

Multi-float Level Switch LCSFT

- ◆ Installation without float removing
- ◆ Up to 5 floats of various types
- ◆ Up to 7 switching points
- ◆ 135 °C maximum liquid temperature
- ◆ Vertical adjustment option
- ◆ Various terminal protection housings
- ◆ EExd protection head available

The operation of level probe LCSFT is based on switching of reed switches by magnetic floats, moving alongside a protective tube. A variety of options are available based on floats suited to specific applications. Floats with different dimensions and specific gravity are available for liquid density down to 0.45 g/cm³, temperature up to 135 °C, and pressure up to 50 bar. Maximum seven switching points and five floats can be mounted on a single probe, and the reed switches are capable of switching directly different loads. The probe is available with various aluminum protective heads and with ABS plastic enclosure. Various process connections are available as well as an option for vertical adjustment. In case of Ex applications, an intrinsically safe remote unit (LCI20) must be used.



Technical specifications

Model	LCSFT															
Specifications																
Float type	S1 / S7 / S10	S2	S3	S4	S5	S6	S8 / S9	S20								
Liquid density [g/cm³]	> 0.80	> 0.70	> 0.65	> 0.55	> 0.55	> 0.50	> 0.50 / > 0.45	> 0.75								
Number of floats	1...3	1...3	1...4	1...4	1...5	1...5	1...5	1...3								
Ext. tube diameter ('d')	8 mm	10 mm	14 mm	14 mm	16/18 mm	16/18 mm	18/25 mm	8 mm								
Contact type ⁽¹⁾	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	NO,NC	
Max. common-lead contact:	3	-	4	2	5	3	7	4	7	4	7	4	7	4	3	-
Max. separated contacts	2	1	2	1	3	2	5	3	5	3	5	3	5	3	2	1
Contact ratings	'1': max. 120 VAC, max. 0.5 A, max. 10 W; '2': max. 230 VAC, max. 0.5 A, max. 10 W; '3': max. 230 VAC, max. 2 A, max. 50 W															
Probe length ('L0')	100...1000 mm	100...2000 mm	200...3000 mm	200...3000 mm	300...4000 mm	300...5000 mm	300...5000 mm	100...1000 mm								
End-to-float distance ('A')	min. 25/25/29 mm	min. 34 mm	min. 40 mm	min. 39 mm	min. 50 mm	min. 70 mm	min. 65/90 mm	min. 36 mm								
Float running distance ('B')	min. 30/30/34 mm	min. 40 mm	min. 57 mm	min. 54 mm	min. 75 mm	min. 110 mm	min. 102/152 mm	min. 42 mm								
Float-to-float distance ('C')	min. 50/50/58 mm	min. 68 mm	min. 82 mm	min. 78 mm	min. 100 mm	min. 136 mm	min. 126/157 mm	min. 72 mm								
Process temperature	-20...135 °C															
Ambient temperature	aluminum housing: -40...75 °C; ABS housing: -20...70 °C															
Max. process pressure	10 / 30 / 50 bar	30 bar	12 bar	30 bar	30 bar	10 bar	30 bar	30 bar								
Housing	aluminum head with up to 6 terminals (contact leads); ABS box with up to 12 terminals (contact leads)															
Wiring	terminal block inside protective housing, accessible through cable gland															
Wetted parts	stainless steel															
Protection	head type "B" (IP55); head type "EG" (IP68); other head types or ABS housing (IP65)															
Process connection	min. 1"	min. 1½"	min. 2"	min. 2"	min. 3" or flange	min. 3" or flange	flange	min. 3/4"								

⁽¹⁾ Different contact types can be ordered.

Ordering code LCSFT - G0.nG1.G2'2"/G2'2"/.../G2'2".G2'2"/G2'2"/.../G2'2".G6.G9.G10 - #1#2

Code	Feature or option	Code values
G0	Housing	B - head type "B", MB - head type "MB", G - IP65 head type "G", D - ABS box 80x80x60 mm, E - IP65 EEx 'd' head type "E", EG - IP68 ATEX-approved EEx 'd' head type "EG"
G1	Float ⁽²⁾ ('n' - number of floats)	S1 - stainless steel, φ28x28, S2 - stainless steel, φ41x38, S3 - stainless steel, φ45x55, S4 - stainless steel, φ52x52, S5 - stainless steel, φ73x73, S6 - stainless steel, φ75x108, S7 - stainless steel, φ30x28, S8 - stainless steel, φ100x100, S9 - stainless steel, φ150x150, S10 - stainless steel, φ30x32, S20 - stainless steel, φ22x40
G2'	Contact function (no float) ⁽³⁾	A - NO, B - NC, C - NO/NC
G2"	Contact ratings	1 - 120V/0.5A/10W, 2 - 230V/0.5A/10W ⁽⁴⁾ , 3 - 230V/2.0A/50W
G6	Operating lengths [mm] ⁽⁵⁾	L0/L1/L2/L3/L4/L5/L6/L7
G9	Process connection	X - none, Q12 - G1", Q13 - G1½", Q14 - G2", Q15 - 1" NPT, Q16 - 1½" NPT, Q17 - 2" NPT, Q21 - G3", Q22 - 3" NPT, F - flange (specify!), Z - other (specify!)
G10	Sheath material	M1 - 304L (1.4301), M2 - 321 (1.4541), M3 - 316TI (1.4571), M9 - 316L (1.4404)
#1	Vertical adjustment	X - none, A - vertical adjustment via stainless steel ferrule installed
#2	RC suppressors	X - none, RC - RC suppressor mounted for each NO contact

⁽²⁾ All the floats on one probe must be of a same type

⁽³⁾ Specify (function, ratings) and separate with "/" each of the contacts for the 1st float, then for the 2nd, and so on, separating specifications per each float with ' '; e.g.: LCSFT - B.2S1.A2/B1/A3.A1/C3

⁽⁴⁾ B2 and C2 are not available

⁽⁵⁾ Specify the exact length (step 50 mm) from the thread, flange, head, or box bottom to the respective contact according to the limits given in the specification table, strictly observing 'A', 'B', and 'C' minimum distances. 1st contact → 'L1'; e.g.: LCSFT - B.2S1.A2/B1/A3.A1/C3.500/50/100/200/250/350