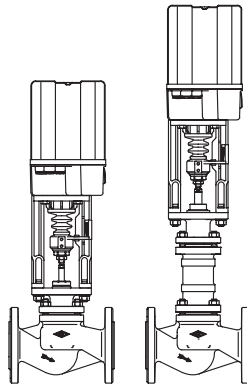


Control valve - straight through with flanges
DN 15 - 250

ARI-STEVI® 440 / 441
Electric actuator ARI-PREMIO

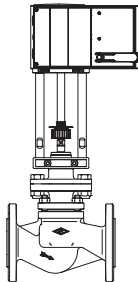
- Enclosure IP 65
- 2 torque switches
- Handwheel
- Additional devices available, e.g. potentiometer



Page 2


ARI-STEVI® 440
Electric actuator FR1
with safety reset

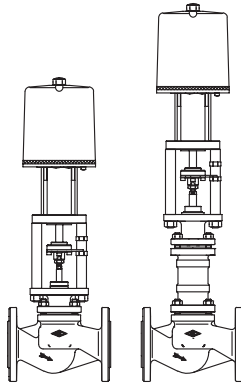
- Operation mode for safety function CLOSE
- Enclosure IP 66
- Operating time adjustable
- Additional devices available, e.g. potentiometer



Page 10

ARI-STEVI® 440 / 441
Electric actuator FR2
with safety reset

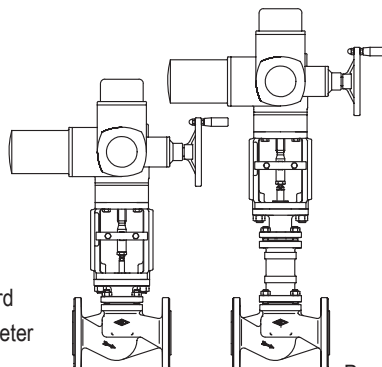
- Type approval acc. to DIN 32730 for Fig. 440 with FR 2.1 
- CE-marking from DN15
- Optional direction for safety reset, OPEN or CLOSE, as required
- Enclosure IP 54
- 1 travel switch for OPEN and CLOSE
- Additional devices available, e.g. potentiometer



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ARI-STEVI® 440 / 441
Electric actuator AUMA SAR

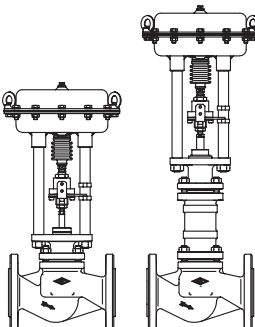
- Electric multiturn actuator, capable of high closing pressures
- Enclosure IP 67
- 2 torque switches
- 2 travel switches
- Handwheel
- Overheating protection for motor as standard
- Additional devices available, e.g. potentiometer
- Explosion proof version available



Page 18

ARI-STEVI® 440 / 441
Pneumatic actuator ARI-DP

- Reversible pneumatic actuator
- Actuator with rolling diaphragm
- Air supply pressure max. 6 bar
- Stem protection by bellow
- Maintenance-free O-ring sealing
- Assembly of additional devices acc. to DIN IEC 60534-6



Page 26

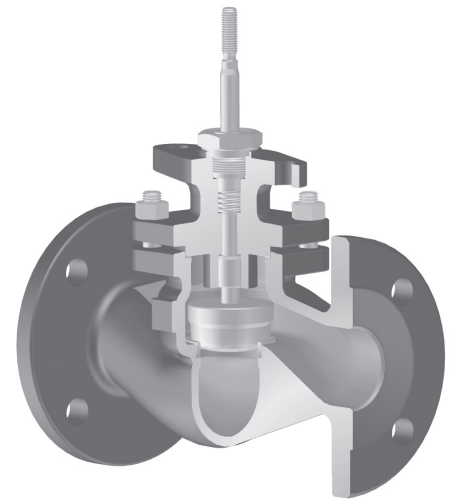


Fig. 440

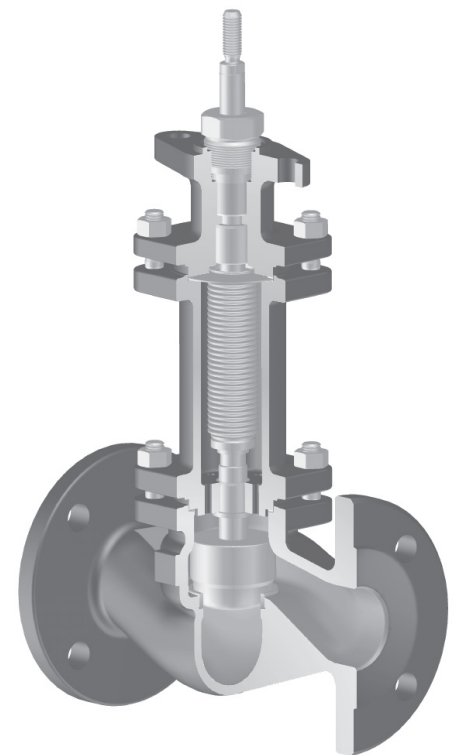


Fig. 441

Features:

- Compact design
- Precision guided stem
- Burnished stem
- Tapered seat ring
- Rangeability 50 : 1
- Spring loaded PTFE-V ring packing unit
- Two-ply bellows seal as standard
- Travel indicator

Control valve in straightway form with electric actuator ARI-PREMIO

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN15-150
22.440 / 22.441	PN16	EN-JS1049	DN15-150
23.440 / 23.441	PN25	EN-JS1049	DN15-150
34.440 / 34.441	PN25	1.0619+N	DN15-150
35.440 / 35.441	PN40	1.0619+N	DN15-150
55.440 / 55.441	PN40	1.4408	DN15-150

Other materials and versions on request.

Stem sealing

- Fig. 440:
- PTFE-V-ring unit -10°C up to +220°C
 - PTFE-packing -10°C up to +250°C
 - Pure graphite-packing -10°C up to +450°C

- Fig. 441:
- Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

- standard:
- Parabolic plug, metal seat
- optional:
- Parabolic plug with PTFE soft seat (max. 200°C)
 - V-port plug, metal seat
 - Parabolic pressure balanced plug, metal seat,
Material of piston seal:
PTFE with stainless steel spring (max. 200°C)

Guiding

- Parabolic plug: Stem guiding
- V-port plug: Stem and port guiding

Flow characteristic

- Equal percentage or linear
(from Kvs 100 modified equal percentage)

Rangeability

- 50 : 1 on parabolic plug
- 30 : 1 on V-port plug

Shut off class (seat / plug leakage classes)

- Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4
- Soft seat Leakage - class VI acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 4.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.
(other flow media on request)

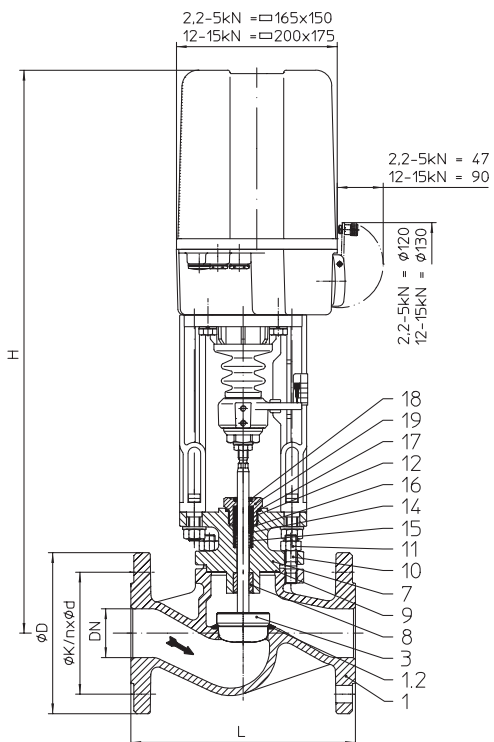


Fig. 440

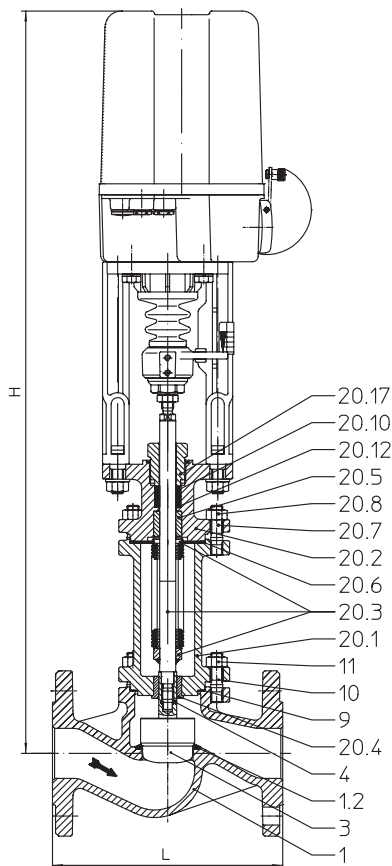


Fig. 441

Dimensions and weights

DN			15	20	25	32	40	50	65	80	100	125	150	
L		(mm)	130	150	160	180	200	230	290	310	350	400	480	
Fig. 440	H	(mm)	556	556	564	564	571	577	590	605	624	685	745	
	ARI-PREMIO 2,2 kN	PN16	(kg)	9	9,7	10,6	12,2	14,1	17	22,1	27,8	38	--	--
		PN25/40	(kg)	9,8	10,6	11,9	13,7	16,2	18,9	26,1	32,3	45	--	--
	ARI-PREMIO 5 kN	PN16	(kg)	10,1	10,8	11,7	13,3	15,2	18,1	23,2	28,9	39	66	88
		PN25/40	(kg)	10,9	11,7	13	14,8	17,3	20	27,2	33,4	46	78	110
	H	(mm)	--	--	---	--	721	727	740	755	774	833	893	
	ARI-PREMIO 12 kN	PN16	(kg)	--	--	--	--	19,2	22,1	27,2	32,9	43	70	92
		PN25/40	(kg)	--	--	--	--	21,3	24	31,2	37,4	50	82	114
Fig. 441	H	(mm)	741	741	749	749	740	742	826	838	854	1040	1071	
	ARI-PREMIO 2,2 kN	PN16	(kg)	13,4	13,4	14,4	16,9	19,4	21,9	24,9	35,9	51	--	--
		PN25/40	(kg)	15,4	16,9	19,4	22,4	28,4	30,9	37,9	47,9	64	--	--
	ARI-PREMIO 5 kN	PN16	(kg)	14,5	14,5	15,5	18	20,5	23	26	37	53	73	105
		PN25/40	(kg)	16,5	18	20,5	23,5	29,5	32	39	49	66	85	130
	H	(mm)	--	--	--	--	890	892	976	988	1004	1188	1219	
	ARI-PREMIO 12 kN	PN16	(kg)	--	--	--	--	24,5	27	30	41	57	77	109
		PN25/40	(kg)	--	--	--	--	33,5	36	43	53	70	89	134

Standard-flange dimensions refer to page 35.

