

# Installation accessories

## PSB/MSB/HSB/HSB+/HTSB/EKL/EMK/BPL



### Insulation entry bush

Designation	Description	PU	Order no.
PSB/power cable	D= 7-12 mm (3 x 1.5 mm <sup>2</sup> ; 3 x 2.5 mm <sup>2</sup> )	unit	05-0020-0472
MSB/HSB		unit	05-0020-0091
HSB+/HTSB/ BPL-AL	plastic gland	unit	05-0020-0524
HSB+/HTSB	metal gland	unit	05-0020-0516
Pt100 Ex	M25	unit	05-0020-0261
EKL/ Pt100 M	single (media-protected)	unit	05-0020-0262
EKL/ Pt100 M	double (media-protected)	unit	05-0020-0343

An insulation entry bush is used to prevent the heating cable being damaged where it passes through the thermal insulation outer cladding. The plate is made of stainless steel (1.4301).

### Over insulation caution labels

Designation	Description	PU	Order no.
Self-adhesive label*	"Elektrisch beheizt"	unit	05-2144-0046
	"Electrically heated"	unit	05-2144-0047
	"Traçage électrique"	unit	05-2144-0703
	"Электрооборев"	unit	05-2144-0860

\*other languages on request



**Mounting plates and brackets**

For securing enclosures and thermostats to pipework and vessels. Each mounting bracket requires a mounting plate to fit the size of the enclosure.

Designation	Description	PU	Order no.
in stainless steel (1.4301)	Mounting bracket MWG/MWU 270, stainless steel	unit	05-0091-0051
	Mounting plate SS 110 for polyester enclosure with dimensions 110x75x55 mm	unit	05-0091-0010
	Mounting plate SS 122 for polyester enclosure with dimensions 122x120x90 mm	unit	05-0091-0011
	Mounting plate SS 220 for polyester enclosure with dimensions 220x120x90 mm	unit	05-0091-0012
	Mounting plate SS 160 for polyester enclosure with dimensions 160x160x90 mm	unit	05-0091-0013
	Mounting plate SS 260 for polyester enclosure with dimensions 260x160x90 mm	unit	05-0091-0014
	Mounting plate SS 360 for polyester enclosure with dimensions 360x160x90 mm	unit	05-0091-0015
	Mounting plate SS 255 for polyester enclosure with dimensions 255x250x90 mm	unit	05-0091-0016
	Mounting plate SS 400 for polyester enclosure with dimensions 400x250x90 mm	unit	05-0091-0017
	Mounting plate SS for DTW/DTB	unit	05-0091-0221

Designation	Description	PU	Order no.
in galvanised steel	Mounting bracket, twisted, mounting distance 200 mm	unit	05-0105-0162
	Mounting bracket, U-shaped, mounting distance 200 mm	unit	05-0105-0163
	Mounting plate for polyester enclosure, dimensions 110x75x55 mm	unit	05-0005-0014
	Mounting plate for polyester enclosure, dimensions 122x120x90 mm	unit	05-0005-0015
	Mounting plate for polyester enclosure, dimensions 220x120x90 mm	unit	05-0005-0016
	Mounting plate for polyester enclosure, dimensions 160x160x90 mm	unit	05-0005-0017
	Mounting plate for polyester enclosure, dimensions 260x160x90 mm	unit	05-0005-0018
	Mounting plate for DTW/DTB	unit	05-0091-0222

Mounting plates for aluminium or stainless steel enclosures on request.

