





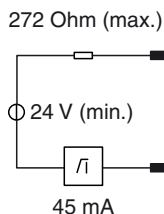
<b>Supply</b>		
Connection		Power Rail or terminals 14+, 15-
Rated voltage		20 ... 30 V DC
Power consumption		≤ 3,3 W at 45 mA output current
<b>Input</b>		
Connection		terminals 7, 8, 9
Input current		approx. 3 mA at 24 V DC
Signal level		1-signal: 16 ... 30 V DC 0-signal: 0 ... 5 V DC
<b>Output</b>		
Internal resistor		272 Ohm
Limit		current $I_E$ : 45 mA voltage $U_E$ : 11,7 V
Open loop voltage		≥ 24 V
Connection		terminals 1+, 2- or 3- channel 1; terminals 4+, 6- channel 2
Output rated operating current		45 mA
Output signal		these values are valid for rated operational voltages from 20 ... 30 V DC
<b>Electrical isolation</b>		
Input/Power supply		function insulation acc. to DIN EN 50178, rated insulation voltage 50 V <sub>eff</sub>
Input/Input		not available
Output/Output		not available
<b>Directive conformity</b>		
Electromagnetic compatibility		standards
Directive 89/336/EC		EN 61326, EN 50081-2, NE 21
<b>Standard conformity</b>		
Climatic conditions		acc. to DIN IEC 721
<b>Ambient conditions</b>		
Ambient temperature		-20 ... 50 °C (253 ... 323 K)
<b>Mechanical specifications</b>		
Protection degree		IP20
Mass		approx. 150 g
<b>Data for application in conjunction with hazardous areas</b>		
EC-Type Examination Certificate		ZELM 00 ATEX 0024 , for additional certificates see <a href="http://www.pepperl-fuchs.com">www.pepperl-fuchs.com</a>
Group, category, type of protection		 II (1) G D [Ex ia] IIC [circuit(s) in zone 0/1/2]
Output		EEx ia IIC
Voltage	$U_0$	28 V
Current	$I_0$	110 mA
Power	$P_0$	770 mW (linear characteristic)
<b>Supply</b>		
Safety maximum voltage	$U_m$	40 V (Attention! The rated voltage can be lower)
Type of protection [EEx ia and EEx ib]		
Explosion group		IIA      IIB      IIC
External capacitance		2150 nF    650 nF    83 nF
External inductance		23 mH     12 mH     3 mH
<b>Input</b>		
Safety maximum voltage	$U_m$	60 V (Attention! The rated voltage can be lower)
<b>Combined fault indication</b>		
Safety maximum voltage	$U_m$	40 V (Attention! The rated voltage can be lower)
<b>Statement of conformity</b>		
Group, category, type of protection, Temperature classification		TÜV 02 ATEX 1820 X , observe statement of conformity  II 3 G EEx nA II T4 bzw. EEx nAC IIC T4 [device in zone 2]
<b>Electrical isolation</b>		
Input/Output		safe electrical isolation acc. to EN 50020, voltage peak value 375 V
Output/Power supply		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

## Notes

### Lead monitoring (only KFD2-SL2-Ex2)

A fault signal is activated across the Power Rail (UPR-03) in the case of an error (lead breakage  $> 15 \text{ k}\Omega$  or lead short circuit  $< 50 \text{ }\Omega$ ). The power feed module evaluates and passes on the fault signal by means of a potentially free contact.

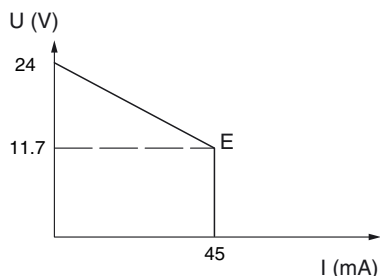
### Output circuit diagramm



### Output characteristic for input voltage

20 V ... 30 V

E: Curve angle point ( $U_E$ ,  $I_E$ )



## Supplementary information

EC-Type Examination Certificate, Statement of Conformity, Declaration of Conformity and instructions have to be observed. For information see [www.pepperl-fuchs.com](http://www.pepperl-fuchs.com).

## Accessories

### PR-03 Power Rail

### UPR-03 Power Rail

### KFD2-EB2 power feed module

The devices are supplied with 24 V DC through the KFD2-EB2 power feed module and the PR-03 or the UPR-03 Power Rail. Each power feed module monitors and provides protection for groups of as many as 100 individual devices. The PR-03 Power Rail is an insert component for the DIN rail. The UPR-03 Power Rail is a complete unit consisting of an electrical insert and an aluminium DIN rail measuring 35 mm x 15 mm x 2000 mm. The devices are simply snapped in place to make electrical contact.

If a Power Rail is not being used, power can be supplied to the devices directly through the device terminals.