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 / Fig. 23.440 Fig. 22.441 / Fig. 23.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 55.440 Fig. 55.441
1	Body	EN-GJL-250 , EN-JL 1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		X20Cr13+QT, 1.4021+QT >DN50: G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem	X20Cr13+QT, 1.4021+QT (DN125-150)			X6CrNiMoTi17-12-2, 1.4571
7	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
12	V-ring unit *	PTFE			
14	Washer *	X5CrNi18-10, 1.4301			
15	Spring *	X10CrNi18-8, 1.4310			
16	Bushing *	PTFE (reinforced)			
17	Sealing ring *	Cu / Soft iron			
18	Scraper *	PTFE (reinforced)			
19	Screw joint *	X8CrNiS18-9, 1.4305			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			X6CrNiMoTi17-12-2, 1.4571
20.4	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			
20.7	Studs	25CrMo4, 1.7218			A4 - 70
20.8	Hexagon nuts	C35E, 1.1181			A4
20.10	Packing ring *	Pure graphite			
20.12	Washer *	X5CrNi18-10, 1.4301			
20.17	Screw joint *	X8CrNiS18-9, 1.4305			

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

DN	15	20	25	32	40	50	65	80	100	125	150		
Seat- σ (mm)	21	21	27	31	41	51	66	81	101	126	151		
Standard Kvs-values	4	6,3	10	16	25	40	63	100	160	250	400		
Reduced Kvs-values ³⁾	2,5	4; 2,5	6,3	10	16	25	40	63	100	160	250		
Travel (mm)	20						30			50			
Actuator ¹⁾ ARI-PREMIO 2,2 kN	Closing pressure (bar)	I.	40	40	30,8	23,1	12,8	8	4,3	2,7	1,5		
		II.	40	40	28,8	21,6	11,9	7,4	3,9	2,3	1,3		
		III.	30,7	30,7	27,1	20,4	10,6	6,5	3,6	2,2	1,2		
	Operating time ²⁾ (s) (Op. speed 0,38 mm/s)	53						79					
Actuator ¹⁾ ARI-PREMIO 5 kN	Closing pressure (bar)	I.			40	40	33,2	21,3	12,3	8	4,9	3	2
		II.			40	40	32,3	20,7	11,9	7,6	4,7	2,9	1,9
		III.	40	40	40	40	31	19,8	11,6	7,5	4,6	2,7	1,8
	Operating time ²⁾ (s) (Op. speed 0,38 mm/s)	53						79			132		
Actuator ¹⁾ ARI-PREMIO 12 kN	Closing pressure (bar)	I.				40	40	32,3	21,2	13,5	8,5	5,9	
		II.				40	40	31,8	20,9	13,3	8,4	5,8	
		III.				40	40	31,6	20,7	13,2	8,3	5,7	
	Operating time ²⁾ (s) (Op. speed 0,79 mm/s)					25		38			63		
Actuator ¹⁾ ARI-PREMIO 15 kN	Closing pressure (bar)	I.						40	26,9	17,2	10,9	7,5	
		II.						40	26,6	17	10,8	7,4	
		III.						40	26,4	16,9	10,6	7,3	
	Operating time ²⁾ (s) (Op. speed 0,38 mm/s)							79			132		

I. Fig. 440: PTFE-V-ring unit;

II. Fig. 440: PTFE- / pure graphite-packing;

III. Fig. 441: Bellows seal

¹⁾ Motor voltage: 230V 50Hz
Special voltages: 24V 50/60Hz; 115V 50/60Hz; 230V 60Hz
Technical data for actuator refer to data sheet ARI-PREMIO..

²⁾ Indicated operating times with 50Hz.

³⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
For max. permissible closing pressures refer to corresponding data sheet.

Control valve in straightway form with electric actuator ARI-PREMIO

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN200-250
22.440 / 22.441	PN16	EN-JS1049	DN200-250
34.440 / 34.441	PN25	1.0619+N	DN200-250
35.440 / 35.441	PN40	1.0619+N	DN200-250
54.440	PN25	1.4408	DN200-250

Other materials and versions on request.

Stem sealing
 Fig. 440: • PTFE-packing -10°C up to +250°C
 • Pure graphite-packing -10°C up to +450°C
 Fig. 441: • Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design
 standard: • V-port plug, metal seat
 optional:
 • V-port pressure balanced plug, metal seat,
 Material of piston seal:
 PTFE with stainless steel spring (max. 200°C)

Guiding
 • V-port plug: Stem and port guiding

Flow characteristic
 • Modified equal percentage or linear or linear

Rangeability
 • 30 : 1

Shut off class (seat / plug leakage classes)
 • Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 8.

Technical data for actuator refer to data sheet.

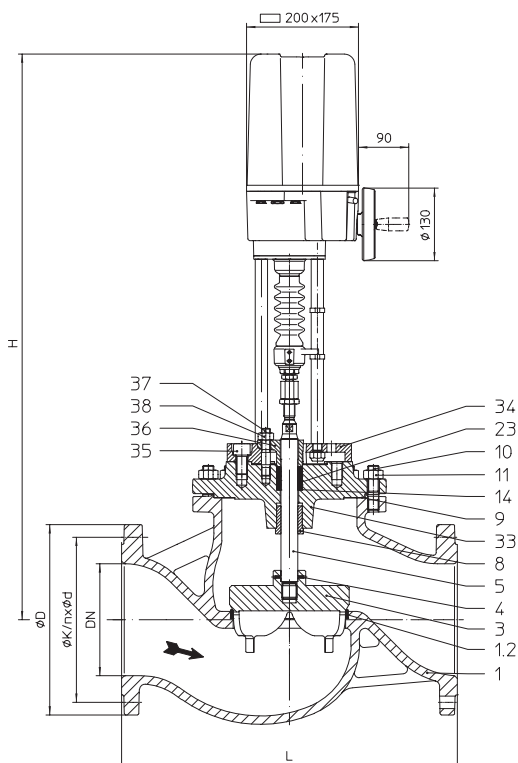


Fig. 440

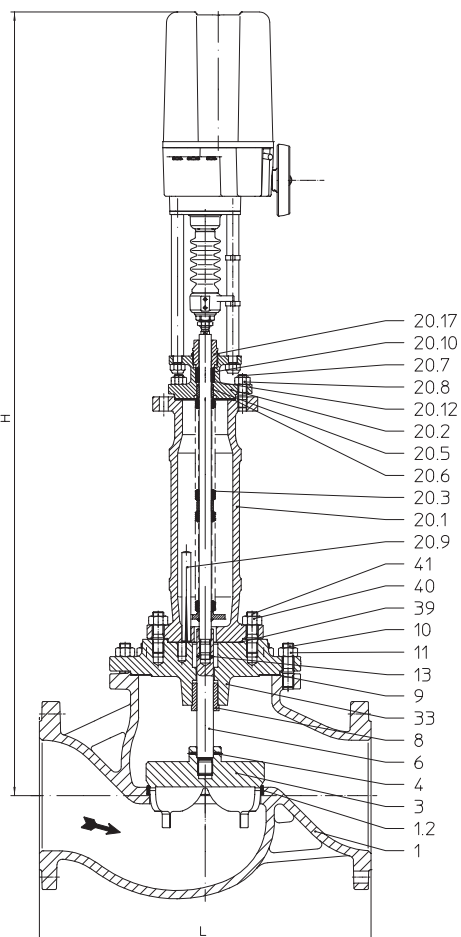


Fig. 441

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.
 (other flow media on request)

Dimensions and weights

DN			200	250
L		(mm)	600	730
Fig. 440	H	(mm)	1011	1071
	ARI-PREMIO 12 kN	PN16	(kg)	156
	ARI-PREMIO 15 kN	PN25/40	(kg)	194
Fig. 441	H	(mm)	1433	1493
	ARI-PREMIO 12 kN	PN16	(kg)	178
	ARI-PREMIO 15 kN	PN25/40	(kg)	211

Standard-flange dimensions refer to page 35.

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 Fig. 22.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 54.440
1	Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		GP19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
6	Stem extension *	X20Cr13+QT, 1.4021+QT			--
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
13	Spannstift *	X10CrNi18-8, 1.4310			--
14	Washer *	X5CrNi18-10, 1.4301			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			--
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			--
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			--
20.7	Studs	25CrMo4, 1.7218			--
20.8	Hexagon nuts	C35E, 1.1181			--
20.9	Straight pin	X20Cr13+QT, 1.4021+QT (hardened)			--
20.10	Packing ring *	Pure graphite			--
20.12	Washer *	X5CrNi18-10, 1.4301			--
20.17	Screw joint *	X8CrNiS18-9, 1.4305			--
23	Packing ring *	PTFE			
33	Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	X6CrNiMoTi17-12-2, 1.4571
34	Adapter flange	EN-GJS-400-18U-LT, EN-JS1049			
35	Hexagon socket head screw	8.8			A2 - 70
36	Packing box flange	EN-GJS-400-15, EN-JS1030			X6CrNiMoTi17-12-2, 1.4571
37	Studs	25CrMo4, 1.7218			A4 - 70
38	Hexagon nuts	C35E, 1.1181			A4
39	Gasket *	Pure graphite (CrNi laminated with graphite)			--
40	Studs	25CrMo4, 1.7218			--
41	Hexagon nuts	C35E, 1.1181			--

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

DN		200	250
Seat- σ (mm)		201	251
Standard Kvs-values		630	1000
Reduced Kvs-values ³⁾		400	630
Travel (mm)		65	
Actuator ¹⁾ ARI-PREMIO 12 kN	Closing pressure (bar)	II.	3,1
		III.	3
	Operating time ²⁾ (s) (Op. speed 0,79 mm/s)	82	
Actuator ¹⁾ ARI-PREMIO 15 kN	Closing pressure (bar)	II.	4
		III.	4
	Operating time ²⁾ (s) (Op. speed 0,38 mm/s)	171	
II. Fig. 440: PTFE- / pure graphite-packing;		III. Fig. 441: Bellows seal	

¹⁾ Motor voltage: 230V 50Hz

Special voltages: 24V 50/60Hz; 115V 50/60Hz; 230V 60Hz
Technical data for actuator refer to data sheet ARI-PREMIO..

²⁾ Indicated operating times with 50Hz.

³⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446).
For max. permissible closing pressures refer to corresponding data sheet.

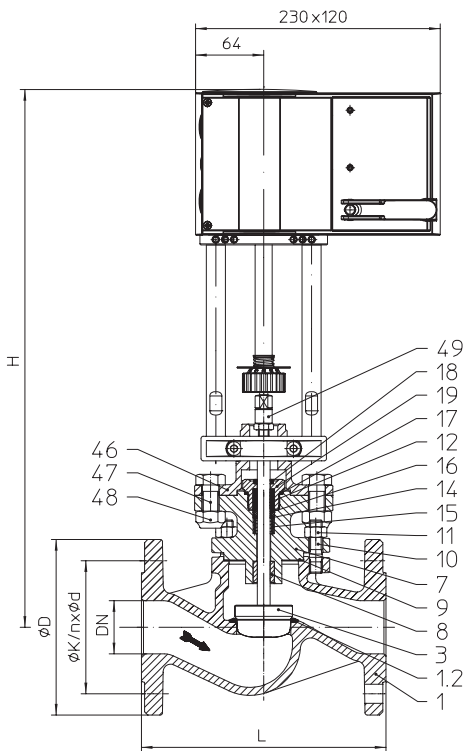
Control valve in straightway form with electric actuator FR 1.2 with safety reset

Fig. 440

Figure	Nominal pressure	Material	Nominal diameter
12.440	PN16	EN-JL1040	DN15-100
22.440	PN16	EN-JS1049	DN15-100
23.440	PN25	EN-JS1049	DN15-100
34.440	PN25	1.0619+N	DN15-100
35.440	PN40	1.0619+N	DN15-100
55.440	PN40	1.4408	DN15-100

Other materials and versions on request.

