

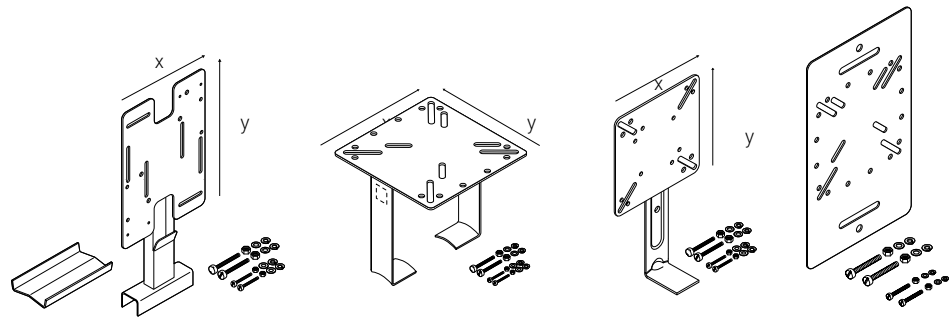
# Raychem ACCESSORIES

## SUPPORTS

Support brackets are used to fix equipment such as thermostats or junction boxes on pipes or cable trays. Support brackets require additional pipe straps which have to be ordered separately.

They include a set of M6 and/or M4 fixing screws, nuts, washers and spring lock washers for the fixation of one junction box or thermostat. They are fabricated in stainless steel (SS304, and passivation)

The table below outlines the typical compatibility of each bracket with relevant equipment, for other equipment please contact Pentair representative.



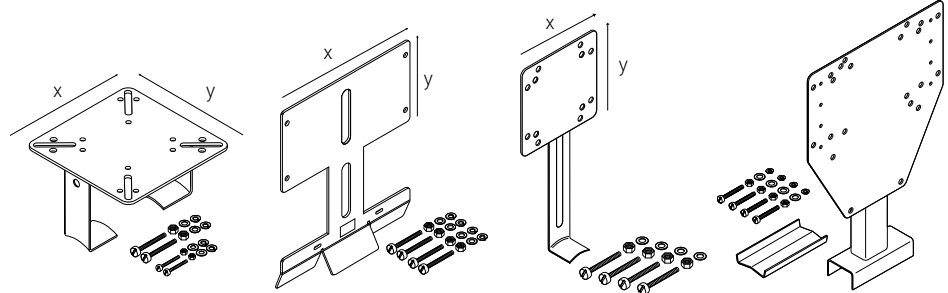
	<b>SB-100</b> <b>192932-000</b>	<b>SB-101</b> <b>990944-000</b>	<b>SB-110</b> <b>707366-000</b>	<b>SB-130**</b> <b>1244-006602</b>
AT-TS-13	x	x	x	x
AT-TS-14	x	x	x	x
JB-82	x	x	x	x
JB-EX-20(-EP)	x	x	x	x
JB-EX-21	x	x		x
JB-EX-21/35MM2				
JB-EX-25/35MM2				
JB-EX-32/35MM2				
JBU-100(-L)-E(P)	x	x		x
MONI-PT100-EXE		x		x
MONI-PT100-NH		x		x
MONI-PT100-4/20mA		x		x
RAYSTAT-CONTROL-10	x	x		x
RAYSTAT-ECO-10	x	x		x
RAYSTAT-EX-02	x	x	x	x
RAYSTAT-EX-03	x	x		x
RAYSTAT-EX-04	x	x		x
NGC-20-C(L)-E				
T-M-10-S/+x+y	x	x		x
T-M-20-S/+x+y(/EX)			x	

\*\*Support bracket for fixation to cable trays

## ACCESSORIES

### TECHNICAL DATA

	<b>SB-100</b> <b>192932-000</b>	<b>SB-101</b> <b>990944-000</b>	<b>SB-110</b> <b>707366-000</b>	<b>SB-130**</b> <b>1244-006602</b>
Plate size (mm) X x Y	160 x 230	160 x 160	130 x 130	180 x 315
Distance pipe-plate (mm)	100	160	100	N.A.
Number of pipe straps required	2	2	1	2
Max. pipe temperature (°C)	230	230	230	N.A.
Weight (kg)	0.70	0.59	0.40	0.62



