

**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.

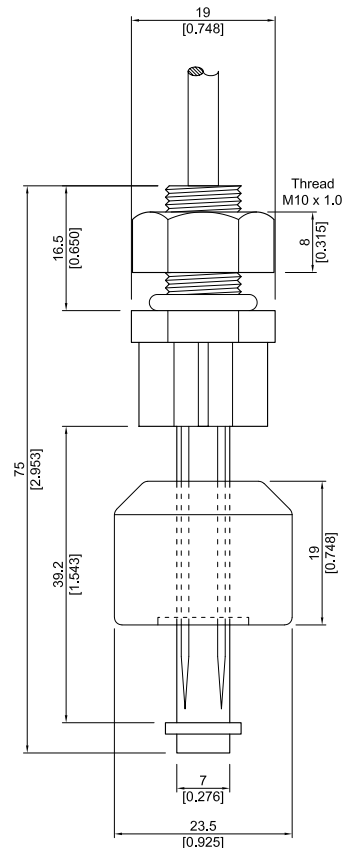


**APPLICATIONS**

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

**DIMENSIONS**

All dimensions in mm [inches]



**FEATURES**

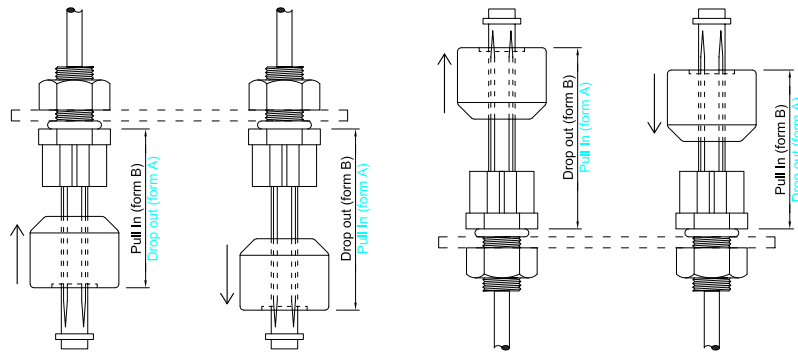
- High power switches available
- Other cables, connectors and colors available
- Form A (normally open) and Form B (normally closed) types are available
- IP 68 (only to screw thread)

**MATERIALS**

<b>Materials PA version</b>	
Shaft, nut	Polyamide black
Float	Polyamide black
Seal	Nitrile rubber
<b>Materials PP version</b>	
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*

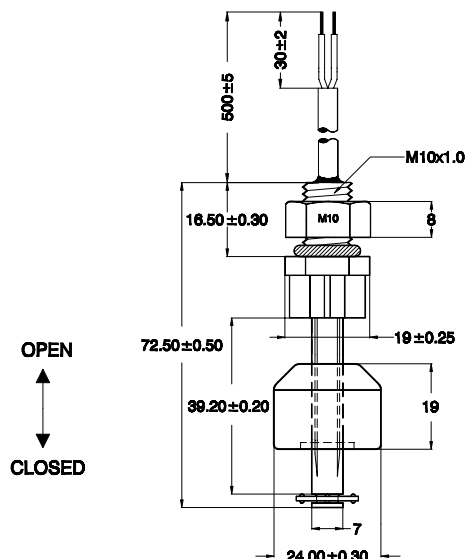
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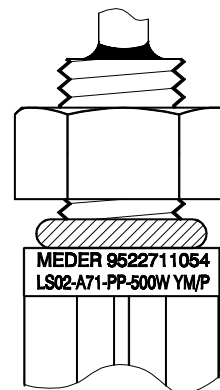
**Level Sensor:** LS02-1A71-PP-500W

**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				