Stem sealing
 Fig. 440: • PTFE-V-ring unit -10°C to 200°C

Plug design
 standard: • Parabolic plug, metal seat
 optional:
 • Parabolic plug with PTFE soft seat (max. 200°C)
 • V-port plug, metal seat
 • Parabolic pressure balanced plug, metal seat,
 Material of piston seal:
 PTFE with stainless steel spring (max. 200°C)

Guiding
 • Parabolic plug: Stem guiding
 • V-port plug: Stem and port guiding

Flow characteristic
 • Equal percentage or linear
 (from Kvs 100 modified equal percentage)

Rangeability
 • 50 : 1 on parabolic plug
 • 30 : 1 on V-port plug

Shut off class (seat / plug leakage classes)
 • Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4
 • Soft seat Leakage - class VI acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 12.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.
 (other flow media on request)

Dimensions and weights

DN			15	20	25	32	40	50	65	80	100	
L		(mm)	130	150	160	180	200	230	290	310	350	
Fig. 440	H	FR 1.2	(mm)	502	502	510	510	515	523	536	551	570
		FR 1.2	PN16	(kg)	9,3	10	10,9	12,5	14,4	17,3	22,4	28,1
	PN25-40		(kg)	10,1	10,9	12,2	14	16,5	19,2	26,4	32,6	45
	with pressure balanced plug FR 1.2	PN16	(kg)	--	--	--	--	15,4	19,3	25,4	32,1	43
		PN25-40	(kg)	--	--	--	--	17,5	21,2	29,4	36,6	50

Standard-flange dimensions refer to page 35.

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 / Fig. 23.440 Fig. 22.441 / Fig. 23.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 55.440 Fig. 55.441
1	Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT			--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
7	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
12	V-ring unit *	PTFE			
14	Washer *	X5CrNi18-10, 1.4301			
15	Spring *	X10CrNi18-8, 1.4310			
16	Bushing *	PTFE (reinforced)			
17	Sealing ring *	Cu / Soft iron			
18	Scraper *	PTFE (reinforced)			
19	Screw joint *	X8CrNiS18-9, 1.4305			
46	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049			
47	Hexagon screws	5.6			
48	Hexagon nuts	8-A2B			
49	Stem adapter	X20Cr13+QT, 1.4021+QT			

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Fig. 440 with parabolic plug											
DN	15	20	25	32	40	50	65	80	100		
Seat- ϕ (mm)	21	21	27	31	41	51	66	81	101		
Standard Kvs-values	4	6,3	10	16	25	40	63	100	160		
Reduced Kvs-values	2,5	4; 2,5	6,3	10	16	25	40	63	100		
Travel (mm)	20						30				
Actuator ¹⁾ FR 1.2 2 kN	Closing pressure (bar) I.	40	40	27,5	20,6	11,3	7	3,8	2,3	1,3	
	Operating time ²⁾ (s)	40						60			
	Operating time on voltage failure (s)	28						35			

Fig. 440 with pressure balanced plug (Design refer to page 16)										
DN	15	20	25	32	40	50	65	80	100	
Seat- ϕ (mm)					41	51	66	81	101	
Standard Kvs-values					25	40	63	100	160	
Reduced Kvs-values					16	25	40	63	100	
Travel (mm)					20			30		
Actuator ¹⁾ FR 1.2 2 kN	Closing pressure (bar) I.				40	40	40	40	25	
	Operating time ²⁾ (s)				40			60		
	Operating time on voltage failure (s)				28			35		

I. Fig. 440: PTFE-V-ring unit (Medium temperature restricted to 200°C)

1) Motor voltage: 24V 50/60Hz 1~, 24VDC, 230V 50/60Hz 1~
Technical data for actuator refer to data sheet FR1.2

2) Indicated operating times with factory setting.

Control valve in straightway form with electric actuator FR 2.1 / FR 2.2 with safety reset

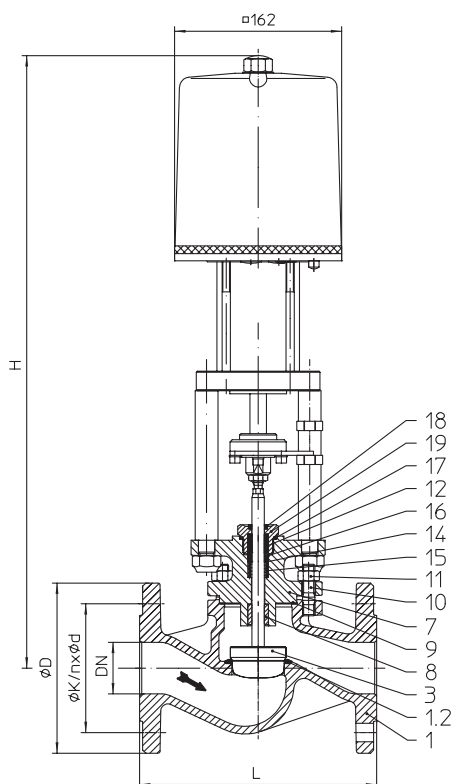


Fig. 440

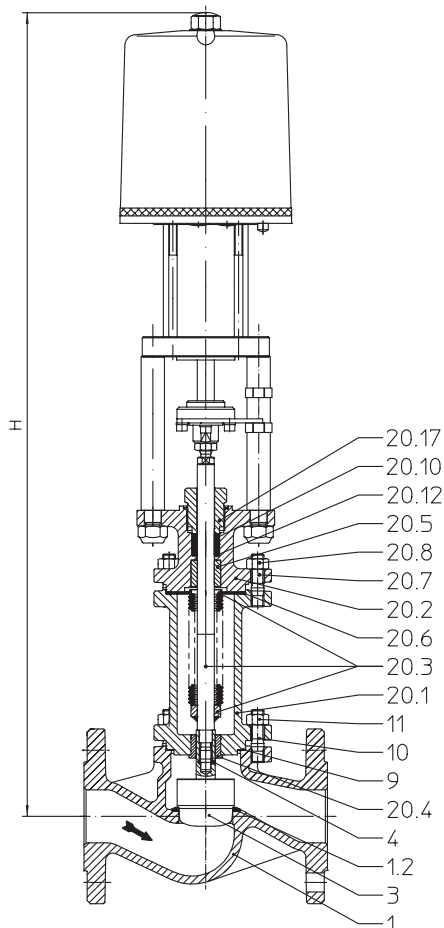


Fig. 441

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN15-100
22.440 / 22.441	PN16	EN-JS1049	DN15-100
23.440 / 23.441	PN25	EN-JS1049	DN15-100
34.440 / 34.441	PN25	1.0619+N	DN15-100
35.440 / 35.441	PN40	1.0619+N	DN15-100
55.440 / 55.441	PN40	1.4408	DN15-100

Other materials and versions on request.

Ü Control valve Type 440 - FR 2.1 acc. to DIN 32730 (EN-JL1040, EN-JS1049, 1.0619+N)

Stem sealing

- Fig. 440:
- PTFE-V-ring unit -10°C up to +220°C
 - PTFE-packing -10°C up to +250°C
 - Pure graphite-packing -10°C up to +450°C

- Fig. 441:
- Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

- standard:
- Parabolic plug, metal seat
- optional:
- Parabolic plug with PTFE soft seat (max. 200°C)
 - V-port plug, metal seat
 - Parabolic pressure balanced plug, metal seat,
Material of piston seal:
PTFE with stainless steel spring (max. 200°C)

Guiding

- Parabolic plug: Stem guiding
- V-port plug: Stem and port guiding

Flow characteristic

- Equal percentage or linear
(from Kvs 100 modified equal percentage)

Rangeability

- 50 : 1 on parabolic plug
- 30 : 1 on V-port plug

Shut off class (seat / plug leakage classes)

- Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4
- Soft seat Leakage - class VI acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 16.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.
(other flow media on request)

Dimensions and weights

DN			15	20	25	32	40	50	65	80	100	
L			(mm)	130	150	160	180	200	230	290	310	350
Fig. 440	H	FR 2.1	(mm)	573	573	581	581	588	594	607	622	641
		FR 2.2	(mm)	591	591	599	599	606	612	625	640	659
	FR 2.1 / 2.2	PN16	(kg)	12,3	13	13,9	15,5	17,4	20,3	25,4	31,1	41
		PN25-40	(kg)	13,1	13,9	15,2	17	19,5	22,2	29,4	35,6	48
	with pressure balanced plug FR 2.1 / 2.2	PN16	(kg)	--	--	--	--	18,4	22,3	28,4	35,1	46
		PN25-40	(kg)	--	--	--	--	20,5	24,2	32,4	39,6	53
Fig. 441	H	FR 2.1	(mm)	758	758	766	766	757	759	843	855	871
		FR 2.2	(mm)	776	776	784	784	775	777	861	873	889
	FR 2.1 / 2.2	PN16	(kg)	16,7	16,7	17,7	20,2	22,7	25,2	28,2	39,2	55
		PN25-40	(kg)	18,7	20,2	22,7	25,7	31,7	34,2	41,2	51,2	68
	with pressure balanced plug FR 2.1 / 2.2	PN16	(kg)	--	--	--	--	23,7	27,2	31,2	43,2	60
		PN25-40	(kg)	--	--	--	--	32,7	36,2	44,2	55,2	73

Standard-flange dimensions refer to page 35.

