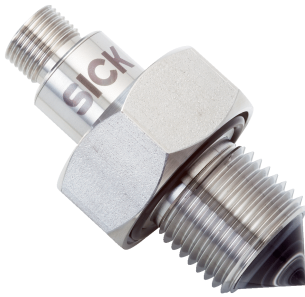


MHF15-21NG1PSM

MHF15

LEVEL SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MHF15-21NG1PSM	1052237

Other models and accessories → www.sick.com/MHF15



Detailed technical data

Features

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

Performance

Response time	2 ms
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Electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
Residual ripple	≤ 5 V _{pp} ²⁾
Power consumption	≤ 30 mA at 24 V DC without output load
Protection class	III
Connection type	M12 round connector x 1, 4-pin
Output signal	1 x PNP
Switching mode	Normally closed
Signal voltage HIGH	V _s - 2.9 V
Signal voltage LOW	Approx. 0 V
Output current	≤ 100 mA ³⁾
Switching frequency	250 Hz ⁴⁾

¹⁾ U_V connections, reverse polarity protected.

²⁾ May not exceed or fall below U_V tolerances.

³⁾ Output overcurrent and short-circuit protected.

⁴⁾ With light/dark ratio 1:1.

Enclosure rating	IP67: EN 60529, IP69K: ISO 20653
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- 1) U_V connections, reverse polarity protected.
- 2) May not exceed or fall below U_V tolerances.
- 3) Output overcurrent and short-circuit protected.
- 4) With light/dark ratio 1:1.

Mechanics

Wetted parts	Stainless steel 316L, polysulfon, FPM
Process connection	G 1/2
Housing material	Stainless steel 1.4404

Ambient data

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

Classifications

ECl@ss 5.0	27273204
ECl@ss 5.1.4	27273204
ECl@ss 6.0	27273204
ECl@ss 6.2	27273204
ECl@ss 7.0	27273204
ECl@ss 8.0	27273204
ECl@ss 8.1	27273204
ECl@ss 9.0	27273204
ECl@ss 10.0	27273204
ECl@ss 11.0	27273204
ETIM 5.0	EC002654
ETIM 6.0	EC002654
ETIM 7.0	EC002654
UNSPSC 16.0901	41111950

Type code

Type code

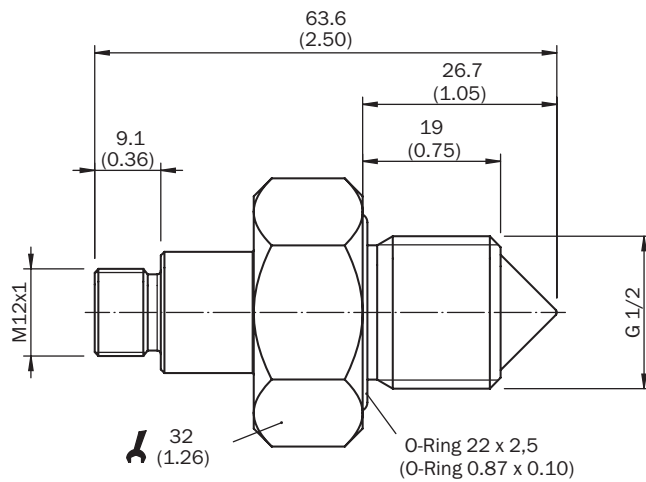
Switch output

P	1 x PNP transistor output, normally closed
N	1 x NPN transistor output, normally closed
H	1 x PNP transistor output, normally open
T	1 x NPN transistor output, normally open

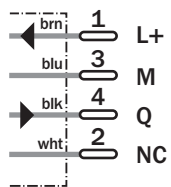


MHF15 -	2	1	N	G	1		S	M
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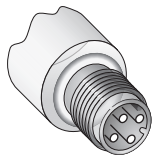
Dimensional drawing (Dimensions in mm (inch))



Connection diagram



Connection type



Recommended accessories

Other models and accessories → www.sick.com/MHF15

	Brief description	Type	Part no.
Flanges			
	Welded flange G 1/2, Stainless steel V4A (1.4404, 316L)	BEF-FL-316G12-LMH1	4065669

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YF2A14-020UB3XLEAX	2095607
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YF2A14-020VB3XLEAX	2096234
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YF2A14-050UB3XLEAX	2095608
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YF2A14-050VB3XLEAX	2096235
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m	YF2A14-100UB3XLEAX	2095609
	Head A: female connector, M12, 4-pin, straight, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YF2A14-100VB3XLEAX	2096236
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 2 m	YG2A14-020UB3XLEAX	2095766
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 2 m	YG2A14-020VB3XLEAX	2095895
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 5 m	YG2A14-050UB3XLEAX	2095767
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 5 m	YG2A14-050VB3XLEAX	2095897
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PUR, halogen-free, unshielded, 10 m	YG2A14-100UB3XLEAX	2095768
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 10 m	YG2A14-100VB3XLEAX	2095898
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 15 m	YG2A14-150VB3XLEAX	2096213
	Head A: female connector, M12, 4-pin, angled, A-coded Head B: Flying leads Cable: Sensor/actuator cable, PVC, unshielded, 20 m	YG2A14-200VB3XLEAX	2096214

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com