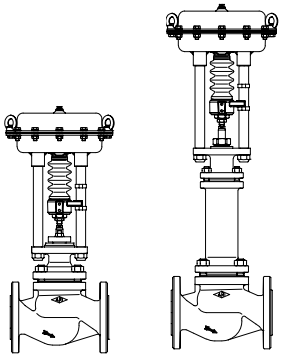
With pneumatic and electric actuators

ARI-STEVI® 470 / 471 - ANSI

Pneumatic actuator
ARI-DP 32 - 35

- 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



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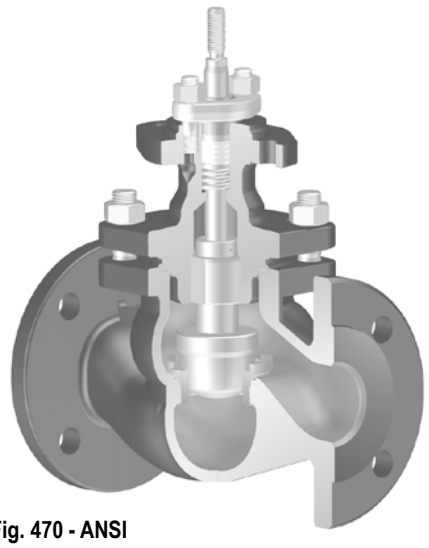
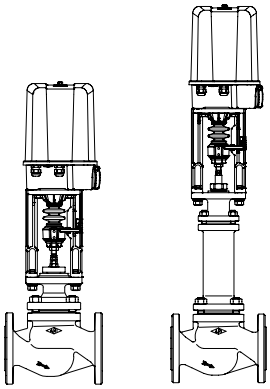


Fig. 470 - ANSI

ARI-STEVI® 470 / 471 - ANSI

Electric actuator
ARI-PREMIO 2,2 - 25 kN
ARI-PREMIO-Plus 2G 2,2 - 25kN

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



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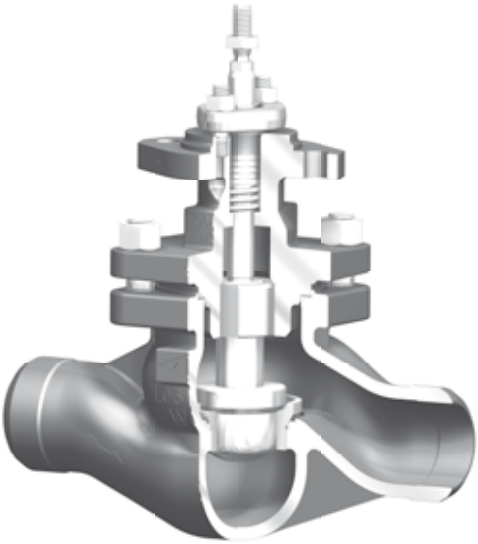
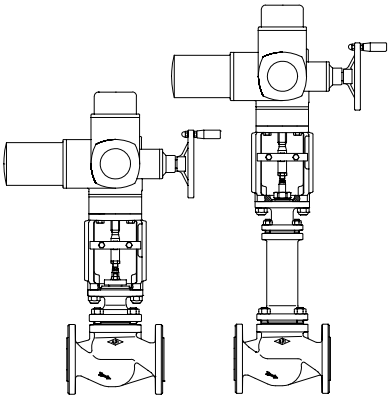


Fig. 470....4 - ANSI

ARI-STEVI® 470 / 471 - ANSI

Electric actuator
AUMA SAR 07.2 - 14.6

- 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



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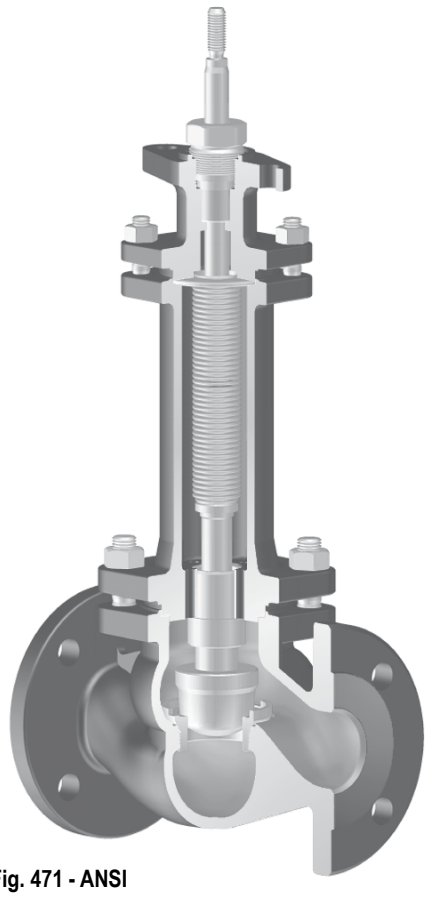


Fig. 471 - ANSI

Figure	Version	Nominal pressure	Material	Nominal diameter
32.470....90	with flanges	ANSI150	SA216WCB	DN 25-200 / NPS 1"-8"
32.471....90	with flanges	ANSI150	SA216WCB	DN 25-200 / NPS 1"-8"
35.470....90	with flanges	ANSI300	SA216WCB	DN 25-200 / NPS 1"-8"
35.470....4....90	with butt weld ends	ANSI300	SA216WCB	DN 25-150 / NPS 1"-6"
35.471....90	with flanges	ANSI300 (restricted pressure)	SA216WCB	DN 25-200 / NPS 1"-8"
35.471....4....90	with butt weld ends		SA216WCB	DN 25-150 / NPS 1"-6"
Other materials and versions on request.				

Information / restriction of technical rules need to be observed!

A production permission acc. to TRB 801 No. 45 is available.

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

Resistance and fitness must be verified, contact manufacturer for information (refer to Product overview and Resistance list).

Stem sealing

Fig. 470

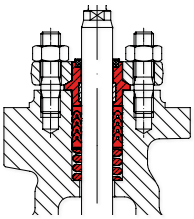
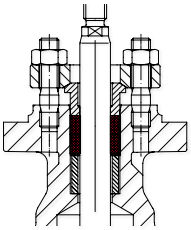
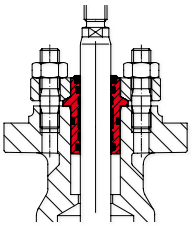
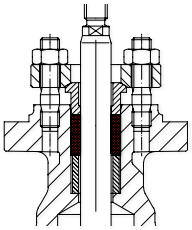
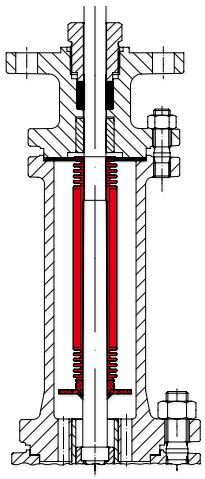
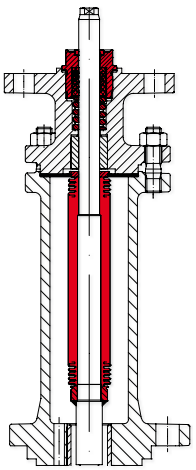
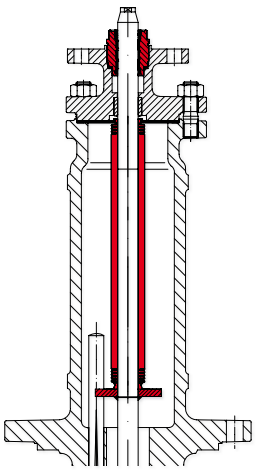
standard		optional	
DN25- 150 / NPS 1"-6"	DN200 / NPS 8"	DN25- 200 / NPS 1"-8"	DN25- 200 / NPS 1"-8"
			
I. PTFE-V-ring unit -10°C to 220°C	**II. PTFE-packing** -10°C to 250°C	**I. EPDM-sealing** -10°C to 150°C (allowed for water and steam up to 180°C)	**II. PTFE-packing** -10°C to 250°C **II. Pure graphite-packing** -10°C to 425°C

Fig. 471

standard	optional	
DN25- 200 / NPS 1"-8"	DN25- 100 / NPS 1"-4"	DN150-200 / NPS 6"-8"
		
III. Stainless steel-bellow with pure graphite-packing -29°C to 425°C	**III. Stainless steel-bellow with V-ring unit** -29°C to 220°C	**III. Stainless steel-bellow with EPDM-sealing** -29°C to 150°C (allowed for water and steam up to 180°C)

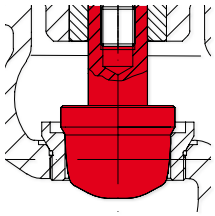
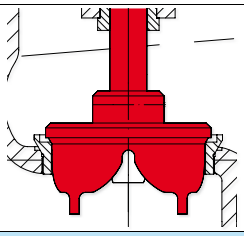
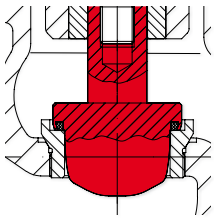
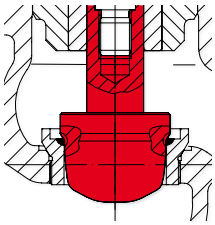
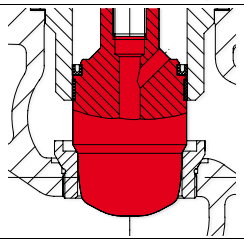
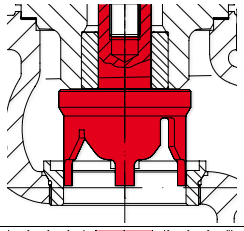
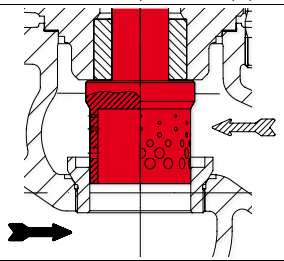
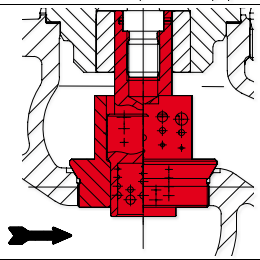
Pressure-temperature-ratings

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

acc. to ANSI B16.5				-29°C to 38°C [1]	50°C	100°C	150°C	200°C	250°C	300°C	350°C	400°C	425°C
Fig. 470 / 471	SA216WCB	ANSI150	(bar)	19,6	19,2	17,7	15,8	13,8	12,1	10,2	8,4	6,5	5,5
Fig. 470	SA216WCB	ANSI300	(bar)	51,1	50,1	46,6	45,1	43,8	41,9	39,8	37,6	34,7	28,8

acc. to manufacturers standard				-29°C to -10°C [1]	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	425°C
Fig. 471-ANSI300 (restricted pressure)	SA216WCB	ANSI300	(bar)	30	40	38,1	35	32	28	25,7	23,8	18,5

[1] Valve with extended bonnet, studs and nuts made of B8M (at temperatures below -10°C)

Plug design standard			Guiding	Rangeability
DN25-150 **Parabolic plug,** **metal seat**	- Leakage class IV acc. to ANSI / FCI 70-2 - from Kvs 0,1 - Flow characteristic: equal percentage (glp) (from Kvs 100 modified) linear (lin) (from Kvs 1)		Plug shaft	50 : 1
DN200 **V-port plug** **metal seat**	- Leakage class IV acc. to ANSI / FCI 70-2 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin)		Plug shaft / Seat ring	30 : 1
Plug design optional			**Guiding**	**Rangeability**
Parabolic plug **with PTFE-Soft seal** (max. 200°C)	- Leakage class VI acc. to ANSI / FCI 70-2 - from Kvs 1,0 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin)		Plug shaft	50 : 1
Parabolic plug **with armoured sealing edge**	- Leakage class IV acc. to ANSI / FCI 70-2 - from Kvs 1,0 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin)		Plug shaft	50 : 1
Parabolic plug **with Pressure balanced plug** **metal seat** Piston seal: PTFE with stainless steel spring (max. 200°C)	- Leakage class IV acc. to ANSI / FCI 70-2 - from Kvs 6,3 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin)		Plug shaft	50 : 1
V-port plug **metal seat**	- Leakage class IV acc. to ANSI / FCI 70-2 - from Kvs 63 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin)		Plug shaft / Seat ring	30 : 1
Perforated plug **metal seat** **optional:** **Pressure balanced** **perforated plug** **metal seat** Piston seal: PTFE with stainless steel spring (max. 200°C)	- Leakage class IV acc. to ANSI / FCI 70-2 - from Kvs 1 - Flow characteristic: - equal percentage (glp) (from Kvs 100 modified) - linear (lin) Flow direction for gas and steam to reduce the sound level Flow direction for liquids at critical operating conditions (cavitation / flashing)		Plug shaft / Seat ring	30 : 1
Perforated plug **with suppporting basket** **metal seat**	- Leakage class IV acc. to ANSI / FCI 70-2 - Flow characteristic: equal percentage (glp) (from Kvs 100 modified) linear (lin) - multistage pressure reduction Flow direction for gas / steam and liquids to reduce the sound level at critical operating conditions		Plug shaft / Seat ring	30 : 1

Control valve in straightway form with pneumatic actuator ARI-DP

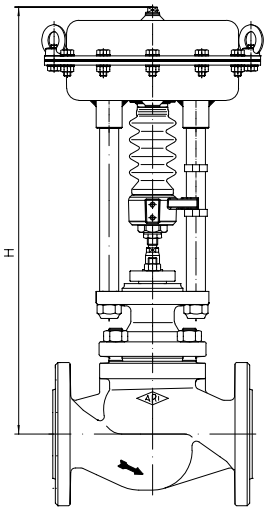


Fig. 470

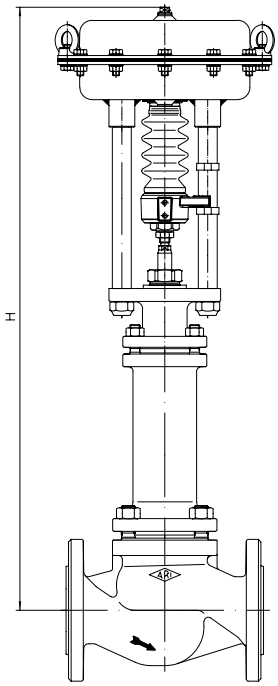
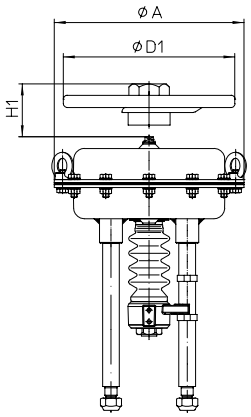


Fig. 471

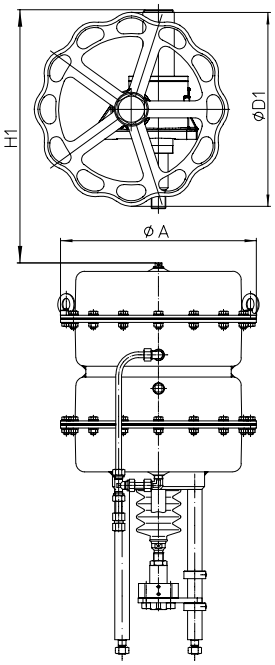
Heights and weights

DN				25	40	50	80	100	150	200
NPS				1"	1 1/2"	2"	3"	4"	6"	8"
Fig. 470	**DP32**	H	(mm)	473	504	504	522	524	584	--
		ANSI150	(kg)	18	25	27	43	61	111	--
		ANSI300	(kg)	20	28	30	50	75	136	--
	DP33	H	(mm)	528	559	559	588	590	650	--
		ANSI150	(kg)	24	31	33	49	67	117	--
		ANSI300	(kg)	26	34	36	56	81	142	--
	DP34	H	(mm)	--	694	694	723	725	785	844
		ANSI150	(kg)	--	61	63	79	97	147	248
		ANSI300	(kg)	--	64	66	86	111	172	264
	DP34T	H	(mm)	--	--	--	--	--	1051	1094
		ANSI150	(kg)	--	--	--	--	--	223	319
		ANSI300	(kg)	--	--	--	--	--	248	335
	DP34Tri	H	(mm)	--	--	--	--	--	1273	1316
		ANSI150	(kg)	--	--	--	--	--	257	353
		ANSI300	(kg)	--	--	--	--	--	282	369
	DP35	H	(mm)	--	--	--	--	--	1154	1197
		ANSI150	(kg)	--	--	--	--	--	422	518
		ANSI300	(kg)	--	--	--	--	--	447	534
Fig. 471	**DP32**	H	(mm)	630	715	715	722	752	911	--
		ANSI150	(kg)	22	26	28	45	65	114	--
		ANSI300	(kg)	23	29	31	52	73	139	--
	DP33	H	(mm)	685	770	770	788	818	977	--
		ANSI150	(kg)	28	32	34	51	71	120	--
		ANSI300	(kg)	29	35	37	58	79	145	--
	DP34	H	(mm)	--	905	905	923	953	1112	1251
		ANSI150	(kg)	--	62	64	81	101	150	233
		ANSI300	(kg)	--	65	67	88	109	175	248
	DP34T	H	(mm)	--	--	--	--	--	1573	1541
		ANSI150	(kg)	--	--	--	--	--	256	304
		ANSI300	(kg)	--	--	--	--	--	281	319
	DP34Tri	H	(mm)	--	--	--	--	--	1795	1763
		ANSI150	(kg)	--	--	--	--	--	290	338
		ANSI300	(kg)	--	--	--	--	--	315	353
	DP35	H	(mm)	--	--	--	--	--	1643	--
		ANSI150	(kg)	--	--	--	--	--	455	--
		ANSI300	(kg)	--	--	--	--	--	480	--

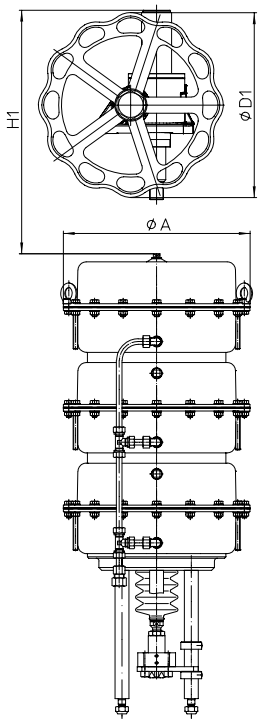
Further dimensions refer to pages 18-23.



