

**Features**

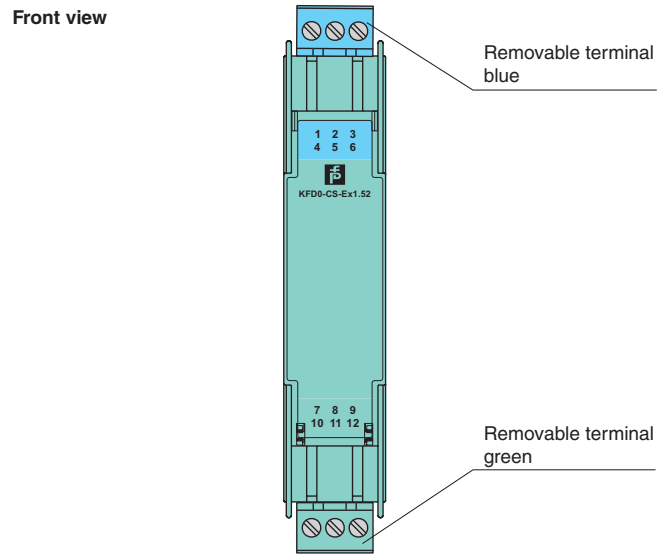
- 1-channel isolated barrier
- 24 V DC supply (loop powered)
- Current input/output 4 mA ... 20 mA
- Accuracy 0.1 %
- Entity parameter  $I_O/I_{SC} = 0$  mA

**Function**

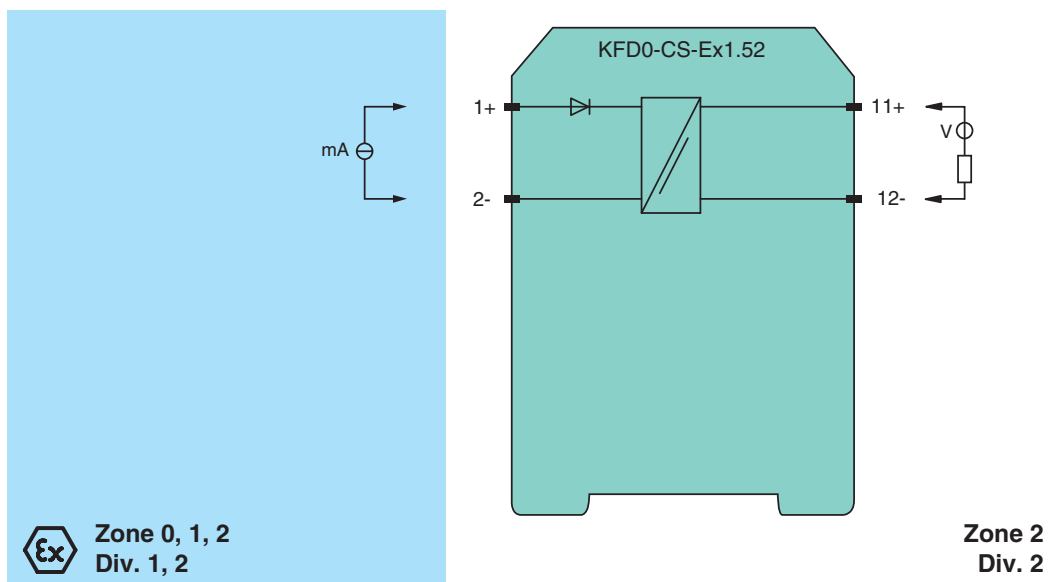
This isolated barrier is used for intrinsic safety applications. It is loop-powered and repeats a 4 mA ... 20 mA signal from a current source inside a hazardous area to the safe area (It does not provide power for transmitters inside the hazardous area.).

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


**Assembly**



**Connection**



Release date 2009-05-28 17:44 Date of issue 2009-05-28 125782\_ENG.xml

<b>General specifications</b>	
Signal type	Analog input
<b>Supply</b>	
Rated voltage	loop powered
Power loss	0.2 W
<b>Input</b>	
Connection	terminals 1+, 2-
Transmission range	current range 4 ... 20 mA voltage range 4 ... 24 V DC
<b>Output</b>	
Connection	terminals 12-, 11+
Current	4 ... 20 mA
Voltage	4 ... 24 V DC for $4\text{ V} < U_{in} < 24\text{ V}$ : $0.9 \times U_{in} - (0.11 \times \text{current in mA}) - 2$
<b>Transfer characteristics</b>	
Deviation	
After calibration	$\pm 20\ \mu\text{A}$ incl. calibration, linearity, hysteresis and load fluctuations at $20\text{ }^\circ\text{C}$ (293 K), $U_{in} \leq 20\text{ V}$ $+20\ \mu\text{A}/-50\ \mu\text{A}$ incl. calibration, linearity, hysteresis and load fluctuations at $20\text{ }^\circ\text{C}$ (293 K), $20\text{ V} < U_{in} < 24\text{ V}$
Influence of ambient temperature	$\pm 1\ \mu\text{A}/\text{K}$ (0 ... $50\text{ }^\circ\text{C}$ ), $U_{in} \leq 12\text{ V}$ $\pm 2\ \mu\text{A}/\text{K}$ (0 ... $60\text{ }^\circ\text{C}$ ), $U_{in} \leq 18\text{ V}$ $\pm 5\ \mu\text{A}/\text{K}$ ( $-20$ ... $60\text{ }^\circ\text{C}$ ), $U_{in} \leq 24\text{ V}$
Rise time	$\leq 10\text{ ms}$ at 4 ... 20 mA and 250 250 $\Omega$ load
<b>Electrical isolation</b>	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
<b>Directive conformity</b>	
Electromagnetic compatibility	
Directive 2004/108/EC	EN 61326-1:2006
<b>Conformity</b>	
Insulation coordination	EN 50178
Electrical isolation	EN 50178
Electromagnetic compatibility	NE 21
Protection degree	IEC 60529
<b>Ambient conditions</b>	
Ambient temperature	$-20$ ... $60\text{ }^\circ\text{C}$ (253 ... 333 K)
<b>Mechanical specifications</b>	
Protection degree	IP20
Mass	approx. 100 g
Dimensions	20 x 107 x 115 mm (0.8 x 4.2 x 4.5 in) , housing type B1
<b>Data for application in conjunction with hazardous areas</b>	
EC-Type Examination Certificate	BASEEFA 03 ATEX 0141 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection	[EEx ia] IIC ( $T_{amb} = 60\text{ }^\circ\text{C}$ )
Voltage $U_o$	25.2 V DC
Current $I_o$	0 mA
Type of protection [EEx ia]	
<b>Output</b>	
Safety maximum voltage $U_m$	250 V <sub>eff</sub> (Attention! The rated voltage can be lower.)
Statement of conformity	TÜV 99 ATEX 1499 X , observe statement of conformity
Group, category, type of protection, temperature classification	 II 3G Ex nA II T4 [device in zone 2]
<b>Electrical isolation</b>	
Input/output	safe electrical isolation acc. to EN 50020, voltage peak value 375 V
<b>Directive conformity</b>	
Directive 94/9/EC	EN 50014, EN 50020, EN 50021, EN 60079-0, EN 60079-15
<b>International approvals</b>	
<b>FM approval</b>	
Control drawing	116-0129
<b>UL approval</b>	
Control drawing	116-0173 (cULus)
<b>CSA approval</b>	
Control drawing	116-0132
<b>General information</b>	
Supplementary information	EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed where applicable. For information see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a> .

Release date 2009-05-28 17:44 Date of issue 2009-05-28 125782\_ENG.xml