	<b>SB-111</b> <b>579796-000</b>	<b>SB-120</b> <b>165886-000</b>	<b>JB-SB-26</b> <b>338265-000</b>	<b>SB-125</b> <b>1244-00603</b>
AT-TS-13	x			
AT-TS-14	x			
JB-82	x			x
JB-EX-20(-EP)	x			
JB-EX-21				
JB-EX-21/35MM2	x*			
JB-EX-25/35MM2	x*			
JB-EX-32/35MM2	x*			
JBU-100(-L)-E(P)				x
MONI-PT100-EXE	x		x	
MONI-PT100-NH	x		x	
MONI-PT100-4/20mA	x		x	
RAYSTAT-CONTROL-10				x
RAYSTAT-ECO-10				x
RAYSTAT-EX-02	x			x
RAYSTAT-EX-03				x
RAYSTAT-EX-04				x
NGC-20-C(L)-E		x		x
T-M-10-S/+x+y	x			
T-M-20-S/+x+y/(EX)		x		x

\* Use 2 brackets per junction box

### TECHNICAL DATA

	<b>SB-111</b> <b>579796-000</b>	<b>SB-120</b> <b>165886-000</b>	<b>JB-SB-26</b> <b>338265-000</b>	<b>SB-125</b> <b>1244-00603</b>
Plate size (mm) X x Y	130 x 130	220 x 120	80 x 80	220 x 232
Distance pipe-plate (mm)	100	120	100	100
Number of pipe straps required	2	2	1	2
Max. pipe temperature (°C)	230	230	230	230
Weight (kg)	0.48	0.66	0.20	0.90

## LABELS AND TAGS



Warning labels indicate the presence of electrical heat-tracing under the insulation of the pipe or other equipment. (min. of 1 label per 5 m of heat-tracing line). Also suitable for stainless steel pipes.

Language	EHT label reference	Product number
Arabian	LAB-ETL-ARA	036236-000
Bulgarian	LAB-I-01/bulgarian	1244-002183
Croatian	ETL-HR	938764-000
Czech	ETL-CZ	731605-000
Danish	ETL-DK	C97690-000
Dutch	LAB-I-23	749153-000
English	LAB-I-01	938947-000
Estonian/English	LAB-ETL-EST	1244-001415
Finnish	LAB-ETL-SF	756479-000
French	LAB-I-05	883061-000
German/French/Italian (230V)	LAB-ETL-CH	148648-000
German	ETL-G	597779-000
German/French/Italian/ English (400V)	LAB-ETL-400	1244-007644
Hungarian	LAB-ETL-H	623725-000
Italian	ETL-I	C97688-000
Latvian	LAB-I-32	841822-000
Lithuanian	LAB-ETL-LIT	105300-000
Norwegian	ETL-N	C97689-000
Norwegian/English	LAB-ETL-NE	165899-000
Polish	ETL-PL	258203-000
Portugese	LAB-ETL-POR	945960-000
Romanian	ETL-RO	902104-000
Russian	LAB-ETL-R	574738-000
Russian/English	LAB-I-01/E/R	1244-001060
Russian/English/Azeri	LAB-I-01/AZ/R/E	1244-012283
Slovenian	ETL-SLO	538156-000
Spanish	ETL-Spanish	C97686-000
Swedish	LAB-ETL-S	691703-000



Language	Component label reference	Product number
English	LAB-I-02	774499-000
Russian/English	LAB-I-02/E/R	1244-001059
	LAB-ENDSEAL	146909-000
English	ETL-END-SEAL	103405-000
	LAB-SPLICE	007063-000

## STABILIZED DESIGN LABELS

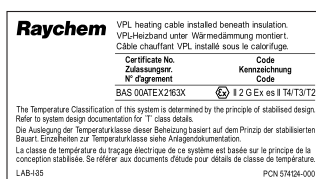
If compliance to the T-class or A.I.T. cannot be achieved by the unconditional T-rating of the heating cable, the hazardous area regulations require that cable sheath temperature is determined by the rules of stabilized design as per EN 60079-30 and the heating circuit is marked accordingly. The following labels are available for this purpose (min.1 label per heating circuit)

## LAB-I-35

Stabilized design sticker. To be installed when power-limiting VPL heating cables are used in hazardous areas.

