005567	167	25,000	0.90	25 (roll)	600	11.20

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	13.00
110100013969	170	30	135	80	0.20	4	200	19.40

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	11.70

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	38	10	0.30	16	37.80

PENTAFLEX KB® 167 Agrar

With guide marking

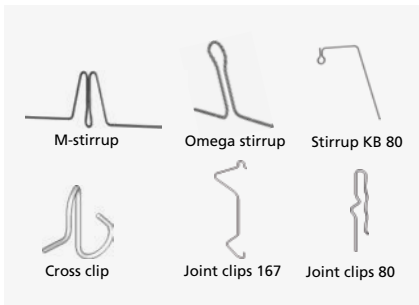


PENTAFLEX KB® 167 Agrar elements are metal seam sheets with a special coating on both sides. They are suitable for applications in contact with slurry, liquid manure and silage effluent (JGS). The seam sheets are regulated by the German national technical approval (abZ) Z-74.101-175 concerning Pentaflex 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	15.10

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	1.10
110300004791	Omega stirrup	0.12	25 ¹⁾	1.10
110300013973	KB 80 stirrup	0.08	25	1.10
110300013975	Cross clip	0.02	25	1.10
110300014104	Joint clip 167	0.02	25	1.10
110300014105	Joint clip 80	0.02	25	0.90

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

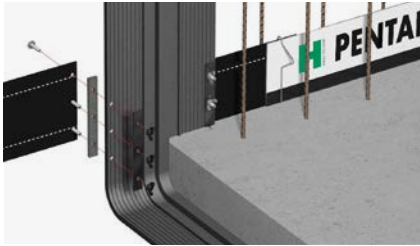
Article number	Type	Price per m [€]
110400022083	PENTAFLEX® Modul 1,200 mm	21.30
110400024200	PENTAFLEX® Modul 800 mm	21.30

Article number	Type	Price per piece [€]
110400024201	PENTAFLEX® Modul corner element 200x200	14.90

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



PENTAFLEX® FBA joint tape connection



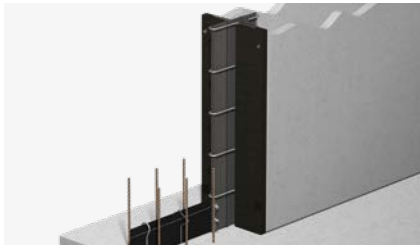
Element for connecting PENTAFLEX KB® with joint tapes.

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	66.30

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	147.40
111500004775	300	240	9.83	20	154.80
111500004776	365	240	10.86	10	162.30
111500019816	240 / 250	320	8.59	20	169.60
111500019818	300	320	9.60	20	178.00
111500019817	365	320	10.16	10	186.70

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	185.80
111600004792	320	6.85	1	196.00

PENTAFLEX® sound-insulation joint tape

For movement joints

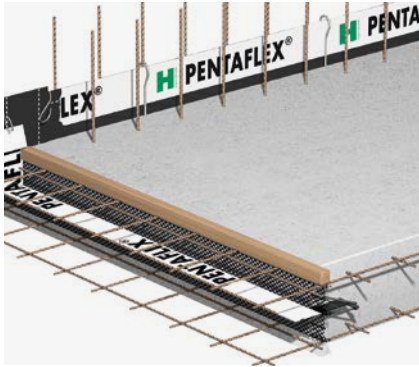


For use with STK sound-insulating cages. Includes PENTAFLEX® joint tape connection for connecting to PENTAFLEX KB® 167.

- 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® ABS

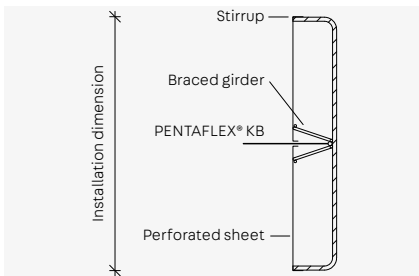


Shuttering element for creating waterproof construction joints in reinforced concrete components. Please specify connection area (floor/floor, ceiling/ceiling or wall/wall) when ordering. Version with bracing lattice beam structure available as rough (ABS R) or interlocking (ABS V) joint in line with 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**
- **Additional allowances for on-site bracing (retaining rebar) are not included in the scope of delivery.**
- E dimension = clearance between upper and lower reinforcement [mm]
- Element length: 2,400 mm; other dimensions and versions available on request

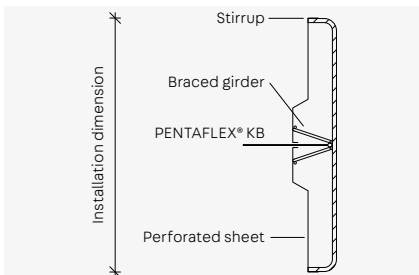
Specify joint length, installation height (E dimension) and connection points when ordering.

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



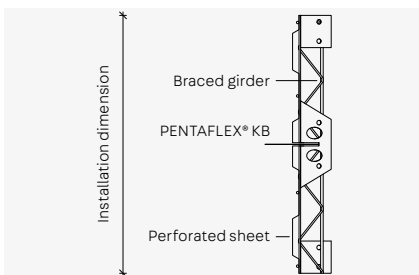
Article number Floor/floor	Article number Wall/wall	Installation height [mm]	Weight [kg/m]	Price per m [€]
111700022084	111900022862	80-200	2.37	44.80
111700022085	111900022863	210-250	2.60	46.30
111700022086	111900022864	260-300	2.82	47.60
111700022087	111900022865	310-350	3.26	54.10
111700022088	111900022866	360-400	3.50	55.40
111700022089	111900022867	410-500	3.99	61.20
111700022090	111900022868	510-590	4.92	71.30

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	55.20
111800022092	112000022870	210-250	2.74	56.90
111800022093	112000022871	260-300	2.96	58.50
111800022094	112000022872	310-350	3.34	65.00
111800022095	112000022873	360-400	3.59	66.50
111800022096	112000022874	410-500	4.08	72.30
111800022097	112000022875	510-590	5.46	82.50

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



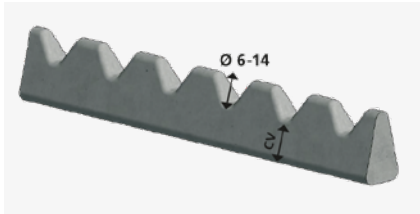
Article number Floor/floor & wall/wall	Installation height [mm]	Weight [kg/m]	Price per m [€]
112200022098	600-690	4.82	85.60
112200022099	700-790	5.21	88.50
112200022100	800-890	6.78	91.60
112200022101	900-990	7.15	94.50
112200022102	1,000-1,090	8.96	103.90
112200022103	1,100-1,190	9.40	114.30
112200022104	1,200-1,290	9.84	124.60
112200022105	1,300-1,390	10.94	135.10
112200022106	1,400-1,490	11.38	145.40
112200022107	1,500-1,590	11.82	155.80
112200022108	1,600-1,690	14.01	166.20
112200022109	1,700-1,790	14.49	176.60
112200022110	1,800-1,890	14.98	186.90
112200022111	1,900-1,990	16.81	197.30



We recommend using our A-CV or AS-CV fibre-reinforced concrete shuttering strips as accessories for the lower reinforcement layer. Shuttering elements without PENTAFLEX® sealing elements can be found in the Formwork section starting on page 147.

Extension products for ABS			Surcharge [€]
Corner surcharge	Per piece		16.70
Tapered cut	Per m		8.50
Surcharge for short pieces			10%
Off-centre joints			10%

Fibre-reinforced concrete shuttering strips A-CV

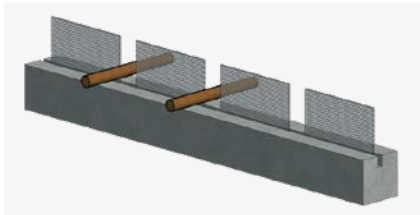


Fibre-reinforced concrete spacer with 50-mm reinforcement grid for bar diameters of 6-14 mm. Concrete cover 20–60 mm. Reduces concrete penetration to a minimum when the construction joint (floor/floor or ceiling/ceiling) is formed. For use with PENTAFLEX® ABS (page 9), KUNEX® ABS (page 27) and shuttering elements (starting on page 147).

- Other dimensions available on request

Article number	Type	Concrete cover [mm]	Height/length [mm]	PU [pcs./pal.]	Weight [kg/pc.]	Price per piece [€]
620300003455	A-CV 20	20	40/1.000	300	1.85	3.90
620300003456	A-CV 25	25	45/1.000	300	2.40	4.00
620300003457	A-CV 30	30	50/1.000	300	2.60	4.50
620300003458	A-CV 35	35	55/1.000	300	3.10	5.00
620300003459	A-CV 40	40	60/1.000	200	3.20	5.90
620300003460	A-CV 45	45	65/1.000	200	3.90	7.70
620300003461	A-CV 50	50	70/1.000	200	4.80	8.50
620300003462	A-CV 60	60	80/1.000	150	5.20	9.30

Fibre-reinforced concrete shuttering strips AS-CV



Square, fibre-reinforced concrete spacer with integrated expanded metal strips and rebar spacings of 100/150/200 mm for 30-50 mm concrete cover. Reduces concrete penetration to a minimum when the construction joint (floor/floor or ceiling/ceiling) is formed. For use with PENTAFLEX® ABS (page 9), KUNEX® ABS (page 27) and shuttering elements (starting on page 147).

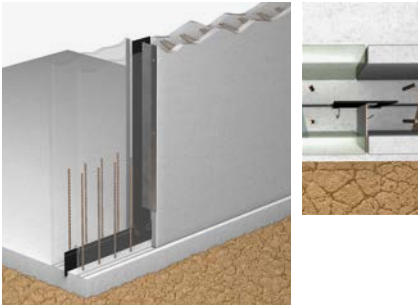
- Other dimensions available on request

Specify rebar diameter when ordering.

Article number	Type	Concrete cover [mm]	Expanded metal [mm]	Rebar spacing [mm]	Total height/length [mm]	Weight [kg/pc.]	Price per piece [€]
620400018716	AS-CV 30/100/80	30	80	100	110/1.000	2.81	13.00
620400018717	AS-CV 30/150/80	30	80	150	110/900	2.85	13.80
620400018718	AS-CV 30/200/80	30	80	200	110/1.000	3.17	15.60
620400018719	AS-CV 35/100/80	35	80	100	115/1.000	3.64	13.90
620400018720	AS-CV 35/150/80	35	80	150	115/900	3.28	15.60
620400018721	AS-CV 35/200/80	35	80	200	115/1.000	3.64	18.60
620400018722	AS-CV 40/100/80	40	80	100	120/1.000	4.17	14.70
620400018723	AS-CV 40/150/80	40	80	150	120/900	3.75	16.40
620400018724	AS-CV 40/200/80	40	80	200	120/1.000	4.17	19.40
620400018725	AS-CV 50/100/80	50	80	100	130/1.000	4.97	16.20
620400018726	AS-CV 50/150/80	50	80	150	130/900	4.47	17.70
620400018727	AS-CV 50/200/80	50	80	200	130/1.000	4.97	20.70

Article number	Type	Concrete cover [mm]	Expanded metal [mm]	Rebar spacing [mm]	Total height/length [mm]	Weight [kg/pc.]	Price per piece [€]
620400024250	AS-CV 30/100/120	30	120	100	150/1.000	3.11	13.00
620400024251	AS-CV 30/150/120	30	120	150	150/900	3.15	13.80
620400024252	AS-CV 30/200/120	30	120	200	150/1.000	3.47	15.60
620400024253	AS-CV 35/100/120	35	120	100	155/1.000	3.94	13.90
620400024254	AS-CV 35/150/120	35	120	150	155/900	3.58	15.60
620400024255	AS-CV 35/200/120	35	120	200	155/1.000	3.94	18.60
620400024256	AS-CV 40/100/120	40	120	100	160/1.000	3.58	14.70
620400024257	AS-CV 40/150/120	40	120	150	160/900	3.94	16.40
620400024258	AS-CV 40/200/120	40	120	200	160/1.000	4.47	19.40
620400024259	AS-CV 50/100/120	50	120	100	170/1.000	4.05	16.20
620400024260	AS-CV 50/150/120	50	120	150	170/900	4.47	17.70
620400024261	AS-CV 50/200/120	50	120	200	170/1.000	5.27	20.70

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**).

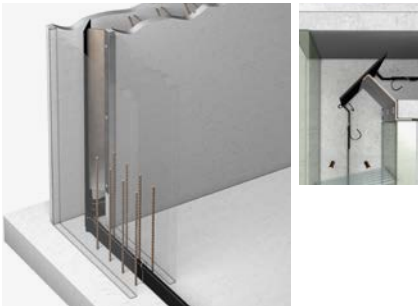
- **ETA-15/0003**
- **abP**
- Element length: 2,500, 2,750 or 3,000 mm
- Includes cross clips and knock-in fastening anchors

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	33.20
110600004407	240-280	2,750	1.84	28	33.20
110600004408	240-280	3,000	1.84	28	33.20
110600004409	290-340	2,500	2.00	28	33.20
110600004410	290-340	2,750	2.00	28	33.20
110600004411	290-340	3,000	2.00	28	33.20
110600004412	350-400	2,500	2.20	28	38.00
110600004413	350-400	2,750	2.20	28	38.00
110600004414	350-400	3,000	2.20	28	38.00

Extension products for FTS joint	Surcharge [€]
Cutting surcharge	Per piece 16.70
Wall width > 400 mm ¹⁾	Per 100 mm of width per m 5.00

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**).

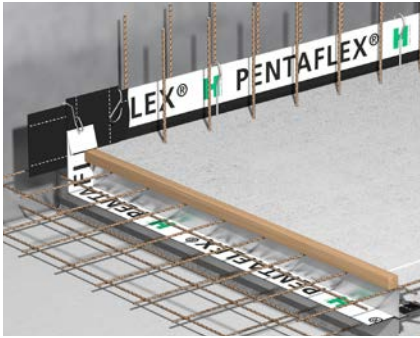
- **ETA-15/0003**
- **abP**
- **PENTAFLEX KB® corner (page 6) must be installed in the floor slab to connect the floor/wall joint.**
- Element length: 2,500, 2,750 or 3,000 mm
- Includes cross clips and knock-in fastening anchors

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	35.00
110600004397	240-280	2,750	2.00	28	35.00
110600004398	240-280	3,000	2.00	28	35.00
110600004399	290-340	2,500	2.15	28	35.00
110600004400	290-340	2,750	2.15	28	35.00
110600004401	290-340	3,000	2.15	28	35.00
110600004402	350-400	2,500	2.30	28	39.70
110600004403	350-400	2,750	2.30	28	39.70
110600004404	350-400	3,000	2.30	28	39.70

Extension products for FTS corner	Surcharge [€]
Cutting surcharge	Per piece 16.70
Wall width > 400 mm ¹⁾	Per 100 mm of width per m 5.00

¹⁾ Other wall widths available on request

PENTAFLEX® OBS floor slab



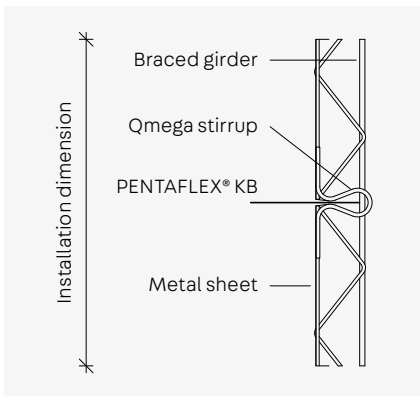
The cast-in-place crack control element PENTAFLEX® OBS floor slab creates a predetermined crack in floor slabs and simultaneously seals the crack. Versions available for very smooth or interlocking joints in line with DIN EN 1992-1-1/NA.

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

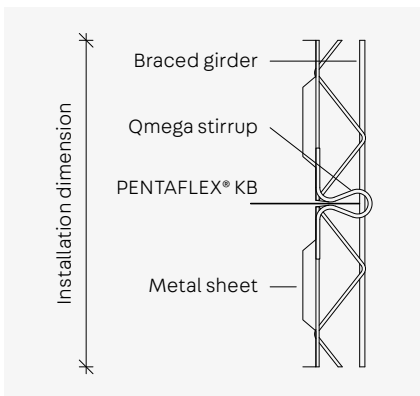
Please state joint length, installation height (E dimension) and connection points when ordering.

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



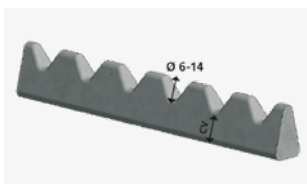
Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
110700020328	80-200	2.37	43.60
110700020330	210-250	2.60	44.90
110700020325	260-300	2.82	46.30
110700020326	310-350	3.26	52.60
110700020327	360-400	3.50	53.80
110700020332	410-500	3.99	59.50
110700020329	510-600	4.92	69.20
110700020316	610-700	5.41	72.00
110700020320	710-800	9.87	74.70
110700020317	810-900	10.39	77.50
110700020318	910-1,000	10.92	80.20

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

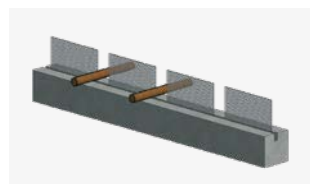


Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
110700019961	140-200	2.61	53.70
110700019962	210-250	2.74	55.30
110700019963	260-300	2.96	56.90
110700019964	310-350	3.34	63.20
110700019965	360-400	3.59	64.70
110700020319	410-500	4.08	70.20
110700020331	510-600	5.46	80.20
110700020322	610-700	5.95	83.30
110700020321	710-800	8.90	86.00
110700020323	810-900	9.39	89.00
110700020324	910-1,000	9.88	91.90

Extension products for OBS floor slab		Surcharge [€]
Corner surcharge	Per piece	16.50
Surcharge for tapered cuts	Per m	8.50
Surcharge for short pieces		10%
Off-centre joints		10%



A-CV



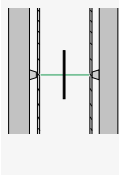
AS-CV



Shuttering elements without PENTAFLEX® sealing elements can be found in the Formwork section starting on page 147.

We recommend using our A-CV or AS-CV fibre-reinforced concrete shuttering strips to support the lower layer of reinforcement. You can find the shuttering strips on page 10.

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**).

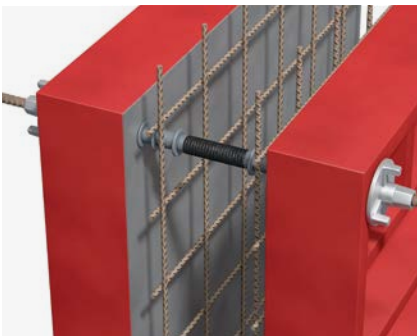
- **ETA-15/0003**
- **abP**
- **Surveyor report**
- Element length: 2,500, 2,750 or 3,000 mm
- E dimension = Clearance between inner and outer reinforcement [mm]
- Other E dimensions available on request
- Includes cross clips for fastening

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

Article number [...]	E dimension [mm]	Weight [kg/m]	PU [pcs./pal.]	PU [pcs./pal.]	PU [pcs./pal.]	Price per m [€]
			l = 2,500 m	l = 2,750 m	l = 3,000 m	
1107...	140	2.45	28	28	28	38.00
1107...	180	2.60	28	28	28	38.00

Extension products for OBS		Surcharge [€]
Cutting surcharge	Per piece	20.30
E dimension 150–170 mm	Per m	5.00
E dimension ≥190 mm	Per 100 mm of width per m	5.00

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

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	1.60
111400002313	22	250	0.06	50	20	1.60
111400002315	22	300	0.07	50	20	1.60
111400002317	22	350	0.08	50	20	1.70
111400002318	22	365	0.08	50	20	1.70
111400002319	22	400	0.09	50	20	1.70
111400002320	22	450 ¹⁾	0.10	50	20	1.80
111400002321	22	500 ¹⁾	0.10	50	20	2.20

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	43.90

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

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	51.00
1109...	125	240-500	1	20	59.20
1109...	160	240-500	1	20	67.60
1109...	200	240-500	1	10	98.80

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	51.00
1109...	125	240-500	1	20	59.20
1109...	160	240-500	1	20	67.60
1109...	200	300-500	1	20	98.80

PENTAFLEX® PP DM wall lead-through



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

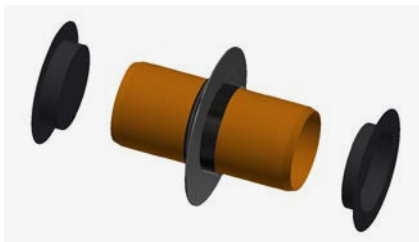
Version with double sleeve.

- 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	49.10
1109...	125	240-500	1	20	54.00
1109...	160	300-500	1	20	62.20

PENTAFLEX® KG protective tube



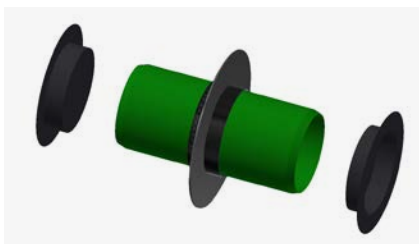
Waterproof protective tubes for cast-in-place or precast walls.

- 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	34.50
1110...	125	240-500	1	20	38.70
1110...	160	240-500	1	20	43.10
1110...	200	240-500	1	-	48.00
1110...	250	240-500	1	-	61.20

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	40.60
1110...	125	240-500	1	20	47.60
1110...	160	240-500	1	20	60.20
1110...	200	240-500	1	-	82.50
1110...	250	240-500	1	-	133.10

PENTAFLEX® KG floor lead-through



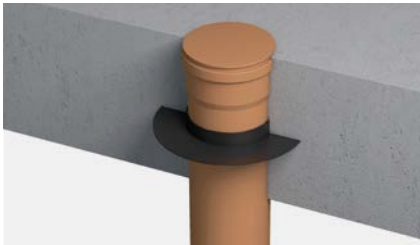
Waterproof floor lead-throughs.

- 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	43.90

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	48.20
111100004296	125	500	1	24	53.60
111100004297	160	500	1	12	64.90
111100004298	200	500	1	-	101.70

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	80.00
111200004235	110	138 x 138	Stainless steel	1.5	1	214.70
111200004238	110	138 x 138	Stainless steel	0.3	1	108.20

PENTAFLEX® extension piece

Article number	DN [mm]	Dimensions [mm]	PU [pcs./box]	Price per piece [€]
111200004255	110	100	1	28.60

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	10.35
120100002677	A320 DIN BV	320	15	100	4.5	25	400	1.84	14.10

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	6.90
120100002676	A320 DIN	320	15	100	4.5	25	400	1.86	9.40

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	2.70
120200002640	A150	150	15	55	3.0	25	600	0.94	3.40
120100002647	A190	190	15	70	3.0	25	500	1.10	3.70
120100002659	A240	240	15	80	3.5	25	500	1.40	4.80
120100002674	A320	320	15	100	4.5	25	400	2.10	7.50
120100002681	A500	500	20	150	6.0	20	40	4.00	14.20

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 thickness [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	3.90
120200002637	A100SL	100	15	40	3.5	11	25	500	0.73	3.70
120200002642	A150S	150	15	58	3.5	11	25	600	0.99	4.10
120200002649	A190S	190	15	78	4.0	11	25	500	1.50	5.70
120200002650	A190SL	190	15	78	4.0	11	25	500	1.47	5.50
120200002656	A190SL7	190	15	78	4.0	11	25	500	1.46	5.10
120200002653	A190SL6	190	15	78	4.0	11	25	500	1.44	4.90
120200002651	A190SL5	190	15	78	4.0	11	25	500	1.43	4.70
120200002663	A240S	240	15	85	4.0	11	25	500	1.63	6.80
120200002664	A240SL	240	15	85	4.0	11	25	500	1.59	6.40
120200002670	A240SL7	240	15	85	4.0	11	25	500	1.62	6.30
120200002667	A240SL6	240	15	85	4.0	11	25	500	1.60	6.00
120200002665	A240SL5	240	15	85	4.0	11	25	500	1.59	5.80
120200002678	A320S	320	15	100	4.5	11	25	400	2.23	8.30
120200002679	A320SL	320	15	100	4.5	11	25	400	2.18	7.90

Bar spacing	=	10 x spring steel insert/m	(example type: A190S)
100 mm (S)	=	8 x spring steel insert/m	(example type: A190SL)
125 mm (SL)	=	7 x spring steel insert/m	(example type: A190SL7)
150 mm (SL7)	=	6 x spring steel insert/m	(example type: A190SL6)
75 mm (SL6)	=	5 x spring steel insert/m	(example type: A190SL5)
200 mm (SL5)	=		

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	14.80
120400002701	AA240/25 DIN BV	240	25	4	80	4.0	25	100	1.94	15.60
120400002705	AA240/35 DIN BV	240	35	4	84	4.0	25	100	2.90	21.90
120400002711	AA320/25 DIN BV	320	25	6	100	4.0	25	50	2.65	20.00
120400002715	AA320/35 DIN BV	320	35	6	100	4.0	25	50	3.91	28.90
120400002719	AA500/35 DIN BV	500	35	8	120	4.0	20	20	5.90	41.20

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	5.90
120400002695	AA240/20	240	20	4	80	4.0	25	100	2.06	7.40
120400002699	AA240/25	240	25	4	80	4.0	25	100	2.15	7.80
120400002702	AA240/35	240	35	4	85	4.0	25	100	2.90	9.90
120400002706	AA320/20	320	20	6	100	4.0	25	100	2.86	9.50
120400002708	AA320/25	320	25	6	100	4.0	25	100	2.80	9.80
120400002712	AA320/35	320	35	6	100	4.0	25	100	4.35	14.10
120400002716	AA500/35	500	35	8	120	4.0	20	40	5.48	19.10

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

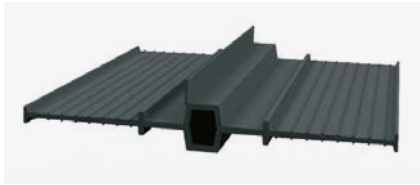
Corner joint tape in line with DIN BV (compatible with bitumen)

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	18.00
120400002692	AA165/165EA DIN BV	165	165	25	6	20	60	2.84	25.80

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	11.60

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 element 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	14.00
120500002744	D320 DIN BV	320	20	15	100	5.0	25	75	2.60	20.30
120500002753	D500 DIN BV	500	20	20	150	6.0	20	40	4.77	39.90

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 element 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	9.30
120500002743	D320 DIN	320	20	15	100	5.0	25	75	2.60	13.50
120500002752	D500 DIN	500	20	20	150	6.0	20	40	4.77	26.70

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 element 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	5.30
120500002732	D190	190	10	15	70	3.5	25	125	1.25	5.20
120500002735	D240	240	20	15	80	4.0	25	100	1.70	7.00
120500002741	D320	320	20	15	100	5.0	25	75	2.80	10.90
120500002750	D500	500	20	20	150	6.0	20	40	4.77	20.50

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 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 section [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	17.25
120600002772	DA240/35 DIN BV	240	20	35	4	84	4.0	25	100	2.97	24.60
120600016747	DA320/25 DIN BV	320	20	25	6	100	4.0	25	50	3.20	24.90
120600002778	DA320/35 DIN BV	320	20	35	6	100	4.0	25	50	4.18	29.40
120600002786	DA500/35 DIN BV	500	20	35	8	120	4.0	20	20	4.95	39.90

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

Article number	Type	Width [mm]	Width of hollow section [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	19.60
120600002785	DA500/35 DIN	500	20	35	8	120	4.0	20	20	4.85	26.70

Exterior 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 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	6.80
120600002766	DA240/20	240	20	20	4	80	4.0	25	100	2.30	9.00
120600002769	DA240/35	240	20	35	4	84	4.0	25	100	3.30	13.00
120600002773	DA320/20	320	20	20	6	100	4.0	25	100	2.98	11.50
120600016745	DA320/25	320	20	25	6	100	4.0	25	100	3.18	12.60
120600002775	DA320/35	320	20	35	6	100	4.0	25	100	4.42	15.70
120600002783	DA500/35	500	20	35	8	120	4.0	20	40	5.34	21.10

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

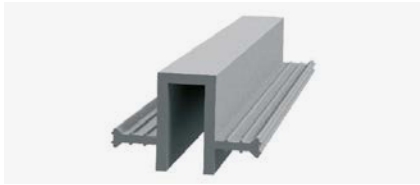
Corner joint tape in line with DIN BV (compatible with bitumen)

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	21.30
120600002761	DA165/165EA DIN BV	165/165	20	25	6	50/50	4.0	20	60	3.10	28.60

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	10.30
120600002758	DA165/165EA	165/165	20	25	6	50/50	4.0	20	60	3.25	15.30

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	11.10
121100002799	FA50/30 DIN BV	50	30	2	30	20	15	150	1.24	13.95
121100002808	FA90/20 DIN BV	90	20	4	30	20	15	90	2.40	19.65
121100002812	FA95/30 DIN BV	95	30	4	30	20	15	75	2.40	21.45
121100002792	FA130/20 DIN BV	130	20	6	30	20	15	60	3.00	27.45

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	5.70
121100002801	FA50/30	50	30	2	30	20	15	150	1.22	6.50
121100002810	FA90/20	90	20	4	30	20	15	90	2.20	9.40
121100002814	FA95/30	95	30	4	30	20	15	75	2.40	10.50
121100002794	FA130/20	130	20	6	30	20	15	60	3.04	13.10

KUNEX® joint closing strip



KUNEX® joint closing strip made from PVC-U is a suitable assembly aid for joint closing tape.

- Material: Hard, grey PVC
- Element length: 2,500 mm

Article number	Type	Height [mm]	Cover width [mm]	Mounting width [mm]	PU [m/bundle]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
121200002815	FL30/60	30	60	30	60	1,440	0.40	2.50

KUNEX® joint sealing strip



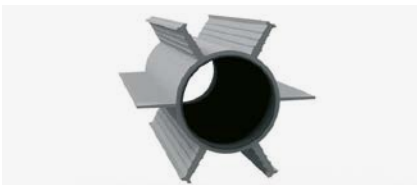
KUNEX® joint sealing strip made from PVC-P for closing the surfaces of movement joints.

- 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	POA

KUNEX® star tube

With German building code test certificate (abP)



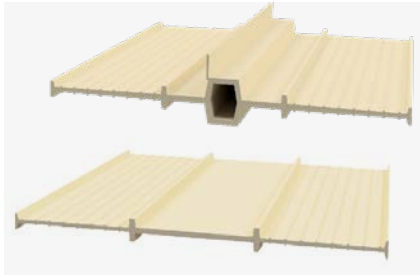
KUNEX® star tube for sealing crack control joints.

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 thickness [mm]	Total width [mm]	PU [pcs./pal.]	Weight [kg/m]	Price per m [€]
120300002901	Q60	2,500	60	≤ 240	100	100	1.90	11.10
120300002902	Q60	3,000	60	≤ 240	100	100	1.90	11.10
120300002903	Q60	4,000	60	≤ 240	100	100	1.90	11.10
120300002905	Q88	2,500	88	≤ 350	150	100	3.06	15.10
120300002906	Q88	3,000	88	≤ 350	150	100	3.06	15.10
120300002907	Q88	4,000	88	≤ 350	150	50	3.06	15.10
120300002898	Q175	2,500	175	350-500	235	25	7.30	29.30
120300002899	Q175	3,000	175	350-500	235	25	7.30	29.30
120300002900	Q175	4,000	175	350-500	235	25	7.30	29.30

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	11.40
123100019840	A320 TPE	320	14	100	4.5	25	400	1.43	15.50

Steel-reinforced interior construction joint tape

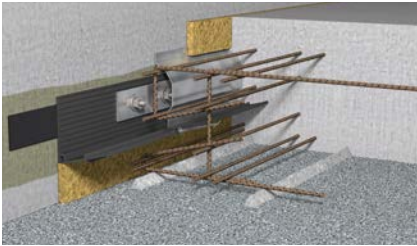
Article number	Type ¹⁾	Width [mm]	Height of anchor rib [mm]	Expansion element width [mm]	Expansion element thickness [mm]	PU [m/roll]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
120200019023	A240SL7 TPE	240	15	85	4.0	25	500	1.25	15.20
123200019842	A320SL7 TPE	320	15	100	4.0	25	400	1.54	18.50

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	15.20
123500019839	D320 TPE	320	20	15	100	5.0	25	75	1.81	22.30

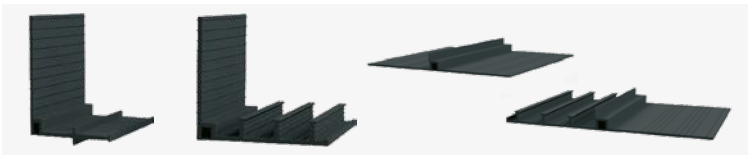
KUNEX® clamp joint



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	31.80
120600002763	DA180/170K DIN BV	180/170	25	35	3	60	20	40	3.90	35.10
120600002780	DA320 KB DIN BV	320	20	4	-	100	20	40	1.99	21.75
120600002782	DA320 KE DIN BV	320	20	20	3	100	20	40	2.30	23.40

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	21.20
120600002762	DA180/170K DIN	180/170	25	35	3	60	20	40	3.60	23.40

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	52.70

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	1.90
121000002914	M16 ¹⁾	18	10	0.04	2.40

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	1.90
121000002631	M16/190 ¹⁾	Galvanised	10	0.29	3.50
121000002628	M12/160	V4A	10	0.14	5.70
121000002630	M16/190 ¹⁾	V4A	10	0.29	11.50

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.

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	6.50
121000019294	TSM 10x140 M12x35 ¹⁾	V4A	25	0.12	11.60

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	9.80

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.

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	55.60
121000002824	1,450 x 80 x 8 ¹⁾	Galvanised	20/30	10	1	6.80	55.60
121000002825	1,300 x 80 x 8	V4A	16/30	9	1	6.80	118.80
121000002823	1,300 x 80 x 8 ¹⁾	V4A	20/30	9	1	6.80	118.80

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.

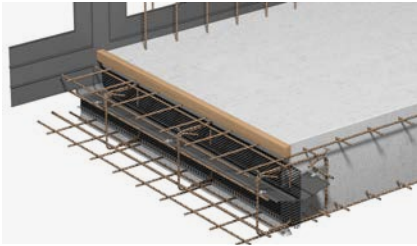
Special profile, galvanised or VA4

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	91.10
121000002835	Outer corner	Galvanised	80 x 10 x 200	1	2.88	132.80
121000002836	Inner corner	V4A	80 x 10 x 80	1	1.20	154.60
121000002834	Outer corner	V4A	80 x 10 x 200	1	2.88	214.30

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	18.50

KUNEX® ABS construction joints



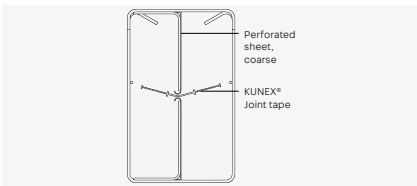
Shuttering element for installing interior KUNEX® joint tapes in waterproof construction joints in reinforced concrete construction. Version for forming rough and interlocking joints in line with EC2.

Please order the KUNEX® joint tape separately.

- Element length: 2,400 mm

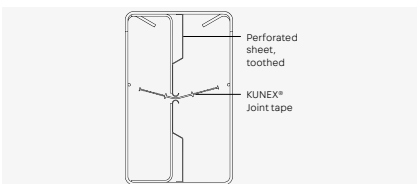
Other dimensions and versions available on request.

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	41.60
121700013927	A240	310-500	6.32	51.40
121700013928	A320	150-300	4.55	43.20
121700013929	A320	310-500	6.42	53.00

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	50.80
121800013933	A240	310-500	6.82	61.40
121800013934	A320	150-300	4.75	52.50
121800013935	A320	310-500	6.95	63.00

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

KUNEX® ABS expansion joints



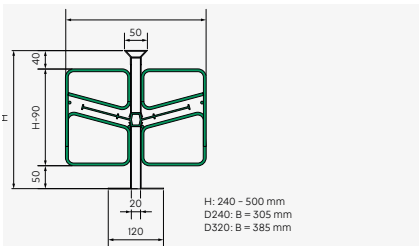
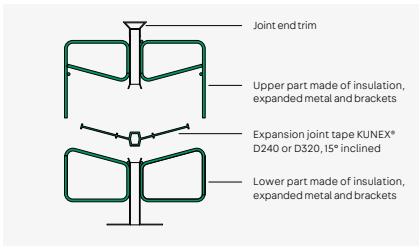
Two-part shuttering element for easy installation of interior KUNEX® joint tapes in waterproof expansion joints with a width of 20 mm in reinforced concrete construction. The elements are suitable for KUNEX® D240 expansion joint tapes in combination with floor slabs from 240 mm to 500 mm thick.

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	86.90
122200021902	D240	310-350	4.53	94.50
122200021903	D240	360-400	4.99	102.80
122200021904	D240	410-450	5.44	111.90
122200021905	D240	460-500	5.89	121.80

Article number	For KUNEX® type	Installation height [mm]	Weight [kg/m]	Price per m [€]
122200021906	D320	240-300	4.19	99.90
122200021907	D320	310-350	4.64	108.60
122200021908	D320	360-400	5.19	118.20
122200021909	D320	410-450	5.56	128.70
122200021910	D320	460-500	6.01	140.10

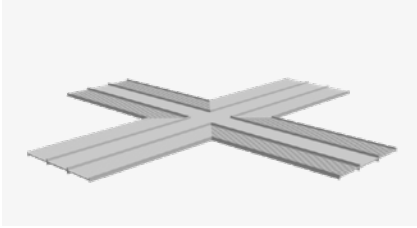
Extension products for ABS expansion joints	Surcharge [€]
Surcharge for short pieces	10%

KUNEX® welded structures

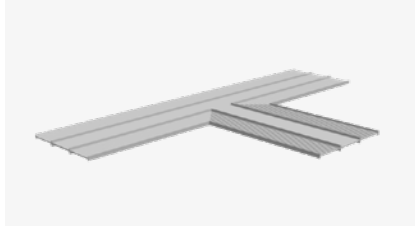
In addition to standard moulded parts made of construction and expansion joint tapes, we also design and produce customised products according to customer requirements. We can produce formwork according to your drawings and specifications. Please get in touch.

Article number	Type	Price [€]
122000002842	KUNEX® welded structures	POA

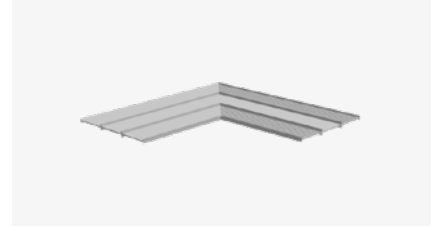
Shape 1 – flat cross



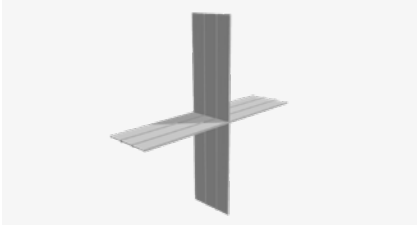
Shape 2 – flat T



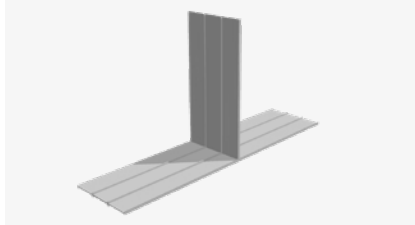
Shape 3 – flat corner



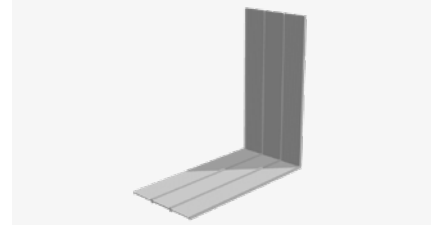
Shape 4 – vertical cross



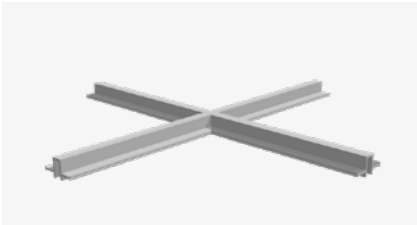
Shape 5 – vertical T



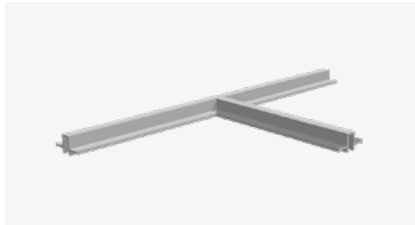
Shape 6 – vertical corner



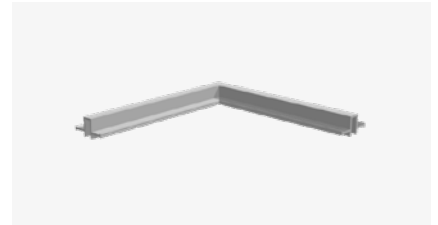
Shape 7 – vertical cross



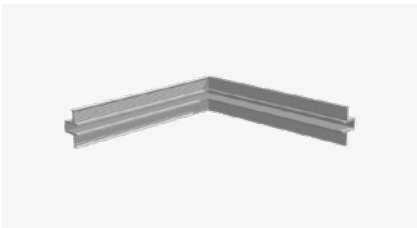
Shape 8 – vertical T



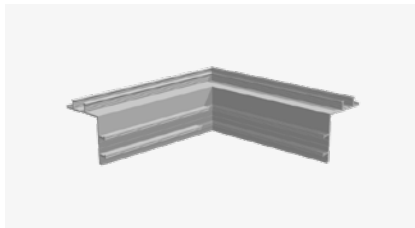
Shape 9 – vertical corner



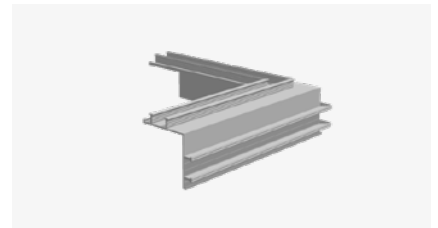
Shape 10 – flat corner



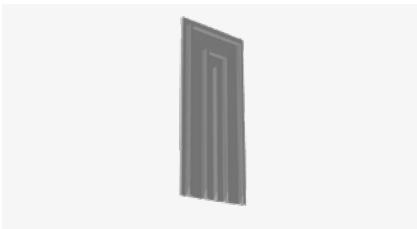
Shape 11 – mirrored corner



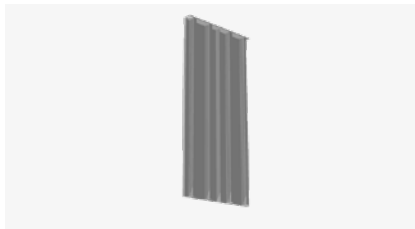
Shape 12 – double-angled corner



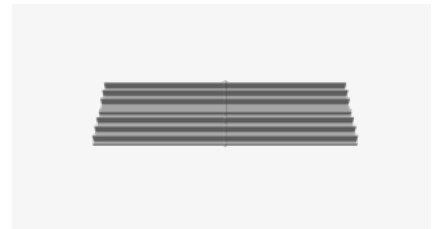
Shape 13 – joint tape lock



Shape 14 – joint tape closure



Shape 15 – butt joint



KUNEX® pre-cut parts

Design	Price [€]
Cost per cut	17.50

KUNEX® welding tools

Article number	Type	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121500002818	Quarter moon knife	1	0.09	52.90
121500002822	Hot air gun 1,600 watts / 230 volts	1	1.30	540.90
121500004055	Tubular nozzle H 5 mm	1	0.10	78.60
121500020357	Wide slot nozzle 20 mm	1	0.30	78.60

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	0.90
121500002840	BV welding tape	30	2	30	0.1	0.90

KUNEX® fastening accessories

Article number	Type	PU [pcs.]	Weight [kg/pc.]	Price per piece [€]
121500002817	Joint tape clips ¹⁾	200	0.01	0.40
121500002830	Omega stirrup	25	0.12	1.10

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	25.50
121500020043	FBV 150	150	1	0.455	28.80
121500020041	FBV 190	190	1	0.575	32.30
121500020045	FBV 240	240	1	0.725	35.80
121500020042	FBV 320	320	1	0.975	39.30



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	14.70
121600019865	MK 50	48 - 53	25	0.227	14.70
121600019860	MK 63	60 - 64	25	0.255	15.20
121600019861	MK 75	71 - 80	25	0.290	16.10
121600019862	MK 90	84 - 92	25	0.325	17.30
121600019767	MK 110	105 - 116	25	0.460	18.20
121600019771	MK 125	120 - 130	20	0.520	24.60
121600019772	MK 160	154 - 166	15	0.630	28.50
121600019773	MK 200	195 - 210	10	0.770	36.70

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	17.30
121600019864	MK ER	8 - 10	25	0.127	17.30

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	3.50

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	7.90

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	9.90

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	16.50

PLURAFLEX® plastic clips

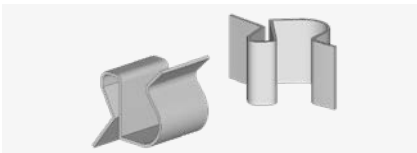


For fastening PLURAFLEX® injection hoses and PLURAFLEX® C11 active to concrete.

- 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	36.30
130200005078	19	100	20 / 2,000	3.50	42.00
130200005079	C11 active	100	20 / 2,000	0.80	30.70

PLURAFLEX® seam sheet clip



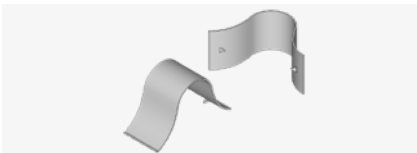
For fastening PLURAFLEX® injection hoses to seam sheets.

