Repeater

Features Assembly • 1-channel signal conditioner 24 V DC supply (loop powered) Front view $\otimes \otimes \otimes$ • Current input/output 4 mA ... 20 mA Removable terminal • transmitter power supply green Accuracy 0.1 % 2 · Reverse polarity protection • Up to SIL 2 acc. to IEC 61508 **Function** This signal conditioner provides the galvanic isolation between field circuits and control circuits. The device can be used as a repeater or transmitter power supply for 2-wire transmitters. 7 8 9 10 11 12 Removable terminal This device is loop powered. No additional power supply has green to be connected. Use the technical data to verify that proper voltage is available $\otimes \otimes \otimes$ to the field devices.

CE

SIL 2

Connection

KFD0-CS-1.50 1+ 2-12.

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Refer to "General Notes Relating to Pepperl+Fuchs Product Information" USA: +1 330 486 0002 pa-info@us.pepperl-fuchs.com

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General specifications	
Signal type	Analog input/analog output
Functional safety related parameters	
Safety Integrity Level (SIL)	SIL 2
Supply	
Rated voltage U _r	loop powered
Power dissipation	0.2 W
Control circuit	
Connection	terminals 12-, 11+
Voltage	10 35 V DC
Current	4 20 mA
Power dissipation	< 150 mW per channel at 25 mA and U < 26.1 V < 400 mW per channel at 25 mA und U > 26.1 V
Field circuit	
Connection	terminals 1+, 2-
Voltage	\ge 0.9 x U _{in} - (0.23 x current in mA) - 0.7 for 10 V < U _{in} < 26.1 V \ge 23 V - (0.23 x current in mA) for U _{in} > 26.1 V
Short-circuit current	max. 100 mA
Transfer current	max. 25 mA
Transfer characteristics	
Accuracy	0.1 %
Deviation	
After calibration	$U_{in} \ge 5 V \pm 20 \mu A/U_{in} \le 5 V \pm 50 \mu A$ incl. calibration, linearity, hysteresis and output load fluctuations at the field side; at 20 °C (68 °F)
Influence of ambient temperature	\leq \pm 2 µA/K at U_{in} \leq 20 V; \leq \pm 5 µA/K at U_{in} > 20 V
Rise time	\leq 5 ms at 4 20 mA and U _{in} = input voltage < 26 V
Galvanic isolation	
Input/Output	basic insulation according to IEC 62103, rated insulation voltage 300 $\mathrm{V}_{\mathrm{eff}}$
Indicators/settings	
Labeling	space for labeling at the front
Directive conformity	
Electromagnetic compatibility	
Directive 2014/30/EU	EN 61326-1:2013 (industrial locations)
Conformity	
Insulation coordination	EN 50178:1997
Electromagnetic compatibility	NE 21:2006
Degree of protection	IEC 60529:2001
Ambient conditions	
Ambient temperature	-20 60 °C (-4 140 °F)
Mechanical specifications	
Degree of protection	IP20
Connection	screw terminals
Mass	approx. 100 g
Dimensions	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 inch) , housing type B1
Mounting	on 35 mm DIN mounting rail acc. to EN 60715:2001
General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see www.pepperl-fuchs.com.

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