

## Product Information

# Flow switch HR2VO1



- Viscosity stabilised
- Individually calibrated display
- Compact design

## Characteristics

Mechanical flow switch for fluid media, with spring-supported piston and magnetic triggering of a reed switch. Robust construction in brass or stainless steel.

## Technical data

|                              |                                                                                                                                                              |                                                                  |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| Switch                       | without                                                                                                                                                      |                                                                  |
| Nominal width                | DN 32 / 40 / 50                                                                                                                                              |                                                                  |
| Process connection           | female thread G 1 1/4..G 2<br>(further process connections available on request)                                                                             |                                                                  |
| Display range                | 10..150 l/min                                                                                                                                                | for details see table "Ranges"                                   |
| Pressure loss                | ~ 4..7 bar at Q <sub>max</sub>                                                                                                                               |                                                                  |
| Q <sub>max</sub>             | up to 160 l/min                                                                                                                                              |                                                                  |
| Tolerance                    | ±10 % of full scale value at constant viscosity                                                                                                              |                                                                  |
| Viscosity-stability          | mean deviation ±7 %, max. 18 % (30-330 mm²/s) of full scale value                                                                                            |                                                                  |
| Pressure resistance          | PS 200 bar                                                                                                                                                   |                                                                  |
| Media temperature            | -20..+120 °C                                                                                                                                                 |                                                                  |
| Ambient temperature          | -20..+70 °C                                                                                                                                                  |                                                                  |
| Media                        | oil                                                                                                                                                          |                                                                  |
| Electrical connection        | none                                                                                                                                                         |                                                                  |
| Materials medium-contact     | Brass construction:<br>CW614N nickelled,<br>CW614N,<br>1.4305, 1.4310,<br>hard ferrite                                                                       | Stainless steel construction:<br>1.4571, 1.4310,<br>hard ferrite |
| Non-medium-contact materials | CW614N nickelled, PC, acrylic                                                                                                                                |                                                                  |
| Weight                       | see table "Dimensions and weights"                                                                                                                           |                                                                  |
| Installation location        | Standard: horizontal inwards flow from the left; other installation positions are possible; the installation position affects the switching point and range. |                                                                  |

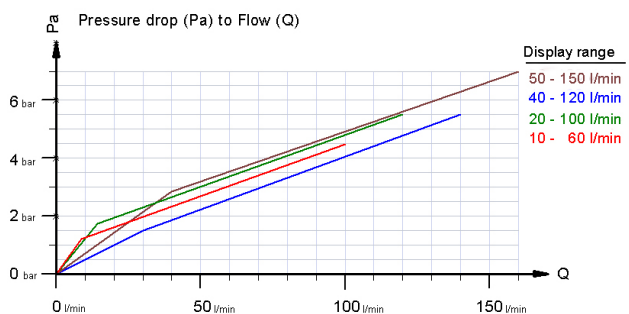
## Ranges

Details in the table correspond to horizontal inwards flow with increasing flow rate.

| Display range<br>l/min oil<br>30-330 mm²/s | Q <sub>max</sub><br>Recommended<br>l/min | Pressure loss<br>bar at Q <sub>max</sub> oil |
|--------------------------------------------|------------------------------------------|----------------------------------------------|
| 10 - 60                                    | 100                                      | 4                                            |
| 20 - 100                                   | 120                                      | 5                                            |
| 40 - 120                                   | 140                                      | 5                                            |
| 50 - 150                                   | 160                                      | 7                                            |

Special ranges are available.

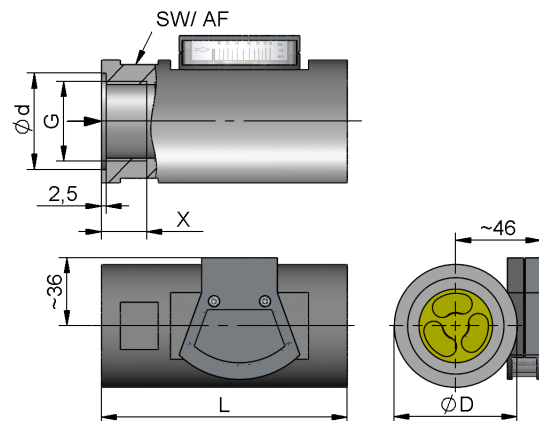
## Reference Data:



Display spaces of the flow switch HR2VK1

## Dimensions and weights

| DN | G       | Types        | L   | ØD | SW | Ød | X  | Weight<br>kg |
|----|---------|--------------|-----|----|----|----|----|--------------|
| 32 | G 1 1/4 | HR2VO1-032GM | 130 | 65 | 60 | 51 | 23 | 2.5          |
| 40 | G 1 1/2 | HR2VO1-040GM | 170 | 65 | 60 | 56 | 24 | 3.1          |
| 50 | G 2     | HR2VO1-050GM | 185 | 80 | 75 | 70 | 26 | 5.2          |



## Product Information

### Handling and operation

#### Note

- Include straight calming section of 5 x DN in inlet and outlet
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- Under unfavorable pressure conditions, e.g. with a free outlet, there is a risk of cavitation.

### Ordering code

HR2VO1 -  1.  2.  3.  4.

| 1.  | Nominal width                                              |
|-----|------------------------------------------------------------|
| 032 | DN 32 - G 1 <sup>1</sup> / <sub>4</sub>                    |
| 040 | DN 40 - G 1 <sup>1</sup> / <sub>2</sub>                    |
| 050 | DN 50 - G 2                                                |
| 2.  | Process connection                                         |
| G   | female thread                                              |
| 3.  | Connection material                                        |
| M   | brass                                                      |
| K   | stainless steel                                            |
| 4.  | Display range H <sub>2</sub> O for horizontal inwards flow |
| 060 | 10 - 60 l/min                                              |
| 100 | 15 - 100 l/min                                             |
| 120 | 40 - 120 l/min                                             |
| 150 | 50 - 150 l/min                                             |

### Options

- Special values

### Ordering information

- Specify direction of flow, medium, and display range.