

DESCRIPTION

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

Two versions 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<sup>2</sup> and a length of 500 mm. The cable can be modified on request.

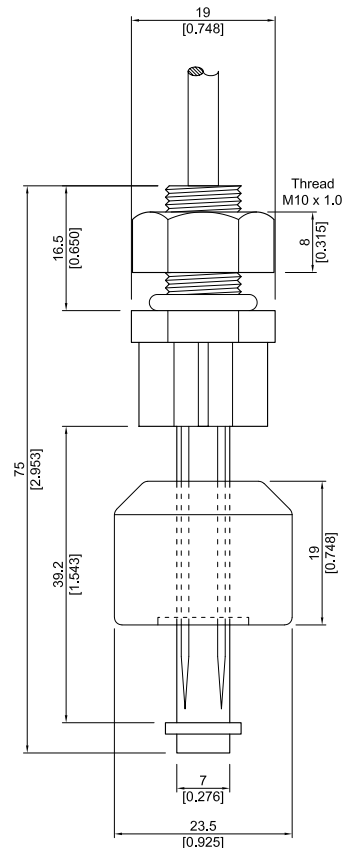


APPLICATIONS

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

DIMENSIONS

All dimensions in mm [inches]



FEATURES

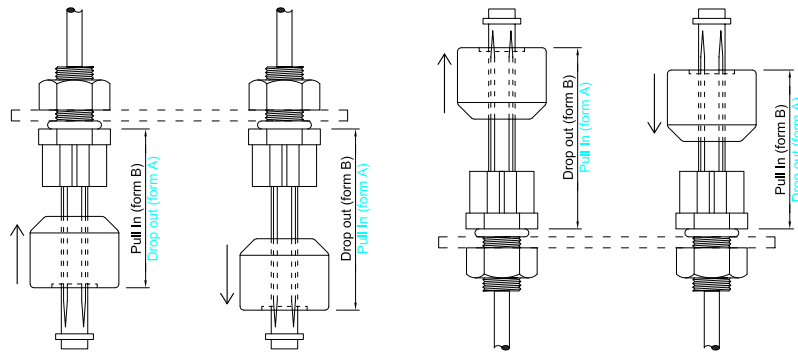
- High power switches available
- Other cables, connectors and colors available
- Form A (normally open) and Form B (normally closed) types are available
- IP 68 (only to screw thread)

MATERIALS

Materials PA version	
Shaft, nut	Polyamide black
Float	Polyamide black
Seal	Nitrile rubber
Materials PP version	
Shaft, nut	Polypropylene black
Float	Polypropylene black
Seal	Nitrile rubber

**Level Sensors with  
Magnetic Floats**

**MOVEMENT**



**ORDER INFORMATION**

SERIES	CONTACT FORM	SWITCH MODEL	MATERIAL	CABLE LENGTH (mm)	TERMINATION
LS02 -	XX	XX -	XX -	XXX	X
OPTIONS	1 Form A	66, 84	PA, PP	500 *	W, X, Y
	1 Form B				

\* Other cable lengths available.

**Part Number Example**

LS02 - 1A66 - PA - 500 W

**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 consult factory.

W		The cable cut length includes: 30 mm of separated wire with 5mm of wire stripped and tinned
X		The cable cut length includes: 30 mm of separated wire with individual crimped terminals
Y		The cable cut length includes: 30 mm of separated wire with individual spade terminals