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	42.20

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	78.30

PLURAFLEX® spider fitting



Reinforcement mount for attaching 2 PLURAFLEX® nail packers.

Article number	PU [pcs./box]	Weight [kg/box]	Price per piece [€]
13020005047	25	3.00	4.80

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 [€]
13020005090	25	2.00	3.50

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. [€]
13010005033	100	1.00	222.70

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. [€]
13020005082	MR 10	Red / 10	50	0.50	144.60
13020005084	MW 10	White / 10	50	0.50	144.60

PLURAFLEX® M8 injection nipple

For nail packers



Injection nipple for connecting to PLURAFLEX® nail packers depending on the choice of injection material.

Article number	Type	For injection material	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
13020005072	IVH	Resin	100	1.00	60.30
13020005073	IVZ	Cement	100	1.00	60.30

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	11.00

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	2.40
130200005052	White	11	7	1 / 50	16 / 800	6.50	2.40

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	18.10

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	1.30

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	2.70

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	5.10
130200005064	HSS 19	21	1 / 30	10 / 300	2.00	6.70

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	2.30

PLURAFLEX® M6 injection nipple

For injection nozzles



Injection nipple for connecting to PLURAFLEX® injection nozzles depending on the choice of injection material.

Article number	Type	For injection material	PU [pcs./box]	Weight [kg/box]	Price per 100 pcs. [€]
130200005067	IVH	Resin	100	1.00	60.30
130200005068	IVZ	Cement	100	1.00	60.30

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	390.00

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	30.60

PLURAFLEX® V C11 set



Service pack:

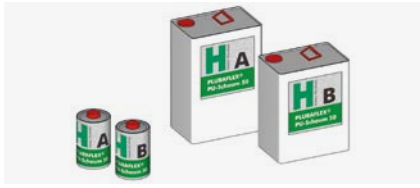
package of PVC hose and protective box for PLURAFLEX® C11.

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	30.60

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	37.10
130300019087	Canister	5.00	6.20	11.20	30.10
130300005025	Canister	10.50	13.00	23.50	27.90

PLURAFLEX® PUR injection resin 05



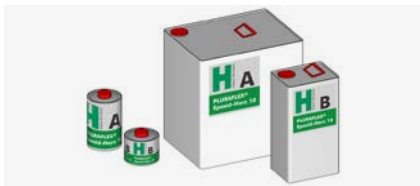
WEBAC® 1405

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). Fulfills 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	36.10
130300005023	Canister	5.00	2.75	7.75	26.70
130300005020	Canister	10.00	5.50	15.50	24.90

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	40.30
130300005054	Canister	1.00	0.40	1.40	33.20
130300019547	Canister	5.00	2.00	7.00	28.30

PLURAFLEX® 2C injection grout



High-quality, 2-component injection grout with low viscosity for sealing even fine cracks. PLURAFLEX® 2C injection grout sets quickly and is impermeable to water, waterproof, weatherproof and frostproof after curing.

Article number	PU	Powder component A [kg]	Liquid component B [kg]	Total weight [kg]	PU [bucket/pal.]	Price per kg [€]
130200005069	Bucket	6.50	3.50	10.00	24	16.70

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	4.30
140100021828	BS 18/24	24	18	6	30	900	0.90	5.00

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	7.10
140100021830	BT 18/24	24	18	6	30	900	0.90	7.70

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	7.50
140100005107	RB 23/15	23	15	6	30	540	0.22	15.00
140100005108	RB round	Dia. 23	Dia. 23	5	20	360	0.28	18.70

SWELLFLEX® mounting channel

Metal



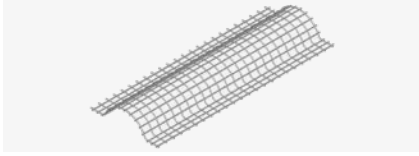
For fastening SWELLFLEX® bentonite waterstop tape to concrete. The channel is fixed in place using conventional fasteners.

- Consumption per m of SWELLFLEX® mounting channel: approx. 5 nails

Mounting channel with waterstop tape

Article number	Element length [mm]	PU [m/bundle]	PU [m/pal.]	Weight [kg/m]	Price per m [€]
140200005113	1,000	30	360	0.50	1.90

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 [€]
14020005110	1,000	30	720	1.80	1.80

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	13.90

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 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).

SECUFLEX® SMT



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

- **Adhesive strip 75 mm wide**
- Highly flexible, crack-bridging and with anti-tracking properties
- Quick, easy and reliable installation of pre-applied waterproofing membranes

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	26.20

SECUFLEX® ST



HDPE sealing strip with adhesive layer and without special granulate for subsequently gluing over joints.

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [m²/Rolle]	PU [rolls/pal.]	Weight [kg/m²]	Price per m² [€]
160100019867	ST 600	20	600	1.2	12	32	0.85	31.80
160100022299	ST 1200	20	1,200	1.2	24	16	0.85	31.80

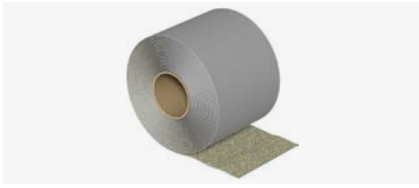
SECUFLEX® MT



One-sided self-adhesive sealing tape with laminated HDPE film for connecting butt joints on the positive side.

Article number	Type	Length [m]	Width [mm]	Thickness [mm]	PU [rolls/box]	Weight [kg/m]	Price per m [€]
160100019820	MT 150	50	150	0.3	1	0.06	6.20

SECUFLEX® PT



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

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

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	3.80

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	56.10
160100019823	PR 100	100	1.0	1.70	92.70
160100019824	PR 120 L	120	1.0	3.20	278.80

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Anchor channels



Anchor channels JTA W, JTA K

ETA (European Technical Assessment ETA-09/0338)

Profile	JTA W 72/48-CE		JTA K 72/48-CE		JTA W 55/42-CE				
Suitable bolts	JA M20-M30		JA M20-M30		JB M16-M24				
Channel length ²⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
		Design		Design		Design		Design	
		fv	A4	fv	A4	fv	A4	fv	A4
150	2	51.20	153.20	2	49.60	112.20	2	34.30	
200	2	55.20	183.30	2	53.40	127.60	2	37.70	
250	2	59.10	213.40	2	57.20	142.90	2	41.10	
300	2	63.20	243.30	2	61.10	158.20	2	44.40	
350	2	67.10	273.40	2	65.00	173.40	2	45.20	
400	3	85.30	331.90	3	82.60	218.60	3	60.30	
550	3	95.90	421.90	3	92.80	264.40	3	69.60	
800	4	131.30	598.80	4	127.10	369.00	4	96.20	
1,050	5	193.20	770.60	5	186.90	468.20	5	117.20	
3,000	11	470.30	2,149.60	11	454.90	1,254.30	11	296.40	
6,000	21	895.80	4,094.40	21	866.40	2,389.20	21	564.60	
Per running m¹⁾	3.5/m	149.30	682.40	3,5/m	144.40	398.20	3,5/m	94.10	
Weight [kg/m]¹⁾	9.80			9.05			7.70		
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.

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 metre for mill finish, average anchor weight (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Profile	JTA W 53/34-CE ¹⁾		JTA K 53/34-CE		JTA W 50+CE		JTA W 50/30-CE ¹⁾		
Suitable bolts	JB M10-M20		JB M10-M20		JB M10-M20		JB M10-M20		
Channel length ³⁾ [mm]	Number of anchors	Price per piece [€] Design		Number of anchors	Price per piece [€] Design		Number of anchors	Price per piece [€] Design	
		fv	A4		fv	A4		fv	A4
150	2	25.30	78.60	2	24.90	70.60	2	22.40	76.20
200	2	29.90	96.20	2	28.60	82.90	2	26.30	81.80
250	2	34.70	113.50	2	32.30	95.10	2	30.20	87.40
300	2	39.40	130.90	2	36.00	107.30	2	34.10	109.90
300	3	44.70	-	3	42.70	-	3	-	-
350	3	46.60	161.50	3	43.10	136.20	3	41.10	122.00
400	3	50.90	178.80	3	46.40	148.40	3	44.70	134.30
550	3	63.30	230.90	3	56.20	185.10	3	55.60	189.00
800	4	91.10	330.90	4	79.30	262.80	4	78.80	244.40
1,050	5	140.90	430.80	5	123.70	340.60	5	101.60	317.20
3,000	13	301.10	1,199.20	13	299.30	827.50	13	252.60	903.70
6,000	25	573.60	2,284.20	25	570.00	1,576.20	25	481.20	1,721.40
Per running m ²⁾	4/m	95.60	380.70	4/m	95.00	262.70	4/m	80.20	286.90
Weight [kg/m] ²⁾	5.60			5.10			3.45		
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

- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

Example order for short anchor channel pieces

Type	Profile size	-	Channel length	-	Anchor	-	Design	-	ETA-compliant
JTA	W 50/30	-	250	-	2A	-	fv	-	CE



Suitable bolts and various accessories for all channels can be found starting on page 64.

For sample calculations of regular lengths and custom lengths, see page 56.

Anchor channels JTA W, JTA K ETA (European Technical Assessment ETA-09/0338)

Profile	JTA K 50/30-CE			JTA W 40+CE			JTA W 40/22-CE ¹⁾		
Suitable bolts	JB M10-M20			JC M10-M16			JC M10-M16		
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	A4		fv	A4
150	2	15.20	40.60	2	14.00	65.70	2	12.70	39.70
200	2	17.30	47.40	2	16.20	72.20	2	13.00	48.60
250	2	19.20	53.90	2	18.30	80.00	2	15.30	57.50
250	3	22.50	60.00	3	-	-	3	19.10	62.20
300	2	21.30	60.60	2	20.40	84.10	2	17.50	63.90
300	3	24.60	66.40	3	-	-	3	20.90	72.20
350	3	26.90	77.40	3	24.90	116.30	3	21.50	77.80
400	3	31.10	84.20	3	26.90	129.00	3	23.60	86.60
550	3	33.30	104.10	3	32.90	147.50	3	32.60	114.80
800	4	46.70	147.40	4	46.40	189.80	4	41.20	168.10
1,050	5	61.70	190.80	5	60.10	265.00	5	51.60	219.10
3,000	13	157.80	541.20	13	150.30	712.20	13	132.60	606.40
6,000	25	300.60	1,030.80	25	286.20	1,356.60	25	252.60	1,155.00
Per running m ²⁾	4/m	50.10	171.80	4/m	47.70	226.10	4/m	42.10	192.50
Weight [kg/m] ²⁾	3.25			2.30			2.30		
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.

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 metre for mill finish, average anchor weight (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Profile	JTA K 40/25-CE ¹⁾			JTA K 38/17-CE ¹⁾			JTA K 28/15-CE		
Suitable bolts	JC M10-M16			JH M10-M16			JD M6-M12		
Channel length ³⁾ [mm]	Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]		Number of anchors	Price per piece [€]	
		fv	Design A4		fv	Design A4		fv	Design A4
100	2	10.60	-	2	8.40	24.60	2	7.60	19.80
150	2	11.80	35.60	2	9.70	30.00	2	8.70	24.20
200	2	12.20	41.40	2	11.10	35.30	2	9.50	28.50
250	2	13.80	47.10	2	12.90	40.70	2	9.80	32.80
250	3	17.00	51.40	-	-	46.80	-	-	-
300	2	14.00	53.10	-	-	-	-	-	-
300	3	17.50	58.20	3	17.80	54.10	3	13.40	45.70
350	3	18.00	60.30	3	18.00	59.50	3	13.70	50.10
400	3	19.40	73.40	3	18.50	67.40	3	14.60	54.40
550	3	23.60	90.80	4	24.10	91.50	4	17.70	73.90
800	4	37.10	125.10	5	40.90	123.80	5	25.00	109.30
1,050	5	47.80	159.40	6	43.40	161.20	6	34.40	123.20
3,000	13	115.90	436.90	16	96.10	372.60	16	71.80	246.60
6,000	25	220.80	832.20	31	183.00	709.80	31	136.80	469.80
Per running m ²⁾	4/m	36.80	138.70	4/m	30.50	118.30	4/m	22.80	78.30
Weight [kg/m] ²⁾	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.

Version and material

- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

Example order for short anchor channel pieces

Type	Profile size	Channel length	Anchor	Design	ETA-compliant
JTA	K 38/17	300	3A	fv	CE



Suitable bolts and various accessories for all channels can be found starting on page 64.

For sample calculations of regular lengths and custom lengths, see page 56.

Toothed anchor channels JXA W

ETA (European Technical Assessment ETA-09/0338)

Profile	JXA W 64/44 ⁴⁾	JXA W 53/34 ⁴⁾	JXA W 38/23 ⁴⁾	JXA W 29/20 ⁵⁾				
Suitable bolts	JXE M20-M24	JXB M16-M20	JXH M12-M16	JXD M10-M12				
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	Number of anchors	Price per piece [€] Design fv
150	2	74.20	2	39.80 155.30	2	17.50 60.70	2	12.80
200	2	82.80	2	43.50 180.50	2	20.60 72.70	2	15.50
250	2	91.60	2	47.20 205.60	2	23.70 84.50	2	17.70
300	2	100.10	2	50.90 230.90	2	26.70 96.40	3	22.70
350	3	126.30	3	66.50 295.10	3	32.30 120.40	3	24.50
400	3	134.40	3	70.00 320.30	3	35.30 132.40	3	26.70
550	3	159.20	3	80.70 398.40	3	43.80 168.10	4	36.20
800	4	221.20	4	111.20 561.90	4	62.20 239.70	5	50.00
1,050	5	317.60	5	156.60 716.60	5	91.70 311.60	6	64.30
3,000	13	843.60	13	434.70 2,029.20	13	176.40 851.40	16	135.80
6,000	25	1,606.80	25	828.00 3,865.20	25	336.00 1,621.80	31	258.60
Per running m ²⁾	4/m	267.80	4/m	138.00 644.20	4/m	56.00 270.30	5/m	43.10
Weight [kg/m] ²⁾	8.30		5.50		2.70		1.70	
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

Anchor type

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

Toothed anchor channels JXA-PC W

Profile	JXA-PC W 64/44		JXA-PC W 53/34		JXA-PC W 38/23		JXA-PC W 29/20	
Suitable bolts	JXE M20-M24		JXB M16-M20		JXH M12-M16		JXD M10-M12	
Channel length ²⁾ [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	109.20	2	91.70	2	73.90	2	66.40
200	2	121.50	2	99.80	2	79.30	2	70.40
250	2	133.90	2	107.80	2	84.50	2	74.20
300	2	146.30	2	116.00	2	89.90	3	102.00
350	3	186.40	3	152.80	3	121.70	3	108.50
400	3	197.80	3	160.30	3	126.80	3	112.20
550	3	233.30	3	183.50	3	142.30	4	148.40
800	4	324.10	4	252.60	4	193.40	5	191.80
1,050	5	461.50	5	353.00	5	267.40	6	249.70
3,000	13	1,119.20	13	851.40	13	652.10	16	638.50
6,000	25	2,131.80	25	1,621.80	25	1,242.00	31	1,216.20
Per running m ¹⁾	4/m	355.30	4/m	270.30	4/m	207.00	5/m	202.70
Weight [kg/m] ¹⁾	8.76		5.74		3.51		2.46	
Standard cutting surcharge		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

- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

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



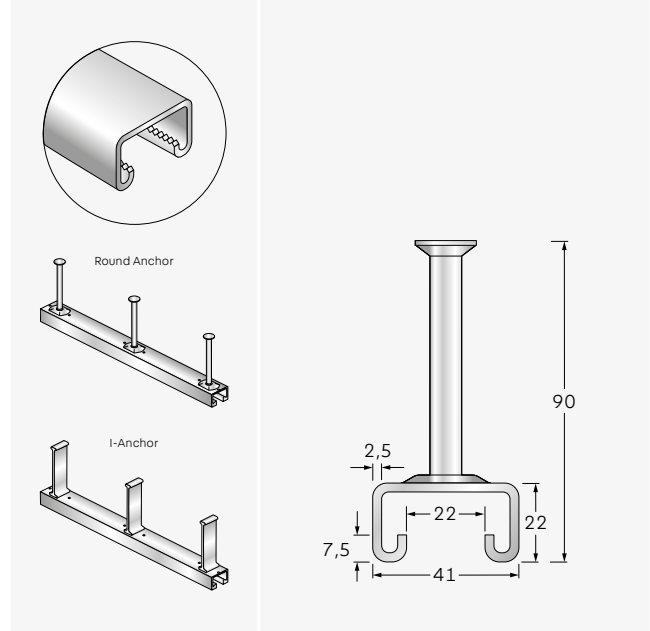
Suitable bolts and various accessories for all channels can be found starting on page 64.

For sample calculations of regular lengths and custom lengths, see page 56.

Toothed anchor channels JZA K

ETA (European Technical Assessment ETA-09/0338)

Profile	JZA K 41/22 ¹⁾⁴⁾
Suitable bolts	JZS M12 - M16




Channel length ³⁾ [mm]	Number of anchors	Price per piece [€]	
		fv	Design A4
100	2	11.10	29.20
150	2	13.10	36.30
200	2	15.00	43.40
250	2	17.00	50.60
300	2	18.90	57.50
350	3	23.10	71.90
400	3	24.90	79.00
550	3	30.20	99.80
800	4	42.60	142.20
1,050	5	55.10	184.70
3,000	13	166.60	550.00
6,000	25	317.40	1,047.60
Per running m²⁾	4/m	52.90	174.60
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

Example order for toothed anchor channels JZA

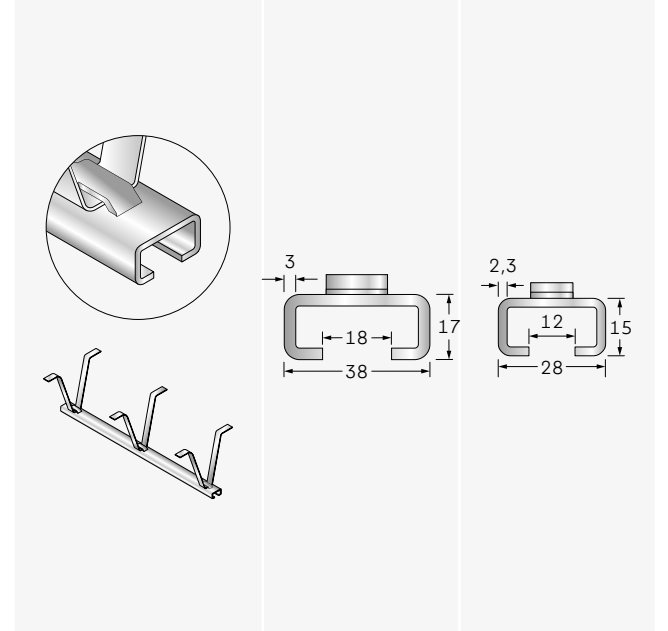
Type	Profile size	-	Channel length	-	Design
JZA	K 41/22	-	6,000	-	fv

 Suitable bolts and various accessories for all channels can be found starting on page 64.

All information concerning cut lengths, anchor version etc. can be found on page 56.

Anchor channels JSA K

Profile	JSA K 38/17	JSA K 28/15
Suitable bolts	JHM10-M16	JD M6-M12
Stirrup type	2 × 20 × 400	1.5 × 15 × 320

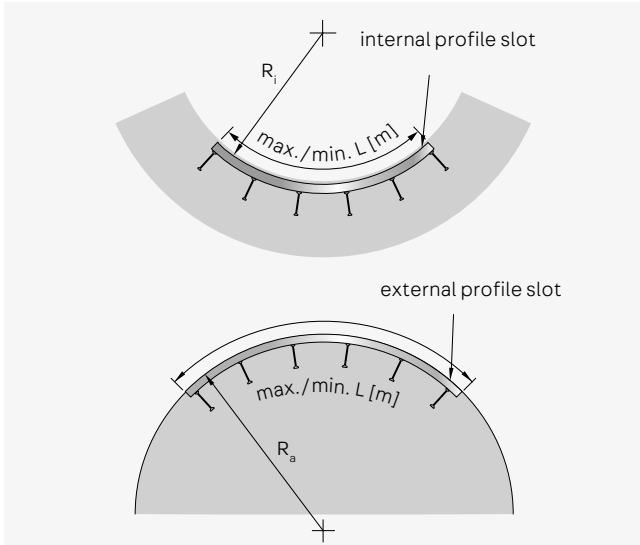


	Price per piece [€]		Price per piece [€]	
	Design		Design	
	With stirrup	Without stirrup	With stirrup	Without stirrup
Per running m²⁾	34.10	26.10	17.30	15.10
Weight [kg/m]²⁾	2.30	-	1.35	-
Standard cutting surcharge		10%		10%

Version and material

- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

Curved anchor channels JTA, JXA



R_i = internal profile slot; R_a = external profile slot

Version and material

- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

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

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

Price per piece [€] on request.

Example order for curved anchor channels JTA

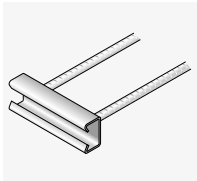
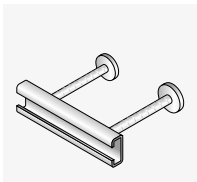
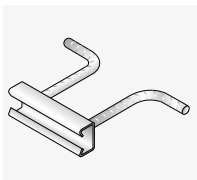
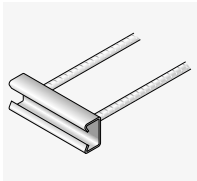
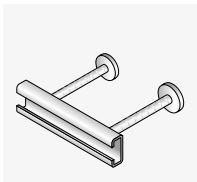
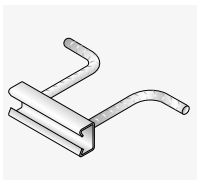
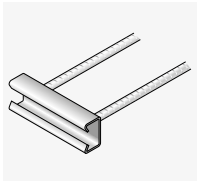
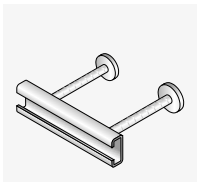
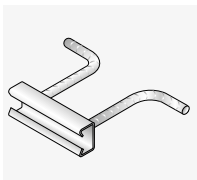
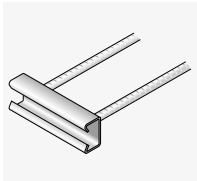
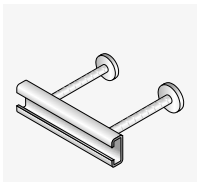
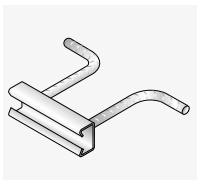
Type	Profile size	Channel length	Design	Bending radius [mm]
JTA	K 38/17	1,050	fv	$R_i = 1,000$



Suitable bolts and various accessories for all channels can be found starting on page 64.

Handrail connection channels JGB

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

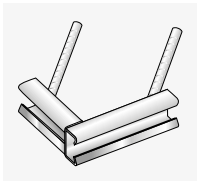
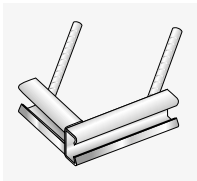
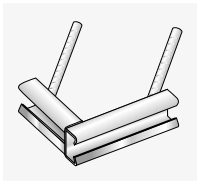
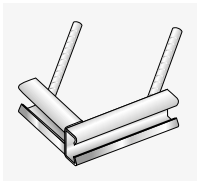
	Profile ²⁾	Anchor diameter	Design	Price per piece [€]					
				Profile length ¹⁾ [mm]					
				100	120	150	200	220	250
 JGB ... G	JGB K 38/17 G-...	Dia. 10	fv	28.00	28.40	28.70	29.60	29.90	30.60
		Installation height H = 165 mm	A4	52.70	54.10	58.30	61.00	62.20	64.80
 JGB ... DA	JGB K 40/25 G-...	Dia. 12	fv	29.90	30.50	30.80	32.10	32.40	32.90
		Installation height H = 200 mm	A4	55.10	56.50	60.20	64.70	65.90	69.00
 JGB ... W	JGB K 50/30 G-...	Dia. 12	fv	33.70	34.30	35.10	36.80	37.40	38.10
		Installation height H = 225 mm	A4	61.80	63.40	68.00	74.70	76.80	79.40
 JGB ... G	JGB K 53/34 G-...	Dia. 14	fv	40.40	41.70	42.90	45.60	46.60	47.90
		Installation height H = 320 mm	A4	68.00	72.10	77.90	86.90	90.80	96.20
 JGB ... DA	JGB K 38/17 DA-...	Dia. 10	fv	30.80	31.10	31.50	32.40	32.70	33.40
		Installation height H = 120 mm	A4	-	-	-	-	-	-
 JGB ... W	JGB K 40/25 DA-...	Dia. 10	fv	31.20	32.10	32.40	33.70	34.10	34.60
		Installation height H = 125 mm	A4	57.80	59.30	61.30	64.90	66.50	68.00
 JGB ... G	JGB K 50/30 DA-...	Dia. 12	fv	35.00	35.60	36.70	38.20	38.90	39.70
		Installation height H = 150 mm	A4	63.70	65.40	68.60	76.90	81.50	81.80
 JGB ... DA	JGB K 53/34 DA-...	Dia. 14	fv	41.70	42.80	44.40	47.10	47.90	49.50
		Installation height H = 250 mm	A4	70.10	74.20	80.20	89.60	93.50	99.10
 JGB ... W	JGB K 38/17 W-...	Dia. 10	fv	32.90	33.00	33.90	34.80	35.30	35.60
		Installation height H = 120 mm	A4	61.90	63.70	65.40	68.90	69.90	71.70
 JGB ... G	JGB K 40/25 W-...	Dia. 12	fv	35.30	35.60	36.20	37.10	37.60	38.10
		Installation height H = 155 mm	A4	65.40	66.90	69.40	72.90	74.00	76.00
 JGB ... DA	JGB K 50/30 W-...	Dia. 12	fv	38.60	39.00	40.10	41.70	42.20	42.90
		Installation height H = 170 mm	A4	71.10	73.10	76.00	80.60	82.90	86.00
 JGB ... W	JGB K 53/34 W-...	Dia. 14	fv	45.30	46.40	47.80	50.00	51.20	52.50
		Installation height H = 240 mm	A4	74.00	77.90	83.30	93.00	96.20	102.30

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

²⁾ W profiles on request.

Handrail connection channels JGB

Corner pieces with rebar

	Profile Profile dimensions ¹⁾ l = 170 x 170 mm	Anchor diameter	Design	Price per piece
				[€]
 JGB ... G	JGB K 38/17 G-170 x 170	Dia. 10	fv	55.40
			A4	111.10
 JGB ... G	JGB K 40/25 G-170 x 170	Dia. 12	fv	58.70
			A4	120.80
 JGB ... G	JGB K 50/30 G-170 x 170	Dia. 12	fv	63.00
			A4	128.80
 JGB ... G	JGB K 53/34 G-170 x 170	Dia. 14	fv	69.80
			A4	158.20

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

Example order for handrail connection channels JGB

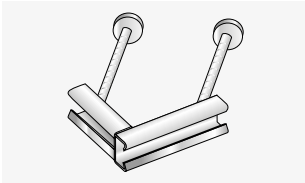
Type	Profile size	-	Type	-	Design	-	Length l
JGB	K 38/17	-	G	-	fv	-	200



Suitable bolts and various accessories for all channels can be found starting on page 64.

Handrail connection channels JGB

Corner piece with headed anchors



JGB ... DA

Profile Profile dimensions ¹⁾ l = 170 x 170 mm	Anchor diameter	Design	Price per piece
JGB K 38/17 DA-170 x 170	Dia. 12	fv	POA
JGB K 40/25 DA-170 x 170	Dia. 14	fv, A4	POA
JGB K 50/30 DA-170 x 170	Dia. 14	fv, A4	POA
JGB K 53/34 DA-170 x 170	Dia. 14	fv, A4	POA

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

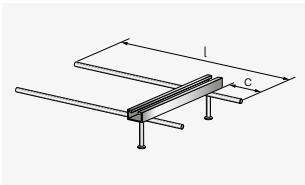
Version and material

- Hot-dip galvanised (fv) version > 50 m (indoor use)
profile steel 1.0038 and anchor B500B
- Stainless steel (A4) profile version 1.4401/1.4404/1.4571
and anchor B500B or B500B NR for K 38/17
- PE foam filling

Further information

- All prices including foam filling and 2 anchors

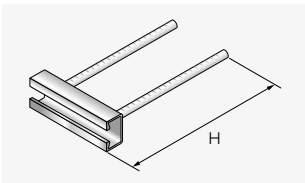
Facade fastening channels JTA-RT



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	POA
JTA-RT W 50/30	1 - 6		75 - 200	365 - 490	fv	POA
JTA-RT W 53/34	1 - 5		100 - 200	400 - 500	fv	POA
JTA-RT W 55/42	1 - 5		100 - 200	400 - 500	fv	POA

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

Facade fastening channels JTA-RF



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

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

Price calculation for channels

All prices are gross prices.

Price calculation

Version: mill finish/galvanised

	Gross price
+	Steel surcharge
-	Discount
=	<u>Net total</u>

Design: Stainless steel A2 or A4

	Gross price
+	Steel surcharge
+	Alloy surcharge
-	Discount
=	<u>Net total</u>

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 metre)

	Price per metre €/m
x	Length
x	Surcharge, alloy surcharge
x	Cutting surcharge %
-	Discount
=	<u>Net total</u>

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

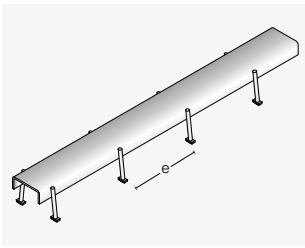
All other cut lengths are special lengths. This calculation is based on a cutting surcharge of 20% (increased production costs).

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.

Profiled metal sheet channels JTB uni

National technical approval (abZ Z-21.4-161)



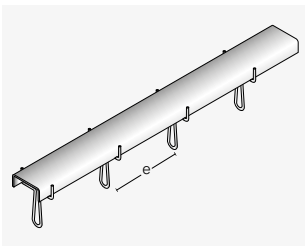
Profile	Material thickness [mm]	Anchor spacing e [mm]	Anchor per 3 m	Weight [kg/m]	Price per m [€]	
					fv	A4
JTB 60/22/3.0-uni ¹⁾	3	450	8	2.38	27.30	109.40
	3	150	20	2.51	38.20	143.10
JTB 60/22/6.0-uni	6	450	8	3.97	46.70	-
	6	150	20	4.10	61.10	-

¹⁾ A4 version with 24-mm profile height

Accessories	Price per set [€]	
	Design	fv
JTB-EB end anchor	With 4 drilling screws dia. 4.8 × 16 mm	8.90

Profiled metal sheet channels JTB AR

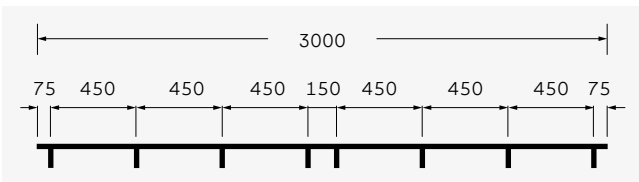
National technical approval (abZ Z-21.4-161)



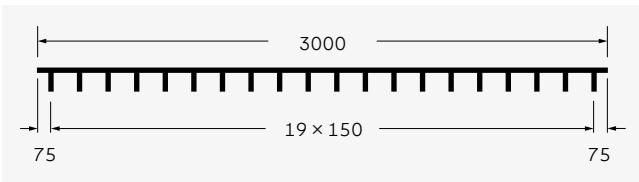
Profile	Material thickness [mm]	Anchor spacing e [mm]	Anchor per 3 m	Weight [kg/m]	Price per m [€]	
					fv	A4
JTB 60/22/3.0-AR ¹⁾	3	450	8	2.40	27.30	109.40
	3	150	20	2.51	38.20	143.10
JTB 60/22/6.0-AR	6	450	8	3.99	46.70	-
	6	150	20	4.30	61.10	-

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

Further information

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

Version and material

- fv = Hot-dip galvanised 1.0038
- A4 = Stainless steel 1.4401/1.4404/1.4571

Example order for profiled metal sheet channels JTB

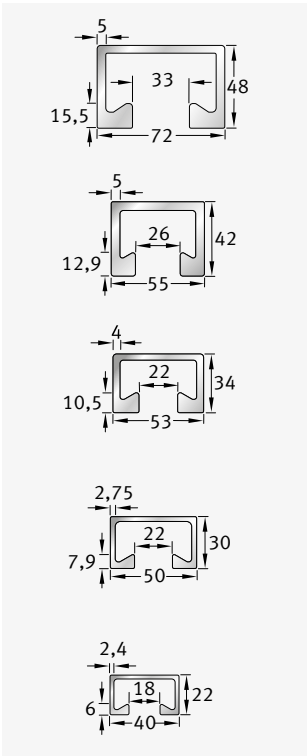
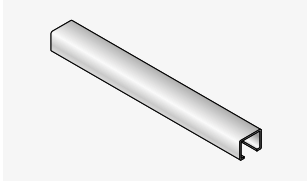
Type	Profile size	Anchor spacing	Anchor shape	Design
JTB	60/22/3,0	450	uni	fv

Mounting channels



Mounting channels JM W-CE

ETA (European Technical Assessment ETA-15/0386)



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JM W 72/48-CE	JA M20-M30	8.85	wb	68.60	15.70
			fv	102.10	15.70
			A4	575.70	31.40
JM W 55/42-CE	JB M10-M24	6.57	wb	61.60	15.70
			fv	93.00	15.70
JM W 53/34-CE	JB M10-M20	4.96	wb	38.70	15.70
			fv	58.70	15.70
			A4	330.10	17.60
JM W 50/30-CE	JB M10-M20	3.25	wb	26.00	9.90
			fv	41.00	9.90
JM W 40/22-CE	JC M10-M16	2.12	wb	17.50	6.20
			fv	26.70	6.20
			A4	151.60	9.70

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 metre for mill finish version (for galvanised profiles: +10%; for stainless steel profiles: +2%)

Version and material

- wb = Mill finish 1.0038/1.0044
- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

Example order for mounting channels JM

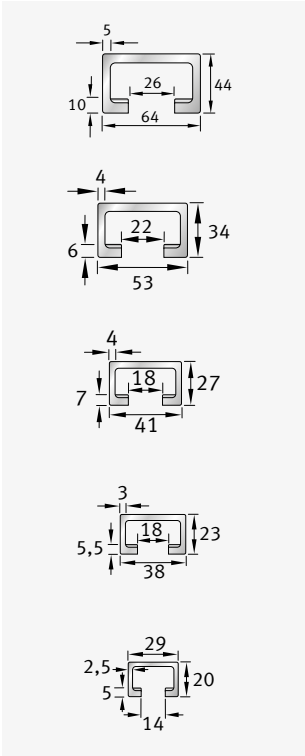
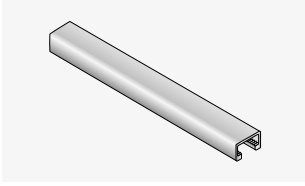
Type	Profile size	Channel length	Design	ETA-compliant
JM	W 50/30	6,000	fv	CE



Suitable bolts and various accessories for all channels can be found starting on page 64.

Information on price calculations and cut lengths can be found on page 56.

Toothed mounting channels JXM W



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JXM W 64/44	JXE M20-M24	7.19	wb	100.70	22.60
			fv	150.30	22.60
JXM W 53/34	JXB M16-M20	4.65	wb	68.60	15.70
			fv	102.30	15.70
			A4	575.70	31.40
JXM W 41/27¹⁾	JXH M12-M16, JH M10-M16	3.38	wb	46.90	-
			fv	58.70	-
JXM W 38/23	JXH M12-M16, JH M10-M16	2.42	wb	26.00	9.90
			fv	41.00	9.90
			A4	255.80	12.50
JXM W 29/20	JXD M12, JD M6-M12	1.55	wb	17.50	6.20
			fv	26.70	6.20

¹⁾ Only available in 6,000 mm

Version and material

- wb = Mill finish 1.0038/1.0044
- fv = Hot-dip galvanised 1.0038/1.0044
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

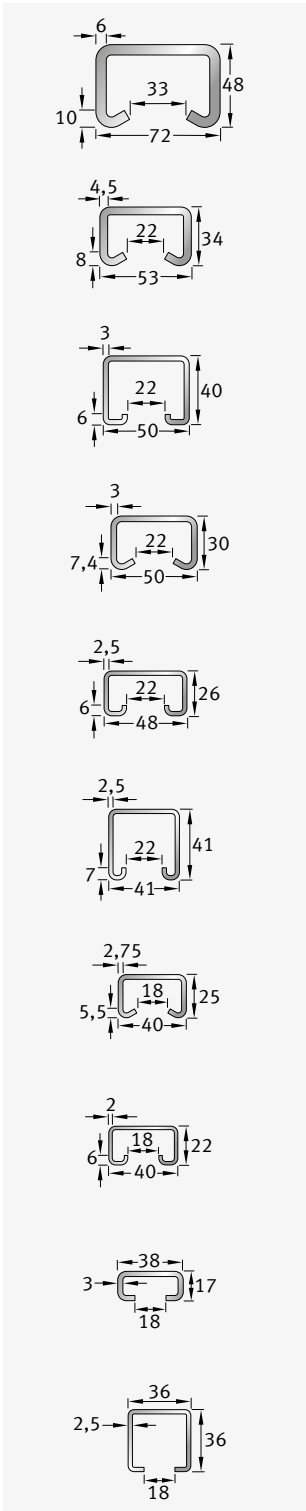
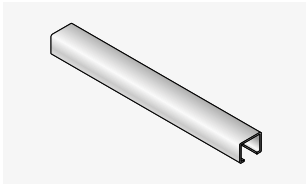
Example order for toothed mounting channels JXM W

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



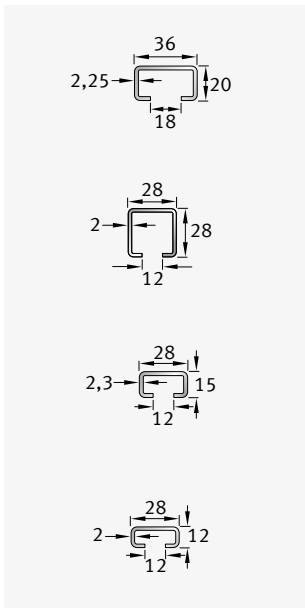
Information on price calculations and cut lengths can be found on page 56.

Mounting channels JM K



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JM K 72/48	JA M20-M30	8.09	wb	63.50	16.00
			fv	92.20	16.00
			A4	420.80	18.20
JM K 53/34	JB M10-M20	4.47	wb	23.70	10.10
			fv	39.80	10.10
			A4	187.60	15.60
JM K 50/40 ¹⁾	JB M10-M20	3.41	wb	22.00	-
			fv	38.60	-
JM K 50/30	JB M10-M20	3.04	wb	18.00	6.40
			fv	31.50	6.40
			A4	149.50	9.90
JM K 48/26 ¹⁾	JB M10-M20	2.25	wb	16.50	-
			fv	27.10	-
JM K 41/41 ¹⁾	JAM(F) 22 M6-M12 (channel nuts)	2.61	wb	16.50	-
			fv	27.10	-
JM K 40/25	JC M10-M16	2.01	wb	13.00	6.40
			fv	22.10	6.40
			A2	79.90	9.90
JM K 40/22	JC M10-M16	1.53	A4	103.90	9.90
			wb	9.00	6.40
			fv	16.90	6.40
JM K 38/17	JH M10-M16	1.77	wb	11.00	4.60
			fv	18.30	4.60
			A2	65.60	6.90
JM K 36/36 ¹⁾	JH M10-M16	2.20	A4	85.10	6.90
			wb	13.20	-
			fv	23.00	-
			A4	100.30	-

¹⁾ Only available in 6,000 mm



Profile	Bolt	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JM K 36/20 ¹⁾	JH M10-M16	1.44	wb	9.00	-
			fv	15.10	-
JM K 28/28 ¹⁾	JD M6-M12	1.39	wb	8.50	-
			fv	13.20	-
			A4	67.20	-
JM K 28/15	JD M6-M12	1.08	wb	7.00	4.60
			fv	11.20	4.60
			A2	41.00	6.90
JM K 28/12 ¹⁾	JD M6-M10	0.89	wb	5.90	4.60
			fv	9.40	4.60
			A2	34.20	6.90
			A4	54.10	6.90

¹⁾ Only available in 6,000 mm

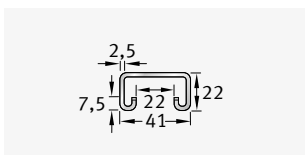
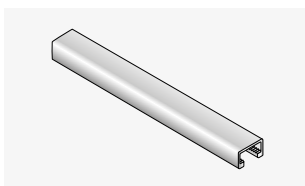
Further information

- 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 metre 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

Toothed mounting channels JZM K



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	20.50	6.40
			fv	31.10	6.40
			A4	122.30	9.90

Version and material

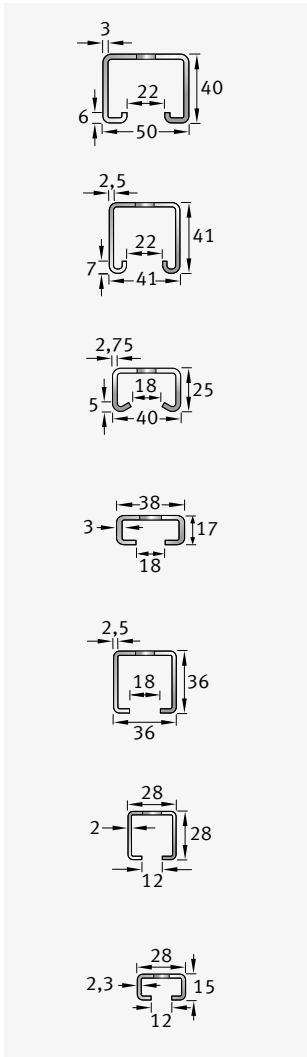
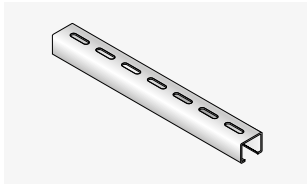
- wb = Mill finish 1.0038/1.0044
- fv = Hot-dip galvanised 1.0038/1.0044
- A2 = Stainless steel 1.4301/1.4541
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed



Suitable bolts and various accessories for all channels can be found starting on page 64.

Information on price calculations and cut lengths can be found on page 56.

Slotted back mounting channels JML K



Profile	Bolt	Slot [mm]	Weight [kg/m]	Design	Price per m [€]	Cutting surcharge per piece [€]
JML K 50/40¹⁾	JB M10-M20	11 × 40	3.25	wb	23.70	-
				fv	40.30	-
JML K 41/41¹⁾	JAM (F) 22 M6-M12 (Channel nuts)	11 × 40	2.47	wb	18.30	-
				fv	29.20	-
JML K 40/25	JC M10-M16	11 × 40	1.86	wb	16.00	6.40
				fv	25.20	6.40
				A4	108.20	9.90
JML K 38/17	JH M10-M16	11 × 40	1.55	fv	20.80	4.60
				A4	89.60	6.90
JML K 36/36¹⁾	JH M10-M16	11 × 40	2.09	wb	14.90	-
				fv	27.40	-
				A4	104.40	-
JML K 28/28¹⁾	JD M6-M12	11 × 40	1.28	wb	9.80	-
				fv	16.00	-
JML K 28/15	JD M6-M12	9 × 25	1.02	wb	8.50	4.60
				fv	12.90	4.60
				A4	58.80	6.90

¹⁾ Only available in 6,000 mm

Further information

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

Version and material

- wb = Mill finish 1.0038/1.0044
- fv = Hot-dip galvanised 1.0038/1.0044
- A2 = Stainless steel 1.4301/1.4541
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

Example order for slotted back mounting channels JML

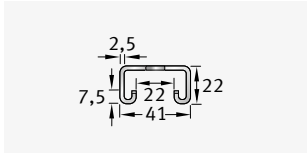
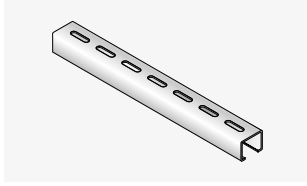
Type	Profile size	Channel length	Design
JML	K 40/25	6,000	fv



Suitable bolts and various accessories for all channels can be found starting on page 64.

Information on price calculations and cut lengths can be found on page 56.

Slotted back toothed mounting channels JZML K



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	26.20	6.40
				fv	34.10	6.40
				A4	126.80	9.90

Further information

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



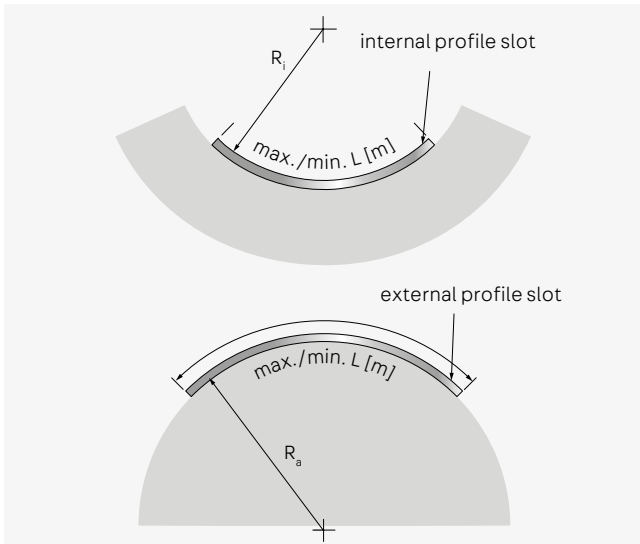
Suitable bolts and various accessories for all channels can be found starting on page 64.

