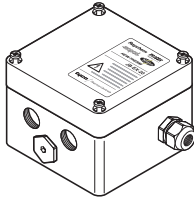
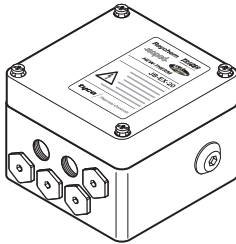


## Junction boxes



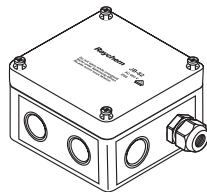
JB-EX-20

Junction box, 3 x M20 entries and 1 x M25 with gland, approved for use in hazardous areas.  
Typical use as power-box for PI/MI heating systems. Details on page 75.



JB-EX-21

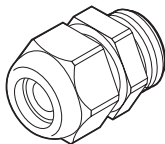
Junction box, 6 x M20 and 1 x M32 entries for use in hazardous areas. Power cable gland M32 must be purchased separately.  
Typical use as power-, splice- and end-box for 3-phase systems with PI/MI heating systems. Details on page 77.



JB-82

Junction box, 4 x M20/M25 pre-punched holes and M25 cable gland for use in non-hazardous areas. Details on page 45.

**Mounting brackets for junction boxes and pipe straps are available, please refer to page 142.**



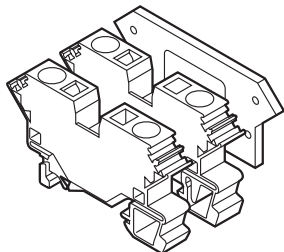
GL-45-M32

Cable gland EExe (M32), polyamide for use with power cables with a diameter range of 12-21 mm.



HWA-PLUG-M20-EXE-PLASTIC

Stopping plug EExe (M20), polyamide, spare part for various junction boxes.



HWA-WAGO-PHASE

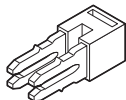
Phase/neutral terminal (EEx e), spare part for various junction boxes, max. 10 mm<sup>2</sup> solid/stranded.

HWA-WAGO-EARTH

Earth terminal (EEx e), spare part for various junction boxes, max. 10 mm<sup>2</sup> solid/stranded.

HWA-WAGO-ENDPLATE

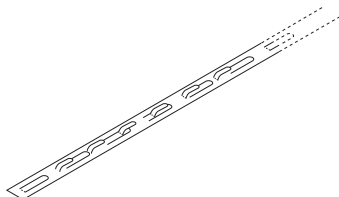
End plate for terminals HWA-WAGO-..., 10 mm<sup>2</sup> terminals, spare part.



HWA-WAGO-JUMPER

Jumper to bridge terminals HWA-WAGO-..., 10 mm<sup>2</sup> terminals, spare part.

## Fixing / Installation Materials



Pre punched strap, which controls spacing distances when heating cables are attached to surfaces of bigger pipes and vessels. Punch interval: 25 mm  
Available in different materials – copper, mild steel and stainless steel. Only use stainless steel strap on stainless steel pipes/vessels.

References

Material, length

SNMC

Copper 20 m

SNM

Mild steel 20 m

HARD-SPACER-SS-25mm-25m

Stainless steel 25 m

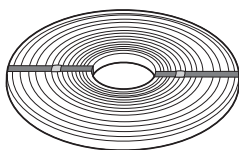
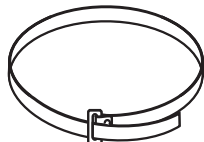


## Components and accessories for Mineral Insulated (MI) heating system

Stainless steel pipe straps for holding MI cable onto pipe. Tighten with pliers. Allow one strap per 30 cm of pipe.

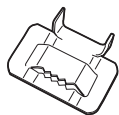
### Available Pipe Straps

Part No.	Pipe Diameter	Packing Qty
PB 125	to 1 1/4" (32 mm)	50 pc
PB 300	1 1/2" to 3" (38-75 mm)	35 pc
PB 600	3 1/2" to 6" (89-150 mm)	25 pc
PB 1000	6" to 10" (150-250 mm)	1 pc
PB 1200	to 12" (300 mm)	1pc
PB 2400	to 24" (600 mm)	1pc
PB 3600	to 36" (900 mm)	1pc

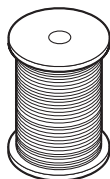


SNLS Plain stainless steel banding / strip for holding MI cables in place on pipes. 30 m roll. Secured with buckles.

Allowances as per table below.



SNLK Stainless steel buckles for use with metal banding strip type SNLS.



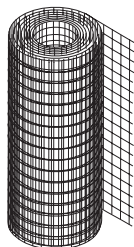
RMI-TW Tie wire for fastening steel heating cables on pipes. Especially suitable for irregular shaped objects such as pumps, valves, flanges. Supplied in 50 m reels.

**Do not use with copper or cupro nickel sheathed heating cables; use straps wherever possible.**

Allowances as per table below.

### Allowances for tie wire and banding on pipes.

Pipe Size (mm)	25	40	50	100	150	200	250	300	350	400	450	500	600	750	900	1200
Required length (m) per m of pipe	0.8	1.1	1.2	1.6	2.1	2.8	3.5	4.2	4.6	5.2	5.9	6.5	7.9	9.8	11.8	15.7



FT-19 Zinc-plated Metal Mesh for holding MI heating cables in place on pipes, tanks or other equipment. Supplied in 25 m rolls (approx. width 1m)

FT-20 Stainless-steel Metal Mesh for holding MI heating cable in place on pipes, tanks or other equipment. Supplied in 25 m rolls (approx. width 1m)

### Warning Labels



LAB-I-01 Self adhesive warning label: "Electrically traced" for proper marking of electrical trace heating systems. One label per 5 m of traced pipe. Attach to outside of thermal insulation weather barrier on both sides of pipe and also at equipment such as valves, pumps requiring periodic maintenance. Labels in other languages are available, refer to page 144

### Temperature Controls

See control and monitoring product range, on page 90 including line sensing thermostats.