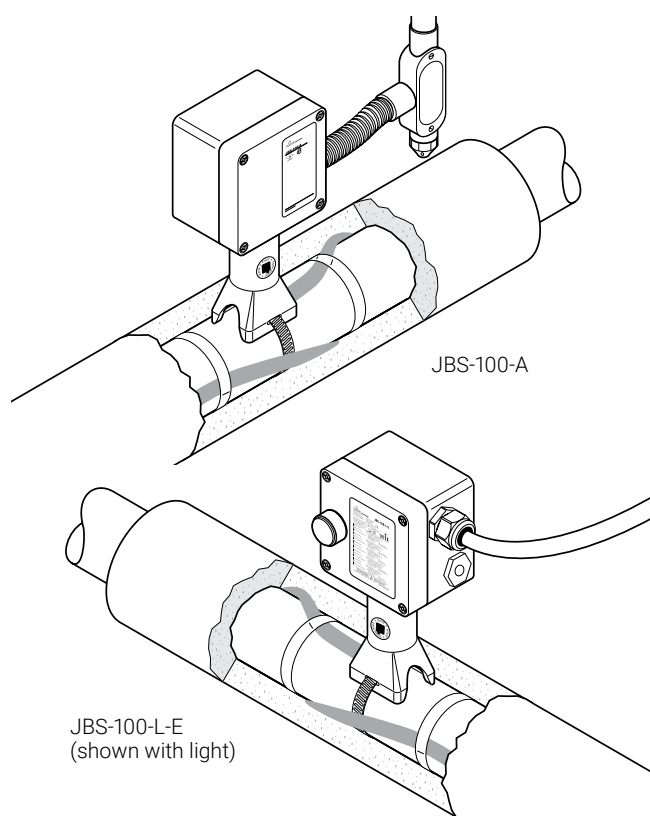


Single-Entry power connection with junction box

PRODUCT OVERVIEW



The nVent RAYCHEM JBS-100 kit is designed to connect power to a single nVent RAYCHEM BTV, QTVR, XTV, KTV, HTV or VPL industrial parallel heating cable. It is approved by FM, CSA, and PTB for use in hazardous locations.

The JBS-100 integrates the functions of both connection kits and insulation entries. The rugged stand protects the heating cable and allows for up to 100 mm (4") of thermal insulation.

The core sealing boot does not require a heat gun or torch for the installation (no hot work permit necessary). The non-curing sealant (silicone free) in the boot allows easy installation and facilitates maintenance.

Spring-type terminals provide fast installation and safe, reliable, maintenance-free operation. This connection kit significantly reduces installation time. The kit is offered in three basic versions, customised for local installation practices. All kits are also available as a lighted version. These include a unique light module with a superbright LED that simply plugs into the terminals, and a lens in the lid. This provides indication that power is available in the box. There is also a connection kit with drain plug available.

Description

JBS-100-A JBS-100-L-A	JBS-100-E JBS-100-L-E JBS-100-D-E	JBS-100-EP JBS-100-L-EP
This connection system is certified for use in North America and has one through-hole for use with 3/4" conduit.	This connection system is certified for use in IEC regions and provides two M25 threaded entries, one stopping plug, and one plastic power cable gland.	This connection system is certified for use in IEC regions and provides two M25 threaded entries, an earthing plate, and an external earthing stud. It is designed for use with armoured cables.

Kit contents

JBS-100-A JBS-100-L-A	JBS-100-E JBS-100-L-E JBS-100-D-E	JBS-100-EP JBS-100-L-EP
1 junction box with terminals	1 junction box with terminals	1 junction box with terminals, earth plate, and stud
1 light module (for -L only)	1 light module (for -L only)	1 light module (for -L only)
1 stand	1 stand	1 stand
1 core sealer	1 core sealer	1 core sealer
1 green/yellow earthing sleeve	1 green/yellow earthing sleeve	1 green/yellow earthing sleeve
1 polywater sachet	1 M25 gland for power cable with 8-15 mm diameter	1 M25 stopping plug
1 cable tie	1 M25 stopping plug	1 polywater sachet
	1 polywater sachet	1 cable tie
	1 cable tie	
	1 ATEX/IECEx Certified drainplug (for JBS-100-D-E only)	

