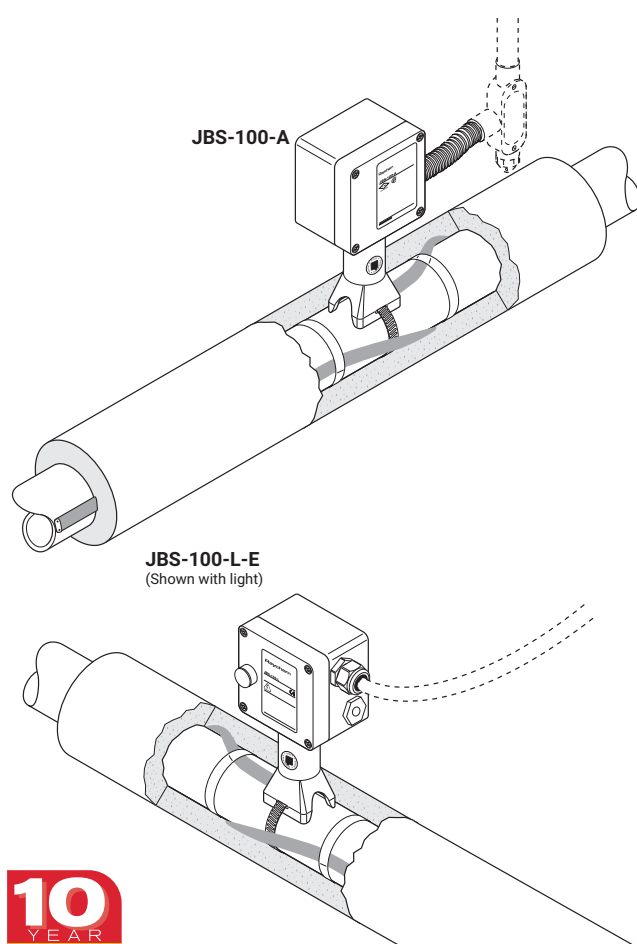


## Single-entry power connection with junction box

### PRODUCT OVERVIEW



The Raychem JBS-100 kit is designed to connect power to a single Raychem brand BTV, QTVR, XTVR, HTV or VPL heating cable. It is approved by FM, CSA, PTB and IEx for use in hazardous locations.

The JBS-100 integrates the functions of connection kits and insulation entries. The rugged stand protects the heating cable and allows for up to four inches (100 mm) of thermal insulation.

The cold-applied core sealer does not require a heat gun or torch for installation, so no hot work permit is necessary. The silicone-free, noncuring sealant allows easy installation and re-entry for maintenance.

Innovative spring clamp terminals provide fast installation and safe, reliable, maintenance-free operation.

Compared with other systems, this connection kit significantly reduces installation time. The kit is offered in three versions, customized for local installation practices, and is also available with a plug-in LED light (-L) that indicates when power is supplied to the heating cable circuit.

The kit contains all the necessary materials for a complete installation except for one pipe strap, which must be ordered separately.



### DESCRIPTION

JBS-100-A, A6 JBS-100-L-A* *Not for use with 480 V VPL	JBS-100-E JBS-100-L-E* *Not for use with 480 V VPL	JBS-100-EP JBS-100-L-EP* *Not for use with 480 V VPL
This kit has a junction box with one through hole for use with 3/4 inch conduit.	This kit has a junction box with two M25 threaded entries, one stopping plug and one plastic power cable gland.	This kit has a junction box with two M25 threaded entries, an earthing plate and an external earthing stud. It is designed for use with armored power cables.









