Flowmeter

DHTF-1

Function

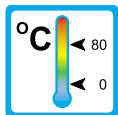The flowmeters type DHTF-1 are impeller flowmeters.

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).
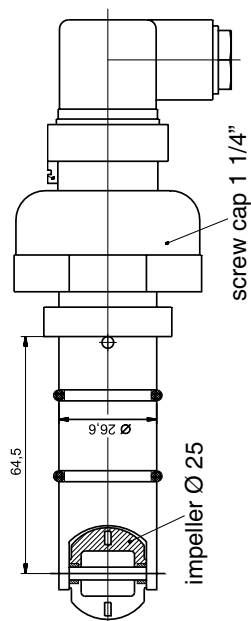
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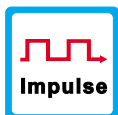
Dimension outline drawing DHTF-1

screw cap 1 1/4"

ø 26,6

64,5

impeller Ø 25

Electric connections

Plug DIN 43650 Form A	
Power supply: 4,5 - 24 VDC	Ingress protection: IP 65
Pin alloca-tion: PIN 1: 4,5 - 24 VDC	PIN 2: signal
PIN $\oplus$: ground	

Operating data

Flow range (H$_2$O at 22 °C):	0,15 - 10 m/s
Sensing principle:	Hall effect, touchless
Viscosity:	0,5 - 20 cSt
Accuracy:	± 1 % of full scale over calibrated range
Repeatability:	± 0,5 % of full scale over calibrated range
max. operating pressure:	10 bar
Burst pressure (at 22 °C):	15 bar
Operating temperature:	0° C to +80 °C
Output:	open collector
Output signal:	square wave
Output frequency:	42 Hz / m/s
max. output current (at 24 V):	11 mA*

* at temperatures < 60 °C: 15 mA

Materials

Sensor housing:	PP
Impeller:	ECTFE (HALAR®)
Bearing (axle / bearing):	ceramic (AL$_2$O$_3$) / ceramic (AL$_2$O$_3$)
Magnets:	ECTFE-encapsulated
O-Rings:	Viton® (optional: EPDM)
Weight:	approx. 126 g
Process connection:	Mounting in pipe connection via T-piece

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