

**Features**

- 2-channel isolated barrier
- 24 V DC supply (loop powered)
- Current input/output 4 mA ... 20 mA
- Accuracy 0.1 %
- Entity parameter  $I_O/I_{SC} = 0 \text{ mA}$

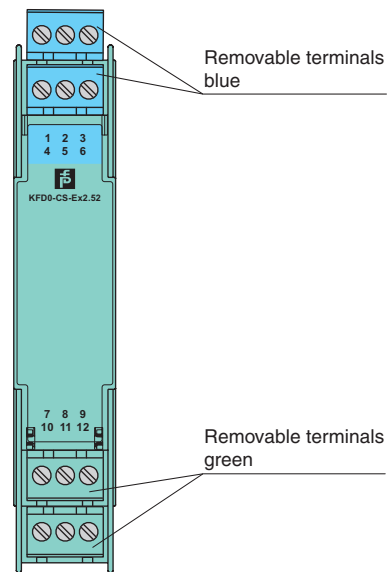
**Function**

This isolated barrier is used for intrinsic safety applications. It is loop-powered and repeats a 4 mA ... 20 mA signal from a current source inside a hazardous area to the safe area (It does not provide power for transmitters inside the hazardous area.).

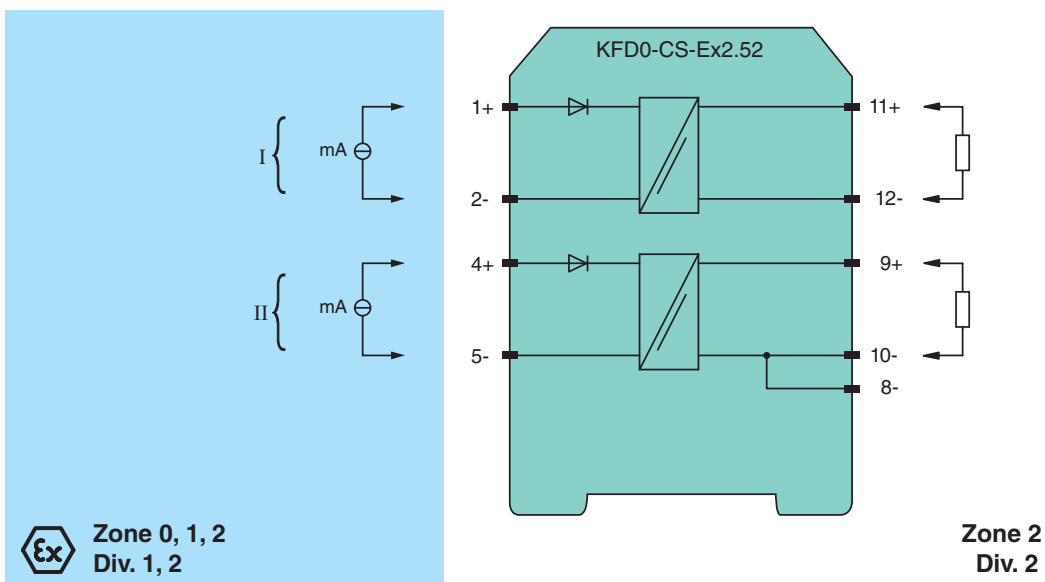
The 25.2 V, 0 mA entity parameters make it easy to design intrinsically safe systems.

