

# Junction Boxes for Connection of Data, Control and Signal Cables

Junction boxes models range JB222(3)1-223-1X(14-17) and JB222(3)1-223-2X(16-24) is designed for connecting control cables to the electric heating systems.

The boxes' installation can have 2 mounting variants depending on the models chosen:

- JB222(3)1-223-1X(14-17) – with a pipe installation support UVK, to be mounted on the surface of the heated pipeline, tank, etc.
- JB222(3)1-223-2X(16-24) – installation on a wall or on a nearby metal structure or using a bracket directly on a pipeline. Brackets are supplied separately.

The box allows connection of one or two control cables, up to three temperature sensors and input

through thermal insulation of up to four temperature sensors (one reserved).

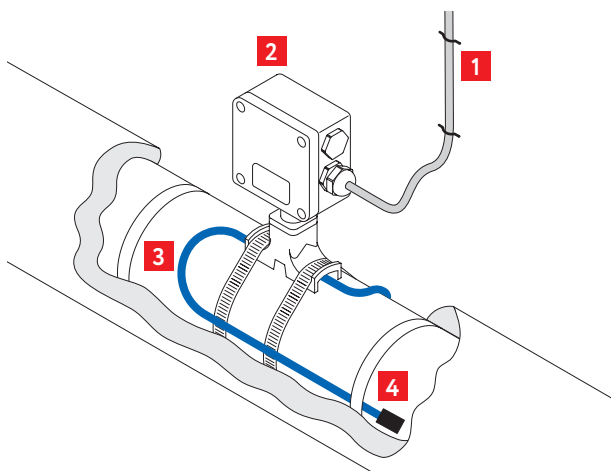
The enclosure design ensures moisture and dust ingress protection IP66 and high corrosion stability. Cable glands are intended for connecting unarmored power cables with a diameter of 7 to 18 mm or armored power cables with a diameter of 12 to 20 mm.

The installed terminal blocks allow the connection of multi-core or single-core wires with a cross-section of 0.5 to 2.5 mm<sup>2</sup>. Design options with screw or push-in terminal blocks and with various types of explosion protection: models JB221 – type e (increased safety) and models JB221 – type ia (intrinsic safety) – are available.

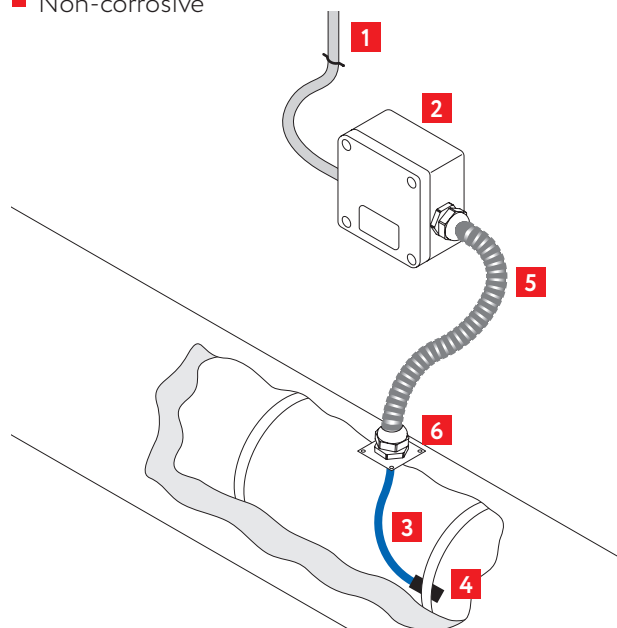


## Features and Application Areas

- Efficient solution for control cables connection and input through thermal insulation
- Approved for installation in explosion hazard areas
- Critical component parts included in the scope of supply. Metal pipe strap PFS/3, cable entry unit and flexible sealed gland FSG to be ordered separately
- Wide application range
- Quick and easy installation
- High thermal stability
- Non-corrosive



1. Control cable
2. Junction box JB222(3)1-223-1X(14-17)
3. Installation sensor cable
4. Temperature sensor



1. Control cable
2. Junction box JB222(3)1-223-2X(16-24)
3. Installation sensor cable
4. Temperature sensor
5. Flexible sealed gland
6. Cable entry unit



