

**Features**

- 1-channel signal conditioner
- Universal usage at different power supplies
- Input 2-wire and 3-wire transmitters, current and voltage sources
- Current and voltage output

**Function**

This signal conditioner provides the isolation for non-intrinsically safe applications.

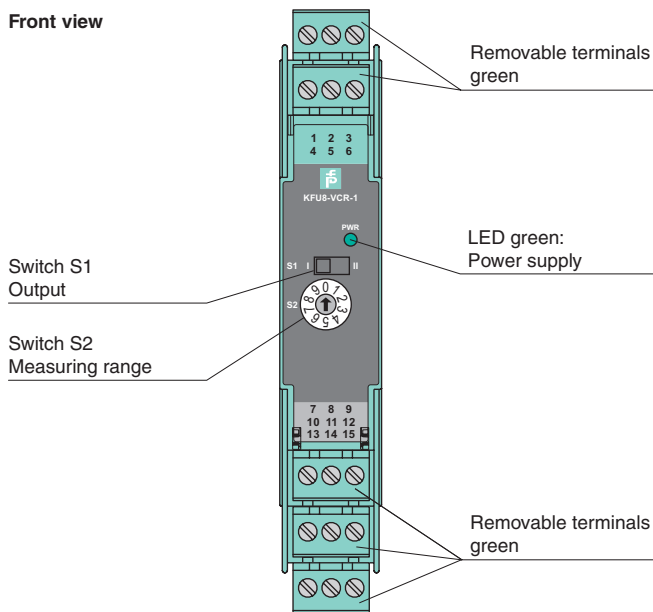
The device supplies 2-wire and 3-wire transmitters, and can also be used with current and voltage sources.

The input ranges include 0/4 mA ... 20 mA or 0/2 V ... 10 V.

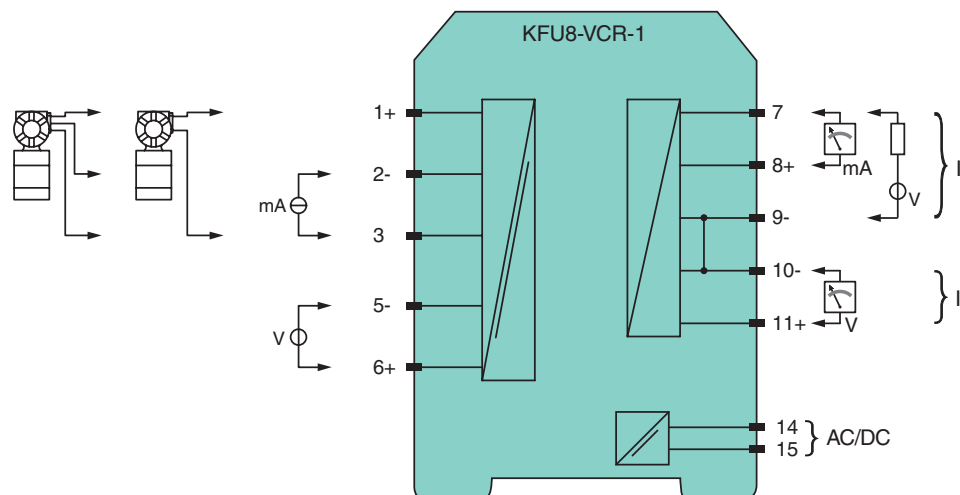
At the output the signal is available as 0/4 mA ... 20 mA or 0/2 V ... 10 V.

Output and measuring range are selected by switches located on the front of the device.