PN: 574124-000

Weight: 0,0015 kg



## ACCESSORIES

### LAB-EX-XTV-KTV

Aluminum tag plate for XTV and KTV self-regulating heating cables. To be installed if T-class compliance was proven by stabilized design and not by unconditional T-rating.  
PN: 1244-011961      Weight: 0.04 kg

### LAB-EX-FXT

Aluminum tag plate. To be installed when parallel constant wattage FMT or FHT heating cables are used in hazardous areas.  
PN: 1244-006953      Weight: 0.04 kg

### PI-LABEL-EX

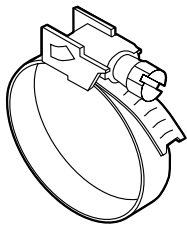
Aluminum tag plate. To be installed when series polymer insulated XPI & XPI-S heating cables are used in hazardous areas.  
PN: 1244-006940      Weight: 0.04 kg

### PI-LABEL-NH

Aluminum tag plate. To be installed when series polymer insulated XPI & XPI-S heating cables are used non hazardous areas. This label is not mandatory but highly recommended for future reference.  
PN: 1244-006941      Weight: 0.04 kg

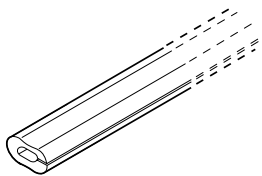
## PIPE STRAPS

Metal straps for pipe mounting of integrated power connections, above the insulation tees and end seals as well as support brackets and the tubular insulation entry.  
Banding: stainless steel



Pipe outer diameter in mm	(inches)	Pipe strap	PN (Weight)
20 - 47	(1/2" - 1 1/4")	PSE-047	700333-000 (0.017 kg)
40 - 90	(1 1/4" - 3")	PSE-090	976935-000 (0.024 kg)
60 - 288	(2" - 10")	PSE-280	664775-000 (0.052 kg)
60 - 540	(2" - 20")	PSE-540	364489-000 (0.052 kg)

## PROTECTIVE GROMMET



### G-02

Silicone grommet that protects the heating cable at sharp edges such as endplates of insulation cladding, flanges etc. It can be cut-to-length and resists temperatures up to 215°C.  
Sold in pieces of 1 m.

PN: 412549-000      Weight: 0.37 kg/m

## FIXING MATERIALS

Self-adhesive tape for fixing the heating cables on pipes or other equipment.

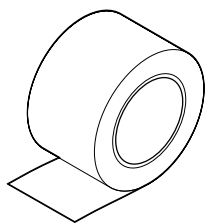


### GT-66

Glass cloth tape for attaching heating cable to pipe.  
Not for stainless steel pipes or for installation temperatures below 5°C.  
20 m per roll, 12 mm width.  
PN: C77220-000      Weight: 0.053 kg

### GS-54

Glass cloth tape for attaching heating cable to pipe.  
For stainless steel pipes or for any installation below 5°C.  
16.5 m per roll, 12 mm width.  
PN: C77221-000      Weight: 0.048 kg

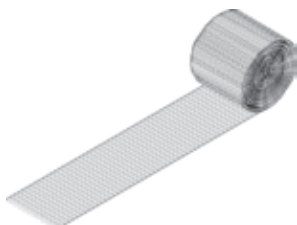
**ATE-180**

Aluminium tape\* for attaching heating cables and thermostat sensors to pipes and tanks. Minimum installation temperature: 0°C. Also suitable for stainless steel pipes.

55 m per roll, 63.5 mm width.

PN: 846243-000 Weight: 0.84 kg

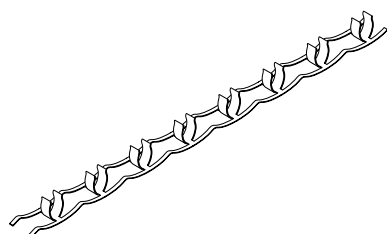
\*Power output of selfregulating heating cables might increase when installed with aluminium tape or other heat transfer aids. Please use TraceCalc or contact Pentair representative for further details.

**HWA-METAL-MESH-SS-50MM-10M**

Stainless steel mesh for fixation of heating cables on valves, pumps or other odd-shaped surfaces. This mesh provides optimum contact and heat transfer between heating cables and heated equipment and can be used for exposure temperatures up to 400°C.

10 m per roll, 50 mm width.

PN: 1244-005772 Weight: 0.36 kg

**HWA-PI-FIX-SS-XMM-10M**

Stainless steel clip band to attach Polymer Insulated series heating cables to pipes. Clips at regular distances to allow for even heater spacing. Band available in two sizes for different diameter ranges.

