Badger Meter Europa

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Oscillating piston meters OP

OP meters for accurate measurement and batching of industrial liquids

Features

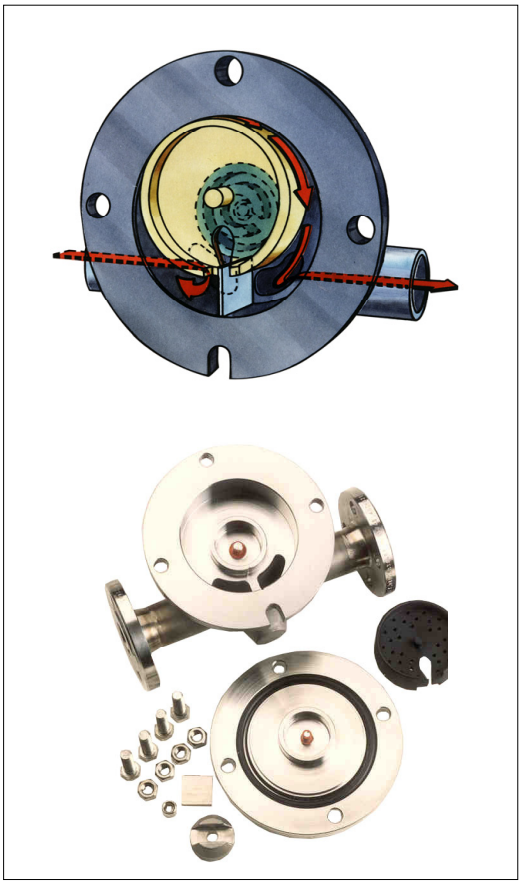
- High durability
- Reliable
- High accuracy ±0,5%
- Rugged
- High performance
- Adjustable
- Easy maintainance
- Hard-wearing

Description

Simple to operate, reliable and accurate
Oscillating piston meters are positive displacement meters. The liquid is divided by the oscillating piston into two distinct partial volumes. The movements of the oscillating piston are transmitted magnetically to the dry side of the meter and processed accordingly.

Only three internal, durable parts...
assure precise function, high durability and reduced maintenance costs. The materials are matched to the individual liquid giving maximum corrosion resistance.

Universal
A wide selection of mechanical, pneumatic and state-of-the-art electronic instruments are available. OP meters are versatile and measure volume and flow of liquids of any viscosity in many industries.



Technical data

Model	OP15	OP 25/32	OP 50
Housing material	1.4401, 316 S/S	1.4401, 316 S/S	
Flanges DIN/ANSI	DN 15 PN 16 DN 25 PN 16 1/2" ANSI, ASA 150 RF	DN 25 PN 16 DN 32 PN 16 1" ANSI, ASA 150 RF	DN 15 PN 16 DN 25 PN 16 1/2" ANSI, ASA 150 RF
Piston materials and temperatures	Kynar (PVDF) 5-65°C 65-120°C Ryton (PPS) 5-65°C 65-120°C Ultem 5-120°C	Kynar 5-65/65-120°C TFE/Carbon 0-80°C Ryton 5-120°C Ultem 5-120°C	Kynar (PVDF) 5-65°C 65-120°C Ryton (PPS) 5-65°C 65-120°C Ultem 5-120°C
Bushing materials	Rulon (PTFE + Mineralfüller), W 88 (73% Ni, 12% Cr)		
O-Rings	Buna N, Viton A, EPDM, Neoprene, PTFE, Butyl		

Size DN mm	Nominal flo QN l/min	Viscosity mPas	Q min. l/min	Q max. at continuous operat.	Q max. at intermit operation l/min
15	24	1	4	15	24
		50	3	15	24
		800	1,5	15	24
		2000	1	12	12
		5000	0,5	5	5
		10000	0,1	2	2
25/32	115	1	20	75	115
		50	15	75	115
		800	7	75	115
		2000	5	52	52
		5000	3	20	20
		10000	1	15	15
50	380	1	75	250	380
		50	50	250	380
		800	30	250	380
		2000	20	130	130
		5000	10	55	55
		10000	5	30	30

