

# **All-Metal Flow Meters**

for Liquids



measuring

monitoring

analysing



- Measuring range:
   Water 0.2-2 to 40-360 L/min
   Oil 0.2-2 to 40-360 L/min
- Accuracy: ±5% f. s.
- pmax 350 bar, tmax 105°C
- Connection: G 1/4 ... G 1 1/4 female
- Material: Brass or stainless steel
- Direct indication
- Relatively insensitive to variations in viscosity
- Calibrated for oil or water







#### **Description**

The KOBOLD flow meters of model SVC are remarkable for their simplicity, versatility and ruggedness. The flow rates of oil, water and liquids similar to water can thus be quickly measured. The SVC instruments operate on a very simple principle and are easy to mount. The medium flows through an annular opening created by the cylinder bore and the cone, and produces a pressure difference that forces the piston against a calibrated spring. The stroke of the piston is directly proportional to the flow rate.

Due to the sharp edges of the opening the viscosity has only a negligible effect on the piston stroke. The position of the piston is indicated by means of a magnet fitted in the piston. The magnet moves a steel indicator that slides on the outside of the non-magnetic instrument tube. The display line appears against a colour-coded scale that is printed on the inside of a transparent tube for direct indication of flow rate.

#### **Technical Details**

Body of housing: Brass or stainless steel

Measuring ranges: See Order Details
Process connection: See Order Details

Pressure loss: Flow rate and nominal size

(upon request)

Viscosity range: Water (SVC-1...)

Oil (10 to 200 cSt) (SVC-2...)

Max. operating

pressure: 350 bar

Max. operating

temperature: 90°C (brass version)

105°C (stainless steel version)

Accuracy:  $\pm 5\%$  f. s. Repeatability:  $\pm 1\%$  f. s.

#### **Materials**

Body, connection piece: Brass or st. steel 1.4571
Piston: Brass or st. steel 1.4571

Flow taper:

Ms version G 1/4: Brass

Ms version G 1/2: Acetate copolymer
Ms version G 3/4, G 1 1/4: Acetate homopolymer
Stainless steel version: Stainless steel 1.4571
Magnet: Alcomax, PTFE coated
Taper lock nut: Stainless steel 1.4571

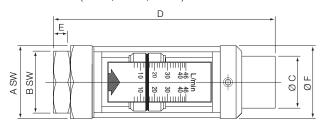
Seal: FPM Spring: oil /Ms version: Steel

Other versions: Stainless steel

Indicator: Steel

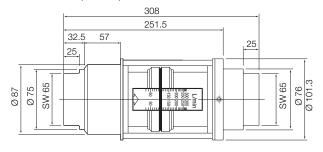
Indicator: Polycarbonate, acrylic

### **Dimensions** (G 1/4, G 1/2, G 3/4)



Thread	Α	В	С	D	E	F
1/4	32	29	19	123	7	32
1/2	41	38	32	165.5	12.5	46
3/4	58	46	43	190	15	58

## Dimensions (G 1 1/4)



## **Order Details**

Material brass						
Measuring range L/min	ũ		Medium oil			
0.2 - 2	G 1/4 female	SVC-1101	SVC-2101			
0.5 - 4.5	G 1/4 female	SVC-1102	SVC-2102			
1 - 9	G 1/4 female	SVC-1103	SVC-2103			
2 - 20	G 1/2 female	SVC-1104	SVC-2104			
5 - 46	G 1/2 female	SVC-1105	SVC-2105			
5 - 55	G 3/4 female	SVC-1106	SVC-2106			
10 - 110	G 3/4 female	SVC-1107	SVC-2107			
20 - 180	G 1 1/4 female	SVC-1108	SVC-2108			
30 - 270	G 1 1/4 female	SVC-1109	SVC-2109			
40 - 360	G 1 1/4 female	SVC-1110	SVC-2110			

Material stainless steel							
Measuring range L/min	Connection	Medium water	Medium oil	Weight kg			
0.2 - 2	G 1/4 female	SVC-1201	SVC-2201	0.4			
0.5 - 4.5	G 1/4 female	SVC-1202	SVC-2202	0.4			
1 - 9	G 1/4 female	SVC-1203	SVC-2203	0.4			
2 - 20	G 1/2 female	SVC-1204	SVC-2204	0.9			
5 - 46	G 1/2 female	SVC-1205	SVC-2205	0.9			
5 - 55	G 3/4 female	SVC-1206	SVC-2206	1.75			
10 - 110	G 3/4 female	SVC-1207	SVC-2207	1.75			
20 - 180	G 1 1/4 fem.	SVC-1208	SVC-2208	8.0			
30 - 270	G 1 1/4 fem.	SVC-1209	SVC-2209	8.0			
40 - 360	G 1 1/4 fem.	SVC-1210	SVC-2210	8.0			