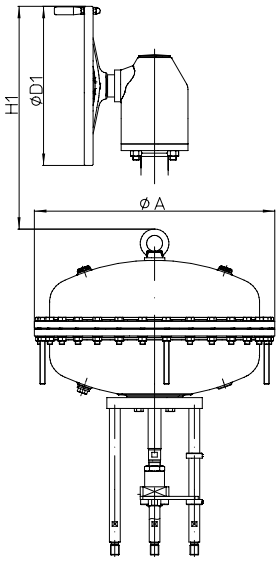
DP32 / DP33 / DP34



DP34T



DP34Tri



DP35

Actuator data			DP32	DP33	DP34	DP34T	DP34Tri	DP35
Ø A		(mm)	250	300	405			755
Effective diaphragm area		(cm^2)	250	400	800	1600	2400	2800
Top mounted handwheel	Ø D1	(mm)	225	300	400			500
	H1	(mm)	270	284	442	635	635	731
	Weight	(kg)	5		17	41		49

Further technical data of the actuator: refer to data sheet ARI-DP.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							25						40			50			80			100			150
NPS							1"						1 1/2"			2"			3"			4"			6"
Parabolic plug	Kvs-value					(m^3/h)	0,25 0,16 0,1	0,63 0,4	2,5 1,6 1	4	6,3	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	40						40		30	40	30		30	15	8	15	8	4	4
V-port plug	Kvs-value					(m^3/h)	--						--			--			--	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	--						--			--			--	30		30		25	25
Perforated plug	Kvs-value					(m^3/h)	--			2,5	4	**6,3**	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100
	max. diff. pressure [1]					(bar)	--			40			40			40			40			40			40
Seat-Ø						(mm)	3	5	12	18	22	25	25	32	40	32	40	50	50	65	80	65	80	100	100
Travel						(mm)	20						20		30	20	30		30			30			30
DP32 250 cm² Spring closes on air failure (stem extending by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2]	1,2	I.	(bar)	30,6	29,2	21,2	8,1	4,8	3,3	2,5												
					II.	(bar)	20	18,6	11,9	3,8	1,8	1													
					III.	(bar)																			
		0,4-1,2		1,4	I.	(bar)	51	51	51	25,8	16,8	12,6	11,9	6,7	3,8	6,7	3,8	2,1	2						
					II.	(bar)	51	51	49,9	21,4	13,8	10,3	8,8	4,8	2,6	4,8	2,6	1,3	1,1						
					III.	(bar)	9,7	9,4	8,4	7,5	7	6,5	6,5	3,6	1,8	3,6	1,8								
		0,8-2,4		2,7	I.	(bar)				51	40,8	31,4	30,6	18,3	11,3	18,3	11,3	6,9	6,8	3,7	2,2	3,7	2,2	1,2	1,2
					II.	(bar)			51	51	37,8	29,1	27,5	16,4	10,1	16,4	10,1	6,1	5,9	3,2	1,9	3,2	1,9	1	1
					III.	(bar)	27,5	27,2	26,2	25,3	24,7	24,3	24,3	15,2	9,3	15,2	9,3	5,6	5,6	3	1,8	3	1,8		
		1,5-2,9		3,2	I.	(bar)					51	51	51	38,6		38,6									
					II.	(bar)					51	51	51	36,7		36,7									
					III.	(bar)	40	40	40	40	40	40	40	35,5		35,5									
		2,0-3,8		4,1	I.	(bar)								51		51									
					II.	(bar)								51		51									
					III.	(bar)								40		40									

DN						25						40			50			80			100			150
NPS						1"						1 1/2"			2"			3"			4"			6"
Parabolic plug	Kvs-value				(m^3/h)	0,25 0,16 0,1	0,63 0,4	2,5 1,6 1	4	6,3	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160
	max. diff. pressure [1]				(bar)	40						40		30	40	30		30	15	8	15	8	4	4
V-port plug	Kvs-value				(m^3/h)	--						--			--			--	63	**100**	63	100	**160**	160
	max. diff. pressure [1]				(bar)	--						--			--			--	30		30		25	25
Perforated plug	Kvs-value				(m^3/h)				2,5	4	**6,3**	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100
	max. diff. pressure [1]				(bar)	--			40			40			40			40			40			40
Seat-Ø					(mm)	3	5	12	18	22	25	25	32	40	32	40	50	50	65	80	65	80	100	100
Travel					(mm)	20						20		30	20	30		30			30			30
DP32 250 cm² Spring opens on air failure (stem retracting by spring)	Air supply pressure min. (bar) [2]	1,4	I.	(bar)	51	51	51	25,8	16,8	12,6	11,9	6,7	3,8	6,7	3,8	2,1	2							
			II.	(bar)	51	51	49,9	21,4	13,8	10,3	8,8	4,8	2,6	4,8	2,6	1,3	1,1							
			III.	(bar)	9,7	9,4	8,4	7,5	7	6,5	6,5	3,6	1,8	3,6	1,8									
		2	I.	(bar)				51	51	40,7	40	24,1	15,1	24,1	15,1	9,3	9,2	5,1	3,2	5,1	3,2	1,8	1,8
			II.	(bar)			51	51	49,9	38,4	36,9	22,2	13,8	22,2	13,8	8,5	8,3	4,6	2,8	4,6	2,8	1,6	1,6
			III.	(bar)	36,3	36,1	35	34,2	33,6	33,2	33,2	21	13,1	21	13,1	8	8	4,4	2,7	4,4	2,7	1,5	1,4
		3	I.	(bar)						51	51	51	33,8	51	33,8	21,4	21,3	12,4	8	12,4	8	4,9	4,9
			II.	(bar)					51	51	51	51	32,6	51	32,6	20,6	20,4	11,8	7,6	11,8	7,6	4,7	4,7
			III.	(bar)	40	40	40	40	40	40	40	40	31,8	40	31,8	20,1	20,1	11,6	7,5	11,6	7,5	4,6	4,4
		4	I.	(bar)									51		51	33,5	33,4	19,6	12,7	19,6	12,7	8	8
			II.	(bar)									51		51	32,7	32,5	19	12,4	19	12,4	7,8	7,8
			III.	(bar)									40		40	32,2	32,2	18,9	12,3	18,9	12,3	7,7	7,5
		5	I.	(bar)												45,6	45,5	26,8	17,5	26,8	17,5	11	11
			II.	(bar)												44,8	44,6	26,2	17,2	26,2	17,2	10,8	10,8
			III.	(bar)												40	40	26,1	17	26,1	17	10,8	10,6
		6	I.	(bar)												51	51	34	22,3	34	22,3	14,1	14,1
			II.	(bar)												51	51	33,4	21,9	33,4	21,9	13,9	13,9
			III.	(bar)														33,3	21,8	33,3	21,8	13,8	13,6

I. **Fig. 470: PTFE-V-ring unit / EPDM-sealing**
II. **Fig. 470: PTFE- / pure graphite-packing**
III. **Fig. 471: Bellows seal**

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							25						40			50			80			100			150
NPS							1"						1 1/2"			2"			3"			4"			6"
Parabolic plug	Kvs-value					(m^3/h)	0,25 0,16 0,1	0,63 0,4	2,5 1,6 1	4	6,3	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	40						40		30	40	30		30	15	8	15	8	4	4
V-port plug	Kvs-value					(m^3/h)	--						--			--			--	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	--						--			--			--	30		30		25	25
Perforated plug	Kvs-value					(m^3/h)	--			2,5	4	**6,3**	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100
	max. diff. pressure [1]					(bar)	--			40			40			40			40			40			40
Seat-Ø						(mm)	3	5	12	18	22	25	25	32	40	32	40	50	50	65	80	65	80	100	100
Travel						(mm)	20						20		30	20	30		30			30			30
DP33 400 cm² Spring closes on air failure (stem extending by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2]	1,2	I.	(bar)	51c)	51c)	43,7c)	18,6c)	11,9c)	8,8c)	8a)	4,3a)	2,3a)	4,3a)	2,3a)	1,1a)	1						
					II.	(bar)	45,6c)	44,2c)	34,4c)	14,2c)	8,9c)	6,5c)	5a)	2,4a)	1,1a)	2,4a)	1,1a)								
					III.	(bar)	6,1a)	5,8a)	4,8a)	3,9a)	3,3a)	2,9a)	2,9a)	1,2a)		1,2a)									
		0,4-1,2		1,4	I.	(bar)			51c)	46,6c)	31c)	23,7c)	22,9a)	13,5a)	8,3a)	13,5a)	8,3a)	4,9a)	4,8	2,5	1,4	2,5	1,4		
					II.	(bar)	51c)	51c)	51c)	42,3c)	28c)	21,4c)	19,9a)	11,6a)	7a)	11,6a)	7a)	4,1a)	3,9	2	1,1	2	1,1		
					III.	(bar)	20,2a)	19,9a)	18,9a)	18a)	17,5a)	17a)	17a)	10,5a)	6,3a)	10,5a)	6,3a)	3,7a)	3,7	1,8	1	1,8	1		
		0,8-2,4		2,7	I.	(bar)				51a)	51a)	51a)	51	32	20,2	32	20,2	12,6	12,5	7,1	4,5	7,1	4,5	2,7	2,7
					II.	(bar)				51a)	51a)	51a)	49,7	30,1	19	30,1	19	11,8	11,6	6,6	4,1	6,6	4,1	2,5	2,5
					III.	(bar)	40	40	40	40	40	40	40	28,9	18,2	28,9	18,2	11,3	11,3	6,4	4	6,4	4	2,4	2,2
		1,5-3,0		3,3	I.	(bar)									41,1		41,1	26,1	26	15,1	9,8	15,1	9,8	6,1	6,1
					II.	(bar)									39,9		39,9	25,3	25,1	14,6	9,5	14,6	9,5	5,9	5,9
					III.	(bar)									39,1		39,1	24,8	24,8	14,4	9,3	14,4	9,3	5,8	5,6
		1,7-2,7		3,1	I.	(bar)								51		51									
					II.	(bar)							51	51		51									
					III.	(bar)								40		40									
		2,0-4,0		4,5	I.	(bar)									51		51	35,7	35,6	20,9	13,6	20,9	13,6	8,5	8,5
					II.	(bar)									51		51	34,9	34,7	20,4	13,3	20,4	13,3	8,3	8,3
					III.	(bar)									40		40	34,4	34,4	20,2	13,1	20,2	13,1	8,2	8,1

DN							25						40			50			80			100			150
NPS							1"						1 1/2"			2"			3"			4"			6"
Parabolic plug	Kvs-value					(m^3/h)	0,25 0,16 0,1	0,63 0,4	2,5 1,6 1	4	6,3	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	40						40		30	40	30		30	15	8	15	8	4	4
V-port plug	Kvs-value					(m^3/h)	--						--			--			--	63	**100**	63	100	**160**	160
	max. diff. pressure [1]					(bar)	--						--			--			--	30		30		25	25
Perforated plug	Kvs-value					(m^3/h)				2,5	4	**6,3**	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100
	max. diff. pressure [1]					(bar)	--			40			40			40			40			40			40
Seat-Ø						(mm)	3	5	12	18	22	25	25	32	40	32	40	50	50	65	80	65	80	100	100
Travel						(mm)	20						20		30	20	30		30			30			30
DP33 400 cm² Spring opens on air failure (stem retracting by spring)	Air supply pressure min. (bar) [2]	1,4			I.	(bar)	51d)	51d)	51d)	46,6d)	31d)	23,7d)	22,9d)	13,5d)	8,3d)	13,5d)	8,3d)	4,9d)	4,8d)	2,5d)	1,4d)	2,5d)	1,4d)		
					II.	(bar)	51d)	51d)	51d)	42,3d)	28d)	21,4d)	19,9d)	11,6d)	7d)	11,6d)	7d)	4,1d)	3,9d)	2d)	1,1d)	2d)	1,1d)		
					III.	(bar)	20,2d)	19,9d)	18,9d)	18d)	17,5d)	17d)	17d)	10,5d)	6,3d)	10,5d)	6,3d)	3,7d)	3,7d)	1,8d)	1d)	1,8d)	1d)		
		2			I.	(bar)				51d)	51d)	51d)	51d)	41,2d)	26,2d)	41,2d)	26,2d)	16,5d)	16,4d)	9,4d)	6d)	9,4d)	6d)	3,7d)	3,7d)
					II.	(bar)				51d)	51d)	51d)	51d)	39,3d)	24,9d)	39,3d)	24,9d)	15,7d)	15,5d)	8,9d)	5,7d)	8,9d)	5,7d)	3,4d)	3,4d)
					III.	(bar)	40d)	40d)	40d)	40d)	40d)	40d)	40d)	38,2d)	24,2d)	38,2d)	24,2d)	15,2d)	15,2d)	8,7d)	5,5d)	8,7d)	5,5d)	3,4d)	3,2d)
		3			I.	(bar)								51d)	51d)	51d)	51d)	35,7d)	35,6d)	20,9d)	13,6d)	20,9d)	13,6d)	8,5d)	8,5d)
					II.	(bar)								51d)	51d)	51d)	51d)	34,9d)	34,7d)	20,4d)	13,3d)	20,4d)	13,3d)	8,3d)	8,3d)
					III.	(bar)								40d)	40d)	40d)	40d)	34,4d)	34,4d)	20,2d)	13,1d)	20,2d)	13,1d)	8,2d)	8,1d)
		4			I.	(bar)												51a)	51	32,4	21,2	32,4	21,2	13,4	13,4
					II.	(bar)												51a)	51	31,8	20,9	31,8	20,9	13,2	13,2
					III.	(bar)												40a)	40	31,6	20,7	31,6	20,7	13,1	12,9
		5			I.	(bar)														43,8	28,8	43,8	28,8	18,3	18,3
					II.	(bar)														43,3	28,5	43,3	28,5	18,1	18,1
					III.	(bar)														40	28,4	40	28,4	18	17,8
		6			I.	(bar)														51	36,4	51	36,4	23,2	23,2
					II.	(bar)														51	36,1	51	36,1	23	23
					III.	(bar)															36		36	22,9	22,7

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
II. Fig. 470: PTFE- / pure graphite-packing
III. Fig. 471: Bellows seal

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN						40			50			80			100			150			200		
NPS						1 1/2"			2"			3"			4"			6"			8"		
Parabolic plug	Kvs-value			(m³/h)		10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160	250	**400**	--		
	max. diff. pressure [1]			(bar)		40		30	40	30		30	15	8	15	8	4	4	2		--		
V-port plug	Kvs-value			(m³/h)		--			--			--	63	**100**	63	100	**160**	160	250	**400**	250	400	**630**
	max. diff. pressure [1]			(bar)		--			--			--	30		30		25	25	15		15		12
Perforated plug	Kvs-value			(m³/h)		6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100	160	**250**	160	250	**400**
	max. diff. pressure [1]			(bar)		40			40			40			40			40			40		30
Seat-Ø				(mm)		25	32	40	32	40	50	50	65	80	65	80	100	100	125	150	125	150	200
Travel				(mm)		20		30	20	30		30			30			30	50		50	50	65
DP34 800 cm² Spring closes on air failure (stem extending by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2] 1,2	I.	(bar)			8,3e)		8,3e)	5e)	4,9	2,6	1,5	2,6	1,5							
				II.	(bar)			7,1e)		7,1e)	4,2e)	4	2	1,1	2	1,1							
				III.	(bar)			6,4e)		6,4e)	3,7e)	3,7b)	1,9b)	1b)	1,9b)	1b)							
		0,4-1,2	1,4	I.	(bar)			20,4d)		20,4d)	12,7d)	12,6	7,2	4,5	7,2	4,5	2,7	2,7	1,6	1	1,6		
				II.	(bar)			19,1d)		19,1d)	11,9d)	11,7	6,6	4,2	6,6	4,2	2,5	2,5	1,4		1,2		
				III.	(bar)			18,4d)		8,4d)	11,4b)	11,4d)	6,5b)	4,1b)	6,5b)	4,1b)	2,4b)	2,2	1,3		1,3 a)		
		0,8-2,4	2,7	I.	(bar)			44,4b)		44,4b)	28,2b)	28,1	16,4	10,6	16,4	10,6	6,6	6,6	4,1	2,7	4,1	2,7	
				II.	(bar)			43,2b)		43,2b)	27,4b)	27,2	15,9	10,3	15,9	10,3	6,4	6,4	4	2,6	3,8	2,5	
				III.	(bar)			40b)		40b)	26,9b)	26,9	15,7	10,2	15,7	10,2	6,3	6,2	3,8	2,5	3,8	2,5	
		1,0-2,0	2,4	I.	(bar)																		1,9
				II.	(bar)																		1,8
				III.	(bar)																		1,8
		1,5-3,0	3,3	I.	(bar)														8,5	5,8	8,5	5,8	
				II.	(bar)														8,4	5,7	8,2	5,6	
				III.	(bar)														8,2	5,6	8,2	5,6	
		2,1-3,0	3,3	I.	(bar)			51a)		51a)	51a)	51	46,4	30,5	46,4	30,5	19,4	19,4					
				II.	(bar)			51a)		51a)	51a)	51	45,9	30,2	45,9	30,2	19,2	19,2					
				III.	(bar)						40a)	40	40	30,1	40	30,1	19,1	18,9					
		2,0-4,0	4,5	I.	(bar)														11,7	8	11,7	8	4,4
				II.	(bar)														11,5	7,9	11,3	7,8	4,3
				III.	(bar)														11,4	7,8	11,4	7,8	4,3
		2,4-3,6	4	I.	(bar)								51	35,1	51	35,1	22,4	22,4					
				II.	(bar)								51	34,8	51	34,8	22,2	22,2					
				III.	(bar)									34,7		34,7	22,1	21,9					

