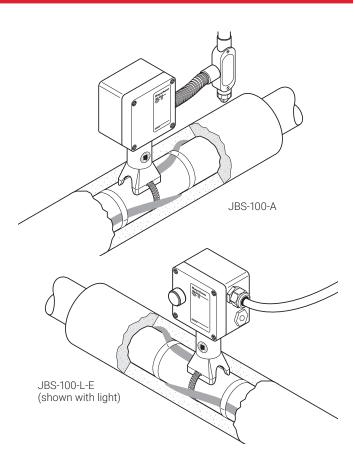
# JBS-100



# SINGLE-ENTRY POWER CONNECTION WITH JUNCTION BOX igodot



The nVent RAYCHEM JBS-100 kit is designed to connect power to one nVent RAYCHEM BTV, QTVR, XTV, KTV 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 kit is for use in North America and has one through-hole for use with 3/4" conduit.	This kit is for use in Europe and provides two M25 threaded entries, one stopping plug, and one plastic power cable gland.	This kit is for use in Europe and provides two M25 threaded entries, an earthing plate, and an external earthing stud. It is designed for use with armoured cables.
KIT CONTENTS			
	<ol> <li>junction box with terminals</li> <li>light module (for -L only)</li> <li>stand</li> <li>core sealer</li> <li>green/yellow earthing sleeve</li> <li>polywater sachet</li> <li>cable tie</li> </ol>	<ol> <li>junction box with terminals</li> <li>light module (for -L only)</li> <li>stand</li> <li>core sealer</li> <li>green/yellow earthing sleeve</li> <li>M25 gland for power cable 8-15 mm (temperature range -55°C / 70°C) in diameter</li> <li>M25 stopping plug</li> <li>polywater sachet</li> <li>cable tie</li> </ol>	<ol> <li>junction box with terminals, earth plate, and stud</li> <li>light module (for -L only)</li> <li>stand</li> <li>core sealer</li> <li>green/yellow earthing sleeve</li> <li>M25 stopping plug</li> <li>polywater sachet</li> <li>cable tie</li> </ol>

1 ATEX/IECEx Certified drainplug (for JBS-100-D-E only)

Hazardous	locations		
	Class I, Div. 2, Groups A, B, C, D Class II, Div. 1 & 2, Groups E, F, G Class III	<ul> <li>PTB 09 ATEX 1059 U</li> <li>RU C-BE./IM43.B.01712</li> <li>IEx e IIC T* Gb X</li> <li>1Ex e mb IIC T* Gb X</li> <li>Ex tb IIIC T* Db X</li> <li>Ex tb mb IIIC T* Db X</li> <li>Ta -60°C+56°C IP66</li> <li>IECEx PTB 09.0037U</li> <li>Ex eb mb IIC T* Gb</li> <li>Ex mb tb IIIC T* Db</li> </ul>	PTB 09 ATEX 1059 U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db IECEx PTB 09.0037U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db
F M APPROVED WS	Class I, Div. 2, Groups A, B, C, D Class II, Div. 1 & 2, Groups E, F, G Class III	PTB 09 ATEX 1059 U II 2 G Ex eb mb IIC T* Gb III 2 D Ex mb tb IIIC T* Db IECEx PTB 09.0037U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db	PTB 09 ATEX 1059 U II 2 G Ex eb mb IIC T* Gb <ex> III 2 D Ex mb tb IIIC T* Db IECEx PTB 09.0037U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db</ex>
(1) Approved	CLI, ZN1, AEx e II T* CLI, ZN1, AEx em II T* (for -L only)	Ex e II T* Ex em II T* (for -L only)	Ex e II T* Ex em II T* (for -L only)
-WS®	Ex e II T* Ex em II T* (for -L only)	DNV approval DNV-GL TAE00000TV and DNV-GL TAE00000TU	DNV approval DNV-GL TAE00000TV and DNV-GL TAE00000TU

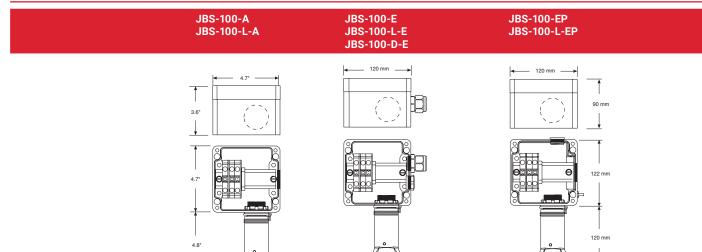
\*For T-rating, see heating cable or design documentation <sup>(1)</sup> Except VPL

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

	JBS-100-E JBS-100-L-E	JBS-100-EP JBS-100-L-EP
E	AC Ex	EAL Ex
E	x e IIC Gb U Ex tb IIIC Db U x e mb IIC Gb U x tb mb IIIC Db U	RU C-BE./IM43.B.01712 Ex e IIC Gb U Ex tb IIIC Db U Ex e mb IIC Gb U Ex tb mb IIIC Db U Ta -55°C+40°C IP66

### **DIMENSIONS (NOMINAL)**

APPROVALS (\*\*)



# **PRODUCT SPECIFICATIONS**

	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, VPL-CT				
Ingress protection	NEMA Type 4X	IP66/IP67	IP66/IP67			
Entries	1 x 3/4"	2 x M25 including power cable gland for diameter 8 - 17 mm	2 x M25			
Ambient temperature range	−50°C to +40°C	−50°C to +56°C* (JBS-100- Eand JBS-100-D-E) −40°C to +40°C (JBS-100-L-E	-50°C to +56°C* (JBS-100-EP) -40°C to +40°C (JBS-100-L-EP) )			
	*Extra conditions for safe use apply for ambient temperatures above +40°C. Please refer to the summary on page 136, the certificate or installation instructions for full details.					
Min. installation temperature	-50°C	-50°C	-50°C			
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 mm² stranded, 10 mm² solid	10 mm² stranded, 10 mm² 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 fo voltages higher than 254 Vac. Please refer to the summary on page 136, the certificate or installation instructions for full details.					
Max. continuous operating current	50 A heating cable circuit 40 A heating cable circuit 40 A heating cable circuit					
MATERIALS OF CONSTRUCTION	ON					
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			
PTIONAL LED INDICATOR LI	GHT					
Colour	Red	Green	Green			
Voltage rating	100-277 Vac	100-254 Vac	100-254 Vac			
Power consumption	< 1 W	< 1 W	< 1 W			
Ordering details (**)						
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)			
OWER CONNECTION WITH L	GHT					
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 D						
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)					
Glands for power cables	GL-55-M25 hazardous area approved gland for cables 8-15 mm (temperature range -55°C/70°C) GL-36-M25 hazardous area approved gland for cables 8-17.5 mm (temperature range -20°C/70°C)					

#### **North America**

Tel +1.800.545.6258 Fax +1.800.527.5703 thermal.info@nvent.com

## Europe, Middle East, Africa

Tel +32.16.213.511 Fax +32.16.213.604 thermal.info@nvent.com

#### **Asia Pacific**

Tel +86.21.2412.1688 Fax +86.21.5426.3167 cn.thermal.info@nvent.com

### Latin America

Tel +1.713.868.4800 Fax +1.713.868.2333 thermal.info@nvent.com



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