Flow Meter with Float CF and DF for liquids and gases

- Quality design
- High corrosion resistance
- Reliable measurement principle
- Low weight and small dimensions

Flow meters with float series CF and DF can be attached to the pipe by fittings, pipe thread or with direct or angular (90°) hose connection. DF flow meter size 2 and smaller has a hose connection for connecting hose, which has a diameter of 10-12 mm. DF flow meter size 3 and larger has a hose connection for connecting hose, which has an internal diameter of 13-14 mm. Hose connections are available with flow meter.

Technical requirements and parameters

Values of measuring ranges, connecting threads and weights

Type	Type	Water +15°C l/h	Air +20°C l/h 101,3 kPa	Connection dimensions		Weight kg	Max. pressure loss mbar	
				C	D		Water mbar	Air mbar
CF04.01K1	DF04.01K1	0,4 – 2,5	10 – 100	G 1/2"	G 1/4"	2,4	7	13
CF03.01K1	DF03.01K1	0,6 – 6	15 – 220	G 1/2"	G 1/4"	2,4	21	33
CF02.01K1	DF02.01K1	1 – 12	30 – 450	G 1/2"	G 1/4"	2,4	19	33
CF01.01K1	DF01.01K1	2 – 17	60 – 600	G 1/2"	G 1/4"	2,4	14	20
CF 1.01K1	DF 1.01K1	4 – 35	70 – 1100	G 1/2"	G 1/4"	2,4	20	24
CF 2.01K1	DF 2.01K1	8 – 66	300 – 2300	G 1/2"	G 1/4"	2,4	32	46
CF 3.01K1	DF 3.01K1	20 – 145	450 – 4300	G 3/4"	G 1/2"	2,4	53	56
CF 4.01K1	DF 4.01K1	30 – 280	1100 – 9000	G 3/4"	G 1/2"	2,4	58	72
CF 4.02K1	DF 4.02K1	40 – 350	–	G 3/4"	G 1/2"	2,4	90	–
CF 5.01K1	DF 5.01K1	40 – 540	1000 – 11000	G 3/4"	G 1/2"	2,5	90	45
CF 6.01K1	DF 6.01K1	100 – 1000	2500 – 19000	G 3/4"	G 1/2"	2,35	91	39
CF 6.02K1	DF 6.02K1	200 – 1250	–	G 3/4"	G 1/2"	2,35	141	–

Note. The values of measuring ranges are valid for stainless steel floats. When using floats from other materials values of measuring ranges are different. Flow rates are reduced when using floats made of other materials.
Flow meter type CF, DF can be equipped with float position sensors.
For the size CF 3.01K1 (DF 3.01K1) and a smaller is used sensor SP3.
For the size CF 4.01K1 (DF 4.01K1) and begger is used sensor SP1 - min and SP2 - max.

Operating medium temperature	0 - 100°C
Measurable media	liquid and gaseous
Maximum operating pressure (without shocks)	1 MPa (according to requirements even more)
Measurement accuracy - accuracy class	4%, 2,5%, 1,6%

Materials of main parts

Connection fittings	mat. gr. 17 246
Float	mat. gr. 17 246 označeno K1 gr. 17 348 označeno K2 alloy Al marked K5 titanium marked K6
Measuring tube	borosilicate glass
Sealing elements	acc. CSN 02 9281 - rubber
Support part	mat. gr. 11 - equipped with epoxy paint finish S2300 a S 2323, or powder-mail

K – flow meter| Emkometer s.r.o., Na Žižkově 1245, Ledeč n/S., 58401, CZ
tel/fax: 569 721 622 | tel: 569 720 539, 569 721 549 | info@emkometer.cz

Before assembly remove from the flow meter the provision against the float movement during transportation. Flow meters are during the assembly tightened by a spanner size of 32 mm. Working position is vertical with supply of measured substance underneath. Before connecting the meter pipes should be flushed.

Operation and maintenance is limited to checkingof the leakage, cleaning the protective screen at the inlet of the flow meter (if fitted) and cleaning the measuring tube. When using flow meters use a protective shield. During the operation is necessary avoid pressure surges that could cause a sharp shock of the float to the float stops.

Requirements for other measuring ranges, other media, as well as requests for other materials to be discussed with the manufacturer.

Marking

Each device is labeled with the following information:

- type designation
- serial number
- year of manufacture
- measuring unit
- type of fluid and the reference conditions (temperature, viscosity, density, pressure)

Testing

Each device is individually calibrated, while verifying the correct operation of the float. Furthermore, the tests are carried out material, dimensional, visual, surface treatment, assembly and marking correctness.

Order

Ordering information

- device type
- flow rate to be measured during the operation (max, min)
- delivery date
- quantity

Note. If the order required measuring of other media than water or air according the table, it is necessary to introduce other variables characterizing the media state, density, temperature, pressure and viscosity.

