

PVDF side-mounted float switch specification

LSYZ-1-PVDF | Complete English translation of the attached Chinese specification

1. Identification and materials

Type: Float Sensor. Part number: LSYZ-1-PVDF. Customer name and customer approval fields are blank. This drawing identifies an M16 configuration; it is distinct from the ELEC4 and ELEC6 models on the product page.

Item	Specification
Sensor body	Gray PVDF
Float	Gray PVDF
Washer / sealing ring	Silicone (the English column prints “Silicon”)
Screw nut	Gray PVDF
Wire	UL1007, 80°C, 22AWG, gray
Filling compound	Black hard potting compound; C-5335-120A + C-5335-120B, mixed 4:1
Terminal	Not specified
Terminal housing	Not specified

2. Reed-switch characteristics

Parameter	Value
Contact form	A
Maximum contact rating	10W
Maximum switching voltage	100VDC
Minimum breakdown voltage	220VDC
Maximum switching current	0.5A
Minimum insulation potential	— (not specified)
Maximum contact resistance	100mΩ
Minimum insulation resistance	10 ¹⁰ Ω
Electrical life	1×10 ⁸ operations at 5VDC, 10mA

Observe maximum switched power, voltage and current together. The stated electrical-life test condition is 5VDC / 10mA and does not establish the same life at maximum load.

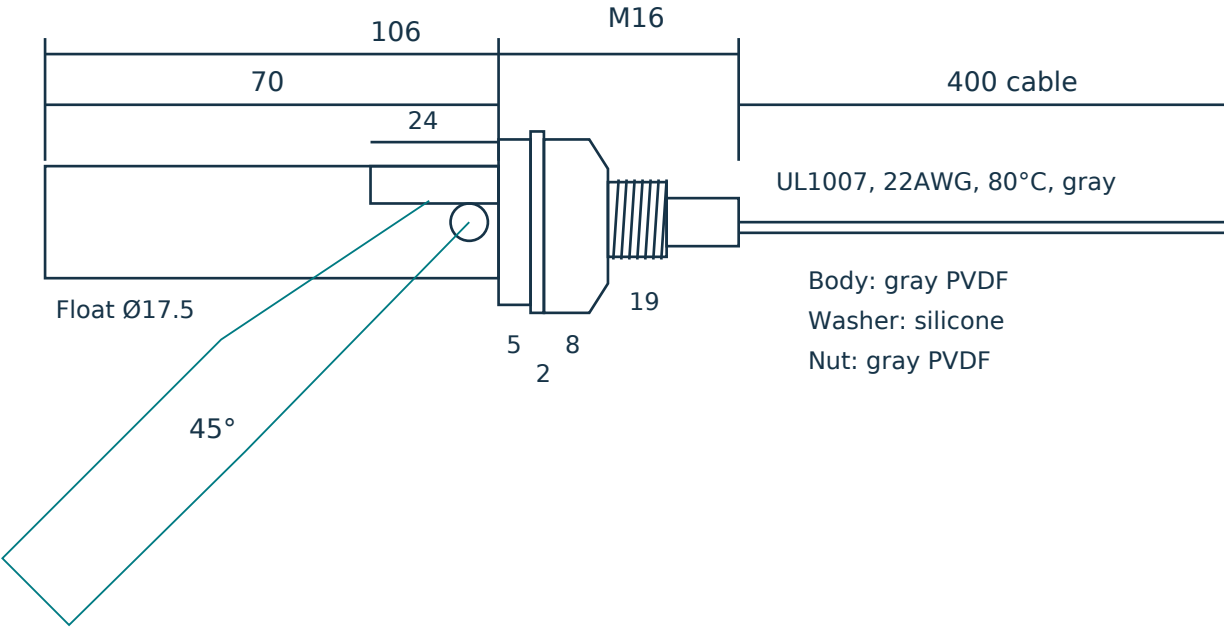
Operating characteristics and dimensional drawing

3. Complete operating-characteristic table

Parameter	Value
Maximum shock	150g, less than 1ms
Maximum vibration	20g, 1-2000Hz
Operating temperature	−10°C to 85°C
Humidity	90%RH below 80°C
Float water absorption	±3% after 1000h, as printed
Application	Water float sensing

4. Dimensioned configuration

Dimensions in mm; schematic profile, not to scale



Drawing callouts: overall body-and-float reference 106mm; float-tip to body reference 70mm; upper-arm reference 24mm; float diameter Ø17.5mm; thread M16; mounting stack references 5mm, 2mm and 8mm; rear mounting reference 19mm; lead length 400mm; downward movement angle 45°. The arrow on the rear housing indicates installation orientation.

General tolerance: dimensions without a decimal ±0.5mm; dimensions with one decimal ±0.3mm. The schematic reproduces the dimensional references; the original drawing controls the exact geometry.

5. Technical requirements

1. The float must move freely without sticking.
2. The screw thread must engage smoothly.
3. During continuous testing immersed in boiling water, switching must not fail.

The boiling-water test requirement is separate from the stated −10°C to 85°C operating range and does not create a 100°C continuous-service rating.

Product-page variants and drawing administration

6. ELEC4 and ELEC6 webpage variants

Parameter	ELEC4	ELEC6
Body and float	PVDF	PVDF
Thread-size designation	3/8in	1/2in
Thread-pitch label	13G, as printed; confirm standard	14G, as printed; confirm standard
Approximate mass	33.3g	33g
Working temperature	−20°C to 60°C	−20°C to 60°C

Contact parameter	1A1	2A1
Maximum contact rating	10VA	20VA
Maximum switching voltage	100VAC/DC	220VAC/DC
Maximum switching current	0.5A	1.5A
Breakdown-voltage reference	110VAC/DC	300VAC/DC
Maximum contact resistance	≤100mΩ	≤100mΩ

The Chinese product feature text also gives −10°C to 85°C, but the specific ELEC4/ELEC6 technical table gives −20°C to 60°C. Keep that table range separate from the LSYZ-1-PVDF drawing's −10°C to 85°C. The 3/8in / 13G combination is not a verified thread standard; confirm the actual mating thread and installation opening.

The product page describes magnetic reed sensing, horizontal side mounting, chemical-resistant PVDF construction and a smooth surface that reduces deposits. It lists water, alcohol, gasoline, diesel and other compatible liquids as applications. Material compatibility depends on the actual medium and temperature; these listings do not state an explosion-protection approval.

7. Complete drawing title-block information

Company printed on the drawing: ELECALL Electric Co., Ltd. Filename: PVDF Side-Mounted Float Level Switch. Edition: A0. Sheet: 1/1. Scale: 1:1. The pattern-mark field contains a projection symbol. Drawing number, approval, checking, drawing author and drawing date are blank. The customer approval/signature box is also blank.

The specification includes mechanical materials, reed-switch characteristics, operating characteristics and technical requirements. Apply minimum breakdown voltage, shock, vibration and test conditions to the exact LSYZ-1-PVDF construction described here.