

Monobloc ball valve type 27 and type 27 A



Body material	PPH	PE 100	PPG	PVDF	ECTFE
Ball seat	PTFE				
Other seats	• EPDM		• FKM		• FEP
Working temperature	-10 °C up to 80 °C ¹⁾	-30 °C up to 60 °C ¹⁾	-10 °C up to 100 °C ¹⁾	-30 °C up to 120 °C ¹⁾	
Nominal size	Type 27 = DN 15 up to DN 50 (type 27 A = DN 65 up to DN 150)				
Connection with pipe	• Flange connection acc. to DIN EN 1092-1 (replaces DIN 2501) - PN 10 • Flange connection acc. to ANSI 150 lbs		• Spigot SDR 11 / 21		
Length	• Flange DIN EN 558 - 1 series FTF 1 (DIN 3202 - series F 1) • Flange ANSI Class 150				
Actuator	Lockable lever, optionally pneumatic or electric actuator				
Accessories	Limit switches, solenoid valves, shaft extension				
ATEX-approval	also according to ATEX-guideline  2014/34/EU available				

¹⁾ Working temperatures for sealing materials:
 EPDM: -20 up to 90 °C
 FKM / FEP: -30 up to 120 °C

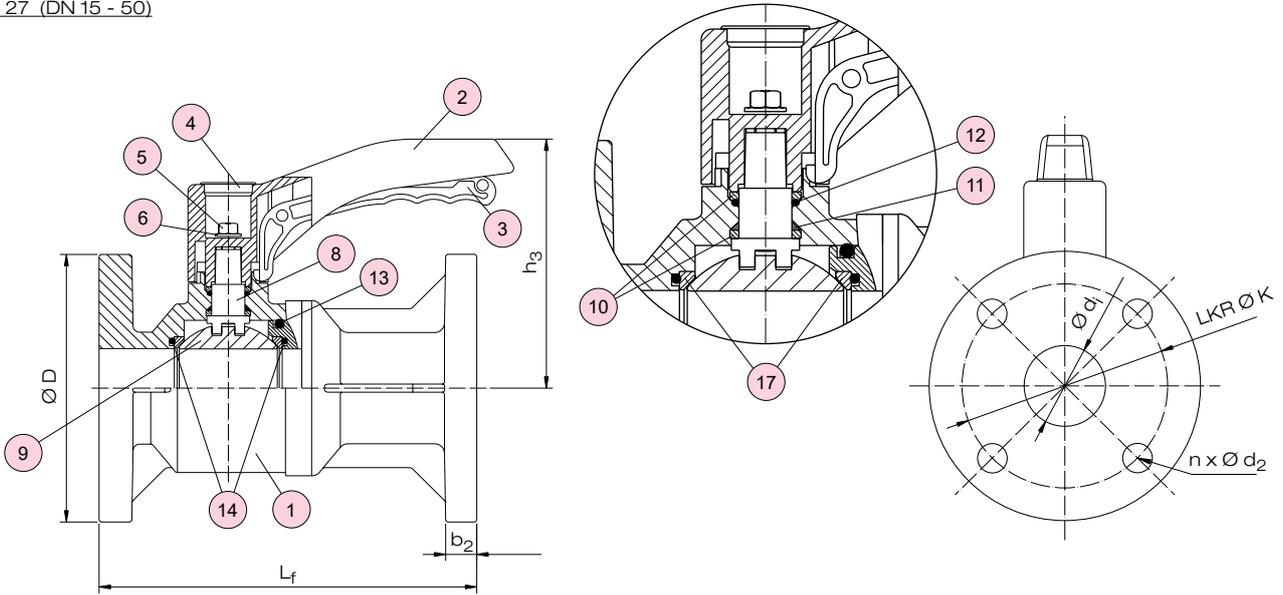
Example for an invitation to tender text:

Monobloc ball valve type 27, DN 50, PN 10, PPH / EPDM, flange connection acc. to DIN EN 1092-1 - PN 10, length acc. to DIN EN 558-1, series FTF 1, variable lever and optical position indicator

