

# LIQUID FLOW SWITCHES

# 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; \_

TYPE	FITTING	SETTING RANGE I/min H <sub>2</sub> O	MAX. FLOW RATE RECOMMENDED	PRESSURE LOSS (MAX FLOW RATE)	TOLERANCE
	G	-	l/min H₂O	bar	± % ES (*)
DB10MI	3/8″	5 - 6	10	0.01	15
DB15MI	1/2″	6 - 7	20	0.01	15
DB20MI	3/4″	7,5 - 11	40	0.01	15
DB20MI/1	3/4″	13 - 16	40	0.01	15
DB25MI	״ן	19 - 24	60	0.01	15
DB32MI	11/4″	30 - 50	80	0.01	15
DB40MI	11/2″	50 - 60	100	0.01	15
DB50MI	2″	70 - 90	150	0.01	15

(\*) ES end of scale

Note: the value indicated on schedule have been measured with the flow switch mounted on horizontal position.

#### **TECHNICAL DATA**

Contacts: Switch capacity: Working fluid temp: Max pressure: Differential: Plug: Storage:	dust-tight microswitch with SPDT contacts 5 A, 250 Vac -20+110 °C 25 bar min. 0,7 I/min connector female DIN 43650-A -20+70 °C < 95% r.h.
Housing:	ABS V0
Body:	brass
Paddle:	stainless steel
Sealing:	NBR
Protection:	IP65, class II
Size:	102 x 30 x 83104 mm
Weight:	see table

#### **DIMENSIONS (mm)**





#### WIRING DIAGRAM

The microswitch contact "2" (common) and "1" (normally open) opens when the value drops below the set switch-off value.

The contact "3" (normally closed) can be used as a signal contact (fig.1).

# fig. 1 (2)(1)(3)

#### 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

1

To adjust the setting range slide the plastic cover and operate onto the adjusting screw between the minimum and the maximum. During installation take care to the correct flow direction. A straight zone of at least five times the diameter must be provided upstream and downstream the location of installation.

G	DN	H (mm)	WEIGHT (g)
3/8″	10	83	300
1/2″	15	83	300
3/4″	20	85	346
3/4″/1	20	88	350
۳	25	90	386
1 1/4″	32	92	518
1 1/2″	40	97	642
2″	50	104	990

DB...MI