

## DHTF-1

### Function

The flowmeters type DHTF-1 are impeller flowmeters.

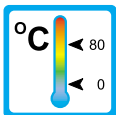


### Application

The impeller flowmeters type DHTF-1 are employed to measure and monitor volume flow of liquids.

Areas of application:

- Mechanical engineering
- Chemical industry
- Research and development



### Features

The series proves itself through reliable function and easy handling. Further characteristics of this model are:

- PP-Version
- High accuracy
- Mounting in different pipe diameters possible (mounting via T-piece)

### Installation hints

The flowmeter can be installed vertically or horizontally. The unit must not be installed upside down (Danger of sedimentation). The flow direction must be observed.

The flowmeter must not be used as a supporting part in a pipe construction.

The liquid must not contain any solids.

External magnetic fields influence the measurement. Keep sufficient distance to magnetic fields (e.g. electromotors).

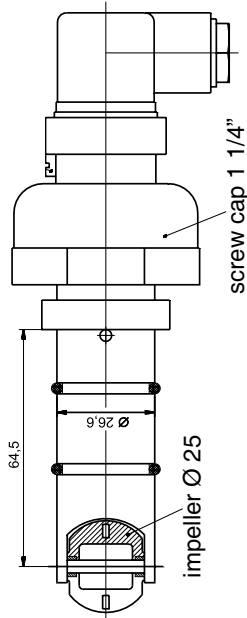


DHTF-1 1 0003 04-07 E M



# Technical data

## Dimension outline drawing DHTF-1



### Electric connections

Plug DIN 43650 Form A

Power supply: 4,5 - 24 VDC

Ingress protection: IP 65

Pin allocation:

PIN 1: 4,5 - 24 VDC

PIN 2: signal

PIN  $\ominus$  : ground

### Operating data

|  |   |
|--|---|
| <b>Flow range (H<sub>2</sub>O at 22 °C):</b> | 0,15 - 10 m/s                               |
| <b>Sensing principle:</b>                    | Hall effect, touchless                      |
| <b>Viscosity:</b>                            | 0,5 - 20 cSt                                |
| <b>Accuracy:</b>                             | ± 1 % of full scale over calibrated range   |
| <b>Repeatability:</b>                        | ± 0,5 % of full scale over calibrated range |
| <b>max. operating pressure:</b>              | 10 bar                                      |
| <b>Burst pressure (at 22 °C):</b>            | 15 bar                                      |
| <b>Operating temperature:</b>                | 0° C to +80 °C                              |
| <b>Output:</b>                               | open collector                              |
| <b>Output signal:</b>                        | square wave                                 |
| <b>Output frequency:</b>                     | 42 Hz / m/s                                 |
| <b>max. output current (at 24 V):</b>        | 11 mA*                                      |

\* at temperatures < 60 °C: 15 mA

### Materials

|                                  |   |
|----------------------------------|---|
| <b>Sensor housing:</b>           | PP  |
| <b>Impeller:</b>                 | ECTFE (HALAR®)  |
| <b>Bearing (axle / bearing):</b> | ceramic (AL <sub>2</sub> O <sub>3</sub> ) / ceramic (AL <sub>2</sub> O <sub>3</sub> ) |
| <b>Magnets:</b>                  | ECTFE-encapsulated  |
| <b>O-Rings:</b>                  | Viton® (optional: EPDM)   |
| <b>Weight:</b>                   | approx. 126 g   |
| <b>Process connection:</b>       | Mounting in pipe connection via T-piece   |

DHTF-1 2 0002 07-05 E M