**Connection cables**

Designation	Description	PU	Order no.
Connection cables Heat-resistant	3 x 1.5 mm <sup>2</sup> , Cross section D <sub>A</sub> 8.5 mm (Quality HO5SS-F, outer jacket EWKF, -50 °C to +180 °C)*	metre	02-4034-0008
	3 x 2.5 mm <sup>2</sup> , Cross section D <sub>A</sub> 9.8 mm (Quality HO5SS-F, outer jacket EWKF, -50 °C to +180 °C)	metre	02-4034-0027

\*not for use with PLEXO TCS

**Crimping Accessories**

Designation	Description	PU	Order no.
Crimp-Set EKL	Crimping pliers in the boot and crimp insert 1.5 to 10 mm <sup>2</sup> , 16 to 25 mm <sup>2</sup>	unit	03-5545-0002
	Butt Connectors Nickel-plated 1.5 to 2.5 mm <sup>2</sup> ; 100 unit	unit	03-7035-0010

**Cable ties**

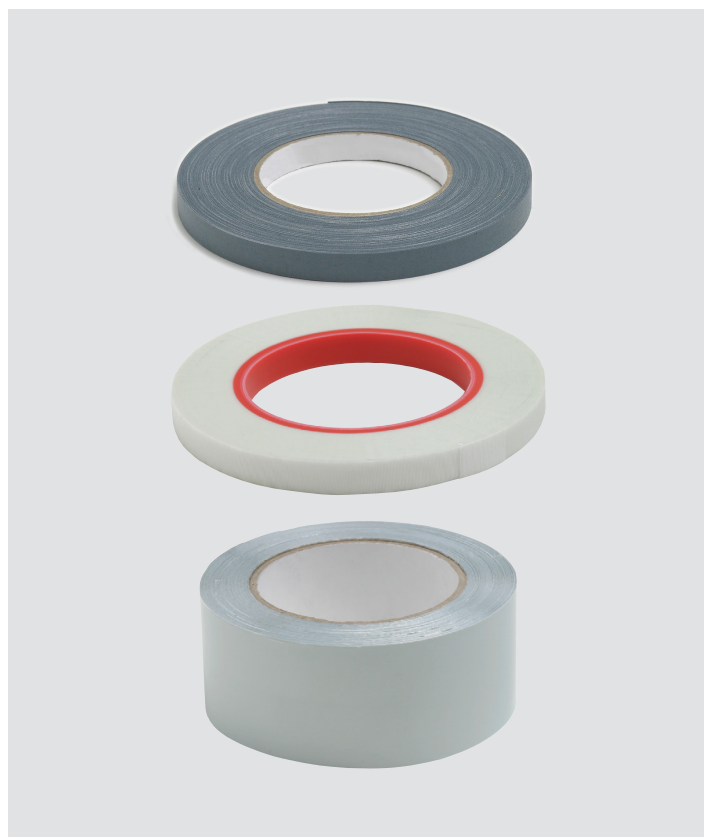
Designation	Description	PU	Order no.
Tie installation tool		unit	03-5510-0004
Stainless steel cable ties (1.4301)	up to DN 15, length 127 to 129 mm, 100 unit	pack	03-6510-0211
	up to DN 40, length 200 to 201 mm, 100 unit	pack	03-6510-0207
	length 259 to 300 mm, 100 unit	pack	03-6510-0220
	up to DN 80, length 362 to 370 mm, 100 unit	pack	03-6510-0208
	up to DN 150, length 679 to 680 mm, 100 unit	pack	03-6510-0209
	up to DN 300, length 998 to 1067 mm, 25 unit	pack	03-6510-0210
Nylon cable ties for fixing heating cables to wire mats (max. temperature +105 °C), not UV resistant	length 200 mm 1000 piece	box	03-6500-0015

