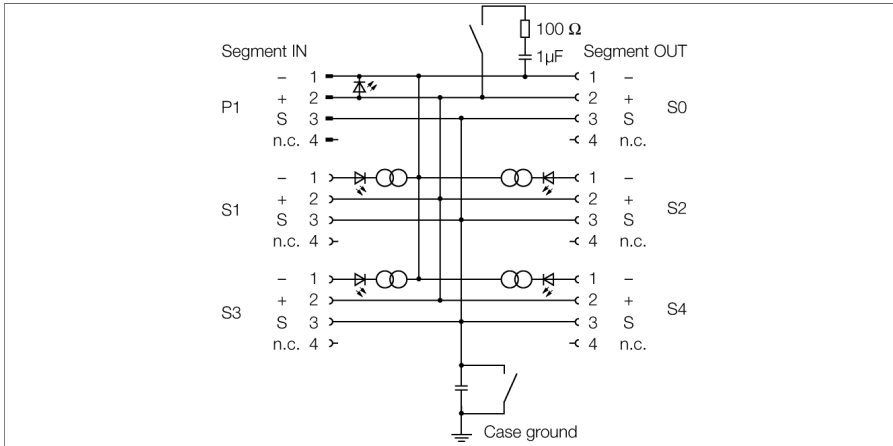


# FOUNDATION fieldbus IP67 junction box, 4-channel JBBS-49SC-M413/EX



The 4-channel Ex junction box JBBS-49SC-M413/EX is designed for FOUNDATION™ fieldbus systems.

The junction box is equipped with an adjustable short-circuit current limiter. As maximum current limit, the following values can be selected together for all channels via a rotary coding switch: 30, 35, 45 and 60 mA.

The housing is made of powder-coated die-cast aluminium and is IP67 rated.

The junction box is equipped with an activatable terminating resistor for the bus. The switch is integrated in the housing on the board.

Condensation in the housing is prevented by a breather.

Shielding and housing can be connected directly via a second switch which is also located on the board.

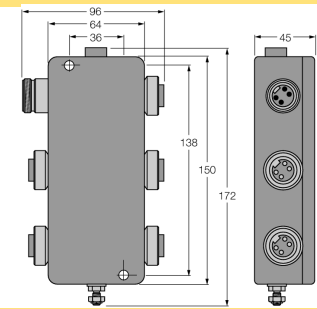
**Note:** It must be ensured that there is sufficient equipotential bonding in the system. The device is connected to the equipotential bonding via the housing's M5 x 1 grounding bolt.



- Junction box for wall mounting with stainless steel 7/8" flange connections
- Short-circuit protection per drop line/spur
- Integrated terminating resistor (activatable)
- Cable shielding: Capacitive or direct connection to housing potential selectable via switch
- Isolated support terminal for optional protective conductor incorporated in cable
- Powder-coated die-cast aluminium housing
- Pressure compensation element protects against condensation
- Connection of the housing potential via M5 x 1 bolt
- Enty and FISCO compliant according to IEC 60079-11

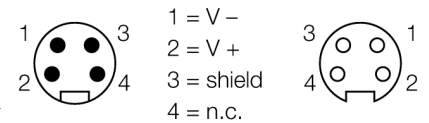
Type	JBBS-49SC-M413/EX
ID	6611437
Fieldbus standard	IEC 61158-2
Operating voltage	12...32 VDC
Current self-consumption	≤ 7 mA
Voltage drop	≤ 0.3V
Short-circuit protection	≤ 30, ≤ 35, ≤ 45, ≤ 60 mA
Displays/Operating elements	
Operational readiness	1 × green
Short-circuit message	4 × red
Ex approval acc. to conformity certificate	PTB 03 ATEX 2236
Device designation	Ⓢ II 2 G Ex ib IIC T4 Gb
Device marking	Ⓢ II 2 (1) G Ex ia [ia Ga] IIC T4 Gb
	Ⓢ II 2 (1D) G Ex ia [ia IIIC Da] IIB T4 Gb
	Ⓢ II 2 (2D) G Ex ib [ib IIIC Db] IIB T4 Gb
	FISCO / Entity field device
Entity Parameter	
Max. output voltage $U_o$	≤ 24 V
Max. output current $I_o$	≤ 250 mA
Max. output power $P_o$	≤ 2560 mW
Max. input voltage $U_i$	≤ 24 V
Max. input current $I_i$	≤ 250 mA
Max. input power $P_i$	≤ 2560 mW
FISCO parameter according to IEC 60079-11	
Max. output voltage $U_o$	≤ 17.5 V
Max. output current $I_o$	≤ 380 mA
Max. output power $P_o$	≤ 5320 mW
Max. input voltage $U_i$	≤ 17.5 V
Max. input current $I_i$	≤ 380 mA
Max. input power $P_i$	≤ 5320 mW
External inductance/capacitance L/C,	trunk (in/out): negligible / ≤ 5.00 nF per field circuit: negligible / ≤ 0.82 nF Σ Field circuits: negligible / ≤ 5.00 nF
Electrical connection	7/8" receptacle
Segment IN	1 x 7/8" - male
Segment OUT	1 x 7/8" - female
Spur line	4 x 7/8" - female connector
Earthing bolt	M5 x 1
Protection class	IP67
MTTF	117 years acc. to SN 29500 (Ed. 99) 40 °C
Ambient temperature	-30...+70 °C
Housing material	Powder-coated die-cast aluminium
Housing color	Black/yellow
Dimensions	64 x 150 x 45 mm
Connection mode	Wall mounting

## Dimensions



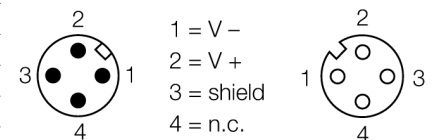
## pin assignment

— 7/8" Segment in      ⌋ 7/8" Segment out, Spur



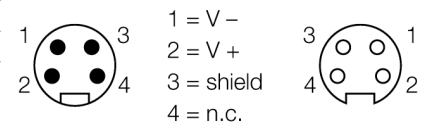
nominal values: 9 A, 300 V

— M12 x 1 Segment in      ⌋ M12 x 1 Segment out, Spur



nominal values: 4 A, 300 V

— 7/8" Segment in      ⌋ 7/8" Segment out, Spur



nominal values: 9 A, 300 V