## KIT CONTENTS

JBS-100-A, A6 JBS-100-L-A	JBS-100-E JBS-100-L-E	JBS-100-EP JBS-100-L-EP
1 junction box with terminals 1 stand assembly 1 core sealer 1 green/yellow tube 1 light module (for -L only) 1 cable tie	1 junction box with terminals 1 stand assembly 1 core sealer 1 green/yellow tube 1 M25 gland for power cable 8–17 mm in diameter 1 M25 stopping plug 1 light module (for -L only) 1 cable tie	1 junction box with terminals, earth continuity plate, and stud 1 stand assembly 1 core sealer 1 green/yellow tube 1 M25 stopping plug 1 light module (for -L only) 1 cable tie

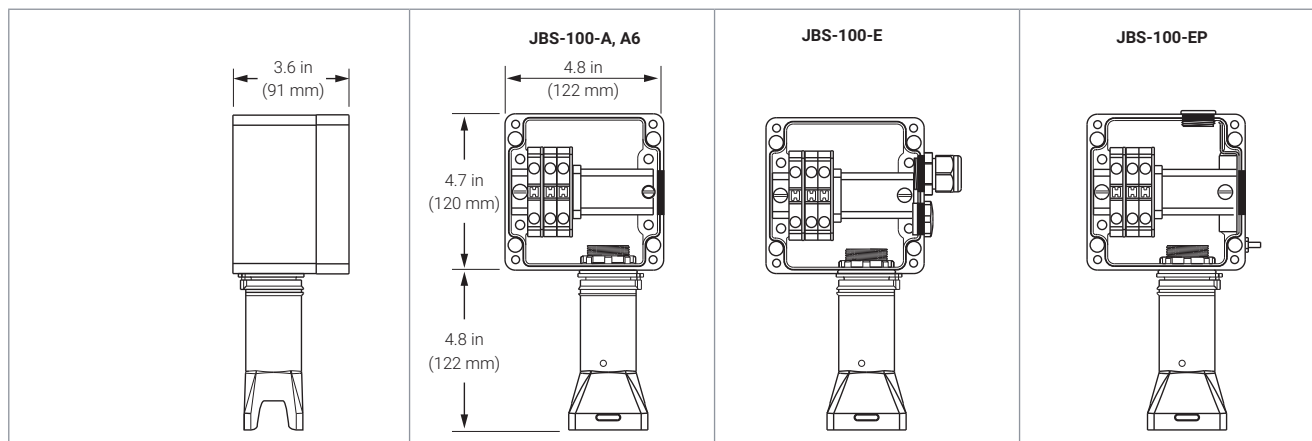
**Note:** Order appropriate pipe strap separately (one per kit)

## APPROVALS

### Hazardous locations

JBS-100-A JBS-100-L-A	JBS-100-E JBS-100-L-E	JBS-100-EP JBS-100-L-EP
	PTB 20 ATEX 1008 U  II 2 G Ex eb mb IIC Gb  II 2 D Ex tb mb IIIC Db	
 CL I ZN 1 AEx eb IIC T* Gb Ex eb IIC T* Gb ZN21 AEx tb IIIC T*°C Db Ex tb IIIC T*°C Db CL I ZN 1 AEx eb mb IIC T* Gb Ex eb mb IIC T* Gb ZN21 AEx mb tb IIIC T*°C Db Ex mb tb IIIC T*°C Db		IECEX PTB 20.0014U Ex eb mb IIC Gb Ex tb mb IIIC Db
 (1) Class I, Div. 2, Groups A, B, C, D  Class II, Div. 2, Groups F, G Class III NEMA 4X Temp Code T*	 Ex eb IIC T* Gb Ex eb mb IIC T* Gb	
 Class I, Div. 2 (Zone 2 <sup>(2)</sup> ), Groups A, B, C, D Class I Zone 2 GROUP IIC (HTV heating cable only)	 CL I ZN 1 AEx eb IIC T* Gb Ex eb IIC T* Gb ZN21 AEx tb IIIC T*°C Db Ex tb IIIC T*°C Db CL I ZN 1 AEx eb mb IIC T* Gb Ex eb mb IIC T* Gb ZN21 AEx mb tb IIIC T*°C Db Ex mb tb IIIC T*°C Db	
	* For system T-rating, see heating cable or design documentation. (1) Excluding HTV heating cable. (2) Per C22.1 Table 18 NOTE: Protection method "m" or "mb" applies to -L model only	