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 / Fig. 23.440 Fig. 22.441 / Fig. 23.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 55.440 Fig. 55.441
1	Body	EN-GJL-250 , EN-JL 1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		X20Cr13+QT, 1.4021+QT >DN50: G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
7	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
12	V-ring unit *	PTFE			
14	Washer *	X5CrNi18-10, 1.4301			
15	Spring *	X10CrNi18-8, 1.4310			
16	Bushing *	PTFE (reinforced)			
17	Sealing ring *	Cu / Soft iron			
18	Scraper *	PTFE (reinforced)			
19	Screw joint *	X8CrNiS18-9, 1.4305			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			X6CrNiMoTi17-12-2, 1.4571
20.4	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			
20.7	Studs	25CrMo4, 1.7218			A4 - 70
20.8	Hexagon nuts	C35E, 1.1181			A4
20.10	Packing ring *	Pure graphite			
20.12	Washer *	X5CrNi18-10, 1.4301			
20.17	Screw joint *	X8CrNiS18-9, 1.4305			

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Fig. 440 / 441 with parabolic plug												
DN			15	20	25	32	40	50	65	80	100	
Seat-ø (mm)			21	21	27	31	41	51	66	81	101	
Standard Kvs-values			4	6,3	10	16	25	40	63	100	160	
Reduced Kvs-values ³⁾			2,5	4; 2,5	6,3	10	16	25	40	63	100	
Travel (mm)			20						30			
Actuator ¹⁾ FR 2.1 1 kN	Closing pressure (bar)	I.	18	18	10,3	7,4	3,6	2				
		II.	16	16	9	6,5	3,2	1,7				
		III.	9	9	7,4	5,2	1,9	0,9				
	Operating time ²⁾ (s) (Op. speed 0,29 mm/s)		69									
Operating time on voltage failure (s)		5,5										
Actuator ¹⁾ FR 2.2 2,2 kN	Closing pressure (bar)	I.	40	40	30,8	23,1	12,8	8	4,3	2,7	1,5	
		II.	40	40	28,8	21,6	11,9	7,4	3,9	2,3	1,3	
		III.	30,7	30,7	27,1	20,4	10,6	6,5	3,6	2,2	1,2	
	Operating time ²⁾ (s) (Op. speed 0,29 mm/s)		69						103			
Operating time on voltage failure (s)		5,5						8,5				
I. Fig. 440: PTFE-V-ring unit;			II. Fig. 440: PTFE- / pure graphite-packing;						III. Fig. 441: Bellows seal			

Fig. 440 / 441 with pressure balanced plug (Design refer to page 16)												
DN				25	32	40	50	65	80	100		
Seat-ø (mm)				27	31	41	51	66	81	101		
Standard Kvs-values				10	16	25	40	63	100	160		
Reduced Kvs-values ³⁾				6,3	10	16	25	40	63	100		
Travel (mm)				20				30				
Actuator ¹⁾ FR 2.1 1 kN	Closing pressure (bar)	I.		20	20	20	16	16	16	12		
		II.				20	16	16				
		III.				16	15	2				
	Operating time ²⁾ (s) (Op. speed 0,29 mm/s)				69				103			
Operating time on voltage failure (s)				5,5				8,5				
Actuator ¹⁾ FR 2.2 2,2 kN	Closing pressure (bar)	I.				40	40	40	40			
		II.				40	40	40	40			
		III.				40	40	40	40	40		
	Operating time ²⁾ (s) (Op. speed 0,29 mm/s)					69			103			
Operating time on voltage failure (s)					5,5			8,5				
I. Fig. 440: PTFE-V-ring unit;			II. Fig. 440: PTFE- / pure graphite-packing;						III. Fig. 441: Bellows seal			

Control valve Type 440 - FR 2.1 acc. to DIN 32730 (EN-JL1040, EN-JS1049, 1.0619+N)

1) Motor voltage: 230V 50Hz
 Special voltages: 24V 50/60Hz; 230V 60Hz
 Technical data for actuator refer to data sheet FR

2) Indicated operating times with 50Hz.

3) Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
 For max. permissible closing pressures refer to corresponding data sheet.

Control valve in straightway form with electric actuator AUMA

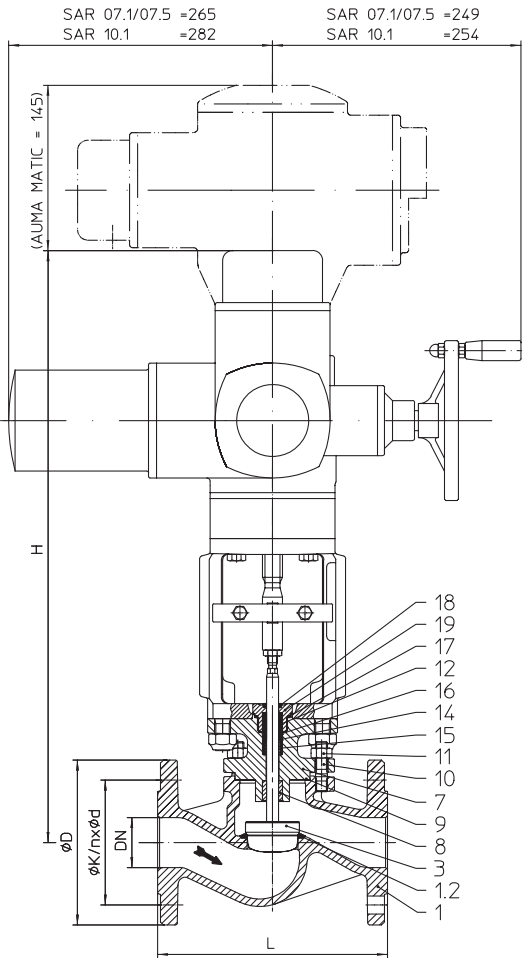


Fig. 440

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN40-150
22.440 / 22.441	PN16	EN-JS1049	DN40-150
23.440 / 23.441	PN25	EN-JS1049	DN40-150
34.440 / 34.441	PN25	1.0619+N	DN40-150
35.440 / 35.441	PN40	1.0619+N	DN40-150
55.440 / 55.441	PN40	1.4408	DN40-150

Other materials and versions on request.

Stem sealing

- Fig. 440:
- PTFE-V-ring unit -10°C up to +220°C
 - PTFE-packing -10°C up to +250°C
 - Pure graphite-packing -10°C up to +450°C

- Fig. 441:
- Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

- standard:
- Parabolic plug, metal seat
- optional:
- Parabolic plug with PTFE soft seat (max. 200°C)
 - V-port plug, metal seat
 - Parabolic pressure balanced plug, metal seat,
Material of piston seal:
PTFE with stainless steel spring (max. 200°C)

Guiding

- Parabolic plug: Stem guiding
- V-port plug: Stem and port guiding

Flow characteristic

- Equal percentage or linear
(from Kvs 100 modified equal percentage)

Rangeability

- 50 : 1 on parabolic plug
- 30 : 1 on V-port plug

Shut off class (seat / plug leakage classes)

- Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4
- Soft seat Leakage - class VI acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 20.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

- Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.
Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.
(other flow media on request)

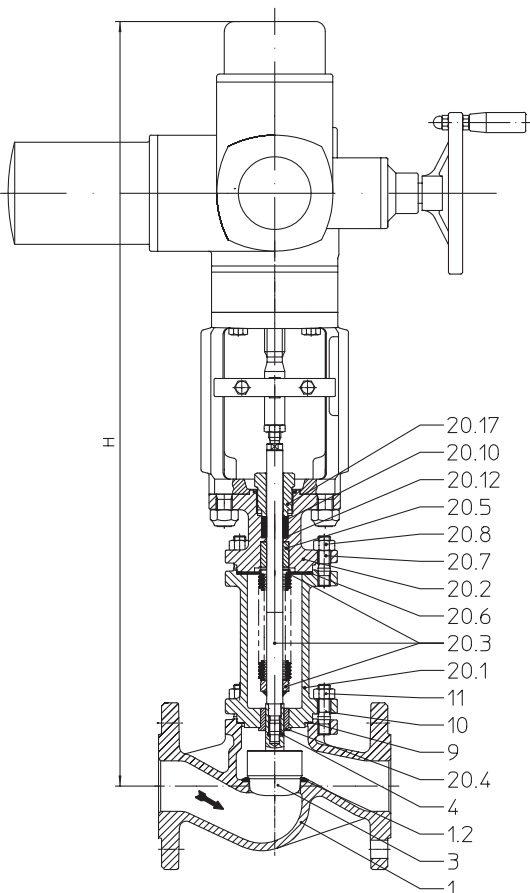


Fig. 441

Dimensions and weights

DN			40	50	65	80	100	125	150	
L		(mm)	200	230	290	310	350	400	480	
Fig. 440	H	(mm)	611	617	630	645	664	703	763	
	AUMA SAR 07.1	PN16	(kg)	35	37,9	44,5	50,2	60	87	109
		PN25/40	(kg)	37,1	39,8	48,5	54,7	68	99	131
	AUMA SAR 10.1	PN16	(kg)	--	--	49	54,7	65	91	113
PN25/40		(kg)	--	--	53	59,2	72	103	135	
Fig. 441	H	(mm)	780	782	866	878	894	1058	1089	
	AUMA SAR 07.1	PN16	(kg)	40,3	44,3	47,3	58,3	74	94	126
		PN25/40	(kg)	49,3	53,3	60,3	70,3	87	106	151
	AUMA SAR 10.1	PN16	(kg)						98	130
		PN25/40	(kg)						110	155

Standard-flange dimensions refer to page 35.

(For version with AUMA SAR Ex other heights.)

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 / Fig. 23.440 Fig. 22.441 / Fig. 23.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 55.440 Fig. 55.441
1	Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		X20Cr13+QT, 1.4021+QT >DN50: G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem	X20Cr13+QT, 1.4021+QT (DN125-150)			X6CrNiMoTi17-12-2, 1.4571
7	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
12	V-ring unit *	PTFE			
14	Washer *	X5CrNi18-10, 1.4301			
15	Spring *	X10CrNi18-8, 1.4310			
16	Bushing *	PTFE (reinforced)			
17	Sealing ring *	Cu / Soft iron			
18	Scraper *	PTFE (reinforced)			
19	Screw joint *	X8CrNiS18-9, 1.4305			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			X6CrNiMoTi17-12-2, 1.4571
20.4	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			
20.7	Studs	25CrMo4, 1.7218			A4 - 70
20.8	Hexagon nuts	C35E, 1.1181			A4
20.10	Packing ring *	Pure graphite			
20.12	Washer *	X5CrNi18-10, 1.4301			
20.17	Screw joint *	X8CrNiS18-9, 1.4305			

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Fig. 440				40	50	65	80	100	125	150
DN				40	50	65	80	100	125	150
Seat-ø (mm)				41	51	66	81	101	126	151
Standard Kvs-values				25	40	63	100	160	250	400
Reduced Kvs-values ³⁾				16	25	40	63	100	160	250
Travel (mm)				20		30		50		
Actuator ¹⁾ AUMA SAR 07.1 Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	I./II.	shut off	40	40	40	29,7	19	12,1	8,3
			controlling	40	36,5	21,4	14	8,8	5,5	3,7
	Torque (Nm)			15	20	30	30	30	30	30
	Operating time ²⁾ (s)			54		56		94		
Output drive (rpm)				5,6		8		8		
Actuator ¹⁾ AUMA SAR 07.5 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	I./II.	shut off		40	40	40	26,9	17,2	11,9
			controlling		40	30,5	20	12,8	8	5,5
	Torque (Nm)				30	40	60	60	60	60
	Operating time ²⁾ (s)				43		64		55	
Output drive (rpm)					5,6		5,6		11	
Actuator ¹⁾ AUMA SAR 10.1 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	I./II.	shut off			40	40	31,6	29,3	20,3
			controlling			40	40	26,9	17,2	11,9
	Torque (Nm)					60	60	70	100	100
	Operating time ²⁾ (s)						64		55	
Output drive (rpm)							5,6		11	

I. Fig. 440: PTFE-V-ring unit;
II. Fig. 440: PTFE- / pure graphite-packing

Fig. 441				40	50	65	80	100	125	150
DN				40	50	65	80	100	125	150
Seat-ø (mm)				41	51	66	81	101	126	151
Standard Kvs-values				25	40	63	100	160	250	400
Reduced Kvs-values ³⁾				16	25	40	63	100	160	250
Travel (mm)				20		30		50		
Actuator ¹⁾ AUMA SAR 07.1 Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	III.	shut off	40	40	40	29,5	18,9	11,9	8,2
			controlling	40	35,7	21,1	13,8	8,7	5,4	3,6
	Torque (Nm)			15	20	30	30	30	30	30
	Operating time ²⁾ (s)			54		56		94		
Output drive (rpm)				5,6		8		8		
Actuator ¹⁾ AUMA SAR 07.5 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	III.	shut off		40	40	30,8	19,7	17	11,8
			controlling		40	30,2	19,8	12,6	7,9	5,4
	Torque (Nm)				30	40	45	45	60	60
	Operating time ²⁾ (s)				43		64		55	
Output drive (rpm)					5,6		5,6		11	
Actuator ¹⁾ AUMA SAR 10.1 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	III.	shut off						26,1	18,1
			controlling						17	11,8
	Torque (Nm)								90	90
	Operating time ²⁾ (s)								55	
Output drive (rpm)									11	

III. Fig. 441: Bellows seal

1) Motor voltage: 400V 50Hz 3~
(Other voltages on request)
Technical data for actuator refer to price list.

