principle and characteristics

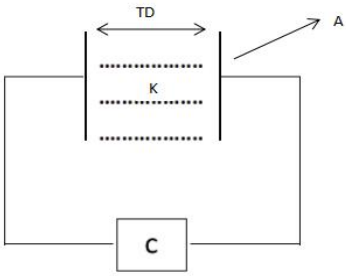
LF100D series miniature capacitor (liquid) level switch uses induction rod to detect the electric capacity between the induction rod and the barrel wall with the measured object as the medium. When the induction rod is covered by material, the capacitance increases gradually. When the matching value of the circuit set inside the switch is reached, the circuit generates high frequency resonance, and the resonance signal is converted into switch action.

C = (0.0884 × K · A) / TD

K = dielectric constant

A = contact area

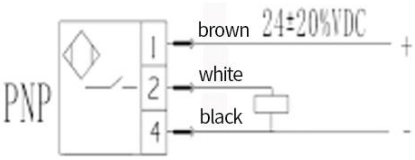
TD = Insulation layer thickness

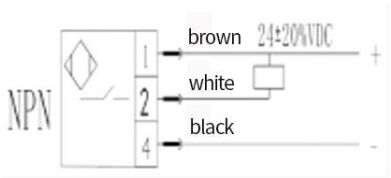


technical specification

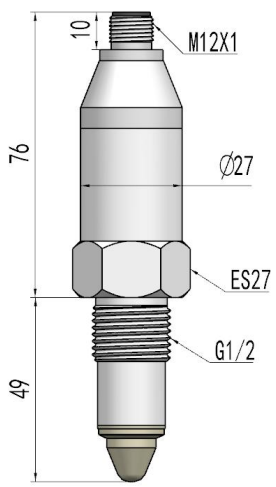
- power supply：24VDC
  material of body：SUS304/SUS316L
- output：3A/250VAC SPDT；NPN；PNP
- temperature：–20 · · · 100° C
- pressure：5bar(PTFE)/40bar(PEEK)
- Induction rod material：SUS304/SUS316L+PTFE/PEEK
- Process connection: G1/2 "(customizable)
- Electrical interface: M12*1 aviation connector

wiring diagra





dimensio n figure



Selection table

LF100D–	A	N1	D	X	L	specification
LF100D–						LF100D series miniature capacitor
	A					PNPoutput
	B					NPNoutput
	R					RS485（Optional）
		G2				External thread: G1/2
						Custom thread
			D			DC24V
				X		304SUS
				S		316LSUS
				P		PTFE
				E		PEEK
					L	L=mm （customizable）

* The selection table is only available for parameter selection, and the corresponding code is delivered.