DN					40			50			80			100			150			200		
NPS					1 1/2"			2"			3"			4"			6"			8"		
Parabolic plug	Kvs-value			(m³/h)	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160	250	**400**			
	max. diff. pressure [1]			(bar)	40	40	30	40	30	30	30	15	8	15	8	4	4	2	2			
V-port plug	Kvs-value			(m³/h)								63	**100**	63	100	**160**	160	250	**400**	250	400	**630**
	max. diff. pressure [1]			(bar)								30		30		25	25	15		15	15	12
Perforated plug	Kvs-value			(m³/h)	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100	160	**250**	160	250	**400**
	max. diff. pressure [1]			(bar)	40			40			40			40			40			40		30
Seat-Ø				(mm)	25	32	40	32	40	50	50	65	80	65	80	100	100	125	150	125	150	200
Travel				(mm)	20		30	20	30		30			30			30	50		50	50	65
DP34 800 cm² Spring opens on air failure (stem retracting by spring)	Air supply pressure min. (bar) [2]	1,4		I.	(bar)			20,4e)		20,4e)	12,7e)	12,6	7,2	4,5	7,2	4,5	2,7	2,7	1,6	1	1,6	1	
				II.	(bar)			19,1e)		19,1e)	11,9e)	11,7	6,6	4,2	6,6	4,2	2,5	2,5	1,4		1,2		
				III.	(bar)			18,4e)		18,4e)	11,4b)	11,4e)	6,5b)	4,1b)	6,5b)	4,1b)	2,4b)	2,2	1,3		1,3a)		
		2		I.	(bar)			51e)		51e)	36e)	35,9	21	13,7	21	13,7	8,6	8,6	5,4	3,6	5,3	3,6	1,9
				II.	(bar)			51e)		51e)	35,2e)	35	20,5	13,4	20,5	13,4	8,4	8,4	5,2	3,5	5	3,4	1,8
				III.	(bar)			40e)		40e)	34,7e)	34,7b)	20,3b)	13,2b)	20,3b)	13,2b)	8,3b)	8,1	5,1	3,4	5,1a)	3,4a)	1,8a)
		3		I.	(bar)						51e)	51	44,1	29	44,1	29	18,4	18,4	11,7	8	11,7	8	4,4
				II.	(bar)						51e)	51	43,6	28,7	43,6	28,7	18,2	18,2	11,5	7,9	11,3	7,8	4,3
				III.	(bar)						40e)	40b)	40b)	28,5b)	40b)	28,5b)	18,1b)	18	11,4	7,8	11,4a)	7,8a)	4,3a)
		4		I.	(bar)								51	44,3	51	44,3	28,3	28,3	18	12,4	18	12,4	6,9
				II.	(bar)								51	44	51	44	28,1	28,1	17,9	12,3	17,7	12,2	6,7
				III.	(bar)									40b)		40b)	28b)	27,8	17,7	12,2	17,7a)	12,2a)	6,8a)
		5		I.	(bar)									51		51	38,1	38,1	24,3	16,8	24,3	16,8	9,3
				II.	(bar)									51		51	37,9	37,9	24,2	16,7	24	16,6	9,2
				III.	(bar)													37,6	24	16,6	24a)	16,6a)	9,2a)
		6		I.	(bar)												48	48	30,6	21,2	30,6	21,2	11,8
				II.	(bar)												47,7	47,7	30,5	21,1	30,3	21	11,7
				III.	(bar)													40	30,3	21			

I. **Fig. 470: PTFE-V-ring unit / EPDM-sealing**
II. **Fig. 470: PTFE- / pure graphite-packing**
III. **Fig. 471: Bellows seal**

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							150			200		
NPS							6"			8"		
Parabolic plug	Kvs-value					(m³/h)	160	250	**400**	--		
	max. diff. pressure [1]					(bar)	4	2		--		
V-port plug	Kvs-value					(m³/h)	160	250	**400**	250	400	**630**
	max. diff. pressure [1]					(bar)	25	15		15		12
Perforated plug	Kvs-value					(m³/h)	100	160	**250**	160	250	**400**
	max. diff. pressure [1]					(bar)		40		40		30
Seat-Ø						(mm)	100	125	150	125	150	200
Travel						(mm)	30	50		50		65
DP34T 1600 cm² Spring closes on air failure (stem extending by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2]	1,5	I.	(bar)	2,7	1,6	1	1,6		
					II.	(bar)	2,2	1,2		1,2		
					III.	(bar)	2 a)	1,1 a)		1,3 e)		
		0,4-1,2		1,7	I.	(bar)	6,6	4,1	2,7	4,1	2,7	1,4
					II.	(bar)	6,1	3,8	2,5	3,8	2,5	1,3
					III.	(bar)	6 a)	3,7 a)	2,4 a)	3,8 d)	2,5 d)	1,3 d)
		0,8-2,4		2,9	I.	(bar)	14,5	9,1	6,2	9,1	6,2	
					II.	(bar)	14	8,8	6	8,8	6	
					III.	(bar)	13,8	8,7	6	8,8 b)	6 b)	
		1,0-2,0		2,5	I.	(bar)						4,4
					II.	(bar)						4,3
					III.	(bar)						4,3 c)
		1,5-3,0		3,5	I.	(bar)		18	12,4	18	12,4	
					II.	(bar)		17,7	12,2	17,7	12,2	
					III.	(bar)		17,6	12,1	17,7 a)	12,2 a)	
		2,1-3,0		3,5	I.	(bar)	40,1					
					II.	(bar)	39,6					
					III.	(bar)	39,4					
		2,0-4,0		4,5	I.	(bar)		24,3	16,8	24,3	16,8	9,3
					II.	(bar)		24	16,6	24	16,6	9,2
					III.	(bar)		23,9	16,5	24	16,6	9,2
		2,4-3,6		4,1	I.	(bar)	46					
					II.	(bar)	45,5					
					III.	(bar)	40					

DN						150			200		
NPS						6"			8"		
Parabolic plug	Kvs-value				(m³/h)	160	250	**400**	--		
	max. diff. pressure [1]				(bar)	4	2		--		
V-port plug	Kvs-value				(m³/h)	160	250	**400**	250	400	**630**
	max. diff. pressure [1]				(bar)	25	15		15		12
Perforated plug	Kvs-value				(m³/h)	100	160	**250**	160	250	**400**
	max. diff. pressure [1]				(bar)		40		40		30
Seat-Ø					(mm)	100	125	150	125	150	200
Travel					(mm)	30	50		50		65
DP34T 1600 cm² Spring opens on air failure (stem retracting by spring)	Air supply pressure min. (bar) [2]	1,5	I.	(bar)	8,6	5,3	3,6	5,3	3,6	1,9
			II.	(bar)	8,1	5	3,4	5	3,4	1,8
			III.	(bar)	7,9 a)	4,9 a)	3,3 a)	5,1 e)	3,4 e)	1,8 e)
		2	I.	(bar)	18,4	11,7	8	11,7	8	4,4
			II.	(bar)	17,9	11,3	7,8	11,3	7,8	4,3
			III.	(bar)	17,8 a)	11,2 a)	7,7 a)	11,4 e)	7,8 e)	4,3 e)
		3	I.	(bar)	38,1	24,3	16,8	24,3	16,8	9,3
			II.	(bar)	37,6	24	16,6	24	16,6	9,2
			III.	(bar)	37,4 a)	23,9 a)	16,5 a)	24 e)	16,6 e)	9,2 e)
		4	I.	(bar)	51	36,9	25,6	36,9	25,6	14,3
			II.	(bar)	51	36,6	25,4	36,6	25,4	14,2
			III.	(bar)	40 a)	36,5 a)	25,3 a)			
		5	I.	(bar)		49,6	34,4	49,6	34,4	19,3
			II.	(bar)		49,2	34,2	49,2	34,2	19,1
			III.	(bar)		40 a)	34,1 a)			
		6	I.	(bar)		51	43,2	51	43,2	24,2
			II.	(bar)		51	42,9	51	42,9	24,1
			III.	(bar)						

I. **Fig. 470: EPDM-sealing**
II. **Fig. 470: PTFE- / pure graphite-packing**
III. **Fig. 471: Bellows seal**

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 2,5 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							**150**			**200**		
NPS							**6"**			**8"**		
Parabolic plug	Kvs-value					(m³/h)	160	250	**400**	--		
	max. diff. pressure [1]					(bar)	4	2		--		
V-port plug	Kvs-value					(m³/h)	160	250	**400**	250	400	**630**
	max. diff. pressure [1]					(bar)	25	15		15		12
Perforated plug	Kvs-value					(m³/h)	100	160	**250**	160	250	**400**
	max. diff. pressure [1]					(bar)	40			40		30
Seat-Ø						(mm)	100	125	150	125	150	200
Travel						(mm)	30	50		50		65
DP34Tri **2400 cm²** **Spring closes on air failure** (stem extending by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2]	1,5	I.	(bar)	4,6 a)	2,8 a)	1,9 a)	2,8 a)	1,9 a)	
					II.	(bar)	4,1 a)	2,5 a)	1,6 a)	2,5 a)	1,6 a)	
					III.	(bar)	4 d)	2,4 d)	1,6 d)	2,5 f)	1,6 f)	
		0,4-1,2		1,7	I.	(bar)	10,6 a)	6,6 a)	4,5 a)	6,6 a)	4,5 a)	2,4 a)
					II.	(bar)	10,1 a)	6,3 a)	4,3 a)	6,3 a)	4,3 a)	2,3 a)
					III.	(bar)	9,9 c)	6,2 c)	4,2 c)	6,3 f)	4,3 f)	2,3 f)
		0,8-2,4		2,9	I.	(bar)	22,4 a)	14,2 a)	9,8 a)	14,2 a)	9,8 a)	5,4 a)
					II.	(bar)	21,9 a)	13,9 a)	9,5 a)	13,9 a)	9,5 a)	5,3 a)
					III.	(bar)	21,7 a)	13,8 a)	9,5 a)	13,9 d)	9,6 d)	5,3 d)
		1,0-2,0		2,5	I.	(bar)						6,9 a)
					II.	(bar)						6,7 a)
					III.	(bar)						6,8 d)
		1,5-3,0		3,5	I.	(bar)		27,5 a)	19 a)	27,5 a)	19 a)	10,6 a)
					II.	(bar)		27,1 a)	18,8 a)	27,1 a)	18,8 a)	10,5 a)
					III.	(bar)		27 a)	18,7 a)	27,2 b)	18,8 b)	10,5 b)
		2,1-3,0		3,5	I.	(bar)	51 a)					
					II.	(bar)	51 a)					
					III.	(bar)	40 a)					
		2,0-4,0		4,5	I.	(bar)		36,9 a)	25,6 a)	36,9 a)	25,6 a)	14,3 a)
					II.	(bar)		36,6 a)	25,4 a)	36,6 a)	25,4 a)	14,2 a)
					III.	(bar)		36,5 a)	25,3 a)			

I. Fig. 470: EPDM-sealing
II. Fig. 470: PTFE- / pure graphite-packing
III. Fig. 471: Bellows seal

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 5 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							150		200		
NPS							6"		8"		
Parabolic plug	Kvs-value					(m³/h)	250	**400**	--		
	max. diff. pressure [1]					(bar)	2		--		
V-port plug	Kvs-value					(m³/h)	250	**400**	250	400	**630**
	max. diff. pressure [1]					(bar)	15		15		12
Perforated plug	Kvs-value					(m³/h)	160	**250**	160	250	**400**
	max. diff. pressure [1]					(bar)	40		40		30
Seat-Ø						(mm)	125	150	125	150	200
Travel						(mm)	50		50		65
DP35 2800 cm² Spring closes on air failure  (stem extending by spring)	Spring range (bar)	2,45-3,28	Air supply pressure min. (bar) [2]	3,8	I./II.	(bar)	51	37,4	51	37,4	
					III.	(bar)	40 a)	37,3 a)			
		2,97-3,8		4,3	I./II.	(bar)		45,5		45,5	
		2,72-3,8		4,3	I./II.	(bar)					23,4

DN						150		200		
NPS						6"		8"		
Parabolic plug	Kvs-value				(m³/h)	250	**400**	--		
	max. diff. pressure [1]				(bar)	2		--		
V-port plug	Kvs-value				(m³/h)	250	**400**	250	400	**630**
	max. diff. pressure [1]				(bar)	15		15		12
Perforated plug	Kvs-value				(m³/h)	160	**250**	160	250	**400**
	max. diff. pressure [1]				(bar)	40		40		30
Seat-Ø					(mm)	125	150	125	150	200
Travel					(mm)	50		50		65
DP35 2800 cm² Spring opens on air failure  (stem retracting by spring)	Air supply pressure min. (bar) [2]	1,5	I./II.		(bar)	12,7 b)	8,7 b)	12,7 b)	8,7 b)	4,1 b)
			III.		(bar)	12,6 e)	8,6 e)			
		2	I./II.		(bar)	23,9 b)	16,6 b)	23,9 b)	16,6 b)	8,5 b)
			III.		(bar)	23,8 e)	16,5 e)			
		3	I./II.		(bar)	46,5 b)	32,2 b)	46,5 b)	32,2 b)	17,3 b)
			III.		(bar)	40 e)	32,2 e)			
		4	I./II.		(bar)	51 b)	47,9)	51 b)	47,9 b)	26,2 b)
		4,5	I./II.		(bar)		51 b)		51 b)	30,6 b)

I. Fig. 470: EPDM-sealing
II. Fig. 470: PTFE- / pure graphite-packing
III. Fig. 471: Bellows seal

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

Control valve in straightway form with electric actuator ARI-PREMIO / PREMIO-Plus 2G

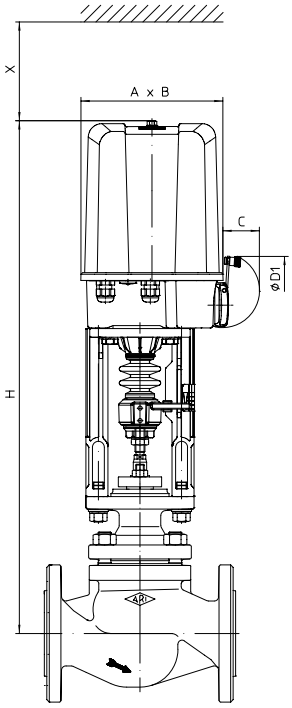


Fig. 470....90

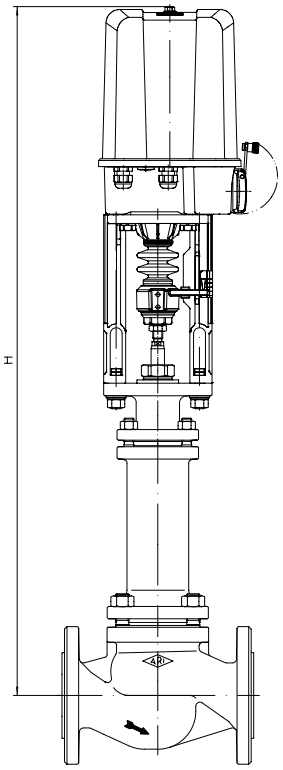


Fig. 471....90

Actuator data		2,2 - 5 kN	12 - 25 kN
A	(mm)	171	210
B	(mm)	156	184
C	(mm)	50	90
Ø D1	(mm)	90	130
X	(mm)	150	200
Further technical data of the actuator: refer to data sheet ARI-PREMIO/PREMIO-Plus 2G			

Heights and weights

DN				25	40	50	80	100	150	200
NPS				1"	1 1/2"	2"	3"	4"	6"	8"
Fig. 470	2,2 kN	H	(mm)	582	613	613	642	644	724	--
		ANSI150	(kg)	15	21	23	39	58	108	--
		ANSI300	(kg)	16	24	26	46	72	133	--
	5 kN	H	(mm)	582	613	613	642	644	724	842
		ANSI150	(kg)	16	22	24	40	59	109	183
		ANSI300	(kg)	17	25	27	47	73	134	200
	12 kN 15 kN	H	(mm)	--	787	787	816	818	878	996
		ANSI150	(kg)	--	26	28	44	63	113	186
		ANSI300	(kg)	--	29	31	51	77	138	203
	25 kN	H	(mm)	--	--	--	816	818	878	952
		ANSI150	(kg)	--	--	--	45	64	114	187
		ANSI300	(kg)	--	--	--	52	78	139	204
Fig. 471	2,2 kN	H	(mm)	739	824	824	842	872	1045	--
		ANSI150	(kg)	18	23	25	41	62	111	--
		ANSI300	(kg)	19	26	28	48	70	136	--
	5 kN	H	(mm)	739	824	824	842	872	1045	1264
		ANSI150	(kg)	19	24	26	42	63	112	209
		ANSI300	(kg)	20	27	29	49	71	137	226
	12 kN 15 kN	H	(mm)	--	998	998	1016	1046	1205	1433
		ANSI150	(kg)	--	28	30	46	67	116	212
		ANSI300	(kg)	--	31	33	53	75	141	229
	25 kN	H	(mm)	--	--	--	1016	1046	1205	1433
		ANSI150	(kg)	--	--	--	47	68	117	213
		ANSI300	(kg)	--	--	--	54	76	142	230