2) Indicated operating times with 50Hz.

3) Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
For max. permissible closing pressures refer to corresponding data sheet.

Control valve in straightway form with electric actuator AUMA

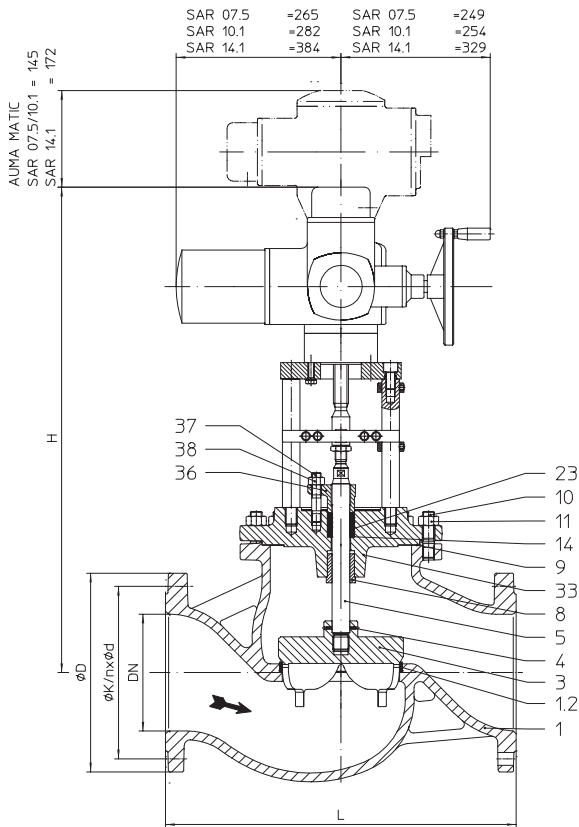


Fig. 440

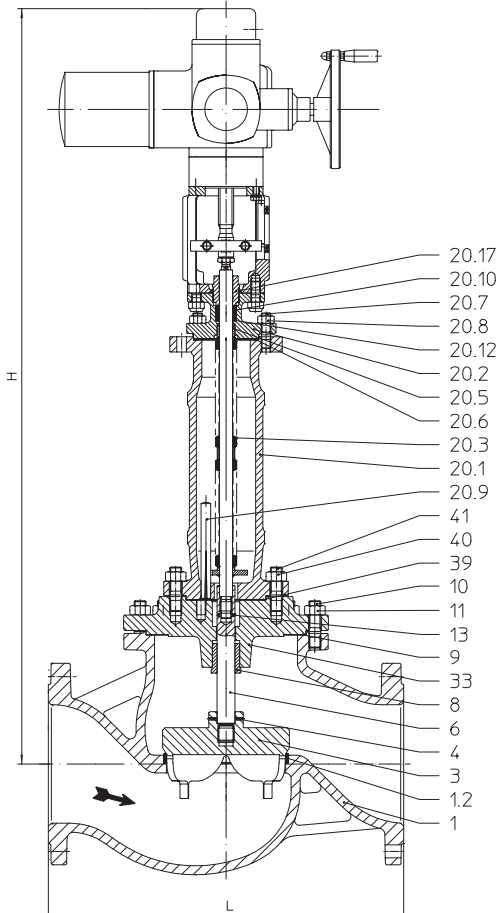


Fig. 441

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN200-250
22.440 / 22.441	PN16	EN-JS1049	DN200-250
34.440 / 34.441	PN25	1.0619+N	DN200-250
35.440 / 35.441	PN40	1.0619+N	DN200-250
54.440	PN25	1.4408	DN200-250

Other materials and versions on request.

Stem sealing

Fig. 440: • PTFE-packing -10°C up to +250°C

• Pure graphite-packing -10°C up to +450°C

Fig. 441: • Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

standard: • V-port plug, metal seat

optional:

• V-port pressure balanced plug, metal seat,

Material of piston seal:

PTFE with stainless steel spring (max. 200°C)

Guiding

• V-port plug: Stem and port guiding

Flow characteristic

• Modified equal percentage or linear or linear

Rangeability

• 30 : 1

Shut off class (seat / plug leakage classes)

• Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 8.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.

(other flow media on request)

Dimensions and weights

DN			200	250	
L		(mm)	600	730	
Fig. 440	H	(mm)	776	836	
	AUMA SAR 07.5	PN16	(kg)	177	282
		PN25/40	(kg)	215	318
	H	(mm)	956	916	
	AUMA SAR 10.1	PN16	(kg)	181	286
		PN25/40	(kg)	219	322
	H	(mm)	931	991	
	AUMA SAR 14.1	PN16	(kg)	211	316
PN25/40		(kg)	249	352	
Fig. 441	H	(mm)	1289	1349	
	AUMA SAR 07.5	PN16	(kg)	199	304
		PN25/40	(kg)	234	341
	H	(mm)	1301	1361	
	AUMA SAR 10.1	PN16	(kg)	204	309
		PN25/40	(kg)	239	345

Standard-flange dimensions refer to page 35.

(For version with AUMA SAR Ex other heights.)

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 Fig. 22.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 54.440
1	Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
6	Stem extension *	X20Cr13+QT, 1.4021+QT			--
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
13	Spannstift *	X10CrNi18-8, 1.4310			--
14	Washer *	X5CrNi18-10, 1.4301			--
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			--
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			--
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			--
20.7	Studs	25CrMo4, 1.7218			--
20.8	Hexagon nuts	C35E, 1.1181			--
20.9	Straight pin	X20Cr13+QT, 1.4021+QT (hardened)			--
20.10	Packing ring *	Pure graphite			--
20.12	Washer *	X5CrNi18-10, 1.4301			--
20.17	Screw joint *	X8CrNiS18-9, 1.4305			--
23	Packing ring *	PTFE			
33	Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	X6CrNiMoTi17-12-2, 1.4571
36	Packing box flange	EN-GJS-400-15, EN-JS1030			X6CrNiMoTi17-12-2, 1.4571
37	Studs	25CrMo4, 1.7218			A4 - 70
38	Hexagon nuts	C35E, 1.1181			A4
39	Gasket *	Pure graphite (CrNi laminated with graphite)			--
40	Studs	25CrMo4, 1.7218			--
41	Hexagon nuts	C35E, 1.1181			--

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Fig. 440				200	250
DN				200	250
Seat- ϕ (mm)				201	251
Standard Kvs-values				630	1000
Reduced Kvs-values ³⁾				400	630
Travel (mm)				65	
Actuator ¹⁾ AUMA SAR 07.5 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	II.	shut off	6,5	4,1
			controlling	2,9	1,8
	Torque (Nm)			60	60
	Operating time ²⁾ (s)			71	
Output drive (rpm)			11		
Actuator ¹⁾ AUMA SAR 10.1 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	II.	shut off	13,7	8,7
			controlling	6,5	4,1
	Torque (Nm)			120	120
	Operating time ²⁾ (s)			71	
Output drive (rpm)			11		
Actuator ¹⁾ AUMA SAR 14.1 Output drive Form A TR 30 x 6 - LH	Closing pressure (bar)	II.	shut off	23,7	15,1
			controlling	11	7
	Torque (Nm)			250	250
	Operating time ²⁾ (s)			59	
Output drive (rpm)			11		

II. Fig. 440: PTFE- / pure graphite-packing

Fig. 441				200	250
DN				200	250
Seat- ϕ (mm)				201	251
Standard Kvs-values				630	1000
Reduced Kvs-values ³⁾				400	630
Travel (mm)				65	
Actuator ¹⁾ AUMA SAR 07.5 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	III.	shut off	6,5	4,1
			controlling	2,9	1,8
	Torque (Nm)			60	60
	Operating time ²⁾ (s)			71	
Output drive (rpm)			11		
Actuator ¹⁾ AUMA SAR 10.1 Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	III.	shut off	10,1	6,4
			controlling	6,5	4,1
	Torque (Nm)			90	90
	Operating time ²⁾ (s)			71	
Output drive (rpm)			11		

III. Fig. 441: Bellows seal

¹⁾ Motor voltage: 400V 50Hz 3-
(Other voltages on request)
Technical data for actuator refer to price list.

²⁾ Indicated operating times with 50Hz.

³⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446).
For max. permissible closing pressures refer to corresponding data sheet.

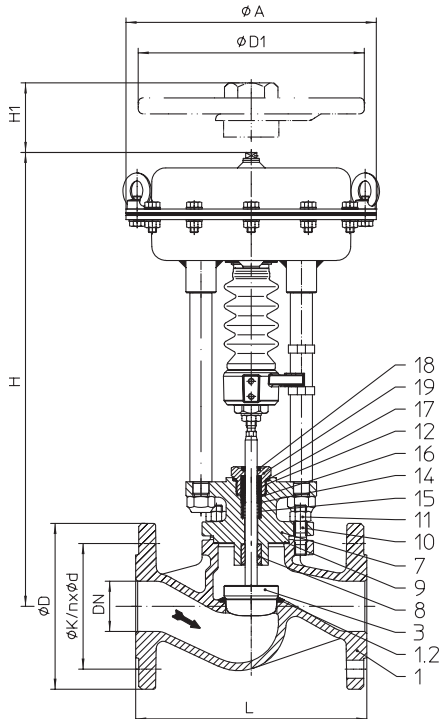
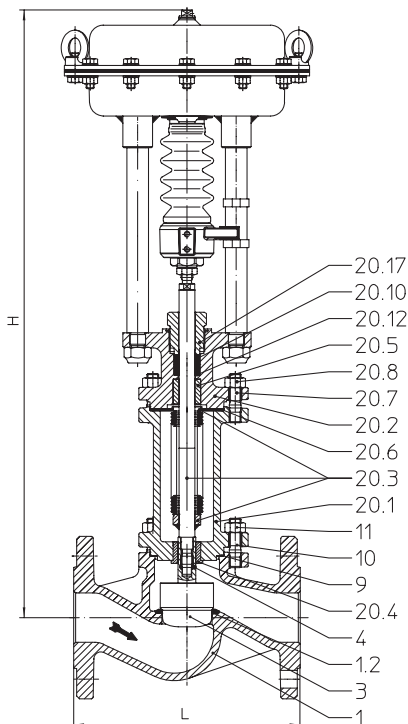
Control valve in straightway form with pneumatic actuator ARI-DP

Fig. 440

Fig. 441

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN15-150
22.440 / 22.441	PN16	EN-JS1049	DN15-150
23.440 / 23.441	PN25	EN-JS1049	DN15-150
34.440 / 34.441	PN25	1.0619+N	DN15-150
35.440 / 35.441	PN40	1.0619+N	DN15-150
55.440 / 55.441	PN40	1.4408	DN15-150

Other materials and versions on request.

