



LIQUID FLOW SWITCHES

DB3...MI

FUNCTION

Liquid flow control for non aggressive liquid with small and medium quantity. The units cause a low pressure drop and present a high reliability.
Alarm signal of flow shortage (safety switch).

APPLICATIONS

Well-suited in:

- heating and air conditioning systems;
- refrigeration systems;
- devices for oil monitoring;
- lubrication circuits.

TYPE	FITTING G	SETTING RANGE l/min H ₂ O	MAX. FLOW RATE RECOMMENDED l/min H ₂ O	PRESSURE LOSS (MAX FLOW RATE) bar	TOLLERANCE ± % VF (*)
DB3-10MI	3/8"	4.0 - 5.5	10	0.01	15
DB3-15MI	1/2"	5.5 - 7.0	20	0.01	15
DB3-20MI	3/4"	7.5 - 10.0	40	0.01	15
DB3-25MI	1"	14 - 18	60	0.01	15
DB3-32MI	1 1/4"	22 - 30	80	0.01	15
DB3-40MI	1 1/2"	37 - 50	100	0.01	15
DB3-50MI	2"	67 - 93	150	0.01	15

(*) VF end of scale

TECHNICAL FEATURES

Contacts:	dust-tight microswitch with gold SPDT contacts
Switch capacity:	5 A, 250 Vac
Max fluid temperature:	+110 °C
Max pressure:	25 bar
Differential:	see schedule
Hysteresis:	min. 0,7 l/min
Plug:	connector female DIN 43650-A
Storage:	-20...+70 °C
Housing:	POM
Body:	brass nickel plated
Paddle:	stainless steel
Sealing:	NBR
Protection:	IP65, class I
Size:	see diagram
Weight:	see table

ELECTRICAL WIRING

The microswitch contact "C" (common) and "NO" (normally open) is already wired for use and provided with a 1,5 m cable. This contact opens when the value drops below the set switch-off value.
The "NC" contact (normally closed) can be used as a signal contact (fig.1).

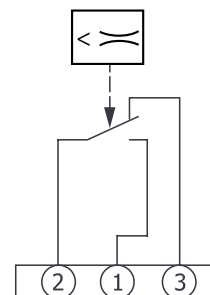


fig. 1

FUNCTIONING

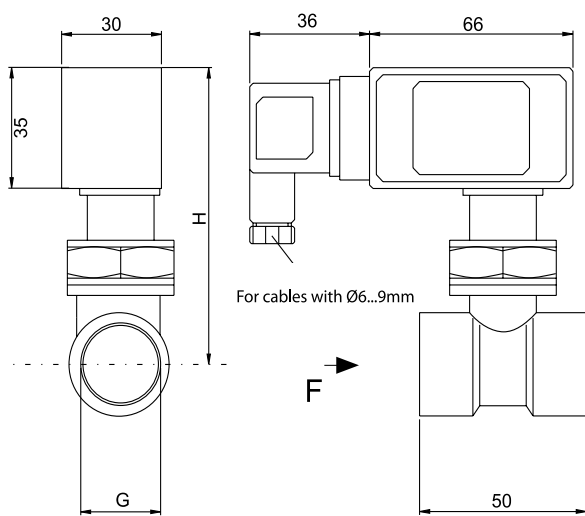
The stainless steel paddle moves because of flow that is stronger than spring return. The end arm part is mounted on a primary magnet. It actuates a secondary magnet that is external to flow and is mounted on the microswitch contact lever.



NOTE

After the cap nut has been removed the switch-off value can be changed slightly by adjustment of indicator between the minimum and the maximum.
 During installation take care to the correct flow direction. A straight zone of at least 5 x D must be provided upstram and downstream the location of installation.

DIMENSIONS (mm)



G	DN	H (mm)	WEIGHT (g)
3/8"	10	87	300
1/2"	15	87	300
3/4"	20	88	346
1"	25	92	386
1 1/4"	32	96	518
1 1/2"	40	99	642
2"	50	108	990