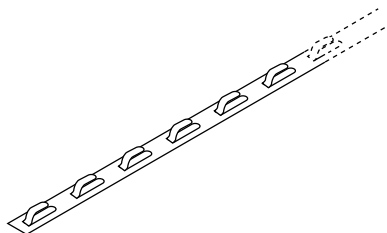
10 m per roll.

For diameters up to 5 mm, HWA-PI-FIX-SS-5MM-10M

PN: 1244-007768 Weight: 0.32 kg

For diameters up to 8 mm, HWA-PI-FIX-SS-8MM-10M

PN: 1244-007769 Weight: 0.52 kg

**HARD-SPACER-SS-25MM-25M**

Stainless steel spacer for fixing the heating cable on walls, tanks and vessels, etc.

Width spacer: 12.5 mm.

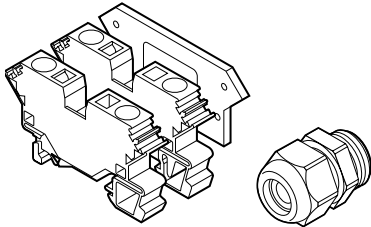
Fixing distance for cables: each 25 mm.

25 m per roll.

PN: 107826-000 Weight: 1.10 kg

**EAC** (Russia, Kazakhstan, Belarus) For other countries contact your local Pentair representative.  
Valid for following terminals, glands, plugs, adaptors and reducers.

**TERMINALS**



**HWA-WAGO-TSTAT-KIT**

Thermostat kit with supplementary terminals to connect thermostats of type RAYSTAT-EX-02 to the junction boxes JBS, JBM and JBU.  
The kit includes 2 terminals Spring-type terminals (1 x L, 1 x PE), 1 power cable gland GL-36-M25, 1 end plate and 1 installation instruction.  
PN: 966659-000 Weight: 0.073 kg

PTB 98 ATEX 3133 U (Terminal)	II 2G Ex e II II 2D
and	
PTB 99 ATEX 3128 X (Gland)	II 2G Ex e II II 2D Ex tD A21 IP66

**HWA-WAGO-PHASE**

Phase/neutral terminal (Ex e), spare part for various junction boxes, max. 10 mm<sup>2</sup> solid/stranded.  
PN: 633476-000 Weight: 0.019 kg

PTB 98 ATEX 3133 U	II 2G Ex e II II 2D
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**HWA-WAGO-EARTH**

Earth terminal (Ex e), spare part for various junction boxes, max. 10 mm<sup>2</sup> solid/stranded.  
PN: 911505-000 Weight: 0.027 kg

PTB 98 ATEX 3133 U	II 2G Ex e II II 2D
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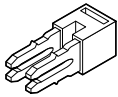
**HWA-WAGO-ENDPLATE**

End plate for HWA-WAGO-..., 10 mm<sup>2</sup> terminals, spare part.  
PN: 983674-000 Weight: 0.003 kg

PTB 98 ATEX 3133 U	II 2G Ex e II II 2D
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**HWA-WAGO-JUMPER**

Jumper to bridge HWA-WAGO-..., 10 mm<sup>2</sup> terminals, spare part.  
PN: 550942-000 Weight: 0.0004 kg



PTB 98 ATEX 3133 U	II 2G Ex e II II 2D
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**HWA-WDM-PHASE-35**

Phase/neutral screw terminal (Ex e), spare part for JB-EX-xx/35MM2 junction boxes, max. 35 mm<sup>2</sup> solid/stranded.  
PN: 1244-006990 Weight: 0.052 kg

KEMA 98 ATEX 1683 U	II 2G Ex e II II 2D
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**HWA-WDM-EARTH-35**

Earth screw terminal (Ex e), spare part for JB-EX-xx/35MM2 junction boxes, max. 35 mm<sup>2</sup> solid/stranded.  
PN: 1244-006992 Weight: 0.077 kg

KEMA 98 ATEX 1683 U	II 2G Ex e II II 2D
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**HWA-WDM-EARTH-10**

Earth screw terminal (Ex e), spare part for JB-EX-xx/35MM2 junction boxes, max. 10 mm<sup>2</sup> solid/stranded.


