

## Flowmeter

TDH...-25.../PP

H<sub>2</sub>O



## OVERVIEW

### Operation

- Turbine flowmeter

### Application

- Medical engineering
- Pharmaceutical industry
- Chemical industry
- Research & Development

### Features

- Universal orientation
- High quality sapphire bearings
- High measuring accuracy
- Wide measuring range
- Pulse output
- Device body of PP

### Installation information

- The operating instructions for TDH...-25.../PP must be observed!
- **Download: [www.meister-flow.com](http://www.meister-flow.com)**

## OPERATING DATA

<b>Sensor</b>	Hall-Sensor
<b>Nominal diameter</b>	DN 25
<b>Nominal pressure</b>	PN 10 (see media temperature)
<b>Pressure drop</b>	see diagram on page 5
<b>Media temperature, max.</b>	at 10 bar      30 °C
	at 5 bar        60 °C
	at 2 bar        80 °C
<b>Ambient temperature</b>	0 - 75 °C
<b>Measuring accuracy <sup>(1)</sup></b>	±5 % of measured value
<b>Repeatability</b>	±0,5 %
<b>Start of signal output</b>	1 l/min
<b>Maximum size of solids in medium</b>	< 0,63 mm

<sup>(1)</sup> up to 5 l/min ±7 % of measured value

## MEASURING RANGES

<b>Type</b>	<b>Measuring range for H<sub>2</sub>O at 20 °C <sup>(2)</sup></b>	
	<b>l/min</b>	
TDH...-25.../PP	4 – 160 <sup>(3)</sup>	

<sup>(2)</sup> The measurement of fluids with higher viscosities is possible with deviation of stated values.

<sup>(3)</sup> At continuous operation max. 80 l/min

## MATERIALS

<b>Wetted parts</b>	
Measuring tube:	PP
Turbine chamber:	PPO Noryl GFN 1630V
Impeller:	PPO Noryl GFN 1520V
Impeller magnets:	Hard ferrite magnets
Axle:	1.4539
Bearing:	Sapphire / PA
Sensor housing:	PPO Noryl GNF 1630V
O-Ring:	EPDM
Spacer:	PP

## VERSIONS

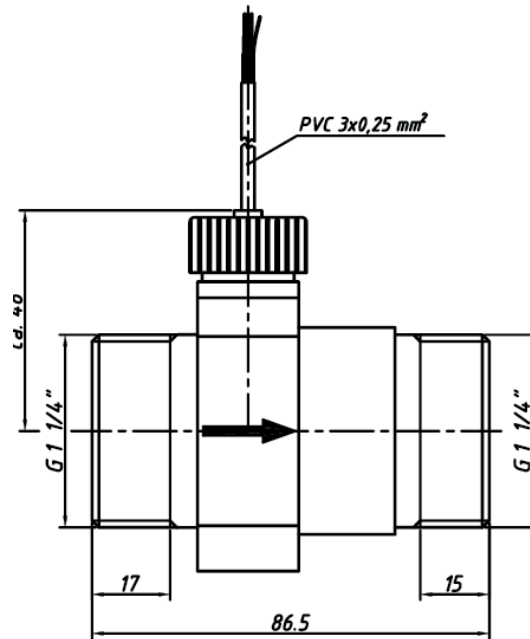
### Versions with connection cable

<b>Type</b>	<b>Measured value acquisition</b>	<b>Output</b>
TDHK-25I/PP	Hall sensor	Pulse output

2,0 m PVC cable, shielded

T<sub>max</sub> = 75 °C

# TECHNICAL DRAWING



## SUMMARY OF TYPES

Type	Sensor	Output	Technical data		
			G <sup>(4)</sup>	DN	PN
TDHK-25I/PP	Hall sensor	Pulse output	1 1/4"	25	10 <sup>(5)</sup>

<sup>(4)</sup> External thread, welded sleeve / solvent cement socket or hose connector available as accessory items.

