

FUM10

Ultrasonic- Level Sensor

- for liquids
- robust design in plastic housing
- measuring ranges from 60...500 to 600...6000 mm
- analogue output 4...20 mA, programmable by TEACH-IN process
- supply 12...30 VDC
- max. pressure: atmospheric
- max. temperature: 70 °C



Description:

Ultrasonic level sensors measure the clearance between a liquid level and the sensor's transmission surface using the echo time measurement of an ultrasonic signal.

Liquid levels can be measured and the data sent to master evaluators by means of a programmable current or voltage output.

For operating ranges up to 2 m, the devices are available in an M18 enclosure incl. two lock nuts that is easy to install. For an operating range up to 3,5 m, we offer an M30 enclosure. The sensor with 6 m operating range has a housing with square flange and an extra large transmission surface.

Typical applications:

FUM10 ultrasonic level sensors are suitable for applications where liquid levels in depressurized vessels are monitored, measured or regulated.

Models:

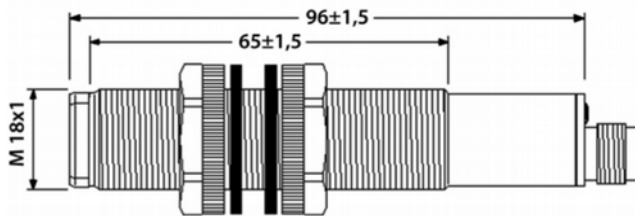
FUM10...S:	electrical connection M12 x 1 industrial plug
FUM10...K:	with cable connection

Measuring Ranges:

Type	Measuring range	Response time (90 %) [ms]	Protection class
FUM10.K.05...	60...500 mm	100	IP67
FUM10.K.08...	100...800 mm	100	IP67
FUM10.K.20...	200...2000 mm	200	IP67
FUM10.K.35...	350...3500 mm	400	IP67
FUM10.K.60...	600...6000 mm	700	IP65

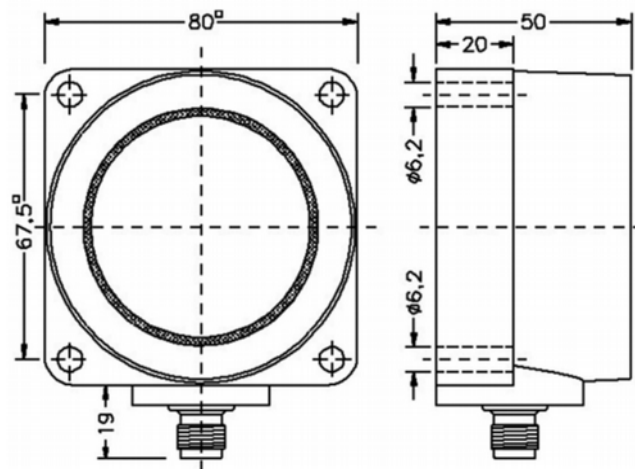
Dimensions:

FUM10.K.5... to FUM10.K.20...

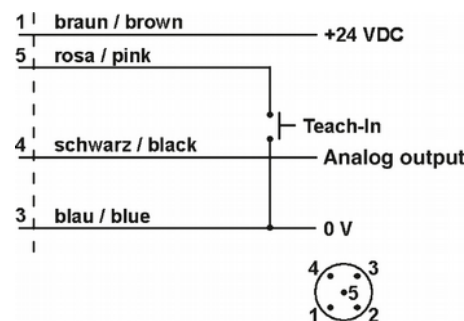


FUM10.K.35: enclosure M30 x 1,5, length 125 mm

FUM10.K.60...



Electrical Connection:



Order Code:

Order number: **FUM10. K. 20. I. S. 0**

Ultrasonic level sensor

Material:

K = housing made of plastic
S = special order

Measuring range:

05 = 60...500 mm
08 = 100...800 mm
20 = 200...2000 mm
35 = 350...3500 mm
60 = 600...6000 mm

Output signals:

I = current output 4...20 mA
V = voltage output 0...10 V
(The output signal can be set within the measuring range limit by „Teach-in“ on site)

Electrical connection:

S = plug M12 x 1, 5-pin
K = cable, 5-wire, 2 m (not for FUM10.K.60)

Options:

0 = without
9 = please specify in plain text

Accessories:

SM12.5:

M12 connector with PVC cable,
5-wire (2, 5, 10 m cable length, straight or angled form)



Technical Data:

Materials:

housing made of PET / PBT,
sound transducer made of
glass / ceramic,
epoxy resin potting compound

Supply voltage:

12 to 30 VDC

Electrical connection:

plug M12 or 1,5 m cable

Process connection:

FUM10.K.05...20: thread M18 incl. 2 lock nuts
FUM10.K.35: thread M30 incl. 2 lock nuts
FUM10.K.60: 4-hole square flange
67,5 x 67,5 mm

Outputs:

analogue output, 4...20 mA
or 0...10 V

Resolution:

FUM10.K.05...08: 0,25 mm
FUM10.K.20...35: 1 mm
FUM10.K.60: 1,5 mm

Display:

3 LED, Echo, beginning and end of the
head line

Repeatability:

FUM10.K.05...35: ± 0,2% ± 1 mm
FUM10.K.60: ± 0,2% ± 2 mm

max. pressure:

atmospheric

Medium temperature-range:

-15...+70 °C, compensated