LS03 Series

MEDER electronic

Level Sensors with Magnetic Floats



APPLICATIONS

• Liquid container monitoring in household appliances, automotive applications, test and measurement, and control technology.

DESCRIPTION

Standard liquid level sensor. The sensor has to be mounted horizontally for best results.

Following materials are available:

PP (Polypropylene) for water applications and dilute acids

PA (Polyamide) for use in oil, gasoline (petrol) and brake fluid

The standard termination is a PVC cable with a cross section of 0.14 mm^2 and a length of 500 mm. The cable can be modified on request.

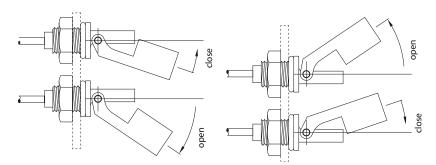
FEATURES

- Depending on mounting position/movement direction, the sensor opens or closes with the rising, respectively the sinking liquid level
- Different versions available for mounting from inside or from outside
- · High power switches available

MATERIALS

| PA version | | | |
|-------------------------|--|--|--|
| Stem, nut | Polyamide black | | |
| Float | Polyamide black | | |
| Seal | Nitrile rubber | | |
| PP version | | | |
| PP version | | | |
| PP version Stem, nut | Polypropylene white | | |
| | Polypropylene white Polypropylene white | | |

MOVEMENT DIRECTION



MEDER electronic

LS03 Series

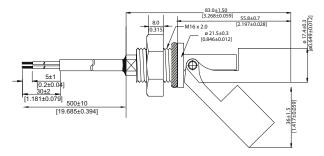
Level Sensors with Magnetic Floats

VERSIONS & DIMENSIONS

All dimensions in mm [inch]

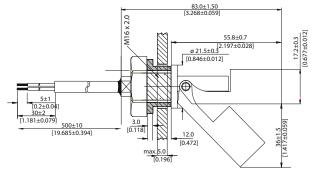


- Mounting from inside, thread M16 x 2.0
- Insertion hole: ø 16.5 mm
- · Sealing from inside with O-ring.



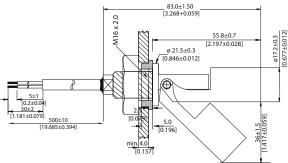
DL Type

- Mounting from outside, thread M16 x 2.0
- Insertion hole: ø 22 mm 24mm
- 12 mm wide sealing, suitable for low filling pressure
- Wall thickness max. 5 mm



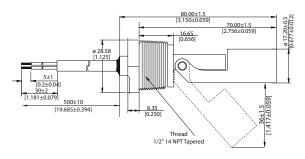
DK Type

- Mounting from outside, thread M16 x 2.0
- · Insertion hole: ø 22 mm
- 5 mm narrow sealing, suitable for high filling pressure
- · Wall thickness min. 4 mm



GZ Type

- Mounting from outside, tapered thread 1/2" (no sealing necessary)
- · Insertion hole: 1/2" thread