CONTACT DATA

All data 20 °C	Switch Model → Contact Form →	Switch 66 Form A / B			Switch 84 Form A / B			
Contact Ratings	Conditions	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Switching Power	Any DC combination of V & A not to exceed their individual max.'s			10			10	W
Switching Voltage	DC or peak AC			200			400	V
Switching Current	DC or peak AC			0.5			0.5	A
Carry Current	DC or peak AC			1.25			1.0	A
Static Contact Resistance	w/ 0.5V & 10mA			150			150	mΩ
Dynamic Contact Resistance	Measured w/ 0.5V & 50mA 1.5 ms after closure			200			200	mΩ
Insulation Resistance across Contacts	100 Volts applied	10 <sup>10</sup> *			10 <sup>11</sup>			Ω
Breakdown Voltage across Contacts	Voltage applied for 60 sec. min.	225 *			700			VDC
Operate Time, incl. Bounce	Measured w/ 50% overdrive			0.5			2.0	ms
Release Time	Measured w/ no coil suppression			0.1			0.1	ms
Capacitance	@ 10kHz across contact		0.2			0.7		pF
<b>Environmental Data</b>								
Shock Resistance	1/2 sine wave duration 11ms			50			50	g
Vibration Resistance	From 10 - 2000 Hz			20			20	g
Ambient Temperature	10 °C/ minute max .allowable	-20		90	-20		90	°C
Storage Temperature	10 °C/ minute max. allowable	-20		100	-20		100	°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 10 <sup>12</sup> 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.								



*Products for tomorrow*

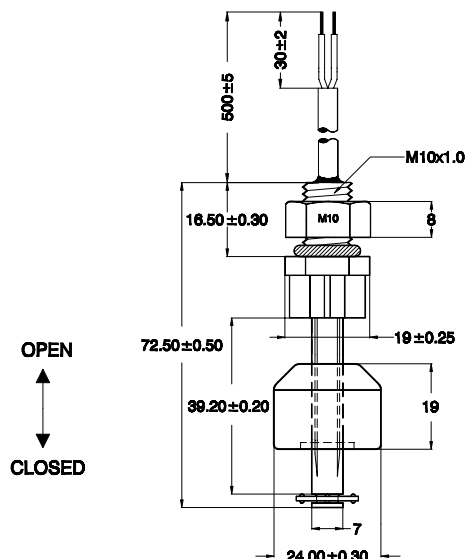
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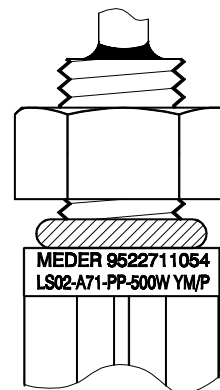
**Level Sensor:** LS02-1A71-PP-500W

**Part Number:** 9522711054

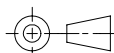
**Dimensions (mm)**(unspecified tolerances  $\pm 0,1\text{mm}$ )



**Marking**



MEDER-Label Art.Nr. Type  
 Production-Code-EN60062/Factory Code



Contact Data 71 (Form A/Dry)		Min.	Typ.	Max.	Units
Contact Rating	Any combination of the switching voltage and current must not exceed the given rated power			10	W
Switching Voltage	DC or Peak AC			200	V
Switching Current	DC or Peak AC			0,5	A
Carry Current	DC or Peak AC			1,0	A
Static Contact Resistance (initial)	Measured with 40% overdrive			150	mΩ
Insulation Resistance	RH 45%	$10^{12}$			Ω
Breakdown Voltage		240			VDC
Operate Time, including Bounce	Measured with 40% overdrive			0,5	ms
Release Time				0,1	ms
Capacitance			0,3		pF

Material	
stem	Polypropylene white
nut	Polypropylene white
float	Polypropylene white
lock washer	Polypropylene white
O-ring	nitril caoutchouc

Environmental Data					
Shock	½ sine wave, duration 11ms			50	g
Vibration	from 10 - 2000 Hz			20	g
Operating Temperature	10°C/min max. allowable	-20		80	°C
Storage Temperature	10°C/min max. allowable	-20		80	°C
Contact Resistance with Cable	Measured with 40% overdrive			200	mΩ
Sealing Compound		Epoxy resin			
Cable	Round cable LIYY 2 x 0,14 mm <sup>2</sup> , grey, colour of wire: white and brown Ends of cable with 5±1 mm tinned leads				
Connection	M10 x 1,0				
Float specific density	approx. 0,7 g / cm <sup>3</sup>				
Remarks	Float down = Contact closed; Float over = Contact open				