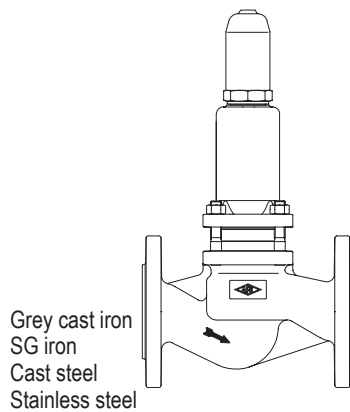


Pressure regulating valve, spring loaded
DN 15 - 100

ARI-PRESO® - Pressure regulating valve
Straight through with flanges

- Spring loaded
- TA - Luft TÜV-Test-No. 922-9241371



Grey cast iron
SG iron
Cast steel
Stainless steel

Fig. 753

Page 2

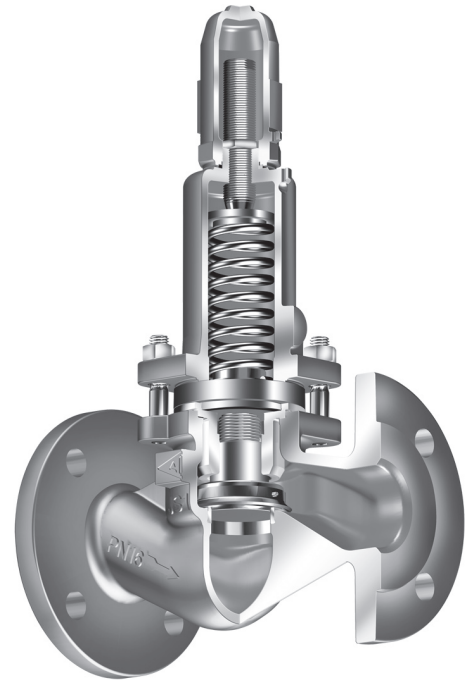


Fig. 753

Features:

- Spring loaded
- Standard bellows seal
- Compact design
- Regulating plug
- Shaft plug guide
- Pressure range:
0,5 - 1,5 bar
1,0 - 3,0 bar
2,0 - 5,0 bar
4,0 - 10,0 bar
- Exact and easy adjustment
- Proportional flow characteristic
- Maintenance-free

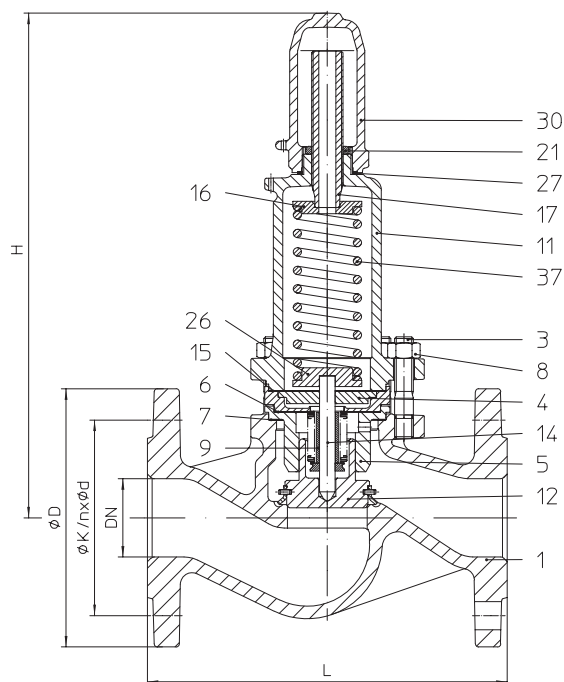
Pressure regulating valve - straight through with flanges - spring loaded (Grey cast iron, SG iron, Cast steel, Stainless steel)


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

• TA - Luft TÜV-Test-No. 922-9241371

Selection of possible applications

Industrial installations, processing technology, plant manufacturing, etc.
(other applications on request)

Selection of possible flow media

Liquids, gas and vapours, steam, etc.
(other flow media on request)

Parts

Pos.	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			GX5CrNiMo19-11-2, 1.4408
3	Studs	25CrMo4, 1.7218			A4-70
4	Stem guide	X20Cr13+QZ, 1.4021+QT			
5	Guide housing	X20Cr13+QZ, 1.4021+QT			
6	Gasket *	Pure graphite (CrNi laminated with graphite)			
7	Gasket *	Pure graphite (CrNi laminated with graphite)			
8	Hexagon nut	C35E, 1.1181			A4
9	Lift limitation	≥ DN40: X6CrNiMoTi17-12-2, 1.4571			
11	Bonnet	EN-JL1040, EN-GJL-250	EN-JS1049, EN-GJS-400-18U-LT	GX5CrNiMo19-11-2, 1.4408	
12	Plug unit *	X20Cr13+QZ, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
14	Stem unit *	X6CrNiMoTi17-12-2, 1.4571			
15	Gasket *	Pure graphite (CrNi laminated with graphite)			
16	Spring plate (top)	S235JR, 1.0037			X6CrNiMoTi17-12-2, 1.4571
17	Adjusting screw	X20Cr13+QZ, 1.4021+QT			
21	Lock nut	11SMn30+C, 1.0715+C			
26	Spring plate (bottom)	S235JR, 1.0037			X6CrNiMoTi17-12-2, 1.4571
30	Cap, gastight	EN-JS1049, EN-GJS-400-18U-LT			GX5CrNiMo19-11-2, 1.4408
37	Spring *	FDSiCr			

* Spare part

Information / restriction of technical rules need to be observed!

