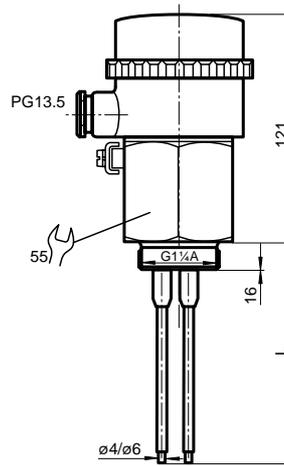


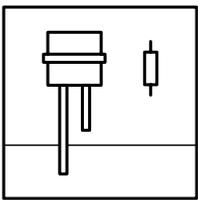
## 2-rod electrode



## Dimensions



## HR-6552



## Features

- Sensors for conductive limit value detection
- Approvals for hazardous areas zone 0 and overspill prevention in acc. with VbF
- Electrode Ø4 mm or Ø6 mm



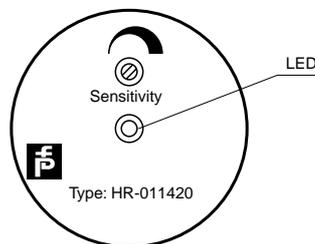
When placing your order, please specify the length (L) of the electrode rods. The electrode rods can be cropped by the user if necessary. Please order the HR-011420 transformer separately.

## Function

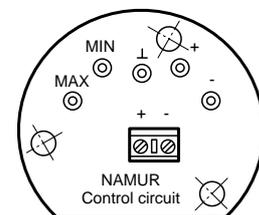
The electronic transformer integrated in the terminal box generates the measuring AC voltage for the electrodes. If the product comes into contact with conductive batch, the measuring circuit is closed. The electrical transformer indicates this by changing the current consumption in accordance with EN 60947-5-6 (NAMUR) on a 2-wire cable on a transformer isolated barrier. The transformer isolated barrier forms the switch signal from the current change. At the same time, it controls the cable connection to the transformer.

If used in hazardous areas or as overspill protection, the requirements of the approval/certifications should be observed.

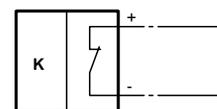
## Electrical connection



Electronical converter HR-011420 mounted in the terminal box



Connecting terminal board in the terminal box



	<b>HR-6552</b>
<b>Application</b>	
<b>Description</b>	Sensors for conductive limit value detection
<b>Function and system design</b>	
<b>Equipment architecture</b>	A measuring system consists of rod electrode HR-6552/W0114, a converter HR-011420 and a transformer isolated barrier KHD2-SRÜ-Ex1.W.LB or KHA6-SRÜ-Ex1.W.LB.
<b>Input characteristics</b>	
<b>Measured variable</b>	Measuring voltage via converter from the transformer isolated barrier
<b>Output characteristics</b>	
<b>Output signal</b>	Electrode relay creates switch signal corresponding to the selected responsiveness
<b>Operating conditions</b>	
<b>Ambient conditions</b>	
Ambient temperature	-20 ... +60 °C (253 ... 333 K) in case of media temperature between 60 ... 150 °C (333 ... 423 K) use heat insulation tube
Protection class	in acc. with IEC 60529 IP65 with terminal box
<b>Process conditions</b>	
Process temperature	-20 ... +60 °C (253 ... 333 K)
Process pressure	≤ 30 bar
<b>Mechanical construction</b>	
<b>Material</b>	Housing: PBT Thread: stainless steel 1.4571 Electrode rod: stainless steel 1.4571, Hastelloy C or tantalum
<b>Process connection</b>	G1¼A thread
<b>Connection</b>	<ul style="list-style-type: none"> <li>• between electrode and converter: connection to the converter via plug facility in the terminal box</li> <li>• between converter and transformer isolated barrier: terminals in the terminal box below the converter</li> </ul>
<b>Certificates and approvals</b>	
<b>Ex approval</b>	01/PTB Nr.: Ex-79/2011X (overspill protection in acc. with VbF)
<b>Type of protection</b>	⊕ EEx ia II C T6
<b>Overspill protection</b>	Z-65.13-6 (overspill protection in accordance with WHG)
<b>General information</b>	
<b>Supplementary information</b>	www.pepperl-fuchs.com
<b>Accessories</b>	
<b>Designation</b>	<ul style="list-style-type: none"> <li>• Spacer, PTFE for Ø4 mm rods</li> <li>• Spacer with clamp screw, PTFE, for Ø4 mm rods</li> <li>• Spacer with clamp screw, PTFE, for Ø6 mm rods</li> </ul>

	<b>Electronical converter HR-011420</b>
<b>Application</b>	
<b>Description</b>	The electronical transformer indicates a changing of the current consumption to EN 60947-5-6 (NAMUR) of the multiple-rod electrode on a 2-wire cable on a transformer isolated barrier.
<b>Input characteristics</b>	
<b>Measured variable</b>	Conductivity of the liquid
<b>Output characteristics</b>	
<b>Output signal</b>	Abrupt current change to EN 60947-5-6 (NAMUR) switched > 2.1 mA unswitched < 1.2 mA max. external self capacitance: 0.14 µF max. external self inductance: 10 µH
<b>Auxiliary energy</b>	
<b>Supply voltage</b>	8.2 V DC ±2 % from transformer isolated barrier
<b>Performance characteristics</b>	
<b>Hysteresis</b>	500 ... 1000 Ω, adjustable via potentiometer (20 turns)
<b>Operating conditions</b>	
<b>Ambient conditions</b>	
Ambient temperature	-20 ... +70 °C (253 ... 343 K)
<b>Certificates and approvals</b>	
<b>Overspill protection</b>	Z-65.13-6 (overspill protection in accordance with WHG)
<b>General information</b>	
<b>Supplementary information</b>	www.pepperl-fuchs.com