Stem sealing

- Fig. 440:
- PTFE-V-ring unit -10°C up to +220°C
 - PTFE-packing -10°C up to +250°C
 - Pure graphite-packing -10°C up to +450°C

- Fig. 441:
- Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

 standard:

- Parabolic plug, metal seat

optional:

- Parabolic plug with PTFE soft seat (max. 200°C)
- V-port plug, metal seat
- Parabolic pressure balanced plug, metal seat,
Material of piston seal:
PTFE with stainless steel spring (max. 200°C)

Guiding

- Parabolic plug: Stem guiding
- V-port plug: Stem and port guiding

Flow characteristic

- Equal percentage or linear
(from Kvs 100 modified equal percentage)

Rangeability

- 50 : 1 on parabolic plug
- 30 : 1 on V-port plug

Shut off class (seat / plug leakage classes)

- Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4
- Soft seat Leakage - class VI acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 28.

Technical data for actuator refer to data sheet.

Selection of possible applications

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

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

 Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.
 (other flow media on request)

Top mounted handwheel

Actuator		DP32	DP33	DP34
Ø D1	(mm)	225	300	400
H1	(mm)	270	284	442
Weight	(kg)	5	8	17

Technical data for actuator refer to data sheet DP32-34Tri.

Dimensions and weights

DN			15	20	25	32	40	50	65	80	100	125	150		
L			(mm)	130	150	160	180	200	230	290	310	350	400	480	
DP32	Ø A		(mm)	250									--	--	
		Fig. 440	H	(mm)	442	442	450	450	457	463	476	491	510	--	--
			PN16	(kg)	12,6	13,3	14,2	15,8	17,7	20,6	25,7	31,4	42	--	--
	Fig. 441	H	(mm)	627	627	635	635	626	628	712	724	740	--	--	
		PN16	(kg)	17	17	18	20,5	23	25,5	28,5	39,5	55	--	--	
		PN25/40	(kg)	19	20,5	23	26	32	34,5	41,5	51,5	68	--	--	
DP33	Ø A		(mm)	300									--	--	
		Fig. 440	H	(mm)	497	497	505	505	512	518	531	546	565	--	--
			PN16	(kg)	18,6	19,3	20,2	21,8	23,7	26,6	31,7	37,4	48	--	--
	Fig. 441	H	(mm)	682	682	690	690	681	683	767	779	795	--	--	
		PN16	(kg)	23	23	24	26,5	29	31,5	34,5	45,5	61	--	--	
		PN25/40	(kg)	25	26,5	29	32	38	40,5	47,5	57,5	74	--	--	
DP34	Ø A		(mm)	--	--	--	--	--	--	405					
		Fig. 440	H	(mm)	--	--	--	--	--	--	666	681	700	739	779
			PN16	(kg)	--	--	--	--	--	--	61,7	67,4	78	104	126
	Fig. 441	H	(mm)	--	--	--	--	--	--	902	914	930	1074	1105	
		PN16	(kg)	--	--	--	--	--	--	64,5	75,5	91	110	143	
		PN25/40	(kg)	--	--	--	--	--	--	77,5	87,5	104	123	168	

Standard-flange dimensions refer to page 35.

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 / Fig. 23.440 Fig. 22.441 / Fig. 23.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 55.440 Fig. 55.441
1	Body	EN-GJL-250 , EN-JL 1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		X20Cr13+QT, 1.4021+QT >DN50: G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem	X20Cr13+QT, 1.4021+QT (DN125-150)			X6CrNiMoTi17-12-2, 1.4571
7	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
12	V-ring unit *	PTFE			
14	Washer *	X5CrNi18-10, 1.4301			
15	Spring *	X10CrNi18-8, 1.4310			
16	Bushing *	PTFE (reinforced)			
17	Sealing ring *	Cu / Soft iron			
18	Scraper *	PTFE (reinforced)			
19	Screw joint *	X8CrNiS18-9, 1.4305			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			X6CrNiMoTi17-12-2, 1.4571
20.4	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			
20.7	Studs	25CrMo4, 1.7218			A4 - 70
20.8	Hexagon nuts	C35E, 1.1181			A4
20.10	Packing ring *	Pure graphite			
20.12	Washer *	X5CrNi18-10, 1.4301			
20.17	Screw joint *	X8CrNiS18-9, 1.4305			

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Spring closes on air failure																
DN	15	20	25	32	40	50	65	80	100	125	150					
Seat-ø (mm)	21	21	27	31	41	51	66	81	101	126	151					
Standard Kvs-values	4	6,3	10	16	25	40	63	100	160	250	400					
Reduced Kvs-values ¹⁾	2,5	4; 2,5	6,3	10	16	25	40	63	100	160	250					
Travel (mm)	20						30			50						
Actuator DP32	Spring range (bar)	Air supply pressure min. (bar)	1,2	I.	5,5	5,5	2,6	1,6								
				II.	2,3	2,3										
				III.												
			0,4-1,2	1,4	I.	18,6	18,6	10,7	7,8	3,9	2,2					
					II.	15,4	15,4	8,7	6,2	3	1,6					
					III.	8,6	8,6	7,1	5	1,7						
			0,8-2,4	2,7	I.	40	40	26,8	20,1	11	6,8	3,7	2,2	1,2		
					II.	40	40	24,8	18,6	10,2	6,3	3,2	1,9	1		
					III.	26,4	26,4	23,2	17,3	8,9	5,4	2,9	1,7			
			1,5-2,5	2,8	I.			40	40	23,5	15					
					II.			40	40	22,7	14,4					
					III.	40	40	40	38,9	21,4	13,6					
2,0-3,3	3,6	I.					32,5	20,8								
		II.					31,6	20,2								
		III.				40	30,3	19,4								
Actuator DP33	Spring range (bar)	Air supply pressure min. (bar)	1,2	I.	13,3 c)	13,3 c)	7,4c)	5,2 c)	2,4 c)	1,2 c)						
				II.	10,1 c)	10,1 c)	5,4 c)	3,7 c)	1,5 c)							
				III.	5 a)	5 a)	3,8 a)	2,5 a)								
			0,4-1,2	1,4	I.	34,2 c)	34,2 c)	20,2 c)	15,1 c)	8,1 c)	4,9 c)	2,5	1,4			
					II.	31 c)	31 c)	18,3 c)	13,6 c)	7,3 c)	4,4 c)	2,1	1,1			
					III.	19,1 a)	19,1 a)	16,6 a)	12,3 a)	5,9 a)	3,5 a)	1,8 a)				
			0,8-2,4	2,7	I.	40 a)	40 a)	40 a)	34,7 a)	19,5 a)	12,3 a)	7	4,4	2,6		
					II.	40 a)	40 a)	40 a)	33,2 a)	18,6 a)	11,8 a)	6,5	4,1	2,4		
					III.	40	40	40	31,9	17,3	10,9	6,2	3,9	2,3		
			1,5-3,0	3,3	I.							14,8	9,6	6		
					II.							14,3	9,3	5,8		
					III.							14	9,1	5,7		
			1,7-2,7	3,1	I.				40 a)	40 a)	29 a)					
					II.				40 a)	40 a)	28,4 a)					
					III.				40	40	27,6					
			2,0-4,0	4,5	I.							20,3	13,3	8,4		
					II.							19,9	12,9	8,2		
					III.							19,6	12,8	8,1		
2,3-3,7	4,5	I.						40								
		II.						39,5								
		III.						38,6								
Actuator DP34	Spring range (bar)	Air supply pressure min. (bar)	1,2	I.						2,5 b)	1,5 b)					
				II.						2,1 b)	1,2 b)					
				III.						1,8 e)	1 e)					
			0,4-1,2	1,4	I.							7 b)	4,4 b)	2,7 b)	1,6	1
					II.							6,6 b)	4,1 b)	2,5 b)	1,4	
					III.							6,3 d)	3,9 d)	2,3 d)	1,3 a)	
			0,8-2,4	2,7	I.							16	10,4	6,5	4	2,7
					II.							15,5	10,1	6,3	3,9	2,6
					III.							15,2 b)	9,9 b)	6,2 b)	3,7	2,5
			1,5-3,0	3,3	I.										8,4	5,7
					II.										8,2	5,6
					III.										8,1	5,5
			2,0-4,0	4,5	I.										11,5	7,9
					II.										11,3	7,8
					III.										11,2	7,7
			2,1-3,0	3,3	I.							40	29,7	19		
					II.							40	29,4	18,8		
					III.							40 a)	29,2 a)	18,7 a)		
2,4-3,6	4,5	I.								34,2	21,9					
		II.								33,9	21,7					
		III.														

I. Fig. 440: PTFE-V-ring unit;

II. Fig. 440: PTFE- / pure graphite-packing;

III. Fig. 441: Bellows seal

Air supply pressure max. of pneumatic actuators DP: 6 bar
 Air supply pressure max. limit of control valve: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

¹⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
For max. permissible closing pressures refer to corresponding data sheet.

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Spring opens on air failure

DN	15	20	25	32	40	50	65	80	100	125	150				
Seat-ø (mm)	21	21	27	31	41	51	66	81	101	126	151				
Standard Kvs-values	4	6,3	10	16	25	40	63	100	160	250	400				
Reduced Kvs-values ¹⁾	2,5	4; 2,5	6,3	10	16	25	40	63	100	160	250				
Travel (mm)	20						30			50					
Actuator DP32	Air supply pressure min. (bar)	1,4	I.	18,6	18,6	10,7	7,8	3,9	2,2						
			II.	15,4	15,4	8,7	6,2	3	1,6						
			III.	8,6	8,6	7,1	5	1,7							
		2	I.	40	40	34,9	26,3	14,6	9,2	5	3,1	1,8			
			II.	40	40	32,9	24,8	13,7	8,6	4,6	2,8	1,6			
			III.	35,2	35,2	31,3	23,5	12,4	7,7	4,3	2,6	1,5			
		3	I.			40	40	32,5	20,8	12	7,8	4,8			
			II.			40	40	31,6	20,2	11,6	7,5	4,6			
			III.	40	40	40	40	30,3	19,4	11,3	7,3	4,5			
		4	I.					40	32,4	19	12,4	7,8			
			II.					40	31,8	18,6	12,1	7,6			
			III.					40	31	18,3	11,9	7,5			
		5	I.					40	26	17	10,8				
			II.					40	25,6	16,7	10,6				
			III.					40	25,3	16,5	10,5				
		6	I.						33	21,7	13,8				
			II.						32,6	21,4	13,6				
			III.						32,3	21,2	13,5				
		Actuator DP33	Air supply pressure min. (bar)	1,4	I.	34,2 d)	34,2 d)	20,2 d)	15,1 d)	8,1 d)	4,9 d)	2,5 d)	1,4 d)		
					II.	31 d)	31 d)	18,3 d)	13,6 d)	7,3 d)	4,4 d)	2,1 d)	1,1 d)		
					III.	19,1 d)	19,1 d)	16,6 d)	12,3 d)	5,9 d)	3,5 d)	1,8 d)			
				2	I.	40 d)	40 d)	40 d)	40 d)	25,2 d)	16 d)	9,2 d)	5,9 d)	3,6 d)	
					II.	40 d)	40 d)	40 d)	40 d)	24,3 d)	15,5 d)	8,7 d)	5,6 d)	3,4 d)	
					III.	40 d)	40 d)	40 d)	40 d)	23 d)	14,6 d)	8,4 d)	5,4 d)	3,3 d)	
3	I.							40 d)	34,6 d)	20,3 d)	13,3 d)	8,4 d)			
	II.							40 d)	34 d)	19,9 d)	12,9 d)	8,2 d)			
	III.							40 d)	33,1 d)	19,6 d)	12,8 d)	8,1 d)			
4	I.								40 c)	31,4	20,6	13,1			
	II.								40 c)	31	20,3	12,9			
	III.								40 a)	30,7 a)	20,1 a)	12,8 a)			
5	I.								40	28	17,9				
	II.								40	27,7	17,7				
	III.								40 a)	27,5 a)	17,6 a)				
6	I.									35,4	22,7				
	II.									35,1	22,5				
Actuator DP34	Air supply pressure min. (bar)			1,4	I.					7 b)	4,4 b)	2,7 b)	1,6	1	
					II.					6,6 b)	4,1 b)	2,5 b)	1,4		
					III.					6,3 e)	3,9 e)	2,3 e)	1,3 a)		
				2	I.						20,5 b)	13,3 b)	8,4 b)	5,3	3,6
					II.						20 b)	13 b)	8,2 b)	5,1	3,5
					III.						19,7 e)	12,9 e)	8,1 e)	5 a)	3,4 a)
				3	I.						40 b)	28,2 b)	18 b)	11,5	7,9
		II.							40 b)	27,9 b)	17,8 b)	11,3	7,8		
		III.							40 e)	27,7 e)	17,7 e)	11,2 a)	7,7 a)		
		4	I.							40 b)	27,6 b)	17,7	12,2		
			II.							40 b)	27,5 b)	17,5	12,1		
			III.									17,4 a)	12 a)		
		5	I.									23,9	16,6		
			II.									23,7	16,5		
			III.									23,6 a)	16,4 a)		
		6	I.									30,9	20,9		
			II.									29,9	20,8		