Further dimensions refer to pages 18-23.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN				25						40			50			80			100			150			200		
NPS				1"						1 1/2"			2"			3"			4"			6"			8"		
Parabolic plug	Kvs-value		(m^3/h)	0,25 0,16 0,1	0,63 0,4	2,5 1,6 1	4	6,3	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160	250	**400**	--		
	max. diff. pressure [1]		(bar)	40						40		30	40		30	30	15	8	15	8	4	4		2	--		
V-port plug	Kvs-value		(m^3/h)	--						--			--				63	**100**	63	100	**160**	160	250	**400**	250	400	**630**
	max. diff. pressure [1]		(bar)	--						--			--				30		30		25	25		15	15		12
Perforated plug	Kvs-value		(m^3/h)	--			2,5 1,6 1	4	**6,3**	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100	160	**250**	160	250	**400**
	max. diff. pressure [1]		(bar)	--			40			40			40			40			40			40			40		30
Seat-Ø			(mm)	3	5	12	18	22	25	25	32	40	32	40	50	50	65	80	65	80	100	100	125	150	125	150	200
Travel			(mm)	20						20		30	20	30		30			30			30	50		50	50	65
2,2 kN	Closing pressure	I.	(bar)	51	51	51	51	46,7	35,9	35,2	21,1	13,2	21,1	13,2	8,1	8	4,4	2,7	4,4	2,7	1,5	1,5					
		II.	(bar)	51	51	51	51	43,7	33,7	32,1	19,2	11,9	19,2	11,9	7,3	7,1	3,9	2,3	3,9	2,3	1,3	1,3					
		III.	(bar)	31,8	31,5	30,5	29,6	29,1	28,6	28,6	18	11,2	18	11,2	6,8	6,8	3,7	2,2	3,7	2,2	1,2	1					
	Operating time (50 Hz)		(s)	53						53		79	53	79		79			79			79					
	Operating speed		(mm/s)	0,38																							
5 kN	Closing pressure	I.	(bar)					51	51	51	51	34,6	51	34,6	21,9	21,8	12,6	8,2	12,6	8,2	5	5	3,1	2	3,1	2	1
		II.	(bar)					51	51	51	51	33,4	51	33,4	21,1	20,9	12,1	7,8	12,1	7,8	4,8	4,8	2,9	1,9	2,7	1,8	
		III.	(bar)	40	40	40	40	40	40	40	40	32,6	40	32,6	20,6	20,6	11,9	7,7	11,9	7,7	4,7	4,5	2,8	1,8	2,8	1,8	
	Operating time		(s)	53						53		79	53	79		79			79			79	132		132		
	Operating speed		(mm/s)	0,38																							
12 kN	Closing pressure	I.	(bar)									51		51	51	51	33,2	21,8	33,2	21,8	13,8	13,8	8,7	5,9	8,7	5,9	3,2
		II.	(bar)									51		51	51	51	32,7	21,5	32,7	21,5	13,6	13,6	8,6	5,8	8,4	5,7	3,1
		III.	(bar)									40		40	40	40	32,5	21,3	32,5	31,3	13,5	13,3	8,4	5,7	8,4	5,7	3,1
	Operating time		(s)									79		79		79			79			79	132		132		171
	Operating speed		(mm/s)									0,38				0,38											
15 kN	Closing pressure	I.	(bar)														42,1	27,7	42,1	27,7	17,6	17,6	11,1	7,6	11,1	7,6	4,2
		II.	(bar)														41,5	27,3	41,5	27,3	17,3	17,3	11	7,5	10,8	7,4	4
		III.	(bar)														40	27,2	40	27,2	17,3	17,1	10,8	7,4	10,8	7,4	4,1
	Operating time		(s)														79		79			79	132		132		171
	Operating speed		(mm/s)													0,38											
25 kN	Closing pressure	I.	(bar)														51	47,2	51	47,2	30,1	30,1	19,1	13,2	19,1	13,2	7,3
		II.	(bar)														51	46,8	51	46,8	29,9	30	19,1	13	18,8	13,2	7,2
		III.	(bar)														40	40		40	29,8	29,6	18,8	13	18,8	13	7,2
	Operating time		(s)														79		79			79	132		132		171
	Operating speed		(mm/s)													0,38											

Further operating speeds: refer to data sheet ARI-PREMIO/PREMIO-Plus 2G

Operating time [s]= Travel [mm] / Operating speed [mm/s]

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
II. Fig. 470: PTFE- / pure graphite-packing
III. Fig. 471: Bellows seal

[1] max. differential pressure drop
[2] Based on a frequency of 50Hz the control speed and power consumption of the synchronous motors PREMIO 2,2kN are 20% higher at frequency of 60 Hz.

Control valve in straightway form with electric actuator AUMA

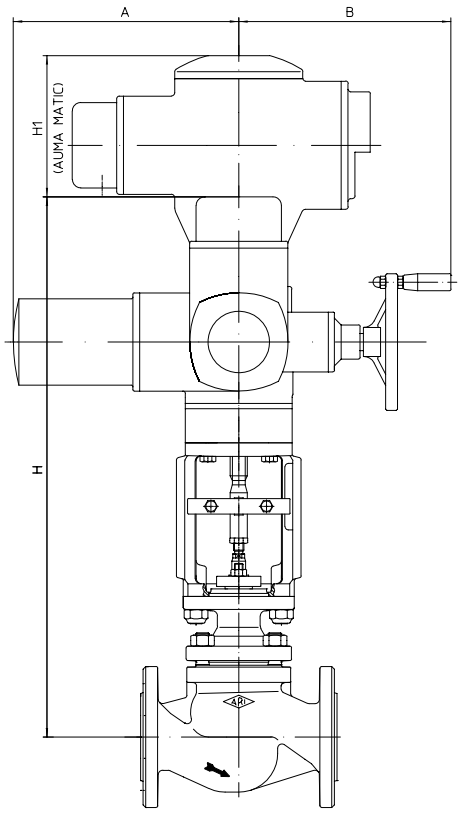


Fig. 470

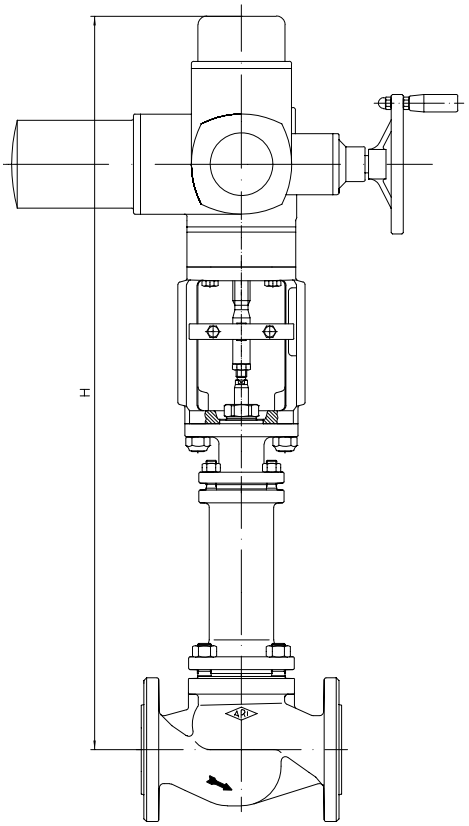


Fig. 471

Actuator data		SAR 07.2	SAR 07.6	SAR 10.2	SAR 14.2	SAR 14.6
A	(mm)	265		283	389	
B	(mm)	249		254	336	339
H1 (AUMA MATIC)	(mm)	130			182	

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

Heights and weights

DN				25	40	50	80	100	150	200
NPS				1"	1 1/2"	2"	3"	4"	6"	8"
Fig. 470	SAR 07.2 SAR 07.6	H	(mm)	652	683	683	712	714	774	869
		ANSI150	(kg)	37	45	47	63	81	131	236
		ANSI300	(kg)	38	48	50	70	95	156	252
	SAR 10.2	H	(mm)	--	--	--	714	716	776	871
		ANSI150	(kg)	--	--	--	65	84	134	235
		ANSI300	(kg)	--	--	--	72	98	159	251
	SAR 14.2	H	(mm)	--	--	--	--	--	901	944
		ANSI150	(kg)	--	--	--	--	--	174	270
		ANSI300	(kg)	--	--	--	--	--	199	286
	SAR 14.6 LE100	H	(mm)	--	--	--	--	--	1159	1202
		ANSI150	(kg)	--	--	--	--	--	219	315
		ANSI300	(kg)	--	--	--	--	--	244	331
Fig. 471	SAR 07.2 SAR 07.6	H	(mm)	809	894	894	912	942	1101	1314
		ANSI150	(kg)	40	45	48	65	85	134	222
		ANSI300	(kg)	41	48	50	70	95	156	252
	SAR 10.2	H	(mm)	--	--	--	914	944	1103	1316
		ANSI150	(kg)	--	--	--	67	88	137	225
		ANSI300	(kg)	--	--	--	74	96	159	240
	SAR 14.2	H	(mm)	--	--	--	--	--	1428	--
		ANSI150	(kg)	--	--	--	--	--	207	--
		ANSI300	(kg)	--	--	--	--	--	232	--

For version with AUMA SAR Ex other heights.

Further dimensions refer to pages 18-23.

Fig. 470	DN				25	40			50			80			100			150			200		
	NPS				1"	1 1/2"			2"			3"			4"			6"			8"		
Parabolic plug	Kvs-value			(m^3/h)	**10**	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160	250	**400**	--		
	max. diff. pressure [1]			(bar)	40	40		30	40	30		30	15	8	15	8	4	4	2		--		
V-port plug	Kvs-value			(m^3/h)	--	--			--				63	**100**	63	100	**160**	160	250	**400**	250	400	**630**
	max. diff. pressure [1]			(bar)	--	--			--				30		30		25	25	15		15		12
Perforated plug	Kvs-value			(m^3/h)	**6,3**	6,3	10	**16**	10	16	**25**	25	40	63	40	63	**100**	100	160	**250**	160	250	**400**
	max. diff. pressure [1]			(bar)	40	40			40			40			40			40			40		30
Seat-Ø				(mm)	25	25	32	40	32	40	50	50	65	80	65	80	100	100	125	150	125	150	200
Travel				(mm)	20	20		30	20	30		30			30			30	50		50	50	65
SAR 07.2 Output drive Form A TR 20 x 4 - LH	Closing pressure	I./II.	shut off	(bar)	51	51			51		51	51	46,4	30,6	46,4	30,6	19,4						
			controlling [2]	(bar)	51	51			51		37,6	37,4	21,9	14,3	21,9	14,3	9						
	Torque			(Nm)	15	15			15		20	20	30		30								
	Operating time (50 Hz)			(s)	54	54		56	54	56		56			56								
	Output drive			(rpm)	5,6	5,6		8	5,6	8		8			8								
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off	(bar)							51	51		43,1	51	43,1	27,5	27,5	17,5	12	17,3	11,9	6,6
			controlling [2]	(bar)							51	51	31,3	20,6	31,3	20,6	13	13	8,2	5,6	8	5,5	2,9
	Torque			(Nm)							30	30	50	60	50	60		60			60		
	Operating time (50 Hz)			(s)							64	64			64			64	55		55		71
	Output drive			(rpm)							5,6	5,6			5,6			5,6	11		11		
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off	(bar)									51	51	51	51	41,9	41,9	26,8	18,5	35,8	24,8	13,9
			controlling [2]	(bar)									51	43,1	51	43,1	27,5	27,5	17,5	12	17,3	11,9	6,6
	Torque			(Nm)									60	80	60	80	90	90			120		
	Operating time (50 Hz)			(s)									64		64			64	55		55		71
	Output drive			(rpm)									5,6		5,6			5,6	11		11		
SAR 14.2 Output drive Form A TR 30 x 6 - LH	Closing pressure	I./II.	shut off	(bar)														51	51	42,7	51	42,7	24
			controlling [2]	(bar)														45,2	28,9	20	28,9	20	11,1
	Torque			(Nm)														150	225	250	225	250	
	Operating time (50 Hz)			(s)														38	63		63		59
	Output drive			(rpm)														8			8		11
SAR 14.6 with LE100.1 Output drive Form A TR 40 x 7 - LH	Closing pressure	I./II.	shut off	(bar)														51			51		31,7
			controlling [2]	(bar)														51	40	27,7	40	27,7	15,5
	Torque			(Nm)														250	300	400	300	400	400
	Operating time (50 Hz)			(s)														46	54		54		51
	Output drive			(rpm)														5,6	8		8		11

I. Fig. 470: PTFE-V-ring unit / EPDM-sealing
II. Fig. 470: PTFE- / pure graphite-packing

[1] max. differential pressure drop

[2] Restrictions through max. permissible torque of the actuator at controlling operation.

Fig. 471	DN				25	40			50			80			100			150			200		
	NPS				1"	1 1/2"			2"			3"			4"			6"			8"		
Parabolic plug	Kvs-value			(m^3/h)	10	10	16	**25**	16	25	**40**	40	63	**100**	63	100	**160**	160	250	**400**	--		
	max. diff. pressure [1]			(bar)	40	40		30	40	30		30	15	8	15	8	4	4	2		--		
V-port plug	Kvs-value			(m^3/h)	--	--			--			--	63	**100**	63	100	**160**	160	250	**400**	250	400	**630**
	max. diff. pressure [1]			(bar)	--	--			--			--	30		30		25	25	15		15		12
Perforated plug	Kvs-value			(m^3/h)	6,3	6,3	10	**16**	10	16	**25**	25	40	**63**	40	63	**100**	100	160	**250**	160	250	**400**
	max. diff. pressure [1]			(bar)	40	40			40			40			40			40			40		30
Seat-Ø				(mm)	25	25	32	40	32	40	50	50	65	80	65	80	100	100	125	150	125	150	200
Travel				(mm)	20	20		30	20	30		30			30			30	50		50	50	65
SAR 07.2 Output drive Form A TR 20 x 4 - LH	Closing pressure	III.	shut off	(bar)	40	40			40		40	40		30,4	40	30,4	19,4						
			controlling [2]	(bar)	40	40			40		37,1	37,1	21,7	14,2	21,7	14,2	8,9						
	Torque			(Nm)	15	15			15		20	20	30		30								
	Operating time (50 Hz)			(s)	54	54		56	54	56		56			56								
	Output drive			(rpm)	5,6	5,6		8	5,6	8		8			8								
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)							40	40			40		27,4	27,2	17,3	11,9	17,3	11,9	6,6
			controlling [2]	(bar)							40	40	31,2	20,4	31,2	20,4	12,9	12,7	8	5,5	8	5,5	3
	Torque			(Nm)							30	30	40	60	40	60		60			60		
	Operating time (50 Hz)			(s)							64	64			64			64	55		55		71
	Output drive			(rpm)							5,6	5,6			5,6			5,6	11		11		
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)									40		40		32,2	40	29,7	20,5	26,6	18,4	10,2
			controlling [2]	(bar)									40		40		27,4	27,2	17,3	11,9	17,3	11,9	6,6
	Torque			(Nm)									60		60		70	90	100		90		
	Operating time (50 Hz)			(s)									64		64			64	55		55		71
	Output drive			(rpm)									5,6		5,6			5,6	11		11		
SAR 14.2 Output drive Form A TR 30 x 6 - LH	Closing pressure	III.	shut off	(bar)															40	33,9			
			controlling [2]	(bar)														40	28,8	19,9			
	Torque			(Nm)														120	175	200			
	Operating time (50 Hz)			(s)														38	63				
	Output drive			(rpm)															8				

III. Fig. 471: Bellows seal

[1] max. differential pressure drop

[2] Restrictions through max. permissible torque of the actuator at controlling operation.

Control valve in straightway form with flanges

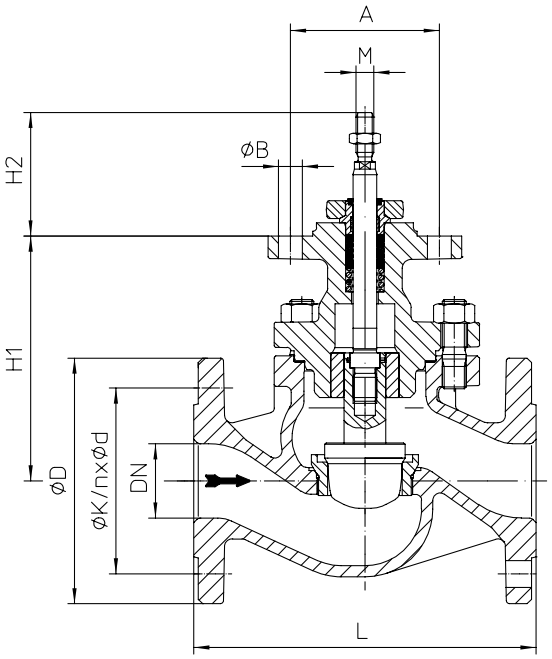


Fig. 470....90
DN25-150 / NPS 1"-6"
(e.g.: DP32-34; PREMIO 2,2-25kN; AUMA 07.2-10.2)

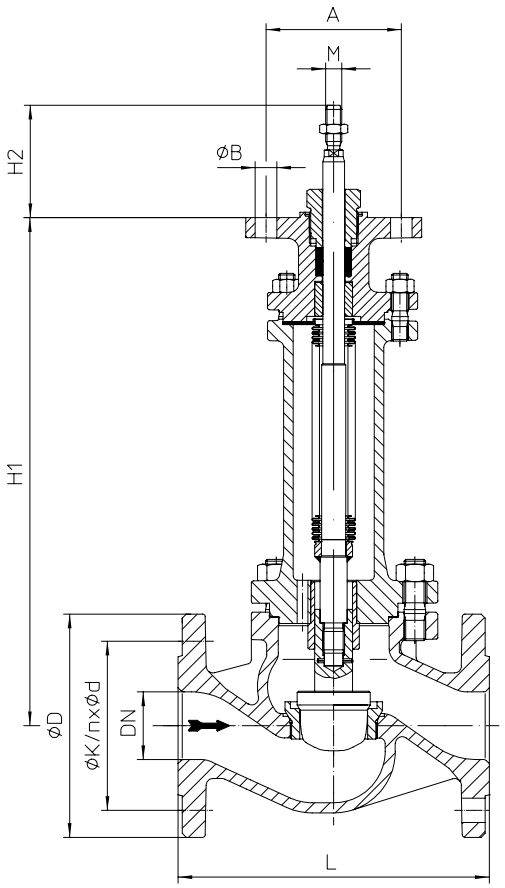


Fig. 471....90
DN25-150 / NPS 1"-6"
(e.g.: DP32-34; PREMIO 2,2-25kN; AUMA 07.2-10.2)

