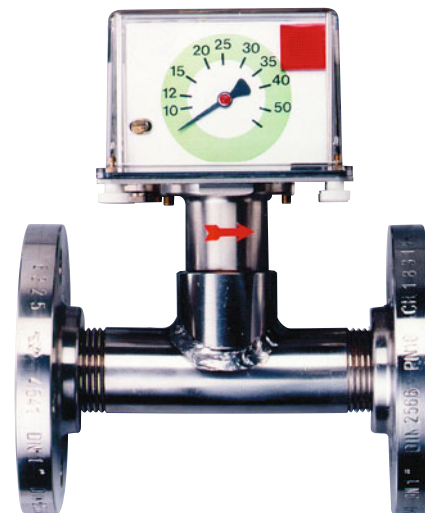


DP06

Paddle-bellows flow meter and switch for liquids

- Large 270° dial gauge display for flow rate
- Simple switch-point adjustment over the entire switching range on a separate small dial
- Bellows keeps liquid hermetically separated from the switching element
- Insensitive to dirty/contaminated fluids
- Very high reliability
- High electrical loading capacity through use of 1 or 2 independently adjustable microswitches
- Insensitive to electromagnetic fields
- Easy installation, for piping up to DN 600



Description:

The flow meters and switches model DP06 operate according to the paddle-bellows principle. The flowing liquid pushes against the surface area of a paddle mounted at the end of a pivoting arm. The arm is deflected against the force of a spring. This deflection is mechanically transmitted to a 270° dial-gauge display and a separately adjustable contact unit. A bellows system seals the liquid off from the mechanism. In case of malfunction, the spring returns the paddle plate to the zero position (no flow), which causes the system to automatically signal a fault.

Fields of application:

The DP06 paddle-bellows flow meter and switch is suitable for monitoring thin and low-viscosity liquids in average to large flow volumes. For nominal pipe sizes over DN50, installation with an intermediate mounting flange yields a price/performance ratio of exceptional economy.

Designs:

Each of the 3 types of DP06 flow meters and switches are available in 3 material combinations:

DP06.R... with T fitting and pipe-thread connection from G 3/8 to G 2 male thread

DP06.F... with T fitting and DIN flange from DN10 to DN50

Material combination A: T fitting of brass
Pivoting system of brass
Bellows of 1.4571 stainless steel
Flange of galvanized carbon steel

Material combination B: T fitting of 1.4571 stainless steel
Pivoting system of 1.4305 stainless steel
Bellows of 1.4571 stainless steel
Flange of 1.4571 stainless steel

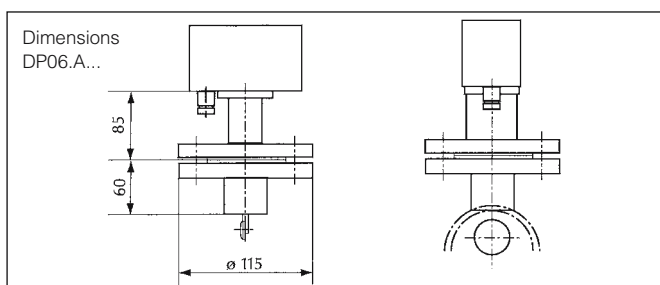
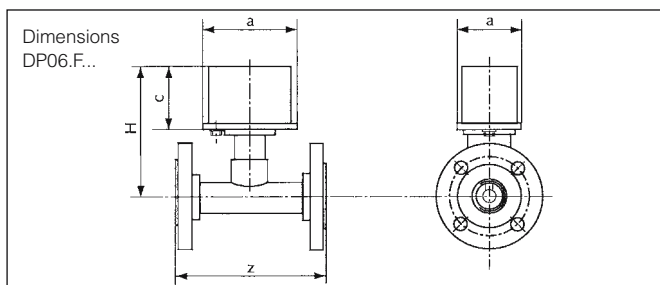
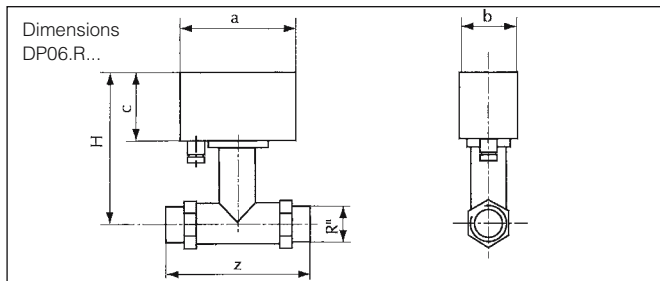
Material combination C: T fitting of PVC
Pivoting system of 1.4305 stainless steel
Bellows of 1.4571 stainless steel
Flange of PVC

