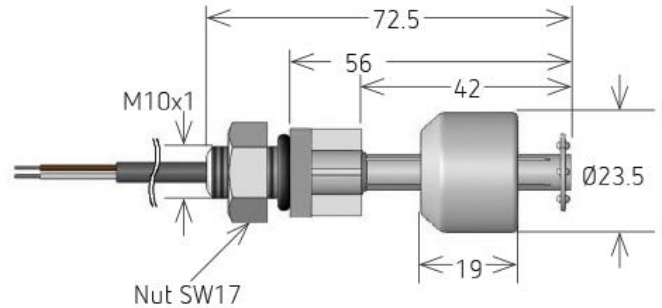


# LS02 Series Level Sensors

- **Features:** IP68-only up to Screw in Thread, High Power Switch Option, Other Cables & Connectors
- **Applications:** Level Control, Detection and Monitoring
- **Markets:** Automotive, Appliance, HVAC/R, Test & Measurement



Part Description: **LS02-0X00-XX-000X**

| Contact Qty | Contact Form | Switch Model | Material | Cable Length (mm) | Termination           |
|-------------|--------------|--------------|----------|-------------------|-----------------------|
| 1           | A, B         | 66, 85       | PA, PP   | 500, 1000, 5000   | W = Stripped & Tinned |

| Customer Options   | Switch Model |      | Unit |
|--|--------------|------|------|
|  | 66           | 85   |      |
| <b>Contact Data</b>  |              |      |      |
| <b>Rated Power (max.)</b><br>Any DC combination of V&A not to exceed their individual max.'s | 10           | 100  | W    |
| <b>Switching Voltage (max.)</b><br>DC or peak AC   | 180          | 1000 | V    |
| <b>Switching Current (max.)</b><br>DC or peak AC   | 0.5          | 1.0  | A    |
| <b>Carry Current (max.)</b><br>DC or peak AC   | 1.25         | 2.5  | A    |
| <b>Contact Resistance (max.)</b><br>@ 0.5V & 50mA  | 150          | 150  | mOhm |

| Glossary Contact Form |  |   |
|-----------------------|--|---|
| Form A                | NO = Normally Open Contacts<br>SPST = Single Pole Single Throw   |  |
| Form B                | NC = Normally Closed Contacts<br>SPST = Single Pole Single Throw |  |
| Form C                | Changeover<br>SPDT = Single Pole Double Throw                    |  |

| Glossary Material             |  |
|-------------------------------|--|
| PP: Polypropylene             | For water applications and dilute acids  |
| PA: Polyamide                 | For oil                                  |
| NBR: Nitrile Butadiene Rubber | For oil, gasoline & in high temperatures |
| SS: Stainless Steel           | For high temp. (>160°C)                  |

# LS02 Series Level Sensors

## General Sensor Data

|                                  |                                  |                                   |     |
|----------------------------------|----------------------------------|-----------------------------------|-----|
| Materials                        |                                  |                                   |     |
| Stem, nut                        | PA                               | PP                                |     |
| Float                            | PA                               | PP                                | NBR |
| Seal                             | Nitrile Rubber                   |                                   |     |
| Cable Specifications             | Low Voltage<br>(66 Switch Model) | High Voltage<br>(85 Switch Model) |     |
| Cross Section (mm <sup>2</sup> ) | 0.14                             | 0.25                              |     |
| Cable Material                   | PVC                              |                                   |     |
| Packing                          | Bulk                             |                                   |     |

## LS02 Reed Sensor



## Environmental Data

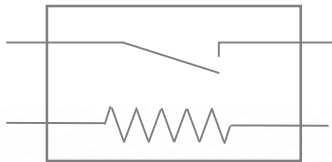
|  |           | Unit |
|--|-----------|------|
| Shock Resistance (max.)<br>1/2 sine wave duration 11ms | 50        | g    |
| Vibration Resistance (max.)                            | 20        | g    |
| Operating Temperature<br>Cable not moved               | -20 to 80 | °C   |
| Operating Temperature<br>Cable moved                   | -5 to 80  | °C   |
| Storage Temperature                                    | -30 to 80 | °C   |

## Handling & Assembly Instructions

- Max torque of nuts 1Nm
- Cable bending-radius is diameter x 15
- Min. bending distance to housing is 5mm
- Decrease switching distance by mounting on iron
- Do not use magnetically inductive screws
- Series resistor recommended for > 5m cable length

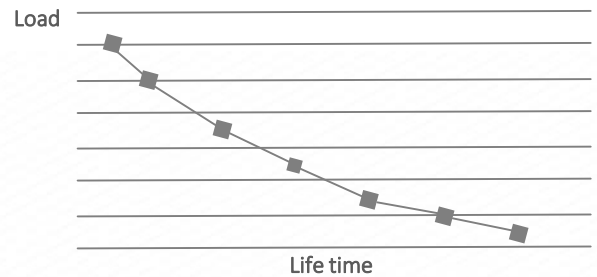
## Layout

### Top View



## Life Test Data

\*Load increase reduces life expectancy of Reed Switches



## Glossary Magnetic Sensitivity

| Sens. | A     | B     | C     | D     | E     | F     | G     |
|-------|-------|-------|-------|-------|-------|-------|-------|
| AT    | 05-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 | 35-40 |

Please note: All technical specifications on this series datasheet refer to the standard product range. Modifications in the sense of technical progress are reserved. For general information only. For more specific information, please consult the product datasheet, available upon request.

This series datasheet could contain technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These change will be incorporated in future revisions.

For deviating values, most current specifications and products please contact your nearest sales office.