Operating instructions can be ordered by phone +49 (0)5207 / 994-0 or fax +49 (0)5207 / 994-158 or -159.

ARI-Valves of EN-JL1040 are not allowed to be operated in systems acc. to TRD 110.

A production allowance acc. to TRB 801 No. 45 exists (acc. to TRB 801 No. 45 EN-JL1040 is not allowed.)

The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Dimensions

DN	(mm)	15	20	25	32	40	50	65	80	100
L	(mm)	130	150	160	180	200	230	290	310	350
H	(mm)	230	230	290	300	325	330	400	440	500
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)								

Face-to-face dimension FTF series 1 according to DIN EN 558

Weights

DN	(mm)	15	20	25	32	40	50	65	80	100
12./22./32./52.753	(kg)	3,6	4,1	6,6	7,7	10,4	12,9	20,2	28,9	43,7

Application

The pressure regulating valve PRESO is a spring loaded differential pressure-control valve. The main applications are:

- Pump protection: PRESO inserted parallel to the pump, this secures a minimum flow.
- Application in bypass lines from users, e.g. heat exchanger in thermal oil systems to sustain a minimum flow.
- Parallel to piping systems to avoid to higher differential pressures.
- Pressure maintaining valve to avoid the flashing in condensate systems.

PROPERTY	INDICATION
Produktkey	28102000001
Article code	1275300652
Type	ARI-PRESO
Designation	Pressure regulating valve - traight through with flanges - spring lo...
Material	EN-JL1040
Pressure	PN 16
Connection	flanged
Nominal diameter	DN 65
Feature1	Kvs-value:22,0 Design:spring loaded
Feature2	Pressure range:01,00 - 03,00 bar

Produktkey	Article code	Type	Material	Pressure	Connection	Nominal diameter	Feature1
28102000001	1275300652	ARI-PRESO	EN-JL1040	PN 16	flanged	DN 65	Kvs-value:22,0 Desig...
28102000007	2275300652	ARI-PRESO	EN-351049	PN 16	flanged	DN 65	Kvs-value:22,0 Desig...
28102000011	3275300652	ARI-PRESO	1.0619+N	PN 16	flanged	DN 65	Kvs-value:22,0 Desig...
28102000016	5275300652	ARI-PRESO	1.4408	PN 16	flanged	DN 65	Kvs-value:22,0 Desig...

MyValve - Calculator

Contents:

Module ARI-Pressure regulating valves PRESO-Calculation

- Sizing (calculation of valve-size with given temperature, flow, set pressure, opening pressure and set pressure)

Media:

Integrated media-databank (more than 160 media) with conditions:

- Vapours / gases
- Steam (saturated and superheated)
- Liquids

Special features:

- Project administration of the calculation and product data incl. spare part drawings concerning to project and tag number
- Direct output or calculation and product data in PDF format
- Product data could be taken for a direct order
- SI- and ANSI-units with direct conversion to another databank
- Settings with over pressure or absolute pressure
- All ARI Pressure regulating valves are integrated in a databank
- Direct access concerning to the product on data sheets, operating instructions, pressure-temperature-diagram and spare part drawings
- Operation in company networks possible (no complex installations on individually PC's necessary)

System Requirements:

Windows operating systems, Linux, etc.

max. permissible back pressure p2
(Observe pressure-temperature-ratings)

DN	(mm)	15	20	25	32	40	50	65	80	100
Pressure 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)

Standard-flange dimensions

Flanges acc. to DIN EN 1092-1/-2 (Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545)

DN		(mm)	15	20	25	32	40	50	65	80	100
PN16	$\varnothing D$	(mm)	95	105	115	140	150	165	185	200	220
PN16	$\varnothing K$	(mm)	65	75	85	100	110	125	145	160	180
PN16	$n \times \varnothing d$	(mm)	4 x 14	4 x 14	4 x 14	4 x 18	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18

Pressure-temperature-ratings acc. to DIN EN 1092-2

Material			-60°C to <-10°C*	-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	--	--

Pressure-temperature-ratings acc. to manufacturers standard

Material			-60°C to <-10°C*	-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	8,9

Pressure-temperature-ratings acc. to DIN EN 1092-1

Material			-60°C to <-10°C*	-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	--

Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

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

Please indicate when ordering:

- Figure-No.
- Nominal diameter
- Nominal pressure
- Body material
- Plug design
- Kvs-value
- Pressure range
- Special design / accessories

Example:

Figure 22.753; Nominal diameter DN50; Nominal pressure PN16; Body material EN-JS1049; metal seat; Kvs 20; Pressure range 1 - 3 bar.

Dimensions in mm Weights in kg Pressures in barg (gauge) 1 bar \triangleq 10 ⁵ Pa \triangleq 0,1 MPa Kvs in m ³ /h
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