Information on price calculations and cut lengths can be found on page 56.

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

Profiles JM, JML	Design	Profile 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, A2		
K 28/15	fv, A4, A2		

Price per piece [€] on request.

Version and material

- fv = Hot-dip galvanised 1.0038/1.0044
- A2 = Stainless steel 1.4301/1.4541
- A4 = Stainless steel 1.4401/1.4404/1.4571
- W = Hot-rolled
- K = Cold-formed

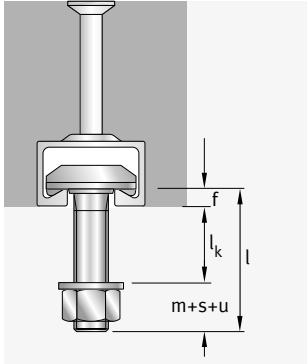
Example order for curved mounting channel JM

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

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

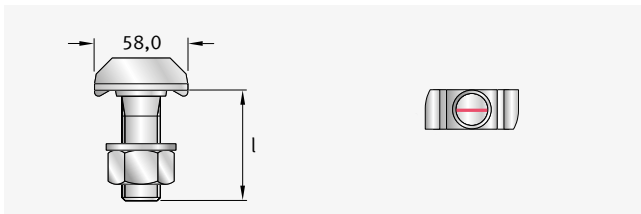
Bolt	Sum m+s+u [mm]
M6	8.8
M8	11.3
M10	13.9
M12	17.3
M16	21.8
M20	27.0
M24	32.5
M27	35.8
M30	38.6

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

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

Hook-head T-bolts JA

ETA (European Technical Assessment ETA-09/0338)

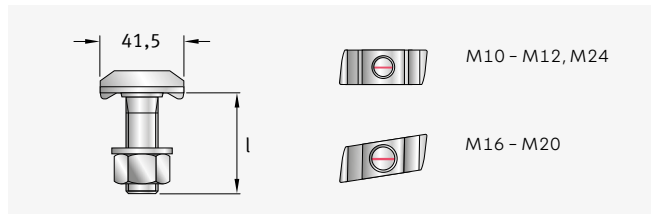


For profiles: W 72/48, K 72/48

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	967.30
JA M20 × 75	4.6 fv	50	1,052.90
JA M20 × 100	4.6 fv	25	1,080.50
JA M20 × 150	4.6 fv	25	1,397.30
JA M20 × 200	4.6 fv	25	1,596.30
JA M24 × 75	4.6 fv	25	1,016.90
JA M24 × 100	4.6 fv	25	1,279.30
JA M24 × 200	4.6 fv	10	1,709.30
JA M27 × 75	4.6 fv	10	1,323.70
JA M27 × 100	4.6 fv	10	1,478.60
JA M30 × 75	4.6 fv	25	1,476.50
JA M30 × 100	4.6 fv	10	1,782.20
JA M30 × 200	4.6 fv	5	2,697.80
Hot-dip galvanised (fv), strength class 8.8			
JA M20 × 50	8.8 fv	50	1,152.00
JA M20 × 60	8.8 fv	50	1,228.20
JA M20 × 75	8.8 fv	50	1,467.00
JA M20 × 100	8.8 fv	25	1,594.10
JA M20 × 125	8.8 fv	25	1,805.00
JA M24 × 75	8.8 fv	25	POA
JA M24 × 100	8.8 fv	25	POA
JA M24 × 150	8.8 fv	20	POA
JA M24 × 200	8.8 fv	10	POA
Stainless steel grade A4-50			
JA M24 × 50	A4-50	20	POA
JA M24 × 100	A4-50	15	POA
Stainless steel grade A4-70			
JA M24 × 150	A4-70	15	POA

Hook-head T-bolts JB

ETA (European Technical Assessment ETA-09/0338)



For profiles: 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	351.00
JB M10 × 40	4.6 gv	100	352.70
JB M10 × 50	4.6 gv	100	357.50
JB M10 × 60	4.6 gv	100	370.10
JB M10 × 80	4.6 gv	100	433.70
JB M10 × 100	4.6 gv	100	511.60
JB M12 × 30	4.6 gv	100	297.60
JB M12 × 40	4.6 gv	100	310.70
JB M12 × 50	4.6 gv	100	322.90
JB M12 × 60	4.6 gv	50	333.60
JB M12 × 80	4.6 gv	50	401.70
JB M12 × 100	4.6 gv	50	510.70
JB M12 × 125	4.6 gv	50	693.70
JB M12 × 150	4.6 gv	25	820.10
JB M16 × 30	4.6 gv	50	360.60
JB M16 × 40	4.6 gv	50	375.10
JB M16 × 50	4.6 gv	50	389.70
JB M16 × 60	4.6 gv	50	400.40
JB M16 × 80	4.6 gv	50	492.80
JB M16 × 100	4.6 gv	50	538.70
JB M16 × 125	4.6 gv	25	747.80
JB M16 × 150	4.6 gv	25	859.40
JB M16 × 200	4.6 gv	25	947.60
JB M20 × 35	4.6 gv ¹⁾	25	457.70
JB M20 × 45	4.6 gv ¹⁾	25	508.80

¹⁾ Not for profile K 48/26

Hook-head T-bolts JB

ETA (European Technical Assessment ETA-09/0338)

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JB M20 × 55	4.6 gv ¹⁾	25	542.80
JB M20 × 65	4.6 gv ¹⁾	25	567.90
JB M20 × 75	4.6 gv ¹⁾	25	592.90
JB M20 × 100	4.6 gv ¹⁾	25	624.40
JB M20 × 125	4.6 gv ¹⁾	25	826.60
JB M20 × 150	4.6 gv ¹⁾	25	1,058.50
JB M20 × 200	4.6 gv ¹⁾	25	1,237.30
JB M20 × 300	4.6 gv ¹⁾	25	1,630.40
JB M24 × 75	4.6 gv ¹⁾³⁾	25	POA
Galvanised (gv), strength class 8.8			
JB M16 × 40	8.8 gv	25	631.80
JB M16 × 50	8.8 gv	25	682.20
JB M16 × 60	8.8 gv	25	734.00
JB M16 × 80	8.8 gv	25	855.90
JB M16 × 100	8.8 gv	25	1,013.00
JB M16 × 125	8.8 gv	25	1,300.10
JB M16 × 150	8.8 gv	25	POA
JB M20 × 45	8.8 gv	25	773.10
JB M20 × 55	8.8 gv	25	902.50
JB M20 × 65	8.8 gv	25	949.10
JB M20 × 80	8.8 gv	25	1,007.50
JB M20 × 100	8.8 gv	25	1,091.10
JB M20 × 125	8.8 gv	25	1,375.40
JB M20 × 150	8.8 gv	25	1,687.10
Hot-dip galvanised (fv), strength class 4.6			
JB M10 × 80	4.6 fv	100	433.70
JB M12 × 30	4.6 fv	100	297.60
JB M12 × 40	4.6 fv	100	310.70
JB M12 × 50	4.6 fv	100	322.90
JB M12 × 60	4.6 fv	50	333.60
JB M12 × 80	4.6 fv	50	401.70
JB M12 × 100	4.6 fv	50	510.70
JB M12 × 125	4.6 fv	50	693.70
JB M16 × 40	4.6 fv	50	375.10
JB M16 × 50	4.6 fv	50	389.70
JB M16 × 60	4.6 fv	50	400.40
JB M16 × 80	4.6 fv	50	492.80
JB M16 × 100	4.6 fv	25	538.70
JB M20 × 55	4.6 fv ¹⁾	25	542.80
JB M20 × 65	4.6 fv ¹⁾	25	567.90
JB M20 × 75	4.6 fv ¹⁾	25	592.90
JB M20 × 100	4.6 fv ¹⁾	25	624.40
JB M20 × 125	4.6 fv ¹⁾	25	826.60
JB M20 × 150	4.6 fv ¹⁾	25	1,058.50

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.

Further information

- All prices including nuts;
- Please order washers separately

Example order for T-bolts

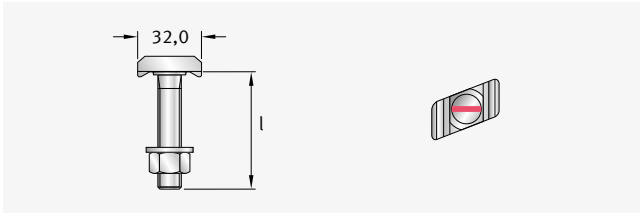
Type	Thread	x	Length l	-	Design
JB	M16	x	80	-	4.6 gv

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	447.80
JB M12 × 50	8.8 fv	100	525.50
JB M12 × 60	8.8 fv	50	595.10
JB M12 × 80	8.8 fv	50	633.10
JB M12 × 100	8.8 fv	50	727.90
JB M12 × 125	8.8 fv	50	881.80
JB M16 × 40	8.8 fv	50	631.80
JB M16 × 50	8.8 fv	50	682.20
JB M16 × 60	8.8 fv	50	734.00
JB M16 × 80	8.8 fv	50	855.90
JB M16 × 100	8.8 fv	50	1,013.00
JB M16 × 125	8.8 fv	50	1,300.10
JB M20 × 55	8.8 fv ¹⁾	25	902.50
JB M20 × 65	8.8 fv ¹⁾	25	949.10
JB M20 × 75	8.8 fv ¹⁾	25	984.20
JB M20 × 80	8.8 fv	25	1,007.50
JB M20 × 100	8.8 fv ¹⁾	25	1,091.10
JB M20 × 125	8.8 fv ¹⁾	25	1,375.40
JB M24 × 75	8.8 fv ¹⁾³⁾	25	POA
JB M24 × 100	8.8 fv ¹⁾³⁾	25	POA
Stainless steel grade A4-50			
JB M10 × 30	A4-50	50	2,005.30
JB M10 × 80	A4-50	50	2,889.50
JB M12 × 30	A4-50	50	2,297.60
JB M12 × 40	A4-50	50	2,361.10
JB M12 × 50	A4-50	50	2,559.10
JB M12 × 60	A4-50	50	2,713.30
JB M12 × 80	A4-50	50	3,284.20
JB M12 × 100	A4-50	50	3,855.10
JB M12 × 125	A4-50	25	4,553.20
JB M16 × 30	A4-50	50	3,341.60
JB M16 × 40	A4-50	50	3,692.50
JB M16 × 50	A4-50	25	3,934.90
JB M16 × 60	A4-50	25	3,998.00
JB M16 × 80	A4-50	25	4,969.00
JB M16 × 125	A4-50	25	5,652.30
JB M16 × 150	A4-50	25	6,352.30
JB M16 × 200	A4-50	25	7,005.90
JB M20 × 45	A4-50	25	3,998.00
JB M20 × 55	A4-50	25	4,297.20
JB M20 × 65	A4-50	25	4,603.20
JB M20 × 75	A4-50	25	4,901.20
JB M20 × 100	A4-50	25	5,475.10
JB M20 × 125	A4-50	25	6,055.80
JB M20 × 150	A4-50	25	POA
Stainless steel grade FA-70 (1.4462) ²⁾			
JB M12 × 40	FA-70	50	2,455.50
JB M12 × 50	FA-70	50	2,661.40
JB M12 × 100	FA-70	25	4,009.30
JB M16 × 50	FA-70	25	4,094.90
JB M16 × 80	FA-70	25	5,206.60
JB M20 × 55	FA-70	25	5,100.00
JB M20 × 100	FA-70	25	5,907.40
JB M20 × 150	FA-70	25	8,209.40

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 JC

ETA (European Technical Assessment ETA-09/0338)



For profiles: 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	165.00
JC M10 × 30	4.6 gv	100	166.50
JC M10 × 40	4.6 gv	100	176.10
JC M10 × 50	4.6 gv	100	179.60
JC M10 × 60	4.6 gv	100	197.30
JC M10 × 65	4.6 gv	100	223.50
JC M10 × 80	4.6 gv	100	323.40
JC M10 × 100	4.6 gv	100	331.40
JC M12 × 20	4.6 gv	100	205.40
JC M12 × 30	4.6 gv	100	208.30
JC M12 × 40	4.6 gv	100	210.90
JC M12 × 50	4.6 gv	100	221.60
JC M12 × 60	4.6 gv	50	232.40
JC M12 × 80	4.6 gv	50	285.70
JC M12 × 100	4.6 gv	50	335.00
JC M12 × 125	4.6 gv	50	459.40
JC M12 × 150	4.6 gv	25	710.10
JC M12 × 200	4.6 gv	25	Prices on request
JC M16 × 30	4.6 gv	50	275.00
JC M16 × 40	4.6 gv	50	297.60
JC M16 × 50	4.6 gv	50	320.20
JC M16 × 60	4.6 gv	50	325.10
JC M16 × 80	4.6 gv	50	381.60
JC M16 × 100	4.6 gv	25	461.30
JC M16 × 125	4.6 gv	25	693.50
JC M16 × 150	4.6 gv	25	793.50
JC M16 × 200	4.6 gv	25	895.90
JC M16 × 250	4.6 gv	25	1,004.10
Galvanised (gv), strength class 8.8			
JC M12 × 30	8.8 gv	100	311.10
JC M12 × 40	8.8 gv	50	304.40
JC M12 × 50	8.8 gv	50	315.40
JC M12 × 60	8.8 gv	50	330.00
JC M12 × 100	8.8 gv	50	497.30
JC M16 × 40	8.8 gv	25	451.20
JC M16 × 50	8.8 gv	25	526.60
JC M16 × 60	8.8 gv	25	538.20
JC M16 × 80	8.8 gv	25	600.10
JC M16 × 100	8.8 gv	25	661.00
JC M16 × 125	8.8 gv	25	931.50
JC M16 × 150	8.8 gv	25	1,192.50

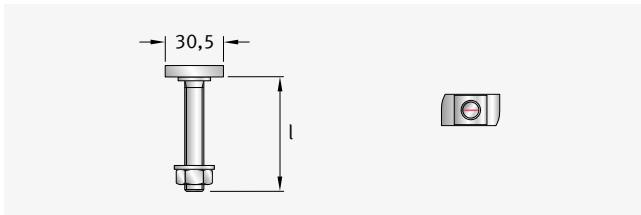
¹⁾ The designation FA also corresponds to F4 (1.4462).

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	166.50
JC M10 × 40	4.6 fv	100	176.10
JC M10 × 60	4.6 fv	100	197.30
JC M12 × 40	4.6 fv	100	210.90
JC M12 × 50	4.6 fv	100	221.60
JC M12 × 60	4.6 fv	100	232.40
JC M12 × 80	4.6 fv	50	285.70
JC M12 × 100	4.6 fv	50	335.00
JC M16 × 40	4.6 fv	50	297.60
JC M16 × 50	4.6 fv	50	320.20
JC M16 × 60	4.6 fv	50	325.10
JC M16 × 80	4.6 fv	50	381.60
JC M16 × 100	4.6 fv	25	461.30
Hot-dip galvanised (fv), strength class 8.8			
JC M12 × 40	8.8 fv	100	304.40
JC M12 × 50	8.8 fv	100	315.40
JC M12 × 60	8.8 fv	100	330.00
JC M12 × 80	8.8 fv	50	402.90
JC M12 × 100	8.8 fv	50	497.30
JC M16 × 40	8.8 fv	50	451.20
JC M16 × 50	8.8 fv	50	526.60
JC M16 × 60	8.8 fv	50	538.20
JC M16 × 80	8.8 fv	50	600.10
JC M16 × 100	8.8 fv	25	661.00
JC M16 × 125	8.8 fv	25	931.50
Stainless steel grade A4-50			
JC M10 × 30	A4-50	50	2,677.90
JC M10 × 40	A4-50	100	2,735.60
JC M10 × 50	A4-50	50	3,073.70
JC M12 × 30	A4-50	100	1,914.60
JC M12 × 40	A4-50	50	2,197.40
JC M12 × 50	A4-50	50	2,308.20
JC M12 × 60	A4-50	50	2,424.30
JC M12 × 80	A4-50	50	2,673.30
JC M12 × 100	A4-50	50	3,000.80
JC M16 × 30	A4-50	50	2,209.50
JC M16 × 40	A4-50	50	2,455.00
JC M16 × 50	A4-50	50	2,658.60
JC M16 × 60	A4-50	25	2,675.00
JC M16 × 80	A4-50	25	2,900.20
JC M16 × 100	A4-50	25	3,394.40
JC M16 × 150	A4-50	25	4,450.60
JC M16 × 200	A4-50	25	5,468.70
Stainless steel grade FA-70 (1.4462) ¹⁾			
JC M12 × 40	FA-70	50	2,412.20
JC M12 × 60	FA-70	50	2,811.20
JC M16 × 50	FA-70	50	2,848.50

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

Tee-head bolts JH

ETA (European Technical Assessment ETA-09/0338)



For profiles: 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	152.00
JH M10 × 30	4.6 gv	100	153.60
JH M10 × 40	4.6 gv	100	163.20
JH M10 × 50	4.6 gv	100	170.40
JH M10 × 60	4.6 gv	100	174.80
JH M10 × 80	4.6 gv	50	234.70
JH M10 × 100	4.6 gv	50	312.10
JH M10 × 150	4.6 gv	50	525.80
JH M12 × 20	4.6 gv	100	161.80
JH M12 × 30	4.6 gv	100	170.80
JH M12 × 40	4.6 gv	100	176.10
JH M12 × 50	4.6 gv	100	188.60
JH M12 × 60	4.6 gv	50	213.20
JH M12 × 80	4.6 gv	50	230.50
JH M12 × 100	4.6 gv	25	344.40
JH M12 × 125	4.6 gv	25	440.50
JH M12 × 150	4.6 gv	25	533.60
JH M12 × 200	4.6 gv	25	880.70
JH M16 × 30	4.6 gv	50	237.70
JH M16 × 40	4.6 gv	50	241.10
JH M16 × 50	4.6 gv	50	263.60
JH M16 × 60	4.6 gv	50	287.90
JH M16 × 80	4.6 gv	50	353.20
JH M16 × 100	4.6 gv	25	421.60
JH M16 × 125	4.6 gv	25	596.80
JH M16 × 150	4.6 gv	25	699.10

²⁾ Delivery subject to confirmation.

Further information

- All prices including nuts;
- Please order washers separately

Example order for T-bolts

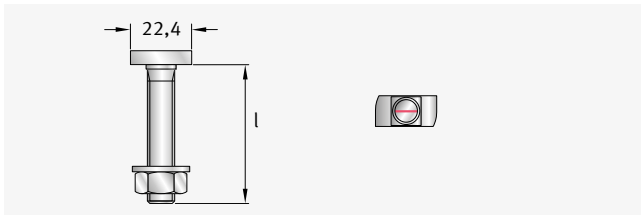
Type	Thread	x	Length l	-	Design
JH	M12	x	80	-	4.6 fv

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
JH M16 × 200	4.6 gv	25	1,025.50
Hot-dip galvanised (fv), strength class 4.6			
JH M10 × 50	4.6 fv	50	170.40
JH M10 × 60	4.6 fv	50	174.80
JH M10 × 80	4.6 fv	50	234.70
JH M12 × 30	4.6 fv	100	170.80
JH M12 × 40	4.6 fv	100	176.10
JH M12 × 50	4.6 fv	50	188.60
JH M12 × 60	4.6 fv	50	213.20
JH M12 × 80	4.6 fv	50	230.50
JH M12 × 100	4.6 fv	25	344.40
JH M12 × 125	4.6 fv	25	440.50
JH M16 × 50	4.6 fv	50	263.60
JH M16 × 60	4.6 fv	50	287.90
Hot-dip galvanised (fv), strength class 8.8			
JH M12 × 100	8.8 fv	25	432.00
JH M16 × 60	8.8 fv	50	534.30
Stainless steel grade A4-50 / A4-70 / FA-70 ²⁾			
JH M10 × 30	A4-70	100	1,272.40
JH M10 × 40	A4-70	100	1,427.70
JH M10 × 50	A4-70	100	1,478.10
JH M10 × 60	A4-70	100	1,554.90
JH M12 × 30	A4-70	100	1,248.20
JH M12 × 40	A4-70	100	1,326.90
JH M12 × 50	A4-70	100	1,427.70
JH M12 × 60	A4-70	100	1,578.70
JH M12 × 80	A4-70	100	1,628.70
JH M12 × 100	A4-50	100	2,396.20
JH M12 × 150	A4-50	25	3,476.00
JH M12 × 200	A4-50	50	3,914.00
JH M16 × 40	A4-50	50	1,815.60
JH M16 × 50	A4-50	25	2,007.50
JH M16 × 60	A4-50	25	2,134.50
JH M16 × 80	A4-50	25	2,453.00
JH M16 × 100	A4-50	25	3,082.60
JH M16 × 150	A4-50	25	4,285.50

²⁾ Delivery subject to confirmation.

Tee-head bolts JD

ETA (European Technical Assessment ETA-09/0338)



For profiles: 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	93.90
JD M6 × 20	4.6 gv	500	95.60
JD M6 × 25	4.6 gv	500	97.00
JD M6 × 30	4.6 gv	500	101.70
JD M6 × 40	4.6 gv	500	103.60
JD M6 × 50	4.6 gv	500	106.70
JD M6 × 60	4.6 gv	500	109.90
JD M8 × 15	4.6 gv	500	76.10
JD M8 × 20	4.6 gv	500	77.90
JD M8 × 25	4.6 gv	500	79.10
JD M8 × 30	4.6 gv	500	82.50
JD M8 × 40	4.6 gv	500	87.50
JD M8 × 50	4.6 gv	500	90.50
JD M8 × 60	4.6 gv	500	111.70
JD M8 × 80	4.6 gv	500	194.80
JD M8 × 100	4.6 gv	100	263.60
JD M8 × 150	4.6 gv	100	483.80
JD M10 × 15	4.6 gv	500	101.40
JD M10 × 20	4.6 gv	500	105.20
JD M10 × 25	4.6 gv	500	108.30
JD M10 × 30	4.6 gv	500	112.10
JD M10 × 40	4.6 gv	100	128.00
JD M10 × 50	4.6 gv	100	139.10
JD M10 × 60	4.6 gv	100	145.50
JD M10 × 80	4.6 gv	50	210.40
JD M10 × 100	4.6 gv	50	281.30

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

³⁾ Delivery subject to confirmation

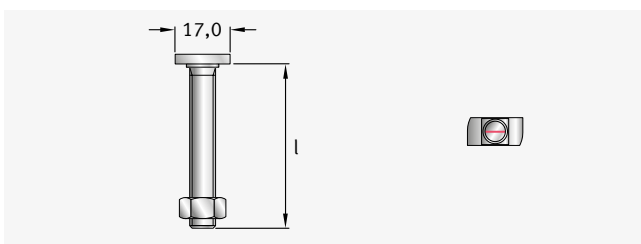
Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
JD M10 × 125	4.6 gv	50	431.90
JD M10 × 150	4.6 gv	100	525.80
JD M10 × 200	4.6 gv	50	POA
JD M12 × 30	4.6 gv ²⁾	200	195.80
JD M12 × 40	4.6 gv ²⁾	100	202.40
JD M12 × 50	4.6 gv ²⁾	100	213.50
JD M12 × 80	4.6 gv ²⁾	100	232.80
Hot-dip galvanised (fv), strength class 4.6			
JD M10 × 30	4.6 fv	500	112.10
JD M10 × 40	4.6 fv	100	128.00
JD M10 × 60	4.6 fv	100	145.50
JD M10 × 80	4.6 fv	50	210.40
JD M10 × 100	4.6 fv	50	281.30
JD M12 × 50	4.6 fv ²⁾	100	213.50
Stainless steel grade A4-50 / A4-70 / FA-70 ³⁾			
JD M8 × 30	A4-50	100	730.80
JD M10 × 20	A4-50	100	749.90
JD M10 × 25	A4-70	100	783.10
JD M10 × 30	A4-70	100	817.10
JD M10 × 40	A4-70	100	881.50
JD M10 × 50	A4-70	100	958.40
JD M10 × 60	A4-70	100	1,018.00
JD M10 × 80	A4-50	100	1,252.90
JD M10 × 100	A4-50	50	1,655.70
JD M10 × 125	A4-50	50	POA
JD M10 × 150	A4-50	50	POA
JD M10 × 200	A4-50	50	POA

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

³⁾ Delivery subject to confirmation

Tee-head bolts JG

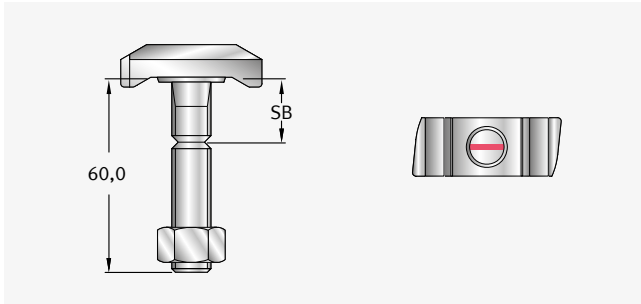
ETA (European Technical Assessment ETA-09/0338)



For profile: K 21/12 (on request)

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 4.6			
JG M6 × 15	4.6 gv	500	75.40
JG M6 × 20	4.6 gv	500	78.80
JG M8 × 15	4.6 gv	400	79.10
JG M8 × 20	4.6 gv	400	82.50
JG M8 × 30	4.6 gv	400	85.80
JG M8 × 60	4.6 gv	100	123.00
Stainless steel grade A4-50			
JG M8 × 40	A4-50	250	713.80

Breaking point T-bolts JB-SB

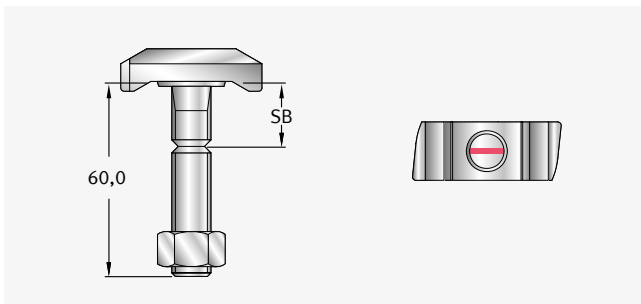


JB-SB for profiles: W 55/42, W 53/34, K 53/34, K 50/40, W 50+, W 50/30, K 50/30, K 48/26

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

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

Breaking point T-bolts JH-SB



JH-SB for profiles: 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	POA
JH M12 × 60 - SB 25	4.6 gv	POA

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

Example order for T-bolts

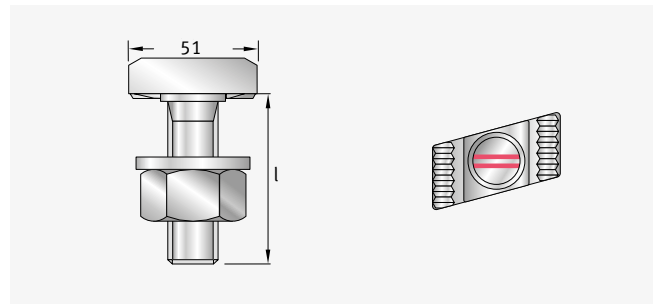
Type	Thread	x	Length l	-	Design
JH	M12	x	60 - SB 20	-	4.6 fv

Further information

- All prices including nuts;
- Please order washers separately

Toothed T-bolts JXE

ETA (European Technical Assessment ETA-09/0338)



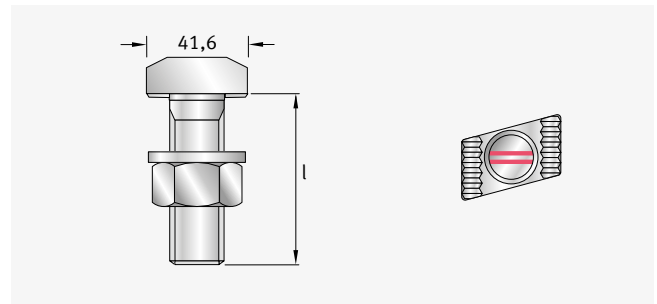
For profiles: JXA and JXM W 64/44

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	2,185.80
JXE M20 × 100	8.8 fv	25	2,592.00
JXE M20 × 150	8.8 fv	25	3,180.00
JXE M24 × 75	8.8 fv	25	POA
JXE M24 × 100	8.8 fv	25	POA
JXE M24 × 150	8.8 fv	25	POA
	Stainless steel grade FA-70 (1.4462) ¹⁾		
JXE M20 × 50	FA-70	50	POA
JXE M20 × 100	FA-70	25	POA

¹⁾ The designation FA corresponds to F4 (1.4462)

Toothed T-bolts JXB

ETA (European Technical Assessment ETA-09/0338)



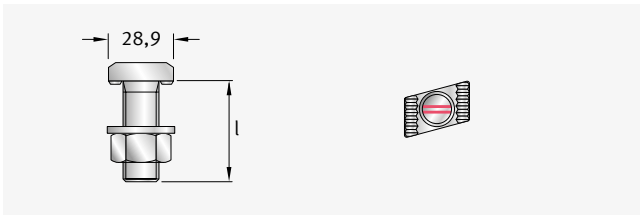
For profiles: JXA and JXM W 53/34

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	1,652.00
JXB M16 × 80	8.8 fv	25	1,703.20
JXB M16 × 100	8.8 fv	25	1,755.90
JXB M20 × 55	8.8 fv	25	1,819.30
JXB M20 × 65	8.8 fv	25	1,912.90
JXB M20 × 80	8.8 fv	25	1,966.10
JXB M20 × 100	8.8 fv	25	2,027.00
JXB M20 × 150	8.8 fv	25	POA
	Stainless steel grade FA-70 (1.4462) ¹⁾		
JXB M16 × 60	FA-70	25	POA
JXB M16 × 100	FA-70	25	POA
JXB M20 × 80	FA-70	25	POA
JXB M20 × 100	FA-70	25	POA
JXB M20 × 125	FA-70	25	POA

¹⁾ The designation FA corresponds to F4 (1.4462)

Toothed T-bolts JXH

ETA (European Technical Assessment ETA-09/0338)



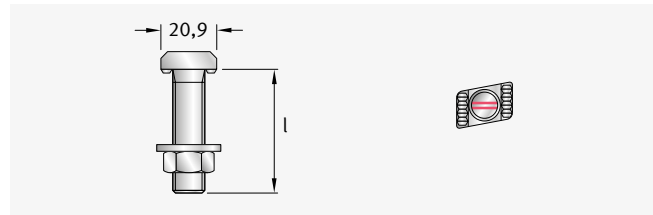
For profiles: JXA and JXM W 38/23

Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Galvanised (gv), strength class 8.8			
JXH M12 × 30	8.8 gv	100	409.30
JXH M12 × 50	8.8 gv	100	440.20
JXH M12 × 100	8.8 gv	25	936.90
JXH M16 × 40	8.8 gv	50	562.10
JXH M16 × 60	8.8 gv	50	613.30
JXH M16 × 125	8.8 gv	25	1,049.60
Hot-dip galvanised (fv), strength class 8.8			
JXH M12 × 30	8.8 fv	100	409.30
JXH M12 × 40	8.8 fv	100	420.00
JXH M12 × 50	8.8 fv	100	440.20
JXH M12 × 60	8.8 fv	50	487.30
JXH M12 × 80	8.8 fv	50	708.00
JXH M12 × 100	8.8 fv	25	936.90
JXH M16 × 30	8.8 fv	50	517.20
JXH M16 × 40	8.8 fv	50	562.10
JXH M16 × 50	8.8 fv	50	583.30
JXH M16 × 60	8.8 fv	50	613.30
JXH M16 × 80	8.8 fv	50	729.80
JXH M16 × 100	8.8 fv	25	778.80
JXH M16 × 125	8.8 fv	25	1,049.60
JXH M16 × 150	8.8 fv	25	1,765.70
JXH M16 × 200	8.8 fv	25	2,053.60
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXH M12 × 40	FA-70	50	POA
JXH M12 × 60	FA-70	50	POA
JXH M12 × 80	FA-70	50	POA
JXH M16 × 60	FA-70	25	POA
JXH M16 × 80	FA-70	25	POA
JXH M16 × 100	FA-70	25	POA
JXH M16 × 150	FA-70	25	POA

¹⁾ The designation FA corresponds to F4 (1.4462)

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	311.70
JXD M12 × 50	8.8 gv	100	362.90
JXD M12 × 100	8.8 gv	50	524.50
Hot-dip galvanised (fv), strength class 8.8			
JXD M10 × 40	8.8 fv	100	283.80
JXD M12 × 30	8.8 fv	100	311.70
JXD M12 × 40	8.8 fv	100	337.30
JXD M12 × 50	8.8 fv	100	362.90
JXD M12 × 60	8.8 fv	100	413.10
JXD M12 × 80	8.8 fv	100	475.80
JXD M12 × 100	8.8 fv	50	524.50
JXD M12 × 150	8.8 fv	25	1,381.30
Stainless steel grade FA-70 (1.4462) ¹⁾			
JXD M12 × 40	FA-70	50	2,248.90
JXD M12 × 60	FA-70	50	2,458.10
JXD M12 × 80	FA-70	50	2,667.10

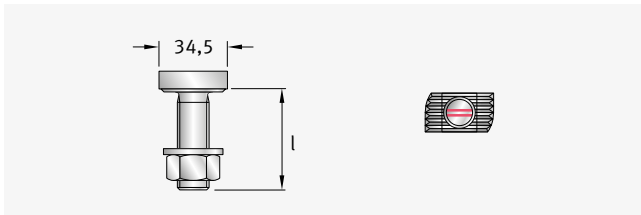
¹⁾ The designation FA corresponds to F4 (1.4462)

Example order for T-bolts

Type	Thread	x	Length l	-	Design
JXH	M16	x	60	-	8.8 gv

JZS toothed t-bolts

ETA (European Technical Assessment ETA-09/0338)



For profiles: JZA and JZM K 41/22

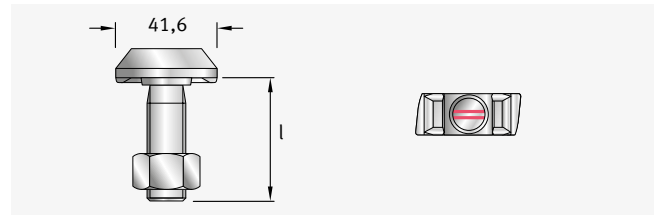
Thread × length l [mm]		PU [pcs.]	Price per 100 pcs. [€]
Hot-dip galvanised (fv), strength class 8.8			
JZS M10 × 40	8.8 fv	50	437.80
JZS M12 × 35	8.8 fv	50	486.80
JZS M12 × 50	8.8 fv	50	530.40
JZS M12 × 80	8.8 fv	50	785.00
JZS M16 × 50	8.8 fv	50	811.80
JZS M16 × 80	8.8 fv	50	955.00
JZS M16 × 100	8.8 fv	50	1,129.00
Stainless steel grade A4-50			
JZS M12 × 35	A4-50	50	3,130.70
JZS M12 × 50	A4-50	50	3,407.40
JZS M12 × 80	A4-50	50	3,617.90
JZS M16 × 35	A4-50	25	2,687.80
JZS M16 × 50	A4-50	25	3,195.70
JZS M16 × 80	A4-50	25	4,053.40
JZS M16 × 100	A4-50	25	4,336.60

Further information

- All prices including nuts;
- Please order washers separately

Double-notch toothed T-bolt JKB

ETA (European Technical Assessment ETA-09/0338)

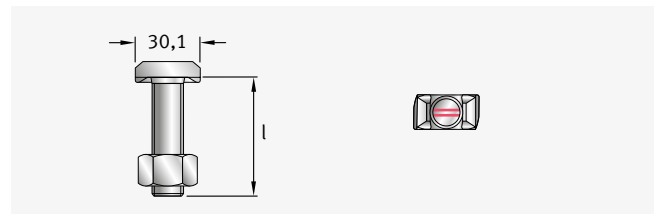


For profiles: W 50/30, W 50+, W 53/34

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	737.70
JKB M16 × 50	8.8 fv	50	756.10
JKB M16 × 60	8.8 fv	50	774.40
JKB M16 × 80	8.8 fv	25	833.00
JKB M16 × 100	8.8 fv	25	863.90
JKB M20 × 45	8.8 fv	25	845.70
JKB M20 × 60	8.8 fv	25	860.20
JKB M20 × 70	8.8 fv	25	907.50
JKB M20 × 80	8.8 fv	25	1,012.80

Double-notch toothed T-bolt JKC

ETA (European Technical Assessment ETA-09/0338)



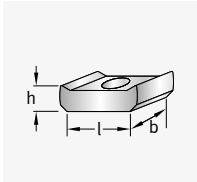
For profiles: W 40+, W 40/22

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	522.70
JKC M16 × 50	8.8 fv	50	540.00
JKC M16 × 60	8.8 fv	50	591.80
JKC M16 × 80	8.8 fv	25	691.00

Accessories for channels



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

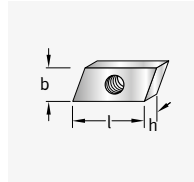


For profiles: W 72/48,
K 72/48

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	A4
M6	-	-	POA	POA
M8	-	-	POA	POA
M10	-	-	POA	POA
M12	57x31x22	50	1,200.40	POA
M16	57x31x22	50	1,200.40	POA
M20	57x31x22	50	1,200.40	POA

¹⁾ JORDAHL® locking plates for mounting channels on request

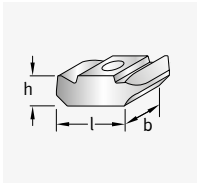
Hammer-head locking plates JGM H (flat steel)



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	32x14x6	500	114.80	-
M6	32x14x6	500	114.80	994.30
M8	32x14x6	500	114.80	994.30
M10	32x18x8	300	114.80	994.30
M12	32x18x8	300	114.80	994.30

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

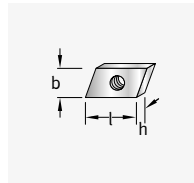


For profiles: W 55/42,
W 53/34, W 50+,
W 50/30, K 53/34,
K 50/40, K 50/30,
K 48/26

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	A4
M6	41x21x16	100	321.00	1,914.60
M8	41x21x16	100	321.00	1,914.60
M10	41x21x16	100	321.00	1,914.60
M12	41x21x16	100	321.00	1,914.60
M16	41x26x16	100	484.40	1,914.60

¹⁾ JORDAHL® locking plates for mounting channels on request

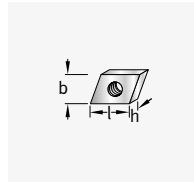
Hammer-head locking plates JGM D (flat steel)



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	22x12x4	1.000/400	55.00	656.40
M5	22x12x4	1.000/400	55.00	656.40
M6	22x12x4	1.000/400	55.00	656.40
M8	22x12x6	1.000/400	55.00	656.40
M10	19x14x6	1.000/1.000	55.00	656.40

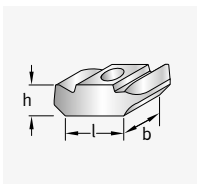
Hammer-head locking plates JGM G (flat steel)



For profiles: K 21/12

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	A4
M4	16x12x4	1,000	53.30	570.30
M5	16x12x4	1,000	53.30	570.30
M6	16x12x4	1,000	53.30	570.30
M8	16x12x6	1,000	53.30	570.30

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

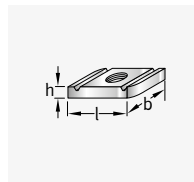


For profiles: W 40+,
W 40/22, K 40/25,
K 40/22

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	A4
M6	32x17x11	250	254.90	1,851.00
M8	32x17x11	250	254.90	1,851.00
M10	32x17x11	250	254.90	1,851.00
M12	32x17x11	250	281.40	1,882.80
M16	32x23x13	250	395.90	1,882.80

¹⁾ JORDAHL® locking plates for mounting channels on request

JAM 22 channel nuts

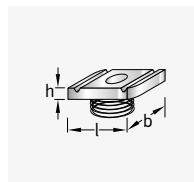


For profiles: K 41/41

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	fv
M6	35x20x6	500	101.70	131.10
M8	35x20x6	500	111.10	140.50
M10	35x20x8	500	128.00	159.00
M12	35x20x9.5	500	141.90	-

JAM F 22 channel nuts

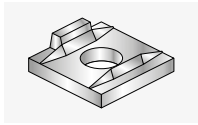
With spring



For profiles: K 41/41

Thread	l x w x h [mm]	pU	Price per 100 pcs. [€]	
			Design gv	fv
M6	35x20x6	500	123.80	148.50
M8	35x20x6	500	132.90	157.60
M10	35x20x8	500	143.40	171.00
M12	35x20x9.5	500	162.10	197.20

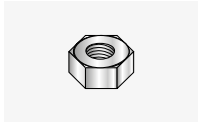
JKZS notch-toothed shims



Type	For bolts	Price per 100 pcs. [€]	
		Design	fv
16	M16 8.8		410.80

Hexagon nuts

(DIN EN ISO 4032, DIN 934)



Thread	Price per 100 pcs. [€]		
	Design		
	gv	fv	A4
M6	3.50	-	12.40
M8	6.70	-	23.50
M10	13.30	14.90	54.10
M12	21.60	21.60	83.00
M16	42.10	42.80	150.80
M20	85.50	87.50	292.00
M24	150.80	150.80	718.60

Washers

(DIN EN ISO 7089, without chamfer)



Matching bolt thread	HV ²⁾	Price per 100 pcs. [€]		
		Design		
		gv	fv	A4
M6 ²⁾	140	3.90	-	15.20
M8 ²⁾		5.70	-	24.80
M10		9.60	14.30	42.60
M12		11.30	17.00	71.80
M16		20.60	30.90	130.90
M20	200	40.30	60.40	192.90
M24		58.20	87.30	271.60
M27		90.60	122.70	404.60
M30		98.10	150.90	485.20

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

Washers

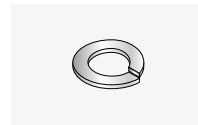
(DIN EN ISO 7093-1, DIN 9021)



Matching bolt thread	Price per 100 pcs. [€]		
	Design		
	gv	fv	A4
M6	9.30	-	38.90
M8	12.20	-	51.50
M10	17.00	17.00	69.40
M12	29.70	29.70	138.70
M16	50.20	50.20	176.10
M20	151.00	151.00	494.80

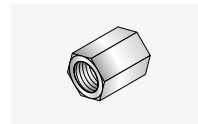
FR spring washers

(in line with former DIN 127)



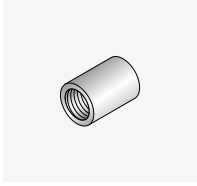
Type	Shape	Price per 100 pcs. [€]	
		gv	A4
6	B6	3.50	12.90
8	B8	4.00	25.50
10	B 10	6.00	40.20
12	B 12	9.10	55.50
16	B 16	20.70	135.10
20	B 20	33.10	192.00
24	B 24	65.30	-

Hexagon coupling sleeves VMSK



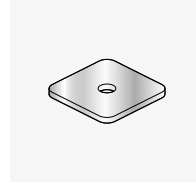
Thread x length [mm]	Shape	Price per 100 pcs. [€]	
		gv	A4
M10 x 25	B6	258.70	POA
M12 x 30	B8	300.70	POA
M16 x 40	B 10	457.70	POA
M20 x 50	B 12	667.90	POA

Round coupling sleeves VM



Thread x length [mm]	Price per 100 pcs. [€]	
	gv	A4
M6 x 20	56.60	POA
M8 x 20	77.90	POA
M10 x 25	126.30	POA
M12 x 30	200.80	POA
M16 x 40	322.00	POA
M20 x 50	564.40	POA

Square bearing plates JVL

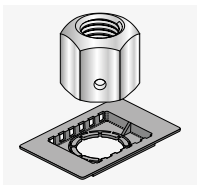


Article	Material	Height x width x dia. [mm]	Price per piece [€]
JVL4003-08	A4	3 x 40 x 8	2.00
JVL6504-08	A4	4 x 65 x 8	5.50
JVL8008-08	A4	8 x 80 x 8	18.40
JVL4006-08	A4	6 x 40 x 8	5.00
JVL6503-08	A4	3 x 65 x 8	4.30
JVL6506-08	A4	6 x 65 x 8	9.70
JVL8003-08	A4	3 x 80 x 8	6.20
JVL8006-08	A4	6 x 80 x 8	13.30

Other sizes available on request

Gap fillers JGF

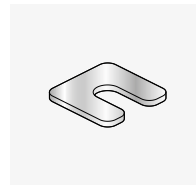
With utility model protection



Consisting of: special nut and injection insert (ABS)

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

Horseshoe shims JVS



Article	Material	Height x width x dia. [mm]	Price per piece [€]
JVS4003-13	A4	3 x 40 x 13	2.00
JVS6504-17	A4	4 x 65 x 17	5.60
JVS8008-21	A4	8 x 80 x 21	19.00
JVS4006-13	A4	6 x 40 x 13	5.00
JVS6503-17	A4	3 x 65 x 17	4.40
JVS6506-17	A4	6 x 65 x 17	9.80
JVS8003-21	A4	3 x 80 x 21	6.50
JVS8006-21	A4	6 x 80 x 21	13.60

Other sizes available on request

Flange nuts SKF



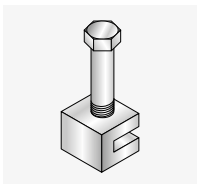
Thread	Price per 100 pcs. [€]	
	gv	A4
M12	20.20	
M16	48.50	

