

Flowmeter

TDH...-25.../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

Installation information

- The operating instructions for TDH...-25.../MS must be observed!
- **Download: www.meister-flow.com**

OPERATING DATA

Sensor	Hall sensor
Nominal diameter	DN 25
Nominal pressure	PN 10
Pressure drop	see diagram on page 5
Media temperature, max.	85 °C
Ambient temperature	0 - 75 °C
Measuring accuracy ⁽¹⁾	±5 % of measured value
Repeatability	±0,5 %
Start of signal output	1 l/min
Maximum size of solids in medium	< 0,63 mm

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

MEASURING RANGES

Type	Measuring range for H ₂ O at 20 °C ⁽²⁾	
	l/min	
TDH...-25.../MS	4 – 160 ⁽³⁾	

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

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

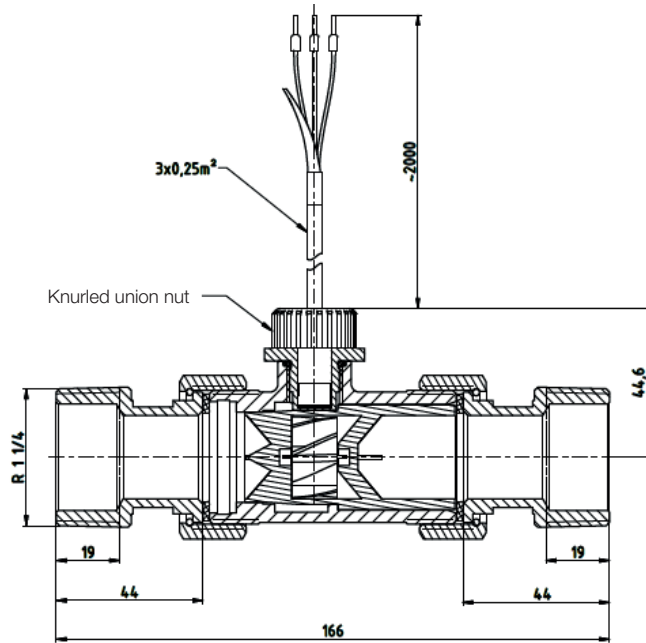
MATERIALS

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
Mesh filter (optional):	1.4301
	Flat filter with O-ring
	Mesh size 0,63 mm
O-Ring	EPDM

VERSIONS

Versions with connection cable		
Type	Measured value acquisition	Output
TDHK-25I/MS	Hall sensor	Pulse output
2,0 m PVC cable, shielded		
T _{max} = 75 °C		

TECHNICAL DRAWING



SUMMARY OF TYPES

Type	Sensor	Output	Technical data		
			G ⁽⁴⁾	DN	PN
TDHK-25I/MS	Hall sensor	Pulse output	1 1/4"	25	10

⁽⁴⁾External thread, additional connecting couplings required.

These are available as optional accessories.

ELECTRICAL DATA

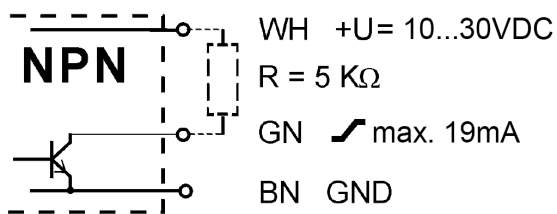
Power supply	10 - 30 V DC ⁽⁵⁾
Start of signal output	1 l/min
Pulse rate / K-Factor	65 Pulses/l
Resolution	15 ml/Pulse
Signal form	square-wave signal NPN open collector
Signal current max.	19 mA
Pull-up/down resistor	5 Ω ⁽⁶⁾
Connection diagram	A1 see below

⁽⁵⁾ Optional: 4,5 - 26,5 V DC

⁽⁶⁾ Recommended

CONNECTION DIAGRAM

A1: TDHK-25I/MS (Cable)



Color code

BN	brown
GN	green
WH	white
R	Resistor

ELECTRICAL CONNECTION

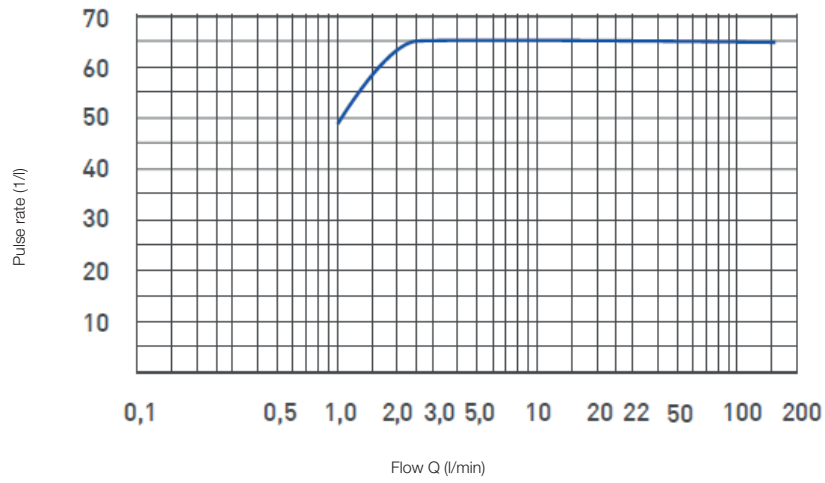
- 2,0 m PVC cable, shielded

Ingress Protection

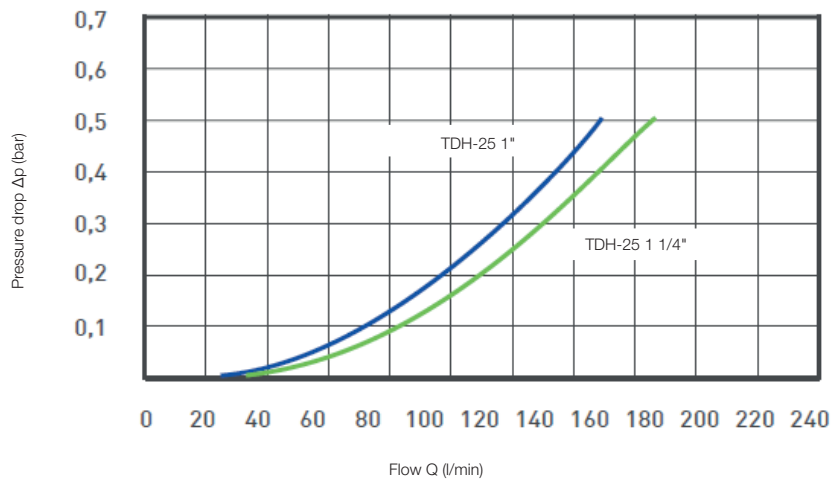
IP54

DIAGRAMS

Characteristic curve



Pressure drop





TDH...-25.../MS 6 0001 12-15 EM

MASTERPIECES MADE IN GERMANY

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