

**Features**

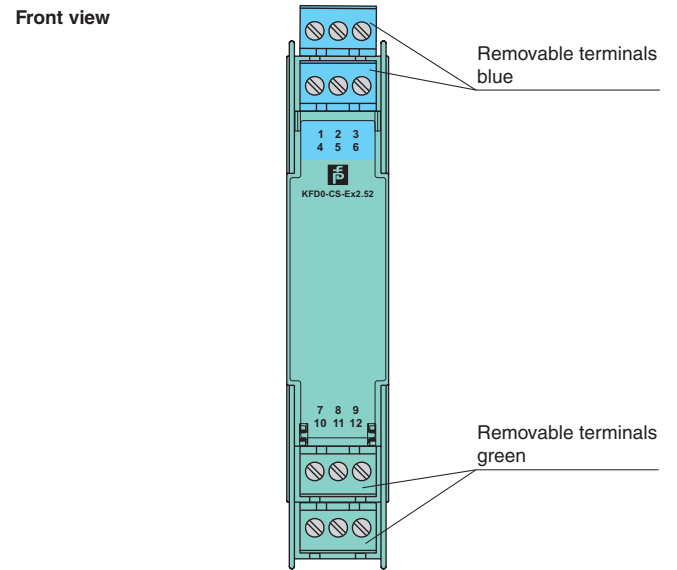
- 2-channel isolated barrier
- 24 V DC supply (loop powered)
- Current input/output 4 mA ... 20 mA
- Accuracy 0.1 %
- Entity parameter  $I_O/I_{SC} = 0$  mA

**Function**

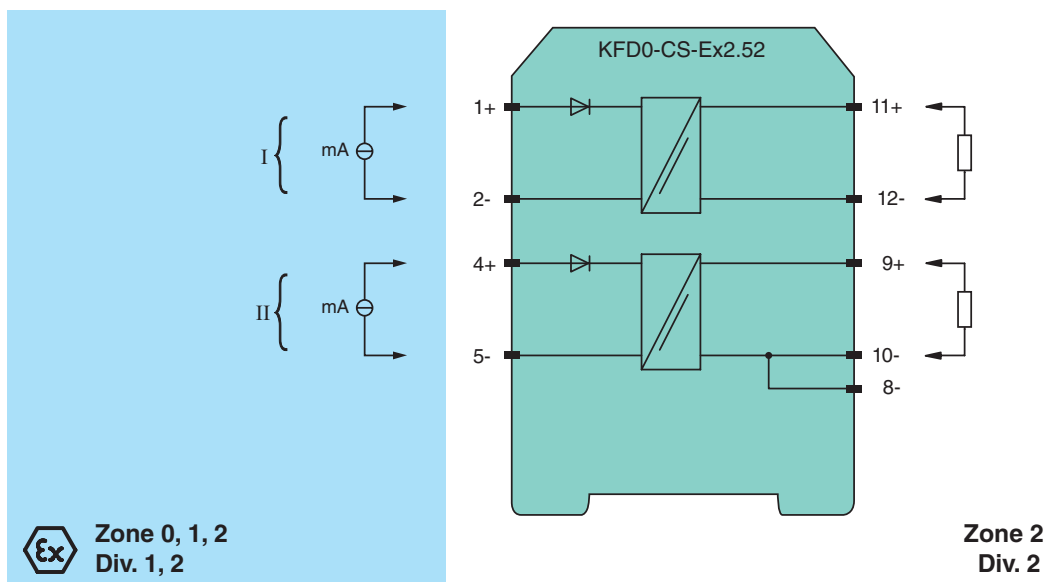
This isolated barrier is used for intrinsic safety applications. It is loop-powered and repeats a 4 mA ... 20 mA signal from a current source inside a hazardous area to the safe area (It does not provide power for transmitters inside the hazardous area.).

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

**Assembly**



**Connection**



Release date 2017-08-09 14:20 Date of issue 2017-08-09 183893\_eng.xml

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

<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		$\pm 20 \mu A$ incl. calibration, linearity, hysteresis and load fluctuations at $20^\circ C$ ( $68^\circ F$ ), $U_{in} \leq 20 V$ $+20 \mu A/-50 \mu A$ incl. calibration, linearity, hysteresis and load fluctuations at $20^\circ C$ ( $68^\circ F$ ), $20 V < U_{in} < 24 V$
Influence of ambient temperature		$\pm 1 \mu A/K$ ( $0 \dots 50^\circ C$ ( $32 \dots 122^\circ F$ )), $U_{in} \leq 12 V$ $\pm 2 \mu A/K$ ( $0 \dots 60^\circ C$ ( $32 \dots 140^\circ F$ )), $U_{in} \leq 18 V$ $\pm 5 \mu A/K$ ( $-20 \dots 60^\circ C$ ( $-4 \dots 140^\circ F$ )), $U_{in} \leq 24 V$
Rise time		$\leq 10$ 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		$-20 \dots 60^\circ C$ ( $-4 \dots 140^\circ F$ )
<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 ( $-20^\circ C \leq T_{amb} \leq 60^\circ C$ ) , [circuit(s) in zone 0/1/2]
Voltage	$U_o$	25.2 V DC
Current	$I_o$	0 mA
Output		
Maximum safe voltage	$U_m$	253 V $_{eff}$ (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 BAS 08.0059
Approved for		[Ex ia Ga] IIC, [Ex ia Da] IIIC, [Ex ia Ma] I
<b>General information</b>		

Release date 2017-08-09 14:20 Date of issue 2017-08-09 183893\_eng.xml

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

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0002  
pa-info@us.pepperl-fuchs.com

Germany: +49 621 776 2222  
pa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
pa-info@sg.pepperl-fuchs.com

Supplementary information

Observe the certificates, declarations of conformity, instruction manuals, and manuals where applicable. For information see [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

Release date 2017-08-09 14:20 Date of issue 2017-08-09 183893\_eng.xml

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

Pepperl+Fuchs Group  
[www.pepperl-fuchs.com](http://www.pepperl-fuchs.com)

USA: +1 330 486 0002  
[pa-info@us.pepperl-fuchs.com](mailto:pa-info@us.pepperl-fuchs.com)

Germany: +49 621 776 2222  
[pa-info@de.pepperl-fuchs.com](mailto:pa-info@de.pepperl-fuchs.com)

Singapore: +65 6779 9091  
[pa-info@sg.pepperl-fuchs.com](mailto:pa-info@sg.pepperl-fuchs.com)