

- ◆ 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
- ◆ Local controller available
- ◆ ATEX certified Ex version available



The operation of the BASI's level probe BLCSFT is based on the switching of reed switches by magnetic floats, moving alongside a protective tube. Large variety of versions based on different stainless steel floats is available. 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 7 switching points and 5 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 and stainless-steel protective heads and with ABS plastic enclosure. Various process connections are available as well as an option for vertical adjustment.

Technical specifications

Model	BLCSFT															
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	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	NO,NC
Max. common-lead contacts	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 ⁽²⁾	aluminum housing: -40...75 °C; stainless steel housing: -40...85 °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	protection 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 "B": IP55; head "MB", "G", ABS housing: IP65; head "EGS": IP66; head "EG", "EGW", EX housing: IP68															
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.

⁽²⁾ -20...60 °C for Ex housing



Ordering code BLCSFT - x-x-x-x-x-x-x-x-x-x

Feature or option	Code values
Housing	B - head type "B", MB - head type "MB", G - IP65 head type "G", D - ABS box 80x80x60 mm, EG - IP68 ATEX-approved Ex 'd' head type "EG", EGS - IP66 ATEX-approved Ex 'd' head type "EGS", EGW - windowed ATEX-approved Ex 'd' head type "EGW", EX - explosion-proof instrument housing (specify!)
Float ⁽³⁾ ('n' - number of floats)	S1 - stainless steel, ø28x28, S2 - stainless steel, ø41x38, S3 - stainless steel, ø45x55, S4 - stainless steel, ø52x52, S5 - stainless steel, ø73x73, S6 - stainless steel, ø75x108, S7 - stainless steel, ø30x28, S8 - stainless steel, ø100x100, S9 - stainless steel, ø150x150, S10 - stainless steel, ø30x32, S20 - stainless steel, ø22x40
Contact function (no float) ⁽⁴⁾	A - NO, B - NC, C - NO/NC
Contact ratings	1 - 120V/0.5A/10W, 2 - 230V/0.5A/10W ⁽⁵⁾ , 3 - 230V/2.0A/50W
Operating lengths [mm] ⁽⁶⁾	L0/L1/L2/L3/L4/L5/L6/L7
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!)
Sheath material	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404, M15 - 1.4362
Local controller	X - none, A - local controller mounted ⁽⁷⁾
Vertical adjustment	X - none, A - vertical adjustment via stainless steel ferrule installed
RC suppressors	X - none, RC - RC suppressor mounted for each NO contact

⁽³⁾ All the floats on one probe must be of a same type!

⁽⁴⁾ 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.: BLCSFT - B.2S1.A2/B1/A3.A1/C3

⁽⁵⁾ B2 and C2 are not available!

⁽⁶⁾ 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.: BLCSFT - B.2S1.A2/B1/A3.A1/C3.500/50/100/200/250/350

⁽⁷⁾ See controller datasheets and order separately!



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Multi-float Level Switch

BLCSFT

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