DP06.A... with weld-on flange for nominal pipe size DN65 to DN600

Material combination A: Housing of brass
Pivoting system of brass
Bellows of 1.4571 stainless steel
Weld-on flange of carbon steel, painted

Material combination B: Housing of 1.4571 stainless steel
Pivoting system of 1.4305 stainless steel
Bellows of 1.4571 stainless steel
Weld-on flange of 1.4571 stainless steel

Dimensions:



Ordering Code:

Order number: DP06. R025. B. 1. 20-100

Paddle-bellows flow meter and switch

Process connection (xx=nominal pipe size):

R0xx = With male thread
(G 3/8 to G2 only)

F0xx = With flange
(DN10 to DN50 only)

Axxx = With weld-on flange
(from DN65 to DN600)

Material combination:

A = Brass / stainless steel (carbon steel, galvanized)

B = Completely of stainless steel

C = PVC / stainless steel (not for DP06.A..).

Switching output:

1 = 1 microswitch (250 V / 10 A)

2 = 2 microswitch (250 V / 5 A)

Switching range:

xxxx-xxxx = min. - max. flow rate (refer to „Measuring Ranges“ table)

Additional specifications:

- Liquid density and viscosity (if not water)
- Process pressure and temperature
- Mounting position and direction of flow
- Ratings of electrical connections

Measuring ranges:

Process connection DP06.R... DP06.F...	Flow rate (l/min)		Flow ratio	Process connection DP06.A...	Flow rate (m³/h)		Flow ratio
	min.	max.			min.	max.	
3/8"/DN10	1	25	1:5	DN 65	4,8	60	1:4
1/2"/DN15	1	55	1:5	DN 80	7,2	90	1:4
3/4"/DN20	5	100	1:5	DN 100	12	144	1:4
1"/DN25	6	150	1:5	DN 125	18	255	1:4
1 1/4"/DN32	10	250	1:5	DN 150	24	330	1:4
1 1/2"/DN40	20	400	1:5	DN 200	42	600	1:4
2"/DN50	50	600	1:5	DN 250	72	900	1:4
Switching ranges apply to water at 20 °C. Within the specified limits, all switching ranges can be achieved, provided that the max./min. ratio for the switching point is not exceeded.				DN 300	102	1.200	1:4
				DN 350	150	1.800	1:4
				DN 400	180	2.400	1:4
				DN 500	300	3.600	1:4
				DN 600	420	4.500	1:4

Nominal size	Installation length Z (in mm)		Installation clearance H (in mm)
	DP06.R...	DP06.F...	
3/8"/DN10	135	155	145
1/2"/DN15	135	155	145
3/4"/DN20	135	160	145
1"/DN25	135	160	145
1 1/4"/DN32	170	190	150
1 1/2"/DN40	170	190	155
2"/DN50	170	190	160

Technical specifications:

Max. pressure: 16 bar

Max. temperature: 100 °C

Repeat accuracy: +/- 5% to 20 l/min
+/- 4% from 21 to 200 l/min
+/- 3% > 200 l/min

Switching hysteresis: 10% (to 2 bar)

Contacts: microswitch, 250 V, 10 and, or 5 A

Status display: low-voltage lamp or LED
(depending on the voltage rating)

PKP Prozessmesstechnik GmbH

Borsigstraße 24 · D-65205 Wiesbaden

+49 (0) 6122-7055-0 · +49 (0) 6122-7055-50

Email: info@pkp.de · Internet: www.pkp.de

PKP Process Instruments Inc.

10 Brent Drive · Hudson, MA 01749

+1-978-212-0006 · +1-978-568-0060

Email: info@pkp.eu · Internet: www.pkp.eu

