

LIQUID FLOW SWITCHES DB...MI

FUNCTION **APPLICATIONS**

Liquid flow control for non aggressive liquid with small and medium quantity. The units cause a low pressure drop and present

Alarm signal of flow shortage (safety switch).

Well-suited in:

- heating and air conditioning systems;
- refrigeration systems;

| TYPE | FITTING | SETTING RANGE I/min H ₂ O | MAX. FLOW RATE RECOMMENDED | PRESSURE LOSS (MAX FLOW RATE) | TOLERANCE |
|----------|---------|---|-------------------------------|----------------------------------|------------|
| | G | 2 | I/min H ₂ 0 | 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 | 1" | 19 - 24 | 60 | 0.01 | 15 |
| DB32MI | 1 1/4" | 30 - 50 | 80 | 0.01 | 15 |
| DB40MI | 1 1/2" | 50 - 60 | 100 | 0.01 | 15 |
| DB50MI | 2" | 70 - 90 | 150 | 0.01 | 15 |

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

TECHNICAL DATA

Contacts: dust-tight microswitch with SPDT contacts

5 A, 250 Vac Switch capacity: Working fluid temp: -20...+110 °C Max pressure: 25 bar Differential: min. 0,7 l/min

Plug: connector female DIN 43650-A

-20...+70 °C Storage: < 95% r.h. Housing: ABS VO Body: brass Paddle: stainless steel

Sealing: NBR Protection: IP65, class II

102 x 30 x 83...104 mm Size:

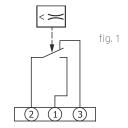
Weight: see table

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).



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.

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 | | | |
| 1" | 25 | 90 | 386 | | | |
| 1 1/4" | 32 | 92 | 518 | | | |
| 1 1/2" | 40 | 97 | 642 | | | |
| 2" | 50 | 104 | 990 | | | |

DIMENSIONS (mm)