**Fixing straps**

Designation	Description	PU	Order no.
Special fixing straps with buckle, VA	for pipe diameter D = 49...127 mm	unit	03-6510- 0228
	for pipe diameter D = 44...406 mm	unit	03-6510- 0229
Special fixing straps	for fixing mounting brackets on pipes, weight 55 g/m; width 14 mm, length 30 m short length: indicate required length in plain text	roll	03-6510-0202
		metre	03-6510-0227
Buckle	for special fixing strap 14 mm, AF 8, weight 16 g, fastened with open-ended spanner	unit	03-6515-0200
SS fixing strap 3/8"	weight 60g/m; length 30 m	roll	03-6510-0203
SS buckle 3/8"	for SS fixing strap 3/8", fix with tensioning tool, weight 15 g, box 100 pieces	box	03-6515-0201
SS fixing strap 3/4"	weight 110 g/m; length 30 m	roll	03-6510-0204
SS buckle 3/4"	for SS fixing strap 3/4", fix with tensioning tool, weight 15 g, 2 pieces a corner; box 100 pieces	box	03-6515-0202
Tensioning tool	for SS fixing strap	unit	03-5510-0003
Polyester fixing strap	for fixing heating tapes to tanks/vessels, width 16 mm, temp. up to +105 °C, weight: 20 g/m, indicate required length in plain text	metre	03-6500-0100
Buckle	for polyester fixing strap, width 16 mm, weight 13 g	unit	03-6515-0203
Wire mesh	width 1.0 m, length 25 m, zinc-coated, pitch 12 mm	roll	02-2210-0002
	width 1.0 m, length 25 m, stainless steel, pitch 16 mm	roll	02-2210-0003
Lacing wire	Diameter = 0.65 mm, zinc-coated	roll	02-2310-0003
	Diameter = 0.65 mm, stainless steel	roll	02-2310-0002
Securing pins	SS (1000/box), Ø 2.1 mm, length 30 mm	box	02-5470-0002
Self retaining washers	SS (1000/box), Ø 30 mm for securing pins	box	02-5479-0001
	Cu zinc-coated (1000/box), Ø 30 mm for securing pins	box	02-5479-0002
Spacing strips	EKL spacing strip; stainless steel; length 20 m	roll	03-6510-0219
	EKL spacing strip; stainless steel; length 50 m	roll	03-6510-0200
	EMK spacing strip, stainless steel, length 20 m	roll	03-6510-0201

# Installation accessories

## Adhesive tapes



### PT Polyester self-adhesive tape

The polyester self-adhesive tape serves for fixing the heating cable to pipes according to the mounting manual.

The polyester self-adhesive tape is heat-resistant up to max. 100 °C and the adhesive is free of plasticizer. It is optimally suited for application in connection with the self-limiting heating cables PSB.

### GT Glass cloth self-adhesive tape

The glass cloth self-adhesive tape serves for fixing the heating cable to pipes according to the mounting manual.

The glass cloth self-adhesive tape is heat-resistant up to max. 180 °C and the adhesive is free of plasticizer. It is optimally suited for application in connection with the heating cables MSB, HSB, HSB+, HTSB and EKL Light, EKL Medium and EKL Premium.

### Selection chart

Self-adhesive tape per meter pipe, with 5 attachments per meter pipe:

pipe dimension		diameter pipe (mm)	adhesive tape (m)
DN	inch		
6	1/8	10.2	0.32
8	1/4	13.5	0.42
10	3/8	17.2	0.54
15	1/2	21.3	0.67
20	3/4	26.9	0.85
25	1	33.7	1.06
32	1 1/4	42.4	1.33
40	1 1/2	48.3	1.52
50	2	60.3	1.89
65	2 1/2	76.1	2.39
80	3	88.9	2.79
100	4	114.3	3.59
125	5	139.7	4.39
150	6	168.3	5.29
200	8	219.1	6.88
250	10	273.0	8.58
300	12	323.9	10.18
400	16	406.4	12.77
500	20	508.0	15.96
600	24	610.0	19.16
700	28	711.0	22.34
800	32	813.0	25.54
900	36	914.0	28.71
1000	40	1016.0	31.92

### AT Aluminium self-adhesive tape

The aluminium self-adhesive tape serves for fixing, respectively for pasting over the heating cable of pipes according to the mounting manual. It is also recommended for improving thermal conductivity and is indispensable for heating plastic pipes.