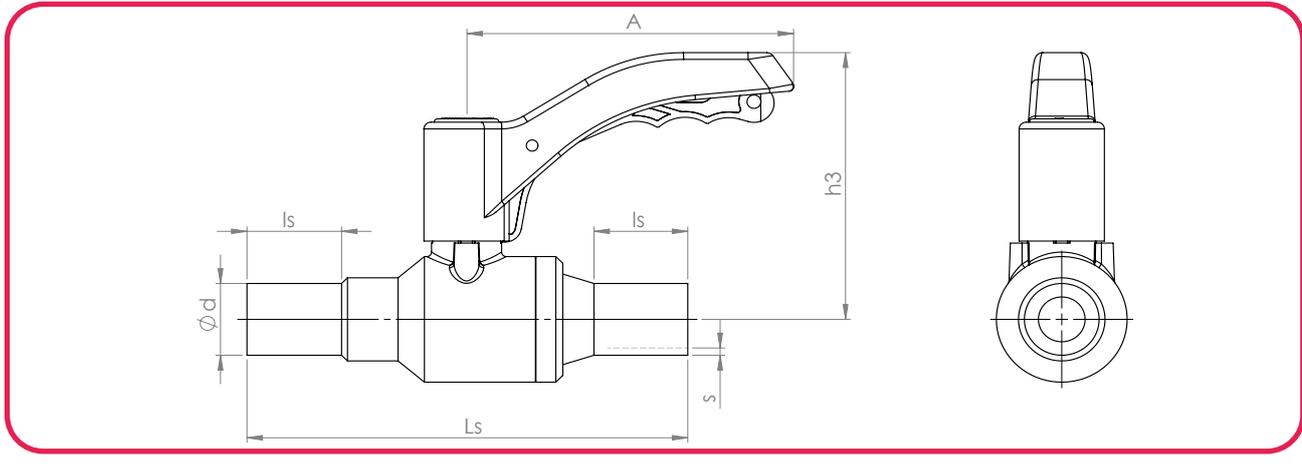
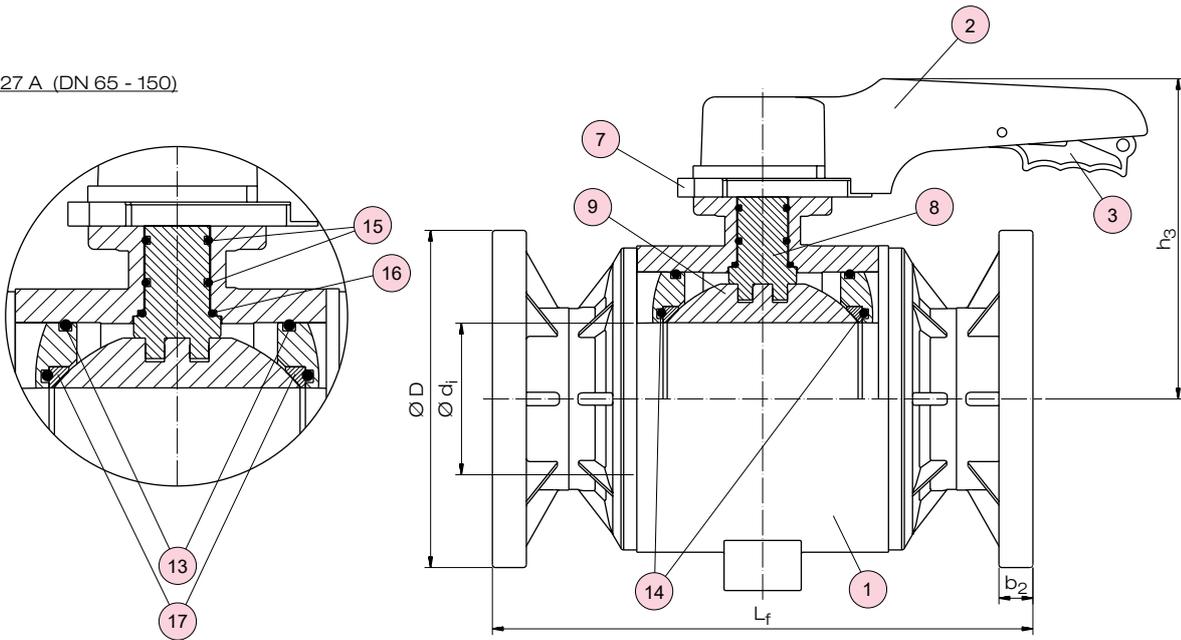
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Monobloc ball valve type 27 and type 27 A