Installation cones JIC



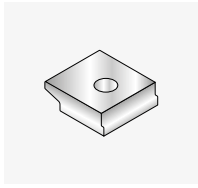
Thread	Price per 100 pcs. [€]	
	Design	8.8 steel
M16		POA

End anchors JE for anchor channels



Type	for anchor chan- nels	PU [pcs.]	Bolt thread	Price per piece [€]	
				gv	A4
JE 1	JTA K 28/15	25	M8	5.30	10.80
JE 2	JTA K 38/17	25	M10	5.80	12.60
JE 2	JTA W 40/22	25	M10	5.80	12.60
JE 2	JTA K 40/25	25	M10	5.80	12.60

Clamping plates KPA for crane rails

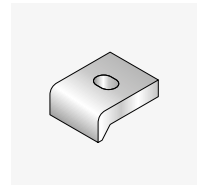


Type	Diameter [mm]	Price per 100 pcs. [€]	
		Design	fv
KPA 45	22	1,120.80	
KPA 55	18 / 22	1,188.70	
KPA 65	22	1,256.70	
KPA 75	22	1,308.10	

Other diameters available on request

Clamping plates KP

DIN 3568



Type	Slot LL	Price per 100 pcs. [€]	
		Design	fv
KP 50/7	14 × 20	1,052.20	
KP 60/10	18 × 24	1,070.50	
KP 60/11	18 × 24	1,079.60	
KP 60/12	18 × 24	1,177.30	
KP 60/14	18 × 24	1,199.00	
KP 60/16	18 × 24	1,220.80	
KP 60/18	18 × 24	1,243.10	
KP 60/20	18 × 24	1,266.40	

Other diameters available on request

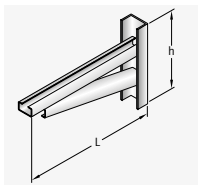
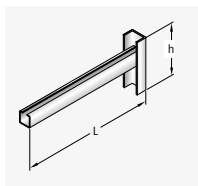
Clamping claws SPKU

With washers



Article	Price per 100 pcs. [€]	
	Design	fv
SPKU	1,029.90	

Channel brackets JKO

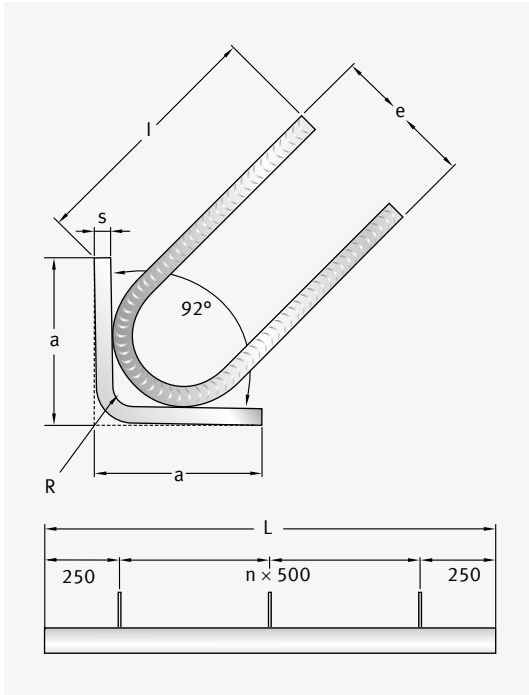


Bracket type	Profile	Suitable bolts	Vertical profile for bolts	Cantilever length L [mm]	Total height h [mm]	Price per piece [€]	
						Design	fv
JKO 28/28-1	K 28/28	Type JD, M6-M12	U 36/24 M12	100	120	32.60	POA
				200	120	33.40	POA
				300	120	34.60	POA
				400	120	35.40	POA
JKO 36/36-1	K 36/36	Type JH, M10-M16	U 45/27 M12	300	180	44.30	POA
				400	180	47.00	POA
				500	180	51.80	POA
				600	180	57.20	POA
				300	208	62.00	POA
JKO 36/36-2	K 36/36	Type JH, M10-M16	U 45/27 M12	400	238	67.80	POA
				500	269	74.20	POA
				600	300	79.70	POA
				700	330	86.30	POA

Example order for JKO profile bracket

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

Edge protection angles JKW



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

Version and material

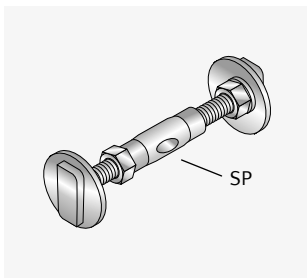
- fv = Hot-dip galvanised 1.0038/1.0044
- A2 = Stainless steel 1.4301/1.4541
- A4 = Stainless steel 1.4401/1.4404/1.4571
- L4 = Lean duplex stainless steel

Example order for JKW edge protection angles

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

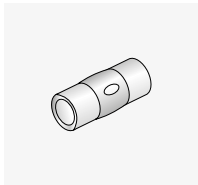
Clamp connections JSV

(material A4)



Type	Load level [in kN]	Sleeve	Bolt		Price per piece [€]
			left-handed thread	right-handed thread	
JSV-28-1	3.5	SP 10 x 50	JDL M10 x 50	JD M10 x 40	49.80
JSV-28-2	3.5	SP 10 x 80	JDL M10 x 50	JD M10 x 60	53.20
JSV-38-1	5.0	SP 12 x 50	JHL M12 x 50	JH M12 x 50	68.40
JSV-38-2	5.0	SP 12 x 80	JHL M12 x 50	JH M12 x 60	72.10
JSV-38-3	5.0	SP 12 x 80	JHL M12 x 50	JH M12 x 100	78.40
JSV-38-4	7.0	SP 16 x 50	JHL M16 x 50	JH M16 x 50	96.50
JSV-38-5	7.0	SP 16 x 80	JHL M16 x 50	JH M16 x 80	105.50
JSV-38-6	7.0	SP 16 x 80	JHL M16 x 50	JH M16 x 100	108.70
JSV-40-1	8.0	SP 16 x 50	JCL M16 x 50	JC M16 x 60	107.60
JSV-40-2	8.0	SP 16 x 80	JCL M16 x 50	JC M16 x 60	111.80
JSV-40-3	8.0	SP 16 x 80	JCL M16 x 50	JC M16 x 100	134.60
JSV-50-1	10.0	SP 16 x 80	JBL M16 x 80	JB M16 x 50	142.40
JSV-50-2	10.0	SP 16 x 80	JBL M16 x 80	JB M16 x 80	148.10
JSV-50-3	10.0	SP 16 x 80	JBL M16 x 80	JB M16 x 100	153.50

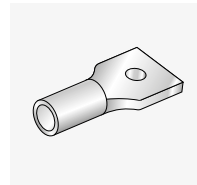
Turnbuckles SP (material A4)



(with right/left-hand-
ed thread and hole)

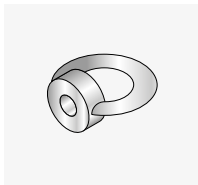
Thread × length [mm]	Price per 100 pcs. [€]	
	Design	gv
M10 × 50		2,397.80
M10 × 80		2,589.90
M12 × 50		2,889.20
M12 × 80		3,087.90
M16 × 50		4,118.50
M16 × 80		4,524.60

Eye sockets ÖM



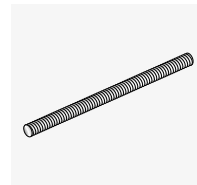
Thread × length [mm]	Price per 100 pcs. [€]	
	Design	gv
M8 × 40		142.40
M10 × 50		147.00
M12 × 60		160.20
M16 × 80		344.70

Ring nuts RM (DIN 582)



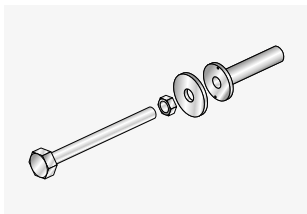
Thread	Price per 100 pcs. [€]	
	Design	gv
M8	Untreated	241.10
		338.10
M10	Untreated	381.60
		447.90
M12	Untreated	520.80
		585.50
M16	Untreated	703.60
		820.10
M20	Untreated	984.70
		1,177.40

Threaded rods GS (length l = 1,000 mm)



Thread	Price per 100 pcs. [€]	
	Design	gv
M6		156.90
M8		181.40
M10		281.30
M12		401.10
M16		828.20
M20		1,219.40

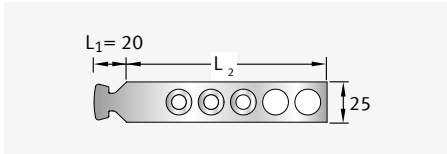
Pressure bolts JDS (material A4)



Thread	T-bolt length [mm]										Price per piece [€]
	Round plastic sleeve (length = 80 mm)										
	80	100	120	140	160	180	200	220 ¹⁾	240 ¹⁾		
M10	11.80	11.80	11.80	11.80	12.20	12.50	13.50	POA	POA	1.50	
M12	13.50	13.50	13.50	13.50	13.50	14.90	14.90	POA	POA	1.60	
M16	21.40	21.40	21.40	21.40	21.40	22.50	22.50	POA	POA	1.70	
M20	37.90	37.90	37.90	37.90	37.90	41.70	41.70	POA	POA	1.70	

¹⁾ Custom designs available on request

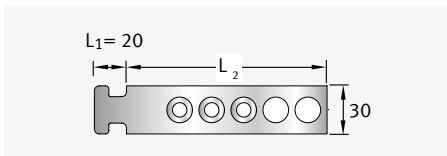
Brick tie anchors JMA



Series: 12

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

Length L ₂ [mm]	pU [pcs.]	Price per 100 pcs. [€]	
		fv	A4
85	100	86.90	388.40
120	100	99.30	474.20
180	100	138.90	584.70
300	100	257.10	859.80

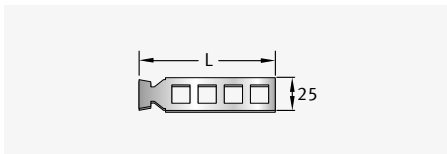


Series: 18

For profile: K 38/17

Length L ₂ [mm]	pU [pcs.]	Price per 100 pcs. [€]	
		fv	A4
85	100	104.10	481.50
120	100	126.10	534.20
180	100	168.80	630.30
300	100	299.80	953.80

Thin-bed brick tie anchors JMA-D



Series: D/12

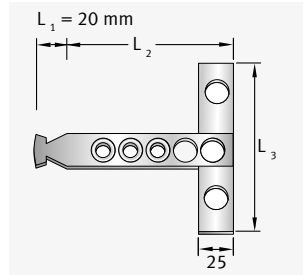
For profiles: Kt 25/15-D, K 28/15

Length L [mm]	pU [pcs.]	Price per 100 pcs. [€]	
		fv	A2
125	100	244.80	
185	100	280.30	
245	100	316.20	

Example order for JMA brick tie anchor

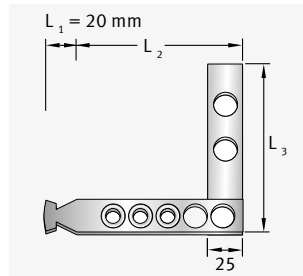
Type	-	Length L ₂	-	Series	-	Design
JMA	-	180	-	12	-	A4

Transverse brick tie anchors JMA-Q / JMA-QE



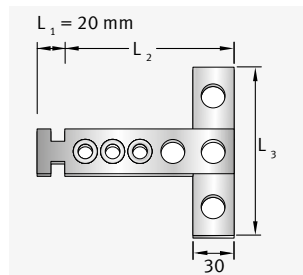
Series: Q/12

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



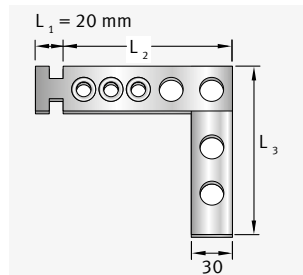
Series: QE/12

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	1,008.10	1,547.10
120	120	1,033.70	1,629.90
180	120	1,078.70	1,781.20
300	120	1,259.10	2,421.80
85	180	1,059.30	1,705.30
120	180	1,078.70	1,781.20
180	180	1,130.10	1,932.50
300	180	1,285.90	2,529.50
85	300	1,245.00	2,356.90
120	300	1,259.10	2,421.80
180	300	1,285.90	2,517.20
300	300	1,483.00	3,197.60

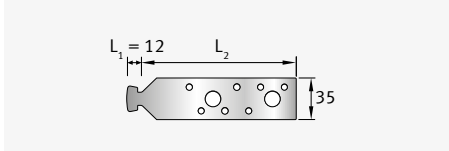
Series 18		Price per 100 pcs. [€]	
Length L ₂ [mm]	Length L ₃ [mm]	Design	
		fv	A4
85	120	1,080.60	1,753.60
120	120	1,111.00	1,870.10
180	120	1,184.20	2,126.40
300	120	1,320.70	2,572.60
85	180	1,147.50	2,009.90
120	180	1,184.20	2,126.40
180	180	1,257.50	2,376.80
300	180	1,353.70	2,704.60
85	300	1,301.80	2,496.00
120	300	1,320.70	2,572.60
180	300	1,353.70	2,704.40
300	300	1,526.00	3,227.50

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

Nail anchors JNA

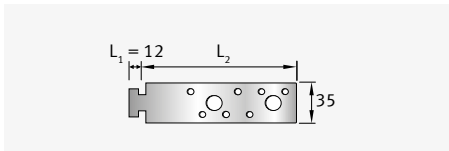
For connecting timber components to adjacent reinforced concrete components



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	184.60	
130	100	214.60	
200	100	282.40	

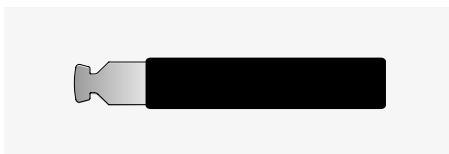


Series: 18

For profile: K 38/17

Length L_2 [mm]	PU [pcs.]	Price per 100 pcs. [€]	
		Design	fv
100	100	184.60	
130	100	214.60	
200	100	282.40	

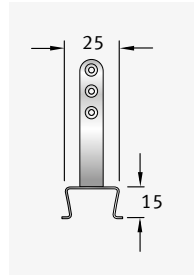
Sliding sleeves JMA-G



For brick tie anchors: JMA 120/12

Type	Price per 100 pcs. [€]
JMA-G 150/12	165.80

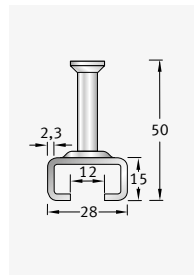
Brick tie channels



Brick tie anchors: 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]	PU [bundle]	Price per m [€]	
			sv	A4
Kt 25/15-D	6/m	100 pcs.	5.30	22.80

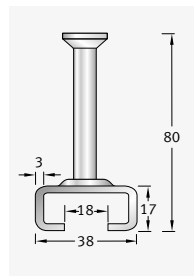


Brick tie anchors: Series 12

Weight: 1.20 kg/m

Type	Anchor [pcs./m]	Price per m [€]	
		fv	A4
JTA K 28/15	5/m	22.80	78.30
Cutting surcharge		10%	10%

Manufactured lengths: see page 49



Brick tie anchors: Series 18

Weight: 2.05 kg/m

Type	Anchor [pcs./m]	Price per m [€]	
		fv	A4
JTA K 38/17	5/m	30.50	118.30
Cutting surcharge		10%	10%

Manufactured lengths: see page 49

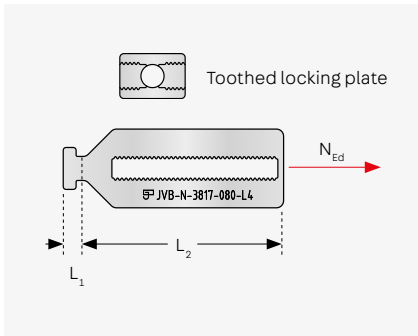
For further information and anchor designs

- For details of lengths, weights, K 38/17 with shortened anchors and much more, see page 49
- All prices include foam filling and nail holes

Version and material

- K = Cold-formed
- fv = Hot-dip galvanised 1.0038/1.0044
- sv = Sendzimir galvanised 1.0038
- A2 = Stainless steel 1.4301/1.4541
- A4 = Stainless steel 1.4401/1.4404/1.4571

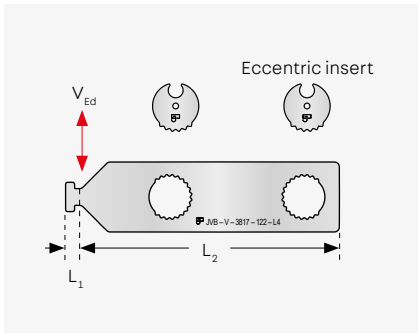
Connection straps JVB-N (for longitudinal tension loads)



Type	Length L_1 [mm]	Length L_2 [mm]	Price per piece [€]	
			gv	L4
JVB-N-2815-55	10	92	19.60	57.30
JVB-N-2815-60	10	104	19.90	59.10
JVB-N-2815-80	10	143	21.60	65.60
JVB-N-3817-55	12	88	21.30	60.80
JVB-N-3817-65	12	112	23.20	66.20
JVB-N-3817-80	12	142	25.40	72.00
JVB-N-5030-60	22	104	26.00	94.30
JVB-N-5030-70	22	122	28.20	99.00
JVB-N-5030-80	22	143	30.60	104.20

Prices do not include toothed locking plates

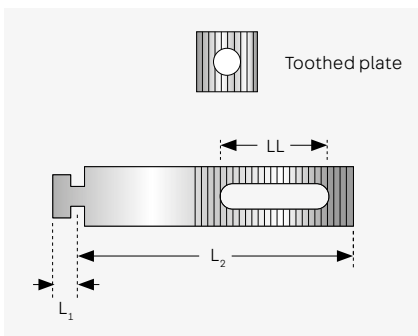
Connection straps JVB-V (for transverse shear loads)



Type	Length L_1 [mm]	Length L_2 [mm]	Price per piece [€]	
			gv	L4
JVB-V-2815-108	10	273	29.50	55.00
JVB-V-3817-122	12	327	46.30	86.60
JVB-V-5030-152	22	392	63.00	129.40

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. [€]	
				gv	A4
JVB-90-Z/12		10	90	1,142.10	1,705.70
JVB-115-Z/12	12	10	115	1,167.40	1,958.00
JVB-140-Z/12	For profile	10	140	1,180.00	2,030.10
JVB-165-Z/12	K 28/15	10	165	1,192.70	2,096.10
JVB-190-Z/12		10	190	1,211.50	2,108.10
JVB-215-Z/12	LL 11x55	10	215	1,224.10	2,198.30
JVB-240-Z/12		10	240	1,236.70	2,294.30
JVB-115-Z/18	18	12	115	1,325.10	2,384.40
JVB-140-Z/18	For profile	12	140	1,331.50	2,438.50
JVB-165-Z/18	K 38/17	12	165	1,337.70	2,492.50
JVB-190-Z/18		12	190	1,350.40	2,606.60
JVB-215-Z/18	LL 13x55	12	215	1,394.60	2,678.70
JVB-240-Z/18		12	240	1,419.90	2,810.90

Prices include toothed plate 30 x 30 mm

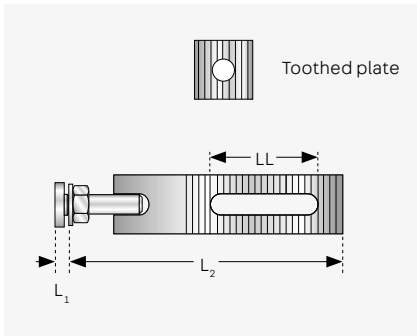
Version and material

- gv = Galvanised
- A4 = Stainless steel 1.4401/1.4404/1.4571
- L4 = Lean duplex stainless steel

Example order for connection strap JVB-N

Type	-	Design
JVB-N-3817-55	-	L4

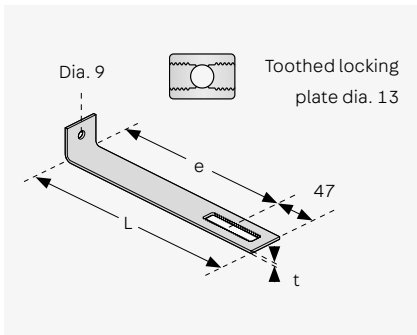
Connection straps JVB-ZS (toothed with bolt)



Type	Series Series/slot	Length L ₁ [mm]	Length L ₂ [mm]	Price per 100 pcs. [€]	
				gv	A4
JVB-115-ZS/12	12 For profile K 28/15 LL 11x55	7	115	1,981.40	3,699.70
JVB-140-ZS/12		7	140	1,994.00	3,783.80
JVB-165-ZS/12		7	165	2,000.30	3,885.90
JVB-190-ZS/12		7	190	2,044.50	3,927.90
JVB-215-ZS/12		7	215	2,050.80	4,048.10
JVB-140-ZS/18	18 For profile K 38/17 LL 13x55	10	140	2,278.00	4,949.00
JVB-165-ZS/18		10	165	2,315.90	4,991.10
JVB-190-ZS/18		10	190	2,385.20	5,189.30
JVB-215-ZS/18		10	215	2,391.50	5,249.30

Prices include toothed plate 30 x 30 mm

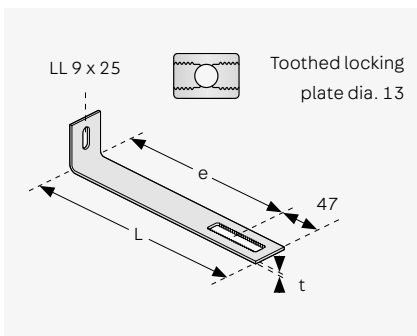
Tilt restraint straps JVB-WRL



Type	Length L [mm]	Thickness t [mm]	Price per piece [€]
JVB-WRL3	100 - 395	3	POA
JVB-WRL4		4	POA
JVB-WRL5	continuous	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 [€]
JVB-WLL3	100 - 395	3	POA
JVB-WLL4		4	POA
JVB-WLL5	continuous	5	POA
JVB-WLL6		6	POA

Prices include toothed locking plate

Example order for tilt restraint strap JVB-WRL

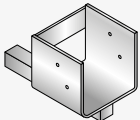

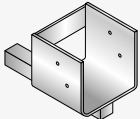

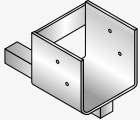

Type	/	Length L	-	Design
JVB-WRL3	/	112	-	L4

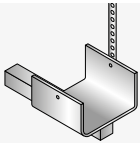

Scaffold shoes JG

(Tested in line with EN 1090)

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

Variant JG-K	Type	Colour	Hole [mm]	Price per piece [€]
	JG-K 4-CE	Yellow	2 × dia. 11	30.60
	JG-K 9-CE	Blue	4 × dia. 14	35.20
	JG-K 12-CE	Red	4 × dia. 14	51.50

Variant JG-H	Type	Colour	Price per piece [€]	Matching sleeve	Dimensions [mm]	Price per piece [€]
	JG-H 2.5-CE	Grey	35.30		25 × 25 × 95 PE	3.60
	JG-H 5/9-CE	Blue	45.60		30 × 30 × 95 PE	3.90
	JG-H 5/9-CE	Blue	45.60		30 × 30 × 105 fv	13.60

Variant JG-L	Type	Colour	Price per piece [€]	Matching sleeve	Dimensions [mm]	Price per piece [€]
	JG-L 2.5-CE ¹⁾	Grey	30.80		25 × 25 × 95 PE	3.60

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

Version and material

- Scaffold shoe – paint-coated 1.0038 steel
- Sleeve fv – hot-dip galvanised 1.0038 steel
- Sleeve PE – plastic

Example order for JG scaffold shoe

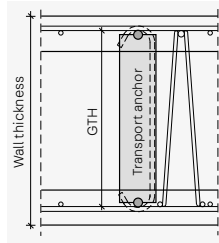
Type
JG-K 4

Transport anchors



Double-wall transport anchors KE III

Type A



PÜZ-tested transport anchor for double walls.

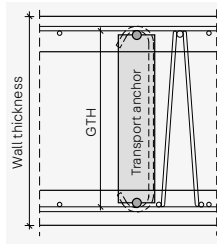
- Monitored by PÜZ (testing, monitoring and certification body)
- Other dimensions available on request



Article number	Type	Minimum wall thickness [mm]	Lattice beam height [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per piece [€]
610100012808	KE III-120	170	120	1.34	350	POA
610100012811	KE III-130	180	130	1.36	350	POA
610100012815	KE III-140	190	140	1.39	350	POA
610100012818	KE III-150	200	150	1.42	350	POA
610100012822	KE III-160	210	160	1.45	300	POA
610100012825	KE III-170	220	170	1.47	300	POA
610100012829	KE III-180	230	180	1.59	300	POA
610100012832	KE III-190	240	190	1.62	300	POA
610100012836	KE III-200	250	200	1.65	250	POA
610100012839	KE III-210	260	210	1.68	200	POA
610100012842	KE III-220	270	220	1.70	200	POA
610100012845	KE III-230	280	230	1.73	200	POA
610100012848	KE III-240	290	240	1.76	200	POA
610100012852	KE III-250	300	250	1.88	200	POA
610100012855	KE III-260	310	260	1.91	200	POA
610100012858	KE III-270	320	270	1.93	150	POA
610100012861	KE III-280	330	280	1.96	100	POA
610100012864	KE III-290	340	290	1.99	100	POA
610100012867	KE III-300	350	300	2.02	100	POA
610100012870	KE III-310	360	310	2.04	100	POA
610100012873	KE III-320	370	320	2.07	100	POA
610100012876	KE III-330	380	330	2.10	100	POA
610100012879	KE III-340	390	340	2.13	100	POA
610100012882	KE III-350	400	350	2.16	100	POA

Double-wall transport anchors KE IV

Type A



PÜZ-tested transport anchor for double walls with special requirements.

- Monitored by PÜZ (testing, monitoring and certification body)
- Other dimensions available on request



Article number	Type	Minimum wall thickness [mm]	Lattice beam height [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Price per piece [€]
610200012892	KE IV-120	170	120	2.90	250	POA
610200012894	KE IV-130	180	130	2.96	250	POA
610200012896	KE IV-140	190	140	2.99	200	POA
610200012898	KE IV-150	200	150	3.01	200	POA
610200012900	KE IV-160	210	160	3.04	200	POA
610200012902	KE IV-170	220	170	3.26	200	POA
610200012904	KE IV-180	230	180	3.28	200	POA
610200012906	KE IV-190	240	190	3.31	150	POA
610200012908	KE IV-200	250	200	3.34	150	POA
610200012910	KE IV-210	260	210	3.37	150	POA
610200012912	KE IV-220	270	220	3.40	150	POA
610200012914	KE IV-230	280	230	3.43	150	POA
610200012916	KE IV-240	290	240	3.46	150	POA
610200012918	KE IV-250	300	250	3.68	150	POA
610200012920	KE IV-260	310	260	3.71	100	POA
610200012922	KE IV-270	320	270	3.74	100	POA
610200012924	KE IV-280	330	280	3.77	100	POA
610200012926	KE IV-290	340	290	3.80	100	POA
610200012928	KE IV-300	350	300	3.83	100	POA
610200012930	KE IV-310	360	310	3.97	100	POA
610200012932	KE IV-320	370	320	4.00	100	POA
610200012934	KE IV-330	380	330	4.03	100	POA
610200012936	KE IV-340	390	340	4.06	100	POA
610200012938	KE IV-350	400	350	4.09	100	POA

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Punching shear reinforcement



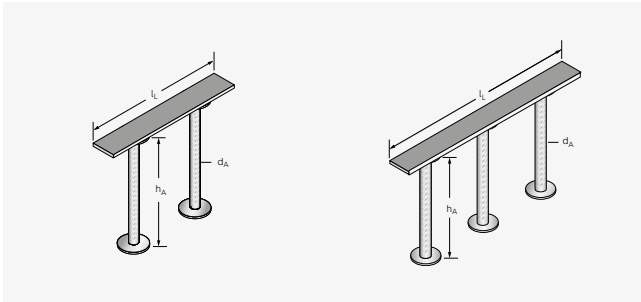
Punching shear reinforcement JDA

ETA (European Technical Assessment ETA-13/0136)

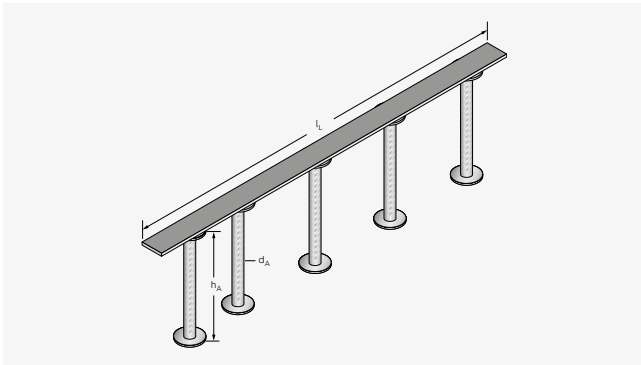
Shear force reinforcement JDA-S

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

Example order for punching shear reinforcement JDA

Type	No. of anchors	/	Anchor diameter d_A	/	Anchor length h_A	-	Strip length l_s
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_s
JDA	5	/	14	/	205	-	725

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

Version and material

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



Further lengths 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 93.

Diameter d _s : 10								
Anchor length h _a [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	
125	9.85	14.60	19.30	23.90	28.35	32.75	37.00	
135	9.95	14.80	19.50	24.15	28.65	33.10	37.40	
145	10.00	14.85	19.60	24.25	28.80	33.25	37.60	
155	10.10	15.00	19.80	24.50	29.10	33.60	38.00	
165	10.20	15.15	20.00	24.75	29.40	33.90	38.35	
175	10.25	15.20	20.10	24.85	29.50	34.10	38.55	
185	10.35	15.35	20.30	25.10	29.80	34.40	38.90	
195	10.45	15.50	20.50	25.35	30.10	34.75	39.30	
205	10.55	15.65	20.70	25.60	30.40	35.10	39.65	
215	10.60	15.75	20.80	25.70	30.55	35.25	39.85	
225	10.70	15.90	20.95	25.95	30.80	35.60	40.25	
235	10.80	16.05	21.15	26.20	31.10	35.90	40.60	
245	10.85	16.10	21.25	26.30	31.25	36.10	40.80	
255	10.95	16.25	21.45	26.55	31.55	36.40	41.15	
265	11.05	16.40	21.65	26.80	31.80	36.75	41.55	
275	11.05	16.40	21.65	26.80	31.80	36.75	41.55	
285	11.15	16.55	21.85	27.05	32.10	37.05	41.90	
295	11.25	16.70	22.05	27.30	32.40	37.40	42.30	
305	11.30	16.80	22.15	27.40	32.55	37.55	42.50	
315	11.40	16.95	22.35	27.65	32.85	37.90	42.85	
325	11.50	17.10	22.55	27.90	33.10	38.25	43.25	
335	11.60	17.25	22.75	28.15	33.40	38.55	43.60	
345	11.65	17.30	22.85	28.25	33.55	38.75	43.80	
355	11.75	17.45	23.05	28.50	33.85	39.05	44.20	
365	11.85	17.60	23.25	28.75	34.15	39.40	44.55	
375	11.90	17.65	23.30	28.85	34.25	39.55	44.75	
385	12.00	17.80	23.50	29.10	34.55	39.90	45.10	
395	12.10	17.95	23.70	29.35	34.85	40.25	45.50	
405	12.15	18.05	23.80	29.45	35.00	40.40	45.70	
415	20.65	30.65	40.45	50.10	59.45	68.65	77.65	
425	20.80	30.90	40.75	50.45	59.90	69.15	78.20	
435	20.90	31.05	40.95	50.70	60.20	69.50	78.60	
445	21.10	31.35	41.35	51.15	60.75	70.15	79.35	
455	21.20	31.50	41.55	51.40	61.05	70.50	79.70	
465	21.35	31.70	41.85	51.75	61.50	71.00	80.30	
475	21.50	31.95	42.15	52.15	61.90	71.50	80.85	
485	21.65	32.15	42.45	52.50	62.35	72.00	81.40	
495	21.75	32.30	42.65	52.75	62.65	72.30	81.80	
505	21.85	32.45	42.85	53.00	62.95	72.65	82.15	
515	21.95	32.60	43.00	53.25	63.20	73.00	82.55	
525	22.05	32.75	43.20	53.45	63.50	73.30	82.90	
535	22.15	32.90	43.40	53.70	63.80	73.65	83.30	
545	22.25	33.05	43.60	53.95	64.10	74.00	83.65	
555	22.35	33.20	43.80	54.20	64.35	74.30	84.05	
565	22.45	33.35	44.00	54.45	64.65	74.65	84.40	
575	22.55	33.50	44.20	54.70	64.95	75.00	84.80	
585	22.65	33.65	44.40	54.95	65.25	75.30	85.15	
595	22.75	33.80	44.60	55.15	65.50	75.65	85.55	
605	22.85	33.95	44.80	55.40	65.80	76.00	85.90	
615	22.95	34.10	45.00	55.65	66.10	76.30	86.30	
625	23.05	34.25	45.20	55.90	66.40	76.65	86.65	
635	23.15	34.40	45.35	56.15	66.65	76.95	87.05	
645	23.25	34.55	45.55	56.40	66.95	77.30	87.40	
655	23.35	34.65	45.75	56.60	67.25	77.65	87.80	
665	23.45	34.80	45.95	56.85	67.55	77.95	88.15	
675	23.55	34.95	46.15	57.10	67.80	78.30	88.55	
685	23.65	35.10	46.35	57.35	68.10	78.65	88.90	
695	23.75	35.25	46.55	57.60	68.40	78.95	89.30	

Diameter d _s : 12								
Anchor length h _a [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	
125	10.60	15.75	20.80	25.70	30.55	35.25	39.85	
135	10.70	15.90	20.95	25.95	30.80	35.60	40.25	
145	10.75	15.95	21.05	26.05	30.95	35.75	40.40	
155	10.85	16.10	21.25	26.30	31.25	36.10	40.80	
165	10.95	16.25	21.45	26.55	31.55	36.40	41.15	
175	11.00	16.35	21.55	26.70	31.70	36.60	41.35	
185	11.10	16.50	21.75	26.90	31.95	36.90	41.75	
195	11.20	16.65	21.95	27.15	32.25	37.25	42.10	
205	11.25	16.70	22.05	27.30	32.40	37.40	42.30	
215	11.35	16.85	22.25	27.50	32.70	37.75	42.70	
225	11.45	17.00	22.45	27.75	33.00	38.05	43.05	
235	11.50	17.10	22.55	27.90	33.10	38.25	43.25	
245	11.60	17.25	22.75	28.15	33.40	38.55	43.60	
255	11.70	17.35	22.95	28.35	33.70	38.90	44.00	
265	11.75	17.45	23.05	28.50	33.85	39.05	44.20	
275	11.85	17.60	23.25	28.75	34.15	39.40	44.55	
285	11.95	17.75	23.40	29.00	34.40	39.75	44.95	
295	12.00	17.80	23.50	29.10	34.55	39.90	45.10	
305	12.10	17.95	23.70	29.35	34.85	40.25	45.50	
315	12.20	18.10	23.90	29.60	35.15	40.55	45.85	
325	12.25	18.20	24.00	29.70	35.30	40.75	46.05	
335	12.35	18.35	24.20	29.95	35.55	41.05	46.45	
345	12.45	18.50	24.40	30.20	35.85	41.40	46.80	
355	12.50	18.55	24.50	30.30	36.00	41.55	47.00	
365	12.60	18.70	24.70	30.55	36.30	41.90	47.40	
375	12.65	18.80	24.80	30.70	36.45	42.05	47.55	
385	12.75	18.95	25.00	30.90	36.70	42.40	47.95	
395	12.85	19.10	25.20	31.15	37.00	42.75	48.30	
405	12.90	19.15	25.30	31.30	37.15	42.90	48.50	
415	22.55	33.50	44.20	54.70	64.95	75.00	84.80	
425	22.75	33.80	44.60	55.15	65.50	75.65	85.55	
435	22.85	33.95	44.80	55.40	65.80	76.00	85.90	
445	23.00	34.15	45.10	55.80	66.25	76.50	86.50	
455	23.15	34.40	45.35	56.15	66.65	76.95	87.05	
465	23.30	34.60	45.65	56.50	67.10	77.45	87.60	
475	23.45	34.80	45.95	56.85	67.55	77.95	88.15	
485	23.60	35.05	46.25	57.25	67.95	78.45	88.75	
495	23.75	35.25	46.55	57.60	68.40	78.95	89.30	
505	23.90	35.50	46.85	57.95	68.85	79.45	89.85	
515	24.05	35.70	47.15	58.30	69.25	79.95	90.45	
525	24.20	35.95	47.45	58.70	69.70	80.45	91.00	
535	24.35	36.15	47.75	59.05	70.15	80.95	91.55	
545	24.50	36.40	48.00	59.40	70.55	81.45	92.10	
555	24.65	36.60	48.30	59.80	71.00	81.95	92.70	
565	24.80	36.85	48.60	60.15	71.40	82.45	93.25	
575	24.95	37.05	48.90	60.50	71.85	82.95	93.80	
585	25.10	37.25	49.20	60.85	72.30	83.45	94.40	
595	25.25	37.50	49.50	61.25	72.70	83.95	94.95	
605	25.40	37.70	49.80	61.60	73.15	84.45	95.50	
615	25.55	37.95	50.10	61.95	73.60	84.95	96.05	
625	25.70	38.15	50.35	62.30	74.00	85.45	96.65	
635	25.85	38.40	50.65	62.70	74.45	85.95	97.20	
645	26.00	38.60	50.95	63.05	74.90	86.45	97.75	
655	26.15	38.85	51.25	63.40	75.30	86.95	98.30	
665	26.30	39.05	51.55	63.80	75.75	87.45	98.90	
675	26.45	39.30	51.85	64.15	76.20	87.95	99.45	
685	26.60	39.50	52.15	64.50	76.60	88.45	100.00	
695	26.75	39.70	52.45	64.85	77.05	88.95	100.60	

Diameter d_s : 14								
Anchor length h_A [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	
125	-	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-	-
145	11.80	17.50	23.15	28.60	34.00	39.25	44.35	
155	11.90	17.65	23.30	28.85	34.25	39.55	44.75	
165	12.00	17.80	23.50	29.10	34.55	39.90	45.10	
175	12.10	17.95	23.70	29.35	34.85	40.25	45.50	
185	12.20	18.10	23.90	29.60	35.15	40.55	45.85	
195	12.30	18.25	24.10	29.85	35.40	40.90	46.25	
205	12.45	18.50	24.40	30.20	35.85	41.40	46.80	
215	12.50	18.55	24.50	30.30	36.00	41.55	47.00	
225	12.60	18.70	24.70	30.55	36.30	41.90	47.40	
235	12.75	18.95	25.00	30.90	36.70	42.40	47.95	
245	12.85	19.10	25.20	31.15	37.00	42.75	48.30	
255	12.90	19.15	25.30	31.30	37.15	42.90	48.50	
265	13.05	19.40	25.60	31.65	37.60	43.40	49.05	
275	13.15	19.55	25.75	31.90	37.85	43.70	49.45	
285	13.20	19.60	25.85	32.00	38.00	43.90	49.65	
295	13.35	19.80	26.15	32.35	38.45	44.40	50.20	
305	13.45	19.95	26.35	32.60	38.75	44.70	50.55	
315	13.55	20.10	26.55	32.85	39.00	45.05	50.95	
325	13.65	20.25	26.75	33.10	39.30	45.40	51.30	
335	13.75	20.40	26.95	33.35	39.60	45.70	51.70	
345	13.85	20.55	27.15	33.60	39.90	46.05	52.10	
355	13.95	20.70	27.35	33.85	40.20	46.40	52.45	
365	14.05	20.85	27.55	34.05	40.45	46.70	52.85	
375	14.15	21.00	27.75	34.30	40.75	47.05	53.20	
385	14.25	21.15	27.95	34.55	41.05	47.40	53.60	
395	14.35	21.30	28.15	34.80	41.35	47.70	53.95	
405	14.45	21.45	28.30	35.05	41.60	48.05	54.35	
415	23.45	34.80	45.95	56.85	67.55	77.95	88.15	
425	23.60	35.05	46.25	57.25	67.95	78.45	88.75	
435	23.75	35.25	46.55	57.60	68.40	78.95	89.30	
445	23.95	35.55	46.95	58.10	69.00	79.65	90.05	
455	24.10	35.80	47.25	58.45	69.40	80.15	90.60	
465	24.25	36.00	47.55	58.80	69.85	80.65	91.20	
475	24.40	36.25	47.80	59.15	70.25	81.15	91.75	
485	24.55	36.45	48.10	59.55	70.70	81.65	92.30	
495	24.70	36.70	48.40	59.90	71.15	82.15	92.85	
505	24.85	36.90	48.70	60.25	71.55	82.65	93.45	
515	25.00	37.15	49.00	60.65	72.00	83.15	94.00	
525	25.15	37.35	49.30	61.00	72.45	83.60	94.55	
535	25.30	37.55	49.60	61.35	72.85	84.10	95.15	
545	25.45	37.80	49.90	61.70	73.30	84.60	95.70	
555	25.60	38.00	50.20	62.10	73.75	85.10	96.25	
565	25.75	38.25	50.45	62.45	74.15	85.60	96.80	
575	25.90	38.45	50.75	62.80	74.60	86.10	97.40	
585	26.05	38.70	51.05	63.15	75.00	86.60	97.95	
595	26.20	38.90	51.35	63.55	75.45	87.10	98.50	
605	26.35	39.15	51.65	63.90	75.90	87.60	99.10	
615	26.50	39.35	51.95	64.25	76.30	88.10	99.65	
625	26.65	39.60	52.25	64.65	76.75	88.60	100.20	
635	26.80	39.80	52.55	65.00	77.20	89.10	100.75	
645	26.95	40.00	52.80	65.35	77.60	89.60	101.35	
655	27.10	40.25	53.10	65.70	78.05	90.10	101.90	
665	27.25	40.45	53.40	66.10	78.50	90.60	102.45	
675	27.40	40.70	53.70	66.45	78.90	91.10	103.00	
685	27.55	40.90	54.00	66.80	79.35	91.60	103.60	
695	27.70	41.15	54.30	67.15	79.80	92.10	104.15	

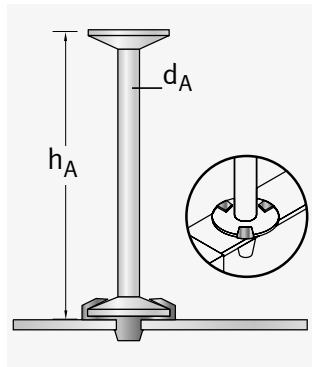
Diameter d_s : 16								
Anchor length h_A [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	
125	-	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-	-
145	-	-	-	-	-	-	-	-
155	12.70	18.85	24.90	30.80	36.60	42.25	47.75	
165	12.85	19.10	25.20	31.15	37.00	42.75	48.30	
175	12.95	19.25	25.40	31.40	37.30	43.05	48.70	
185	13.10	19.45	25.70	31.75	37.75	43.55	49.25	
195	13.20	19.60	25.85	32.00	38.00	43.90	49.65	
205	13.35	19.80	26.15	32.35	38.45	44.40	50.20	
215	13.45	19.95	26.35	32.60	38.75	44.70	50.55	
225	13.55	20.10	26.55	32.85	39.00	45.05	50.95	
235	13.70	20.35	26.85	33.20	39.45	45.55	51.50	
245	13.80	20.50	27.05	33.45	39.75	45.90	51.90	
255	13.95	20.70	27.35	33.85	40.20	46.40	52.45	
265	14.05	20.85	27.55	34.05	40.45	46.70	52.85	
275	14.20	21.10	27.85	34.45	40.90	47.20	53.40	
285	14.30	21.25	28.05	34.70	41.20	47.55	53.75	
295	14.45	21.45	28.30	35.05	41.60	48.05	54.35	
305	14.55	21.60	28.50	35.30	41.90	48.40	54.70	
315	14.70	21.85	28.80	35.65	42.35	48.90	55.25	
325	14.80	22.00	29.00	35.90	42.60	49.20	55.65	
335	14.90	22.15	29.20	36.15	42.90	49.55	56.00	
345	15.05	22.35	29.50	36.50	43.35	50.05	56.60	
355	15.15	22.50	29.70	36.75	43.65	50.35	56.95	
365	15.30	22.70	30.00	37.10	44.05	50.85	57.55	
375	15.40	22.85	30.20	37.35	44.35	51.20	57.90	
385	15.55	23.10	30.50	37.70	44.80	51.70	58.45	
395	15.65	23.25	30.65	37.95	45.05	52.05	58.85	
405	15.80	23.45	30.95	38.30	45.50	52.55	59.40	
415	24.40	36.25	47.80	59.15	70.25	81.15	91.75	
425	24.55	36.45	48.10	59.55	70.70	81.65	92.30	
435	24.75	36.75	48.50	60.00	71.30	82.30	93.05	
445	24.95	37.05	48.90	60.50	71.85	82.95	93.80	
455	25.15	37.35	49.30	61.00	72.45	83.60	94.55	
465	25.35	37.65	49.70	61.45	73.00	84.30	95.30	
475	25.50	37.85	50.00	61.85	73.45	84.80	95.90	
485	25.70	38.15	50.35	62.30	74.00	85.45	96.65	
495	25.90	38.45	50.75	62.80	74.60	86.10	97.40	
505	26.10	38.75	51.15	63.30	75.15	86.80	98.15	
515	26.30	39.05	51.55	63.80	75.75	87.45	98.90	
525	26.50	39.35	51.95	64.25	76.30	88.10	99.65	
535	26.70	39.65	52.35	64.75	76.90	88.80	100.40	
545	26.90	39.95	52.70	65.25	77.45	89.45	101.15	
555	27.10	40.25	53.10	65.70	78.05	90.10	101.90	
565	27.30	40.55	53.50	66.20	78.60	90.75	102.65	
575	27.50	40.85	53.90	66.70	79.20	91.45	103.40	
585	27.70	41.15	54.30	67.15	79.80	92.10	104.15	
595	27.90	41.45	54.70	67.65	80.35	92.75	104.90	
605	28.10	41.75	55.10	68.15	80.95	93.45	105.65	
615	28.30	42.05	55.45	68.65	81.50	94.10	106.40	
625	28.50	42.30	55.85	69.10	82.10	94.75	107.15	
635	28.70	42.60	56.25	69.60	82.65	95.45	107.90	
645	28.90	42.90	56.65	70.10	83.25	96.10	108.65	
655	29.10	43.20	57.05	70.55	83.80	96.75	109.40	
665	29.30	43.50	57.45	71.05	84.40	97.40	110.15	
675	29.50	43.80	57.80	71.55	84.95	98.10	110.90	
685	29.70	44.10	58.20	72.00	85.55	98.75	111.65	
695	29.90	44.40	58.60	72.50	86.10	99.40	112.40	

