

# FIXING MATERIAL



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All clamps, cable hangers and tightening belts are in compliance with EU directives.

## Icons - capture







MAT	material	height (mm)
	temperature resistance, scope of application (°C)	width (mm)
	package (pcs./kg)	drilling depth (mm)
	color	diameter screw (mm)
	outside diameter (mm)	diameter of fixation hole (mm)
	inside diameter (mm)	maximum wrap diameter (mm)
	length (mm)	opening force (daN)
	dimensions - width, height (mm)	

**Axial tension capacity for KOPOS KOLÍN a.s. dowels in particular construction materials**

Axial tension capacity (N)					
	concrete 20/25	brick	soft material	gas-silicate	plaster
HM 6	560	420	230	100	
HM 8/1	700	690	500	120	
HM 10	1200	750	580	300	
HM 12	2150	1250	850	390	
HL 6			300	150	120
HL 8			300	120	400
HL 10			300	130	450
HS 6					150









**HM - dowels**

	 mm	 mm	 mm	 mm	 pcs	kg	MAT	 °C
HM 6	6	30	35	∅ 3,5 - 4	100; 14000	9,8	PA	-30 - + 80
HM 8/1	8	40	45	∅ 4 - 5	100; 6000	9		
HM 10	10	50	55	∅ 5 - 6	100; 3000	7,8		
HM 12	12	60	65	∅ 6 - 8	100; 2000	9		

The dowels are designed to steadily fix the electro-installation and other elements on walls and ceilings made of hard construction materials. For connection is necessary to use screw stopped on full length of dowel, whereas is necessity to count with thickness of fixed material. Detailed information about the depth and the diameter of the drilling for individual types of dowels are stated in the assembly manuals.









**HM PE - dowels**

	 mm	 mm	 mm	 mm	 pcs	kg	MAT	 °C
HM 6 PE	6	30	35	∅ 3,5 - 4	200; 14000	9,8	PE	-30 - + 70
HM 8 PE	8	40	45	∅ 4 - 5	200; 6000	9,0		
HM 10 PE	10	50	55	∅ 5 - 6	200; 3000	9,7		
HM 12 PE	12	60	65	∅ 6 - 8	200; 2000	9,0		

The dowels are designed for universal use (hobby). For connection is necessary to use screw stopped on full length of dowel, whereas is necessity to count with thickness of fixed material. Detailed information about the depth and the diameter of the drilling for individual types of dowels are stated in the assembly manuals.







**HL - dowels**

	 mm	 mm	 mm	 mm	 pcs	kg	MAT	 °C
HL 6	6	34	40	∅ 3,5 - 4	100; 10000	7,2	PE	-30 - + 70
HL 8	8	48	55	∅ 4 - 5	100; 4000	6,4		
HL 10	10	59	65	∅ 5 - 6	100; 2400	6,5		

The dowels are designed to steadily fix the electro-installation and similar elements on hollow walls and ceilings. For connection is necessary to use screw stopped on **full length of dowel**, whereas is necessity to count with thickness of fixed material. Detailed information about the depth and the diameter of the drilling for individual types of dowels are stated in the assembly manuals.







### HS - dowels

	 mm	 mm	 pcs	kg	MAT	 °C
<b>HS 6</b>	6	22,5	100; 6000	8,4	PA	-30 - + 80
drill <b>HSV 6</b>	5,5	60	10; 250	1,3		

The dowels are designed to steadily fix the electro-installation and similar elements on plaster walls and ceilings.  
Part of the delivery is one HSV 6 drill per 50 pcs. of HS dowels.



### HN - hammering dowels

	 mm	 mm	 pcs	kg	MAT	 °C
<b>HN 6X25</b>	6	25	100; 900	2,8	PA	-30 - + 80
<b>HN 6X35</b>	6	35	700; 800	3,3		
<b>HN 6X45</b>	6	45	100; 1500	7,5		
<b>HN 6X55</b>	6	55	100; 900	5,2		
<b>HN 6X70</b>	6	70	50; 1200	9,1		
<b>HN 8X45</b>	8	45	100; 1200	9,8		







The dowels are designed to fix non-supporting construction elements and particular items on full brick and concrete masonry.

