2. Short description
The 3-way isolation transmitter is used for electrical isolation and conversion of 0 - 20 mA, 4 - 20 mA and 0 - 10 V signals. For applications where normally only one signal combination is used, IsoPAQ-41P offers a cost-effective alternative. The signal combination is selected by the Part No.

The 3-way isolation guarantees reliable decoupling of the sensor circuit from the processing circuit and prevents linked measurement circuits from influencing each other. The Protective Separation with high isolation level provides protection for personnel and downstream devices against impossibly high voltage.

3. Functioning
The input signal is modulated and then electrically decoupled using a transformer. The isolated signal is then made available at the output, demodulated, filtered and amplified.

4. Equipment
A screwdriver with a width of 2.5 mm is required to connect the wires to the screw clamp terminals.

5. Mounting, electrical connection
The isolation transmitter is mounted on standard 35 mm DIN rail.

6. Order information
Product Input / Output Part No.
IsoPAQ-41P 0 - 20 mA / 0 - 20 mA 70ISP1012
          0 - 10 V / 0 - 20 mA 70ISP1050
          0 - 20 mA / 0 - 20 mA 70ISP1014
          0 - 10 V / 0 - 20 mA 70ISP1054
          0 - 20 mA / 0 - 10 V 70ISP1016
          0 - 10 V / 0 - 10 V 70ISP1056

7. Technical Data

<table>
<thead>
<tr>
<th>Input</th>
<th>Input signal (factory set as ordered)</th>
<th>0 - 20 mA</th>
<th>4 - 20 mA</th>
<th>0 - 10 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input resistance</td>
<td>Current input Voltage</td>
<td>22 Ω</td>
<td>1 MΩ</td>
<td></td>
</tr>
<tr>
<td>Input capacitance</td>
<td>Approx. 130 pF</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overload</td>
<td>Voltage input</td>
<td>&gt; 300 V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage input</td>
<td>Voltage limitation via 30 V Z-Diode, max. continuous current 30 mA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output</td>
<td>Output signal (factory set as ordered)</td>
<td>0 - 20 mA</td>
<td>4 - 20 mA</td>
<td>0 - 10 V</td>
</tr>
<tr>
<td>Load</td>
<td>Current (factory set as ordered)</td>
<td>0.60 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voltage output</td>
<td>&lt; 1 Ω</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line transmission range</td>
<td>2 - 170 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ripple</td>
<td>&lt; 10 mV</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General data</td>
<td>Temperature coefficient of end value</td>
<td>± 0.005 %/°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cut-off frequency (–3 dB)</td>
<td>&lt; 1 kHz</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test voltage</td>
<td>Input against output against power supply</td>
<td>4 kV / 50 Hz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working voltage</td>
<td>Basic insulation</td>
<td>600 V AC/DC for overvoltage category II and contamination class 2 as per EN 61010 part 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection against dangerous body currents</td>
<td>Protective Separation by reinforced insulation acc. to EN 61010 part 1 up to 300 V AC/DC for overvoltage category II and contamination class 2 between input and output and power supply</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ambient temperature:
- Operation: –20 °C to +70 °C (< 2 to 158 °F)
- Storage: –35 °C to +85 °C (–31 to 185 °F)

Power supply:
- 20 to 255 V AC/DC
- AC 48 ... 62 Hz, approx. 2 VA
- DC approx. 1,0 W

EMC:
- EN 61326 - 1
- EN 61010 - 1

Connection:
- 12.5 mm3 housing, protection type: IP 20

Weight:
- Approx. 150 g

Cut-off mV in specified operating temperature range
1) As far as relevant the standards and rules mentioned above are considered
2) In applications with high operating voltages accidental contact and make sure that there is sufficient distance or insulation between adjacent situations.
3) Minor deviations possible during interference

8. Block diagram

9. Dimensions

LIMITED WARRANTY

INOR Process AB, or any other affiliated company within the Inor Group (hereinafter jointly referred to as “Inor”), hereby warrants that the Product will be free from defects in materials or workmanship for a period of five (5) years from the date of delivery (“Limited Warranty”). This Limited Warranty is limited to repair or replacement at Inor’s option and is effective only for the first end-user of the Product. Upon receipt of a warranty claim, Inor shall respond within a reasonable time period as to its decision concerning:

1. Whether Inor acknowledges its responsibility for any asserted defect in materials or workmanship; and, if so, 2. the appropriate cause of action to be taken (i.e. whether a defective product should be replaced or repaired by Inor).

This Limited Warranty applies only if the Product:

1. is installed according to the instructions furnished by Inor;

2. is connected to a proper power supply;

3. is not misused or abused; and

4. there is no evidence of tampering, mishandling, neglect, accidental damage, modification or repair without the approval of Inor or damage done to the Product by anyone other than Inor.

This Limited Warranty is provided by Inor and contains the only express warranty provided.

INOR SPECIFICALLY DISCLAIMS ANY EXPRESS WARRANTY NOT PROVIDED HEREIN AND ANY IMPLIED WARRANTY, GUARANTEE OR REPRESENTATION AS TO SUITABILITY FOR ANY PARTICULAR PURPOSE, PERFORMANCE, QUALITY AND ABSENCE OF ANY HIDDEN DEFECTS, AND ANY REMEDY FOR BREACH OF CONTRACT, WHICH BUT FOR THIS PROVISION, MIGHT ARISE BY IMPLICATION, OPERATION OF LAW, CUSTOM OF TRADE OR COURSE OF DEALING, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. EXCEPT AS PROVIDED HEREIN, INOR FURTHER DISCLAIMS ANY RESPONSIBILITY FOR LOSSES, EXPENSES, INCONVENIENCES, SPECIAL, DIRECT, CONSEQUENTIAL OR CONSEQUENTIAL DAMAGES ARISING FROM OWNERSHIP OR USE OF THE PRODUCT.

Products that are covered by the Limited Warranty will either be repaired or replaced at the option of Inor. Customer pays freight to Inor, and Inor will pay the return freight by post or other “normal” way of transport. If any other type of return freight is requested, customer pays the whole return cost.

INOR Process AB
PO Box 9125
200 39 MALMO
SWEDEN
Phone: +46 40 31 25 60
Fax: +46 40 31 25 70
E-mail: support@inor.se
Internet: www.inor.com