<sup>(5)</sup> see media temperature on page 2

## ELECTRICAL DATA

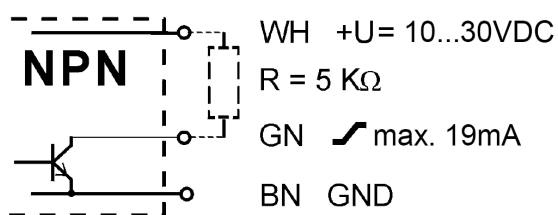
<b>Power supply</b>	10 - 30 V DC <sup>(6)</sup>
<b>Start of signal output</b>	1 l/min
<b>Pulse rate / K-Factor</b>	65 Pulses/l
<b>Resolution</b>	15 ml/Pulse
<b>Signal form</b>	square-wave signal NPN open collector
<b>Signal current max.</b>	19 mA
<b>Pull-up/down resistor</b>	5 Ω <sup>(7)</sup>
<b>Connection diagram</b>	A1 see below

<sup>(6)</sup> Optional: 4,5 - 26,5 V DC

<sup>(7)</sup> Recommended

## CONNECTION DIAGRAM

### A1: TDHK-25I/PP (Cable)



### Color code

BN	brown
GN	green
WH	white
R	Resistor

## ELECTRICAL CONNECTION

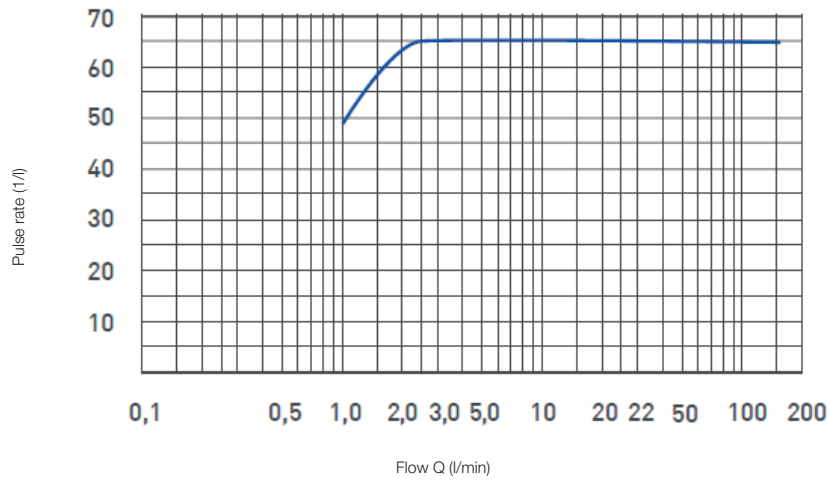
- 2,0 m PVC cable, shielded

### Ingress Protection

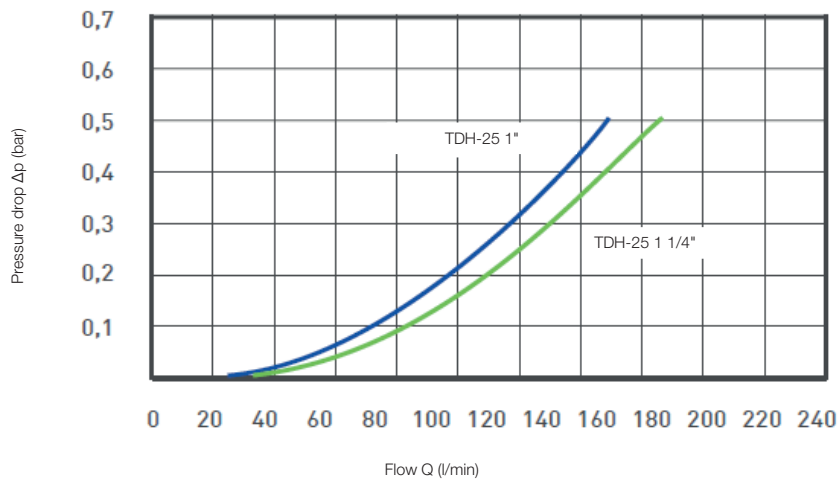
IP54

# DIAGRAMS

## Characteristic curve



## Pressure drop





TDH...-25.../PP 6 0001 12-15 E M

# MASTERPIECES MADE IN GERMANY

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