DN			25	40	50	80	100	150
NPS			1"	1 1/2"	2"	3"	4"	6"
Dimensions								
M	Fig. 470	(mm)	M10	M12		M16 x 1,5		
	Fig. 471	(mm)	M12			M14 x 1,5		M16 x 1,5
H1	Fig. 470	(mm)	134	165	165	194	196	256
	Fig. 471	(mm)	291	376	376	394	424	583
H2	Fig. 470 / Fig. 471	(mm)	83					
A	Fig. 470 / Fig. 471	(mm)	100					
ØB	Fig. 470 / Fig. 471	(mm)	2 x 16					
Face-to-face dimension Form RF acc. to ANSI / ISA - S75.03-1992								**(Face-to-face dimension for Form RTJ refer to page 26.)**
L	ANSI150	(mm)	184	222	254	298	352	451
	ANSI300	(mm)	197	235	267	318	368	473
Flanges acc. to ANSI B16.5								
ØD	ANSI150	(mm)	110	125	150	190	230	280
	ANSI300	(mm)	124	155	165	210	254	318
ØK	ANSI150	(mm)	79	98	121	152	191	241
	ANSI300	(mm)	89	114	127	168	200	270
n x Ød	ANSI150	(mm)	4 x 16	4 x 16	4 x 19	4 x 19	8 x 19	8 x 22
	ANSI300	(mm)	4 x 19	4 x 22	8 x 19	8 x 22	8 x 22	12 x 22
Weights								
Fig. 470	ANSI150	(kg)	9	16	18	34	52	102
	ANSI300	(kg)	11	19	21	41	66	127
Fig. 471	ANSI150	(kg)	13	17	19	36	56	105
	ANSI300	(kg)	14	20	22	43	64	130
max. permissible thrust								
Fig. 470		(kN)	12,7	18,2		40,6		
Fig. 471		(kN)	18,2			29,6		40,6

Control valve in straightway form with flanges

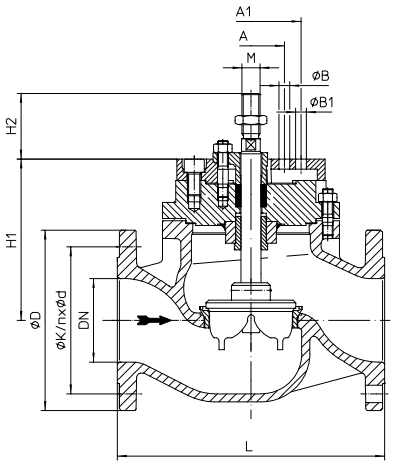


Fig. 470....90
DN200 / NPS 8"
(e.g.: DP34, PREMIO 5-25kN)

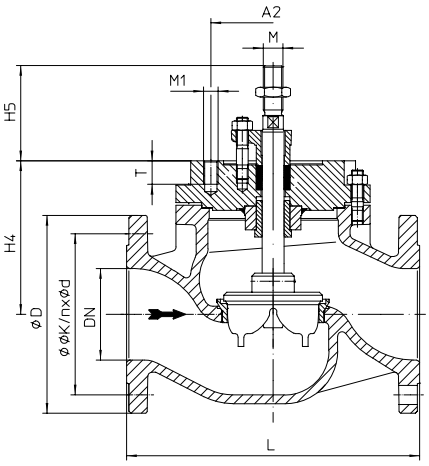


Fig. 470....90
DN200 / NPS 8"
(e.g.: AUMA 07.6-10.2)

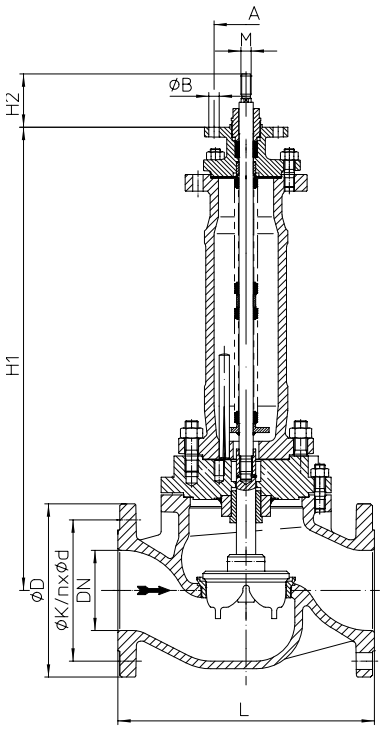


Fig. 471....90
DN200 / NPS 8" M16
(e.g.: PREMIO 5-25kN, AUMA 07.6-10.2)

DN			**200**	
NPS			**8"**	

Dimensions				
M	Fig. 470	(mm)	M20	
	Fig. 471	(mm)	M16	M20
H1	Fig. 470	(mm)	315	
	Fig. 471	(mm)	796	722
H2	Fig. 470	(mm)	98	
	Fig. 471	(mm)	83	98
H4	Fig. 470	(mm)	283	
H5	Fig. 470	(mm)	130	
A	Fig. 470 / Fig. 471	(mm)	100	
ØB	Fig. 470	(mm)	2 x 16	
A1	Fig. 470 / Fig. 471	(mm)	150	
ØB1	Fig. 470 / Fig. 471	(mm)	4 x 16	
A2	Fig. 470	(mm)	170	
M1	Fig. 470	(mm)	M20	
T	Fig. 470	(mm)	32	

Face-to-face dimension Form RF acc. to ANSI / ISA - S75.03-1992 (Face-to-face dimension for Form RTJ refer to page 26.)			
L	ANSI150	(mm)	543
	ANSI300	(mm)	568

Flanges acc. to ANSI B16.5			
ØD	ANSI150	(mm)	345
	ANSI300	(mm)	381
ØK	ANSI150	(mm)	298
	ANSI300	(mm)	330
n x Ød	ANSI150	(mm)	8 x 22
	ANSI300	(mm)	12 x 25

Weights				
Fig. 470	ANSI150	(kg)	203	
	ANSI300	(kg)	193	
Fig. 471	ANSI150	(kg)	202	201
	ANSI300	(kg)	219	218

max. permissible thrust		
Fig. 470	(kN)	59,1
Fig. 471	(kN)	34

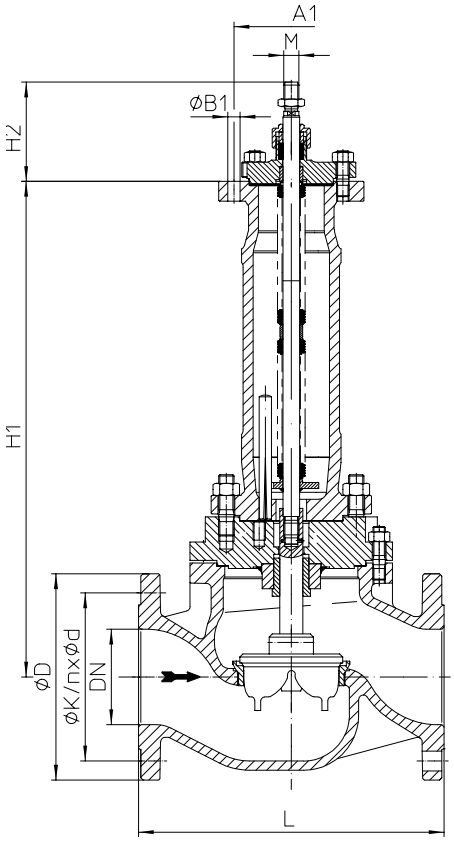


Fig. 471....90
DN200 / NPS 8" M20
(e.g.: DP34-34Tri)

Control valve in straightway form with flanges

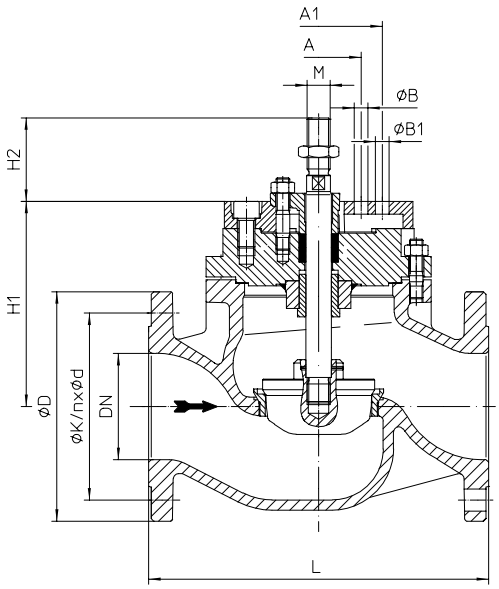


Fig. 470....90
DN150-200 / NPS 6"-8"
(e.g.: DP34T-34Tri)

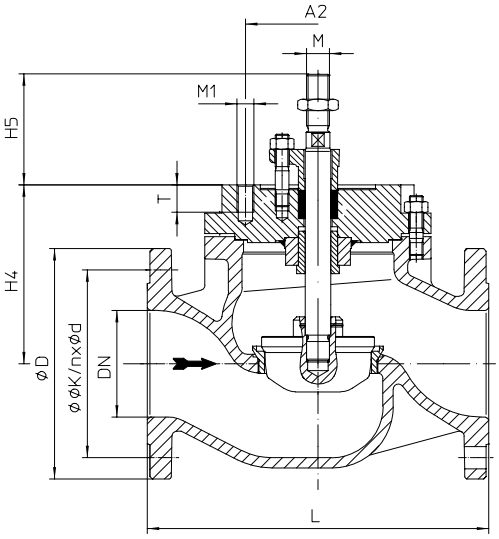


Fig. 470....90
DN150-200 / NPS 6"-8"
(e.g.: DP35; AUMA 14.2-14.6)

DN			150	200
NPS			6"	8"
Dimensions				
M	Fig. 470	(mm)	M27	
	Fig. 471	(mm)	M27	--
H1	Fig. 470	(mm)	278	315
	Fig. 471	(mm)	722	--
H2	Fig. 470	(mm)	98	
	Fig. 471	(mm)	185	--
H4	Fig. 470	(mm)	240	283
H5	Fig. 470	(mm)	130	
A	Fig. 470	(mm)	100	
ØB	Fig. 470	(mm)	16	
A1	Fig. 470	(mm)	150	
	Fig. 471	(mm)	150	--
ØB1	Fig. 470	(mm)	16	
	Fig. 471	(mm)	16	--
A2	Fig. 470	(mm)	170	
M1	Fig. 470	(mm)	M20	
T	Fig. 470	(mm)	32	
Face-to-face dimension Form RF acc. to ANSI / ISA - S75.03-1992 (Face-to-face dimension for Form RTJ refer to page 26.)				
L	ANSI150	(mm)	451	543
	ANSI300	(mm)	473	568
Flanges acc. to ANSI B16.5				
ØD	ANSI150	(mm)	280	345
	ANSI300	(mm)	318	381
ØK	ANSI150	(mm)	241	299
	ANSI300	(mm)	270	330
n x Ød	ANSI150	(mm)	8 x 22	8 x 22
	ANSI300	(mm)	12 x 22	12 x 26
Weights				
Fig. 470	ANSI150	(kg)	107	203
	ANSI300	(kg)	132	219
Fig. 471	ANSI150	(kg)	188	--
	ANSI300	(kg)	203	--
max. permissible thrust				
Fig. 470		(kN)	112	
Fig. 471		(kN)	70	

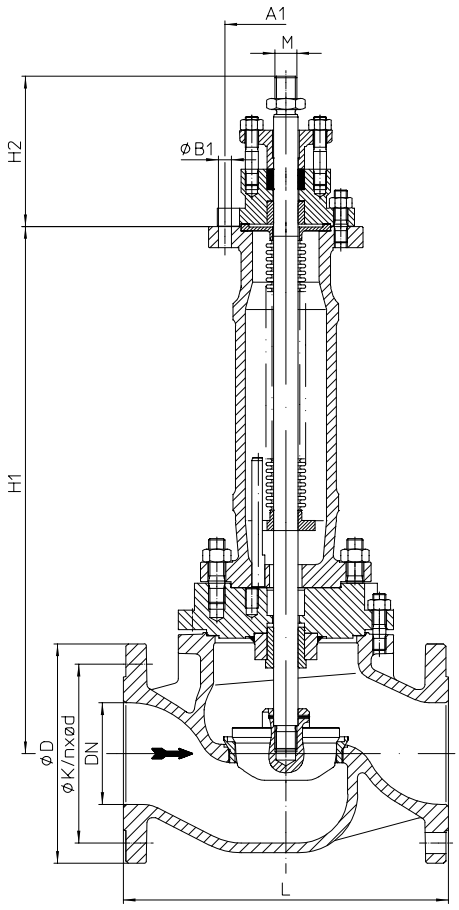


Fig. 471....90
DN150 / NPS 6"
(e.g.: DP34T-35; AUMA 14.2)

Control valve in straightway form with butt weld ends

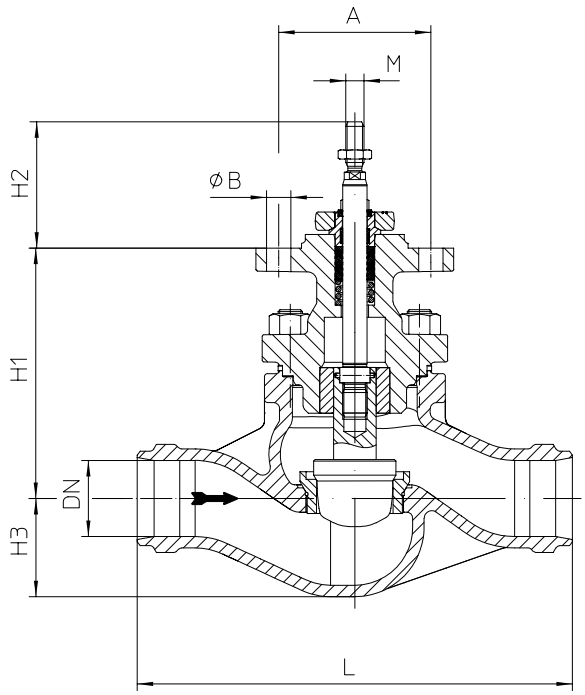


Fig. 470...4....90
DN25-150 / NPS 1"-6"
(e.g.: DP32-34; PREMIO 2,2-25kN; AUMA 07.2-10.2)

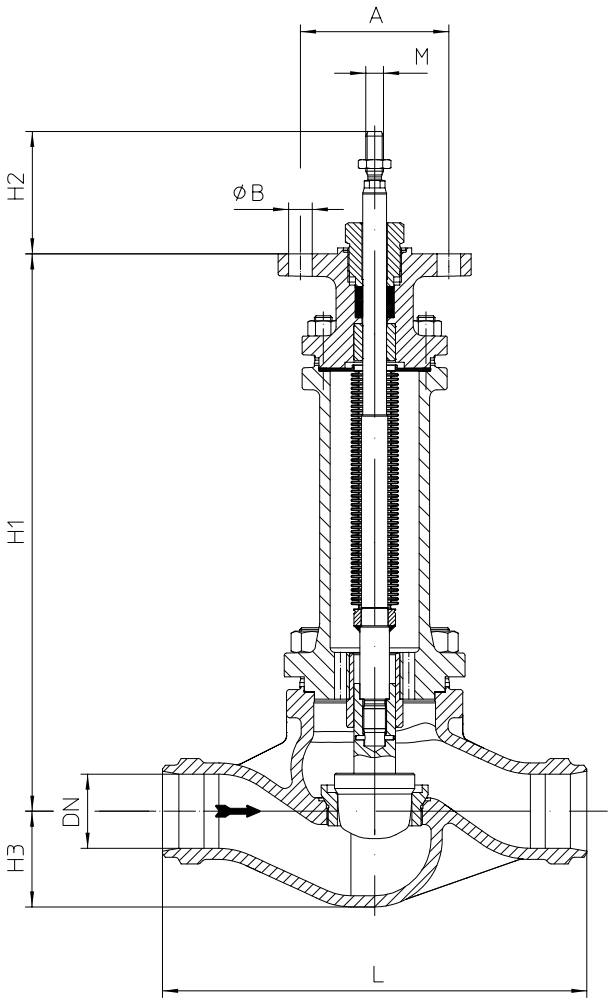


Fig. 471...4....90
DN25-150 / NPS 1"-6"
(e.g.: DP32-34; PREMIO 2,2-25kN; AUMA 07.2-10.2)

DN			25	40	50	80	100	150
NPS			1"	1 1/2"	2"	3"	4"	6"
Dimensions								
M	Fig. 470	(mm)	M10	M12		M16 x 1,5		
	Fig. 471	(mm)	M12			M14 x 1,5		
H1	Fig. 470	(mm)	134	165	165	194	196	256
	Fig. 471	(mm)	291	376	376	394	424	583
H2	Fig. 470 / 471	(mm)	83					
H2	Fig. 470 / 471	(mm)	50	70	70	100	115	160
A	Fig. 470 / 471	(mm)	100					
ØB	Fig. 470 / 471	(mm)	16					
Face-to-face dimension according to ANSI / ISA - S75.15-1994								
L		(mm)	210	251	286	337	394	508
								Butt weld ends similar to ANSI B16.25 (refer to page 27)
Weights								
Fig. 470	ANSI300	(kg)	8	14	15	28	43	82
Fig. 471	ANSI300	(kg)	9	16	17	33	48	96
max. permissible thrust								
Fig. 470		(kN)	12,7	18,2		40,6		
Fig. 471		(kN)	18,2			29,6		40,6

Control valve in straightway form with butt weld ends

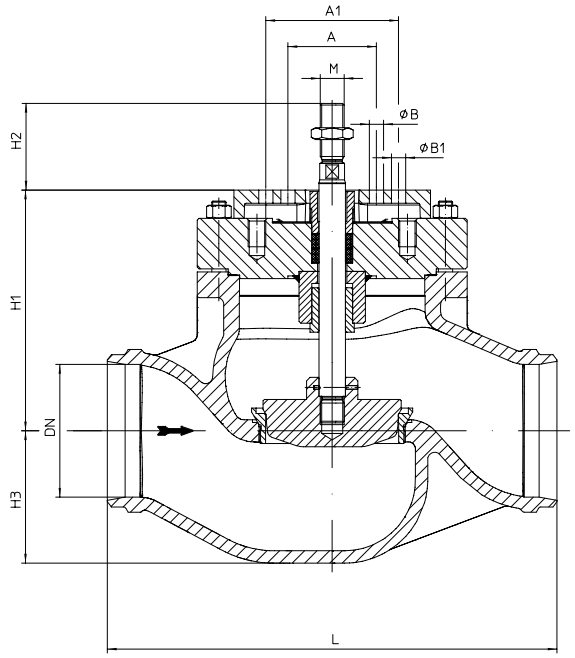


Fig. 470...4....90
DN150 / NPS 6"
(e.g.: DP34T-34Tri)

