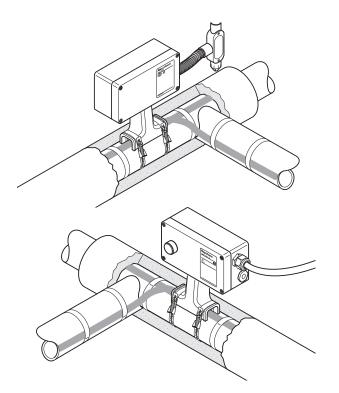
# JBM-100



# MUTIPLE-ENTRY POWER/TEE CONNECTION WITH JUNCTION BOX 🐼



The nVent RAYCHEM JBM-100 kit is designed to connect power to up to three nVent RAYCHEM BTV, QTVR, XTV, KTV, or VPL industrial parallel heating cables and is approved by FM, CSA, and PTB for use in hazardous locations.

The JBM-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

JBM-100-A JBM-100-L-A	J	IBM-100-E IBM-100-L-E IBM-100-D-E		IBM-100-EP IBM-100-L-EP	
This kit is for use in North America and has one 3/4" through holes for use with 3/4" conduit. One stopping plug is supplied in the kit.		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					
1 junction box with terminals	1	junction box with terminals	1	junction box with terminals, earth	
1 light module (for -L only)	1	light module (for -L only)		continuity plate, and stud	
1 stand	1	stand	1	light module (for -L only)	
3 core sealers	3	core sealers	1	stand	
3 green/yellow earthing sleeve	3	green/yellow earthing sleeve	3	core sealers	
1 3/4" stopping plug	1	M25 gland for power cable 8-15 mm	3	green/yellow earthing sleeve	
1 polywater sachet		(temperature range -55°C / 70°C) in diameter	2	M25 stopping plugs	
1 spanner	1	M25 stopping plug	1	polywater sachet	
1 strain relief assembly	1	polywater sachet	1	spanner	
2 grommet plugs	1	spanner	1	strain relief assembly	
	1	strain relief assembly	2	grommet plugs	
	2	grommet plugs			
	1	ATEX/IECEx Certified drainplug			

(for JBM-100-D-E only)

RAYCHEM-DS-EU1396-JBM100-EN-2009

Hazardous	locations		
F M APROVED	Class I, Div. 2, Groups A, B, C, D Class II, Div. 1 & 2, Groups E, F, G Class III	PTB 09 ATEX 1056U 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 IECEx PTB 09.0027U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db	PTB 09 ATEX 1056U II 2 G Ex eb mb IIC T* Gb III 2 D Ex mb tb IIIC T* Db IECEx PTB 09.0027U Ex eb mb IIC T* Gb Ex mb tb IIIC T* Db
F M APPROVED	(1) 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  ${}^{\scriptscriptstyle (1)}\mathsf{Except}$  VPL

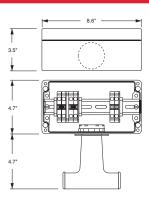
(\*\*) Localized versions may exist with limited approvals and different part numbers. Contact your local sales representative.

JBM-100-A JBM-100-L-A	JBM-100-E JBM-100-EP	JBM-100-L-E JBM-100-L-EP
	EAL Ex	EAL Ex
	TC RU C-BE.MЮ62.B.00054/18 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+56°C IP66 ООО "ТехИмпорт"	TC RU C-BE.MЮ62.B.00054/18 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 ООО "ТехИмпорт"

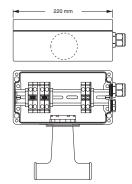
# DIMENSIONS (NOMINAL)

**APPROVALS (\*\*)** 

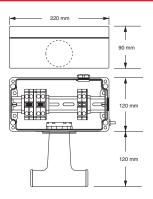
JBM-100-A JBM-100-L-A



JBM-100-E JBM-100-L-E JBM-100-D-E



JBM-100-EP JBM-100-L-EP



Heating cable capability	BTV-CR, BTV-CT, QTVR-CT, XT	V-CT, KTV-CT, VPL-CT		
Ingress protection	NEMA Type 4X	IP66	IP66	
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* (JBM-100-E and JBM-100-D-E) -40°C to +40°C (JBM-100-L-E)	-50°C to +56°C* (JBM-100-EP) -40°C to +40°C (JBM-100-L-EP)	
	*Extra conditions for safe use the summary on page 136, th	apply for ambient temperature e certificate or installation inst		
Min. installation temperature	-50°C	-50°C	-50°C	
Max. pipe temperature	Refer to heating cable specific	ation		
Terminals	Spring-type terminals line, 2 ground	Spring-type terminals 2 phase, 2 neutral, 2 earth	Spring-type terminals 2 phase, 2 neutral, 2 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*	
	*JBM-100-L-E and JBM-100-L- for voltages higher than 254 or installation instructions for	Vac. Please refer to the summa		
Max. continuous operating current	50 A heating cable circuit	40 A heating cable circuit	40 A heating cable circuit	
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	
Ordering Details (**)				
POWER CONNECTION				
Part Description (**)	JBM-100-A	JВМ-100-Е	JBM-100-EP	
PN (Weight)	179935-000 (4.3 lb)	831519-000 (1.9 kg)	986415-000 (2.1 kg)	
POWER CONNECTION WITH LIGHT				
Part Description	JBM-100-L-A	JBM-100-L-E	JBM-100-L-EP	
PN (Weight)	656081-000 (5.3 lb)	395855-000 (2.3 kg)	300273-000 (2.5 kg)	
POWER CONNECTION WITH DRAIN	PLUG			
Part Description	JBM-100-D-E			
PN (Weight)	1244-021056 (2.1 kg)			
ACCESSORIES				
Conduit drain 3/4"	JB-DRAIN-PLUG-3/4IN (prevents condensate from collecting in the box) ONLY FOR JBM-100-L-A			
Small pipe adaptor	JBM-SPA, required for pipes $\leq$ 1" (DN 25) D55673-000 (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 ap (temperature range -20°C/70°(		mm	

(temperature range -20°C/70°C)

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

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