MEDER electronic

LS03 Series

Level Sensors with Magnetic Floats

CONTACT DATA

| All Data at 20° C | Switch Model \rightarrow Contact Form \rightarrow | Switch 66 Form A | | | Switch 85 Form A | | | |
|--|---|---------------------|------|------|---------------------|------|------|-------|
| Contact Ratings | Contact Ratings Conditions | | Тур. | Max. | Min. | Тур. | Max. | Units |
| Switching Power | Any DC combination of V & A not to exceed their individual max.'s | | | 10 | | | 100 | w |
| Switching Voltage | DC or peak AC | | | 200 | | | 1000 | V |
| Switching Current | DC or peak AC | | | 0.5 | | | 1.0 | А |
| Carry Current | DC or peak AC | | | 1.25 | | | 2.5 | А |
| Static Contact Resistance | w/ 0.5 V & 10 mA | | | 150 | | | 150 | mΩ |
| Dynamic Contact Resistance | Measured w/ 0.5 V & 50 mA , 1.5 ms after closure | | | 200 | | | 200 | mΩ |
| Insulation Resistance across Contacts | 100 volts applied | 10 ^{10*} | | | 10 ¹¹ | | | Ω |
| Breakdown Voltage across Contact | Voltage applied for 60 sec. min. | 225 * | | | 700 | | | VDC |
| Operation Time incl. Bounce | Measured w/ 50 % overdrive | | | 0.5 | | | 1.0 | ms |
| Release Time | Measured w/ no coil suppression | | | 0.1 | | | 0.1 | ms |
| Capacitance | at 10 kHz cross contact | | 0.2 | | | 0.7 | | pF |
| Environmental Data | | | | | | | | |
| Shock Resistance | 1/2 sinus wave duration 11 ms | | | 50 | | | 50 | g |
| Vibration Resistance | From 10 - 2000 Hz | | | 20 | | | 20 | g |
| Ambient Temperature | 10°C/ minute max. allowable | -20 | | 90 | -20 | | 130 | °C |
| Stock Temperature | 10°C/ minute max. allowable | -20 | | 100 | -55 | | 130 | °C |
| Soldering Temperature | 5 sec. dwell | | | 260 | | | 260 | °C |

Please note: The indicated electrical data are maximum values and can vary downwards when using a more sensitive switch.

* Insulation resistance of 10¹² and breakdown voltage of 480 VDC is available.

These ranges refer to the uncut / unmodified Reed Switches described in our Reed Switch section. Consult factory if more detail is required.

LS03 Series Level Sensors with Magnetic Floats

| Series | Version | Contact Form | Switch Model | Material | Cable Length (mm) | Termination |
|----------------------------------|------------|---|-----------------|----------|----------------------|-------------|
| LS03 - | | XX | XX - | XX - | XXX | Х |
| | (Standard) | 1 Form A 66, 85 66, 85 66, 85 66, 85 66, 85 | | | | |
| | / DL - | | 66, 85 | PA, PP | 500 * | w |
| Option | / DK - | | 66, 85 | | | |
| | / GZ - | | 66, 85 | | | |
| * Other cable lengths available. | | | | | | |

ORDER INFORMATION

Part Number Example

LS03/DL - 1A66 - PA - 500 W

DL is the version 1A is the contact form 66 is the switch model PA is the material 500 is the cable length (mm) W is the termination

TERMINATION

For wire and termination details please contact factory.

| W | The cable cut length includes: 5 mm of wire stripped and tinned |
|---|--|
| | 5 mm of wire stripped and tinned |

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Liquid Level Sensors category:

Click to view products by MEDER manufacturer:

Other Similar products are found below :

 F03-16PT-1M
 FSH-21
 FSH-25
 FSH-34
 FSH-35
 FSV-31
 FSV-35
 LRNH31S41
 FSH-31
 RSF14Y100RF
 F03-16PT-10M
 LL01-1AB01

 F03-16PS-F
 F03-16SF-5M
 F03-16PE-5M
 F03-16PT-5M
 K7L-U
 LBFS 1151
 LL8951T5
 SCN-1518SC
 LL103000
 LRNR31N01
 K7L

 AT50DB
 F03-16PT-2M
 14102
 RSF107H100GV
 MS03-PP
 KSL-100-1
 LS01-1A66-PP-2000W
 LS01-1B66-PP-500W
 LS02-1A66-S-500W

 LS02-1B66-S-500W
 LS02-1B85-PP-5000W
 LS03-1A85-PP-500W
 LS03/DL-1A85-PA-500W
 RSF26H050TG
 EL-3N
 LL01-1AA01

 LRNH31S42
 MS10C
 SSH66XE34N100
 SSH66TE34N100S
 TSF76H100DN
 TSF76H050TV
 OLS500D3L
 RSF88Y100R
 RSF76Y100RN

 RSF54Y100RC
 RSF53Y100RC
 OLS200D3LSH
 KSF54Y100RC
 SSF04D3LSH
 SSF04D3LSH
 SSF04D3LSH