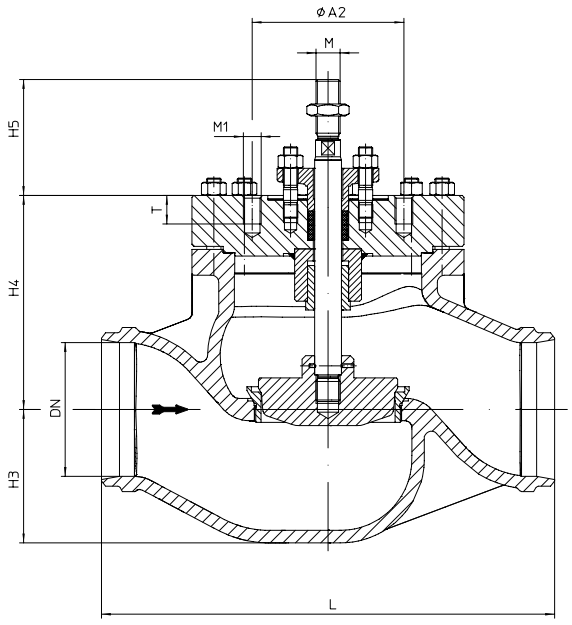


Fig. 470...4....90
DN150 / NPS 6"
(e.g.: DP35; AUMA 14.2-14.6)

DN	150
NPS	6"

Dimensions			
M	Fig. 470 / 471	(mm)	M27
H1	Fig. 470	(mm)	272
	Fig. 471	(mm)	679
H2	Fig. 470	(mm)	98
	Fig. 471	(mm)	185
H3	Fig. 470 / 471	(mm)	160
H4	Fig. 470	(mm)	240
H5	Fig. 470	(mm)	130
A	Fig. 470	(mm)	100
n x ØB	Fig. 470	(mm)	2 x 16
A1	Fig. 470 / 471	(mm)	150
n x ØB1	Fig. 470 / 471	(mm)	4 x 16
A2	Fig. 470	(mm)	170
n x M1	Fig. 470	(mm)	8 x M20
T	Fig. 470	(mm)	32

Face-to-face dimension according to ANSI / ISA - S75.15-1994		
L	(mm)	508
Butt weld ends similar to ANSI B16.25 (refer to page 27)		

Weights			
Fig. 470	ANSI300	(kg)	98
Fig. 471	ANSI300	(kg)	131

max. permissible thrust		
Fig. 470	(kN)	112
Fig. 471	(kN)	70

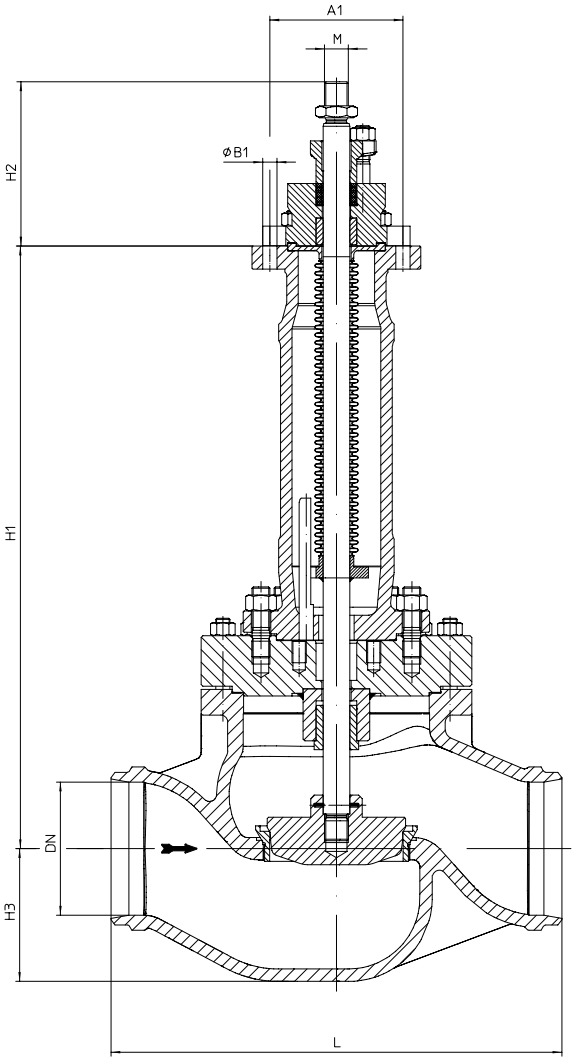
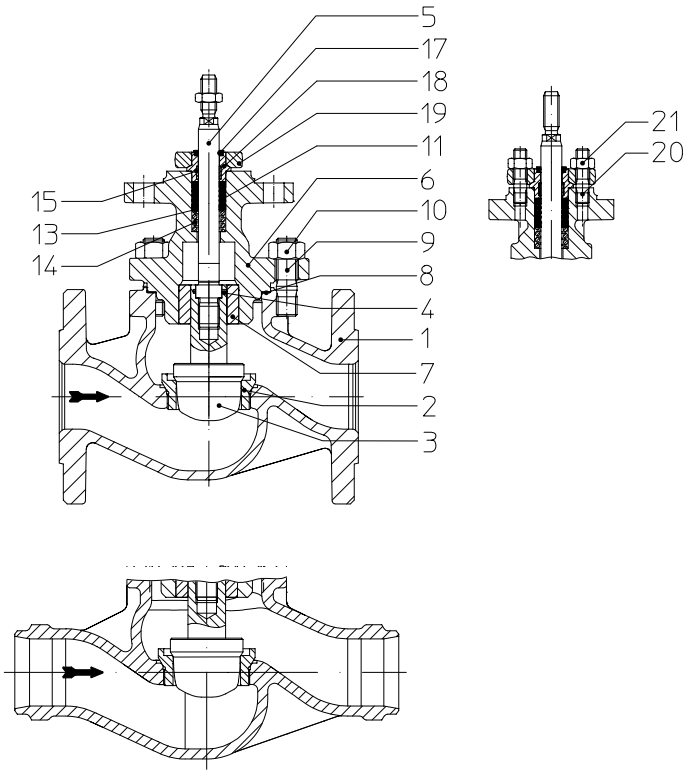
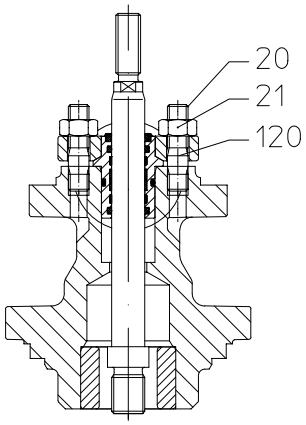


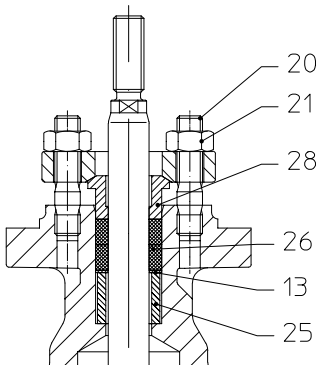
Fig. 471...4....90
DN150 / NPS 6"
(e.g.: DP34T-35; AUMA 14.2)



I. PTFE-V-ring unit



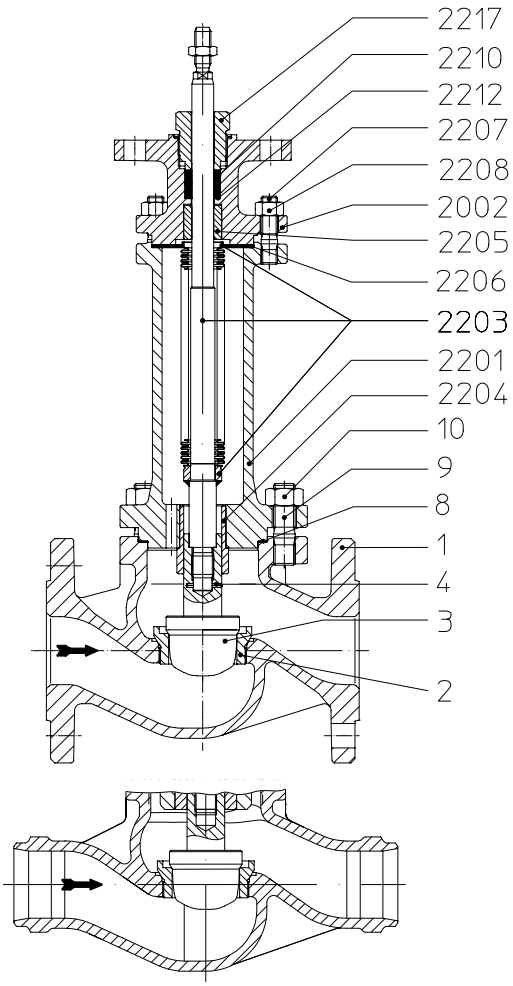
I. EPDM-sealing



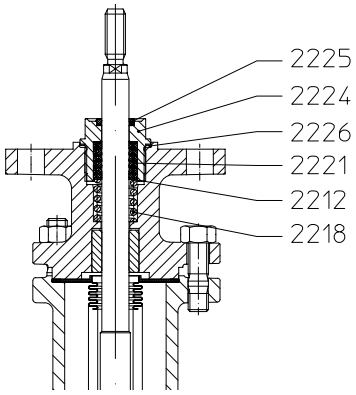
II. PTFE- / pure graphite-packing

Pos.	Sp.p.	Description	Fig. 32.470...90 / Fig. 35.470...90
1		Body	SA216WCB
2	x	Seat ring	SA276Gr.420
3	x	Plug	SA276Gr.420
4	x	Clamping sleeve	A2
5	x	Spindle	SA276Gr.420
6		Mounting bonnet	SA216WCB
7		Giude bushing	SA276Gr.420 (hardened)
8	x	Gasket	Pure graphite (CrNi laminated with graphite)
9		Stud	SA193-B7
10		Hexagon nuts	SA194-2H
11	Set: refer to Pos. 100	V-ring unit	PTFE
13		Washer	SA240Gr.304
14		Compression spring	AISI301 A313Gr.301
15		Guide bush	PTFE25%C
17		Scraper	PTFE
18		Stem guiding	AISI303
19		Packing box flange	SA105
20		Stud	A4-70
21		Hexagon nuts	A4
25	x	Distance bush	SA276Gr.420
26	x	Packing ring	PTFE or Pure graphite
28	x	Packing follower	SA276Gr.420

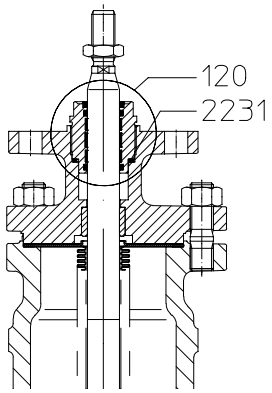
Stem sealings Fig. 470....90			
100	x	V-ring unit (set)	Set of: Pos. 11, 13, 14, 15, 17, 18
120	x	EPDM-sealing, cpl.	EPDM / AISI303
26	x	Packing ring	PTFE / SA276Gr.420
26	x	Packing ring	Pure graphite / SA276Gr.420
	└ Spare parts		



III. Stainless steel bellows seal with PTFE-packing / Pure graphite-packing



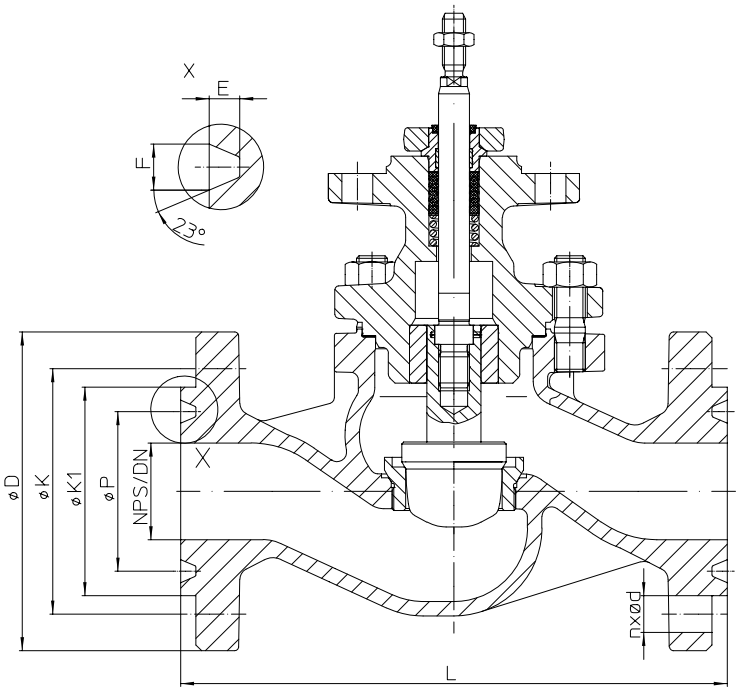
III. Stainless steel-bellow with V-ring unit



III. Stainless steel bellows seal with EPDM-sealing

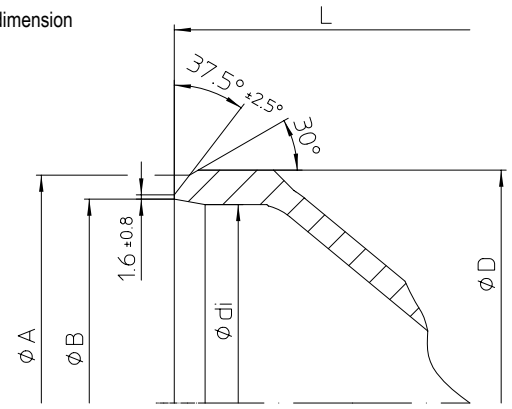
Pos.	Sp.p.	Description	Fig. 32.471...90 / Fig. 35.471...90
1		Body	SA216WCB
2	x	Seat ring	SA276Gr.420
3	x	Plug	SA276Gr.420
4	x	Clamping sleeve	A2
8	x	Gasket	Pure graphite (CrNi laminated with graphite)
9		Stud	SA193-B7
10		Hexagon nuts	SA194-2H
2201		Bellows housing	SA216WCB
2202		Mounting bonnet	SA216WCB
2203	x	Stem- / Bellows unit	SA276Gr.420 / SA240Gr.321
2204		Giude bushing	SA276Gr.420 (hardened)
2205		Giude bushing	SA276Gr.420 (hardened)
2206	x	Gasket	Pure graphite (CrNi laminated with graphite)
2207		Stud	SA193-B7
2208		Hexagon nuts	SA194-2H
2210	x	Packing ring	Pure graphite
2212	x	Washer	SA240Gr.304
2217	x	Screw joint	AISI303
2218	Set: refer to Pos. 100	Compression spring	AISI301
2212		Washer	SA240Gr.304
2221		V-ring unit	PTFE
2224		Screw joint	AISI303
2225		Scraper	PTFE
2226		Gasket	SA479Gr.316Ti
2231	x	Gasket	Cu

Stem sealings Fig. 471....90			
2010	x	Packing ring	Pure graphite or PTFE
100	x	V-ring unit (set)	Set of: Pos. 2212, 2218, 2221, 2224, 2225, 2226
120	x	EPDM-sealing, cpl.	EPDM / AISI303
	└ Spare parts		



DN			25	40	50	80	100	150	200
NPS			1"	1 1/2"	2"	3"	4"	6"	8"
Face-to-face dimension Form RTJ									
L	ANSI150	(mm)	197	235	267	311	365	464	556
	ANSI300	(mm)	210	248	283	334	384	489	584
Flanges acc. to ANSI B16.5 (Ring-Joint Facing)									
øP	ANSI150	(mm)	47,6	65,1	82,6	114	149	194	248
	ANSI300	(mm)	50,8	68,3	82,6	124	149	211	270
E	ANSI150	(mm)	6,4	6,4	6,4	6,4	6,4	6,4	6,4
	ANSI300	(mm)	6,4	6,4	7,9	7,9	7,9	7,9	7,9
F	ANSI150	(mm)	8,7	8,7	8,7	8,7	8,7	8,7	8,7
	ANSI300	(mm)	8,7	8,7	11,9	11,9	11,9	11,9	11,9
ø K1	ANSI150	(mm)	63,5	82,5	102	133	171	219	273
	ANSI300	(mm)	70	90,5	108	146	175	241	302
øD	ANSI150	(mm)	110	125	150	190	230	280	345
	ANSI300	(mm)	124	155	165	210	254	318	381
øK	ANSI150	(mm)	79	98	121	152	191	241	299
	ANSI300	(mm)	89	114	127	168	200	270	330
n x ød	ANSI150	(n x mm)	4 x 16	4 x 16	4 x 19	4 x 19	8 x 19	8 x 22	8 x 22
	ANSI300	(n x mm)	4 x 19	4 x 22	8 x 19	8 x 22	8 x 22	12 x 22	12 x 26

L = Face-to-face dimension



DN			25	40	50	80	100	150
NPS			1"	1 1/2"	2"	3"	4"	6"
Butt weld ends similar to ANSI B16.25 (Schedule 40)								
L	Fig. 470 / 471	(mm)	210	251	286	337	394	508
ØA	Fig. 470 / 471	(mm)	33,5	48,3	60,4	91,3	117,5	172,2
ØB	Fig. 470 / 471	(mm)	**26,7**	**40,9**	**52,5**	**77,9**	**102,3**	**154,1**
Ødi	Fig. 470 / 471	(mm)	25	40	50	80	100	150
ØD	Fig. 470 / 471	(mm)	40	57	67	100	125	176
Butt weld ends similar to ANSI B16.25 (Schedule 80)								
L	Fig. 470 / 471	(mm)	210	251	286	337	394	508
ØA	Fig. 470 / 471	(mm)	33,5	48,3	60,4	91,3	117,5	172,2
ØB	Fig. 470 / 471	(mm)	**24,3**	**38,1**	**49,3**	**73,7**	**97,2**	**146,4**
Ødi	Fig. 470 / 471	(mm)	25	40	50	80	100	150
ØD	Fig. 470 / 471	(mm)	40	57	67	100	125	176

Face-to-face dimension according to ANSI / ISA - S75.15-1994
Butt weld ends similar to ANSI B16.25 (Schedule 40 or Schedule 80)
The material used for ARI valves with butt weld ends are: SA216WCB acc. to ANSI B16.5

Based on our experience we recommend electric welding process for connecting valves or strainers with tubes or with each other.