# Connection of Data, Control and Signal Cables

## Technical Data

Dust and moisture protection rating	IP66
Explosion protection marking	Ex eb IIC T6...T3 Gb Ex ia IIC T6 Gb Ex tb IIC T85°C... T165°C Db
Operating ambient temperature range	T6
Operating ambient temperature range	-60...+55 °C
Operating voltage	max 550 V
Operating current	max 21 A
Enclosure dimensions	122×120×91.5 mm
Total weight (maximum)	1.8 kg
Material Box / Color	Glass fiber reinforced polyester / Black
Material Pipe installation support / Color	

## Accessories (to be ordered separately)

Brackets PB, KP, PL.JB0606 – for mounting the box onto the pipeline.

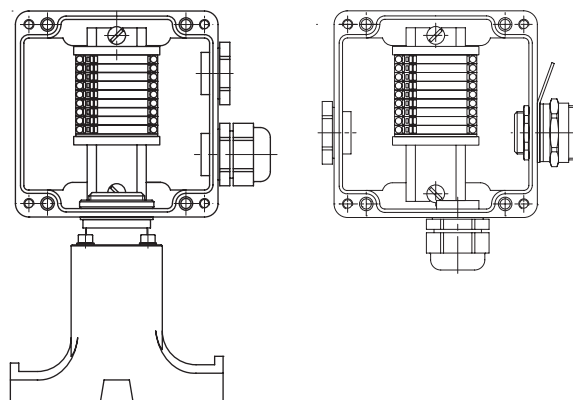
Z-profile – for mounting the box onto a metal structure or onto a wall.

Metal pipe strap PFS/3 – for mounting the pipe support stand or bracket onto the pipeline.

Flexible sealed gland FSG – for mechanical protection of cables in open space sets.

Cable entry unit LEK/U – for penetrating of thermal insulation.

## Construction



Boxes JB222(3)1-223-1XXX (left) and JB222(3)1-223-2XXX (right) with push-in terminal block. Quantity, type of terminals and placement of DIN-rail with terminal block could differ from drawings.

## Approvals




Nº IECEx CCVE 18.0006X



\* Certification is underway

## Delivery Set

Cable glands and plugs (P=plastic; B=brass)									A C  D B		Pipe installation support	Terminal block	Type of terminals	Order code
Model	Side A		Side B		Side C		Side D							
	Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug	Cable gland	Screw plug						
JB22Y1*-223-1X14**							1xM25 B	1xM25 P	V	9L	screw/ push-in	3210002300		
JB22Y1-223-1X15							2xM25 B		V			3210002301		
JB22Y1-223-1X16							1xM25 P	1xM25 P	V			3210002302		
JB22Y1-223-1X17							2xM25 P		V			3210002303		
JB22Y1-223-2X16			1xM25 B			1xM25 P		1xM25 P				3210002304		
JB22Y1-223-2X17				1xM25 P	1xM25 B		1xM25 B					3210002305		
JB22Y1-223-2X18			1xM25 B		1xM25 B		1xM25 B					3210002306		
JB22Y1-223-2X19			1xM25 P		1xM25 B			1xM25 P				3210002307		
JB22Y1-223-2X20			1xM25 P		1xM25 B		1xM25 P					3210002308		
JB22Y1-223-2X21				1xM25 P	1xM25 P			1xM25 P				3210002309		
JB22Y1-223-2X22			1xM25 P		1xM25 P			1xM25 P				3210002310		
JB22Y1-223-2X23			1xM25 P		1xM25 P		1xM25 P					3210002311		
JB22Y1-223-2X24			1xM25 P		1xM25 B		1xM25 B			3210002312				

Order codes are valid for junction boxes with push-in terminal block and "e" explosion proof level. Additional junction box configurations are available upon request.

\* Y = 2 for "e" explosion proof level; Y = 3 for "ia" explosion proof level

\*\* X = 1 for screw type terminal block; X=2 for push-in type terminal block