Diameter d _s : 20								
Anchor length h _a [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	8
125	-	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-	-
145	-	-	-	-	-	-	-	-
155	-	-	-	-	-	-	-	-
165	-	-	-	-	-	-	-	-
175	-	-	-	-	-	-	-	-
185	15.20	22.55	29.80	36.85	43.80	50.55	57.15	
195	15.40	22.85	30.20	37.35	44.35	51.20	57.90	
205	15.55	23.10	30.50	37.70	44.80	51.70	58.45	
215	15.75	23.40	30.85	38.20	45.35	52.35	59.20	
225	15.90	23.60	31.15	38.55	45.80	52.85	59.80	
235	16.10	23.90	31.55	39.05	46.35	53.55	60.55	
245	16.30	24.20	31.95	39.55	46.95	54.20	61.30	
255	16.45	24.45	32.25	39.90	47.40	54.70	61.85	
265	16.65	24.75	32.65	40.40	47.95	55.35	62.60	
275	16.80	24.95	32.95	40.75	48.40	55.85	63.15	
285	17.00	25.25	33.30	41.25	48.95	56.55	63.90	
295	17.15	25.45	33.60	41.60	49.40	57.00	64.50	
305	17.35	25.75	34.00	42.05	49.95	57.70	65.25	
315	17.50	26.00	34.30	42.45	50.40	58.20	65.80	
325	17.70	26.30	34.70	42.90	51.00	58.85	66.55	
335	17.85	26.50	35.00	43.30	51.40	59.35	67.10	
345	18.05	26.80	35.40	43.75	52.00	60.00	67.85	
355	18.20	27.05	35.65	44.15	52.40	60.50	68.45	
365	18.40	27.30	36.05	44.60	53.00	61.20	69.20	
375	18.55	27.55	36.35	45.00	53.40	61.70	69.75	
385	18.75	27.85	36.75	45.45	54.00	62.35	70.50	
395	18.95	28.15	37.15	45.95	54.60	63.00	71.25	
405	19.10	28.35	37.45	46.30	55.00	63.50	71.80	
415	29.05	43.15	56.95	70.45	83.65	96.60	109.25	
425	29.35	43.60	57.55	71.15	84.55	97.60	110.35	
435	29.60	43.95	58.00	71.80	85.25	98.40	111.30	
445	29.85	44.35	58.50	72.40	85.95	99.25	112.25	
455	30.15	44.75	59.10	73.10	86.85	100.25	113.35	
465	30.40	45.15	59.60	73.70	87.55	101.10	114.30	
475	30.65	45.50	60.05	74.35	88.25	101.90	115.25	
485	30.95	45.95	60.65	75.05	89.15	102.90	116.35	
495	31.20	46.35	61.15	75.65	89.85	103.75	117.30	
505	31.45	46.70	61.65	76.25	90.60	104.55	118.25	
515	31.60	46.95	61.95	76.65	91.00	105.05	118.80	
525	31.75	47.15	62.25	77.00	91.45	105.55	119.40	
535	31.90	47.35	62.50	77.35	91.85	106.05	119.95	
545	32.05	47.60	62.80	77.70	92.30	106.55	120.50	
555	32.20	47.80	63.10	78.10	92.75	107.05	121.05	
565	32.35	48.05	63.40	78.45	93.15	107.55	121.65	
575	32.50	48.25	63.70	78.80	93.60	108.05	122.20	
585	32.65	48.50	64.00	79.20	94.05	108.55	122.75	
595	32.80	48.70	64.30	79.55	94.45	109.05	123.35	
605	32.95	48.95	64.60	79.90	94.90	109.55	123.90	
615	33.10	49.15	64.90	80.25	95.35	110.05	124.45	
625	33.25	49.40	65.15	80.65	95.75	110.55	125.00	
635	33.40	49.60	65.45	81.00	96.20	111.05	125.60	
645	33.55	49.80	65.75	81.35	96.60	111.55	126.15	
655	33.70	50.05	66.05	81.70	97.05	112.05	126.70	
665	33.85	50.25	66.35	82.10	97.50	112.55	127.30	
675	34.00	50.50	66.65	82.45	97.90	113.05	127.85	
685	34.15	50.70	66.95	82.80	98.35	113.55	128.40	
695	34.30	50.95	67.25	83.20	98.80	114.05	128.95	

Diameter d _s : 25								
Anchor length h _a [mm]	Price per piece [€]							
	No. of anchors							
	2	3	4	5	6	7	8	8
125	-	-	-	-	-	-	-	-
135	-	-	-	-	-	-	-	-
145	-	-	-	-	-	-	-	-
155	-	-	-	-	-	-	-	-
165	-	-	-	-	-	-	-	-
175	-	-	-	-	-	-	-	-
185	-	-	-	-	-	-	-	-
195	-	-	-	-	-	-	-	-
205	-	-	-	-	-	-	-	-
215	-	-	-	-	-	-	-	-
225	-	-	-	-	-	-	-	-
235	-	-	-	-	-	-	-	-
245	29.25	43.45	57.35	70.95	84.25	97.25	110.00	
255	29.65	44.05	58.10	71.90	85.40	98.60	111.50	
265	30.05	44.60	58.90	72.85	86.55	99.90	113.00	
275	30.45	45.20	59.70	73.85	87.70	101.25	114.50	
285	30.85	45.80	60.45	74.80	88.85	102.60	116.00	
295	31.25	46.40	61.25	75.80	90.00	103.90	117.50	
305	31.65	47.00	62.05	76.75	91.15	105.25	119.00	
315	32.05	47.60	62.80	77.70	92.30	106.55	120.50	
325	32.45	48.20	63.60	78.70	93.45	107.90	122.00	
335	32.85	48.80	64.40	79.65	94.60	109.25	123.50	
345	33.25	49.40	65.15	80.65	95.75	110.55	125.00	
355	33.65	49.95	65.95	81.60	96.90	111.90	126.50	
365	34.05	50.55	66.75	82.55	98.05	113.20	128.05	
375	34.45	51.15	67.50	83.55	99.20	114.55	129.55	
385	34.85	51.75	68.30	84.50	100.35	115.90	131.05	
395	35.25	52.35	69.10	85.50	101.50	117.20	132.55	
405	35.65	52.95	69.85	86.45	102.65	118.55	134.05	
415	36.05	53.55	70.65	87.40	103.80	119.85	135.55	
425	36.50	54.20	71.55	88.50	105.10	121.35	137.25	
435	36.95	54.85	72.40	89.60	106.40	122.85	138.95	
445	37.45	55.60	73.40	90.80	107.85	124.50	140.80	
455	37.85	56.20	74.20	91.80	109.00	125.85	142.30	
465	38.30	56.90	75.05	92.90	110.30	127.35	144.00	
475	38.80	57.60	76.05	94.10	111.75	129.00	145.90	
485	39.25	58.30	76.95	95.20	113.05	130.50	147.60	
495	39.70	58.95	77.80	96.25	114.35	132.00	149.25	
505	40.15	59.60	78.70	97.35	115.65	133.50	150.95	
515	40.55	60.20	79.50	98.35	116.80	134.85	152.45	
525	40.95	60.80	80.25	99.30	117.95	136.15	153.95	
535	41.35	61.40	81.05	100.25	119.10	137.50	155.50	
545	41.75	62.00	81.85	101.25	120.25	138.80	157.00	
555	42.15	62.60	82.60	102.20	121.40	140.15	158.50	
565	42.55	63.20	83.40	103.20	122.55	141.50	160.00	
575	42.95	63.80	84.20	104.15	123.70	142.80	161.50	
585	43.35	64.35	84.95	105.10	124.85	144.15	163.00	
595	43.75	64.95	85.75	106.10	126.00	145.45	164.50	
605	44.15	65.55	86.55	107.05	127.15	146.80	166.00	
615	44.55	66.15	87.30	108.05	128.30	148.15	167.50	
625	44.95	66.75	88.10	109.00	129.45	149.45	169.00	
635	45.35	67.35	88.90	109.95	130.60	150.80	170.50	
645	45.75	67.95	89.65	110.95	131.75	152.10	172.00	
655	46.15	68.55	90.45	111.90	132.90	153.45	173.50	
665	46.55	69.15	91.25	112.90	134.05	154.80	175.05	
675	46.95	69.70	92.00	113.85	135.20	156.10	176.55	
685	47.35	70.30	92.80	114.80	136.35	157.45	178.05	
695	47.75	70.90	93.60	115.80	137.50	158.75	179.55	

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



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

Example order for punching shear reinforcement JDA-FT-KL

Type	No. of anchors	/	Anchor diameter d_A	/	Anchor length h_A	-	Strip length l_1
JDA-FT-KL	2	/	10	/	145	-	200

Grid: 50/100/50

Version and material

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

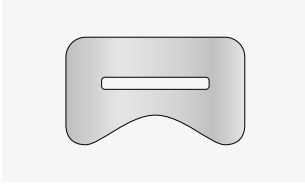


Suitable accessories can be found on page 93.

Accessories for punching shear reinforcement

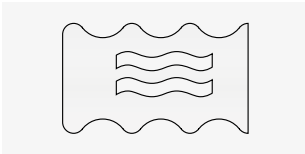


Spacers AH-FBA



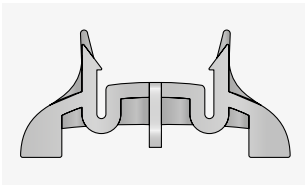
Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-FBA 15	15	Fibre-reinforced concrete (for use in precast ceilings)	0.30
AH-FBA 20	20		0.30
AH-FBA 25	25		0.30
AH-FBA 30	30		0.30

Spacers AH-FT



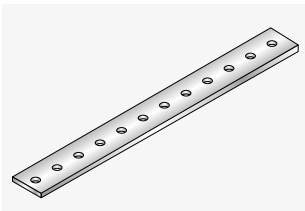
Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-FT	15 / 20 / 25 / 30	Plastic (for use in precast ceilings)	0.25

Spacers AH-DA



Type	Concrete coverings [mm]	Design	Price per piece [€] net
AH-DA 15/20	15 / 20	Plastic (for use in cast-in-place elements)	0.25
AH-DA 25	25		0.25
AH-DA 30	30		0.25
AH-DA 35	35		0.25

Assembly aids JDA-Q



Type	Price per piece [€]
JDA-Q	POA

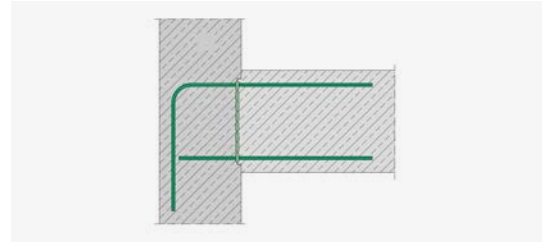
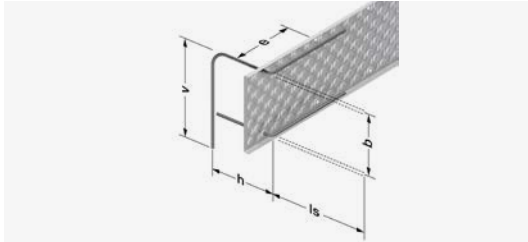
FERBOX®



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.

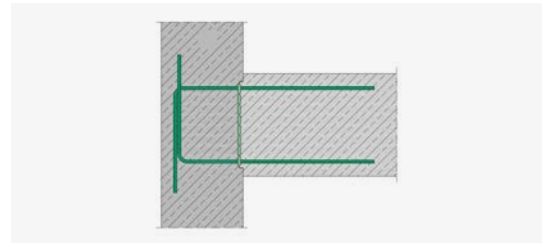
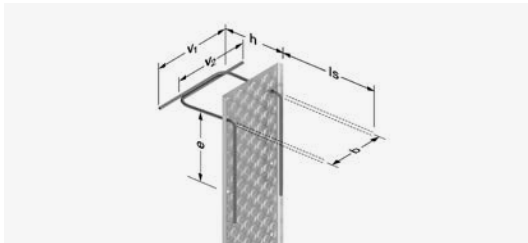
FERBOX® type B01

Bend diameter h/v:
10 ds

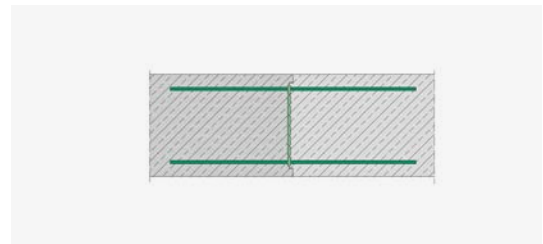
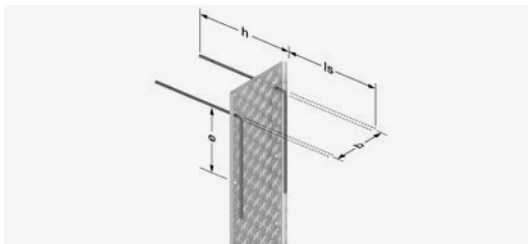


FERBOX® type B02

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

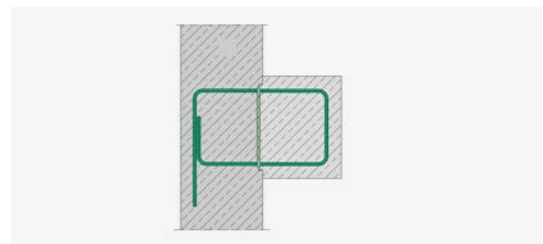
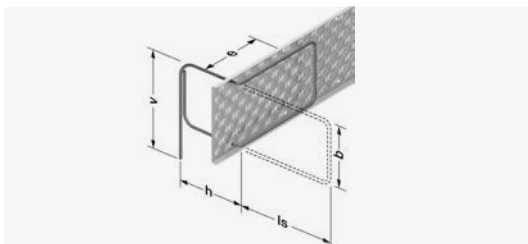


FERBOX® type B03

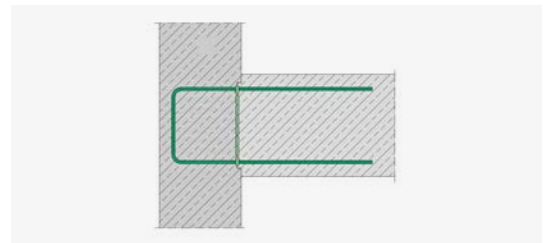
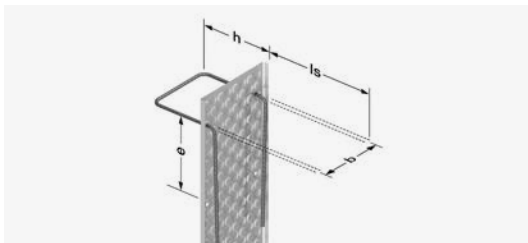


FERBOX® type B04/B04S

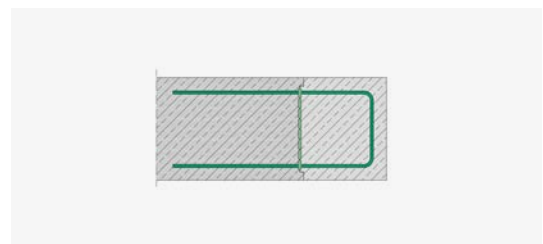
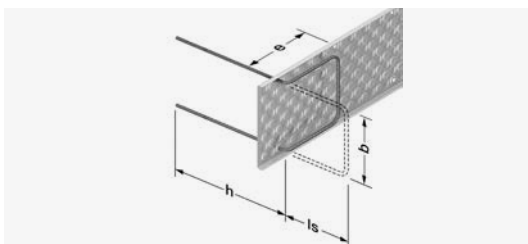
Bend diameter h/v:
4 ds



FERBOX® type B05

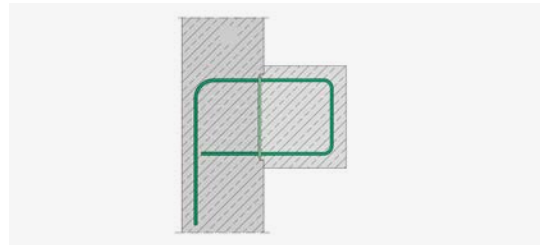
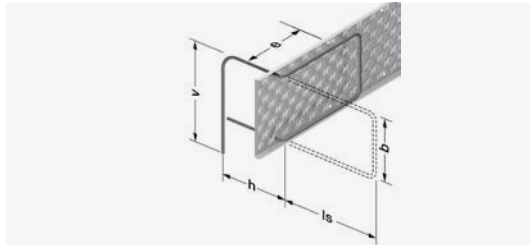


FERBOX® type B06/B06S

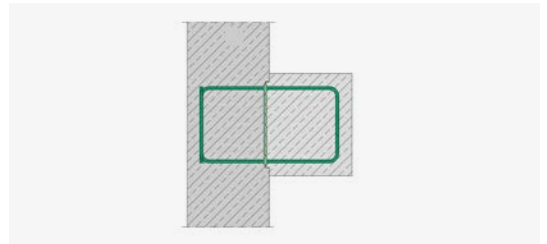
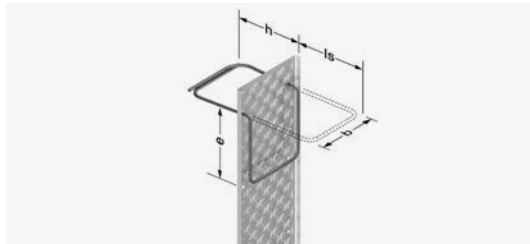


FERBOX® type B07/B07S

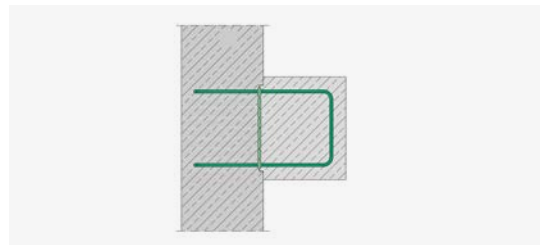
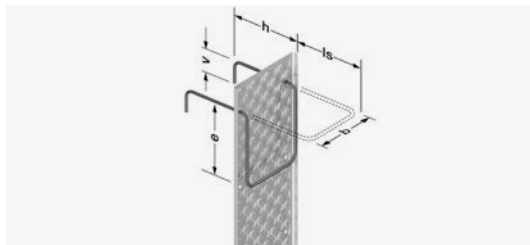
Bend diameter h/v: 10 ds (also available with h/v = 4 ds)



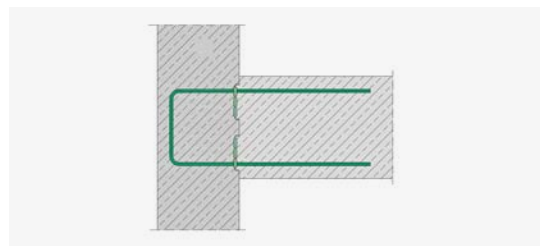
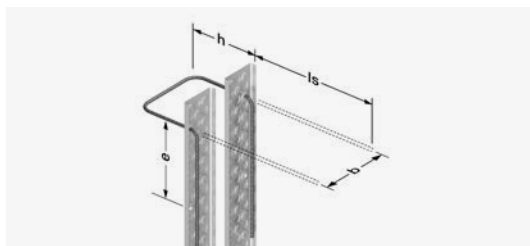
FERBOX® type B08/B08S



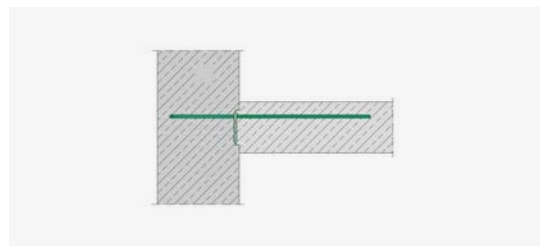
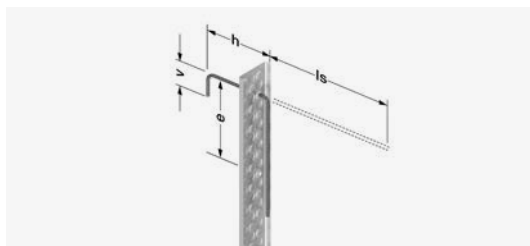
FERBOX® type B09/B09S



FERBOX® type EE

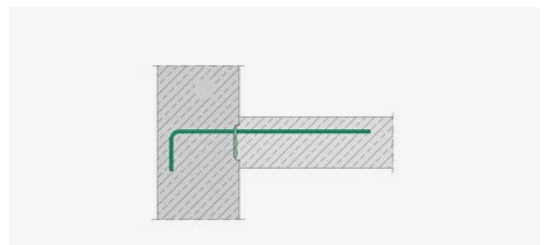
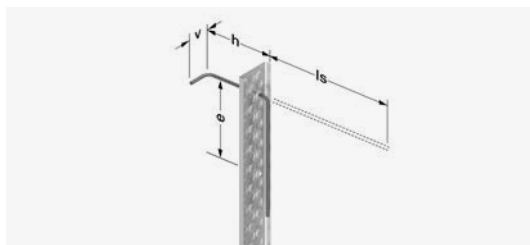


FERBOX® type E01

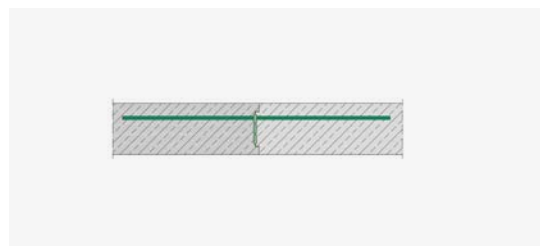
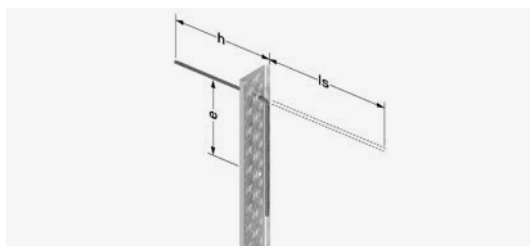


FERBOX® type E02

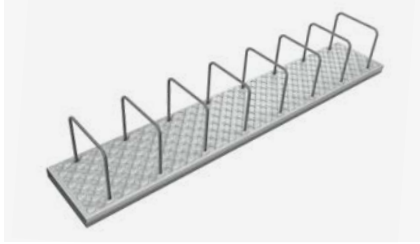
Bend diameter h/v: 4ds (also available with h/v = 10 ds)



FERBOX® type E03

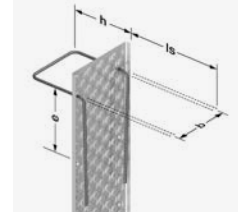


FERBOX® type B05



Double-row rebend connector, box and cover made from galvanized 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				
512100021969	B05 110 08 150	110	8	150	85	170	320	145	3.96	129.6	29.40
512100021970	B05 110 08 200	110	8	200	85	170	320	145	3.29	129.6	24.50
512100021971	B05 110 10 150	110	10	150	85	170	390	145	5.88	129.6	35.80
512100021972	B05 110 10 200	110	10	200	85	170	390	145	4.73	129.6	29.40
512100021973	B05 110 12 150	110	12	150	85	170	390	145	8.77	129.6	45.20
512100021974	B05 110 12 200	110	12	200	85	170	430	145	6.94	129.6	37.70
512100021975	B05 135 08 100	135	8	100	110	170	320	170	5.71	115.2	41.10
512100021976	B05 135 08 150	135	8	150	110	170	320	170	4.34	115.2	31.00
512100021977	B05 135 08 200	135	8	200	110	170	320	170	3.66	115.2	26.50
512100021978	B05 135 10 100	135	10	100	110	170	360	170	8.65	115.2	53.70
512100021979	B05 135 10 150	135	10	150	110	170	390	170	6.30	115.2	37.40
512100021980	B05 135 10 200	135	10	200	110	170	390	170	5.13	115.2	31.20
512100021981	B05 135 12 100	135	12	100	110	170	360	170	12.39	115.2	69.00
512100021982	B05 135 12 150	135	12	150	110	170	460	170	9.37	115.2	48.20
512100021983	B05 135 12 200	135	12	200	110	170	460	170	7.44	115.2	41.10
512100021984	B05 160 08 100	160	8	100	135	170	320	195	5.96	96	42.10
512100021985	B05 160 08 150	160	8	150	135	170	320	195	4.53	96	32.20
512100021986	B05 160 08 200	160	8	200	135	170	320	195	3.83	96	29.40
512100021987	B05 160 10 100	160	10	100	135	170	390	195	8.91	96	52.00
512100021988	B05 160 10 150	160	10	150	135	170	390	195	6.52	96	39.20
512100021989	B05 160 10 200	160	10	200	135	170	390	195	5.33	96	33.10
512100021990	B05 160 12 100	160	12	100	135	170	430	195	13.56	96	71.10
512100021991	B05 160 12 150	160	12	150	135	170	460	195	9.65	96	50.40
512100021992	B05 160 12 200	160	12	200	135	170	460	195	7.69	96	42.90
512100021993	B05 185 08 100	185	8	100	160	170	320	210	6.26	96	43.40
512100021994	B05 185 08 150	185	8	150	160	170	320	210	4.71	96	32.80
512100021995	B05 185 08 200	185	8	200	160	170	320	210	4.00	96	29.40
512100021996	B05 185 10 100	185	10	100	160	170	390	210	9.15	96	53.60
512100021997	B05 185 10 150	185	10	150	160	170	390	210	6.73	96	39.90
512100021998	B05 185 10 200	185	10	200	160	170	390	210	5.52	96	33.30
512100021999	B05 185 12 100	185	12	100	160	170	430	210	13.89	96	72.70
512100022000	B05 185 12 150	185	12	150	160	170	460	210	9.92	96	51.30
512100022001	B05 185 12 200	185	12	200	160	170	460	210	7.94	96	44.30
512100022002	B05 210 08 100	210	8	100	185	170	320	245	6.39	72	45.60
512100022003	B05 210 08 150	210	8	150	185	170	320	245	4.88	72	34.00
512100022004	B05 210 08 200	210	8	200	185	170	320	245	4.16	72	30.60
512100022005	B05 210 10 100	210	10	100	185	170	390	245	9.38	72	55.90
512100022006	B05 210 10 150	210	10	150	185	170	390	245	6.92	72	41.20
512100022007	B05 210 10 200	210	10	200	185	170	390	245	5.69	72	35.40
512100022008	B05 210 12 100	210	12	100	185	170	460	245	14.18	72	75.20
512100022009	B05 210 12 150	210	12	150	185	170	460	245	10.15	72	52.80
512100022010	B05 210 12 200	210	12	200	185	170	460	245	8.14	72	46.20

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	6.52	57.6	47.30
512100022012	B05 235 08 150	235	8	150	210	170	320	270	5.05	57.6	39.10
512100022013	B05 235 08 200	235	8	200	210	170	320	270	4.31	57.6	36.00
512100022014	B05 235 10 100	235	10	100	210	170	390	270	9.62	57.6	64.80
512100022015	B05 235 10 150	235	10	150	210	170	390	270	7.11	57.6	47.30
512100022016	B05 235 10 200	235	10	200	210	170	390	270	5.87	57.6	40.70
512100022017	B05 235 12 100	235	12	100	210	170	460	270	14.46	57.6	86.00
512100022018	B05 235 12 150	235	12	150	210	170	460	270	10.39	57.6	60.30
512100022019	B05 235 12 200	235	12	200	210	170	460	270	8.35	57.6	53.40
512100022020	B05 260 08 100	260	8	100	235	170	320	295	8.03	43.2	47.00
512100022021	B05 260 08 150	260	8	150	235	170	320	295	6.48	43.2	34.90
512100022022	B05 260 08 200	260	8	200	235	170	320	295	5.70	43.2	32.20
512100022023	B05 260 10 100	260	10	100	235	170	390	295	11.47	43.2	57.80
512100022024	B05 260 10 150	260	10	150	235	170	390	295	8.78	43.2	42.20
512100022025	B05 260 10 200	260	10	200	235	170	390	295	7.43	43.2	36.40
512100022026	B05 260 12 100	260	12	100	235	170	460	295	16.49	43.2	76.70
512100022027	B05 260 12 150	260	12	150	235	170	460	295	12.22	43.2	53.80
512100022028	B05 260 12 200	260	12	200	235	170	460	295	10.08	43.2	47.70

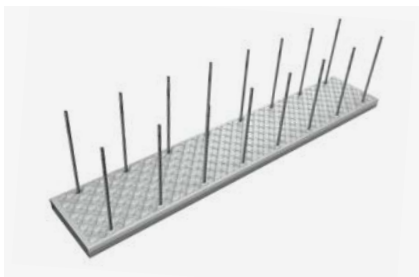
¹⁾ With cv 30

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

Example order for FERBOX® B05

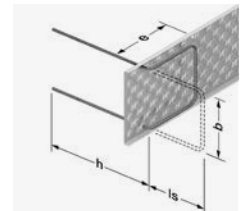
Type	Box width B	Bar diameter Dia.	Bar spacing e	Stirrup width b	Anchoring length h	Overlap length ls	Element length L
B05	225	10	150	185	170	390	1,200

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	26.10
512500022072	B06 85 08 200	85	8	200	60	330	83	120	2.67	96	24.00
512500022073	B06 85 08 250	85	8	250	60	330	83	120	2.05	96	22.80
512500022074	B06 85 10 150	85	10	150	60	400	83	120	5.03	96	32.80
512500022075	B06 85 10 200	85	10	200	60	400	83	120	4.02	96	28.90
512500022076	B06 85 10 250	85	10	250	60	400	83	120	2.89	96	27.30

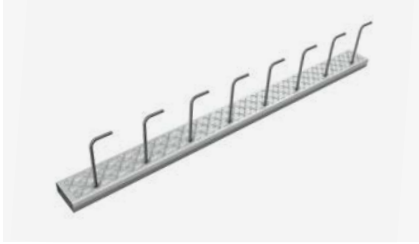
¹⁾ With cv 30

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

Example order for FERBOX® B06

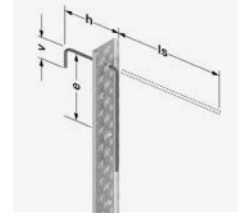
Type	Box width B	Bar diameter Dia.	Bar spacing e	Stirrup width b	Anchoring length h	Overlap length ls	Element length L
B06	85	10	150	60	400	83	1,200

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



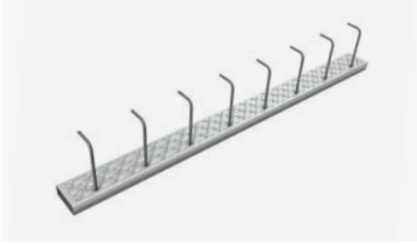
Article number	Type	Dimensions [mm]						Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls	v			
512200022038	E01 85 08 100	85	8	100	170	320	75	2.90	192	21.40
512200022039	E01 60 08 150	60	8	150	170	320	75	1.92	240	17.20
512200022040	E01 60 08 200	60	8	200	170	320	75	1.68	240	15.30
512200022041	E01 60 08 250	60	8	250	170	320	75	1.44	240	14.80
512200022042	E01 85 10 100	85	10	100	170	390	95	4.23	144	25.50
512200022043	E01 60 10 150	60	10	150	170	390	95	2.96	240	20.70
512200022044	E01 60 10 200	60	10	200	170	390	95	2.40	240	18.40
512200022045	E01 60 10 250	60	10	250	170	390	95	2.30	240	17.80
512200022046	E01 85 12 100	85	12	100	170	430	110	6.48	144	32.50
512200022047	E01 85 12 150	85	12	150	170	460	110	4.64	144	26.50
512200022048	E01 85 12 200	85	12	200	170	460	110	3.44	144	22.50
512200022049	E01 85 12 250	85	12	250	170	460	110	3.80	144	21.10

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

Example order for FERBOX® E01

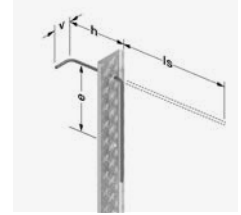
Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L	Hook length v
E01	60	8	150	170	320	1,200	75

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



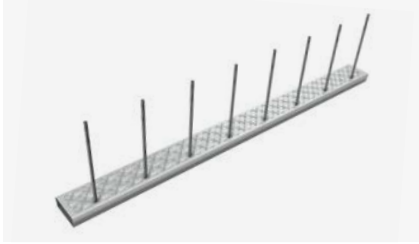
Article number	Type	Dimensions [mm]						Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls	v			
512300022050	E02 85 08 100	85	8	100	170	320	95	2.90	192	22.80
512300022051	E02 60 08 150	60	8	150	170	320	95	1.92	240	16.10
512300022052	E02 60 08 200	60	8	200	170	320	95	1.68	240	14.70
512300022053	E02 60 08 250	60	8	250	170	320	95	1.44	240	14.10
512300022054	E02 85 10 100	85	10	100	170	390	95	4.23	144	28.60
512300022055	E02 60 10 150	60	10	150	170	390	95	2.96	240	19.00
512300022056	E02 60 10 200	60	10	200	170	390	95	2.40	240	17.60
512300022057	E02 60 10 250	60	10	250	170	390	95	2.30	240	15.60
512300022058	E02 85 12 100	85	12	100	170	430	110	6.48	144	40.30
512300022059	E02 85 12 150	85	12	150	170	460	110	4.64	144	25.90
512300022060	E02 85 12 200	85	12	200	170	460	110	3.44	144	23.30
512300022061	E02 85 12 250	85	12	250	170	460	110	3.80	144	21.00

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

Example order for FERBOX® E02

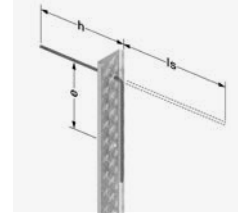
Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L	Hook length v
E02	60	8	150	170	320	800	95

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



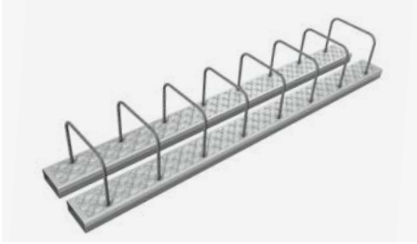
Article number	Type	Dimensions [mm]					Weight [kg/m]	PU [m/pal.]	Price per m [€]
		B	Dia.	e	h	ls			
512400022062	E03 60 08 150	60	8	150	320	320	2.17	168	16.90
512400022063	E03 60 08 200	60	8	200	320	320	1.76	168	14.90
512400022064	E03 60 08 250	60	8	250	320	320	1.56	168	14.10
512400022065	E03 60 10 150	60	10	150	390	390	3.64	144	19.70
512400022066	E03 60 10 200	60	10	200	390	390	2.86	144	17.40
512400022067	E03 60 10 250	60	10	250	390	390	2.48	144	16.20
512400022068	E03 85 12 150	85	12	150	460	460	6.46	120	25.40
512400022069	E03 85 12 200	85	12	200	460	460	5.15	120	21.80
512400022070	E03 85 12 250	85	12	250	460	460	4.50	120	20.10

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

Example order for FERBOX® E03

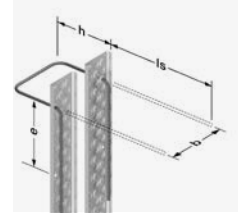
Type	Box width B	Bar diameter Dia.	Bar spacing e	Anchoring length h	Overlap length ls	Element length L
E03	85	12	150	460	460	1,200

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	32.50
512600022078	EE 60 08 200	60	8	200	240	170	320	4.13	43.2	27.70
512600022079	EE 60 10 150	60	10	150	240	170	390	6.98	43.2	38.50
512600022080	EE 60 10 200	60	10	200	240	170	390	5.73	43.2	35.60
512600022081	EE 85 12 150	85	12	150	240	170	460	9.96	43.2	57.90
512600022082	EE 85 12 200	85	12	200	240	170	460	7.63	43.2	47.40

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

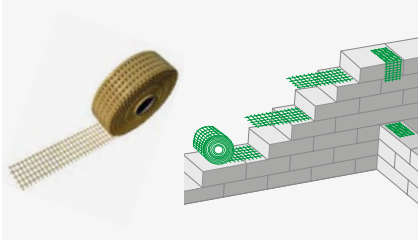
Article number	Design	Price per m [€]
110400022083	PENTAFLEX® Modul 1200 mm	21.30
110400024200	PENTAFLEX® Modul 800 mm	21.30

Article number	Design	Price per piece [€]
110400024201	PENTAFLEX® Modul corner element 200x200	14.90

GRIPRIP®



GRIPRIP®

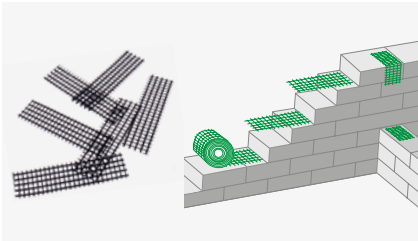


Structural masonry reinforcement made from aramid fabric for thin-bed mortar.

- 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	3.20
540100002393	A 1.1	150	3.60	100	5.80
540100002394	A 2	170	4.00	100	6.40
540100002395	A 2.1	200	4.40	100	7.40
540100002396	A 3	240	5.60	100	9.00
540100002397	A 3.1	300	6.90	100	11.30
540100002398	A 4	340	8.25	100	12.80

GRIPRIP®-S



Structural masonry reinforcement made from aramid fabric for anchoring butt joints on thin-bed mortar.

- Other lengths available on request

Article number	Element length [mm]	Width [mm]	Weight [kg/100 pcs.]	PU [Pack/box]	Price per 100 pcs. [€]
540200002402	300	85	0.27	100 / 2,000	68.20

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	11.00
520100014944	8	0.40	11.00
520100014947	10	0.62	11.00
520100014950	12	0.89	11.00
520100014953	14	1.21	11.00

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 [€]
520700014940	4	1.4362	0.10	POA
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.

Anwendungstechnik Klettgau

T +49 7742 - 9215 300

FIBERNOX®



FIBERNOX® V-ROD



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



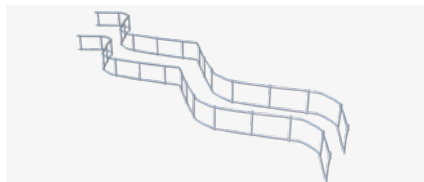
Glass fibre rockbolt anchors for tunnel construction and rock stabilisation. Available in diameters 20, 22, 25, 29 and 32 mm.

- Complete system available with pressure plates and nuts

Rebar accessories



Snake-shaped spacers



Snake-shaped steel support cage of spacers between the lower and upper layers of rebar.

- Supported length approx. 2,000 mm
- Certified in line with DBV fact sheet concerning supports
- Certified version for heights (h) 30-110 mm available on request
- The large bundles are subdivided into smaller bundles of 200 pcs. and these into bundles of 25 pcs.

