

FUS10

Ultrasonic Level Sensor

- **Rugged, heavy-duty device housed in a plastic enclosure**
- **Operating ranges from 60–500 to 600–6000 mm**
- **2 NPN or PNP contacts, can be programmable via TEACH-IN method**
- **Power supply 12–30 VDC**



Description:

Ultrasonic level sensors monitor the distance between a liquid level and the sensor's transmission surface using the echo time measurement of an ultrasonic signal. MIN or MAX limit values can be signaled or pump control can be implemented with two programmable transistor outputs. For operating ranges up to 2m, the sensors are available in an M18 enclosure incl. two lock nuts that is easy to install. For an operating range up to 3.5m, we offer an M30 enclosure. The sensor with 6m operating range has an enclosure with square flange and an extra large transmission surface.

Typical Applications:

FUS10 ultrasonic level sensors are suitable for applications where liquid levels in non-pressurized vessels are monitored or regulated.

Models:

FUS10...S: electrical connection
M12 industrial plug

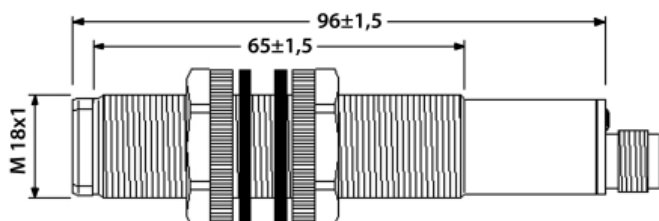
FUS10...K: with cable connector

Operating ranges:

Typ	Schaltbereich	Schaltfrequenz	Schutzart
FUS10.K.05...	60–500 mm	5 s	IP67
FUS10.K.08...	100–800 mm	5 s	IP67
FUS10.K.20...	200–2,000 mm	2 s	IP67
FUS10.K.35...	350–3,500 mm	1 s	IP67
FUS10.K.60...	600–6,000 mm	0.5 s	IP65

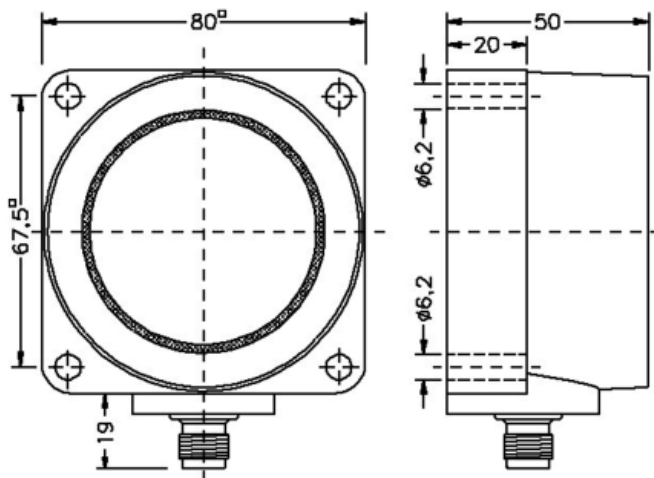
Dimensions:

FUS10.K.5... to FUS10.K.20...



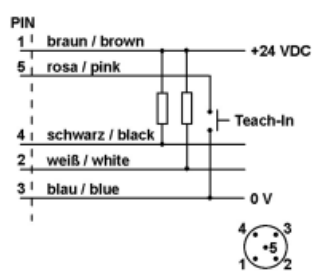
FUS10.K.35: enclosure M30 x 1.5, length 125 mm

FUS10.K.60...

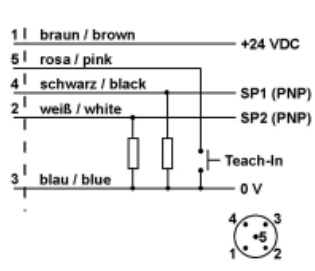


Electrical Connection:

NPN (FUS10...N...)



PNP (FUS10...P...)



Model Coding:

Order number: FUS10. K. 20. P. S. 0

Ultrasonic level sensor

Material:

K = plastic enclosure

S = special-order device

Operating range:

05 = 60–500 mm

08 = 100–800 mm

20 = 200–2,000 mm

35 = 350–3,500 mm

60 = 600–6,000 mm

Output type:

P = 2 x PNP

N = 2 x NPN

Electrical connection:

S = plug M12 x 1, 5-pin

K = cable, 5-core, 2m (not for FUS10.K.60)

Options:

0 = none

1 = matching plug, 5-pin, with 2 m cable

2 = matching plug, 5-pin, with 2 m cable, right-angled

9 = please specify in writing

Specifications:

Materials: enclosure made of PET / PBT, sonic converter made of glass / ceramic, potting compound is epoxy resin

Supply voltage: 12 to 30 VDC

Electrical connection: plug M12 x 1 or 2 m cable

Process-connection:

FUS10.K.05...20: threaded M18 incl. 2 lock nuts

FUS10.K.35: threaded M30 incl. 2 lock nuts

FUS10.K.60: 4-hole square flange 67.5 x 67.5 mm

Outputs: 2 x NPN or PNP switched output

Switching hysteresis: 1 %

Indicator: 3, LED, echo, operating points P1, P2

Repeat accuracy:

FUS10.K.05...35: ± 0,2 % ± 1 mm

FUS10.K.60: ± 0,2 % ± 2 mm

max. pressure: atmospheric

Temperature range: -15 to +70 °C, compensated