K – flow meter| Emkometer s.r.o., Na Žižkově 1245, Ledeč n/S., 58401, CZ
tel/fax: 569 721 622 | tel: 569 720 539, 569 721 549 | info@emkometer.cz

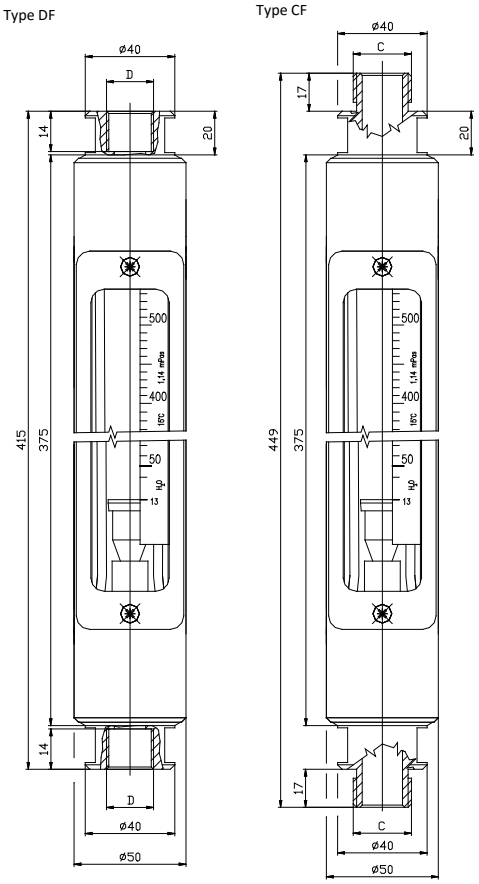
Manufacturer type number

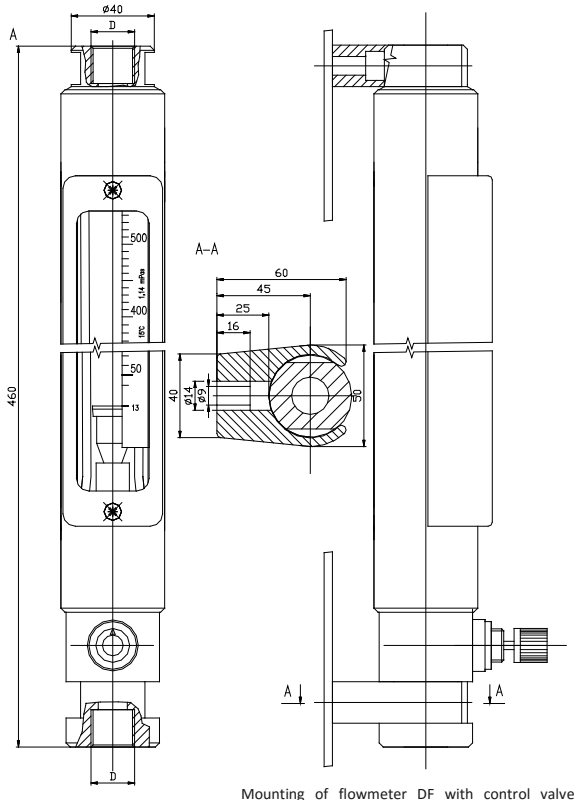
Example:

CF	8	02	K1	P2
1.	2.	3.	4.	5.

1.	Type		
	CF	connection - external thread	
	DF	connection - internal thread	
	CFV	connection - external thread, with guided float	
	DFV	connection - internal thread, with guided float	
2.	Size of measuring tube		
	04, 03, 02 … 8, 9, 10, 11		
3.	Design float emblem		
	01	basic float shape	
	02	modified float shape for greater flow	
	03	basic float shape with the core	
	04	modified float shape with the core for greater flow	
	05	basic float shape with magnet	
	06	modified float shape with magnet for greater flow	
	07	basic float shape with core and magnet	
	08	modified float shape with core and magnet	
	09	lightweight	
	10	bead	
4.	Float material		
	Metal	K1	stainless steel class 17 246
		K2	stainless steel class 17 348
		K5	alloy AL
		K6	titanium
	Plastic	P1	PVC
		P2	PP
		P3	PTFE (Teflon)
5.	Fittings material - inserts		
	- not applicable if the same material as the float		
	Metal	K1	stainless steel class 17 246
		K2	stainless steel class 17 348
		K5	alloy AL
	Plastic	P1	PVC
		P2	PP

K – flow meter| Emkometer s.r.o., Na Žižkově 1245, Ledeč n/S., 58401, CZ
tel/fax: 569 721 622 | tel: 569 720 539, 569 721 549 | info@emkometer.cz





Type DF with control valves on inlet

Mounting of flowmeter DF with control valve
PP holders (holders can be require with flowmeter)

K – flow meter| Emkometer s.r.o., Na Žižkově 1245, Ledeč n/S., 58401, CZ
tel/fax: 569 721 622 | tel: 569 720 539, 569 721 549 | info@emkometer.cz