## DIMENSIONS



## PRODUCT SPECIFICATIONS

	JBS-100-A, A6 JBS-100-L-A	JBS-100-E JBS-100-L-E	JBS-100-EP JBS-100-L-EP
Heating cable capability	BTV-CR, BTV-CT, QTVR-CT, XTVR, HTV-CT and VPL-CT		
Ingress protection	NEMA 4X	IP66	IP66
Entries	1 x 3/4 in	2 x M25	2 x M25
Minimum installation temperature	-67°F (-55°C)	-67°F (-55°C)	-67°F (-55°C)
Minimum ambient temperature	-67°F (-55°C)	-67°F (-55°C)	-67°F (-55°C)
Maximum ambient temperature	132°F (56°C)*	132°F (56°C)*	132°F (56°C)*
* For -L lighted kits, the ambient temperature range is -40°F (-40°C) to 104°F (40°C). For non-lighted kits, use a power wire with continuous temperature rating of > 194°F (90°C). For -E and -EP kits use a metallic power cable gland.			
Terminals	Spring clamp Ex e 2 line, 1 ground	Spring clamp Ex e 1 phase, 1 neutral, 1 earth	Spring clamp Ex e 1 phase, 1 neutral, 1 earth
Maximum conductor size	8 AWG (A6 to 6 AWG)	10 mm <sup>2</sup>	10 mm <sup>2</sup>
Maximum operating voltage	480 Vac*	480 Vac*	480 Vac*
*JBS-100-L-E, JBS-100-L-EP and JBS-100-L-A are limited to 277 Vac. Extra conditions for safe use apply for voltages higher than 254 Vac. Please refer to the certificate or installation instructions for full details.			
Maximum circuit breaker rating*	50 A	40 A	40 A
* For pipe temperatures >150°C and <260°C with XTVR or HTV heating cables, the maximum operating current shall be reduced to maximum 20 A.			

## MATERIALS

Enclosure	Electrostatic charge-resistant glass-filled engineered polymer, black	Electrostatic charge-resistant glass-filled engineered polymer, black	Electrostatic charge-resistant glass-filled engineered polymer, black
Lid screws	Stainless steel	Stainless steel	Stainless steel
Lid gasket	Silicone rubber	Silicone rubber	Silicone rubber
Earth continuity plate	n/a	n/a	Steel, zinc-plated and yellow-chromated

## OPTIONAL LED INDICATOR LIGHT

Color	Red	Green	Green
Voltage rating	100–277 Vac	100–277 Vac	100–277 Vac
Power consumption	< 1 W	< 1 W	< 1 W

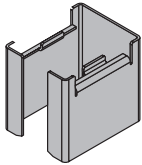
## ORDERING DETAILS

Power connection			
Catalog number	JBS-100-A / JBS-100-A6	JBS-100-E	JBS-100-EP
Part number	085947-000 / C26470-000	829939-000	158251-000
Weight	2.5 lb (1.1 kg)	1.2 kg (2.6 lb)	1.3 kg (2.9 lb)
Power connection with light			
Catalog number	JBS-100-L-A	JBS-100-L-E	JBS-100-L-EP
Part number	944699-000	054363-000	075249-000
Weight	3.5 lb (1.6 kg)	1.6 kg (3.5 lb)	1.7 kg (3.7 lb)

## ACCESSORIES (Not included in the kit)

### Junction box standoff

For insulation thickness  $\geq 120$  mm &  $\leq 180$  mm\*

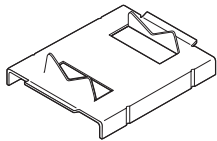


Catalog number	JBS-100-STANDOFF
Part Number	P000003408
Weight	0.297 lb / 135 g

\* Consider extra pipe strap length 6-9" (150-225 mm) for attachment

### Small pipe adapter

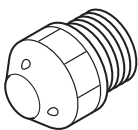
Required for stand on pipes  $\leq 1$ "



Catalog number	JBS-SPA
Part Number	E90515-000
Weight	0.408 lb / 185 g (Bag of 5 adaptors)

### Conduit Drain $\frac{3}{4}$ "

Prevents condensate from collecting in the box



Catalog number	JB-DRAIN-PLUG-3/4IN
Part Number	278621-000
Weight	0.074 lb / 36 g

### North America

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