PRODUCT SPECIFICATIONS

Dimensions (nominal)

	JBS-100-A JBS-100-L-A	JBS-100-E JBS-100-L-E JBS-100-D-E	JBS-100-EP JBS-100-L-EP

Technical details

	JBS-100-A JBS-100-L-A	JBS-100-E JBS-100-L-E JBS-100-D-E	JBS-100-EP JBS-100-L-EP
Heating cable capability	BTV-CR, BTV-CT, QTVR-CT, XTV-CT, KTV-CT, HTV-CT, VPL-CT		
Ingress protection	IP66	IP66	IP66
Entries	1 x 3/4"	2 x M25	2 x M25
Ambient temperature range	–55°C to 56°C (JBS-100-A) –40°C to 40°C (JBS-100-L-A)	–55°C to +56°C* (JBS-100-E and JBS-100-D-E) –40°C to +40°C (JBS-100-L-E)	–55°C to +56°C* (JBS-100-EP) –40°C to +40°C (JBS-100-L-EP)
	* Extra conditions for safe use apply at ambient temperatures >40°C. Temperature resistant power cable and metal glands must be used. Please refer to the certificate or installation instructions for full details.		
Max. pipe temperature	Refer to heating cable specification		
Terminals	Spring-type terminals 2 line, 1 ground	Spring-type terminals 1 phase, 1 neutral, 1 earth	Spring-type terminals 1 phase, 1 neutral, 1 earth
Max. conductor size	8 AWG stranded	10 mm ² stranded, 10 mm ² solid	10 mm ² stranded, 10 mm ² solid
Max. operating voltage	277 Vac	480 Vac*	480 Vac*
	* JBS-100-L-E and JBS-100-L-EP are limited to 254 Vac. Extra conditions for safe use apply for voltages higher than 254 Vac. Please refer to the certificate or installation instructions for full details.		
Max. continuous operating current (***)	53 A	53 A	53 A

(***) For pipe temperature >150°C and <260°C and XTV, KTV or HTV heating cables, the maximum operating current shall be reduced to maximum 20 A.

Materials of construction

Enclosure, lid, and stand	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 blue chromated

Optional LED indicator light

Colour	Red	Green	Green
Voltage rating	100-277 Vac	100-254 Vac	100-254 Vac
Power consumption	< 1 W	< 1 W	< 1 W

APPROVALS

For use in ordinary and hazardous area Zone 1 and Zone 2 (Gas), Zone 21 and Zone 22 (Dust) (and Class I Div 2).

Temperature classification

Temperature classification is defined by the complete system.

Product certification



For certifications in other regions (FM, CSA, IEx etc.), please refer to the installation manual.

More details about product certification, approvals and conditions of safe use are available in the installation manual at www.nVent.com/RAYCHEM.

ORDERING INFORMATION**

Power connection

Part Description	JBS-100-A	JBS-100-E	JBS-100-EP
PN (Weight)	085947-000 (2.5 lb)	829939-000 (1.2 kg)	158251-000 (1.3 kg)

Power connection with light

Part Description	JBS-100-L-A	JBS-100-L-E	JBS-100-L-EP
PN (Weight)	944699-000 (3.5 lb)	054363-000 (1.6 kg)	075249-000 (1.7 kg)

Power connection with drain plug

Part Description		JBS-100-D-E	
PN (Weight)		1244-021057 (1.4 kg)	

Accessories

Conduit drain 3/4"	JB-DRAIN-PLUG-3/4IN (prevents condensate from collecting in the box) ONLY FOR JBS-100-L-A
Small pipe adaptor	JBS-SPA, required for pipes $\leq 1"$ (DN 25) E90515-000 (bag of 5 adaptors)
Junction box stand off	JBS-100 STANDOFF, P000003408 For insulation $120 \geq 180$ mm
Glands for power cables	GL-55-M25 hazardous area approved gland for cables 8-15 mm (temperature range $-55^{\circ}\text{C}/70^{\circ}\text{C}$) GL-36-M25 hazardous area approved gland for cables 8-17.5 mm (temperature range $-20^{\circ}\text{C}/70^{\circ}\text{C}$)

(**) Localized versions may exist with limited approvals and different part numbers. Contact your local sales representative.

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