Accuracy: ±0,5%, operating temperature: 120°C, operating pressure: 16 bar (25)

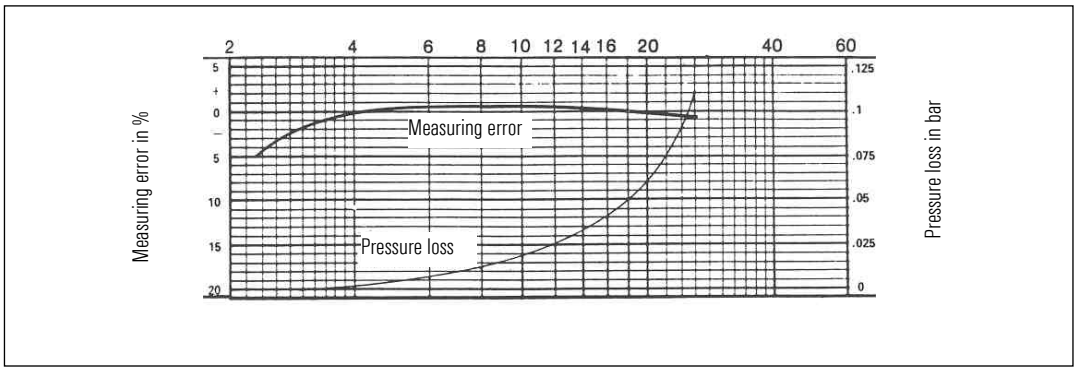
Dimensions

Type	DN	Dimensions (mm)				
		L	H	H1	T	T1
OP-PM 5 / PFT	15	175	152	48	164	60
	25	280	196	58	215	87
	50	300	245	83	275	128
OP-MS-E5	15	175	165	48	173	60
	25	280	202	58	224	87
	50	300	245	83	284	128
OP-ER-8/9	15	175	300	48	108	60
	25	280	350	58	145	87
	50	300	381	83	211	128
OP-PC100 / VZ1250	25	280	460	58	235	87
	50	300	495	83	295	128
OP-BRE / BRP / TR	25	280	491	58	206	87
	50	300	500	83	256	128
OP-M	25	280	202	58	407	87
	50	300	245	83	452	128
OP-MV	25	280	260	58	412	87
	50	300	285	83	457	128
OP-MV-V	25	407	260	58	412	87
	50	500	285	83	457	128

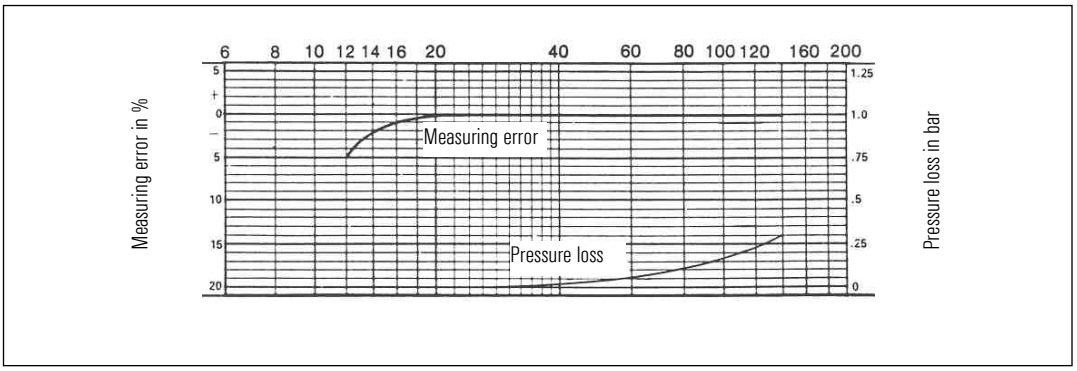
Measuring error & pressure loss

The curves are related to water.

