

**Product Information**

**Sensors and Instrumentation**

**Flow Indicator H1VZ1**



- Viscosity stabilised from 30 to 200 mm<sup>2</sup>/s
- No electrical supply required
- Individually calibrated display

**Characteristics**

A piston fitted with a magnet is pushed through the medium against the force of a spring. This activates the pointer of the measuring device by means of a magnetic coupling. Because of the hermetic separation from the medium, the display unit cannot be soiled by the medium.

**Technical data**

|                                     |  |  |
|-------------------------------------|--|--|
| <b>Switch</b>                       | without  |  |
| <b>Nominal width</b>                | DN 32..50  |  |
| <b>Process connection</b>           | female thread G 1 1/4..G 2 (further process connections available on request)  |  |
| <b>Display range</b>                | 2..220 l/min   | for details see table "Ranges"   |
| <b>Q<sub>max.</sub></b>             | to 250 l/min   |  |
| <b>Tolerance</b>                    | ±5 % of the full scale value plus viscosity variation  |  |
| <b>Pressure resistance</b>          | PN 200 bar   |  |
| <b>Media temperature</b>            | -20..+120 °C   |  |
| <b>Ambient temperature</b>          | -20..+70 °C  |  |
| <b>Media</b>                        | water, oils (gases and aggressive media available on request)  |  |
| <b>Electrical data</b>              | none   |  |
| <b>Materials medium-contact</b>     | <i>Brass construction:</i><br>CW614N nickelled,<br>CW614N, 1.4310,<br>hard ferrite<br><i>DN 32..40:</i> NBR                                      | <i>Stainless steel construction:</i> 1.4571,<br>1.4404, 1.4310, hard ferrite PTFE-coated,<br><i>DN 32..40:</i> FKM |
| <b>Non-medium-contact materials</b> | PC, acrylic  |  |
| <b>Weight</b>                       | see table "Dimensions and weights"   |  |
| <b>Installation location</b>        | Standard: horizontal inwards flow from the left; other installation positions are possible; the installation position affects the display range. |  |

**Ranges**

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

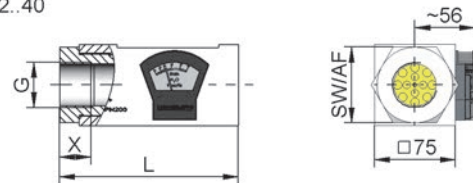
| Display range<br>l/min<br>H <sub>2</sub> O or oil 30..200 mm <sup>2</sup> /s | Q <sub>max.</sub><br>recommended |
|--|----------------------------------|
| 2 - 15   | 50                               |
| 5 - 25   | 60                               |
| 10 - 45  | 100                              |
| 20 - 65  | 150                              |
| 30 - 110   | 200                              |
| 50 - 160   | 230                              |
| 100 - 220  | 250                              |

Special ranges are available.

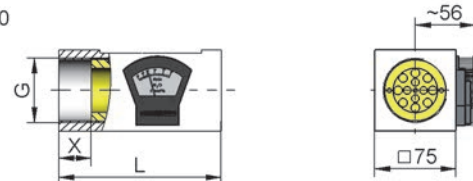
**Dimensions and weights**

| DN | G       | Types       | L   | SW | X  | Weight<br>kg |
|----|---------|-------------|-----|----|----|--------------|
| 32 | G 1 1/4 | H1VZ1-032G. | 165 | 70 | 29 | 5.8          |
| 40 | G 1 1/2 | H1VZ1-040G. |     |    |    | 5.5          |
| 50 | G 2     | H1VZ1-050G. | 150 | -  | 26 | 5.0          |

DN 32..40



DN 50



**Product Information**

**Sensors and Instrumentation**

**Handling and Operation**

- 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)

**Ordering code**

H1V  -

○=Option

|  |     |   |
|--|-----|---|
| <b>1. Display</b>  | Z1  | with frontal measurement display Z1     |
| <b>2. Nominal width</b>  | 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                             |
| <b>3. Process connection</b>   | G   | female thread                           |
| <b>4. Connection material</b>  | M   | brass                                   |
|  | K   | <input type="radio"/> stainless steel   |
| <b>5. Display range H<sub>2</sub>O or oil 30..330 mm<sup>2</sup>/s for horizontal inwards flow</b> | 012 | 2 - 15 l/min                            |
|  | 025 | 5 - 25 l/min                            |
|  | 040 | 10 - 45 l/min                           |
|  | 060 | 20 - 65 l/min                           |
|  | 100 | 30 - 110 l/min                          |
|  | 150 | 50 - 160 l/min                          |
|  | 200 | 100 - 220 l/min                         |

**Options**

- Special ranges/special scaling
- Temperature display 0..120 °C

**Ordering information**

- Specify direction of flow, medium, and display range.
- For oils. State viscosity, temperature and designation (e.g. ISO VG 68) (enquire about display range).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request display range)