PN: 1244-006992 Weight: 0.030 kg

KEMA 98 ATEX 1683 U  II 2G Ex e II  
 II 2D

**HWA-WDM-JUMPER-35-2**

Jumper to bridge two HWA-WDM-... 35 mm<sup>2</sup> terminals, spare part



PN: 1244-006995 Weight: 0.013 kg

KEMA 98 ATEX 1683 U  II 2G Ex e II  
 II 2D

**HWA-WDM-JUMPER-35-3**

Jumper to bridge three HWA-WDM-... 35 mm<sup>2</sup> terminals, spare part

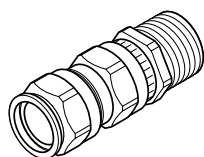
PN: 1244-006996 Weight: 0.020 kg

KEMA 98 ATEX 1683 U  II 2G Ex e II  
 II 2D

**HWA-WDM-PLATE**

End plate for HWA-WDM-... 35 mm<sup>2</sup> terminals, spare part

PN: 1244-007004 Weight: 0.005 kg

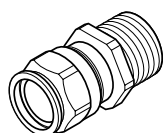
**GLANDS****GL-33**

3/4" NPT power cable gland for RAYSTAT-EX-02 (Ex d IIC)

Nickel plated brass, silicone grommet.

For use with armoured power cables with outer sheath diameter of 13.5 - 21 mm and inner sheath diameter of 10 - 15.5 mm.

PN: 1244-017517 Weight: 0.14 kg

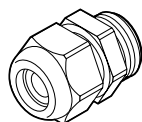
**GL-34**

3/4" NPT power cable gland for RAYSTAT-EX-02 (Ex d IIC)

Nickel plated brass, silicone grommet.

For use with non-armoured power cables with outer sheath diameter of 10 - 15.5 mm.

PN: 1244-017518 Weight: 0.08 kg

**GL-36-M25**

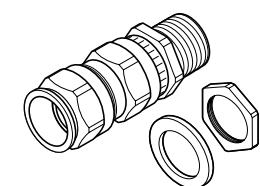
M25 power cable gland (Ex e)

Polyamide.

For use with non-armoured power cables with outer diameter range 8 - 17 mm.

Spare part for JBS-100, JBM-100 and JBU-100.

PN: 774424-000 Weight: 0.016 kg

**GL-38-M25-METAL**

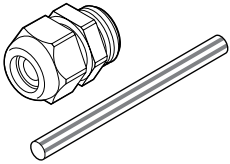
M25 power cable gland (Ex e II and Ex d IIC) for use with junction boxes with internal earth plate (-EP) or metal boxes.

Nickel plated brass, silicone grommet.

For use with armoured power cables with sheath diameter of 13.5 - 21 mm and inner sheath diameter 10 - 15.5 mm.

PN: 056622-000 Weight: 0.15 kg

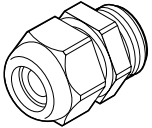
## ACCESSORIES



### GL-44-M20-KIT

M20 cable gland (Ex e), polyamide for use with PI cables with a diameter range of 5 - 13 mm. With green/yellow sleeve.

PN: 1244-000 848      Weight: 0.17 kg



### GL-45-M32

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

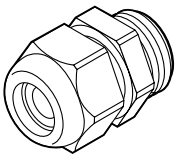
PN: 1244-000 847      Weight: 0.028 kg



### GL-50-M20

M20 cable gland (Ex e), polyamide for use with power cables with a diameter range of 5.5 - 13 mm.

PN: 1244-007000      Weight: 0.009 kg



### GL-51-M40

M40 cable gland (Ex e), polyamide for use with power cables with a diameter range of 17 - 28 mm.

PN: 1244-007003      Weight: 0.045 kg

## PLUGS



### HWA-PLUG-M20-EXE-PLASTIC

M20 stopping plug Ex e.

Polyamide.

Spare parts for various junction boxes.

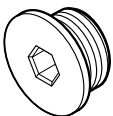
PN: 1244-000 845      Weight: 0.003 kg

PTB 98 ATEX 3130

Ex II 2G Ex e II

Ex II 2D Ex tD A21 IP66

IECEX PTB 03.0000



### HWA-PLUG-M25-EXE-PLASTIC

M25 stopping plug Ex e.

Polyamide.

Spare parts for JBS-100, JBM-100 and JBU-100.

