Zertifiziertes QM-System
DIN EN ISO 9001
Zertifikat-Nr. 01017

Unit for 2-Wire Transmitters

KOBOLD

measuring • monitoring • analysing

- Input/output: 4 - 20 mA
- Single channel
- Control circuit EEx ia IIC
- Narrow design
- Standard rail mounting
- Protection: IP 20

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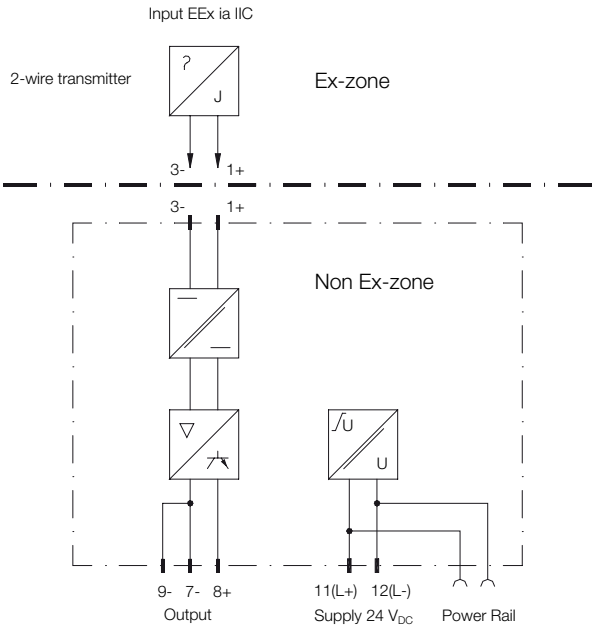
Model:
KFD2-

Description

The KOBOLD KFD2-CR powers a 2-wire transmitter (for example, a pressure sensor with plug-on display) in Ex areas. The 2-wire transmitters work exclusively with a 4 - 20 mA signal. At least 17.6 V is available to the transmitter for a measuring current of 20 mA.

The current from the input circuit is transmitted to the safe area. The maximum load that can be connected at the output is 1 kΩ.

Connection



Order Details (Example: **KFD2-STC4-Ex1.H**)

Description	Order no.
Unit for transmitters, 1-channel Input / output: 0/4-20 mA U_0 = 28 V_{DC} Supply: 24 V_{DC}	**KFD2-STC4-Ex1.H**

Technical Details

Supply voltage:	24 V_{DC} (20...35 V_{DC})
Max. voltage satisfying safety requirements:	250 V_{eff}
Power input:	approx. 1.6 Watt
Ripple factor:	< 20 μA_{eff}

Input (intrinsically safe)

Input signal:	0/4 - 20 mA
Voltage available at 20 mA:	17.6 V_{DC}
Ex-Protection:	⟨Ex⟩ II (1) GD [EEx ia] IIC

Maximum values according to certificate of conformity

Voltage U_0: 27,2 V_{DC} Current I_0: 93 mA

Power P_0: 632 mW

Allowed connected values

Protection	EExia	EExia	EExia
Explosion category	IIA	IIB	IIC
Exterior capacitance	2.6 µF	0.77 µF	0.099 µF
Exterior inductivity	36.62 mH	17.72 mH	4.3 mH

Output (not intrinsically safe)

Maximum voltage satisfying safety requirements:	250 V_{eff}
Output signal:	0/4...20 mA
Available voltage:	20 V_{DC}
Load:	≤ 800 Ω
Ripple factor:	≤ 50 mAeff

Transmission characteristics

Calibration accuracy:	≤ ±10 µA at 20 °C *including nonlinearity and load fluctuations*
Variation in temperature:	≤ ± 0.25 µA/K in the range 0...60 °C ± 1 µA in the range -20...0 °C
Rise time / fall time:	≤ 50 µs; load = 250 Ω
Case material:	Macrolon
Dimensions:	119 x 20 x 115 mm (H x W x D)
Protection:	IP 20
Ambient temperature:	-20 to +60 °C
Weight:	200 g