**Assembly**



**Connection**

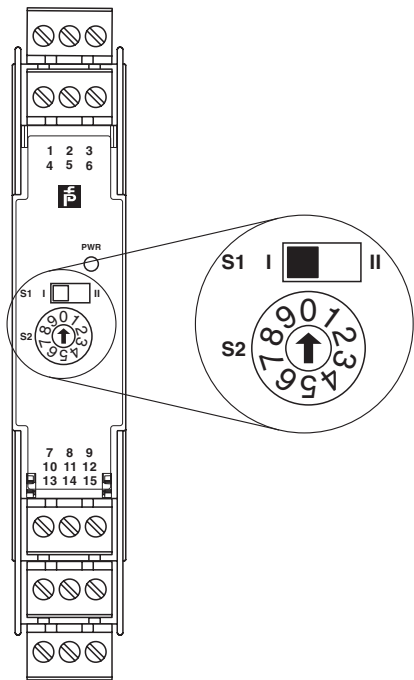


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|  |       |   |
|--|-------|---|
| <b>General specifications</b>              |       |   |
| Signal type                                |       | Analog input  |
| <b>Supply</b>                              |       |   |
| Connection                                 |       | terminals 14, 15  |
| Rated voltage                              | $U_n$ | 19 ... 90 V DC / 48 ... 253 V AC  |
| Rated current                              | $I_n$ | $\leq 110$ mA DC / $\leq 75$ mA AC  |
| Power loss                                 |       | 1.3 W   |
| Power consumption                          |       | 2.1 W   |
| <b>Input</b>                               |       |   |
| Input I                                    |       |   |
| Connection                                 |       | terminals 1+, 2-, 3   |
| Input signal                               |       | 0/4 ... 20 mA   |
| Available voltage                          |       | > 15 V at 20 mA , terminals 1+, 3-  |
| Open circuit voltage/short-circuit current |       | 21 V / 26 mA , terminals 1+, 3-   |
| Input resistance                           |       | < 55 $\Omega$ , terminals 2-, 3+  |
| Input II                                   |       |   |
| Connection                                 |       | terminals 5-, 6+  |
| Input signal                               |       | 0/2 ... 10 V  |
| Input resistance                           |       | > 1 M $\Omega$  |
| <b>Output</b>                              |       |   |
| Output I                                   |       |   |
| Connection                                 |       | source: terminals 7(-), 8(+)<br>sink: terminals 7(+), 9(-)  |
| Output signal                              |       | 0/4 ... 20 mA   |
| Source                                     |       | load 0 ... 750 $\Omega$ open circuit voltage < 21 V   |
| Sink                                       |       | voltage across terminals 5 ... 30 V   |
| Output II                                  |       |   |
| Connection                                 |       | terminals 10-, 11+  |
| Output signal                              |       | 0/2 ... 10 V  |
| Load                                       |       | $\geq 10$ k $\Omega$  |
| <b>Transfer characteristics</b>            |       |   |
| Deviation                                  |       |   |
| Resolution/accuracy                        |       | S1 in position I: 7 $\mu$ A/40 $\mu$ A (0.2 %)<br>S1 in position II: 3.5 mV/20 mV (0.2 %)   |
| Influence of ambient temperature           |       | 0.01 % / K of output signal range   |
| Reaction time                              |       | 150 ms  |
| <b>Electrical isolation</b>                |       |   |
| Input/Output                               |       | functional insulation acc. to IEC 62103, rated insulation voltage 100 V <sub>rms</sub>  |
| Input/power supply                         |       | reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 V <sub>eff</sub>  |
| Output/power supply                        |       | reinforced insulation according to IEC/EN 61010-1, rated insulation voltage 300 V <sub>eff</sub>  |
| <b>Directive conformity</b>                |       |   |
| Electromagnetic compatibility              |       |   |
| Directive 2004/108/EC                      |       | EN 61326-1:2006   |
| Low voltage                                |       |   |
| Directive 2006/95/EC                       |       | EN 61010-1:2010   |
| <b>Conformity</b>                          |       |   |
| Electromagnetic compatibility              |       | NE 21:2006  |
| Degree of protection                       |       | IEC 60529   |
| Protection against electrical shock        |       | IEC 61140   |
| <b>Ambient conditions</b>                  |       |   |
| Ambient temperature                        |       | -20 ... 60 °C (-4 ... 140 °F)   |
| <b>Mechanical specifications</b>           |       |   |
| Degree of protection                       |       | IP20  |
| Mass                                       |       | approx. 150 g   |
| Dimensions                                 |       | 20 x 119 x 115 mm (0.8 x 4.7 x 4.5 in) , housing type B2  |
| Mounting                                   |       | on 35 mm DIN mounting rail acc. to EN 60715:2001  |
| <b>General information</b>                 |       |   |
| Supplementary information                  |       | Statement of Conformity, Declaration of Conformity, Attestation 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> . |

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**Configuration**



**Switch S1 (output)**

| Position | Signal         | Note  |
|----------|----------------|---|
| I        | Current output | The non-selected output can be used simultaneously with an accuracy of $\leq 1\%$ . |
| II       | Voltage output |   |

**Switch S2 (measuring range)**

| Position | Input          | Output I       | Output II    |
|----------|----------------|----------------|--------------|
| 0        | 4 mA ... 20 mA | 4 mA ... 20 mA | 2 V ... 10 V |
| 1        | 4 mA ... 20 mA | 0 mA ... 20 mA | 0 V ... 10 V |
| 2        | 0 mA ... 20 mA | 4 mA ... 20 mA | 2 V ... 10 V |
| 3        | 0 mA ... 20 mA | 0 mA ... 20 mA | 0 V ... 10 V |
| 4        | 2 V ... 10 V   | 4 mA ... 20 mA | 2 V ... 10 V |
| 5        | 2 V ... 10 V   | 0 mA ... 20 mA | 0 V ... 10 V |
| 6        | 0 V ... 10 V   | 4 mA ... 20 mA | 2 V ... 10 V |
| 7        | 0 V ... 10 V   | 0 mA ... 20 mA | 0 V ... 10 V |
| 8        | not used       |                |              |
| 9        | not used       |                |              |

Factory settings:      switch S1 in position I  
                                  switch S2 in position 3