

Flow controller with indicator flag, impeller or ball, with one or two glasses, up to 280 °C

Technical Data

Connection	G 3/8 - 2
	DN 15 - 50 (type 3.30, 3.40, 4.30, 4.40)
	DN 15 - 250 (type 3.10, 3.20, 4.10, 4.20)
Nom. Pressure	PN 16 - 40
Glasses	1 glass (type 3.10 up to 3.40)
	2 glasses (type 4.10 up to 4.40)

Description

Flow controller with indicator flag, impeller or ball are for monitoring of fluids, gases, vapours and two-phase flow.

With internal indicator flag, for constant flow direction:

With 10-division scale glass, installation horizontal or vertical, scale only with soda lime glasses with PN 16 up to DN 100, with PN 40 up to DN 65, above without scale.

DA 3.10 with one glass.

DA 4.10 with two glasses.

Nominal diameters G 3/8 - G 1 and DN 15 - 25 are without resetting spring as standard, subsequent installation is possible. All others are with resetting spring.

Installation position:

- with resetting spring any position
- without resetting spring horizontal with flag downwards, vertical only with flow from below upwards

With internal indicator flag, for alternating flow directions:

DA 3.20 with one glass.

DA 4.20 with two glasses.

Nominal diameters G 3/8 - G 1 and DN 15 - 25 are without resetting spring as standard, subsequent installation is possible. All others are with resetting spring.

Installation position:

- with resetting spring any position
- without resetting spring horizontal with flag downwards

With impeller, for constant flow direction:

DA 3.30 with one glass.

DA 4.30 with two glasses.

Installation position:

- horizontal or vertical, for small flow rates ($v < 1$ m/s)

With ball, for constant flow direction:

DA 3.40 with one glass.

DA 4.40 with two glasses.

Installation position:

- vertical, only with flow from below upwards

Response threshold according to data sheet DA/2.1.061.1

STANDARD EQUIPMENT

- Soda lime glass

OPTIONS

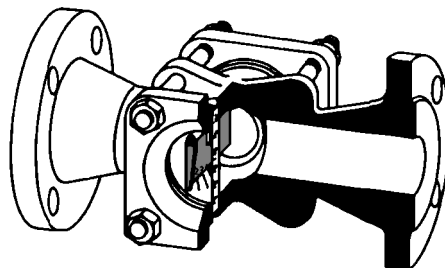
- Various seal materials suitable for your medium
- PTFE indicating vane or ball
- Borosilicate glass
- Special versions on request

Operating instructions, Know How and Safety instructions must be observed.

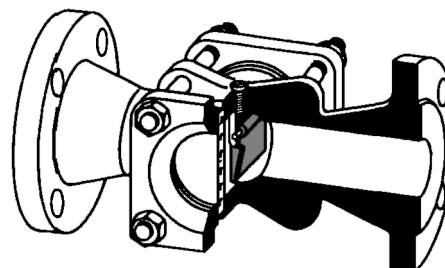
The pressure has always been indicated as overpressure.

We reserve the right to alter technical specifications without notice.

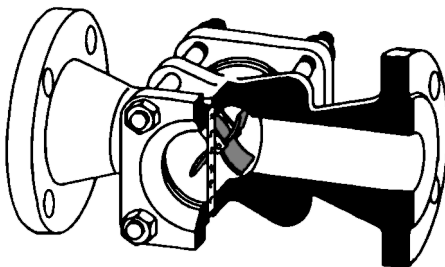
DA 4.10



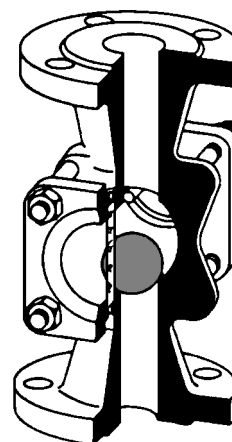
DA 4.20



DA 4.30



DA 4.40



Accessories

DA 3.10 - 3.40, 4.10 - 4.40

Flow controller with indicator flag, impeller or ball,
with one or two glasses, up to 280 °C

Materials				
Type	3.10	4.10	3.20	4.20
Temperature	150 / 280 °C			
Body PN 16	grey cast iron			
PN 25 - 40	C 22.8 / St37-2			
PN 16 - 40	CrNiMo-steel			
Seal	C4400			
Glasses	soda lime glass up to 150 °C optional maxos glass up to 280 °C			
Internals	CrNiMo-steel	CrNiMo-steel / Ms		
Screws	5.6 zincd	5.6 zincd	5.6 zincd	5.6 zincd