Article number	Height [mm]	Weight [kg/pc.]	PU [pcs./pal.]	Design	Price per piece [€]
640100005145	30	0.335	2,000	Not certified	2.10
640100005151	40	0.345	2,000	Not certified	2.10
640100005153	50	0.355	1,500	Not certified	2.20
640100005154	60	0.365	1,500	Not certified	2.30
640100005155	70	0.431	1,000	Not certified	2.60
640100005156	80	0.441	1,000	Not certified	2.70
640100005157	90	0.451	1,000	Not certified	2.80
640100005129	100	0.461	900	Not certified	2.90
640100005130	110	0.471	800	Not certified	2.90
640100005131	120	0.537	700	Certified	3.20
640100005132	130	0.616	600	Certified	3.70
640100005133	140	0.630	600	Certified	3.80
640100005134	150	0.644	600	Certified	3.90
640100005135	160	0.705	500	Certified	4.00
640100005136	170	0.778	500	Certified	4.90
640100005137	180	0.795	500	Certified	4.90
640100005138	190	0.813	500	Certified	5.00
640100005140	200	0.830	400	Certified	5.00
640100005141	220	0.949	400	Certified	5.90
640100005142	240	0.977	300	Certified	6.30
640100005143	260	1.075	300	Certified	7.10
640100005144	280	1.103	300	Certified	7.40
640100005146	300	1.132	300	Certified	7.60
640100005147	320	1.336	300	Certified	8.50
640100005148	340	1.496	200	Certified	8.90
640100005149	360	1.538	200	Certified	9.20
640100005150	380	1.580	200	Certified	9.30
640100005152	400	1.622	200	Certified	9.80

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	92.70
620100003490	25	0.80	1,000	92.70
620100003491	30	1.00	800	113.30
620100003492	35	1.50	700	133.90
620100003493	40	1.90	500	154.50
620100003494	45	2.20	450	185.40
620100003495	50	3.00	350	206.00
620100003496	55	3.50	300	247.20
620100003497	60	4.40	280	278.10
620100022994	65	5.20	240	319.30
620100003498	70	6.00	200	350.20
620100022995	75	7.00	180	391.40

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	92.70
620100003584	25	0.70	1,000	113.30
620100003587	30	0.90	900	113.30
620100003590	35	1.10	850	133.90
620100003594	40	1.20	600	144.20
620100003597	45	1.60	500	175.10
620100003601	50	2.20	400	195.70
620100003604	55	2.30	350	216.30
620100003607	60	2.60	350	247.20
620100022996	65	2.90	300	278.10
620100003610	70	3.40	280	350.20
620100022997	75	3.90	250	381.10

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	82.40
620100003586	30	0.70	1,250	92.70
620100003589	35	0.80	1,100	103.00
620100003593	40	1.00	800	113.30
620100003596	45	1.30	700	144.20
620100003600	50	1.70	600	154.50
620100003603	55	1.80	500	175.10
620100022998	60	1.90	500	195.70
620100022999	65	2.30	400	226.60
620100023000	70	2.70	350	278.10
620100023001	75	3.10	300	309.00

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	92.70
620100003614	25	0.70	1,000	113.30
620100003616	30	0.90	900	113.30
620100003619	35	1.10	800	133.90
620100003621	40	1.20	600	144.20
620100003624	45	1.60	500	175.10
620100003627	50	2.20	400	195.70
620100003630	55	2.30	350	216.30
620100003633	60	2.60	350	247.20
620100023002	65	2.90	300	278.10
620100003636	70	3.40	280	350.20
620100003638	75	3.90	250	381.10

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	82.40
620100018865	30	0.70	1,250	92.70
620100018866	35	0.80	1,100	103.00
620100018867	40	1.00	800	113.30
620100023004	45	1.30	700	144.20
620100018604	50	1.70	600	154.50
620100023005	55	1.80	500	175.10
620100023006	60	1.90	500	195.70
620100023007	65	2.30	400	226.60
620100023008	70	2.70	350	278.10
620100023009	75	3.10	300	309.00

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	41.20
620100003465	25	0.24	3,200	41.20
620100003466	30	0.30	2,700	51.50
620100003467	35	0.37	2,250	51.50
620100003468	40	0.40	1,800	61.80
620100003469	45	0.53	1,500	72.10
620100003470	50	0.74	1,200	72.10
620100003471	55	0.77	1,000	82.40
620100003472	60	0.87	1,000	92.70

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	41.20
620100003476	25	0.24	3,200	41.20
620100003478	30	0.30	2,700	51.50
620100003480	35	0.37	2,250	51.50
620100003482	40	0.40	1,800	61.80
620100003484	45	0.53	1,500	72.10
620100003486	50	0.74	1,200	72.10
620100003487	55	0.77	1,000	82.40
620100003488	60	0.87	1,000	92.70

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./sack]	PU [pcs./pal.]	Price per 100 pcs. [€]
620100003507	25	6-12	0.25	75	3,000	61.80
620100003511	30	6-12	0.28	75	3,000	61.80
620100003515	35	6-12	0.38	60	2,400	72.10
620100003519	40	6-12	0.45	50	2,000	72.10
620100003523	45	6-12	0.50	40	1,600	82.40
620100003527	50	6-12	0.70	32	1,280	92.70
620100003531	55	6-12	0.90	25	1,000	103.00
620100003535	60	6-12	1.00	25	1,000	123.60
620100023010	65	6-12	1.10	20	800	133.90
620100003539	70	6-12	1.15	20	800	133.90
620100023011	75	6-12	1.25	18	700	154.50

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	51.50
620100003505	25	6-12	0.16	125	5,000	51.50
620100003509	30	6-12	0.18	125	5,000	51.50
620100003513	35	6-12	0.20	100	4,000	61.80
620100003517	40	6-12	0.30	100	4,000	61.80
620100003521	45	6-12	0.32	80	3,200	61.80
620100003525	50	6-12	0.43	50	2,000	72.10
620100003529	55	6-12	0.45	45	1,800	82.40
620100003533	60	6-12	0.50	40	1,600	82.40
620100023012	65	6-12	0.55	40	1,500	92.70
620100003537	70	6-12	0.60	30	1,200	103.00
620100023013	75	6-12	0.70	25	1,000	113.30

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	144.20
620100003650	30	1.80	750	175.10
620100003653	35	2.50	500	226.60
620100003656	40	3.70	400	278.10
620100003661	45	4.30	350	329.60
620100003663	50	5.00	300	381.10
620100003667	55	6.00	200	453.20
620100003669	60	7.00	150	545.90
620100023014	65	7.50	150	587.10
620100003671	70	10.00	100	741.60
620100003673	75	11.50	100	762.20
620100003675	80	15.00	80	916.70
620100023015	85	17.50	65	1,060.90
620100023016	90	18.50	60	1,133.00
620100023017	95	19.40	55	1,246.30
620100003642	100	21.50	50	1,380.20

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	250	25,000	109.60
620200003727	35/40/50	100.00	100	10,000	162.70
620200003729	45/55/60	180.00	50	5,000	248.20

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	250	25,000	66.20
620200003731	35/40/50	100.00	100	10,000	124.90
620200003733	45/55/60	170.00	50	5,000	207.90

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	82.40
620200003764	25	66.70	240	8,640	87.00
620200003765	30	88.00	240	8,640	96.50
620200003766	35	97.50	160	5,760	121.20
620200003767	40	121.00	160	5,760	129.50
620200003769	45	131.25	160	5,760	147.20
620200003770	50	148.00	160	4,800	153.10
620200003771	60	186.00	128	3,840	195.40

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	50,400	151.50
620200019869	20	42.00	500	20,000	158.40
620200019870	25	62.00	400	25,200	171.10
620200019871	30	78.00	300	30,000	189.50
620200019872	35	94.00	250	27,500	212.50
620200019873	40	110.00	200	10,000	223.90

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	111.40
620200019080	25	45.00	480	14,400	129.80
620200019081	30	53.00	360	12,960	138.90
620200019082	35	63.00	360	12,960	157.40
620200019083	40	74.00	240	8,640	182.50
620200019084	45	92.00	240	8,640	204.50
620200019085	50	104.00	192	6,912	222.80
620200023019	55	124.00	192	6,912	234.80

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	151.50
620200019875	20	46.00	500	35,000	158.40
620200019876	25	54.00	400	100,000	171.10
620200019877	30	73.00	325	100,100	189.50
620200019878	35	90.00	250	12,000	212.40
620200019879	40	111.00	200	47,600	223.90
620200019880	45	131.00	175	22,575	241.20
620200019881	50	130.00	175	25,025	258.30
620200019882	55	143.00	150	17,550	278.00
620200019883	60	152.00	150	7,500	298.50

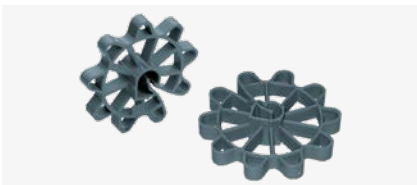
Clamping spacers type DR



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	100,000	27.00
630200005188	20	5-14	4.00	500	2,500	50,000	28.20
630200005189	25	5-14	4.40	500	2,500	50,000	32.00
630200005190	30	5-14	4.80	500	2,000	40,000	41.00
630200005191	35	5-14	5.20	250	1,500	30,000	47.40
630200005192	40	5-14	6.00	250	1,250	25,000	52.60
630200005193	50	5-14	6.40	125	1,000	20,000	76.90

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	20.50
630300005203	20	6-12	3.40	500	5,000	100,000	20.50
630300005204	25	6-12	5.60	500	4,000	48,000	24.30
630300005205	30	6-12	7.80	500	2,500	35,000	30.80
630300005206	35	6-12	11.00	200	1,000	20,000	60.30
630300005207	40	6-12	16.00	125	1,000	20,000	87.10
630300005208	50	6-14	22.00	100	500	10,000	140.90

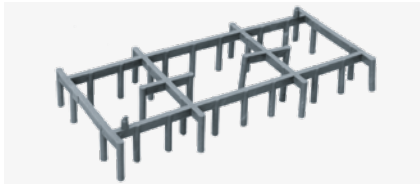
Clamping spacers type MS II



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	21.80
630400005223	20	6-10	4.80	2,000	80,000	25.60
630400005224	25	6-10	7.25	1,300	52,000	37.20
630400005225	30	6-10	8.00	450	28,800	50.10

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	134.50
630500005235	20	28.00	60	9,240	144.80
630500005236	25	32.00	60	9,240	153.80
630500005237	30	33.60	60	9,240	164.00
630500005238	35	35.00	60	7,920	178.10
630500005239	40	38.50	60	7,920	191.00

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	13.60
630100005242	20	2.30	50 x 6 rings	10,800	14.20
630100005243	25	2.35	50 x 6 rings	10,800	14.80
630100005244	30	2.50	50 x 6 rings	7,200	16.10

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	50.60
630600016912	20	15.00	100	6,300	53.90
630600005248	25	17.00	100	4,900	67.40
630600005250	30	18.50	100	4,200	77.40
630600016913	35	21.00	60	3,780	103.30
630600016914	40	24.00	60	2,400	113.50
630600016915	50	35.00	60	1,680	164.10

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	56.10
630700005258	20	16.60	100	6,300	58.70
630700005259	25	19.00	100	4,900	72.10
630700005260	30	20.30	100	4,200	83.10
630700005261	35	27.00	60	3,780	111.50
630700005262	40	32.00	60	2,400	122.70
630700005263	50	34.00	60	1,680	178.00

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	37.20
630900005286	20	9.80	100	4,800	38.40
630900005290	25	10.20	100	4,200	42.40
630900005294	30	10.60	100	3,600	44.90
630900005296	35	11.00	100	3,000	51.20
630900005297	40	12.00	80	2,400	57.60
630900005298	45	12.75	80	2,400	61.50
630900005299	50	13.50	80	1,920	67.90

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	38.50
631000005310	20	10.50	100	4,800	40.90
631000005301	25	10.80	100	4,200	43.60
631000005303	30	11.00	100	3,600	46.10
631000005305	35	12.00	80	2,880	52.60
631000005306	40	13.00	80	2,400	59.00
631000005307	45	14.00	60	1,800	66.70
631000005308	50	14.50	60	1,800	69.20

Facade fastening

Systems for facing masonry

Brickwork support brackets JVAeco+	120
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Systems for parapet slabs

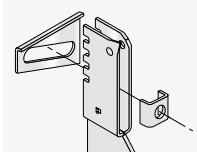
Support corbels JBA	128
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Systems for facing masonry



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

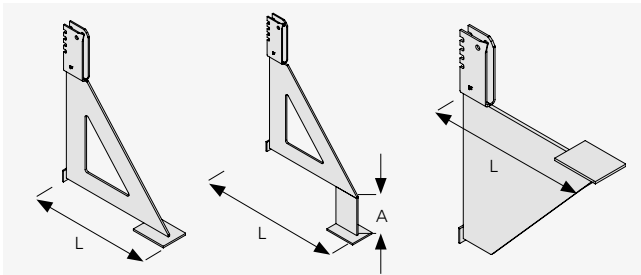


System consisting of:

- JORDAHL® brickwork support bracket
- For wedge adjusters, see page 126
- For clamping washers, see page 126

Brickwork support brackets JVAeco+

Variant JVAeco+ N

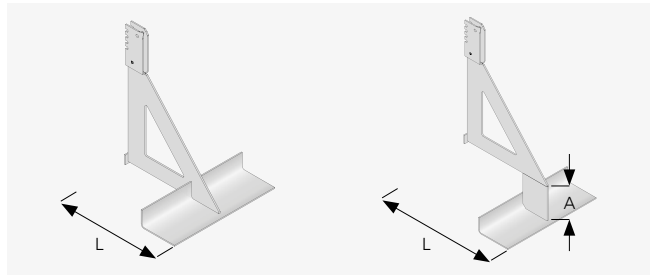


JVAeco+ N

JVAeco+ NA

JVAeco+ NU

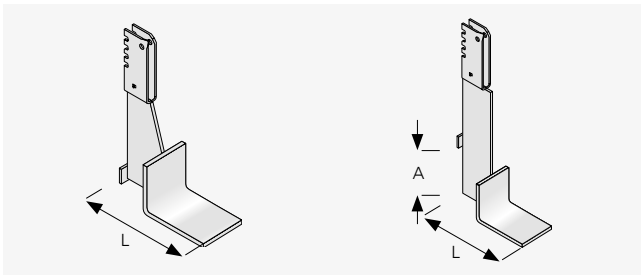
Variant JVAeco+ P



JVAeco+ P

JVAeco+ PAR

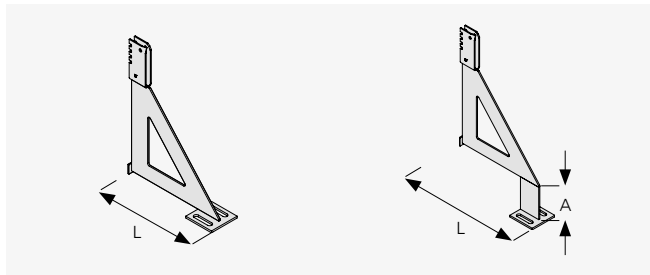
Variant JVAeco+ E



JVAeco+ E

JVAeco+ EA

Variant JVAeco+ NFT



JVAeco+ NFT

JVAeco+ NAFTA

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

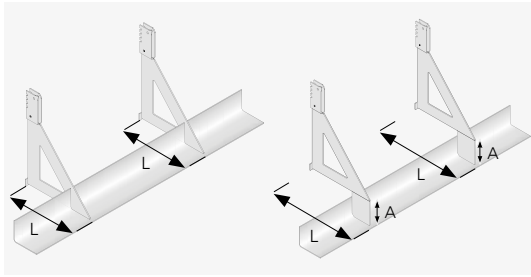
Material

- Stainless steel with corrosion-resistance class (CRC) III



Suitable accessories can be found in the section concerning accessories for facing masonry starting from page 124.

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	

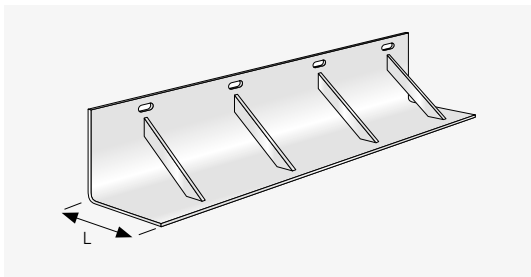
Intermediate and special sizes are available on request

Example order for brickwork support bracket JVAeco+ F

Type	Cantilever 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+



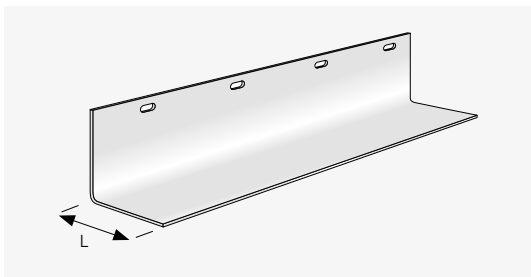
Type	Cantilever length L [mm]	Bracket length ¹⁾ L _w [mm]	Load level [kN]	Price per piece [€]
L-DF+	130-330	490-2,740	1.5 / 3.2	POA

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

Material

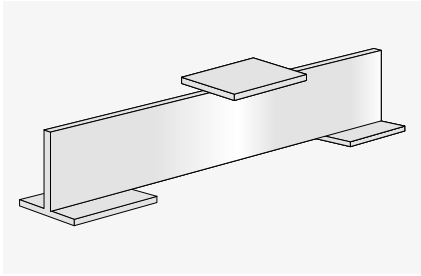
- Stainless steel with corrosion-resistance class (CRC) III



Suitable accessories can be found in the section concerning accessories for facing masonry starting from page 124.

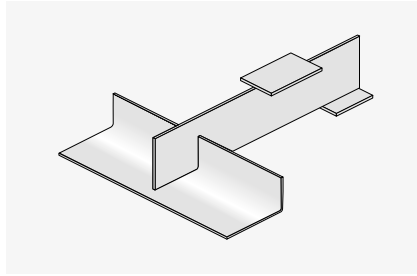
Grout-in brackets JMK+

Variant JMK+ N



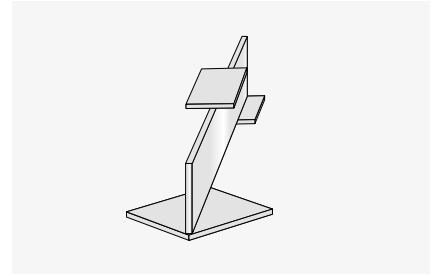
JMK+ N / JMK+ NA
(A dimension not shown)

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			
NA			
P	110-330	3.5 / 7.0	POA
PAR			
E			
EA			

Other dimensions and types available on request.

Example order for grout-in bracket JMK+ N

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

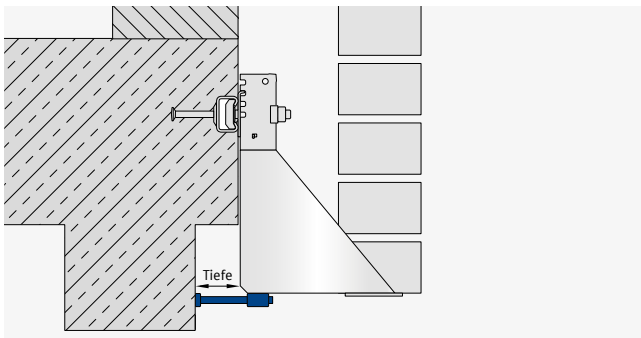
Material

- Stainless steel with corrosion-resistance class (CRC) III



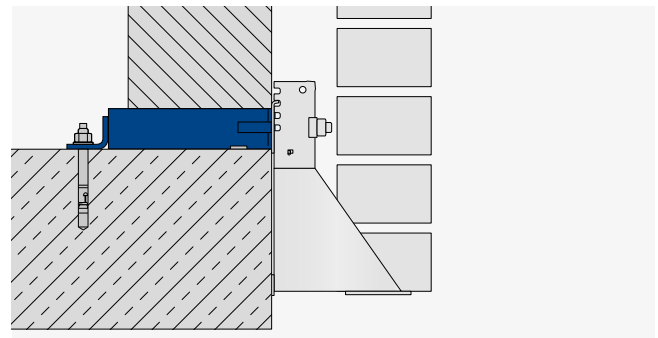
Suitable intermediate brackets can be found on page 124.

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

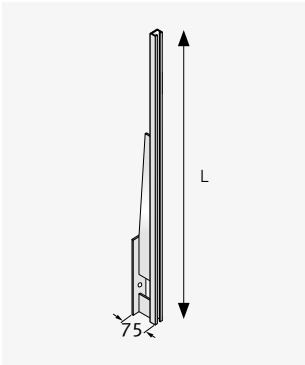
Example order for additional component JVA+ZB

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 124.

Parapet brick anchors JAV



Length L [mm]	Installation depth [mm]	Quant.	Brick tie anchors ^{1) 2)} Type	Price per piece [€]
850	75 / 225	4	JMA 85/12, JMA 120/12, JMA 180/12	POA
1,100	75 / 225	5		POA

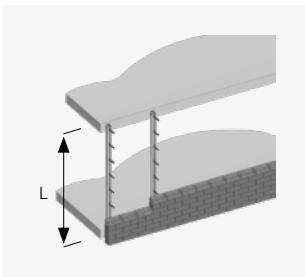
¹⁾ Please order brick tie anchors separately; see page 78

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	/	Length L
JAV	75	/	600

Windposts JWP



Length L [mm]	Profile dimensions w x h x s [mm]	Quant.	Brick tie anchors ^{1) 2)} Type	Price per piece [€]
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	JMA 85/12, JMA 120/12, JMA 180/12	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 78

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

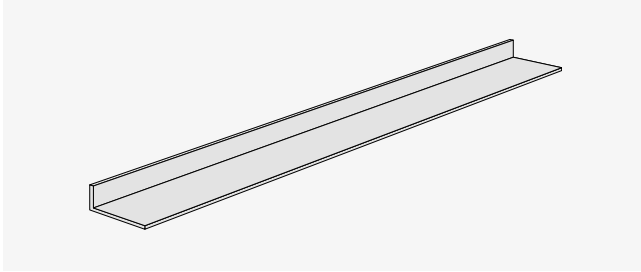
Material

- Stainless steel with corrosion-resistance class (CRC) III

Accessories for facing masonry



Angled brackets JW



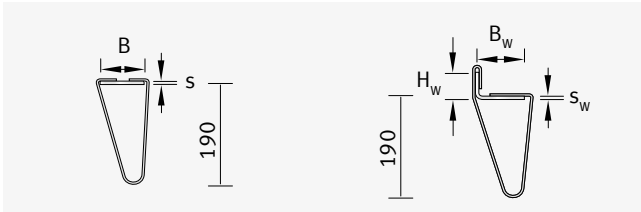
Type	Bracket length [mm]	Angled bracket dimensions $H_w \times W_w \times s_w$ [mm]	Price per piece [€]
JW	480	25 × 90 × 2	POA
JW	730	30 × 90 × 3	POA
JW	980	50 × 90 × 3	POA

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

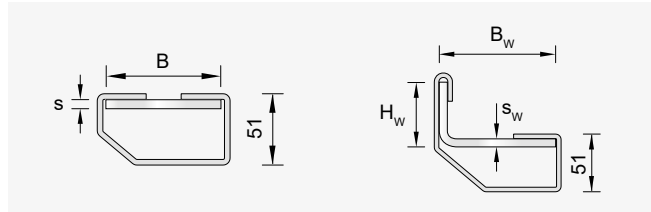
Type	Brick-on-edge course thickness [mm]	For bracket dimensions $H_w \times W_w \times s_w$ [mm]	Price per piece [€]
JRH 0	11.5	For JVAeco+ N, NA, NU	POA
JRH 1	11.5	30-35 × 80-100 × 3-8	POA
JRH 2	11.5	40-45 × 80-100 × 3-8	POA
JRH 3	11.5	50-55 × 80-100 × 3-8	POA
JRH 4	11.5	60-65 × 80-100 × 3-8	POA
JRH 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.

Example order for suspension loop JRH

Type	/	Brick-on-edge course thickness
JRH 5	/	11.5

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.

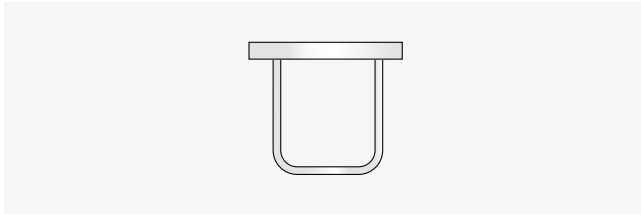
Stainless steel wires ESD

Type	Dia. [mm]	Length [mm]	Price per m [€]
ESD	4	3,000	POA

Material

- Stainless steel with corrosion-resistance class (CRC) III

Prefabricated element holders JFT+



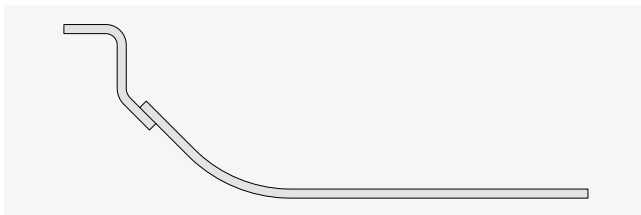
Type	Load level [kN]	Price per piece [€]
JFT 1+ (K28/15)	4.5	POA
JFT 2+ (K38/17) ¹⁾	7.0	POA
JFT 3+ (K38/17) ¹⁾	9.0 / 10.5	POA

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

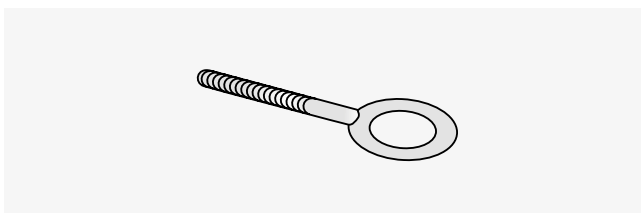
Example order for precast lintel bracket JFTW

Type	-	Load level
JFTW	-	5.5

Version and material

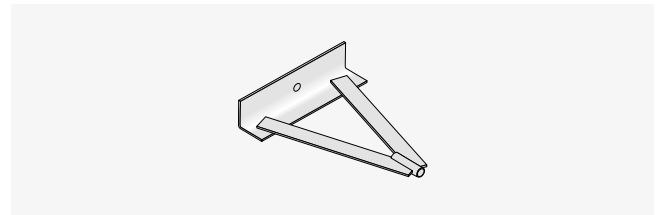
- Stainless steel with corrosion-resistance class (CRC) III

Ring bolts FIG



Scaffold anchors JGA +Q

(with interior thread and cap)



Type	Length ¹⁾ [mm]	Price per piece [€]
JGA +Q	150-410	POA

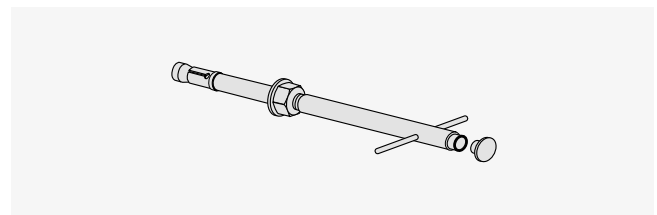
¹⁾ Length in 20-mm steps
Intermediate and special sizes are available on request.

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 64.

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 set ²⁾	Scaffold anchors JGA+ Q	POA
Anchor bolts M12/50 A4 set ²⁾		POA
Anchor bolts M12/60 A4 set ²⁾		POA
Anchor bolts M16/100 A4 set ²⁾	Brickwork support bracket JVAeco+	POA
Heavy-duty anchors M12 × 75/60 A4 set ³⁾	[4.5 / 7.0 / 9.0 / 10.5 / 13.5]	POA
Heavy-duty anchors M12 × 120/60 A4 set ³⁾		POA
Heavy-duty anchors M16 × 95/60 A4 set ³⁾		POA
Heavy-duty anchors M16 × 160/60 A4 set ³⁾		POA
Cleaning brush BS 12 ⁴⁾		POA
Cleaning brush BS 14 ⁵⁾		POA
Cleaning brush BS 16/18 ⁶⁾		POA
Blow-out pump		POA

²⁾ Set includes wedge adjuster and clamping washer

³⁾ Set includes mortar cartridge, wedge adjuster and clamping washer

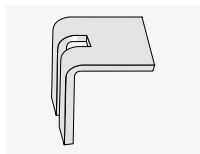
⁴⁾ For heavy-duty anchors M12

⁵⁾ For heavy-duty anchors M12

⁶⁾ For heavy-duty anchors M16

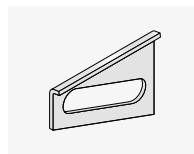
⁷⁾ Set includes mortar cartridge

Shims AGW



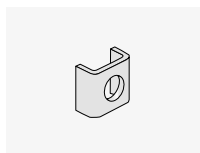
Type	Material thickness [mm]	Price per piece [€]
AGW	2 / 3 / 4 / 5 / 6	POA

Wedge adjusters SLP



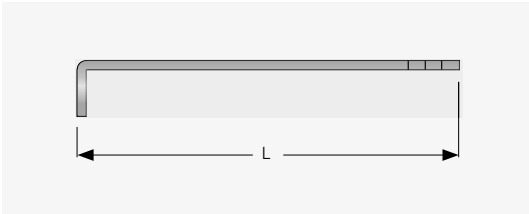
Type	Suitable for load level [kN]	Price per piece [€]
SLP	3.5 / 4.5 / 7.0 / 9.0 / 10.5 / 13.5	POA

Clamping washers KS

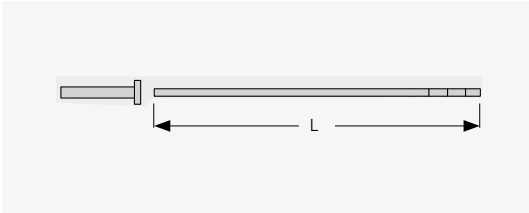


Type	Suitable for load level [kN]	Price per piece [€]
KS11	3.5 / 4.5	POA
KS13	3.5 / 4.5 / 7.0 / 9.0	POA
KS17	10.5 / 13.5	POA

Cavity wall anchors JLA



Cavity wall anchor JLA W-L



Dowel anchor JLA D-ZV

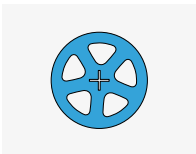
Type	Diameter [mm]	Length L [mm]	Price per piece [€]
JLA W-L	4	225 / 250 / 275 / 300 / 340 / 400	POA
JLA D-ZV	4	180 / 210 / 250 / 275 / 300 / 320 / 350 / 375 / 400	POA
JLA D-ZV	5	350 / 375 / 400 / 425 / 450 / 475 / 500 / 525 / 550	POA

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

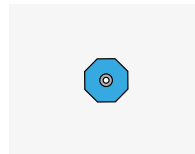
Clamping claws KKP



Type	Price per 100 pcs. [€]
KKP60	POA

Clamping claw plate 60 mm in diameter for cavity wall anchors dia. 3 - 4 mm

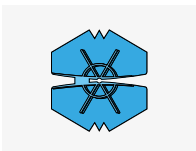
Drip discs TS



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

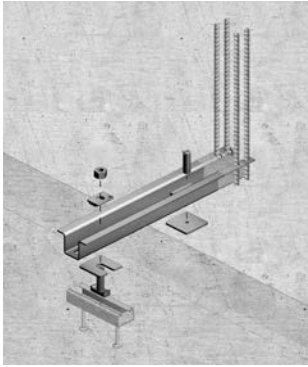
Systems for parapet slabs



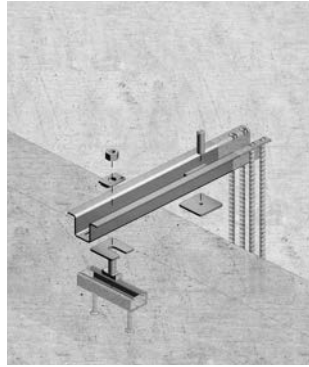
Support corbels JBA

Type approval (TP S-WUE/130261)

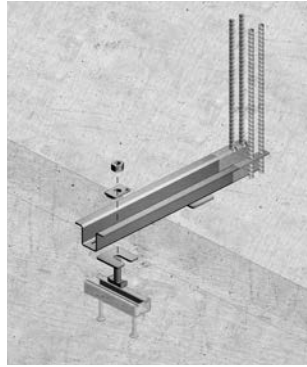
JBA-NJ
Standard version, adjustable



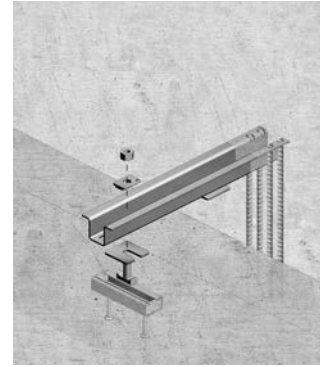
JBA-AJ
Reversed version, adjustable



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	JXS-D21	JVS-80/8-21	JVL-80/8-8	JGW M27x70	POA
JBA set	7	J 7-8	J 7-8	5-8	5-8				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

- Stainless steel with corrosion-resistance class (CRC) III
- Reinforcing steel B500B

Sound insulation

Elevator insulation

Elevator insulation JAI 132

SINTON®

SINTON® X 133

SINTON® X-T1 / X-T2 133

SINTON® S 133

SINTON® SDL 134

SINTON® Z 134

SINTON® ZB 135

SINTON® HT-V 136

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-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-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	368.40
JAI-L1J-JC16 GV	Elevator insulation L1J, adjustable with slot	JC M16x80 8.8 GV	491.20
JAI-L1-JC16 GV	Elevator insulation L1 with round hole	JC M16x80 8.8 GV	491.20
JAI-L1J-JB16 GV	Elevator insulation L1J, adjustable with slot	JB M16x80 8.8 GV	491.20
JAI-L1-JB16 GV	Elevator insulation L1 with round hole	JB M16x80 8.8 GV	491.20

Version and material

- gv = Galvanised
- Insulation material: Mixed cell polyurethane

Example order for elevator insulation JAI

Type	-	Bolts included	-	Design
JAI-A1J	-	JC16	-	gv

SINTON®



SINTON® X

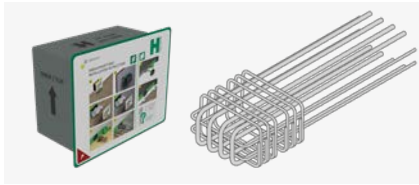


Impact sound insulation element for masonry and concrete walls. Hollow elements for supporting and acoustically isolating landing and staircase walls at the same time. Supplied with packing for stabilisation during casting and frame for fastening to formwork.

- 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	90.40
410200020314	SINTON® X2	2	245	150	180	1.25	48	98.80
410200020315	SINTON® X3	3	245	150	180	1.25	48	108.70

SINTON® X-T1 / X-T2

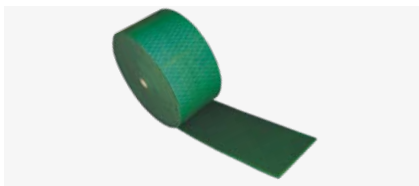


Impact sound insulation element with type-approved reinforcement cage in two load levels (T1 and T2). Hollow element for supporting and acoustically isolating landing and staircase walls at the same time. Supplied with packing for stabilisation during casting and frame for fastening to formwork.

- 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./pal.]	Price per piece [€]
			B	D	H			
410300025052	SINTON® X1-T1	1	245	150	180	5.85	48	153.70
410300025053	SINTON® X2-T1	2	245	150	180	5.85	48	162.10
410300025054	SINTON® X3-T1	3	245	150	180	5.85	48	172.00
410300025055	SINTON® X1-T2	1	245	150	180	6.67	48	196.60
410300025056	SINTON® X2-T2	2	245	150	180	6.67	48	205.00
410300025057	SINTON® X3-T2	3	245	150	180	6.67	48	214.90

SINTON® S

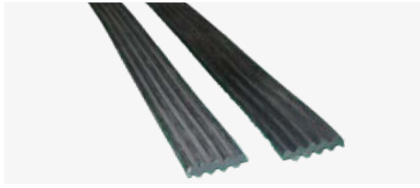


Flexible insulation plate, self-adhesive on one side. For acoustically isolating concrete components that lie flush with the staircase wall via a joint.

- 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	18	2.30	15.00	14.90
450100024247	SINTON® S 36	360	15	12	3.00	15.00	19.20
450100024248	SINTON® S 42	420	15	8	3.50	15.00	20.20
450100024249	SINTON® S 48	480	15	8	4.00	15.00	21.20

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	14.40
460100002386	SINTON® SDL 12/50	1,200	50	10	0.54	17.40
460100002388	SINTON® SDL 15/50	1,500	50	10	0.67	21.60
460100002384	SINTON® SDL 100/50	10,000	50	10	4.46	111.30
460100002383	SINTON® SDL 10/100	1,000	100	10	0.90	26.00
460100002387	SINTON® SDL 12/100	1,200	100	10	1.08	20.00
460100002389	SINTON® SDL 15/100	1,500	100	10	1.34	39.20
460100002385	SINTON® SDL 100/100	10,000	100	10	8.92	202.50

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	36.00
430100004134	Z 100/5	5 single pressure pads*	1,000	0.32	41.20
430100022263	Z 110/5	5 single pressure pads*	1,100	0.34	41.90
430100004138	Z 110/6	6 single pressure pads*	1,100	0.34	45.50
430100004139	Z 120/6	6 single pressure pads*	1,200	0.36	49.10
430100019751	Z 130/7	7 single pressure pads*	1,300	0.39	56.70
430100004141	Z 150/6	6 single pressure pads*	1,500	0.45	65.10
430100004143	Z 150/8	8 single pressure pads*	1,500	0.60	68.60
430100004135	Z 100 L	1 linear pressure pad	1,000	0.30	65.00
430100004137	Z 110 L	1 linear pressure pad	1,100	0.57	70.70
430100004140	Z 120 L	1 linear pressure pad	1,200	0.36	77.20
430100019752	Z 130 L	1 linear pressure pad	1,300	0.39	85.80
430100004142	Z 150 L	1 linear pressure pad	1,500	0.45	103.90
*Additional single pressure pad					5.10

SINTON® ZB

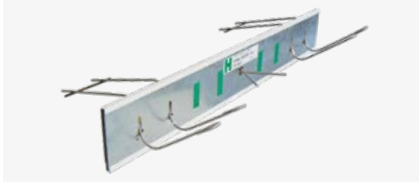


Impact sound insulation element for acoustically decoupling and supporting prefabricated staircases on floor slabs.

- 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	72.90
430200004146	SINTON® ZB 100x60/4	4 single pressure pads*	1,000 x 600	0.50	75.70
430200004148	SINTON® ZB 100x36/5	5 single pressure pads*	1,000 x 360	0.35	76.70
430200004149	SINTON® ZB 100x60/5	5 single pressure pads*	1,000 x 600	0.55	78.60
430200004150	SINTON® ZB 110x36/6	6 single pressure pads*	1,100 x 360	0.40	78.00
430200004152	SINTON® ZB 110x60/6	6 single pressure pads*	1,100 x 600	0.60	81.30
430200004154	SINTON® ZB 120x36/6	6 single pressure pads*	1,200 x 360	0.36	78.60
430200004156	SINTON® ZB 120x60/6	6 single pressure pads*	1,200 x 600	0.60	82.20
430200019753	SINTON® ZB 130x36/7	7 single pressure pads*	1,300 x 360	0.39	90.00
430200019754	SINTON® ZB 130x60/7	7 single pressure pads*	1,300 x 600	0.65	94.10
430200004158	SINTON® ZB 150x36/6	6 single pressure pads*	1,500 x 360	0.45	90.90
430200004160	SINTON® ZB 150x60/6	6 single pressure pads*	1,500 x 600	0.75	95.90
430200004162	SINTON® ZB 150x36/8	8 single pressure pads*	1,500 x 360	0.60	101.20
430200004164	SINTON® ZB 150x60/8	8 single pressure pads*	1,500 x 600	0.80	106.30
430200004145	SINTON® ZB 100x36 L	Linear pressure pad	1,000 x 360	0.30	104.70
430200004147	SINTON® ZB 100x60 L	Linear pressure pad	1,000 x 600	0.50	110.10
430200004151	SINTON® ZB 110x36 L	Linear pressure pad	1,100 x 360	0.35	110.20
430200004153	SINTON® ZB 110x60 L	Linear pressure pad	1,100 x 600	0.60	115.80
430200004155	SINTON® ZB 120x36 L	Linear pressure pad	1,200 x 360	0.36	115.80
430200004157	SINTON® ZB 120x60 L	Linear pressure pad	1,200 x 600	0.60	121.30
430200024946	SINTON® ZB 130x36 L	Linear pressure pad	1,300 x 360	0.36	126.60
430200024943	SINTON® ZB 130x60 L	Linear pressure pad	1,300 x 600	0.60	131.40
430200004159	SINTON® ZB 150x36 L	Linear pressure pad	1,500 x 360	0.45	146.00
430200004161	SINTON® ZB 150x60 L	Linear pressure pad	1,500 x 600	0.75	151.50
*Additional single pressure pad					5.20

SINTON® HT-V



For isolating flights of stairs and landings from impact sound. The elements are typed-tested and meet the requirements of fire resistance class R 90. Can be used for cast-in-place and prefabricated stairs.

Please state height (h) and length (l) when ordering.

- Prices for element length 1,000-1,250 mm

Article number	Type	Height [mm]	Weight [kg/m]	PU [pcs./pal.]	Price per piece [€]
440100012766	HT-V4-160	160	3.47	16	127.90
440100012768	HT-V4-180	180	3.92	14	127.90
440100012770	HT-V4-200	200	4.32	12	127.90
440100012773	HT-V4-220	220	4.66	10	127.90
440100012778	HT-V6-160	160	3.88	16	142.30
440100012780	HT-V6-180	180	4.33	14	142.30
440100012782	HT-V6-200	200	4.73	12	142.30
440100012785	HT-V6-220	220	5.03	10	142.30
440100012794	HT-V8-160	160	4.29	16	165.80
440100012796	HT-V8-180	180	4.74	14	165.80
440100012798	HT-V8-200	200	5.14	12	165.80
440100012800	HT-V8-220	220	5.54	10	165.80
For every 250 mm or part thereof over the standard element length of 1250 mm					14.40
Special height 230-250 mm					12.50

Formwork

RAPIDOBAT®

RAPIDOBAT® unlined	140
RAPIDOBAT® lined	141
RAPIDOBAT® Cretcon HD	141
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RAPIDOBAT®



RAPIDOBAT® unlined

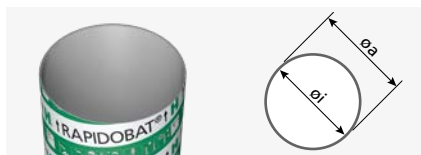


Round shuttering tubes in an unlined design.

- 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 145

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310100001877	150	157	7,000	1.26	15.10
310100001878	200	207	7,000	1.68	17.20
310100001880	240	248	7,000	2.01	21.00
310100001881	250	258	7,000	2.09	21.60
310100001883	300	309	7,000	3.51	26.00
310100001886	350	361	7,000	3.52	34.30
310100001887	360	371	7,000	4.20	37.30
310100001889	400	411	7,000	4.69	42.30
310100001890	435	446	7,000	5.09	48.10
310100001891	450	463	7,000	6.02	49.00
310100001892	500	515	7,000	7.53	52.00
310100013213	550	567	7,000	8.28	58.60
310100001893	560	575	7,000	8.42	59.90
310100001894	600	615	7,000	9.03	62.50
310100001895	650	667	7,000	10.85	71.80
310100001896	700	717	7,000	11.69	93.20
310100001898	750	769	7,000	13.78	109.60
310100001899	800	821	7,000	16.03	116.70
310100001900	900	923	7,000	18.03	236.90
310100001875	1,000	1,024	7,000	21.77	288.00
310100001876	1,200	1,226	6,000	26.07	350.50

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. 150-560 mm 1 joint, dia. 550-1,000 mm 2 joints, > 1,200 mm 3 joints
- For alignment and fastening accessories, see page 145

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310200001851	150	157	7,000	1.49	22.90
310200001852	200	207	7,000	1.98	27.30
310200001854	240	248	7,000	2.37	32.10
310200001855	250	258	7,000	2.47	34.00
310200001857	300	309	7,000	3.96	41.10
310200001860	350	361	7,000	4.05	50.40
310200001861	360	371	7,000	4.74	52.60
310200001863	400	411	7,000	5.40	57.20
310200001864	435	446	7,000	5.89	65.80
310200001865	450	463	7,000	6.82	66.80
310200001866	500	515	7,000	8.66	71.70
3102000013199	550	567	7,000	10.44	93.50
310200001867	560	575	7,000	10.62	94.70
310200001868	600	615	7,000	11.39	96.50
310200001869	650	667	7,000	13.40	121.60
310200001871	700	717	7,000	14.44	138.70
310200001872	750	769	7,000	16.72	155.80
310200001873	800	821	7,000	19.17	166.10
310200001874	900	923	7,000	21.56	291.70
310200001849	1,000	1,024	7,000	25.70	342.90
310200001850	1,200	1,226	6,000	30.78	559.30

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 145

Article number	Dimensions [mm]		Shuttering height [mm]	Weight [kg/m]	Price per m [€]
	Inner dia.	Outer dia.			
310300001830	200	207	7,000	2.21	28.10
310300001832	240	248	7,000	2.65	33.00
310300001833	250	258	7,000	2.76	35.00
310300001835	300	309	7,000	4.31	42.20
310300001837	350	361	7,000	4.45	51.80
310300001838	360	371	7,000	5.16	54.10
310300001839	400	411	7,000	5.76	58.90
310300001840	435	446	7,000	6.25	67.70
310300001841	450	463	7,000	7.22	68.70
310300001842	500	515	7,000	8.87	73.80
3103000013184	550	567	7,000	9.75	96.10
310300001843	560	575	7,000	9.92	97.40
310300001844	600	615	7,000	10.63	99.30
310300001845	650	667	7,000	12.59	125.10
310300001846	700	717	7,000	13.56	142.70
310300001847	750	769	7,000	15.78	160.30
310300001848	800	821	7,000	18.17	170.90

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 143 and 145

Article number	Dimensions [mm]			Chamfer [mm]	Weight [kg/m]	Price per m [€]
	A	B	Outer dia.			
310400001781	200	200	273	24	6.90	42.50
310400001789	240	240	325	24	7.30	53.10
310400001798	250	250	341	24	7.50	54.60
310400001804	300	300	410	24	9.50	63.80
310400001810	350	350	512	24	14.10	78.50
310400001814	400	400	574	24	17.20	88.60
310400001817	450	450	665	24	21.50	153.60
310400001818	500	500	716	24	26.80	163.00

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 143 and 145

Article number	Dimensions [mm]			Chamfer [mm]	Weight [kg/m]	Price per m [€]
	A	B	Outer dia.			
310400001780	175	240	308	24	7.80	58.00
310400001782	200	240	325	24	8.50	48.10
310400001783	200	250	325	24	8.60	49.50
310400001784	200	300	383	24	9.80	58.10
310400001785	200	350	442	24	9.90	81.20
310400001786	200	400	460	24	13.90	72.30
310400001787	200	450	512	24	14.20	94.20
310400001788	200	500	564	24	15.50	115.90
310400001790	240	300	410	24	9.70	64.90
310400001791	240	350	445	24	11.00	99.40
310400001792	240	365	445	24	12.50	103.70
310400001794	240	400	512	24	14.00	104.90
310400001795	240	450	564	24	15.30	118.70
310400001796	240	500	574	24	15.30	120.30
310400001799	250	300	410	24	10.00	64.90
310400001800	250	350	445	24	11.10	99.40
310400001801	250	400	512	24	14.30	104.90
310400001802	250	450	564	24	15.30	113.10
310400001803	250	500	574	24	18.00	131.90
310400001805	300	350	512	24	13.70	79.70
310400001806	300	400	512	24	16.10	82.70
310400001807	300	450	564	24	15.05	127.30
310400001808	300	500	614	24	17.20	136.00
310400001811	350	400	564	24	17.70	93.10
310400001812	350	450	564	24	17.05	134.50
310400001813	350	500	665	24	20.40	156.60
310400001815	400	450	665	24	20.30	152.30
310400001816	400	500	665	24	20.10	157.00

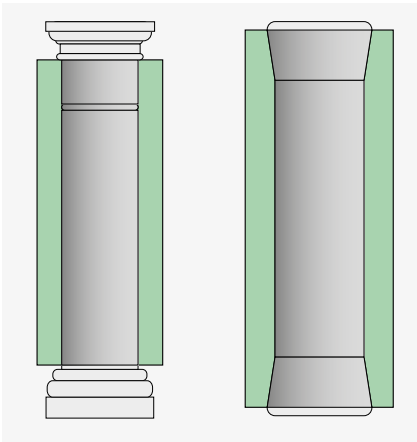
RAPIDO-Fix



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	19.10

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!

