

## Flowmeter

TDH...-40.../MS



## 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
- Sturdy device body of brass
- Integrated mesh filter

### Installation information

- The operating instructions for TDH...-40.../MS 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 40
<b>Nominal pressure</b>	PN 10
<b>Pressure drop</b>	see diagram on page 5
<b>Media temperature, max.</b>	85 °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>	4,7 l/min
<b>Maximum size of solids in medium</b>	< 0,63 mm

<sup>(1)</sup> up to 50 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>	<b>m<sup>3</sup>/h</b>
TDH...-40.../MS	6,7 – 417	0,4 – 25

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

## MATERIALS

### Wetted parts

Measuring tube:	Brass (CW724R)
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
Flow guiding cone:	POM
	1.4301
Mesh filter (integrated):	Flat filter
	Mesh size 0,63 mm
Retaining ring:	Bronze

## VERSIONS

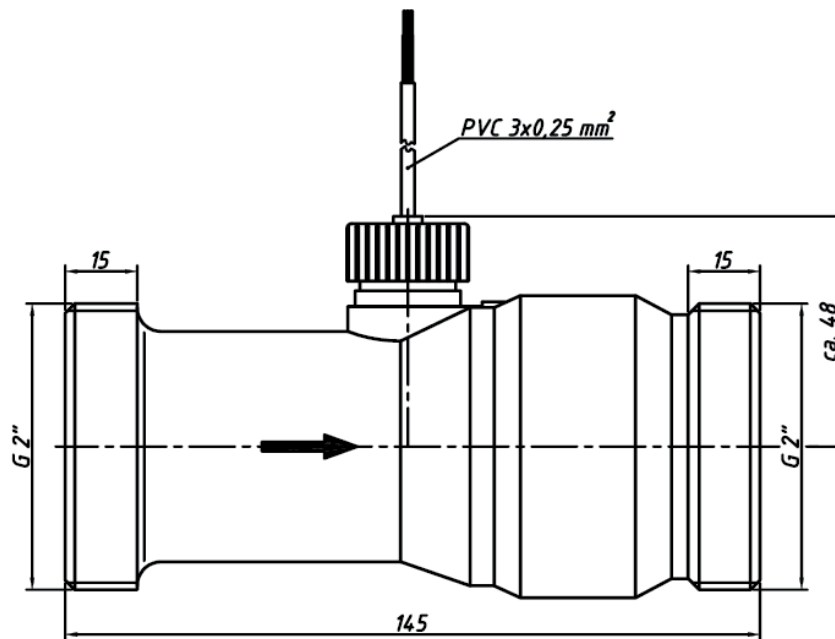
### Versions with connection cable

<b>Type</b>	<b>Measured value acquisition</b>	<b>Output</b>
TDHK-40I/MS	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>(3)</sup>	DN	PN
TDHK-40I/MS	Hall sensor	Pulse output	2"	40	10

<sup>(3)</sup> External thread, additional connecting couplings recommended.

These are available as optional accessories.

## ELECTRICAL DATA

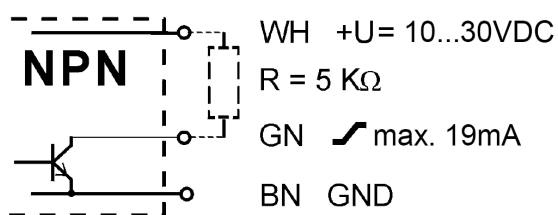
<b>Power supply</b>	10 - 30 V DC <sup>(4)</sup>
<b>Start of signal output</b>	4,7 l/min
<b>Pulse rate / K-Factor</b>	26,6 Pulses/l
<b>Resolution</b>	37,6 ml/Pulse
<b>Signal form</b>	square-wave signal NPN open collector
<b>Signal current max.</b>	19 mA
<b>Pull-up/down resistor</b>	5 $\Omega$ <sup>(5)</sup>
<b>Connection diagram</b>	A1 see below

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

<sup>(5)</sup> Recommended

## CONNECTION DIAGRAM

### A1: TDHK-40I/MS (Cable)



### Color code

BN	brown
GN	green
WH	white
R	Resistor

## ELECTRICAL CONNECTION

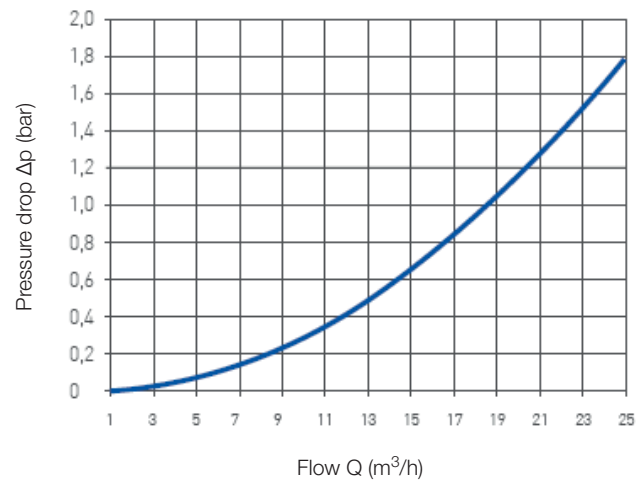
- 2,0 m PVC cable, shielded

### Ingress Protection

IP54

# DIAGRAMS

## Pressure drop





TDH...-40.../MS 6 0001 12-15 EM

# MASTERPIECES MADE IN GERMANY

**Dodavatel pro ČR:** o.z. MERES, HENNLICH s.r.o. • Českolipská 9, 412 01 Litoměřice  
meres@hennlich.cz • www.hennlich.cz/meres • tel.: 416 711 203



Meister Strömungstechnik GmbH • Im Gewerbegebiet 2 • 63831 Wiesen / Germany  
Tel. +49 (0) 6096 9720-0 • Fax +49 (0) 6096 9720-30 • sales@meister-flow.com • www.meister-flow.com  
The general business terms of Meister Strömungstechnik GmbH are valid • All rights reserved