Lime based electrodes with an appropriate composite material should be used as filler material for welding.

Gas welding should be avoided.

Because of the different material compositions and wall thickness of the steam traps and the pipe gas welding shall not be applied. Quenching cracks and coarse grain structure may develop.

myValve® - Your Valve Sizing-Program.

myValve® is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.

Contents:

Module ARI-control valves STEVI-calculation
- Sizing (calculation of flow quantity Kv, volume flow Q, pressure drop Δp, sound level and selecting the valve.)

Media:

Integrated media-data bank (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 data bank.
- Settings with over pressure or absolute pressure.
- All ARI valves are integrated in a data bank.
- 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).
- Extensive catalogue extending over several product groups.

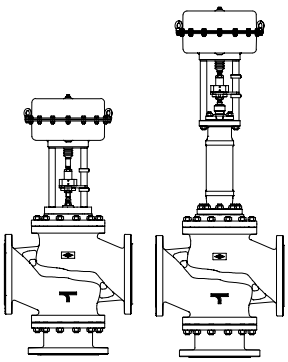
System Requirements:

Windows operating systems, Linux, etc.

With pneumatic and electric actuators

ARI-STEVI® 423 / 463
Pneumatic actuator
ARI-DP 34 - 34T

- 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 4

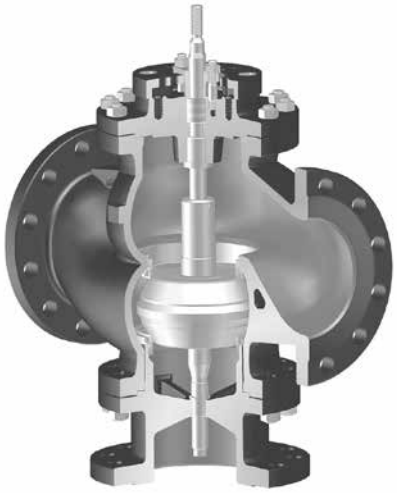


Fig. 423

ARI-STEVI® 423 / 463
Electric actuator
ARI-PREMIO 5 - 25 kN
ARI-PREMIO-Plus 2G 5 - 25 kN

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

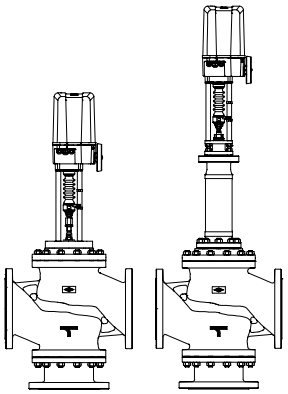


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Fig. 463

ARI-STEVI® 423 / 463
Electric actuator
AUMA SAR 07.6 - 14.6

- 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

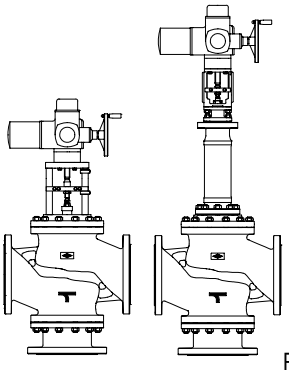

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Figure	Nominal pressure	Material	Nominal diameter
12.423 / 12.463	PN16	EN-JL1040	DN200-250
22.423 / 22.463	PN16	EN-JS1049	DN200-250
22.423	PN16	EN-JS1049	DN300
34.423 / 34.463	PN25	1.0619+N	DN200-250
35.423 / 35.463	PN40	1.0619+N	DN200-250
Other materials and versions on request.			

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 permission acc. to TRB 801 No. 45 is available.
(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.

Resistance and fitness must be verified, contact manufacturer for information (refer to Product overview and Resistance list).

Stem sealing

Fig. 423

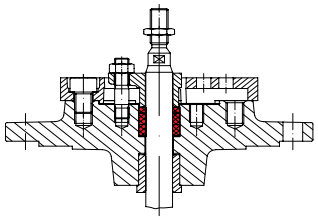
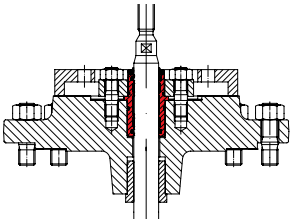
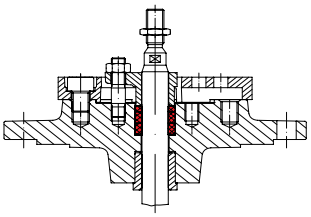
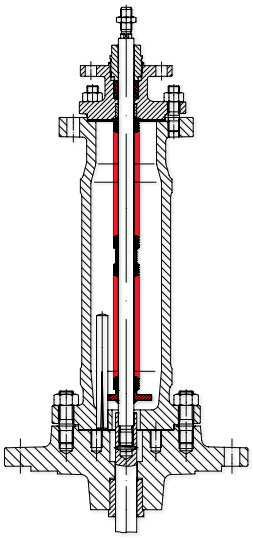
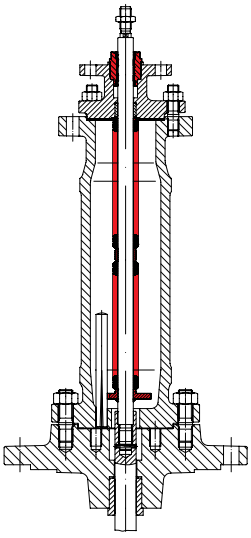
standard	optional	
DN200-300	DN200-300	DN200-300
		
II. PTFE-packing -10°C to 250°C	**I. EPDM-sealing** -10°C to 150°C (allowed for water and steam up to 180°C)	**II. Pure graphite-packing** -10°C to 450°C

Fig. 463

standard	optional
DN200-250	DN200-250
	
III. Stainless steel-bellow with pure graphite-packing -60°C to 450°C	**III. Stainless steel bellows seal with EPDM-sealing** -60°C to 150°C (allowed for water and steam up to 180°C)

Pressure-temperature-ratings

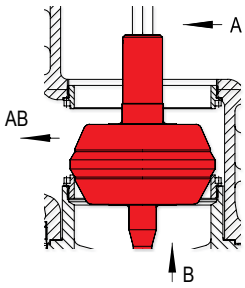
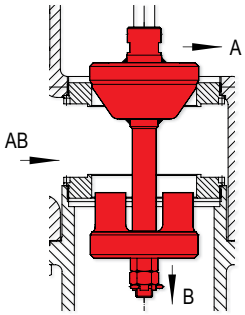
Intermediate values for max. permissible operational pressures can be determined by linear interpolation of the given temperature / pressure chart.

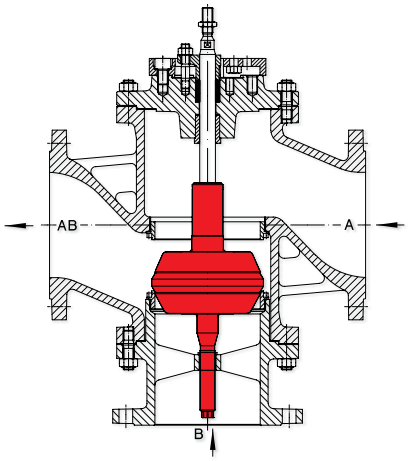
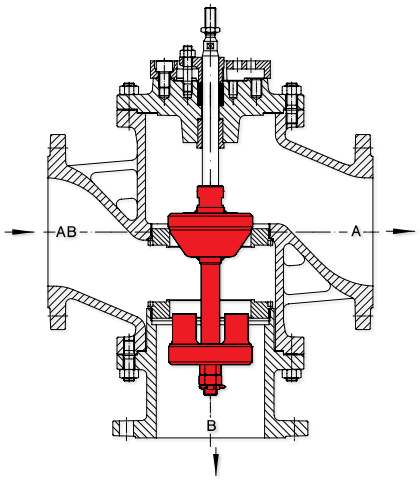
acc. to DIN EN 1092-2			-60°C to <-10°C [1]	-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
EN-JL1040	PN16	(bar)	--	16	14,4	12,8	11,2	9,6	--	--	--
EN-JS1049	PN16	(bar)	on request	16	15,5	14,7	13,9	12,8	11,2	--	--

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	PN25	(bar)	18,7	25	23,9	22	20	17,2	16	14,8	8,2
1.0619+N	PN40	(bar)	30	40	38,1	35	32	28	25,7	23,8	13,1

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	PN40	(bar)	40	40	36,3	33,7	31,8	29,7	28,5	27,4	--

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

Plug design standard			Guiding	Rangeability
standard				
AB ◀┴ A B **Mixing plug** **with two screwed seat rings** • Parabolic plug, metal seat; V-port plug, metal seat	- Leakage class IV acc. to DIN EN 60534-4 - Flow characteristic: linear (lin) / linear (lin)		Stem / Plug shaft	30 : 1
Plug design optional			**Guiding**	**Rangeability**
AB ▷┬ A B **Diverting plug** **with two screwed seat rings** • Parabolic plug, metal seat; V-port plug, metal seat	- Leakage class IV acc. to DIN EN 60534-4 - Flow characteristic: linear (lin) / linear (lin)		Stem / Seat ring	30 : 1

Operation		
AB ◀┴ A B  Design with mixing plug	AB ▷┬ A B  Design with diverting plug (Attentionn: reduced Kvs-value)	ARI-Control valves are suitable for use with pneumatic or electric actuators. According to the application two different variations are possible (see drawings on the left) Design with mixing plug as standard. Select when the valve is used for mixing service (2 inlets, 1 outlet). Design with diverting plug will be used exclusively for diverting service.

Control valve in 3-way-form with pneumatic actuator DP (3-way mixing valve / 3-way diverting valve)

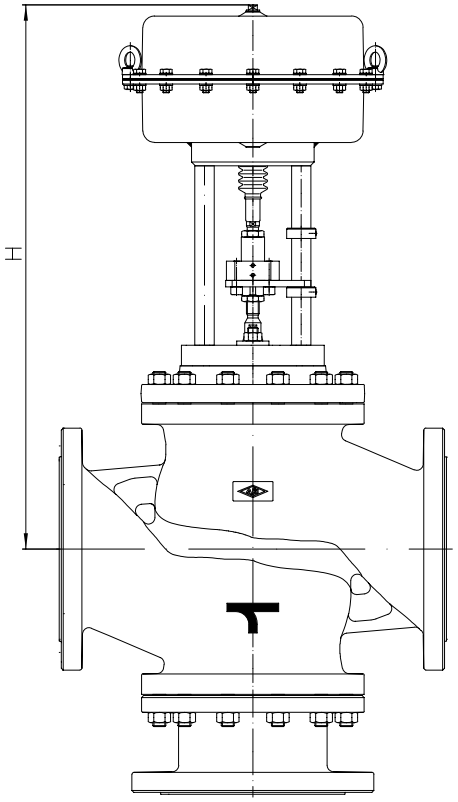


Fig. 423

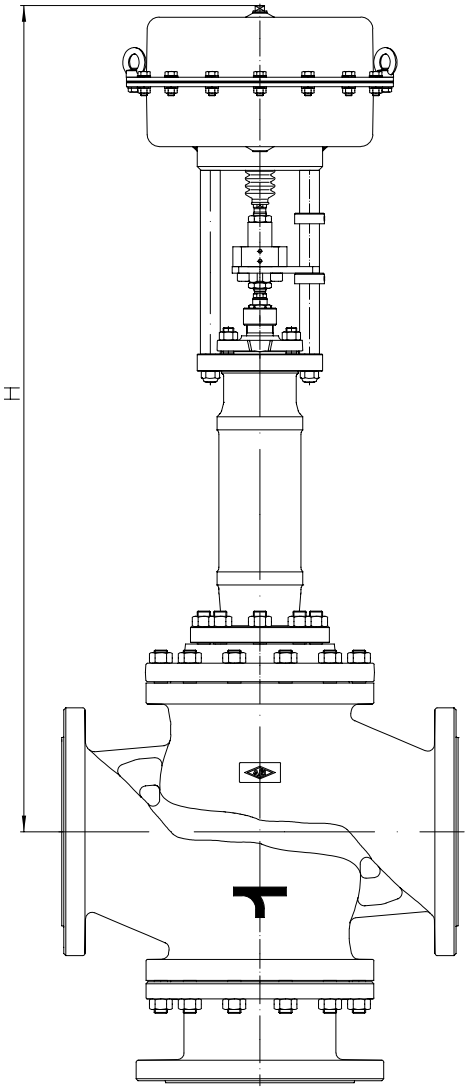
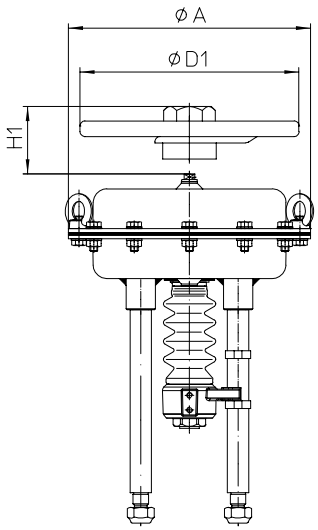


Fig. 463

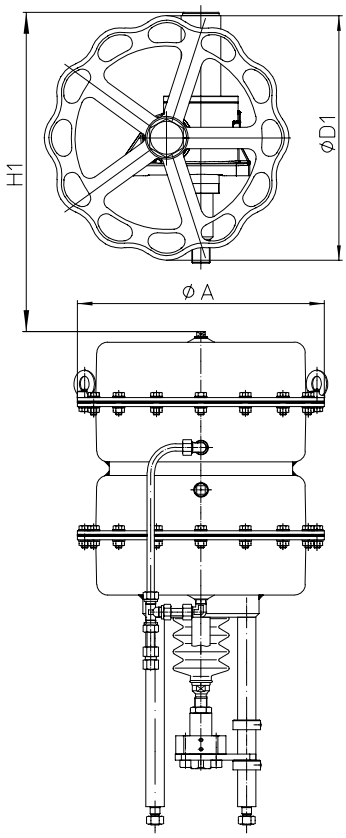
Heights and weights

DN				200	250	300
Fig. 423	**DP34**	H	(mm)	845	905	932
		PN16	(kg)	280	409	403
		PN40	(kg)	319	492	--
	DP34T	H	(mm)	1095	1155	1149
		PN16	(kg)	351	480	474
		PN 40	(kg)	390	563	--
Fig. 463	**DP34**	H	(mm)	1285	1345	--
		PN16	(kg)	302	432	--
		PN 40	(kg)	328	514	--
	DP34T	H	(mm)	1498	1558	--
		PN16	(kg)	373	503	--
		PN 40	(kg)	399	585	--

Further dimensions refer to pages 16-17.



DP32 / DP33 / DP34



DP34T

Actuator data			DP34	DP34T
Ø A		(mm)	405	
Effective diaphragm area		(cm^2)	800	1600
Top mounted handwheel	Ø D1	(mm)	400	
	H1	(mm)	442	635
	Weight	(kg)	17	41
Further technical data of the actuator: refer to data sheet ARI-DP.				