Type 27 (DN 15 - 50)



Type 27 A (DN 65 - 150)



Monobloc ball valve type 27 and type 27 A

No.	Description	Number	Material
1	Body	1	PPH, PE 100, PPG, PVDF, ECTFE
2	Lever	1	PP
3	Hand lever	1	PPG
4	Cap	1	PELD
5	Hexagonal nut	1	A4 - 1.4404 (SUS 316 L)
6	Washer	1	A4 - 1.4404 (SUS 316 L)
7	Locking plate	1	PPG
8	Stem	1	PPH, PE 100, PPG, PVDF, ECTFE
9	Ball	1	PPH, PE 100, PPG, PVDF, ECTFE

No.	Description	Number	Material
10	Sheet gasket	2	PTFE
11	Seal	1	PTFE
12	O-ring (A)	1	EPDM, FKM, FEP
13	O-ring (B)	1/2	EPDM, FKM
14	O-ring (C)	2	EPDM, FKM, FEP
15	O-ring (D) DN 65 - 100	2	EPDM, FKM
16	O-ring (E) DN 65 - 100	1	EPDM, FKM, FEP
17	Ball seat	2	PTFE

Dimensions and weights - flange connection acc. DIN

Dimensions in mm									Weight in kg / pc.			
DN	d _f	K	D	L _f	h ₃	A	b ₂	n x d ₂	PPH	PPG	PVDF	ECTFE
15	15	65	95	130	115	140	13	4 x 14	0,35	0,42	0,61	0,59
20	20	75	105	150	115	140	14	4 x 14	0,41	0,49	0,70	0,67
25	25	85	115	160	125	140	15	4 x 14	0,52	0,63	0,92	0,88
32	31	100	140	180	145	175	17	4 x 18	0,98	1,17	1,71	1,64
40	40	110	150	200	145	175	17,5	4 x 18	1,10	1,31	1,94	1,86
50	51	125	165	230	155	175	18	4 x 18	1,50	1,80	2,72	2,61
65	65	145	185	290	205	250	20	4 x 18	3,21	3,86	5,81	5,58
80	80	160	200	310	205	250	20	8 x 18	3,38	4,06	6,12	5,88
100	100	180	220	350	200	250	21	8 x 18	3,55	4,26	6,43	6,17
125	125	210	250	400	285	320	26	8 x 18	14,0	-	-	-
150	150	240	285	480	285	320	27,5	8 x 22	15,0	-	-	-

Dimensions and weights - flange connection acc. ANSI

Dimensions in mm									Weight in kg / pc.			
DN	d _f	K	D	L _f	h ₃	A	b ₂	n x d ₂	PPH	PPG	PVDF	ECTFE
1/2"	15	60	95	108	115	140	13	4 x 16	0,33	0,40	0,57	0,55
3/4"	20	70	105	117	115	140	14	4 x 16	0,40	0,48	0,66	0,63
1"	25	79,5	115	127	125	140	15	4 x 16	0,50	0,61	0,87	0,84
1 1/4"	31	89	140	140	145	175	17	4 x 16	0,95	1,13	1,65	1,59
1 1/2"	40	98,4	150	165	145	175	17,5	4 x 16	1,06	1,27	1,86	1,79
2"	51	120,6	165	178	155	175	18	4 x 19	1,45	1,74	2,60	2,50
2 1/2"	65	140	185	190	205	250	20	4 x 19	3,11	3,73	5,62	5,40
3"	80	152	200	203	205	250	20	4 x 19	3,27	3,93	5,92	5,68
4"	80	190	220	229	200	250	21	8 x 19	3,43	4,12	6,21	5,96
5"	125	215,9	254	400	285	320	26	8 x 22	14,0	-	-	-
6"	150	241	285	480	285	320	27,5	8 x 22	15,0	-	-	-