Do not screw the screw-nail but rather beat it on when mounting. You can screw in out if necessary.

Detailed information about the depth and the diameter of the drilling for individual types of dowels are stated in the assembly manuals.



### Spacing clamps







	 mm	 mm	 mm	 conductor max. mm	 pcs	kg	MAT	 °C
<b>6516</b>	26	22,5	30	16	500	2,6	PS	-5 - + 60
<b>6526</b>	39	30	40	26	150	2,4		

Spacing clamps have two parts and are designed to fix the cables up to  $\varnothing 16$  mm and  $\varnothing 26$  mm.

To install, screw or stick the bottom part of the clamp on the pad, put in the cable and push the top part on the bottom part.



### Lineal clamps

	 mm	 mm	 mm	 conductor max. mm	 pcs	kg	MAT	 °C
<b>6723</b>	11,5	15	70	10 - 26	1000; 4000	8	PA	-30 - + 70









Lineal clamps are designed to fix protected conductors  $\varnothing 10$  mm to  $\varnothing 26$  mm next to each other on type 5820 and 5822 support lath.

To install, bend the clamp into U-shape and plug it in the support lath.

It is secured against displacement using wedge pre-moulded on the clamp.

**Lineal clamps**



						
	mm	mm	conductor max. mm	pcs	kg	°C
<b>6724</b>	18	35	7 - 13	200; 1600	8,5	PA -30 - + 70







The clips are designated for the fixing of the cables or other leads with a diameter of 7 to 13 mm. To install, plug it into 5820 or 5822 support lath and turn it by 90°.





**Double-sided clamps**



5213 PC - 5242 PC - to fix ČSN steel pipes on the pad.  
 5220 PC - 5263 PC - to fix EN varnished steel pipes on the pad.  
 5220 PC ZN - 5263 PC ZN - to fix EN ZN steel pipes on the pad.  
 3613 A - 3648 A - to fix flexible metal pipes on the pad.  
 6808 - 6825 - to fix Ø8 mm to Ø25 mm cables on the pad.





Steel strap width: dimension 13 - 21 = 0,8 mm  
 dimension 29 - 42 (48) = 1.1 mm

ČSN							MAT
				pcs	kg		
mm	mm	mm					
<b>5213 PC</b>	20,4	46,5 x 10	4,3	1500	7,4	galvanized steel sheet	
<b>5216 PC</b>	22,5	48,5 x 10	4,3	1500	7,8		
<b>5221 PC</b>	28,3	56,5 x 10	4,3	1000	8,6		
<b>5229 PC</b>	37	71 x 15	5,3	500	8,3		
<b>5236 PC</b>	47	87 x 15	5,3	250	6,5		
<b>5242 PC</b>	54	96 x 15	5,3	200	4,8		
<b>3613 A</b>	18,7	44,5 x 10	4,3	1500	7,2		galvanized steel sheet
<b>3616 A</b>	21,2	47 x 10	4,3	1500	7,8		
<b>3623 A</b>	28,3	56,5 x 10	4,3	1000	6,4		
<b>3629 A</b>	34,5	70,5 x 15	5,3	500	8,1		
<b>3636 A</b>	42,2	80 x 15	5,3	400	8,2		
<b>3648 A</b>	54	96 x 15	5,3	200	4,7		

EN							MAT
varnished	ZN					kg	
		mm	mm	mm	pcs		
<b>5220 PC</b>	<b>5220 PC ZN</b>	20	45 x 10	5,3	100	0,8	galvanized steel sheet
<b>5225 PC</b>	<b>5225 PC ZN</b>	25	50 x 10	5,3	100	1	
<b>5232 PC</b>	<b>5232 PC ZN</b>	32	57 x 12	5,3	100	1,6	
<b>5240 PC</b>	<b>5240 PC ZN</b>	40	70 x 12	5,3	50	1	
<b>5250 PC</b>	<b>5250 PC ZN</b>	50	85 x 12	5,3	50	1,4	
<b>5263 PC</b>	<b>5263 PC ZN</b>	63	96 x 12	5,3	50	2	
<b>6808</b>		8	32 x 10	4,3	3000	8,4	
<b>6810</b>		10	32 x 10	4,3	2000	6	
<b>6812</b>		12,5	39 x 10	4,3	2000	7,2	
<b>6816</b>		16	48 x 10	4,3	1500	6,9	
<b>6820</b>		20	56 x 15	5,3	500	5,6	
<b>6825</b>		25	61 x 15	5,3	500	6,4	

