

Senseca Germany GmbH
Tenter Weg 2-8 | 42897 Remscheid | GERMANY
Phone +49 2191 9672-0 | Fax +49 2191 9672-40
www.senseca.com | info@senseca.com | WEEE Reg. No. DE 93889386



Product Information

TZ1-015..050GK

Flow Meter TZ1-...GK

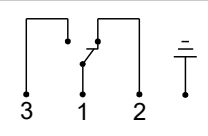


- **Large analog display**
- **Monitor and display**
- **Simple adjustment by means of drag indicator**
- **Insensitive to dirt**
- **Short installation length**

Characteristics

The volume flow raises a disc unit (fitted with a magnet) out from a valve seat against a spring force. The magnet actuates the display movement by means of a magnetic coupling.

Technical data

Switch	optionally micro switch	
Nominal width	DN 15..50	
Process connection	female thread G 1/2..G 2	
Metering range	2..250 l/min to 250 l/min	for details see table "Ranges"
Q_{max}		
Tolerance	±3 % of full scale value	
Pressure resistance	PN 100 bar	
Medium temperature	-20..+90 °C	
Ambient temperature	-20..+70 °C	
Media	water (oils, gases and aggressive media available on request)	
Wiring	changeover no. 0.342	
		
Switching voltage	max. 250 V AC	
Switching current	max. 5 A	
Protection class	2 - safety insulation	
Ingress protection	IP 65	
Electrical connection	plug DIN 43650-A / ISO 4400	
Materials medium-contact	1.4305, 1.4571, 1.4310, NBR, hard ferrite PTFE-coated	
Non-medium-contact materials	CW614N chromed, steel chromed, acrylic, FKM	
Weight	see table "Dimensions and weights"	

Installation location

Standard: horizontal inwards flow; display downwards not recommended; other installation positions are possible; the installation position affects the switching point and display range.

Ranges

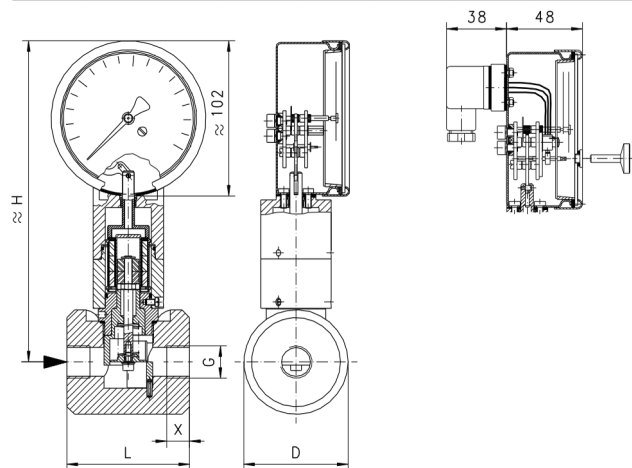
Details in the table correspond to horizontal inwards flow with increasing flow rate.

G	Nominal width	Metering range l/min H ₂ O	Q _{max} recommended	Type
G 1/2	DN 15	6 - 20	8	TZ1-015GK006
		4 - 20	20	TZ1-015GK020
G 3/4	DN 20	5 - 40	40	TZ1-020GK020
				TZ1-020GK040
G 1	DN 25	10 - 60	60	TZ1-025GK060
G 1 1/4	DN 32	10 - 100	100	TZ1-032GK100
G 1 1/2	DN 40	10 - 150	150	TZ1-040GK150
G 2	DN 50	20 - 250	250	TZ1-050GK250

Special ranges are available

Dimensions and weights

G	Types	H	L	D	X	Weight kg
G 1/2 - G 3/4	TZ1-015GK	210	80	68	15	2.9
G 1	TZ1-020GK				16	2.8
G 1 1/4	TZ1-025GK				18	2.7
G 1 1/2	TZ1-032GK	223	105	88	24	3.4
G 2	TZ1-040GK				25	3.7
	TZ1-050GK	225	120	102	27	5.1



Product Information

TZ1-015..050GK

Handling and operation

Note

- Include straight calming section of 5 x DN in inlet and outlet
- Include a filter if the media are dirty (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.

Adjustment

The micro switch (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.



Ordering code

1. 2. 3. 4. 5.
TZ1

=Option

1. Additional devices					
-	only analog display				
M-	with integrated micro switch				
P-	with potentiometer	see „Additional devices for TZ1“			
M2-	with 2 x normally open (n.o.)				
M3-	with 2 x normally closed (n.c.)				
2. Nominal width					
015	DN 15 - G $\frac{1}{2}$				
020	DN 20 - G $\frac{3}{4}$				
025	DN 25 - G 1				
032	DN 32 - G $1\frac{1}{4}$				
040	DN 40 - G $1\frac{1}{2}$				
050	DN 50 - G 2				
3. Process connection					
G	female thread				
4. Connection material					
K	stainless steel				
5. Metering range H ₂ O for horizontal inwards flow					
006	2 - 6 l/min				
020	4 - 20 l/min				
040	5 - 40 l/min				
060	10 - 60 l/min				
100	10 - 100 l/min				
150	10 - 150 l/min				
250	20 - 250 l/min				

Options

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

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).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request metering range)