



Level sensors  
Optical level switch

MHF15-21NG1NSM



**Model Name** > [MHF15-21NG1NSM](#)  
**Part No.** > [1052272](#)



**At a glance**

- Robust level monitoring in liquid without additional requirements
- Small, compact design; no medium calibration required
- Process temperature up to 55 °C, process pressure up to 16 bar
- IP 67 and IP 69K enclosure rating
- Process connection G ½
- Highly medium resistant due to stainless steel housing 1.4404, polysulfone apex
- Output available as PNP or NPN transistor
- FDA-compliant, UL

**Your benefits**

- Small, compact sensor ideal for difficult installation conditions with limited space
- Quick commissioning without medium calibration saves time and money
- No moving mechanical parts reduce maintenance and eliminate the need to recalibrate -- even after long periods of use.



**Features**

Medium:	Fluids
Measurement:	Switch
Light source:	LED
Type of light:	Red light
Wave length:	650 nm
Process pressure:	-0.5 bar ... 16 bar
Process temperature:	-25 °C ... +55 °C
GOST approval:	✓
UL approval:	✓
RoHS certificate:	✓

**Performance**

Response time:	2 ms
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**Mechanical data**

Housing material:	Stainless steel 1.4404
Process connection:	G ½
Wetted parts:	Stainless steel 316L, polysulfon, NBR

## Electrical data

Enclosure rating:	IP 67: EN 60529, IP 69K: EN 40050
Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Ripple:	$\leq 5$ Vpp <sup>2)</sup>
Power consumption:	$\leq 30$ mA at 24 V DC without output load
Protection class:	III
Output signal:	1x NPN <sup>3)</sup>
Switching mode:	Normally closed
Output current:	$\leq 100$ mA <sup>4)</sup>
Signal voltage HIGH:	Vs - 2.9 V
Signal voltage LOW:	$\leq 2,9$ V
Switching frequency:	250 Hz <sup>5)</sup>
Connection type:	Round connector M12 x 1, 4-pin

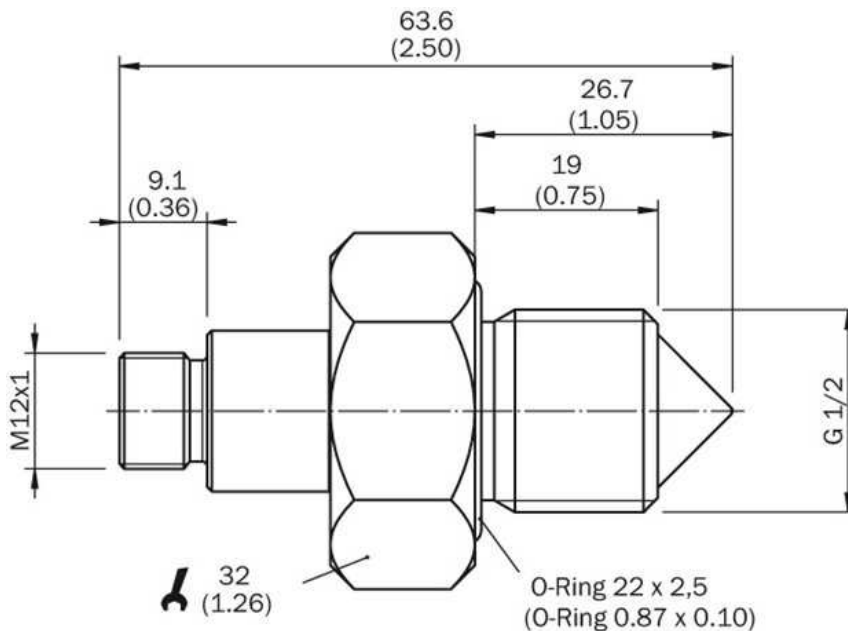
<sup>1)</sup> V<sub>S</sub> connections reverse-polarity protected <sup>2)</sup> May not exceed or fall short of V<sub>S</sub> tolerances <sup>3) 4)</sup> Output overcurrent and short-circuit protected <sup>5)</sup> With light/dark ratio

1:1

## Ambient data

Ambient operating temperature:	-25 °C ... +55 °C
Ambient storage temperature:	-25 °C ... +70 °C

## Dimensional drawing



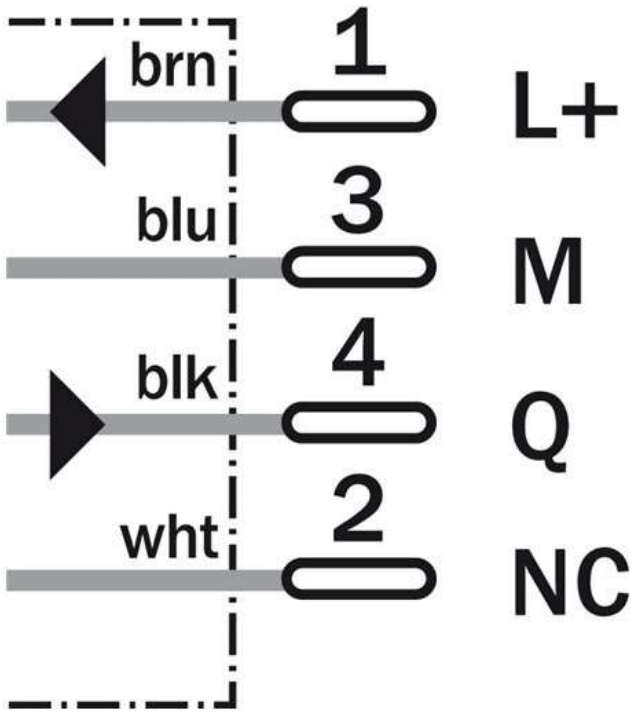
Connection type

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Connection diagram

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