

ARI-PRESO®

Fig. 753 / Pressure regulating valve



Your valve made by ARI®
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Pressure regulating valve - straight through with flanges - spring loaded
(Grey cast iron, SG iron, Cast steel, Stainless steel)

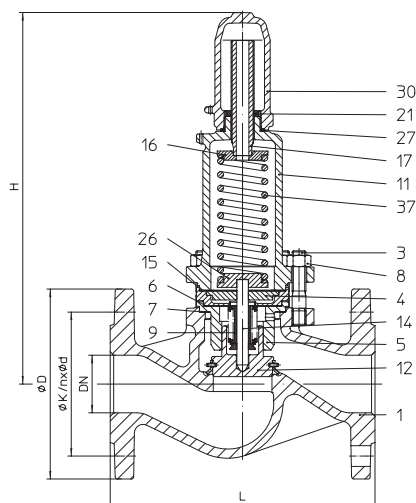


Figure	Nominal pressure	Material	Nominal diameter
12.753	PN 16	EN-JL1040	DN15-100
22.753	PN 16	EN-JS1049	DN15-100
32.753	PN 16	1.0619+N	DN15-100
52.753	PN 16	1.4408	DN15-100

Test:	• TA - Luft
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Parts						
Pos.	Sp.p.	Description	Fig. 12.753	Fig. 22.753	Fig. 32.753	Fig. 52.753
1		Body	EN-JL1040, EN-GJL-250	EN-JS1049, EN-GJS-400-18U-LT	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2		Seat	X20Cr13+QZ, 1.4021+QT			--
3		Stud	25CrMo4, 1.7218			A4-70
4		Stem guide	X20Cr13+QZ, 1.4021+QT			
5		Guide housing	X20Cr13+QZ, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
6	x	Gasket	Pure graphite (CrNi laminated with graphite)			
7	x	Gasket	Pure graphite (CrNi laminated with graphite)			
8		Hexagon nut	C35E, 1.1181			A4
9		Travel limiter ring	≥ DN40: X6CrNiMoTi17-12-2, 1.4571			
11		Bonnet	EN-JS1049, EN-GJS-400-18U-LT			GX5CrNiMo19-11-2, 1.4408
12	x	Plug unit	X20Cr13+QZ, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
14	x	Stem unit	X6CrNiMoTi17-12-2, 1.4571			
15	x	Gasket	Pure graphite (CrNi laminated with graphite)			
16		Spring plate (top)	DN15-20: X6CrNiMoTi17-12-2, ≥ DN25: 1.4571 S235JR, 1.0037			X6CrNiMoTi17-12-2, 1.4571
17		Adjusting screw	X20Cr13+QZ, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
21		Lock nut	11SMn30+C, 1.0715+C			X6CrNiMoTi17-12-2, 1.4571
26		Spring plate (bottom)	DN15-20: X6CrNiMoTi17-12-2, ≥ DN25: 1.4571 S235JR, 1.0037			X6CrNiMoTi17-12-2, 1.4571
27	x	Sealing ring	CuFA			X6CrNiMoTi17-12-2, 1.4571
30		Cap, gastight	EN-JS1049, EN-GJS-400-18U-LT			GX5CrNiMo19-11-2, 1.4408
37	x	Compression spring	FDSiCr			
	L Spare parts					

DN		15	20	25	32	40	50	65	80	100
Face-to-face dimension FTF series 1 according to DIN EN 558										
Standard-flange dimensions refer to page 4										
L	(mm)	130	150	160	180	200	230	290	310	350
H	(mm)	230	230	290	300	325	330	400	440	500
Dimensions										
Kvs-value	(m³/h)	2	2,5	3	5	10	20	22	29	45
Seat-Ø	(mm)	21	21	27	31	41	51	66	81	101
Travel	(mm)	2	2	2,5	2,5	4	5,5	7	8	10
Leakage rate		IV acc. to DIN EN 1349 (≤ 0,01% from the nominal flow)								
Weights										
12./22./32./52.753	(ka)	3.6	4.1	6.6	7.7	10.4	12.9	20.2	28.9	43.7



Flange dimensions / Pressure-temperature-ratings / max. permissible back pressure

max. permissible back pressure p2		(Observe pressure-temperature-limits)								
DN		15	20	25	32	40	50	65	80	100
Setting range Δp_0	Set point Δp_0	max. permissible back pressure p2								
(bar)	(bar)	(barg)								
0,5 - 1,5	0,5	4,5	4,5	6,9	6,4	6,6	9,5	4,9	6,7	5,9
	1	3	3	5,4	4,4	4,7	6,5	3,3	4,9	4,2
	1,5	1,5	1,5	3,9	2,4	2,7	3,5	1,7	3,1	2,5
1 - 3	1	8	8	10,6	11,2	9,9	14	7	7,7	6,8
	2	5	5	7,6	7,2	6	10,4	3,8	4,2	3,5
	3	2	2	4,6	3,2	2	6,8	0,5	0,6	0,1
2 - 5	2	8	8	12	12	12	12	11,3	10,8	10,2
	3	5,8	5,8	9,3	9,2	8,4	9,8	8,1	7,2	6,8
	4	3,7	3,7	6,6	6,5	4,9	7,7	4,8	3,7	3,5
	5	1,5	1,5	3,9	3,7	1,3	5,5	1,6	0,1	0,1
4 - 10	4	10	10	8	8	8	8	8	8	8
	6	7	7	5,7	5,7	5,7	5,7	5,7	5,7	5,7
	8	4	4	3,3	3,3	3,3	3,3	3,3	3,3	3,3
	10	1	1	1	1	1	1	1	1	1

Δp_0 = Differential pressure (Set pressure p_{10} – Back pressure p_2)

DN			15	20	25	32	40	50	65	80	100
Standard-flange dimensions											
Flanges acc. to DIN EN 1092-1/-2 (Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545)											
PN16	ØD	(mm)	95	105	115	140	150	165	185	200	220
	ØK	(mm)	65	75	85	100	110	125	145	160	180
	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	4x18 ¹⁾	8x18	8x18
¹⁾ also with 8 bore holes acc. to DIN EN 1092-1/-2 possible.											

¹⁾ also with 8 bore holes acc. to DIN EN 1092-1/-2 possible.

Pressure-temperature-ratings			Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.								
acc. to DIN EN 1092-2			-60°C to <-10°C ¹⁾	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
EN-JL1040	16	(bar)	--	16	14,4	12,8	11,2	9,6	--	--	--
EN-JS1049	16	(bar)	on request	16	15,5	14,7	13,9	12,8	11,2	--	--
acc. to manufacturers standard			-60°C to <-10°C ¹⁾	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.0619+N	16	(bar)	12	16	15,3	14	13	11	10,2	9,5	5,2
acc. to DIN EN 1092-1			-60°C to <-10°C ¹⁾	-10°C to 100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.4408	16	(bar)	16	16	14,5	13,4	12,7	11,8	11,4	10,9	--

¹⁾ Studs and nuts made of A4-70 (at temperatures below -10°C)