I. Fig. 440: PTFE-V-ring unit;
II. Fig. 440: PTFE- / pure graphite-packing;
III. Fig. 441: Bellows seal

Air supply pressure max. of pneumatic actuators DP:

max. permissible 6 bar

Air supply pressure max. limit of control valve:

max. permissible a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

¹⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).

For max. permissible closing pressures refer to corresponding data sheet.

Control valve in straightway form with pneumatic actuator ARI-DP

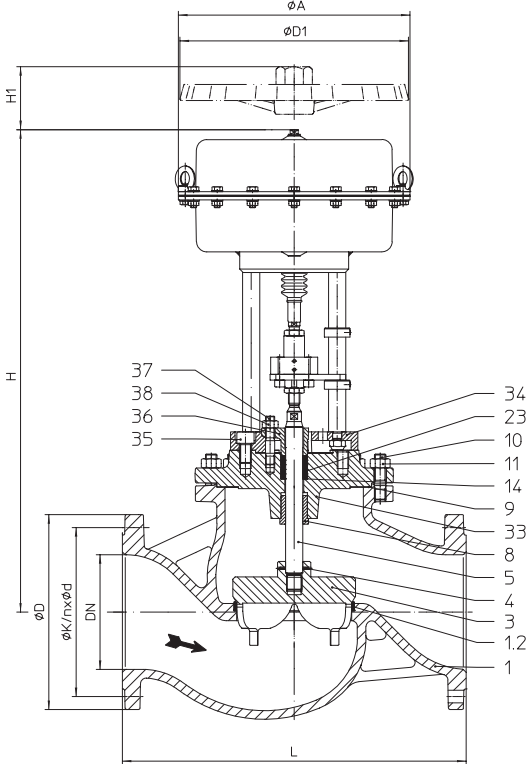


Fig. 440

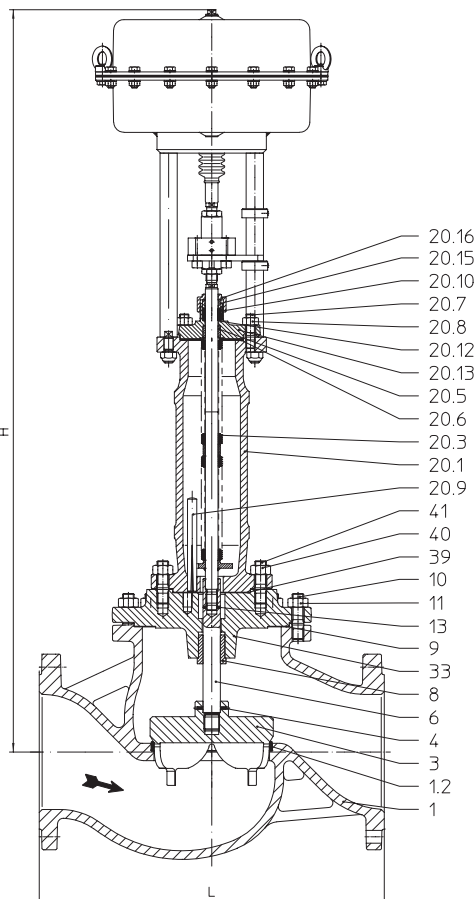


Fig. 441

Figure	Nominal pressure	Material	Nominal diameter
12.440 / 12.441	PN16	EN-JL1040	DN200-250
22.440 / 22.441	PN16	EN-JS1049	DN200-250
34.440 / 34.441	PN25	1.0619+N	DN200-250
35.440 / 35.441	PN40	1.0619+N	DN200-250
54.440	PN25	1.4408	DN200-250

Other materials and versions on request.

Stem sealing

Fig. 440: • PTFE-packing -10°C up to +250°C

• Pure graphite-packing -10°C up to +450°C

Fig. 441: • Stainless steel bellows seal with safety stuffing box -60°C up to +450°C

Plug design

standard: • V-port plug, metal seat

optional:

• V-port pressure balanced plug, metal seat,

Material of piston seal:

PTFE with stainless steel spring (max. 200°C)

Guiding

• V-port plug: Stem and port guiding

Flow characteristic

• Modified equal percentage or linear or linear

Rangeability

• 30 : 1

Shut off class (seat / plug leakage classes)

• Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4

Closing pressures refer to page 8.

Technical data for actuator refer to data sheet.

Selection of possible applications

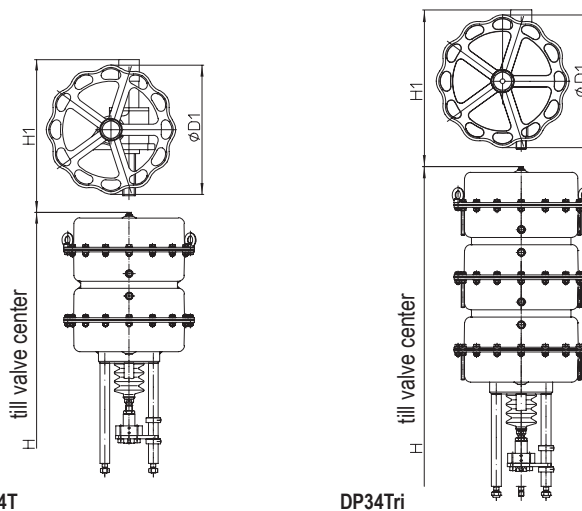
Industrial installations, processing technology, plant manufacturing, etc.
(other applications on request)

Selection of possible flow media

Fig. 440: Cooling water, cooling brine, warm water, hot water, steam, gas, etc.

Fig. 441: Refrigerant, cooling water, warm water, hot water, thermal oil, steam, gas, etc.

(other flow media on request)



DP34T

DP34Tri

Top mounted handwheel

Actuator		DP34	DP34T	DP34Tri
ø D1	(mm)	400	400	400
H1	(mm)	470	635	635
Weight	(kg)	17	41	71

Technical data for actuator refer to data sheet DP32-34Tri.

Dimensions and weights

DN			200	250
L		(mm)	600	730
DP34	Fig. 440	Ø A	(mm) 405	
		H	(mm) 812	872
		PN16	(kg) 190	295
	Fig. 441	PN25/40	(kg) 228	331
		H	(mm) 1367	1427
		PN16	(kg) 213	318
DP34T	Fig. 440	PN25/40	(kg) 247	354
		H	(mm) 1541	1601
		PN16	(kg) 284	389
	Fig. 441	PN25/40	(kg) 318	425
		H	(mm) 1062	1122
		PN16	(kg) 261	366
Standard-flange dimensions refer to page 35.				

DN			200	250
L		(mm)	600	730
DP34Tri	Fig. 440	Ø A	(mm) 405	
		H	(mm) 1284	1344
		PN16	(kg) 295	400
	Fig. 441	PN25/40	(kg) 333	436
		H	(mm) 1763	1823
		PN16	(kg) 318	423
		PN25/40	(kg) 352	459

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

Parts

Pos.	Description	Fig. 12.440 Fig. 12.441	Fig. 22.440 Fig. 22.441	Fig. 34.440 / Fig. 35.440 Fig. 34.441 / Fig. 35.441	Fig. 54.440
1	Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N	GX5CrNiMo19-11-2, 1.4408
1.2	Seat ring	X20Cr13+QT, 1.4021+QT		G19 9 Nb Si, 1.4551	--
3	Plug *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
4	Straight spin *	X10CrNi18-8, 1.4310			A4 - 70
5	Stem *	X20Cr13+QT, 1.4021+QT			X6CrNiMoTi17-12-2, 1.4571
6	Stem extension *	X20Cr13+QT, 1.4021+QT			--
8	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			X6CrNiMoTi17-12-2, 1.4571
9	Gasket *	Pure graphite (CrNi laminated with graphite)			
10	Studs	25CrMo4, 1.7218			A4 - 70
11	Hexagon nuts	C35E, 1.1181			A4
13	Spannstift *	X10CrNi18-8, 1.4310			--
14	Washer *	X5CrNi18-10, 1.4301			
20.1	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.2	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	--
20.3	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541			--
20.5	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)			--
20.6	Gasket *	Pure graphite (CrNi laminated with graphite)			--
20.7	Studs	25CrMo4, 1.7218			--
20.8	Hexagon nuts	C35E, 1.1181			--
20.9	Straight pin	X20Cr13+QT, 1.4021+QT (hardened)			--
20.10	Packing ring *	Pure graphite			--
20.12	Washer *	X5CrNi18-10, 1.4301			--
20.17	Screw joint *	X8CrNiS18-9, 1.4305			--
23	Packing ring *	PTFE			
33	Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N	X6CrNiMoTi17-12-2, 1.4571
34	Adapter flange	EN-GJS-400-18U-LT, EN-JS1049			
35	Hexagon socket head screw	8.8			A2 - 70
36	Packing box flange	EN-GJS-400-15, EN-JS1030			X6CrNiMoTi17-12-2, 1.4571
37	Studs	25CrMo4, 1.7218			A4 - 70
38	Hexagon nuts	C35E, 1.1181			A4
39	Gasket *	Pure graphite (CrNi laminated with graphite)			--
40	Studs	25CrMo4, 1.7218			--
41	Hexagon nuts	C35E, 1.1181			--

* Spare parts

Information / restriction of technical rules need to be observed!