**Single-sided clamps**









					kg	MAT
	mm	mm	mm	pcs		
<b>6704</b>	4	14,8 x 10	4,3	5000	6	galvanized steel sheet
<b>6706</b>	6	17,8 x 10	4,3	5000	8	
<b>6708</b>	8	19,8 x 10	4,3	5000	9,5	
<b>6710</b>	10	22,8 x 10	4,3	5000	11	
<b>6712</b>	12,5	25,3 x 10	5,3	5000	12	

The clamps are designed to fix the Ø4 mm to Ø12,5 mm cables on the pad. Steel strap width - 0,8 mm.



### Clamps





	 mm	 mm	 mm	 pcs	 kg	MAT	 °C
<b>5313</b>	20	30	4,2	1200	10,2	PVC	-5 - + 60
<b>5316</b>	21	31	4,4	1200	11,3		
<b>5321</b>	27	40	4,4	800	9,2		
<b>5329</b>	36	48	4,4	600	9,4		

The clamps are equipped with fastening elements for placing next to each other to create continual row thereof as well as with grooves for installation in supporting trunkings of 5820/.. series (see page 94).

To install, push the pipe between the clamp jaws.










### Cable hanger

	 mm	 pcs	 kg	MAT	 °C
<b>6401</b>	157	1000	2,8	PE	-40 - + 85

The hangers are designed to fasten the  $\varnothing 8$  mm to  $\varnothing 18$  mm cables on support rope. Suitable only for indoor installation..



### Tightening belts

	 mm	 mm	 mm	 pcs	 kg		MAT	 °C
<b>SP 100X2.5</b>	100 x 2,5	25	8	100	0,1	natural	PA	-40 - + 85
<b>SP 140X3.5</b>	150 x 3,6	39	18	100	0,16			
<b>SP 140X4.5</b>	140 x 4,5	36	28	100	0,18			
<b>SP 160X2.5</b>	165 x 2,5	44	8	100	0,2			
<b>SP 160X4.5</b>	160 x 4,8	42	22	100	0,23			
<b>SP 180X4.5</b>	180 x 4,5	45	28	100	0,26			
<b>SP 200X4.5</b>	190 x 4,8	52	22	100	0,3			
<b>SP 250X4.5</b>	250 x 4,8	74	22	100	0,36			
<b>SP 280X4.5</b>	310 x 4,8	89	22	100	0,4			
<b>SP 360X4.5</b>	368 x 4,8	102	22	100	0,46			
<b>SP 380X4.5</b>	380 x 4,5	110	28	100	0,5			
<b>SP 430X4.5</b>	450 x 4,8	133	22	100	0,56			
<b>SP 360X7.5</b>	380 x 7,6	101	55	100	0,6			
<b>SPM 100X2.5</b>	100 x 2,5	25	8	100	0,5			

Tightening belts are intended for ordinary bunching and fastening cables, conductors and pipes.






For fastening to a support base we will use clamps of tightening bands.

Fireproof in compliance with U.L. 94 - V2.

It is not insulation resistant in long-term.



### Tightening belt clamps

	 mm	 pcs	 kg		MAT	 °C
<b>SPP 9</b>	9	100	0,3	natural	PA	-40 - + 85
<b>SPP 19X19</b>	4	100	0,3	black (FA) natural (HA)		
<b>SPPN 19X19</b>	4	100	0,3	black		

Fastening belt clamps are designed to fix the belt on the surface.

Fireproof in compliance with U.L. 94 - V2.

It is not insulation resistant in long-term.

SPP 19X19 - self-adhesive