PN: 434994-000      Weight: 0.007 kg

PTB 98 ATEX 3130

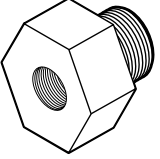
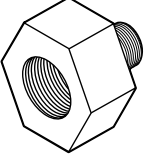
Ex II 2G Ex e II

Ex II 2D Ex tD A21 IP66

IECEX PTB 03.0000



## ADAPTORS/REDUCERS

	Prod Description	Male	Female	Hazardous area approved	Material	Extra accessories	Product Number (Weight)
	REDUCER-M25/M20-EEXE	M25	M20	Ex e	Polyamide	None	1244-002089 [0.021 kg]
	REDUCER-M32/M25-EEXE	M32	M25	Ex e	Polyamide	None	1244-000859 [0.009 kg]
	REDUCER-M40/M32	M40	M32	Ex e	Polyamide	O-ring	1244-007007 [0.016 kg]
	ADPT-PG16-M25-EEXE	M25	PG16	Ex e	Polyamide	O-ring	541892-000 [0.020 kg]
	REDUCER-M25/20-EEXD	M25	M20	Ex d	Brass	O-ring	404287-000 [0.07 kg]
	REDUCER-M25/20	M25	M20	Ex d	Brass	Locknut, Fibre washer, O-ring	630617-000 [0.07 kg]
	REDUCER-M25/M20-EEXD-SS	M25	M20	Ex d	Stainless steel	O-ring	1244-002090 [0.028 kg]
	REDUCER-1NPT/PG16-EEXD	1" NPT	PG16	Ex d	Stainless steel	None	414478-000 [0.10 kg]
	REDUCER-1NPT/M25	1" NPT	M25	Ex d	Stainless steel	None	1244-000953 [0.55 kg]
	REDUCER-M25/PG16-EEXE	PG16	M25	Ex e	Polyamide	O-ring	953780-000 [0.03 kg]
	ADAPTOR-M20/25	M20	M25	Ex d	Brass	Locknut and O-ring	492799-000 [0.092 kg]
	ADPT-M20/25-EEXD	M20	M25	Ex d	Brass	O-ring	684953-000 [0.09 kg]

## APPROVALS

## REDUCER-M25/20-EEXD

SIRA 00ATEX1094    ⓧ I M2 II 2GD  
 Ex d I/IIC Mb Gb Ex e I/IIC Mb Gb  
 Ex tb IIIC Db IP6X  
 IECEX SIR 05.0042U

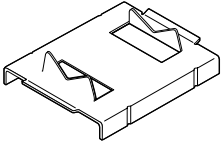
## REDUCER-M25/PG16-EEXE

SIRA00ATEX3091    ⓧ II 2GD  
 Ex e IIC Gb  
 Ex tb IIIC Db IP 6X  
 IECEX SIR 05.0042U

## ACCESSORIES

### SMALL PIPE ADAPTORS

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#### JBS-SPA

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Small pipe adaptor required for pipes  $\leq 1$ " (DN25), applicable for JBS-100, E-100, E-100-L  
E90515-000 (bag of 5 adaptors) Weight: 0.14 kg

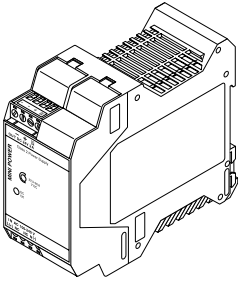
#### JBM-SPA

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Small pipe adaptor required for pipes  $\leq 1$ " (DN25), applicable for JBM-100, T-100  
D55673-000 (bag of 5 adaptors) Weight: 0.40 kg

### POWER SUPPLY

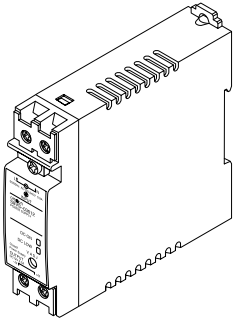
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#### MONI-RMC-PS24

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24 Vdc stabilized power supply  
Wide range input (100 - 240 Vac) power supply to provide  
24 Vdc input for MONI- RMC-BASE.  
Surface or DIN 35 rail mounted.  
PN: 972049-000 Weight: 0.28 kg



#### MONI-PS12

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12 Vdc stabilized power supply  
Wide range input (100 - 240 Vac) power supply to provide 12 Vdc input for the  
Raychem NGC-30-CRM-E and Raychem NGC-30-CRMS-E cards.  
DIN 35 rail mountable.  
PN: 1244-001505 Weight: 0.18 kg



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