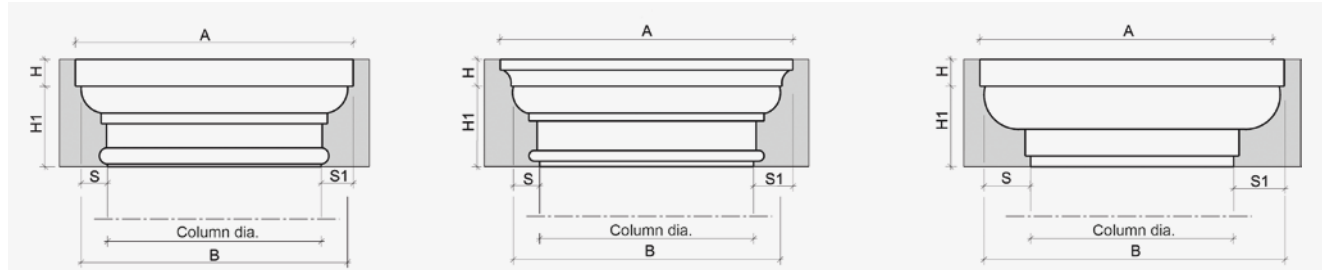
Type	Price [€]
RAPIDOBAT® custom shape	POA

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

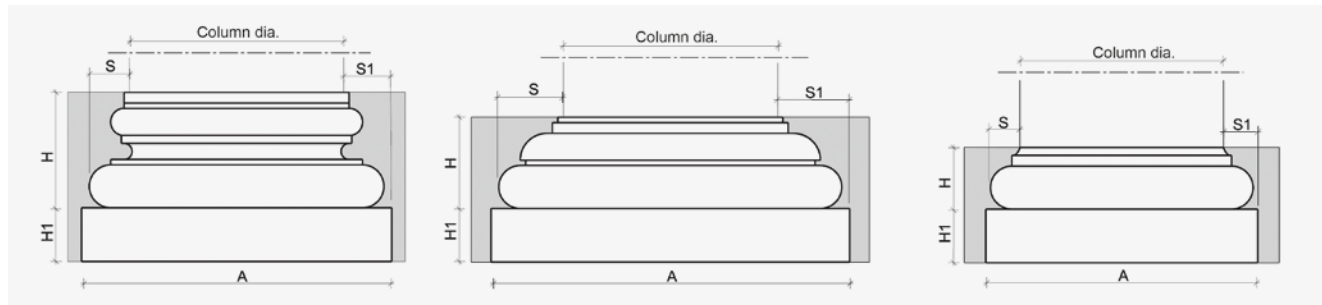
Palermo

Article number	Capital type	Dimensions [mm]					Price per piece [€]
		H	H1	S	S1	A	
3201...	Rome	50	150	50	60	Column dia. + 120	301.60
3201...	Parma / Abakus round	50	150	50	90	Column dia. + 180	294.80
3201...	Palermo	50	150	100	110	Column dia. + 220	293.30

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	306.80
3203...	Verona	200	100	70	80	Column dia. + 160	302.10
3203...	Ancona	100	100	55	65	Column dia. + 130	276.50

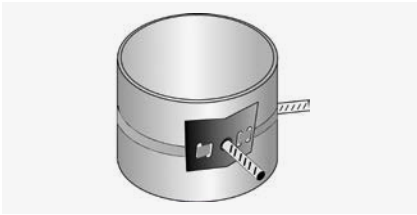
Release agent for capitals and bases

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 [€]
32030004983	2.5	Approx. 0.65	2.14	47.00

RAPIDO-Clamp type D

Set

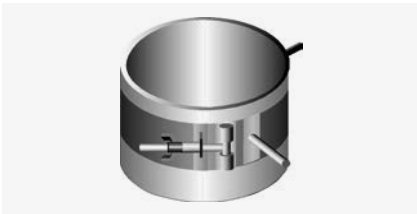


Consisting of a tension belt with two brackets and welded-on DYWIDAG anchor rods for aligning with push-pull props.

Article number	For diameter [mm]	Weight [kg/set]	Price per set [€]
330200001937	200-1,200	1.10	59.00

Article number	Weight [kg/pc.]	Price per piece [€]	
330200001936	Single anchor plate for RAPIDO-Clamp type D	0.30	23.70

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	83.60
330200001927	435-600	Adjust. steel sleeve	4.30	94.00
330200001928	650-800	Adjust. steel sleeve	6.75	165.60
330200001929	900-1,000	Adjust. steel sleeve	8.25	213.40
330200001925	1,200	Adjust. steel sleeve	9.90	317.10

RAPIDOBAT® accessories

- Adhesive tape for strengthening shuttering tubes and connecting half-shells
- Adhesive tape reinforced lengthways and across; 50 mm wide

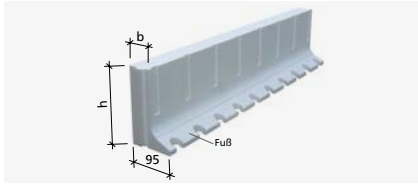
Article number	Function	PU [m/roll]	Weight [kg/roll]	Price per roll [€]
990500000318	Strengthening	50	0.65	15.40
990500019064	Half shells	50	0.78	63.70

WARBORD®



WARBORD® type SE

With base

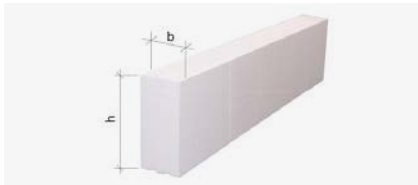


Insulating and ceiling edge shuttering made from expanded polystyrene (EPS) of thermal conductivity group 035.

Article number	Dimensions [mm]			Design	Weight [kg/m]	PU [m/box]	Price per m [€]
	h	l	b				
360100004985	180	1,000	60	With base	0.31	36.0	8.00
360100004986	200	1,000	60	With base	0.34	32.0	8.70
360100004987	220	1,000	60	With base	0.35	28.0	9.80
360100004989	250	1,000	60	With base	0.37	25.0	13.80

WARBORD® 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	9.20
360100014437	200	1,000	80	Without base	0.31	28.0	9.80
360100014439	220	1,000	80	Without base	0.34	21.0	10.50
360100014441	250	1,000	80	Without base	0.39	21.0	14.40
360100014432	160	1,000	100	Without base	0.29	30.0	9.60
360100014434	180	1,000	100	Without base	0.34	24.0	10.00
360100014436	200	1,000	100	Without base	0.38	24.0	12.20
360100014438	220	1,000	100	Without base	0.42	18.0	13.30
360100014440	250	1,000	100	Without base	0.48	21.0	14.80

WARBORD® accessories

Article number	Type	Consumption [ml/m]	Contents [ml/can]	PU [pcs./box]	Price per can [€]
360200005005	WABO foam	25	750	12	16.50
360200005007	Gun foam	25	750	12	16.50

Article number	Type	Weight [kg/pc.]	PU [pcs.]	Price per piece [€]
360200005006	WABO foam gun	0.50	1	80.60

Shuttering elements



Shuttering element type R

Rough joint in line with EC2

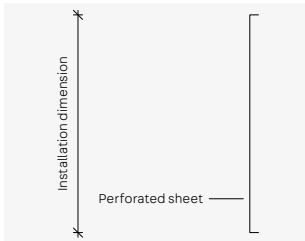


Shuttering element used to create lost formwork in construction joints. This version produces rough joints in line with DIN EN 1992-1-1/NA.

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	9.60
340100013229	210-250	1.16	11.00
340100013230	260-300	1.36	12.40
340100013231	310-350	1.56	14.30
340100014960	360-400	1.76	15.80
340100014961	410-500	2.16	21.30
340100013234	510-600	2.56	31.10
340100013235	610-700	2.96	34.50
340100013236	710-800	3.36	37.20
340100013237	810-900	3.76	39.90
340100013238	910-1,000	4.16	43.10

Extension products for shuttering elements type R	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts	8.70

Shuttering elements type A R

Rough joint in line with EC2

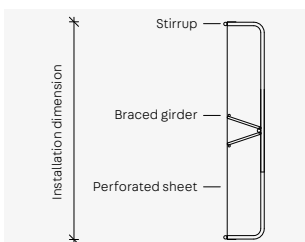


Shuttering element used to create lost formwork in construction joints. This version produces rough joints in line with DIN EN 1992-1-1/NA.

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	26.70
340300013276	210-250	2.56	28.50
340300013277	260-300	2.78	30.10
340300013278	310-350	3.22	34.10
340300014963	360-400	3.46	35.40
340300013280	410-500	3.95	41.50
340300013281	510-590	4.88	51.50

Extension products for shuttering elements type A R	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts	8.70



Shuttering elements for waterproof construction joints can be found in the section on Sealing starting on page 9.

Suitable fibre-reinforced concrete shuttering strips for shuttering elements (floor/floor or ceiling/ceiling) can be found starting on page 149.

Shuttering elements type V

Interlocking joint in line with EC2

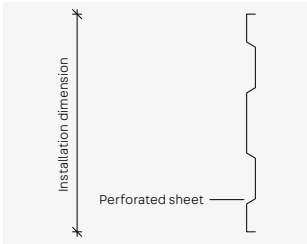


Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

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	11.00
340200013252	210-250	1.30	12.50
340200013253	260-300	1.50	14.00
340200013254	310-350	1.70	17.10
340200014962	360-400	1.90	17.50
340200013256	410-500	2.30	23.30
340200013257	510-600	2.70	33.50
340200013258	610-700	3.10	36.60
340200013259	710-800	3.64	39.70
340200013260	810-900	4.04	42.80
340200013261	910-1,000	4.44	45.60

Extension products for shuttering elements type V	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts	8.70

Shuttering elements type A V

(Version with steel construction) – interlocking joint in line with EC2

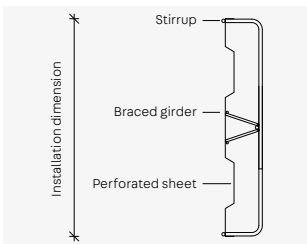


Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

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	28.30
340400013301	210-250	2.70	30.20
340400013302	260-300	2.92	31.30
340400013303	310-350	3.36	35.30
340400014964	360-400	3.55	36.30
340400013305	410-500	4.04	42.10
340400013306	510-590	5.42	55.30

Extension products for shuttering elements type A V	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts	8.70



Shuttering elements for waterproof construction joints can be found in the section on Sealing starting on page 9.

Suitable fibre-reinforced concrete shuttering strips for shuttering elements (floor/floor or ceiling/ceiling) can be found starting on page 149.

Shuttering elements type A V-S

Interlocking joint in line with EC2, reinforced version

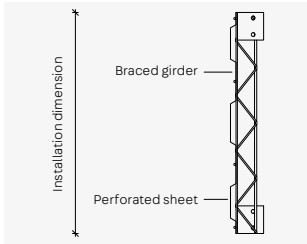


Shuttering element used to create lost formwork in construction joints. Interlocking joint version in line with DIN EN 1992-1-1/NA.

The A V-S version is fitted with a lattice beam structure for reinforcement.

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

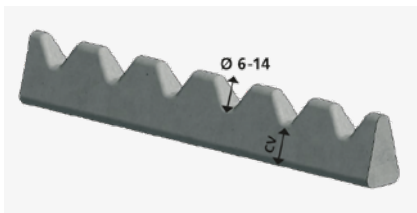
- E dimension: Distance between upper and lower reinforcement layers [mm]
- Element length: 2,400 mm, other lengths available on request



Article number	Installation height [mm]	Weight [kg/m]	Price per m [€]
340400022132	600 - 690	4.82	68.10
340400022133	700 - 790	5.21	71.00
340400022134	800 - 890	6.78	74.00
340400022135	900 - 990	7.15	77.00
340400022136	1,000 - 1,090	8.96	86.30
340400022137	1,100 - 1,190	9.40	96.70
340400022138	1,200 - 1,290	9.84	107.00
340400022139	1,300 - 1,390	10.94	117.50
340400022140	1,400 - 1,490	11.38	127.90
340400022141	1,500 - 1,590	11.82	138.20
340400022142	1,600 - 1,690	14.01	148.60
340400022143	1,700 - 1,790	14.49	159.00
340400022144	1,800 - 1,890	14.98	169.30
340400022145	1,900 - 2,000	16.81	179.70

Extension products for shuttering elements type A V-S	Surcharge [€]
Surcharge for short pieces	10%
Surcharge for tapered cuts	8.70

Fibre-reinforced concrete shuttering strips A-CV

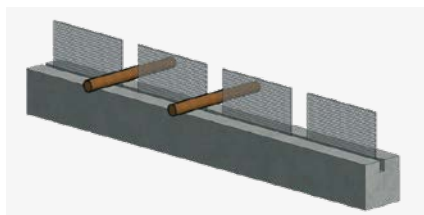


Fibre-reinforced concrete spacer with 50-mm reinforcement grid for bar diameters of 6-14 mm. Concrete cover 20-60 mm. Reduces concrete penetration to a minimum when the construction joint (floor/floor or ceiling/ceiling) is formed. For use with PENTAFLEX® ABS (page 9), KUNEX® ABS (page 27) and shuttering elements (starting on page 147).

- Other dimensions available on request

Article number	Type	Concrete cover [mm]	Height/length [mm]	PU [pcs./pal.]	Weight [kg/pc.]	Price per piece [€]
620300003455	A-CV 20	20	40/1.000	300	1.85	3.90
620300003456	A-CV 25	25	45/1.000	300	2.40	4.00
620300003457	A-CV 30	30	50/1.000	300	2.60	4.50
620300003458	A-CV 35	35	55/1.000	300	3.10	5.00
620300003459	A-CV 40	40	60/1.000	200	3.20	5.90
620300003460	A-CV 45	45	65/1.000	200	3.90	7.70
620300003461	A-CV 50	50	70/1.000	200	4.80	8.50
620300003462	A-CV 60	60	80/1.000	150	5.20	9.30

Fibre-reinforced concrete shuttering strips AS-CV



Square, fibre-reinforced concrete spacer with integrated expanded metal strips and rebar spacings of 100/150/200 mm for 30-50 mm concrete cover. Reduces concrete penetration to a minimum when the construction joint (floor/floor or ceiling/ceiling) is formed. For use with PENTAFLEX® ABS (page 9), KUNEX® ABS (page 27) and shuttering elements (starting on page 147). Other dimensions available on request

Specify rebar diameter when ordering.

Article number	Type	Concrete cover [mm]	Expanded metal [mm]	Rebar spacing [mm]	Total height/length [mm]	Weight [kg/pc.]	Price per piece [€]
620400018716	AS-CV 30/100/80	30	80	100	110/1.000	2.81	13.00
620400018717	AS-CV 30/150/80	30	80	150	110/900	2.85	13.80
620400018718	AS-CV 30/200/80	30	80	200	110/1.000	3.17	15.60
620400018719	AS-CV 35/100/80	35	80	100	115/1.000	3.64	13.90
620400018720	AS-CV 35/150/80	35	80	150	115/900	3.28	15.60
620400018721	AS-CV 35/200/80	35	80	200	115/1.000	3.64	18.60
620400018722	AS-CV 40/100/80	40	80	100	120/1.000	4.17	14.70
620400018723	AS-CV 40/150/80	40	80	150	120/900	3.75	16.40
620400018724	AS-CV 40/200/80	40	80	200	120/1.000	4.17	19.40
620400018725	AS-CV 50/100/80	50	80	100	130/1.000	4.97	16.20
620400018726	AS-CV 50/150/80	50	80	150	130/900	4.47	17.70
620400018727	AS-CV 50/200/80	50	80	200	130/1.000	4.97	20.70

Article number	Type	Concrete cover [mm]	Expanded metal [mm]	Rebar spacing [mm]	Total height/length [mm]	Weight [kg/pc.]	Price per piece [€]
620400024250	AS-CV 30/100/120	30	120	100	150/1.000	3.11	13.00
620400024251	AS-CV 30/150/120	30	120	150	150/900	3.15	13.80
620400024252	AS-CV 30/200/120	30	120	200	150/1.000	3.47	15.60
620400024253	AS-CV 35/100/120	35	120	100	155/1.000	3.94	13.90
620400024254	AS-CV 35/150/120	35	120	150	155/900	3.58	15.60
620400024255	AS-CV 35/200/120	35	120	200	155/1.000	3.94	18.60
620400024256	AS-CV 40/100/120	40	120	100	160/1.000	3.58	14.70
620400024257	AS-CV 40/150/120	40	120	150	160/900	3.94	16.40
620400024258	AS-CV 40/200/120	40	120	200	160/1.000	4.47	19.40
620400024259	AS-CV 50/100/120	50	120	100	170/1.000	4.05	16.20
620400024260	AS-CV 50/150/120	50	120	150	170/900	4.47	17.70
620400024261	AS-CV 50/200/120	50	120	200	170/1.000	5.27	20.70

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	2.40

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	0.50
720100003775	22	40	120	0.21	50	2,000	0.50
720100003777	22	40	140	0.25	50	2,000	0.60
720100003778	22	40	150	0.26	50	2,000	0.60
720100003779	22	40	160	0.28	50	2,000	0.60
720100003780	22	40	180	0.32	25	1,000	0.70
720100003782	22	40	200	0.35	25	1,000	0.70
720100003783	22	40	220	0.38	25	1,000	0.70
720100003784	22	40	230	0.40	25	1,000	0.70
720100003785	22	40	240	0.42	25	1,000	0.70
720100003786	22	40	250	0.44	25	1,000	0.80
720100003787	22	40	280	0.49	25	1,000	0.90
720100003789	22	40	300	0.53	25	1,000	0.90
720100003791	22	40	330	0.58	30	1,020	1.00
720100003792	22	40	340	0.60	30	1,020	1.00
720100003793	22	40	350	0.62	30	1,020	1.10
720100003794	22	40	360	0.63	30	1,020	1.20
720100003795	22	40	380	0.67	30	1,020	1.20
720100003796	22	40	400	0.70	30	1,020	1.20
720100003798	22	40	450	0.79	30	510	1.50
720100003800	22	40	500	0.88	20	500	1.50
720100003801	22	40	550	0.96	20	500	1.90
720100003802	22	40	600	1.05	20	500	1.90

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	13.20
720200005360	22	40	2.00	1,000	17.10
720200005361	22	50	2.50	500	19.20

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	31.60

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	66.70
730100005377	22	26	18.00	50	2,800	44.40
730100002355	26	32	36.00	50	1,800	97.50
730100003898	32	36	29.50	30	1,260	92.60
730100002361	40	46	54.00	30	900	167.90

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	35.80
730100002411	22	10	6.00	500	3,000	26.50
730100002412	26	10	8.00	500	-	59.30
730100002413	32	10	8.40	500	2,500	71.60
730100002414	40	20	16.00	125	1,000	370.40

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	22.30
730100002419	22	3.60	1,000	4,000	22.80
730100002420	26	4.80	1,000	-	35.20
730100002421	32	8.00	500	-	44.40
730100002422	40	12.00	500	-	232.00

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	82.70
990300002335	22	3.60	500	2,500	50,000	61.80
990300002337	26	5.20	250	1,000	20,000	166.60

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	32.10
730100002426	22	26	180	4.5	100	5,000	29.60
730100002427	22	26	200	5.0	100	4,000	30.20
730100002429	22	26	240	5.6	100	4,000	32.10
730100002430	22	26	250	6.0	100	4,000	32.60
730100002439	22	26	300	6.8	100	4,000	33.40
730100002440	22	26	350	10.5	75	3,000	42.00
730100002441	22	26	365	12.0	75	3,000	42.60
730100002443	22	26	400	14.0	75	3,000	44.40
730100002444	22	26	450 ¹⁾	15.0	50	2,000	50.70
730100002445	22	26	500 ¹⁾	17.0	50	2,000	55.50

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. [€]
99030002308	22	3.60	500	2,500	50,000	32.10

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	24,000	67.90
730100002407	22/28	11.0	500	24,000	97.50

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	38.30
730100002447	22	26	180	4.50	100	5,000	35.80
730100002448	22	26	200	5.00	100	4,000	36.40
730100002450	22	26	240	5.60	100	4,000	37.60
730100002451	22	26	250	6.00	100	4,000	38.90
730100002453	22	26	300	6.80	100	4,000	40.10
730100002454	22	26	350	10.50	75	3,000	49.30
730100002455	22	26	365	12.00	75	3,000	50.00
730100002305	22	26	400	14.00	75	3,000	51.30
730100002306	22	26	450 ¹⁾	15.00	50	2,000	58.10
730100002307	22	26	500 ¹⁾	17.00	50	2,000	64.20

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	4.30
730200005399	45	75	3	6.00	500	25,000	5.50
730200005400	45	75	5	10.00	500	25,000	7.40
730200005401	45	75	10	20.00	500	20,000	12.40
730200005402	45	75	20	40.00	250	10,000	29.00

Spacer plates type V

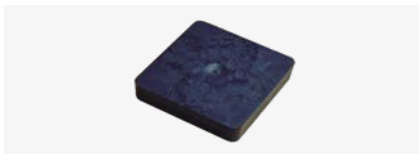


Pressure-resistant spacer plates for use as assembly aids for aligning and installing precast concrete components, for example.

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	4.80
730200005408	70	70	3	1.44	1,000	40,000	6.40
730200005410	70	70	4	1.92	500	20,000	9.10
730200005411	70	70	5	2.40	500	20,000	10.50
730200005412	70	70	6	2.88	500	20,000	13.70
730200005413	70	70	7	3.36	500	20,000	19.60
730200005414	70	70	8	3.84	250	10,000	20.90
730200005415	70	70	9	4.32	250	10,000	21.50
730200005403	70	70	10 ¹⁾	4.80	250	10,000	22.20
730200005404	70	70	15 ¹⁾	7.20	200	8,000	44.40
730200005406	70	70	20 ¹⁾	9.60	150	6,000	55.50
730200005407	70	70	25 ¹⁾	12.00	100	4,000	88.80
730200005409	70	70	30 ¹⁾	14.40	100	4,000	113.70

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	10.50
730200005430	100	100	3	3.32	500	20,000	12.90
730200005431	100	100	5	5.04	250	10,000	19.70
730200005432	100	100	8	8.20	100	4,000	41.40
730200005433	100	100	10	10.30	100	4,000	48.80
730200005434	100	100	15	15.10	50	2,000	108.00
730200005435	100	100	20	20.50	50	2,000	135.80
730200005436	100	100	30	30.20	50	1,000	202.50

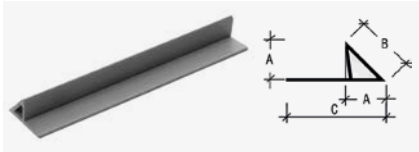
Spacer plates type S



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	4.90
730200005421	70	70	3	22	1.16	250	1,000	6.40
730200005423	70	70	4	22	1.52	125	500	9.00
730200005424	70	70	5	22	1.92	125	500	10.60
730200005425	70	70	6	22	2.32	125	500	13.70
730200005426	70	70	7	22	2.72	125	500	17.50
730200005427	70	70	8	22	3.12	125	250	19.40
730200005428	70	70	9	22	3.52	125	250	21.00
730200005416	70	70	10	22	3.84	125	250	22.50
730200005417	70	70	15	22	5.80	50	200	44.40
730200005419	70	70	20	22	7.60	50	150	56.80
730200005420	70	70	25	22	9.60	100	-	89.50
730200005422	70	70	30	22	11.60	100	-	109.80

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	49.30
730300005455	11	15	23	Hollow	8.00	100	5,000	39.40
730300005457	15	22	29	Hollow	11.70	100	4,900	49.30
730300005459	20	27	35	Hollow	21.80	50	2,400	74.70
730300005460	25	36	42	Hollow	29.80	50	2,400	104.20

Chamfer strips

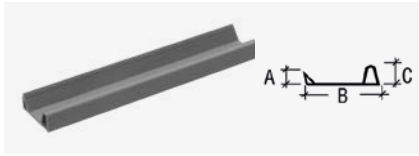


Triangular plastic strips for producing evenly chamfered edges on concrete components. Element length: 2,500 mm.

- 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	6,500	26.00
730300005440	15	21	Hollow	8.00	100	5,400	30.20
730300005442	20	28	Hollow	12.00	100	4,900	40.10
730300005444	25	35	Hollow	16.60	50	2,450	71.60
730300005445	30	40	Hollow	23.60	50	2,400	107.40

Drip profiles

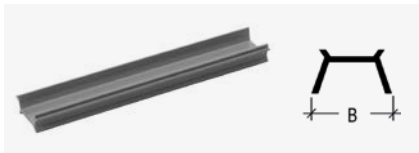


Plastic profile strip with integrated drip profile for drip noses and chamfer strips. Used to produce evenly chamfered edges on concrete components, e.g. for the edges of balconies or porches.
Element length: 2,500 mm.

- 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	4,900	77.70
730300005447	10	48	10	16.30	100	4,900	113.50
730300005448	12	55	16	21.60	40	-	361.80

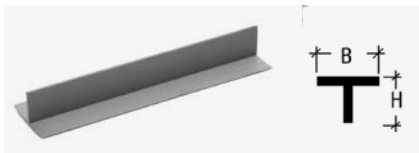
Drip noses



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	39.40
730300005450	20	9.50	100	4,900	47.00

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	40	20	15.00	100	4,900	72.90

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. [€]
730900005527	75	3.60	500	5,000	100,000	16.10
730900005528	90	4.00	500	5,000	100,000	17.30
730900005518	100	4.40	500	3,000	60,000	17.90
730900005519	125	5.20	500	2,500	50,000	20.40
730900005520	150	5.60	500	2,500	50,000	37.60
730900005521	175	7.20	250	2,000	40,000	68.50
730900005522	200	8.00	125	1,000	20,000	80.20
730900005523	250	11.20	250	-	10,000	164.20
730900005524	300	14.00	250	-	10,000	177.80

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	50.70
730600005464	180	9.60	100	5,000	51.90
730600005466	200	10.50	100	5,000	54.40
730600005468	215	12.20	100	5,000	58.20
730600005469	220	11.60	100	4,000	58.50
730600005472	240	12.20	100	4,000	58.60
730600005473	250	12.60	100	4,000	61.70
730600005478	300	22.20	50	2,000	86.40
730600005483	340	24.20	50	1,500	91.40
730600005484	350	25.20	50	1,500	97.50
730600005485	360	26.00	50	1,500	101.30
730600005486	365	26.20	50	1,500	101.50
730600005489	400	28.40	50	1,500	106.20

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	46.10
730700005498	150	5.80	100	5,000	46.90
730700005499	160	6.20	100	5,000	48.60
730700005501	180	7.00	100	5,000	49.00
730700005504	200	7.80	100	5,000	50.10
730700005508	220	8.80	100	4,000	52.60
730700005510	240	9.40	100	4,000	53.90
730700005511	250	9.80	100	4,000	54.50
730700005514	280	11.00	100	4,000	58.60
730700005516	300	11.80	50	3,000	59.00

Connection

Double shear connectors

Double shear connectors
JDSD 162

Double shear connectors
JDSDQ 162

Fire-protection collars for double shear connectors

Fire-protection collars
JBRM 163

Fire-protection collars
JBRMQ 163

Shear dowels

Shear dowels type HED-S 164

Shear dowels type HED-P 164

Fire-protection collars for shear dowels

Fire-protection collars
type BRM 165

Fire-protection collars
type BRMQ 165

Slide sleeves

Slide sleeves type GK 166

Slide sleeves type GS 166

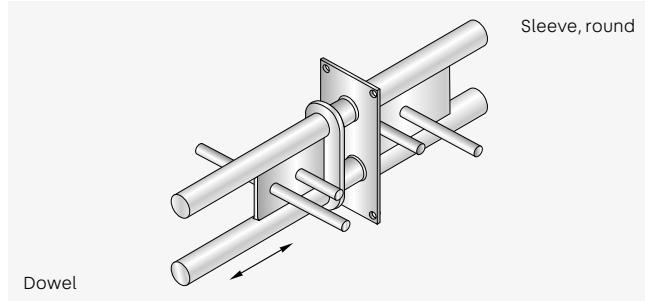
Slide sleeves type GSQ 167

Double shear connectors



Double shear connectors JDSD

National technical approval (abZ Z-15.7-237)



Type	Price per piece [€]		
	Dowel	Sleeve (round sliding tube)	Dowel + sleeve
JDSD 20 HF	77.20	34.10	111.30
JDSD 25 HF	96.80	50.90	147.70
JDSD 30 HF	121.00	56.60	177.60
JDSD 45 HF	139.20	59.50	198.70
JDSD 60 HF	176.70	73.30	250.00
JDSD 90 HF	297.60	92.00	389.60
JDSD 120 HF	358.40	139.70	498.10
JDSD 130	413.30	231.10	644.40
JDSD 150	668.90	290.60	959.50
JDSD 400	1,510.30	444.50	1,954.80
JDSD 450	2,314.20	473.30	2,787.50

Example order for double shear connector JDSD 60 HF

Complete (dowel element and sleeve)

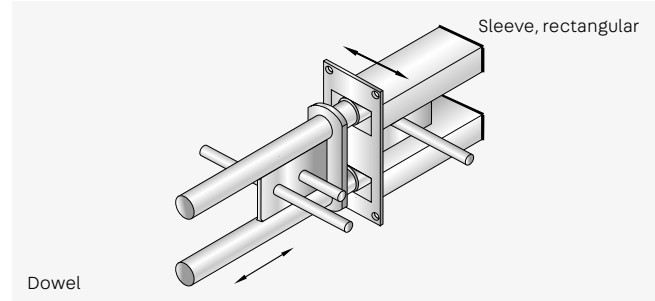
Type	Design
JDSD	60 HF

Version and material

- Stainless steel with corrosion-resistance class (CRC) III and IV

Double shear connectors JDSDQ

National technical approval (abZ Z-15.7-237)



Type	Price per piece [€]		
	Dowel	Sleeve (rectangular sliding tube)	Dowel + sleeve
JDSDQ 25 HF	96.80	93.00	189.80
JDSDQ 30 HF	121.00	103.40	224.40
JDSDQ 45 HF	139.20	112.90	252.10
JDSDQ 60 HF	176.70	153.40	330.10
JDSDQ 90 HF	297.60	226.90	524.50
JDSDQ 120 HF	358.40	332.30	690.70
JDSDQ 130	413.30	429.20	842.50
JDSDQ 150	668.90	595.50	1,264.40
JDSDQ 400	1,510.30	1,107.60	2,617.90
JDSDQ 450	2,314.20	1,380.90	3,695.10

Example order for double shear connector JDSDQ 60 HF

Complete (dowel element and sleeve)

Type	Design
JDSDQ	60 HF

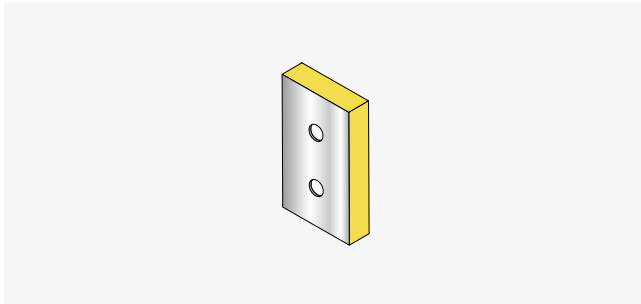


Suitable accessories can be found on page 163.

Fire-protection collars for double shear connectors



Fire-protection collars JBRM



Fire-protection collars R 120 for double shear connectors JDSD. The fire protection collar foams in case of fire and completely seals the joint.

- Classification R 120
- Use two JBRM collars in larger joint openings

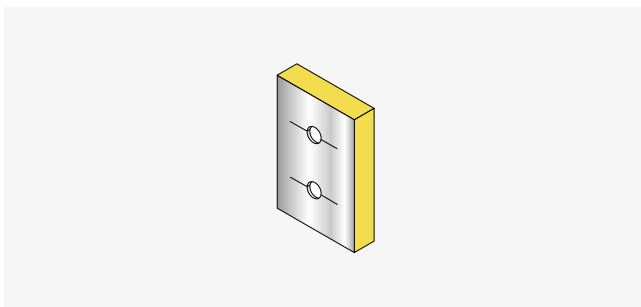
Type	Price per piece [€]	
	Joint width	
	20 mm	30 mm
JBRM 20	10.30	11.50
JBRM 25	10.30	11.50
JBRM 30	10.30	11.50
JBRM 45	12.70	13.10
JBRM 60	13.10	14.60
JBRM 90	14.30	15.60
JBRM 120	16.10	17.40
JBRM 130	17.10	18.50
JBRM 150	18.00	19.70
JBRM 400	24.60	26.30
JBRM 450	29.20	31.60

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



Fire-protection collars R 120 for double shear connectors JDSDQ. The fire protection collar foams in case of fire and completely seals the joint.

- Classification R 120
- Use two JBRMQ collars in larger joint openings

Type	Price per piece [€]	
	Joint width	
	20 mm	30 mm
JBRMQ 25	11.80	12.70
JBRMQ 30	11.80	12.70
JBRMQ 45	13.10	14.90
JBRMQ 60	17.70	18.60
JBRMQ 90	18.50	19.20
JBRMQ 120	19.20	20.70
JBRMQ 130	20.40	22.90
JBRMQ 150	21.20	25.10
JBRMQ 400	28.90	33.20
JBRMQ 450	34.20	38.50

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

Shear dowels



Shear dowels type HED-S



Single shear dowel for transmitting shearing forces around expansion joints. R 90-version with fire-protection collar.

Available in the following steel grades from stock:

- S355 galvanised
- V4A, corrosion-protection class III
- Corrosion-protection class IV and other diameters and lengths available on request

Article number	Type	Dimensions Dia. x l [mm]	Material	Weight [kg/pc.]	Price per piece [€]
550100003857	HED-S 20/300	20x300	S355	0.75	4.50
550100003856	HED-S 20/300	20x300	V4A	0.75	9.80
550100003855	HED-S 20/500	20x500	S355	1.25	6.50
550100003854	HED-S 20/500	20x500	V4A	1.25	15.40
550100003863	HED-S 22/300	22x300	S355	0.90	5.10
550100003862	HED-S 22/300	22x300	V4A	0.90	10.70
550100003861	HED-S 22/500	22x500	S355	1.50	7.70
550100003860	HED-S 22/500	22x500	V4A	1.50	16.80
550100003869	HED-S 25/300	25x300	S355	1.15	5.90
550100003868	HED-S 25/300	25x300	V4A	1.15	14.50
550100003867	HED-S 25/500	25x500	S355	1.95	8.80
550100003866	HED-S 25/500	25x500	V4A	1.95	23.20
550100003875	HED-S 30/350	30x350	S355	1.95	9.50
550100003874	HED-S 30/350	30x350	V4A	1.95	21.50
550100003873	HED-S 30/500	30x500	S355	2.80	12.90
550100003872	HED-S 30/500	30x500	V4A	2.80	30.10

Shear dowels type HED-P



Single shear dowel for transmitting shearing forces around expansion joints. Dowel plasticised on one side with spring element. R 90-version with fire-protection collar.

Available in the following steel grades from stock:

- S355 galvanised
- V4A, corrosion-protection class III
- Corrosion-protection class IV and other diameters and lengths available on request

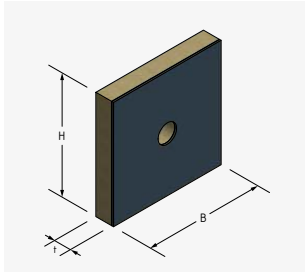
Article number	Type	Element length [mm]	Surcharge per piece for HED-S [€]
550200003828	HED-P 20/300	300	4.20
550200003829	HED-P 20/500	500	4.90
550200003834	HED-P 22/300	300	4.20
550200003835	HED-P 22/500	500	4.90
550200003840	HED-P 25/300	300	4.20
550200003841	HED-P 25/500	500	4.90
550200003846	HED-P 30/350	350	4.20
550200003847	HED-P 30/500	500	4.90

Fire-protection collars for shear dowels



Fire-protection collars type BRM

for HED-P / HED-S



Fire-protection collars R 90 for single shear dowels HED.

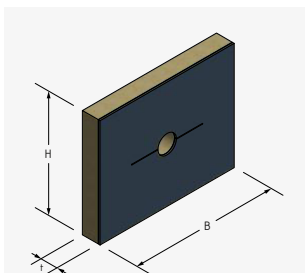
The fire protection collar foams in case of fire and completely seals the joint.

- Classification R 90
- Use two BRM collars in larger joint openings

Article number	Type	Dimensions H x W [mm]	Thickness t [mm]	Max. joint opening f [mm]	Weight [kg/pc.]	To be used with	Price per piece [€]
550300002477	BRM-20-20	122x122	20	30	0.09	GK + GS 20	7.10
550300002480	BRM-22-20	122x122	20	30	0.09	GK + GS 22	7.10
550300002486	BRM-25-20	122x122	20	30	0.09	GK + GS 25	7.10
550300002492	BRM-30-20	122x122	20	30	0.09	GK + GS 30	7.10
550300002478	BRM-20-30	122x122	30	40	0.11	GK + GS 20	7.80
550300002481	BRM-22-30	122x122	30	40	0.11	GK + GS 22	7.80
550300002487	BRM-25-30	122x122	30	40	0.11	GK + GS 25	7.80
550300002493	BRM-30-30	122x122	30	40	0.11	GK + GS 30	7.80
550300002479	BRM-20-40	122x122	40	50	0.14	GK + GS 20	8.30
550300002482	BRM-22-40	122x122	40	50	0.14	GK + GS 22	8.30
550300002488	BRM-25-40	122x122	40	50	0.14	GK + GS 25	8.30
550300002494	BRM-30-40	122x122	40	50	0.14	GK + GS 30	8.30

Fire-protection collars type BRMQ

for HED-P / HED-S



Fire-protection collar R 90 for single shear dowel HED with lateral movement.

The fire protection collar foams in case of fire and completely seals the joint.

- Classification R 90
- Use two BRMQ collars in larger joint openings

Article number	Type	Dimensions H x W [mm]	Thickness t [mm]	Max. joint opening f [mm]	Weight [kg/pc.]	To be used with	Price per piece [€]
550300002495	BRMQ-20-20	152x122	20	30	0.11	GSQ 20	8.60
550300002498	BRMQ-22-20	152x122	20	30	0.11	GSQ 22	8.60
550300002501	BRMQ-25-20	152x122	20	30	0.11	GSQ 25	8.60
550300002504	BRMQ-30-20	152x122	20	30	0.11	GSQ 30	8.60
550300002496	BRMQ-20-30	152x122	30	40	0.14	GSQ 20	8.90
550300002499	BRMQ-22-30	152x122	30	40	0.14	GSQ 22	8.90
550300002502	BRMQ-25-30	152x122	30	40	0.14	GSQ 25	8.90
550300002505	BRMQ-30-30	152x122	30	40	0.14	GSQ 30	8.90
550300002497	BRMQ-20-40	152x122	40	50	0.17	GSQ 20	9.60
550300002500	BRMQ-22-40	152x122	40	50	0.17	GSQ 22	9.60
550300002503	BRMQ-25-40	152x122	40	50	0.17	GSQ 25	9.60
550300002506	BRMQ-30-40	152x122	40	50	0.17	GSQ 30	9.60

Slide sleeves



Slide sleeves type GK

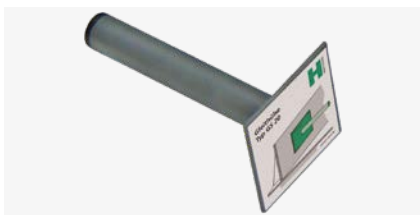


Plastic slide sleeves for shear dowels type HED-S. Allows dowels to move longitudinally in the slide sleeve.

- Other lengths available on request (max. l = 320 mm)

Article number	Type	Material	Element length [mm]	For shear dowel type	Box [pcs.]	Weight [kg/pc.]	Price per piece [€]
550500004970	GK 20/160	Plastic	160	HED-S 20/300	250	0.035	3.50
550500004971	GK 20/265	Plastic	265	HED-S 20/500	150	0.060	3.80
550500004973	GK 22/160	Plastic	160	HED-S 22/300	200	0.040	3.80
550500004974	GK 22/265	Plastic	265	HED-S 22/500	125	0.065	4.30
550500004976	GK 25/160	Plastic	160	HED-S 25/300	200	0.050	4.50
550500004977	GK 25/265	Plastic	265	HED-S 25/500	125	0.085	4.60
550500004979	GK 30/185	Plastic	185	HED-S 30/350	150	0.055	5.30
550500004980	GK 30/265	Plastic	265	HED-S 30/500	100	0.090	5.80

Slide sleeves type GS



Slide sleeve made from V4A steel for shear dowels type HED-S. Allows dowels to move longitudinally in the slide sleeve.

- Other lengths available on request

Article number	Type	Material	Element length [mm]	For shear dowel type	Weight [kg/pc.]	Price per piece [€]
550600012748	GS 20/160	V4A	160	HED-S 20/300	0.37	15.10
550600012749	GS 20/265	V4A	265	HED-S 20/500	0.61	17.20
550600012750	GS 22/160	V4A	160	HED-S 22/300	0.38	17.40
550600012751	GS 22/265	V4A	265	HED-S 22/500	0.63	19.40
550600012752	GS 25/160	V4A	160	HED-S 25/300	0.42	22.70
550600012753	GS 25/265	V4A	265	HED-S 25/500	0.69	27.10
550600012754	GS 30/185	V4A	185	HED-S 30/350	0.48	23.30
550600012755	GS 30/265	V4A	265	HED-S 30/500	0.79	25.50

Slide sleeves type GSQ



Slide sleeves made from V4A for shear dowels type HED-S. Allows dowels to move longitudinally and transversely in the slide sleeve.

- Other lengths available on request

Article number	Type	Material	Element length [mm]	For shear dowel type	Weight [kg/pc.]	Price per piece [€]
550700012757	GSQ 20/180	V4A	180	HED-S 20/300	0.82	26.20
550700012758	GSQ 20/265	V4A	265	HED-S 20/500	1.20	31.90
550700012759	GSQ 22/180	V4A	180	HED-S 22/300	0.84	31.00
550700012760	GSQ 22/265	V4A	265	HED-S 22/500	1.24	38.80
550700012761	GSQ 25/180	V4A	180	HED-S 25/300	0.91	36.80
550700012762	GSQ 25/265	V4A	265	HED-S 25/500	1.34	48.10
550700012763	GSQ 30/205	V4A	205	HED-S 30/350	1.26	40.70
550700012764	GSQ 30/265	V4A	265	HED-S 30/500	2.08	48.40

Thermal insulation

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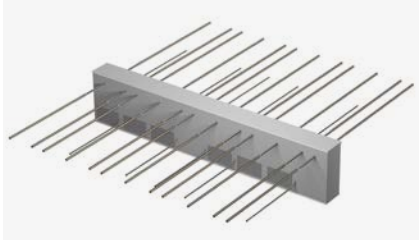
ISOMUR®

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ISOMUR® plus wall base element	200

ISOPRO® 80



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

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012312	IP 10	160-250	7.34	182.00
210100012316	IP 15	160-250	8.44	207.00
210100012322	IP 20	160-250	8.89	231.00
210100012330	IP 25	160-250	9.60	275.00
210100018963	IP 35	160-250	11.49	318.00
210100012358	IP 45	160-250	14.26	350.00
210100012366	IP 50	160-250	15.70	388.00
210100012379	IP 55	160-250	19.92	431.00
210100018954	IP 65	160-250	21.09	457.00
210100018955	IP 75 Q10	170-250	22.26	553.00
210100018956	IP 90 Q10	170-250	24.21	617.00
210100018957	IP 100 Q10	170-250	25.38	678.00

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	43.00
Q8X	160-250	Shear force reinforcement on both sides	70.00
Q10	170-250	Shear force reinforcement	56.00
Q10X	170-250	Shear force reinforcement on both sides	80.00
Q12	180-250	Shear force reinforcement	70.00

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	35.00
Q12	180-250	Shear force reinforcement	14.00

Extension products for IP	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

Sealing

Fastening

Reinforcement

Facade fastening

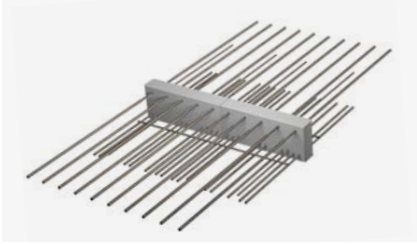
Sound insulation

Formwork

Connection

Thermal insulation

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.

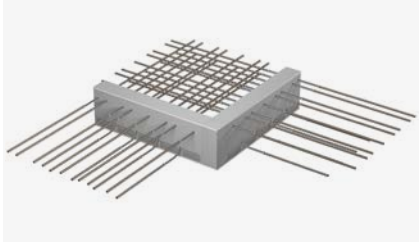
- Element length: 500 + 500 mm
- Steel pressure plane
- With concrete cover cv 50: Minimum height of 200 mm required
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Two-part version available for installation in precast concrete plants

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210200014990	IPT 110 Q10	180-250	44.00	805.00
210200014991	IPT 110 Q12	180-250	45.50	819.00
210200014992	IPT 110 Q14	180-250	49.10	863.00
210200015002	IPT 150 Q10	180-250	57.40	1,012.00
210200015008	IPT 150 Q12	180-250	59.70	1,026.00
210200015012	IPT 150 Q14	190-250	62.90	1,072.00

Prices apply to concrete cover cv 35 and cv 50 mm

Extension products for IPT	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

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 $\lambda = 0.031$ W/m K

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	505.00
210300012401	IP corner 30	620 x 620 ²⁾	180-250	38.30	850.00
210300011842	IPT corner 50	620 x 620 ²⁾	180-250	48.36	1,064.00

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

Extension products for type IP corner / IPT corner	Design	Surcharge per piece [€]
Fire protection	Fire protection panels pre-assembled	0.00

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	253.00
210300018949	IP EL 30	620	180-250	19.10	425.00
210300018950	IPT EL 50	620	180-250	24.10	532.00

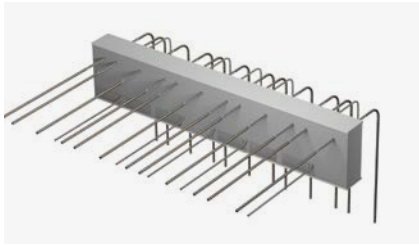
Right subcomponent IP(T) ER

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210300018951	IP ER 20	500	180-250	11.89	253.00
210300018952	IP ER 30	620	180-250	19.10	425.00
210300018953	IPT ER 50	620	180-250	24.10	532.00

Prices apply to concrete cover cv 35 and 50 mm

Extension products for type IP / IPT corner EL / ER	Design	Surcharge per piece [€]
Fire protection	Fire protection panels pre-assembled	0.00

IP var. I

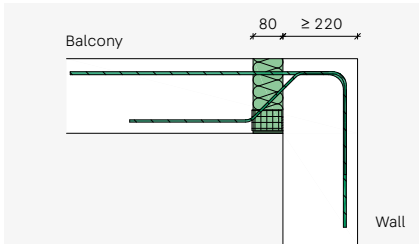


Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls.

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.

