

- ◆ Built-in thermostat available
- ◆ Up to 4 switching points
- ◆ 135 °C maximum liquid temperature
- ◆ Various float types
- ◆ Detachable DIN connector
- ◆ Vertical adjustment option



The operation of the BASI's level probe BLCSFK is based on the switching of reed switches by a magnetic float, moving alongside a protective tube. Large variety of versions based on different floats is available. The float can be made of stainless steel or plastic; floats with different dimensions and specific gravity are available for liquid density down to 0.7 g/cm³, temperature up to 135 °C, and pressure up to 50 bar. Maximum 4 switching points can be mounted in a single probe, and the reed switches are capable of switching directly different loads. The wiring is attained with convenient detachable DIN connector. Various process connections are available as well as an optional vertical adjustment. Moreover, BLCSFK can be equipped with a built-in thermostat with actuation point within 40...130 °C, which additionally expands the probe application area.

Technical specifications

Model	BLCSFK															
Specifications																
Float type	N1		P1		P2		S1		S2		S7		S10		S20	
Liquid density [g/cm³]	> 0.80		> 0.70		> 0.70		> 0.80		> 0.70		> 0.82		> 0.82		> 0.75	
Ext. tube diameter	8 mm		8 mm		10 mm		8 mm		10 mm		8 mm		8 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	-	3	-	4	2	3	-	4	2	3	-	3	-	3	-
Max. separated contacts	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1
Max. level pins (LP)	4	3	4	3	5	5	4	3	5	5	4	3	4	3	4	3
Level 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															
Thermostat ratings	250 VAC / 1.6 A															
Thermostat set-point	40...130 °C (step 5 °C); tolerance: ± 5 °C															
Probe length ('L0')	100...1000 mm		100...1000 mm		100...2000 mm		100...1000 mm		100...2000 mm		100...1000 mm		100...1000 mm		100...1000 mm	
End-to-float distance ('A')	min. 23 mm		min. 23 mm		min. 34 mm		min. 25 mm		min. 34 mm		min. 25 mm		min. 29 mm		min. 36 mm	
Float running distance ('B')	min. 27 mm		min. 27 mm		min. 47 mm		min. 30 mm		min. 40 mm		min. 30 mm		min. 34 mm		min. 42 mm	
Process temperature	-20...100 °C		-20...80 °C		-20...80 °C		-20...135 °C		-20...135 °C		-20...135 °C		-20...135 °C		-20...135 °C	
Ambient temperature	-20...75 °C															
Max. process pressure	0 bar		4 bar		4 bar		10 bar		30 bar		30 bar		50 bar		30 bar	
Wiring	detachable connector DIN 43650 (4-pin) or DIN 43651 (6-pin)															
Wetted parts	float: NBR, PP, or stainless steel; sheath: stainless steel															
Protection	IP65															
Process connection	min. 1/2"		min. 1"		min. 1"		min. 1"		min. 1 1/2"		min. 1"		min. 1"		min. 3/4"	

⁽¹⁾ Different contact types can be ordered.

Connector pins (with) without grounding pin					
level pins (LP)	1	2	3	4	5
without thermostat	(4) 4	(4) 4	(4) 4	(6) 4	(6) 6
with thermostat	(4) 4	(6) 4	(6) 6	6	-

How to choose wiring connector:

1. Calculate the maximum number of pins occupied by the level contacts (LP), using the table above.
2. Decide on the need of thermostat.
3. Decide on need of grounding for your probe - it will occupy the 'PE' connector pin.
4. Find the proper wiring connector (4- or 6-pin) inside the table.



Ordering code LCSFK - x-x-x-x-x-x-x-x-x-x

Feature or option	Code values
Float	N1 - plastic, ø17.5x25, P1 - plastic, ø25x25, P2 - plastic, ø30x45, S1 - stainless steel, ø28x28, S2 - stainless steel, ø41x38, S7 - stainless steel, ø30x28, S10 - stainless steel, ø30x32, S20 - stainless steel, ø22x40
Contact function (no float) ⁽²⁾	A - NO, B - NC, C - NO/NC
Contact ratings	1 - 120V/0.5A/10W, 2 - 230V/0.5A/10W ⁽³⁾ , 3 - 230V/2.0A/50W
Operating lengths [mm] ⁽⁴⁾	L0/L1/L2/L3/L4
Process connection	X - none, Q4 - G1/2", Q10 - 1/2" NPT, Q12 - G1", Q13 - G1½", Q15 - 1" NPT, Q16 - 1½" NPT, Z - other (specify!)
Sheath material	M1 - 1.4301, M2 - 1.4541, M3 - 1.4571, M9 - 1.4404
Wiring connector	C7 - DIN 43650 detachable 4-pin connector, C8 - DIN 43651 detachable 6-pin connector
Vertical adjustment	X - none, A - vertical adjustment via stainless steel ferrule installed
Thermostat	X - none, T__ - built-in thermostat (specify switching temperature in °C!) ⁽⁵⁾
RC suppressors [pcs]	X - none, 1RC...10RC - RC suppressors in bulk

⁽²⁾ Specify (function, ratings) and separate with "/" each of the contacts (up to 4); e.g.: BLCSFK - S1.A2/B1/A3

⁽³⁾ B2 and C2 are not available!

⁽⁴⁾ Specify the exact length (step 50 mm) from the thread bottom to the respective contact according to the limits given in the specification table, strictly observing 'A' and 'B' minimum distances! 1st contact → 'L1'; e.g.: BLCSFK - S1.A2/B1/A3.250/50/150/200

⁽⁵⁾ Maximum 2 level contacts with common lead are available!



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Float-type Level/Temperature Switch

BLCSFK

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