



HENNLICH

MERES

# PÁDLOVÝ PRŮTOKOMĚR

## TZ1

### Flow Meter TZ1-...E



- Large analog display
- Monitor and display
- Simple adjustment by means of drag indicator
- Can be used from nominal width DN 40..100

#### Characteristics

Mechanical flow meter, for fluid or gaseous media, with no-contact triggering of an display device with 270 ° pointer deflection. Robust construction in brass or stainless steel.

#### Technical data

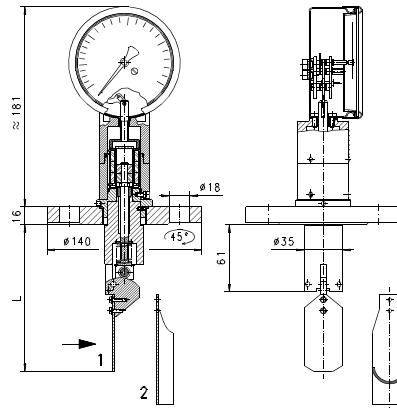
<b>Switch</b>	optionally micro switch
<b>Nominal width</b>	DN 40..100
<b>Process connection</b>	installation flange DIN 2527 DN 32 PN 16 sealing surface as per DIN 2526 form C
<b>Metering range</b>	50..1050 l/min
<b>Q<sub>max.</sub></b>	up to 1400 l/min
<b>Tolerance</b>	±5 % of full scale value
<b>Pressure resistance</b>	PN 16 bar
<b>Medium temperature</b>	-20..+90 °C, optionally -20..+200 °C, type TZ1X on request
<b>Ambient temperature</b>	-20..+70 °C
<b>Media</b>	water (oils available on request)
<b>Wiring</b>	changeover no. 0.342
<b>Switching voltage</b>	max. 250 V AC
<b>Switching current</b>	max. 5 A
<b>Protection class</b>	2 - safety insulation
<b>Ingress protection</b>	IP 65
<b>Electrical connection</b>	plug DIN 43650-A / ISO 4400

<b>Materials medium-contact</b>	<i>Brass construction:</i> Rg 5, CW614N nickelled, 1.4305, 1.4301, 1.4310, 1.4571, NBR, hard ferrite	<i>Stainless steel construction:</i> 1.4305, 1.4301, 1.4310, 1.4571, FKM, hard ferrite
<b>Non-medium-contact materials</b>	CW614N chromed, steel chromed, Acrylic, NBR	
<b>Weight</b>	3 kg	
<b>Installation location</b>	Standard: horizontal inwards flow; display downwards and inwards flow from above not recommended; other installation positions are possible; the installation position affects the switching point and display range.	

#### Ranges and dimensions

Details in the table correspond to horizontal inwards flow with increasing flow rate.

DN	Metering range l/min H <sub>2</sub> O	Q <sub>max.</sub> Recom-mended	Types	Paddle form	L
DN 40	50 - 250	450	TZ1-040G.250	1	93
	100 - 350		TZ1-040G.350		87
DN 50	80 - 350		TZ1-050G.350		98
	100 - 450		TZ1-050G.450		
DN 65	100 - 350	550	TZ1-065G.350	111	
	150 - 500		TZ1-065G.500		101
DN 80	130 - 450	900	TZ1-080G.450	126	
	200 - 600		TZ1-080G.600		112
DN 100	300 - 800	1400	TZ1-100G.800	2	158
	350 - 1050		TZ1-100G.1050		148



Attention! Flange seal not included in scope of delivery

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## Handling and Operation

### Note

- Include straight calming section of 10 x DN in inlet and outlet
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- When switched on, a load must be connected in series.
- The electrical details apply to ohmic loads. Capacitive and inductive loads must be operated using a protective circuit.

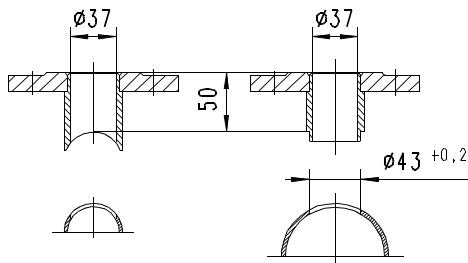
### Loosen adjustment

The microswitch (optional) is adjusted by means of the knurled adjusting screw provided. The screw allows the drag indicator to be set to the desired switching value. The value displayed corresponds to a switching point for a decreasing flow rate.



### Installation recommendation

Use a tube with standard wall thickness as per DIN 2448



The type FL installation flanges are available as an accessory.

## Ordering code

1. 2. 3. 4. 5.  
TZ1    E

O=Option

1. Additional devices	
-	only analog display
M-	with integrated micro switch
P-	<input checked="" type="radio"/> with potentiometer <input type="radio"/> with 2 x normally open (n.o.)
M2-	<input type="radio"/> with 2 x normally closed (n.c.)
M3-	<input type="radio"/> with 2 x normally closed (n.c.)
see „Additional devices for TZ1“	
2. Nominal width	
040	DN 40
050	DN 50
065	DN 65
080	DN 80
100	DN 100
3. Process connection	
E	installation flange
4. Connection material	
M	brass
K	stainless steel
5. Metering range H <sub>2</sub> O for horizontal inwards flow	
250	50 - 250 l/min
350	80 - 350 l/min
	100 - 350 l/min
450	100 - 450 l/min
	130 - 450 l/min
500	150 - 500 l/min
600	200 - 600 l/min
800	300 - 800 l/min
1050	350 - 1,050 l/min

## Options

- Metering ranges for oil
- Special values
- Gold contact
  - min: 5 V DC, 1 mA
  - max: 125 V AC, 30 V DC, 1 A
- Special Harting plug

## Ordering information

- Specify direction of flow, medium, and metering range.
- For oils. State viscosity, temperature and designation (e.g. ISO VG 68) (enquire about metering range).