



Level sensors  
Optical level switch, MHF15

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
UL approval:	✓

**Performance**

Response time:	2 ms
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**Mechanical data**

Housing material:	Stainless steel 1.4404
Process connection:	G 1/2
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>

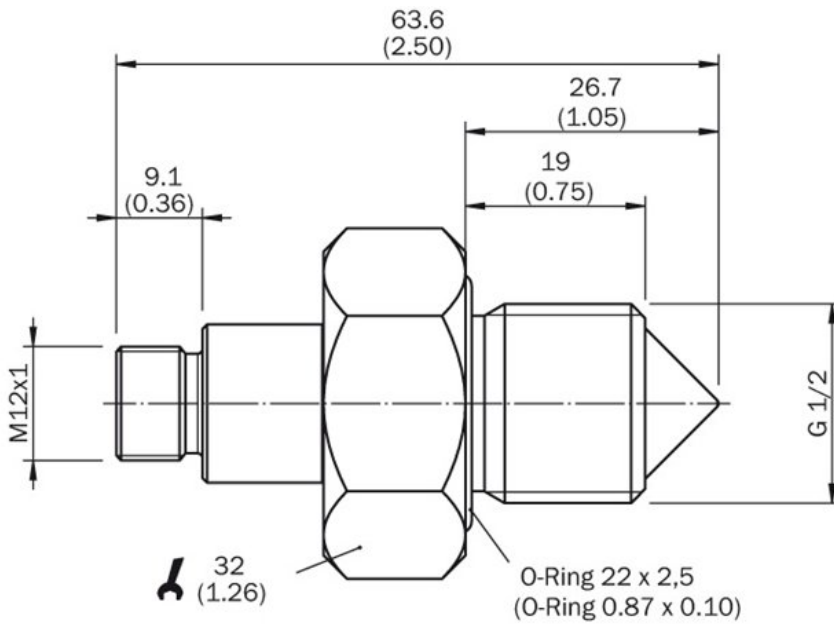
Ripple:	$\leq 5 \text{ Vpp}$ <sup>2)</sup>
Power consumption:	$\leq 30 \text{ mA}$ at 24 V without output load
Protection class:	III
Output signal:	1x NPN <sup>3)</sup>
Switching mode:	Normally closed
Output current:	$\leq 100 \text{ mA}$ <sup>4)</sup>
Signal voltage HIGH:	$V_s$
Signal voltage LOW:	$\leq 2,9 \text{ V}$
Switching frequency:	250 Hz <sup>5)</sup>
Connection type:	M12x1, 4-pin

1)  $V_S$  connections reverse-polarity protected 2) May not exceed or fall short of  $V_S$  tolerances 3) 4) Output overcurrent and short-circuit protected 5) With light/dark ratio  
1:1

### Ambient data

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

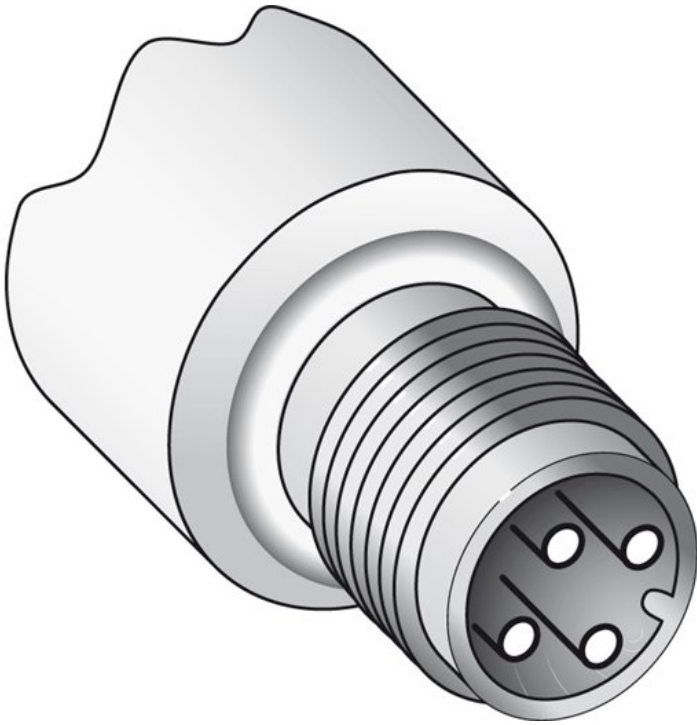
### Dimensional drawing



Dimensions in mm (inch)

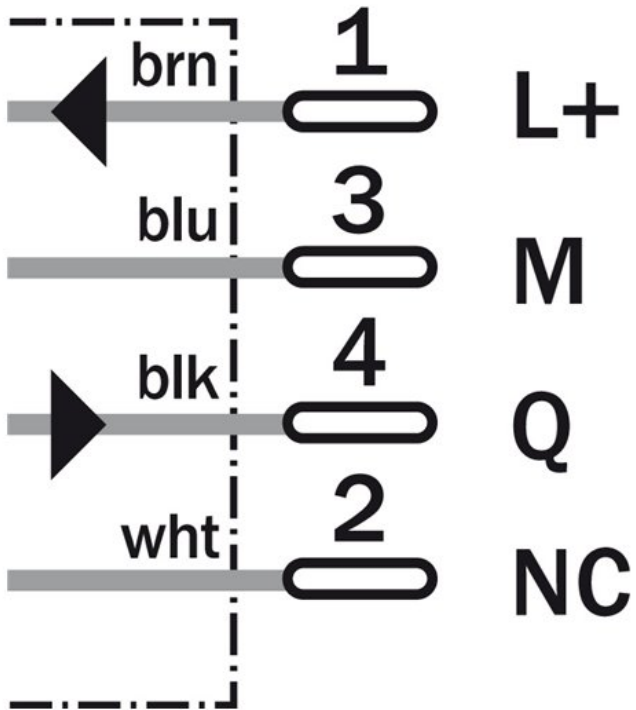
Connection type

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Connection diagram

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