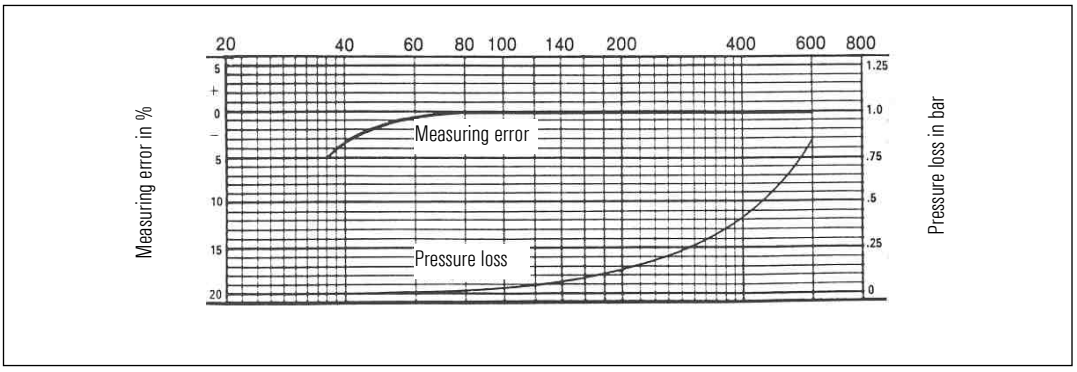
Oscillating piston meter OP 15
Liter per minute



Oscillating piston meter OP 25/32
Liter per minute



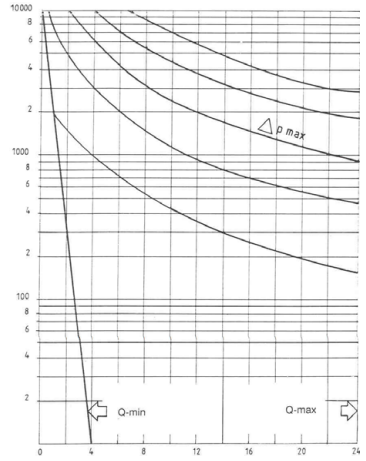
Oscillating piston meter OP 50
Liter per minute



Pressure drop vs viscosity and flow rate

OP 15

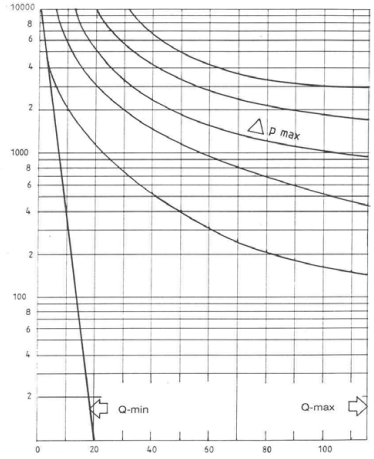
Dynamic viscosity in mPas



Flow rate in l/min

OP 25/32

Dynamic viscosity in mPas

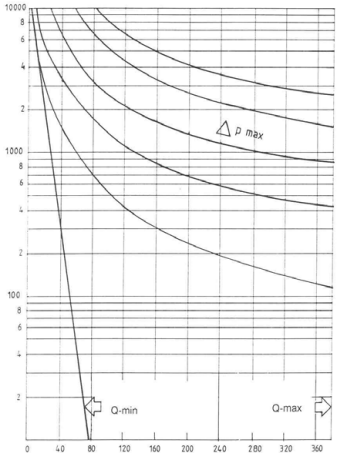


10,3 bar
6,9 bar
3,4 bar
1.7 bar

Flow rate in l/min

OP 50

Dynamic viscosity in mPas



10,3 bar
6,9 bar
3,4 bar
1,7 bar
0,7 bar

Flow rate in l/min