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. (EN-JL1040 ist acc. to TRB 801 No. 45 nicht zugelassen.)

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

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Spring closes on air failure							
DN		200			250		
Seat-ø (mm)		201			251		
Standard Kvs-values		630			1000		
Reduced Kvs-values ¹⁾		400			630		
Travel (mm)					65		
Actuator DP34	Spring range (bar)	Air supply pressure min. (bar)	2,4	II.	1,8	1,1	
				III.	1,7	1	
			2,0-4,0	4,5	II.	4,2	2,6
					III.	4,2	2,6
Actuator DP34T	0,4-1,2	1,7	1,7	II.	1,3 ^{b)}		
				III.	1,2 ^{d)}		
	1,0-2,0	2,5	2,5	II.	4,2 ^{a)}	2,6 ^{a)}	
				III.	4,2 ^{c)}	2,6 ^{c)}	
	2,0-4,0	4,5	4,5	II.	9,1	5,8	
				III.	9,1	5,8	
Actuator DP34Tri	0,4-1,2	1,7	1,7	II.	2,3 ^{d)}	1,4 ^{d)}	
				III.	2,2 ^{f)}	1,4 ^{f)}	
	1,0-2,0	2,5	2,5	II.	6,7 ^{b)}	4,2 ^{b)}	
				III.	6,6 ^{d)}	4,2 ^{d)}	
	2,0-4,0	4,5	4,5	II.	14	8,9	
				III.			
II. Fig. 440: PTFE- / pure graphite-packing;			III. Fig. 441: Bellows seal				
Air supply pressure max. of pneumatic actuators DP:			max. permissible	6 bar (DP34Tri max. permissible 5 bar)			
Air supply pressure max. limit of control valve:			max. permissible	a) 5 bar	b) 4,5 bar	c) 4 bar d) 3,5 bar e) 3 bar	

¹⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
 For max. permissible closing pressures refer to corresponding data sheet

max. permissible closing pressures on flow-to-open P2 = 0

(Observe regulations, refer to page 35. Plug design acc. to „Selection STEVI“, refer to techn. annex.)

Spring opens on air failure						
DN	200		250			
Seat-ø (mm)	201		251			
Standard Kvs-values	630		1000			
Reduced Kvs-values ¹⁾	400		630			
Travel (mm)	65					
Actuator DP34	Air supply pressure min. (bar)	2	II.	1,8	1,1	
			III.	1,7 ^{a)}	1 ^{a)}	
		3	II.	4,2	2,6	
			III.	4,2 ^{a)}	2,6 ^{a)}	
		4	II.	6,7	4,2	
			III.	6,6 ^{a)}	4,2 ^{a)}	
	5	II.	9,1	5,8		
		III.	9,1 ^{a)}	5,8 ^{a)}		
	6	II.	11,6	7,4		
		III.				
	Actuator DP34T	Air supply pressure min. (bar)	1,5	II.	1,8 ^{b)}	1,1 ^{b)}
				III.	1,7 ^{e)}	1 ^{e)}
2			II.	4,2 ^{b)}	2,6 ^{b)}	
			III.	4,2 ^{e)}	2,6 ^{e)}	
3			II.	9,1 ^{b)}	5,8 ^{b)}	
			III.	9,1 ^{e)}	5,8 ^{e)}	
4		II.	14 ^{b)}	8,9 ^{b)}		
		III.				
5		II.	16,5 ^{b)}	10,5 ^{b)}		
		III.				
II. Fig. 440: PTFE- / pure graphite-packing;		III. Fig. 441: Bellows seal				
Air supply pressure max. of pneumatic actuators DP:		max. permissible	6 bar			
Air supply pressure max. limit of control valve:		max. permissible	a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar			

¹⁾ Other Kvs-value-reductions are possible with screwed seat ring (Fig. 445/446 or Fig. 470/471).
 For max. permissible closing pressures refer to corresponding data sheet.

Standard-flange dimensions

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

DN			15	20	25	32	40	50	65	80	100	125	150	200	250
PN16	ØD	(mm)	95	105	115	140	150	165	185	200	220	250	285	340	405
PN16	ØK	(mm)	65	75	85	100	110	125	145	160	180	210	240	295	355
PN16	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22	12x22	12x26
PN25	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300	360	425
PN25	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	310	370
PN25	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x26	12x30
PN40	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300	375	450
PN40	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250	320	385
PN40	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26	12x30	12x33

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	PN16	(bar)	--	16	14,4	12,8	11,2	9,6	--	--	--
EN-JS1049	PN16	(bar)	on request	16	15,5	14,7	13,9	12,8	11,2	--	--
EN-JS1049	PN25	(bar)	on request	25	24,3	23	21,8	20	17,5	--	--

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

Material	PN		-60°C to <-10°C*	-10°C to 50°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.0619+N	PN25	(bar)	18,7	25	23,3	21,7	19,4	17,8	16,1	15	14,4	13,9
1.0619+N	PN40	(bar)	30	40	37,3	34,7	30,2	28,4	25,8	24	23,1	22,2
1.4408	PN40	(bar)	40	40	37,3	33,8	31,1	29,3	27,6	26,7	25,6	--

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

* Valve with extended bonnet, studs and nuts made of A4-70 (at temperatures below -10°C)

Please indicate when ordering:

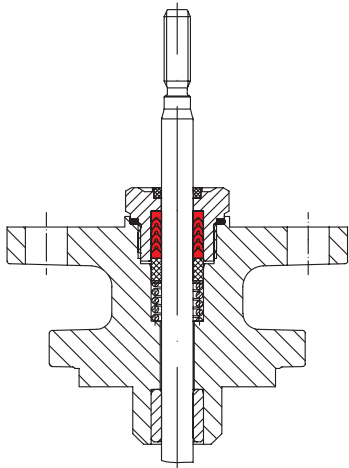
- Figure-No.
- Nominal diameter
- Nominal pressure
- Body material
- Plug design
- Kvs-value
- Flow characteristic
- Stem sealing
- Actuator
- Special design / accessories

Example:

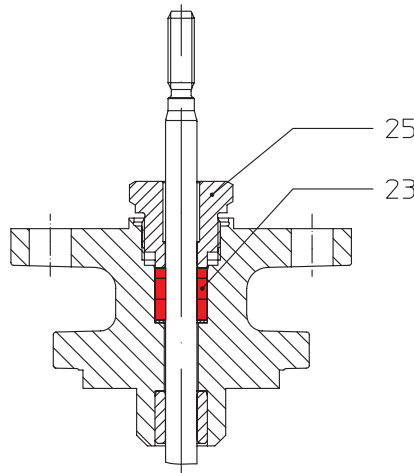
Figure 35.440; Nominal diameter DN100; Nominal pressure PN40; Body material 1.0619+N; Parabolic plug; Kvs 160; Equal percentage; Stem sealing PTFE-V-ring unit; Actuator ARI-PREMIO 5 kN.

Dimensions in mm Weights in kg Pressures in barg (gauge) 1 bar $\hat{=}$ 10 ⁵ Pa $\hat{=}$ 0,1 MPa Kvs in m ³ /h
--

Stem sealing



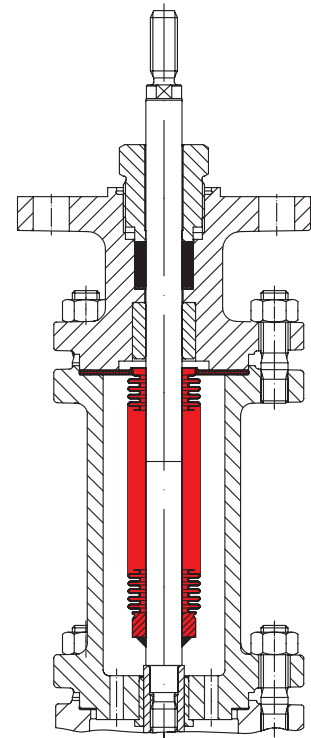
Spring loaded PTFE-V ring packing unit



PTFE-/ Pure graphite-packing

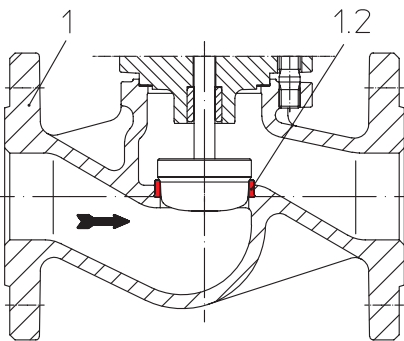
Pos.	Description	
23	Packing ring *	PTFE or Pure graphite
25	Screw joint *	X8CrNiS18-9, 1.4305

* Spare part

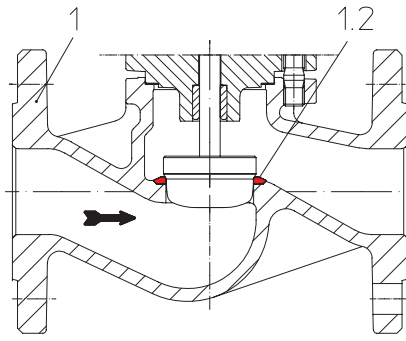


Bellows seal with safety stuffing box

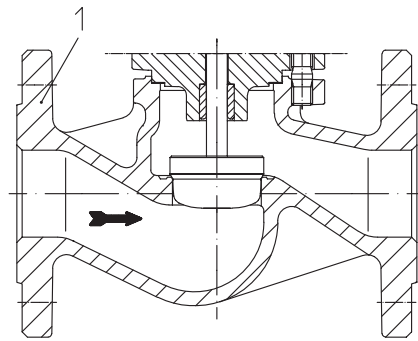
Body design



Body with pressed seat ring
(EN-JL1040, EN-JS1049)

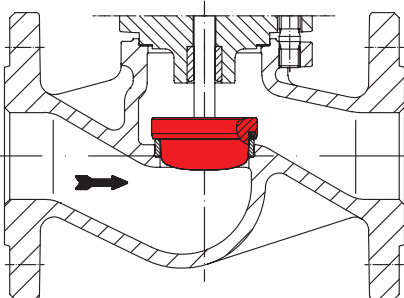


Body with welded seat (1.0619+N)

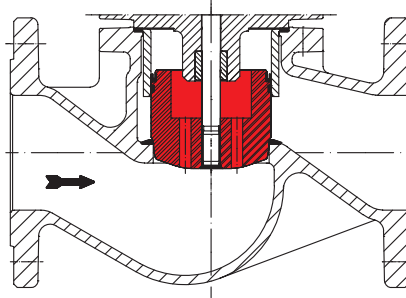


Body with machined seat (1.4408)

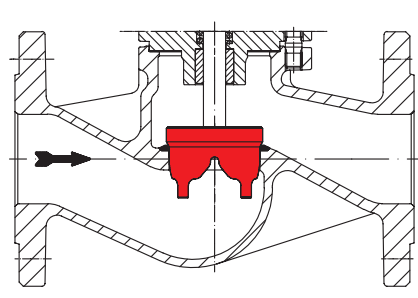
Plug design



Parabolic plug with PTFE soft seat



Parabolic pressure balanced plug



V-port plug with stem and port guiding



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