Dimensions and weights - spigot

Dimensions in mm										Weight in kg / pc.			
DN	d	s ¹⁾ SDR 11	s ²⁾ SDR 21	l _s ¹⁾	L _s ¹⁾	l _s ²⁾	L _s ²⁾	h ₃	A	PE	PPH	PVDF	ECTFE
15	20	1,9	1,9	30	170	30	170	115	140	0,21	0,21	0,38	0,38
20	25	2,3	1,9	50	210	50	210	115	140	0,24	0,24	0,43	0,43
25	32	2,9	2,4	55	225	55	225	125	140	0,28	0,28	0,50	0,50
32	40	3,7	2,4	55	260	55	260	145	175	0,52	0,52	0,94	-
40	50	4,6	3,0	35	235	35	235	145	175	0,55	0,55	0,99	0,99
50	63	5,8	3,0	60	300	60	300	155	175	0,85	0,85	1,50	1,50
65	75	6,8	3,6	85	395	15	240	200	250	1,90	1,90	3,42	-
80	90	8,2	4,3	95	429	25	300	285	250	2,02	2,02	3,62	3,62
100	110	10,0	5,3	110	545	25	350	285	250	2,45	2,45	4,41	4,41

1) PP, PE 100 2) PVDF, ECTFE

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Flow rate characteristic value¹⁾ k_{VS} in m^3/h

DN	15	20	25	32	40	50	65	80	100	125	150
k_{VS} [m^3/h]	11,1	21,0	42,0	60,0	96,0	186,0	300,0	420,0	840,0	1200,0	1800,0

¹⁾ Definition k_{VS} -value see chapter T2 / technical information

Drive torque²⁾ M_A in Nm for ball movement

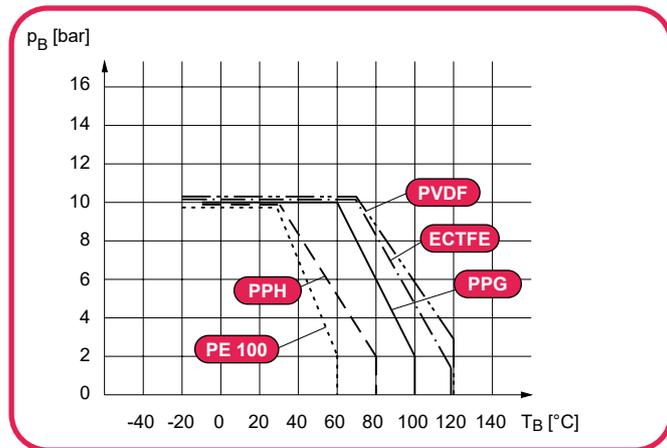
DN	15	20	25	32	40	50	65	80	100	125	150
M_A [Nm]	6,0	6,0	8,0	12,0	12,0	19,0	18,0	18,0	18,0	60,0	60,0

²⁾ all values refer to the maximum differential pressure

Tightening torque in Nm for flange bolts

DN	15	20	25	32	40	50	65	80	100	125	150
Torque [Nm]	7,5	9,0	10,0	20,0	20,0	25,0	25,0	30,0	30,0	40,0	45,0

Working pressure³⁾ p_B in bar



Body material	T_B in °C	DN
		15 - 150
PPH	-10 up to 30	10
	40	8,4
	60	5,2
	80	2
PE 100	-20 up to 25	10
	40	6,6
	50	4,3
	60	2
PPG	-10 up to 30	10
	60	10
	80	6
	100	2
PVDF	-20 up to 30	10
	70	10
	80	8,8
	100	5,8
	120	3
ECTFE	-20 up to 30	10
	70	10
	80	8,8
	100	5,1
	120	1,5

³⁾ Definition see chapter T2 / technical information