The aluminium self-adhesive tape is heat-resistant and the adhesive is free of plasticizer. It is thus optimally suited for application in connection with the heating cables PSB, MSB, HSB and EKL Light, EKL Medium and EKL Premium.

The AT230 high-temperature tape is suitable for HSB+ and HTSB, and EKL Light, EKL Medium and EKL Premium.

### AF Aluminium foil

The aluminium foil serves for covering the heating cable to pipes, containers and areas according to the mounting manual.

The aluminium foil is heat-resistant up to max. 400 °C. The foil is optimally suited for application in connection with the BARTEC heating cables.

### FT Fabric self-adhesive tape

The fabric self-adhesive tape serves for fixing the heating cable to pipes according to the mounting manual.

The textile self-adhesive tape is heat-resistant up to max. 90 °C and the adhesive is free of plasticizer. It is optimally suited for the application in connection with the self-limiting heating cables PSB.

### Processing instructions

The surface of the parts to be glued must be dry, grease-free and clean. A sign of surfaces that are not clean can be the formation of pearls of water when the surface is wet. The sub-surface must also be firm for gluing. Remove loose coats of paint, etc. in advance.

The most favourable processing temperature is approx.

20 °C. Gluing below 10 °C should be avoided. If the temperature differences between the parts to be joined are too great, condensation may develop, which prevents proper bonding.

The adhesive tape should be stuck down with the maximum possible pressure (depending on material and work piece).

Adhesives are viscoelastic and flow into the uneven areas of the substrate.

Low immediate adhesion, but increases significantly!

The final adhesive force is achieved after about 72 hours. This time can be shortened by appropriate heating at 70 °C max.

For a detailed description of how to use our self-adhesive tapes see the BARTEC Design guide on [www.bartec.com](http://www.bartec.com).

### Storage

Storage time of all self-adhesive tapes: max. 12 months cool and dry at 15-25 °C and relative humidity 50-60%

### Adhesive tapes

Designation	AT80-164	AT150-164	AT230-164	AF-33	AF-328	FT-164	PT-164	GT-164
Support material	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Cotton fabric, PE coated	Polypropylene, glass-fibre reinforced	Glass cloth
Adhesive	Acrylate, transparent	Acrylate, transparent	Polysiloxane	no	no	Rubber	Rubber	Silicone
Dimensions WxL	50 mm 50 m/roll	50 mm 55 m/roll	50 mm 50 m/roll	1000 mm 10 m/roll	1000 mm 100 m/roll	12 mm 50 m/roll	19 mm 50 m/roll	11 mm 50 m/roll
Temperature range	-20 °C to +80 °C	-55 °C to +150 °C	-60 °C to +230 °C short term (1h): +350 °C	+400 °C	+400 °C	-20 °C to +80 °C Non-removable: +90 °C	-30 °C to +70 °C Non-removable: +100 °C	-30 °C to +180 °C short term (1h): +250 °C
Adhesive strength on steel	50 N/ 100 mm	41 N/ 100 mm	40 N/ 100 mm	N/C	N/C	44 N/ 100 mm	480 N/ 100 mm	26 N/ 100 mm
Expansion	3.1%	4%	4%	6,94% longitudinal, 7,98% cross dir.	6,94% longitudinal, 7,98% cross dir.	14%	10%	5%
Tensile strength (rel. to width)	215 N/50 mm (430 N/ 100 mm)	120 N/50 mm (240 N/ 100 mm)	110 N/50 mm (220 N/ 100 mm)			71 N/12 mm (590 N/ 100 mm)	380 N/19 mm (2 kN/ 100 mm)	194 N/11 mm (1.7 kN/ 100 mm)
Thickness	0.08 mm	0.06 mm	0.11 mm	0.05 mm	0.05 mm	0.31 mm	0.13 mm	0.18 mm
Order number	02-5500-0003	02-5500-0014	02-5500-0043	02-2430-0003	02-2430-0002	02-5500-0001	02-5500-0005	02-5500-0047