Materials				
Type	3.30	4.30	3.40	4.40
Temperature	80 °C		100 °C	
Body PN 16	grey cast iron			
PN 25 - 40	C 22.8 / St37-2			
PN 16 - 40	CrNiMo-steel			
Seal	C4400			
Glasses	soda lime glass, optional maxos glass			
Internals	CrNiMo-steel / PBTP		CrNiMo-steel / Ms / PA	
Screws	5.6 zincd	5.6 zincd	5.6 zincd	5.6 zincd

Dimensions [mm] (sleeve)								
size	nominal pressure PN	nominal diameter G						
		3/8	1/2	3/4	1	1 1/4	1 1/2	2
A	PN 16 (GG-20)*	105	105	110	110	115	145	165
	PN 16 (CrNiMo-steel)	90	90	90	90	90	90	110
	PN 25/40	90	90	90	90	90	90	110
B		70	70	70	70	70	70	90
C ₁	PN 16 - 40	110	110	110	110	110	110	140
C ₂		140	140	140	140	140	140	180
E	PN 16 (GG-20)*	□ 85	□ 85	□ 85	□ 85	□ 85	□ 85	□ 110
	PN 16 (CrNiMo-steel)	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 150
	PN 25/40	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 150
	PN 16 - 40	∅ 50	∅ 50	∅ 50	∅ 50	∅ 50	∅ 50	∅ 66

* PN 16 made of GG-20 not available:
type 3.10 - 3.40 G 1 1/4, type 4.10 - 4.40 G 1 1/2

Dimensions [mm] (flange)														
size	nom. pressure PN	nominal diameter DN												
		15	20	25	32	40	50	65	80	100	125	150	200*	250*
A	PN 16 (GG-20)	140	150	160	180	200	230	200	260	300	350	400	600	650
**	PN 16 (CrNiMo-st)	164	168	168	172	178	202	290	on request					
**	PN 25/40	166	170	170	174	180	208	290	on request					
B		70	70	70	70	70	90	90	110	125	135	135	230	250
C ₁	PN 16 - 40	110	110	110	110	110	140	140	160	195	205	205	340	390
C ₂		140	140	140	140	140	180	180	220	250	270	270	460	500
E	PN 16 (GG-20)	□ 85	□ 85	□ 85	□ 85	□ 85	□ 110	□ 120	□ 130	∅ 190	∅ 210	∅ 210	∅ 285	∅ 285
	PN 16 (CrNiMo-st)	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 150	∅ 150	on request					
	PN 25/40	∅ 115	∅ 115	∅ 115	∅ 115	∅ 115	∅ 150	∅ 150	on request					
F	PN 16 - 40	∅ 50	∅ 50	∅ 50	∅ 50	∅ 50	∅ 66	∅ 66	∅ 80	∅ 100	∅ 110	∅ 110	∅ 175	∅ 175

* DN 200 and 250 made of St37-2 ** allowance ± 2 mm

Weights [kg]																					
design	nominal pressure PN	nominal diameter G							nominal diameter DN												
		3/8	1/2	3/4	1	1 1/4	1 1/2	2	15	20	25	32	40	50	65	80	100	125	150	200	250
with 1 glass	PN 16	2,6	2,6	2,8	2,9	3,1	3,3	5,4	3,8	4,2	5,2	6,2	6,7	11,5	13	18	26	36	43	80	126
	PN 25/40	4,5	4,5	4,5	4,5	4,5	4,5	9,0	6,3	6,8	7,3	8,5	9,3	14,0	14,5	on request					
with 2 glasses	PN 16	2,6	2,6	2,8	3,0	3,2	3,5	6,5	3,5	4,0	5,0	6,0	7,0	10,0	13	17	26	36	43	80	126
	PN 25/40	4,5	4,5	4,5	4,5	4,5	4,5	10,0	6,0	7,0	7,5	8,5	9,0	15,0	15	on request					

Special designs on request.

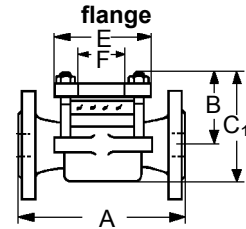
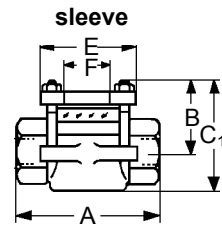
The pressure has always been indicated as overpressure.

Mankenberg reserves the right, to alter or improve the designs or specifications of the products described herein without notice.

**WIR REGELN DAS SCHON
FIRMLY IN CONTROL**

MANKENBERG

DA 3.10
DA 3.20
DA 3.30
DA 3.40



DA 4.10
DA 4.20
DA 4.30
DA 4.40

