

Heat meters

Flow sensors WZW and WZW S/F

For large flow quantities and heavy loads: safe and accurate measuring in heating systems using the Woltmann principle.

Product description

The integration of flow and temperature sensors with a heat meter calculator generates a complete heat meter.

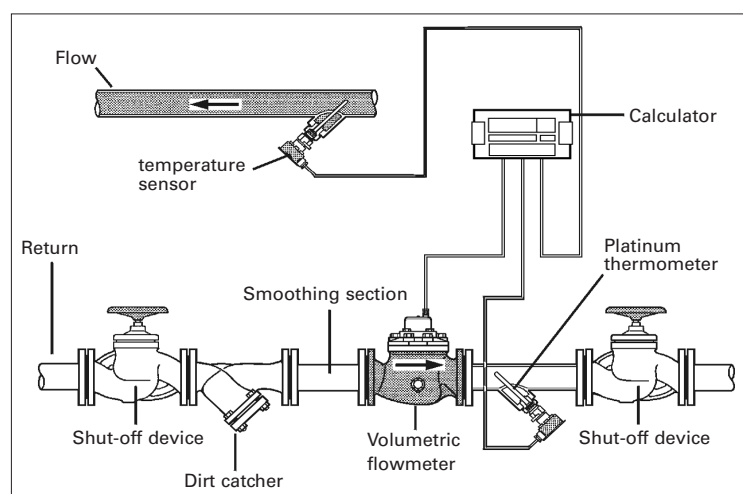
The pulse generator installed in the flow sensor (with a reed contact) provides the calculator the flow data, where the energy is calculated by combining the temperature sensors' data.

The WZW flow sensors work according to the Woltman principle which stands out for its capability to deal with large flow quantities.

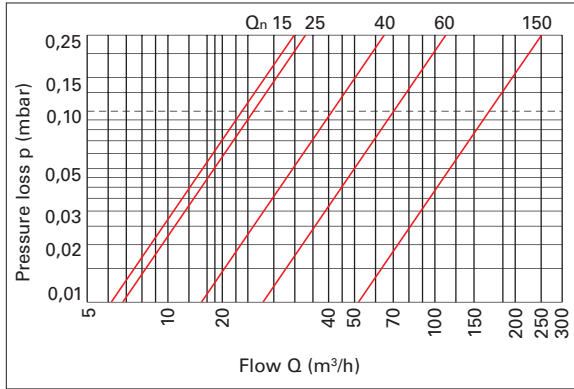
The WZW is ideal for installation in horizontal pipes. It has a increased metering range for lower flowrates. Type WZW S/F can be used for any installation and offers an especially low pressure loss over the entire metering range.

Performance features

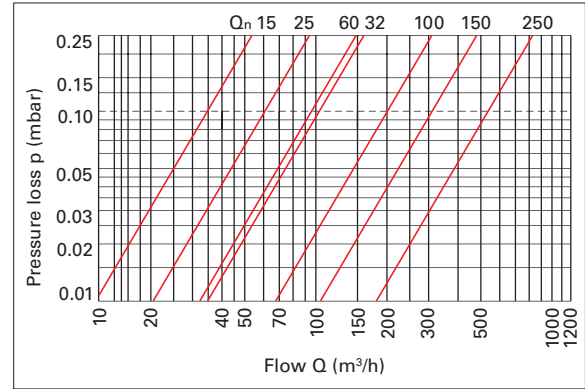
- Dry running flow sensor with magnetic coupling and a pivotable roll register
- Maximum measurement accuracy and stability are always guaranteed, also under extreme loads
- Permanent load for hot water up to a maximum of 120 °C
- Pulse generator easy to replace
- Protection hood protects against external magnetic forces and manipulation
- approved by the PTB (Physikalisch-Technische Bundesanstalt) [Federal Institute of Physical Technology]



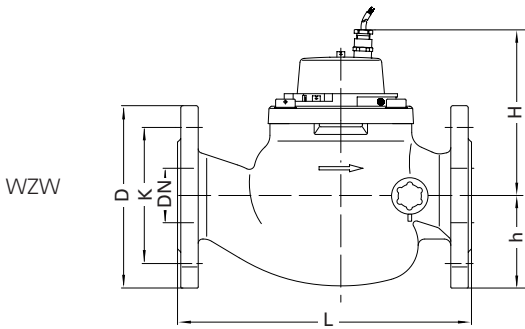
Installation example



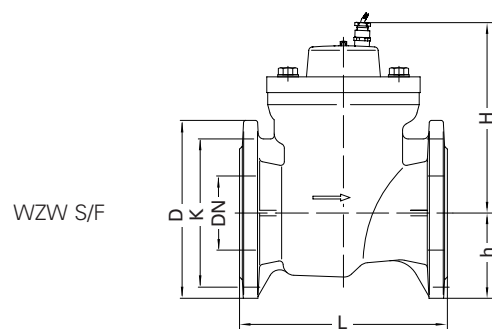
Pressure loss curve WZW



Pressure loss curve WZW S/F



WZW



WZW S/F

Technical data flow sensor WZW

Nominal flow:	Q _n (m ³ /h)	15	25	40	60	150
Nominal width:	DN	50	65	80	100	150
Flange ø:	D (mm)	165	185	200	220	285
Hole circle ø:	K (mm)	125	145	160	180	240
Flow at 0.1 bar pressure loss:	(m ³ /h)	19	21	42	70	160
Metrological class (horizontal):		B	B	B	B	B
Starting flow approx.:	(m ³ /h)	0,06	0,06	0,09	0,09	1,0
Lowest flow:	Q _{min} (m ³ /h)	0,2	0,2	0,3	0,4	2
Operating temperature:	(°C)	0...120				
Nominal pressure:	PN bar	16				
BConstruction length:	L (mm)	270	300	300	360	500
	H (mm)	155	155	190	200	400
	h (mm)	84	97	102	113	155

Technical data flow sensor WZW S/F

Nominal flow:	Q _n (m ³ /h)	15	25	32	60	100	150	250
Nominal width:	DN	50	65	80	100	125	150	200
Flange ø:	D (mm)	165	185	200	220	250	285	340
Hole circle ø:	K (mm)	125	145	160	180	210	240	295
Flow at 0.1 bar pressure loss:	(m ³ /h)	35	63	102	95	200	310	550
Metrological class (horizontal):		C	C	C	A	A	C	C
Starting flow approx.:	(m ³ /h)	0,13	0,13	0,4	0,4	0,6	1,5	2,0
Lowest flow:	Q _{min} (m ³ /h)	0,6	1,0	3,2	2,0	3,0	8,0	10,0
Operating temperature:	(°C)	0...120						
Nominal pressure:	PN bar	16						
Construction length:	L (mm)	200	200	225	250	250	300	350
	H (mm)	141	141	141	200	200	244	244
	h (mm)	75	83	94	110	125	135	163

All installation sizes with flange connection PN 16 according to DIN 2501. All flow sensors are equipped with a relay actuated switch and 3m-long connection cable. (Reed switch with a 100 ohm protective resistor, 1/4 watt, contact load 0.2 A (protective lower voltage).