

TDH...-25.../PP



Function

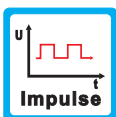
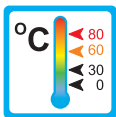
The flowmeters type TDH...-25.../PP are turbine flowmeters.



Application

The turbine flowmeters type TDH...-25.../PP are employed to measure and monitor volume flow of liquids. Areas of application:

- Medical technology
- Pharmaceutical Industry
- Chemical Industry
- Research and Development



Features

The rotors of the series TDH...-25.../PP are equipped with magnets and a Hall-sensor detects the rotation of the rotor.

Further characteristics of the series are:

- Large measuring range
- Sapphire/PA bearings
- High accuracy
- Frequency output
- PP-Version

Installation information

The installation of the flowmeter can be done in any way in the system. The flow direction must be observed.

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

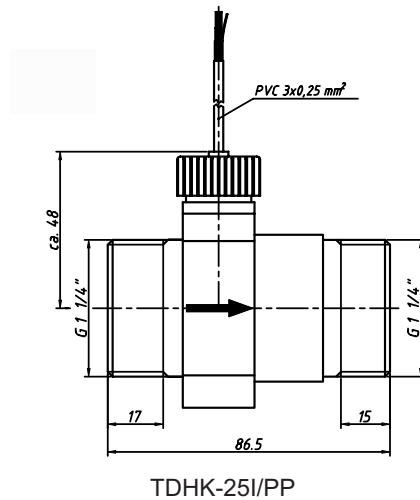
The medium must not contain any solids! We recommend the installation of a strainer.

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

The operating instructions for TD...-25.../PP must be observed under all circumstances.



Technical Data



Versions

Type	Measuring value sensing		Output		
	Hall-sensor	Inductive proximity switch	Impulse output (see page 4)	Analog output	Switch output
TDHK-25I/PP	▲		▲		

Technical data

	Units with Hall-sensor TDH...			
Process connection:	G 1 1/4" male thread			
Nominal size:	DN 25			
Max. medium temperature:	30 °C at 10 bar	60 °C at 5 bar	80 °C at 2 bar	
Nominal pressure:	PN 10 (see max. medium temperature)			
Range:	4 - 160 l/min, at continuous flow max 80 l/min			
Start of signal output:	approximately 1 l/min			
Max. size of solids in medium:	0,5 mm			
Electric connection:				
Cable connection (TDHK...)	2 m shielded PVC cable			
	$T_{max} = 75\text{ °C}$			
Plug (TDHS...)	4-Pin plug M12x1			
Power supply (Pulse output):	4,5...24 VDC			
Ingress protection:	IP 54			
Electric output:	see page 4			
Options:				
Strainer	Screen strainer, screen aperture size 0,63 mm			

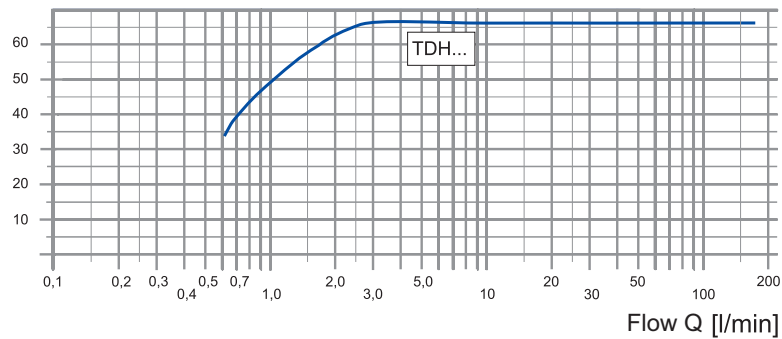
TD-25/PP 2 0002 11-11 E M



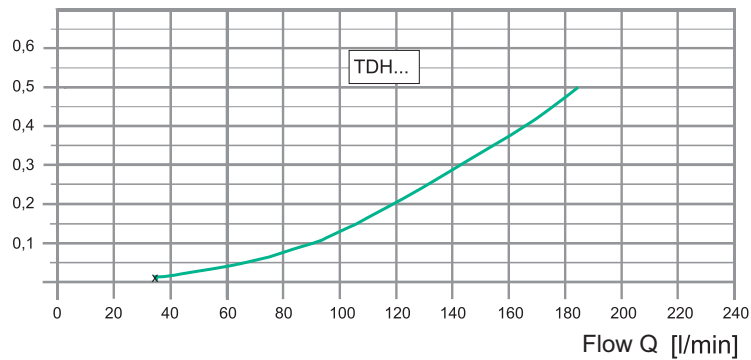
Materials, technical data

Materials		
	Wetted parts	Units with Hall-Sensor TDH...
Measuring tube	yes	PP
Turbine chamber	yes	PA Grivory HTV4X1
Impeller	yes	PP
Impeller magnets	yes	Permanent magnets, Recona 28 nickel-plated
Axle	yes	Stainless steel 1.4436
Bearing	yes	Saphire / PA
Sensor bushing	yes	POM Delrin 100 P
O-Ring	yes	72 NBR 872
Strainer (optional)	yes	Stainless Steel 1.4301 (associated O-Ring: 70 EPDM 281)

Pulse rate [1/l]



Pressure drop Δp [bar]

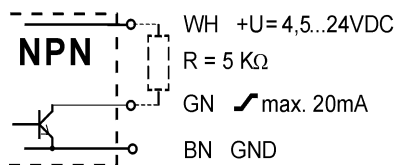


Signal output

Technical data, impulse output (TDHK-25I/PP)

	Units with Hall-sensor TDH...
Accuracy:	± 3 % of range
Repeatability:	± 0,5 %
Output signal:	
Pulse rate / K-factor	65 Pulses / Liter
Resolution	15 ml / Pulse
Signal form	square wave
Signal current	NPN open collector
Connection diagram	max 100 mA
Start of signal output:	A1 (see below)
	approximately 1 l/min

A1: TDHK-25I/PP (Cable)



BN = brown

GN = green

WH = white

