



- 1-channel
- 24 V DC supply voltage
- Lead breakage (LB) monitoring and short-circuit (SC) monitoring
- Power Rail bus
- EMC acc. to NAMUR NE 21

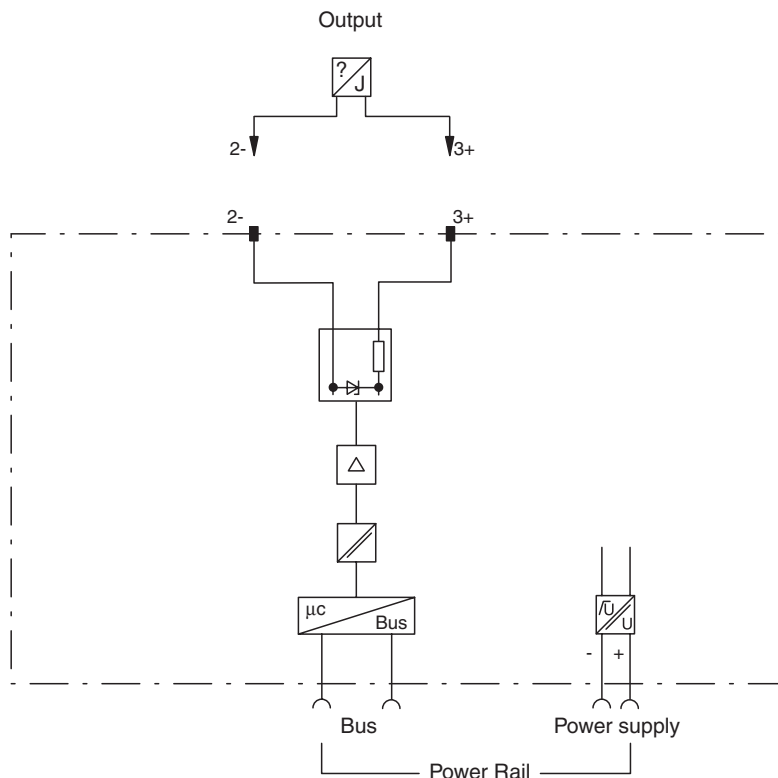
**Function**

The KSD2-CO transmits a 0/4 mA ... 20 mA current signal. Loads between 30 Ω ... 750 Ω can be connected. The output is galvanically isolated from the bus and power supply. The output field circuit is monitored for lead breakage and short circuit conditions.

**Application**

The control of pneumatic positioners (I/P converters) and solenoid drivers.

**Connection**



**Composition**

**Front View**

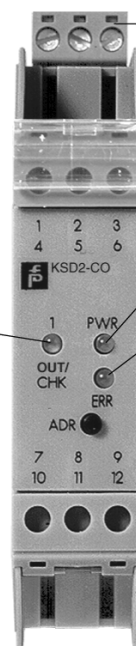
Housing type A3  
(see system description)

LED yellow/red:  
Output check

Removable terminal  
green

LED green:  
Power supply

LED red:  
Fault signal



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<b>Supply</b>	
Connection	Power Rail
Rated voltage	20 ... 30 V DC
Ripple	< 10 %
Power loss	1.3 W
Power consumption	1.3 W
<b>Input</b>	
Connection	Power Rail
Interface	CAN protocol via Power Rail bus
<b>Output</b>	
Connection	terminals 2, 3
Current	0/4 ... 20 mA
Load	30 ... 750 Ω
Residual ripple	≤ 0.25 %
Lead monitoring	possible for $I_{\text{nominal}} \geq 1 \text{ mA}$ breakage $I < 3.6 \text{ mA}$ , short-circuit, load $< 30 \Omega$
<b>Transfer characteristics</b>	
Deviation	0.1 % of output signal range at 20 °C (293;K)
Influence of ambient temperature	0.01 % / K of output signal range
<b>Electrical isolation</b>	
Output/power supply, internal bus	basic insulation acc. to EN 50178, rated insulation voltage 300 V <sub>eff</sub>
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 89/336/EC	EN 61326
<b>Standard conformity</b>	
Insulation coordination	EN 50178
Electrical isolation	EN 50178
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
Climatic conditions	IEC 60721
<b>Ambient conditions</b>	
Ambient temperature	-20 ... 60 °C (253 ... 333 K)
Damaging gas	acc. to ISA-S71.04-1985, severity level G3
<b>Mechanical specifications</b>	
Protection degree	IP20
Connection	terminal connection ≤ 2.5 mm <sup>2</sup>
Mass	approx. 100 g
Dimensions	20 x 100 x 115 mm (0.8 x 3.9 x 4.5 in)
Mounting	DIN rail mounting

Notes

Software functions

Adjustable by the **PACTware™** human machine interface:

- TAG numbers, 28 alphanumeric characters, can be programmed into device
- Commentary, may be saved in PC memory
- Information on devices may be saved in PC memory
- Physical units are adjustable
  - list see system description RPI
- Lead monitoring selectable
- Separate detection and indication of lead breakage and lead short circuit
- Lower scale value and upper scale value of the measurement range
  - for the determination of the overflow and underflow range
  - for the configuration of the analogue monitor of the human machine interface
- Overrange and underrange alarm
- Malfunction output status
  - user defined
  - min.
  - max.
  - maintenance of the last accepted measurement value
- Simulation
  - of the input value
  - of the device diagnosis
  - of the process channel diagnosis

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