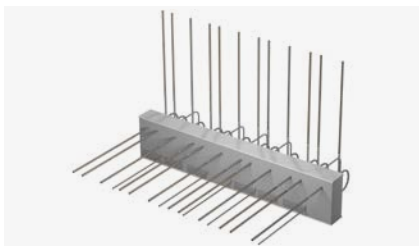
- Element length: 1,000 mm
- Standard: Wall thickness ≥ 220 mm
- Custom elements available on request. Please state the wall thickness when ordering.



Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. I	160-250	8.89	278.00
210100012330	IP 25 var. I	160-250	9.60	314.00
210100012334	IP 30 var. I	160-250	11.49	350.00
210100012358	IP 45 var. I	160-250	14.26	387.00
210100012366	IP 50 var. I	160-250	15.70	452.00
210100012379	IP 55 var. I	160-250	19.92	516.00
210100018964	IP 65 var. I	160-250	21.09	571.00
210100020365	IP 75 var. I	160-250	22.26	625.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP var. II

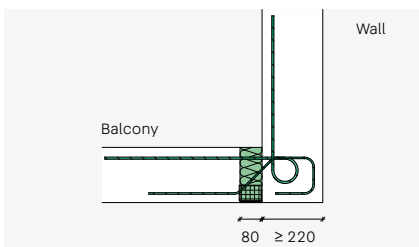


Thermally insulated cantilever slab connection for cantilevered, reinforced concrete components connected to reinforced concrete walls.

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.

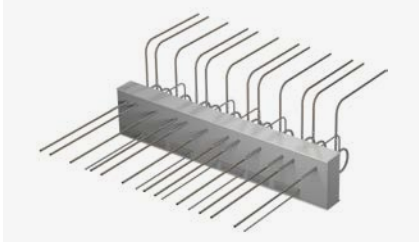


Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. II	160-250	9.66	278.00
210100012330	IP 25 var. II	160-250	10.44	314.00
210100012334	IP 30 var. II	160-250	12.50	350.00
210100012358	IP 45 var. II	160-250	15.50	387.00
210100012366	IP 50 var. II	160-250	17.07	452.00
210100012379	IP 55 var. II	160-250	21.65	516.00
210100018964	IP 65 var. II	160-250	22.85	571.00
210100020365	IP 75 var. II	160-250	24.20	625.00

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	33.00
Fire protection		Fire protection panels pre-assembled	0.00

IP var. III HV

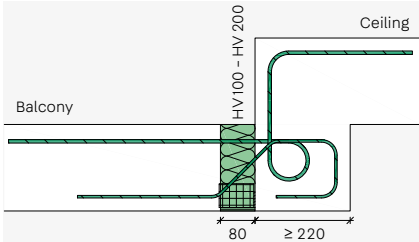


Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights.

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.

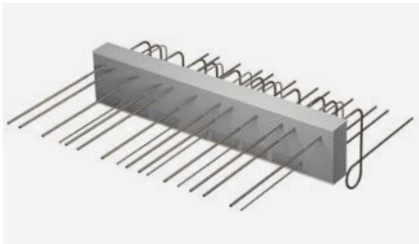
- Element length: 1,000 mm
- Standard: Height offset HV10 (100 mm), HV15 (150 mm), HV20 (200 mm)
- Custom elements available on request. Please state height offset and beam width when ordering.



Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. III HV	160-250	9.96	278.00
210100012330	IP 25 var. III HV	160-250	10.75	314.00
210100012334	IP 30 var. III HV	160-250	12.87	350.00
210100012358	IP 45 var. III HV	160-250	16.00	387.00
210100012366	IP 50 var. III HV	160-250	17.58	452.00
210100012379	IP 55 var. III HV	160-250	22.30	516.00
210100018964	IP 65 var. III HV	160-250	23.55	571.00
210100020365	IP 75 var. III HV	160-250	24.95	625.00

Prices apply to concrete cover cv 35 and cv 50 mm

IP var. III UV

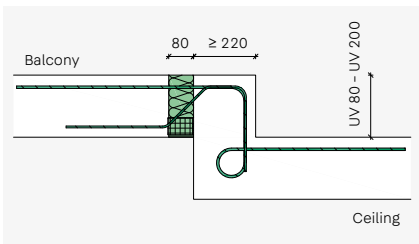


Thermally insulated cantilever slab connection for cantilevered reinforced concrete components connected to reinforced concrete ceilings with offset heights.

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.

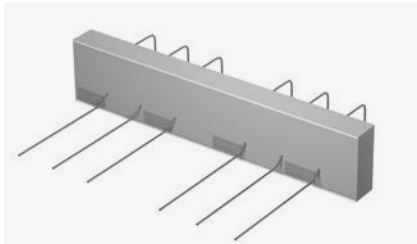


Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
210100012322	IP 20 var. III UV	160-250	10.20	278.00
210100012330	IP 25 var. III UV	160-250	11.00	314.00
210100012334	IP 30 var. III UV	160-250	13.18	350.00
210100012358	IP 45 var. III UV	160-250	16.40	387.00
210100012366	IP 50 var. III UV	160-250	18.01	452.00
210100012379	IP 55 var. III UV	160-250	22.85	516.00
210100018964	IP 65 var. III UV	160-250	24.15	571.00
210100020365	IP 75 var. III UV	160-250	25.55	625.00

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	33.00
Fire protection		Fire protection panels pre-assembled	0.00

IPQ



Thermally insulated slab connection for transmitting shear forces in supported reinforced concrete components. Stainless steel rebar for corrosion protection. Fireproof version available.

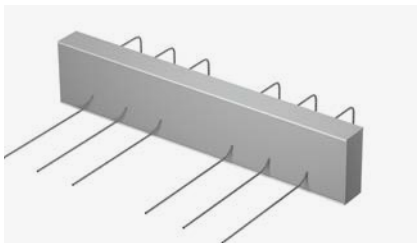
State the element height (h) when ordering.

- Element length: 1,000 mm
- Pressure plane with concrete thrust bearings
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
210400012403	IPQ 10	Bent	160-250	5.43	120.00
210400012414	IPQ 20	Bent	160-250	5.61	129.00
210400012421	IPQ 30	Bent	160-250	5.79	141.00
210400012427	IPQ 40	Bent	160-250	6.15	160.00
210400012433	IPQ 50	Bent	160-250	6.50	180.00
210400012442	IPQ 70	Straight	160-250	7.10	200.00
210400012445	IPQ 80	Straight	160-250	7.50	209.00
210400015016	IPQ 85	Straight	160-250	8.50	219.00
210400012448	IPQ 90	Straight	160-250	9.30	238.00
210400017123	IPQ 100	Straight	170-250	11.20	257.00
210400012411	IPQ 110	Straight	170-250	12.50	276.00
210400015018	IPQ 120	Straight	170-250	13.80	370.00

Extension products for type IPQ	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

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.

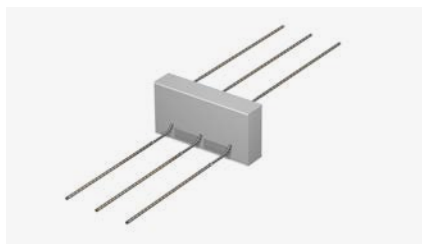
State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
211900015020	IPZQ 10	Bent	160-250	1.30	114.00
211900015022	IPZQ 20	Bent	160-250	1.50	124.00
211900015024	IPZQ 30	Bent	160-250	1.70	136.00
211900015026	IPZQ 40	Bent	160-250	2.00	155.00
211900015028	IPZQ 50	Bent	160-250	2.40	175.00
211900015030	IPZQ 70	Straight	160-250	3.10	195.00
211900015032	IPZQ 80	Straight	160-250	3.50	204.00
211900015034	IPZQ 85	Straight	160-250	4.50	213.00
211900015036	IPZQ 90	Straight	160-250	5.30	232.00
211900015038	IPZQ 100	Straight	170-250	7.20	252.00
211900015040	IPZQ 110	Straight	170-250	8.50	271.00
211900015042	IPZQ 120	Straight	170-250	9.80	365.00

Extension products for type IPZQ	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

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.

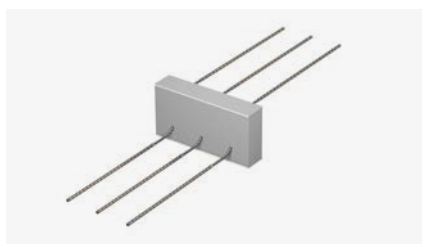
State the element height (h) when ordering.

- Pressure plane type IPQS with concrete thrust bearings
- Steel pressure plane type IPTQS
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210600015044	IPQS 5	400	160-250	2.80	76.00
210600012481	IPQS 10	300	160-250	1.96	101.00
210600015046	IPQS 15	500	160-250	3.00	126.00
210600012484	IPQS 20	400	160-250	3.50	150.00
210600012487	IPQS 30	500	160-250	4.64	186.00
210600012489	IPQS 40	300	170-250	2.76	156.00
210600012492	IPQS 50	400	170-250	4.37	179.00
210600015050	IPQS 55	500	170-250	5.50	188.00
210600015052	IPTQS 60	300	180-250	4.30	196.00
210600012498	IPQS 70	400	180-250	6.20	257.00
210600018551	IPQS 75	500	180-250	8.80	235.00
210600015054	IPTQS 80	300	190-250	4.80	213.00
210600015056	IPTQS 90	400	190-250	7.20	280.00
210600025047	IPTQS 100	400	190-250	9.10	349.00

Extension products for type IPQS / IPTQS	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

IPQZ



Thermally insulated slab connection for tension-free connection of inset balconies and loggias. Stainless steel rebar for corrosion protection.

Fireproof version available.

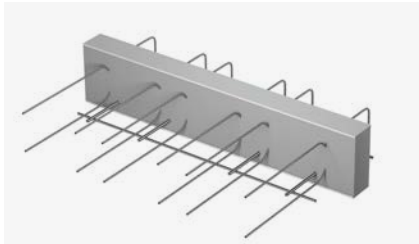
State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210800015058	IPQZ 5	400	160-250	0.80	52.00
210800012505	IPQZ 10	300	160-250	1.00	70.00
210800015060	IPQZ 15	500	160-250	1.00	88.00
210800012506	IPQZ 20	400	160-250	1.50	105.00
210800012508	IPQZ 30	500	160-250	2.00	130.00
210800012510	IPQZ 40	300	170-250	1.80	109.00
210800012512	IPQZ 50	400	170-250	2.60	127.00
210800015064	IPQZ 55	500	170-250	3.50	132.00
210800012513	IPQZ 60	300	180-250	2.80	138.00
210800012516	IPQZ 70	400	180-250	4.20	180.00
210800018552	IPQZ 75	500	180-250	5.80	165.00
210800012518	IPQZ 80	300	190-250	2.80	150.00
210800012520	IPQZ 90	400	190-250	4.20	196.00
210800025048	IPQZ 100	400	190-250	6.10	243.00

Extension products for type IPQZ	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

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.

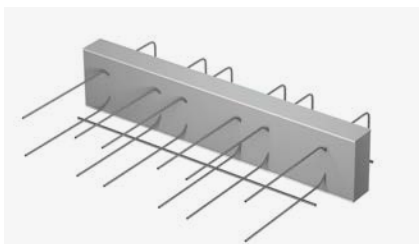
State the element height (h) when ordering.

- Element length: 500 + 500 mm
- Steel pressure plane

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
212100019002	IPTQQ 10	Bent	160-250	4.17	178.00
212100019003	IPTQQ 30	Bent	160-250	4.95	195.00
212100019004	IPTQQ 40	Bent	160-250	5.84	240.00
212100019005	IPTQQ 50	Bent	160-250	7.01	270.00
212100019006	IPTQQ 70	Straight	160-250	8.87	299.00
212100019007	IPTQQ 90	Straight	170-250	14.82	328.00
212100019008	IPTQQ 110	Straight	180-250	23.76	385.00

Extension products for type IPTQQ		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

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.

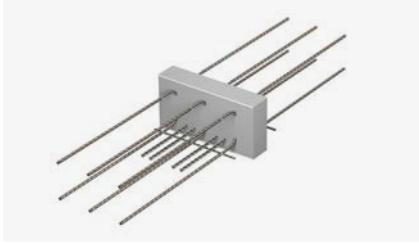
State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031$ W/m-K

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
212200022112	IPZQQ 10	Bent	160-250	2.00	173.00
212200022114	IPZQQ 30	Bent	160-250	2.70	189.00
212200022115	IPZQQ 40	Bent	160-250	3.40	234.00
212200022116	IPZQQ 50	Bent	160-250	4.20	265.00
212200022117	IPZQQ 70	Straight	160-250	6.40	294.00
212200022119	IPZQQ 90	Straight	170-250	9.70	322.00
212200022121	IPZQQ 110	Straight	180-250	15.80	380.00

Extension products for type IPZQQ		Design	Surcharge per piece [€]
Fire protection		Fire protection panels pre-assembled	0.00

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.

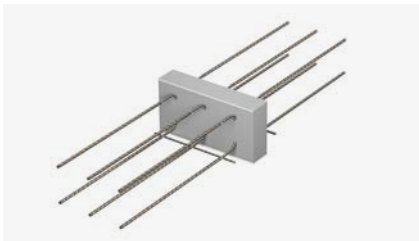
State the element height (h) when ordering.

- Steel pressure plane

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210700019010	IPTQQS 10	300	160-250	2.95	131.00
210700019011	IPTQQS 20	400	160-250	4.30	195.00
210700019012	IPTQQS 40	300	170-250	4.28	202.00
210700019013	IPTQQS 50	400	170-250	6.66	233.00
210700019014	IPTQQS 60	300	180-250	8.11	255.00
210700019015	IPTQQS 70	400	180-250	11.67	333.00
210700019016	IPTQQS 80	300	190-250	11.61	277.00
210700019017	IPTQQS 90	400	190-250	17.29	364.00
210700025049	IPTQQS 100	400	190-250	25.80	452.00

Extension products for type IPTQQS	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

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 $\lambda = 0.031$ W/m-K

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
212300022122	IPQQZ 10	300	160-250	2.50	126.00
212300022123	IPQQZ 20	400	160-250	3.60	189.00
212300022125	IPQQZ 40	300	170-250	3.20	197.00
212300022126	IPQQZ 50	400	170-250	4.80	228.00
212300022127	IPQQZ 60	300	180-250	5.30	250.00
212300022128	IPQQZ 70	400	180-250	7.90	327.00
212300022129	IPQQZ 80	300	190-250	8.20	272.00
212300022130	IPQQZ 90	400	190-250	12.30	359.00
212300025050	IPQQZ 100	400	190-250	25.80	447.00

Extension products for type IPQQZ	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

Horizontal anchors

Article number	Diameter [mm]	Length [mm]	Weight [kg/pc.]	Price per piece [€]
211800014854	10	620/320/620	0.93	14.00
211800014856	12	740/320/740	1.78	16.00

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 $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
210900021860	IP 80 H-X1	160 - 250	0.44	32.00
210900021864	IP 80 H-X2	160 - 250	0.59	46.00
210900021862	IP 80 H-X1-Y1	160 - 250	0.95	53.00
210900021866	IP 80 H-X2-Y2	160 - 250	1.50	78.00

Extension products for type IP 80-H	Design	Surcharge per piece [€]
Fire protection	Fire protection panels pre-assembled	0.00

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

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
211100012555	IPTD 20	160-250	18.79	351.00
211100012557	IPTD 30	160-250	24.11	415.00
211100012566	IPTD 50	160-250	30.05	603.00
211100012573	IPTD 70	160-250	44.50	728.00
211100012581	IPTD 90	160-250	60.19	849.00
211100015066	IPTD 100	160-250	62.20	970.00

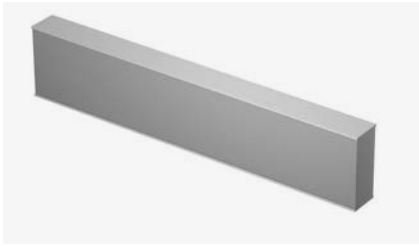
Prices apply to concrete cover cv 35 and 50 mm

Extension products for type IPTD 20-90	Height h [mm]	Design	Surcharge per m [€]
Q8	160-250	Shear force reinforcement	59.00
Q10	170-250	Shear force reinforcement	128.00

Extension products for type IPTD 100	Height h [mm]	Design	Surcharge per m [€]
Q8	170-250	Shear force reinforcement	128.00
Q10	180-250	Shear force reinforcement	144.00

Extension products for type IPTD	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

Z ISO



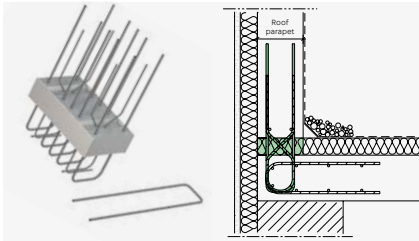
Intermediate insulation to supplement insulated joints in a range of different installation situations
 Element length: 1,000 mm
 Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
 FP1 with fireproof panel

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2117...	IP Z ISO	1,000	160-250	0.6	72.00
2117...	IP Z ISO FP1	1,000	160-250	2.2	72.00

FP1 = Fire protection panels 10 mm thick that expand in case of fire

Extension products for type Z ISO	Surcharge per piece [€]
Cutting surcharge	12.80

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.

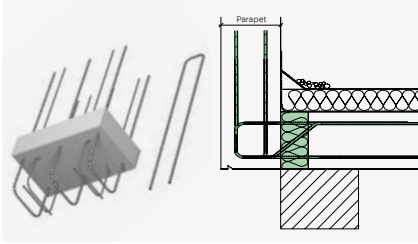
State the parapet thickness (a) when ordering.

- 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 $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Element length [mm]	Parapet thickness a [mm]	Weight [kg/pc.]	Price per piece [€]
211200020248	IPTA 1	350	150-250	3.86	136.00
211200020258	IPTA 2	350	150-250	6.47	150.00

Extension products for type IPTA	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

IPTF



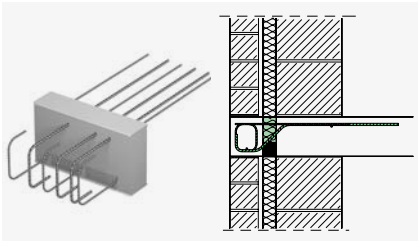
Thermally insulated connector for connecting protruding parapets to ceiling slabs. Stainless steel for corrosion protection. Fireproof version available. These elements are used at specific points depending on the relevant structural requirements.

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

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]	
211300018977	IPTF	350	160-250	2.36	150.00	
Extension products for type IPTF					Design	Surcharge per piece [€]
Fire protection		Pre-assembled fire protection panels around the circumference				0.00

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

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]	
211400020268	IPO 16	350	180-250	2.22	174.00	
211400021507	IPO 20	350	180-250	2.22	188.00	
Extension products for type IPO					Design	Surcharge per piece [€]
Fire protection		Pre-assembled fire protection panels around the circumference				0.00

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

Article number	Type	Weight [kg/pc.]	Price per piece [€]
211500018978	IPTS 1	7.13	308.00
211500018979	IPTS 2	11.22	359.00
211500018980	IPTS 3	16.21	452.00
211500018981	IPTS 4	22.64	598.00

Extension products for type IPTS	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

IPTW



Thermally insulated connector for connecting wall slabs to partition walls. Stainless steel rebar for corrosion protection.

Fireproof version available.

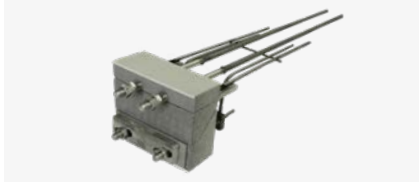
State wall width and wall height when ordering.

- Wall width: 150–250 mm
- Wall height: made to measure (1,500–3,500 mm)

Article number	Type	Weight [kg/pc.]	Price per piece [€]
211600018982	IPTW 1	8.30	452.00
211600018983	IPTW 2	13.17	567.00
211600018984	IPTW 3	22.04	653.00
211600018985	IPTW 4	36.35	749.00

Extension products for type IPTW	Design	Surcharge per piece [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

SBM



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 $\lambda = 0.031$ W/m·K
- Surcharge of €15.00/pc. for heights 190, 210, 230-250 mm.
- Heights 260-280 mm available on request

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2201000...	SBM 14 Q8	180/200/220	7.4	283.00
2201000...	SBM 14 Q10	180/200/220	8.4	297.00
2201000...	SBM 14 QQ	180/200/220	8.6	312.00
2201000...	SBM 20 Q10	180/200/220	18.8	430.00
2201000...	SBM 20 Q12	180/200/220	19.6	446.00

SBQ



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 $\lambda = 0.031$ W/m·K
- Surcharge of €15.00/pc. for heights 190, 210, 230-250 mm.
- Heights 260-280 mm available on request

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
2202000...	SBQ 8	180/200/220	5.1	173.00
2202000...	SBQ 10	180/200/220	6.6	198.00
2202000...	SBQ 12	180/200/220	7.5	221.00

HBM



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 $\lambda = 0.031$ W/m·K

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
220300011817	HBM 14 Q8 (with strut) ¹⁾	180	16.35	374.00
990100014345	Connection strut		8.95	91.00

¹⁾ HBM consists of SBM 14 Q8 height 180 mm with strut

HBQ



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 $\lambda = 0.031$ W/m·K

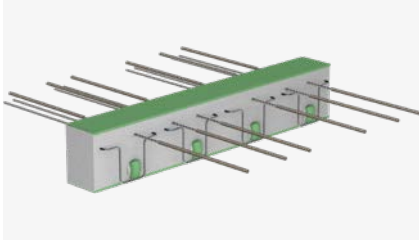
Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
220400011818	HBQ 10 (with strut) ¹⁾	180	15.15	289.00
990100014345	Connection strut		8.95	91.00

¹⁾ HBQ consists of SBQ 10 height 180 mm with strut

ISOPRO® 120



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

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4	160-250	9.30	199.00
233100020938	M 20 Q4	160-250	11.10	248.00
233100020954	M 30 Q4	160-250	14.27	296.00
233100020962	M 40 Q4	160-250	14.90	336.00
233100020970	M 50 Q4	160-250	15.40	371.00
233100020978	M 60 Q4	160-250	18.66	409.00
233100020986	M 70 Q4	160-250	20.60	463.00
233100020994	M 80 Q4	160-250	21.70	501.00
233100021002	M 90 Q4	160-250	30.30	543.00
233100021010	M 100 Q4	160-250	38.90	584.00
233100021018	M 110 Q4	160-250	42.20	677.00
233100021034	M 120 Q4	160-250	43.70	832.00

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	43.00
Q8	160-250	Shear force reinforcement	53.00
Q4Q4	160-250	Shear force reinforcement on both sides	75.00
Q8Q4	160-250	Shear force reinforcement on both sides	85.00
Q6Q6	160-250	Shear force reinforcement on both sides	85.00
Fire protection		Fire protection panels pre-assembled	0.00

Tension elements

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020955	M 30 Q6	180/200/220	15.27	339.00
233100020987	M 70 Q6	180/200/220	21.60	505.00
233100021012	M 100 Q8	180/200/220	40.10	637.00

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 $\lambda = 0.031$ W/m·K
- Other heights available on request

Article number	Type	Element length [mm]		Height h [mm]	Weight [kg/pc.]	Price per piece [€]
		1. layer	2nd layer			
233300021144	C 10 Q10	500	500 ¹⁾	180-250	33.01	901.00
233300024374	C 10 Q12	500	500 ¹⁾	180-250	37.50	944.00
233300021145	C 20 Q10	500	500 ¹⁾	180-250	44.97	1,141.00
233300024375	C 20 Q12	500	500 ¹⁾	180-250	49.50	1,183.00

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

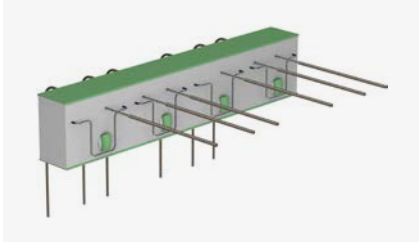
Extension products for IP 120 C		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
233300024378	CE 10 Q12	500	180-250	18.75	472.00
233300021147	CE 20 Q10	500	180-250	22.49	570.00
233300024379	CE 20 Q12	500	180-250	24.75	592.00

Prices apply to concrete cover cv 35 and cv 50 mm

Extension products for IP 120 C		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

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.

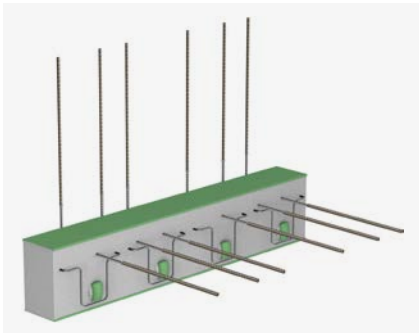
State element height (h) and concrete cover (cv) when ordering.

- 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

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 WU	160-250	9.30	366.00
233100020938	M 20 Q4 WU	160-250	11.10	400.00
233100020954	M 30 Q4 WU	160-250	14.27	536.00
233100020962	M 40 Q4 WU	160-250	14.90	650.00

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.

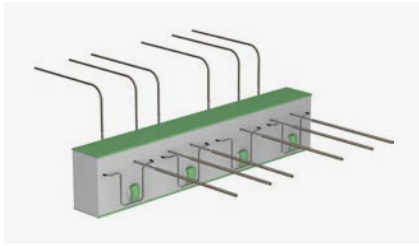
- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Suitable for walls ≥ 220 mm thick
- Custom solutions for walls < 220 mm thick available on request
- Other heights available on request

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 WO	160-250	10.07	366.00
233100020938	M 20 Q4 WO	160-250	12.02	400.00
233100020954	M 30 Q4 WO	160-250	15.45	536.00
233100020962	M 40 Q4 WO	160-250	16.14	650.00

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	43.00
Fire protection		Fire protection panels pre-assembled	0.00

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.

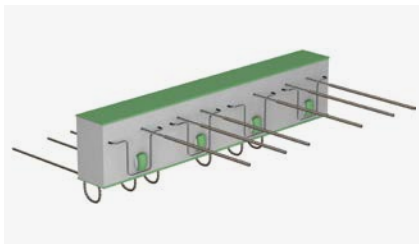
State element height (h) and concrete cover (cv) when ordering.

- 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

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 HV	160-250	10.37	366.00
233100020938	M 20 Q4 HV	160-250	12.38	400.00
233100020954	M 30 Q4 HV	160-250	15.91	536.00
233100020962	M 40 Q4 HV	160-250	16.62	650.00

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.

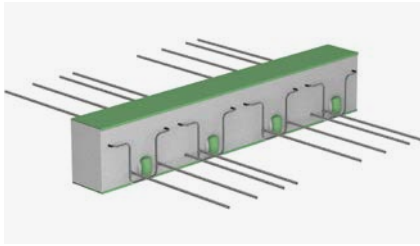
- Element length: 1,000 mm
- With concrete cover cv 50: Minimum height 180 mm
- Selection: height offset HV100 (100 mm), HV150 (150 mm), HV200 (200 mm)
- Custom solutions for all height offsets and beam widths available on request
- Other heights available on request

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
233100020922	M 10 Q4 UV	160-250	10.62	366.00
233100020938	M 20 Q4 UV	160-250	12.68	400.00
233100020954	M 30 Q4 UV	160-250	16.29	536.00
233100020962	M 40 Q4 UV	160-250	17.02	650.00

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	43.00
Fire protection		Fire protection panels pre-assembled	0.00

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 $\lambda = 0.031 \text{ W/m-K}$
- Other heights available on request

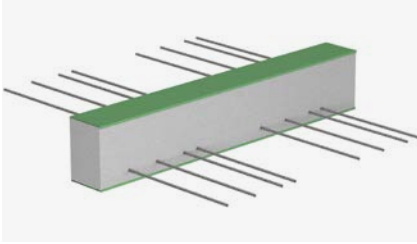
Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233500021042	Q 10	Bent	160-250	5.70	113.00
233500021043	Q 20	Bent	160-250	5.90	125.00
233500021044	Q 30	Bent	160-250	6.20	150.00
233500021045	Q 40	Bent	160-250	6.40	170.00
233500021046	Q 50	Bent	160-250	6.80	180.00
233500021047	Q 60	Straight	160-250	7.50	190.00
233500021048	Q 70	Straight	160-250	7.90	210.00
233500021049	Q 80	Straight	160-250	8.90	231.00
233500021050	Q 90	Straight	160-250	9.70	272.00
233500021051	Q 100	Straight	160-250	11.60	327.00
233500021052	Q 110	Straight	180-250	12.80	381.00
233500021053	Q 120	Straight	180-250	14.20	511.00

Extension products for type IP 120 Q		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

Tension elements

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233500021043	Q 20	Bent	180/200	5.90	125.00
233500021048	Q 70	Straight	180/200	7.90	210.00

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.

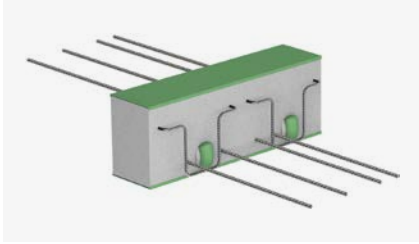
Type IP 120 QZ can only be used in combination with IP 120 Q.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233600021054	QZ 10	Bent	160-250	1.70	108.00
233600021055	QZ 20	Bent	160-250	1.90	119.00
233600021056	QZ 30	Bent	160-250	2.20	145.00
233600021057	QZ 40	Bent	160-250	2.40	164.00
233600021058	QZ 50	Bent	160-250	2.80	174.00
233600021059	QZ 60	Straight	160-250	3.50	184.00
233600021060	QZ 70	Straight	160-250	3.90	205.00
233600021061	QZ 80	Straight	160-250	4.90	226.00
233600021062	QZ 90	Straight	160-250	5.70	267.00
233600021063	QZ 100	Straight	160-250	7.60	322.00
233600021064	QZ 110	Straight	180-250	8.80	376.00
233600021065	QZ 120	Straight	180-250	9.20	506.00

Extension products for type IP 120 QZ		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

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 $\lambda = 0.031 \text{ W/m-K}$
- Other heights available on request

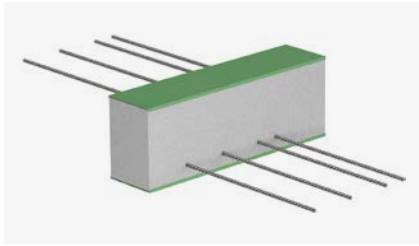
Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
233900021090	QS 10	300	160-250	2.90	97.00
233900021091	QS 20	400	160-250	4.80	147.00
233900021092	QS 30	500	160-250	5.60	185.00
233900021093	QS 40	300	160-250	3.90	107.00
233900021094	QS 50	400	160-250	4.80	157.00
233900021095	QS 60	500	160-250	6.10	196.00
233900021096	QS 70	300	180-250	5.30	165.00
233900021097	QS 80	400	180-250	8.50	173.00
233900021098	QS 90	500	180-250	11.30	180.00
233900021762	QS 100	300	200-250	6.20	188.00
233900021763	QS 110	400	200-250	10.10	270.00
233900021764	QS 120	500	200-250	12.70	310.00

Extension products for type IP 120 QS	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

Tension elements

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
233900021092	QS 30	500	180/200	5.60	185.00
233900021097	QS 80	500	180/200	8.50	173.00

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.

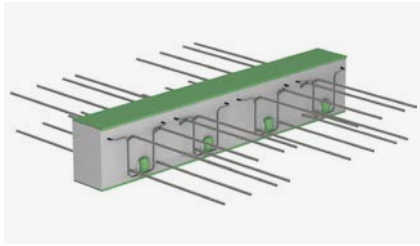
Type IP 120 QSZ can only be used in combination with IP 120 QS.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234000021099	QSZ 10	300	160-250	1.90	64.00
234000021100	QSZ 20	400	160-250	2.80	100.00
234000021101	QSZ 30	500	160-250	3.60	125.00
234000021102	QSZ 40	300	160-250	2.90	75.00
234000021103	QSZ 50	400	160-250	2.80	110.00
234000021104	QSZ 60	500	160-250	4.50	136.00
234000021105	QSZ 70	300	180-250	3.30	117.00
234000021106	QSZ 80	400	180-250	5.80	122.00
234000021107	QSZ 90	500	180-250	7.70	127.00
234000021765	QSZ 100	300	200-250	4.20	131.00
234000021766	QSZ 110	400	200-250	8.10	189.00
234000021767	QSZ 120	500	200-250	10.70	218.00

Extension products for type IP 120 QSZ	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

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

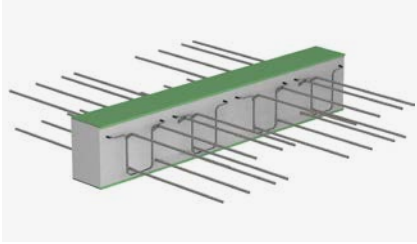
Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233700021066	QQ 10	Bent	160-250	4.66	165.00
233700021067	QQ 20	Bent	160-250	4.92	188.00
233700021068	QQ 30	Bent	160-250	5.43	224.00
233700021069	QQ 40	Bent	160-250	5.69	255.00
233700021070	QQ 50	Bent	160-250	6.70	270.00
233700021071	QQ 60	Straight	160-250	8.70	286.00
233700021072	QQ 70	Straight	160-250	9.60	332.00
233700021073	QQ 80	Straight	160-250	12.10	348.00
233700021074	QQ 90	Straight	170-250	14.20	408.00
233700021075	QQ 100	Straight	170-250	16.30	490.00
233700021076	QQ 110	Straight	180-250	18.40	571.00
233700021077	QQ 120	Straight	180-250	20.10	766.00

Extension products for type IP 120 QQ		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

Tension elements

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233700021067	QQ 20	Bent	180/200	4.92	188.00
233700021072	QQ 70	Straight	180/200	9.60	332.00

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.

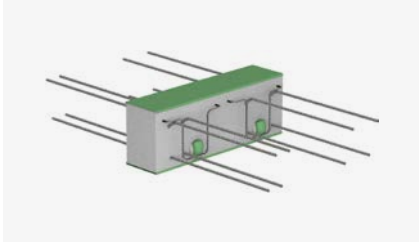
State the element height (h) when ordering.

- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request

Article number	Type	Transverse rod in ceiling	Height h [mm]	Weight [kg/m]	Price per m [€]
233800021078	QQZ 10	Bent	160-250	4.66	160.00
233800021079	QQZ 20	Bent	160-250	4.92	183.00
233800021080	QQZ 30	Bent	160-250	5.43	219.00
233800021081	QQZ 40	Bent	160-250	5.69	250.00
233800021082	QQZ 50	Bent	160-250	6.70	265.00
233800021083	QQZ 60	Straight	160-250	8.70	280.00
233800021084	QQZ 70	Straight	160-250	9.60	327.00
233800021085	QQZ 80	Straight	160-250	12.10	343.00
233800021086	QQZ 90	Straight	170-250	14.20	403.00
233800021087	QQZ 100	Straight	170-250	16.30	485.00
233800021088	QQZ 110	Straight	180-250	18.40	566.00
233800021089	QQZ 120	Straight	180-250	20.10	761.00

Extension products for type IP 120 QQZ		Design	Surcharge per m [€]
Fire protection		Fire protection panels pre-assembled	0.00

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 $\lambda = 0.031 \text{ W/m-K}$
- Other heights available on request

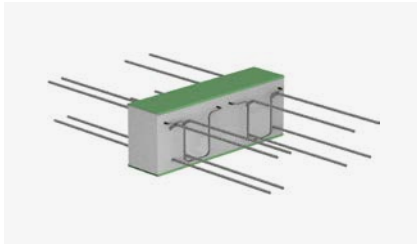
Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234100021108	QQS 10	300	160-250	3.20	128.00
234100021109	QQS 20	400	160-250	4.20	194.00
234100021110	QQS 30	500	160-250	6.40	242.00
234100021111	QQS 40	300	170-250	4.30	139.00
234100021112	QQS 50	400	170-250	7.90	205.00
234100021113	QQS 60	500	170-250	8.30	253.00
234100021114	QQS 70	300	180-250	12.40	214.00
234100021115	QQS 80	400	180-250	11.80	224.00
234100021116	QQS 90	500	180-250	15.70	235.00
234100021756	QQS 100	300	200-250	13.50	245.00
234100021757	QQS 110	400	200-250	15.90	352.00
234100021758	QQS 120	500	200-250	16.20	404.00

Extension products for type IP 120 QQS	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

Tension elements

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234100021110	QQS 30	500	180/200	8.56	242.00
234100021115	QQS 80	500	180/200	14.06	224.00

IP 120 QSZ



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.

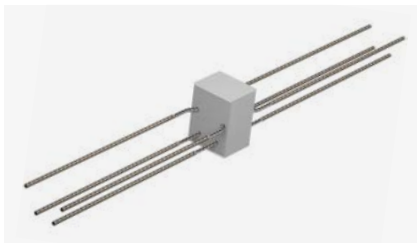
State the element height (h) when ordering.

- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234200021117	QSZ 10	300	160-250	3.20	96.00
234200021118	QSZ 20	400	160-250	4.20	148.00
234200021119	QSZ 30	500	160-250	6.40	183.00
234200021120	QSZ 40	300	170-250	4.30	106.00
234200021121	QSZ 50	400	170-250	7.90	158.00
234200021122	QSZ 60	500	170-250	8.30	194.00
234200021123	QSZ 70	300	180-250	12.40	166.00
234200021124	QSZ 80	400	180-250	11.80	174.00
234200021125	QSZ 90	500	180-250	15.70	181.00
234200021759	QSZ 100	300	200-250	13.50	189.00
234200021760	QSZ 110	400	200-250	15.90	270.00
234200021761	QSZ 120	500	200-250	16.20	312.00

Extension products for type IP 120 QSZ	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

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.

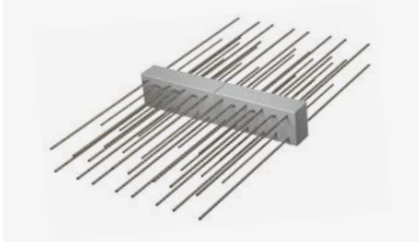
State the element height (h) when ordering. Circumferential fire protection available on request.

- Element length: 150 mm
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234300021162	H-X1	160-250	0.69	35.00
234300021163	H-X2	160-250	0.54	50.00
234300021164	H-X1Y1	160-250	1.05	58.00
234300021165	H-X2Y2	160-250	1.70	85.00

Extension products for type IP 120 H	Design	Surcharge per m [€]
Fire protection	Fire protection panels pre-assembled	0.00

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 $\lambda = 0.031$ W/m-K
- Other heights available on request

Article number	Type	Height h [mm]	Weight [kg/m]	Price per m [€]
234500021126	D 20 Q6	160-250	14.50	362.00
234500021129	D 30 Q6	160-250	22.20	420.00
234500021132	D 50 Q6	160-250	31.90	635.00
234500021135	D 70 Q6	160-250	43.70	768.00
234500021138	D 90 Q6	160-250	59.30	893.00
234500021141	D 100 Q6	160-250	66.00	980.00

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	64.00
Q10	170-250	Shear force reinforcement	128.00
Fire protection	Fire protection panels pre-assembled		0.00

IP 120 Z ISO



Intermediate insulation to supplement insulated joints in a range of different installation situations

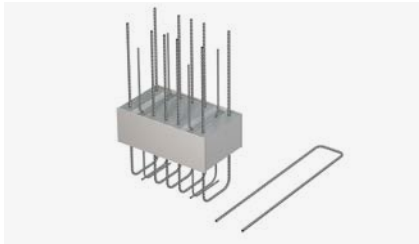
- Element length: 1,000 mm
- Insulating material: Neopor with $\lambda = 0.031$ W/m-K
- FP1 with fireproof panel
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
235100021148	Z ISO	1,000	160-250	1.1	65.00
235100021149	Z ISO FP1	1,000	160-250	2.7	86.00

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	12.80

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.

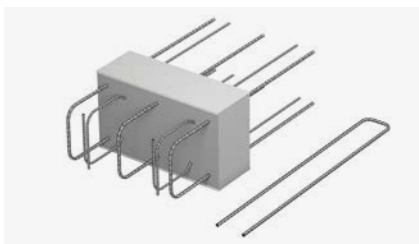
State the parapet thickness (a) when ordering.

- Ceiling thickness: ≥ 160 mm
- Insulation thickness: 120 mm
- Parapet thickness will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K
- Other parapet thicknesses available on request

Article number	Type	Element length [mm]	Parapet thickness a [mm]	Weight [kg/pc.]	Price per piece [€]
234600021166	A 1	350	150-250	3.0	139.00
234600021167	A 2	350	150-250	6.0	151.00

Extension products for type IP 120 A		Design	Surcharge per m [€]
Fire protection		Pre-assembled fire protection panels around the circumference	0.00

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.

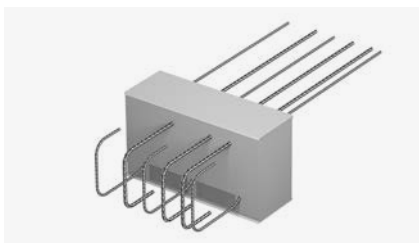
State the element height (h) and parapet width (b) when ordering.

- Parapet width: ≥ 150 mm
- Insulation thickness: 120 mm
- Element height will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234700021168	F	350	160-250	5.70	151.00

Extension products for type IP 120 F		Design	Surcharge per m [€]
Fire protection		Pre-assembled fire protection panels around the circumference	0.00

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.

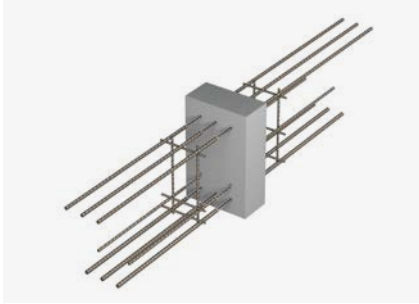
State the element height (h) when ordering.

- Corbel width: ≥ 160 mm
- Insulation thickness: 120 mm
- Element height will be evened up by applying additional insulation
- Insulating material: Neopor with $\lambda = 0.031$ W/m·K
- Other heights available on request

Article number	Type	Element length [mm]	Height h [mm]	Weight [kg/pc.]	Price per piece [€]
234800021169	O 1	350	180-250	2.30	175.00
234800021170	O 2	350	180-250	2.40	190.00

Extension products for type IP 120 O		Design	Surcharge per m [€]
Fire protection		Pre-assembled fire protection panels around the circumference	0.00

IP 120 S



Thermally insulated connector for connecting protruding reinforced concrete beams with ceiling slabs. Stainless steel rebar for corrosion protection.

Fireproof version available.

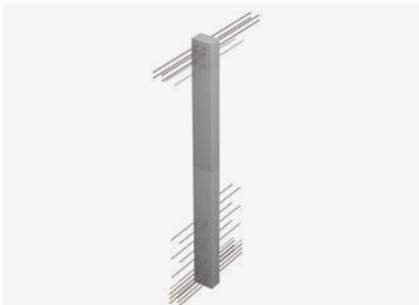
State height and width when ordering.

- Element length: 220–300 mm
- Standard height: 300–600 mm
- Beam width: 220–300 mm
- Insulation thickness: 120 mm
- Designation VB 1: Tie rod design for a firm bond
- Insulating material: Neopor with $\lambda = 0.031 \text{ W/m}\cdot\text{K}$

Article number	Type	Weight [kg/pc.]	Price per piece [€]
234900021150	S 1 - VB 1	8.10	338.00
234900021153	S 2 - VB 1	12.70	395.00
234900021155	S 3 - VB 1	19.90	497.00
234900021157	S 4 - VB 1	28.30	658.00

Extension products for type IP 120 S	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

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
- Tie rod design for a moderate bond

Article number	Type	Weight [kg/pc.]	Price per piece [€]
235000021158	W 1	9.10	497.00
235000021159	W 2	14.40	624.00
235000021160	W 3	26.80	718.00
235000021161	W 4	41.10	823.00

Extension products for type IP 120 W	Design	Surcharge per m [€]
Fire protection	Pre-assembled fire protection panels around the circumference	0.00

Pallet overviews ISOPRO®



Pallet overview ISOPRO® 80

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

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

ISOMUR®



ISOMUR® light 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 $\geq 12.5 \text{ N/mm}^2$
- 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 [€]
290100020366	ISOMUR® light 11.5 - 11.3	600	930	120	72	24.00	14.40
290100020367	ISOMUR® light 15.0 - 11.3	600	990	100	60	POA	POA
290100020368	ISOMUR® light 17.5 - 11.3	600	918	80	48	28.90	17.40
290100020369	ISOMUR® light 24.0 - 11.3	600	966	60	36	36.40	21.80

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	31.50	18.90
290100004826	ISOMUR® plus 15.0 - 11.3	600	990	100	60	34.00	20.40
290100004828	ISOMUR® plus 17.5 - 11.3	600	918	80	48	38.10	22.80
290100004830	ISOMUR® plus 20.0 - 11.3	600	990	80	48	41.10	24.70
290100004832	ISOMUR® plus 24.0 - 11.3	600	966	60	36	44.30	26.60

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With us, you benefit from the collective experience of three established manufacturers, who combine products and expertise in a comprehensive range. That is the PohlCon synergy concept.



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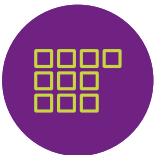
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Our digital solutions provide targeted support in planning with our products. From tender texts to CAD details and BIM data, right through to modern software solutions, we offer customized support for your planning process.



7 fields of application

We think in terms of holistic solutions. This is why we have combined our products into seven fields of application, where you can benefit from their synergy and the overall PohlCon product range.



10 product categories

In order to find the right product in our extensive range even faster, we have divided our products into ten product categories. This way you can navigate clearly and precisely between our products.



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