**Assembly**

Front view



**Connection**



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Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

<b>General specifications</b>		
Signal type		Analog input
<b>Supply</b>		
Rated voltage	$U_r$	loop powered
Power dissipation		150 mW
Power consumption		1 W
<b>Control circuit</b>		
Connection		terminals 12-, 11+; 8-, 10-, 9+
Voltage		4 ... 24 V DC for $4 V < U_{in} < 24 V$ : $0.97 \times U_{in} - (85 \times \text{current in A}) - 1.3$
Current		4 ... 20 mA
<b>Field circuit</b>		
Connection		terminals 1+, 2-; 4+, 5-
Transmission range		current: 4 ... 24 mA voltage: 4 ... 24 V DC
<b>Transfer characteristics</b>		
Accuracy		0.1 %
Deviation		
After calibration		$\pm 20 \mu\text{A}$ incl. calibration, linearity, hysteresis and load fluctuations at $20^\circ\text{C}$ ( $68^\circ\text{F}$ ), $U_{in} \leq 20 \text{ V}$ $\pm 20 \mu\text{A}/50 \mu\text{A}$ incl. calibration, linearity, hysteresis and load fluctuations at $20^\circ\text{C}$ ( $68^\circ\text{F}$ ), $20 \text{ V} < U_{in} < 24 \text{ V}$
Influence of ambient temperature		$\pm 1 \mu\text{A}/\text{K}$ ( $0 \dots 50^\circ\text{C}$ ( $32 \dots 122^\circ\text{F}$ )), $U_{in} \leq 12 \text{ V}$ $\pm 2 \mu\text{A}/\text{K}$ ( $0 \dots 60^\circ\text{C}$ ( $32 \dots 140^\circ\text{F}$ )), $U_{in} \leq 18 \text{ V}$ $\pm 5 \mu\text{A}/\text{K}$ ( $-20 \dots 60^\circ\text{C}$ ( $-4 \dots 140^\circ\text{F}$ )), $U_{in} \leq 24 \text{ V}$
Rise time		$\leq 10 \text{ ms}$ at 4 ... 20 mA and 250 $\Omega$ load
<b>Galvanic isolation</b>		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
<b>Indicators/settings</b>		
Labeling		space for labeling at the front
<b>Directive conformity</b>		
Electromagnetic compatibility		
Directive 2014/30/EU		EN 61326-1:2013 (industrial locations)
<b>Conformity</b>		
Electromagnetic compatibility		NE 21:2011
Degree of protection		IEC 60529:2001
Protection against electrical shock		UL 61010-1:2012
<b>Ambient conditions</b>		
Ambient temperature		$-20 \dots 60^\circ\text{C}$ ( $-4 \dots 140^\circ\text{F}$ )
<b>Mechanical specifications</b>		
Degree of protection		IP20
Connection		screw terminals
Mass		approx. 100 g
Dimensions		20 x 119 x 115 mm (0.8 x 4.7 x 4.5 inch) , housing type B2
Mounting		on 35 mm DIN mounting rail acc. to EN 60715:2001
<b>Data for application in connection with hazardous areas</b>		
EU-type examination certificate		BASEEFA 03 ATEX 0141
Marking		$\text{Ex}$ II (1)GD, I (M1) [Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I ( $-20^\circ\text{C} \leq T_{\text{amb}} \leq 60^\circ\text{C}$ ) , [circuit(s) in zone 0/1/2]
Voltage	$U_o$	25.2 V DC
Current	$I_o$	0 mA
Type of protection [Ex ia]		
Output		
Maximum safe voltage	$U_m$	253 V <sub>eff</sub> (Attention! The rated voltage can be lower.)
Certificate		TÜV 99 ATEX 1499 X
Marking		$\text{Ex}$ II 3G Ex nA II T4 [device in zone 2]
Galvanic isolation		
Input/Output		safe electrical isolation acc. to IEC/EN 60079-11, voltage peak value 375 V
Directive conformity		
Directive 2014/34/EU		EN 60079-0:2012+A11:2013 , EN 60079-11:2012 , EN 60079-15:2010
<b>International approvals</b>		
FM approval		
Control drawing		116-0129
UL approval		
Control drawing		116-0173 (cULus)
IECEX approval		
IECEX certificate		IECEX BAS 08.0059
IECEX marking		[Ex ia Ga] IIC , [Ex ia Da] IIIC , [Ex ia Ma] I

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General information	
Supplementary information	Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .



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