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							200		250		300	
AB A B **Mixing function**	Kvs-value		standard			(m^3/h)		**630**		**1000**		**1500**
			reduced			(m^3/h)	400		630		1000	
	max. diff. pressure [1]					(bar)	10		10		10	
	Seat-Ø A/B					(mm)	150	200	200	250	250	
	Travel					(mm)	50	65	65		65	75
DP34 800 cm² **Spring closes on air failure A -> AB** (stem retracting by spring) or **Spring closes on air failure B -> AB** (stem extending by spring)	Spring range (bar)	0,8-2,4	Air supply pressure min. (bar) [2]	3,2	I./II.	(bar)	2,5					
					III.	(bar)	2,5					
		1,0-2,0		3,0	I./II.	(bar)		1,8	1,8	1,1	1,1	
					III.	(bar)		1,8	1,8	1,1		
		1,5-3,0		4,5	I./II.	(bar)	5,6					
					III.	(bar)	5,6					
		2,0-4,0		6,0	I./II.	(bar)	7,8	4,3	4,3	2,6	2,6	
					III.	(bar)	7,8	4,3	4,3	2,6		

DN							200		250	
AB A B **Diverting function**	Kvs-value		standard			(m^3/h)		**355**		**560**
			reduced			(m^3/h)	212		355	
	max. diff. pressure [1]					(bar)	10		10	
	Seat-Ø A/B					(mm)	115	150	150	180
	Travel					(mm)	50		50	65
DP34 800 cm² **Spring closes on air failure AB -> A** (stem extending by spring) or **Spring closes on air failure AB -> B** (stem retracting by spring)	Spring range (bar)	0,4-1,2	Air supply pressure min. (bar) [2]	1,6	I./II.	(bar)	1,6			
					III.	(bar)	1,6 a)			
		0,8-2,4		3,2	I./II.	(bar)	4,5	2,5	2,5	
					III.	(bar)	4,6	2,5	2,5	
		1,0-2,0		3,0	I./II.	(bar)				2,3
					III.	(bar)				2,3
		1,5-3,0		4,5	I./II.	(bar)	9,8	5,6	5,6	
					III.	(bar)	9,8	5,6	5,6	
		2,0-4,0		6,0	I./II.	(bar)	13,5	7,8	7,8	5,3
					III.	(bar)	13,5	7,8	7,8	5,3

I. Fig. 423: EPDM-sealing
II. Fig. 423: PTFE- / pure graphite-packing
III. Fig. 463: Bellows seal

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN							200		250		300	
AB A B Mixing function	Kvs-value	standard				(m³/h)		630		1000		1500
		reduced				(m³/h)	400		630		1000	
	max. diff. pressure [1]					(bar)	10		10		10	
	Seat-Ø A/B					(mm)	150	200	200	250	250	
	Travel					(mm)	50	65	65		65	75
DP34T 1600 cm² Spring closes on air failure A -> AB (stem retracting by spring) or Spring closes on air failure B -> AB (stem extending by spring)	Spring range (bar)	0,4-1,2	Air supply pressure min. (bar) [2]	1,6	I./II.	(bar)	2,5 b)	1,3 b)	1,3 b)			
					III.	(bar)	2,5 d)	1,3 d)	1,3 d)			
		0,55-2,4		3,0	I./II.	(bar)						1,2
		0,8-2,4		3,2	I./II.	(bar)	6					
					III.	(bar)	6 b)					
		1,0-2,0		3,0	I./II.	(bar)		4,3 a)	4,3 a)	2,6 a)	2,6 a)	
					III.	(bar)		4,3 c)	4,3 c)	2,7 c)		
		1,5-3,0		4,5	I./II.	(bar)	12,2					
					III.	(bar)	12,2 a)					
		2,0-4,0		6,0	I./II.	(bar)	16,6	9,2	9,2	5,8	5,8	
					III.	(bar)	16,6	9,2	9,2	5,8		

DN							200		250	
AB A B Diverting function	Kvs-value	standard				(m³/h)		355		560
		reduced				(m³/h)	212		355	
	max. diff. pressure [1]					(bar)	10		10	
	Seat-Ø A/B					(mm)	115	150	150	180
	Travel					(mm)	50		50	65
DP34T 1600 cm² Spring closes on air failure AB -> A (stem extending by spring) or Spring closes on air failure AB -> B (stem retracting by spring)	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar) [2]	1,2	I./II.	(bar)	1,6 b)			
					III.	(bar)	1,6 e)			
		0,4-1,2		1,6	I./II.	(bar)	4,5 b)	2,5 b)	2,5 b)	1,7 b)
					III.	(bar)	4,6 d)	2,5 d)	2,5 d)	1,7 d)
		0,8-2,4		3,2	I./II.	(bar)	10,5	6	6	
					III.	(bar)	10,5 b)	6,1 b)	6,1 b)	
		1,0-2,0		3,0	I./II.	(bar)				5,3 a)
					III.	(bar)				5,3 c)
		1,5-3,0		4,5	I./II.	(bar)	20,9	12,2	12,2	
					III.	(bar)	21 a)	12,2 a)	12,2 a)	
		2,0-4,0		6	I./II.	(bar)	28,4	16,6	16,6	11,4
					III.	(bar)	28,4	16,6	16,6	11,5

I. Fig. 423: EPDM-sealing
II. Fig. 423: PTFE- / pure graphite-packing
III. Fig. 463: Bellows seal

[1] max. differential pressure drop

[2] Air supply pressure max. to actuator: 6 bar Restriction: a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar

Control valve in 3-way-form with electric actuator ARI-PREMIO (3-way mixing valve / 3-way diverting valve)

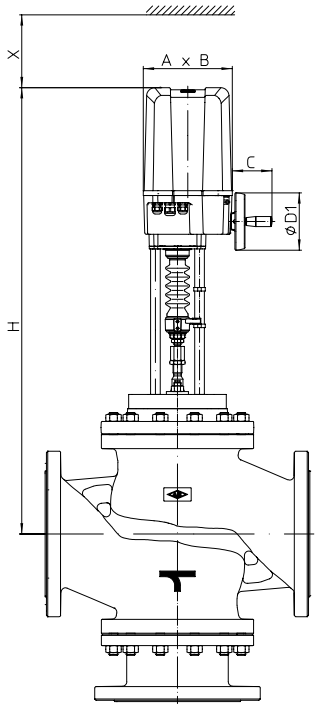


Fig. 423

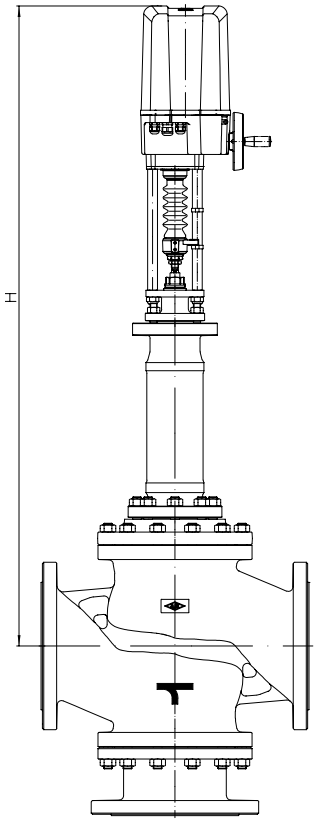


Fig. 463

Actuator data		5 kN	12 - 25 kN
A	(mm)	171	210
B	(mm)	156	184
C	(mm)	50	90
Ø D1	(mm)	90	130
X	(mm)	150	200

Further technical data of the actuator: refer to data sheet ARI-PREMIO/PREMIO-Plus 2G

Heights and weights

DN				200	250	300
Fig. 423	**5 kN**	H	(mm)	843	903	--
		PN16	(kg)	242	371	--
		PN25/40	(kg)	281	454	--
	12 kN 15 kN	H	(mm)	977	1057	1064
		PN16	(kg)	246	375	369
		PN25/40	(kg)	285	458	--
	25 kN	H	(mm)	953	1013	1064
		PN16	(kg)	247	376	370
		PN25/40	(kg)	286	459	--
Fig. 463	**5 kN**	H	(mm)	1265	1325	--
		PN16	(kg)	264	394	--
		PN25/40	(kg)	290	476	--
	12 kN 15 kN	H	(mm)	1434	1494	--
		PN16	(kg)	268	398	--
		PN25/40	(kg)	294	480	--
	25 kN	H	(mm)	1434	1494	--
		PN16	(kg)	269	399	--
		PN25/40	(kg)	295	481	--

Further dimensions refer to pages 16-17.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

DN				200		250		300	
AB A B **Mixing function**	Kvs-value	standard	(m^3/h)		**630**		**1000**		**1500**
		reduced	(m^3/h)	400		630		1000	
	max. diff. pressure [1]		(bar)	10		10		10	
	Seat-Ø A/B		(mm)	150	200	200	250	250	
	Travel		(mm)	50	65	65		65	75
5 kN	Closing pressure	I./II./III.	(bar)	1,8					
	Operating time		(s)	132					
	Operating speed		(mm/s)	0,38					
12 kN	Closing pressure	I./II./III.	(bar)	5,7	3,1	3,1	1,9	1,9	1,9
	Operating time		(s)	132	171	171		171	197
	Operating speed		(mm/s)	0,38					
15 kN	Closing pressure	I./II./III.	(bar)	7,4	4	4	2,5	2,5	2,5
	Operating time		(s)	132	171	171		171	197
	Operating speed		(mm/s)	0,38					
25 kN	Closing pressure	I./II./III.	(bar)	13	7,2	7,2	4,5	4,5	4,5
	Operating time		(s)	132	171	171	171	171	197
	Operating speed		(mm/s)	0,38					

DN				200		250	
AB A B **Diverting function**	Kvs-value	standard	(m^3/h)		**355**		**560**
		reduced	(m^3/h)	212		355	
	max. diff. pressure [1]		(bar)	10		10	
	Seat-Ø A/B		(mm)	115	150	150	180
	Travel		(mm)	50		50	65
5 kN	Closing pressure	I./II./III.	(bar)	3,3	1,8	1,8	
	Operating time		(s)	132		132	
	Operating speed		(mm/s)	0,38			
12 kN	Closing pressure	I./II./III.	(bar)	10	5,7	5,7	3,9
	Operating time		(s)	132		132	171
	Operating speed		(mm/s)	0,38			
15 kN	Closing pressure	I./II./III.	(bar)	12,8	7,4	7,4	5,1
	Operating time		(s)	132		132	171
	Operating speed		(mm/s)	0,38			
25 kN	Closing pressure	I./II./III.	(bar)	22,3	13	13	9
	Operating time		(s)	132	132	132	171
	Operating speed		(mm/s)	0,38			
Further operating speeds: refer to data sheet ARI-PREMIO/PREMIO-Plus 2G							

$$\text{Operating time [s]} = \frac{\text{Travel [mm]}}{\text{Operating speed [mm/s]}}$$

I. Fig. 423: EPDM-sealing
II. Fig. 423: PTFE- / pure graphite-packing
III. Fig. 463: Bellows seal

[1] max. differential pressure drop

Control valve in 3-way-form with electric actuator Auma SAR (MATIC) (3-way mixing valve / 3-way diverting valve)

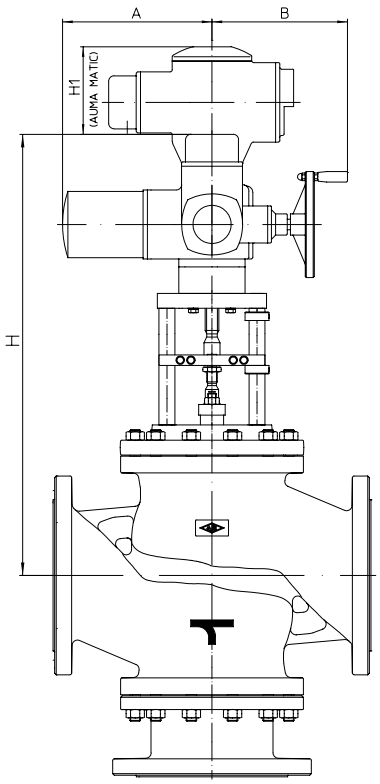


Fig. 423

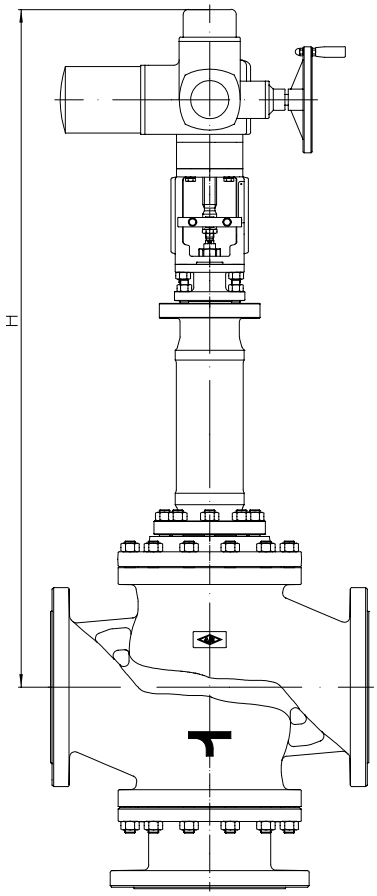


Fig. 463

Actuator data		SAR 07.6	SAR 10.2	SAR 14.2	SAR 14.6
A	(mm)	265	283	389	389
B	(mm)	249	254	336	336
H1 (AUMA MATIC)	(mm)	130		182	182
Motor voltage: 400V 50Hz 3~ (Other voltages on request) Technical data for actuator refer to price list.					

Heights and weights

DN				200	250	300
Fig. 423	**SAR 07.6**	H	(mm)	845	905	936
		PN16	(kg)	268	397	391
		PN40	(kg)	307	480	--
	SAR 10.2	H	(mm)	857	917	951
		PN16	(kg)	270	399	393
		PN40	(kg)	309	482	--
	SAR 14.2	H	(mm)	932	992	977
		PN16	(kg)	301	430	424
		PN40	(kg)	340	513	--
	SAR 14.6 LE100	H	(mm)	913	1005	--
		PN16	(kg)	347	476	--
		PN40	(kg)	386	559	--
Fig. 463	**SAR 07.6**	H	(mm)	1290	1350	--
		PN16	(kg)	286	416	--
		PN40	(kg)	312	498	--
	SAR 10.2	H	(mm)	1302	1362	--
		PN16	(kg)	288	418	--
		PN40	(kg)	314	500	--

(For version with AUMA SAR Ex other heights.)

Further dimensions refer to pages 16-17.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

Fig. 423

DN					200		250		300	
AB ◁ A, B **Mixing function**	Kvs-value	standard		(m^3/h)		**630**		**1000**		**1500**
		reduced		(m^3/h)	400		630		1000	
	max. diff. pressure [1]			(bar)	10		10		10	
	Seat-Ø A/B			(mm)	150	200	200	250	250	
	Travel			(mm)	50	65	65		65	75
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off	(bar)	11,9	6,6	6,6	4,1	4,1	4,1
			controlling [2]	(bar)	5,5	2,9	2,9	1,8	2,2	2,2
	Torque			(Nm)	60		60		60	
	Operating time (50 Hz)			(s)	55	71	71		71	82
	Output drive			(rpm)	11		11		11	
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I./II.	shut off	(bar)	24,8	13,9	13,9	8,8	8,8	8,8
			controlling [2]	(bar)	11,9	6,6	6,6	4,1	4,5	4,5
	Torque			(Nm)	120		120		120	
	Operating time (50 Hz)			(s)	55	71	71		71	82
	Output drive			(rpm)	11		11		11	
SAR 14.2 Output drive Form A TR 30 x 6 - LH	Closing pressure	I./II.	shut off	(bar)	40	23,9	23,9	15,3	15,2	15,2
			controlling [2]	(bar)	20	11,1	11,1	7,1	7,4	7,4
	Torque			(Nm)	250		250		250	
	Operating time (50 Hz)			(s)	63	59	59		59	68
	Output drive			(rpm)	8	11	11		11	
SAR 14.6 **with LE100.1** Output drive Form A TR 40 x 7 - LH	Closing pressure	I./II.	shut off	(bar)	40	31,6	31,6	20,2		
			controlling [2]	(bar)	27,7	15,5	15,5	9,8		
	Torque			(Nm)	300	400	400			
	Operating time (50 Hz)			(s)	54	70	70			
	Output drive			(rpm)	8		8			

Fig. 463

DN					200		250	
AB ◁ A, B **Mixing function**	Kvs-value	standard		(m^3/h)		**630**		**1000**
		reduced		(m^3/h)	400		630	
	max. diff. pressure [1]			(bar)	10		10	
	Seat-Ø A/B			(mm)	150	200	200	250
	Travel			(mm)	50	65	65	
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)	11,9	6,6	6,6	4,1
			controlling [2]	(bar)	5,5	3	3	1,8
	Torque			(Nm)	60		60	
	Operating time (50 Hz)			(s)	55	71	71	
	Output drive			(rpm)	11		11	
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)	18,4	10,2	10,2	6,5
			controlling [2]	(bar)	11,9	6,6	6,6	4,1
	Torque			(Nm)	90		90	
	Operating time (50 Hz)			(s)	55	71	71	
	Output drive			(rpm)	11	11	11	

I. Fig. 423: EPDM-sealing

II. Fig. 423: PTFE- / pure graphite-packing

III. Fig. 463: Bellows seal

[1] max. differential pressure drop

[2] Restrictions through max. permissible torque of the actuator at controlling operation.

max. permissible closing pressures on flow-to-open P2 = 0.
Observe pressure-temperature-limits, refer to page 2.

Fig. 423

DN					200		250	
AB ⇨ A, B **Diverting function**	Kvs-value	standard		(m^3/h)		**355**		**560**
		reduced		(m^3/h)	212		355	
	max. diff. pressure [1]			(bar)	10		10	
	Seat-Ø A/B			(mm)	115	150	150	180
	Travel			(mm)	50		50	65
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	I. / II.	shut off	(bar)	20,5	11,9	11,9	8,2
			controlling [2]	(bar)	9,5	5,5	5,5	3,7
	Torque			(Nm)	60		60	
	Operating time (50 Hz)			(s)	55		55	71
	Output drive			(rpm)	11		11	
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	I. / II.	shut off	(bar)	40	24,8	24,8	17,2
			controlling [2]	(bar)	20,5	11,9	11,9	8,2
	Torque			(Nm)	120		120	
	Operating time (50 Hz)			(s)	55		55	71
	Output drive			(rpm)	11		11	
SAR 14.2 Output drive Form A TR 10 x 6 - LH	Closing pressure	I. / II.	shut off	(bar)	40	40	40	29,6
			controlling [2]	(bar)	34,2	20	20	13,8
	Torque			(Nm)	175	250	250	
	Operating time (50 Hz)			(s)	63		63	59
	Output drive			(rpm)	8		8	11
SAR 14.6 **with LE100.1** Output drive Form A TR 40 x 7 - LH	Closing pressure	I. / II.	shut off	(bar)	40	40	40	39,2
			controlling [2]	(bar)	40	27,7	27,7	19,2
	Torque			(Nm)	300		300	400
	Operating time (50 Hz)			(s)	54		54	70
	Output drive			(rpm)	8		8	

Fig. 463

DN					200		250	
AB ⇨ A, B **Diverting function**	Kvs-value	standard		(m^3/h)		**355**		**560**
		reduced		(m^3/h)	212		355	
	max. diff. pressure [1]			(bar)	10		10	
	Seat-Ø A/B			(mm)	115	150	150	180
	Travel			(mm)	50		50	65
SAR 07.6 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)	20,5	11,9	11,9	8,2
			controlling [2]	(bar)	9,6	5,5	5,5	3,7
	Torque			(Nm)	60		60	
	Operating time (50 Hz)			(s)	55		55	71
	Output drive			(rpm)	11		11	
SAR 10.2 Output drive Form A TR 26 x 5 - LH	Closing pressure	III.	shut off	(bar)	31,5	18,4	18,4	12,7
			controlling [2]	(bar)	20,5	11,9	11,9	8,2
	Torque			(Nm)	90		90	
	Operating time (50 Hz)			(s)	55		55	71
	Output drive			(rpm)	11		11	

I. Fig. 423: EPDM-sealing
II. Fig. 423: PTFE- / pure graphite-packing
III. Fig. 463: Bellows seal

[1] max. differential pressure drop
[2] Restrictions through max. permissible torque of the actuator at controlling operation.

Control valve in 3-way-form

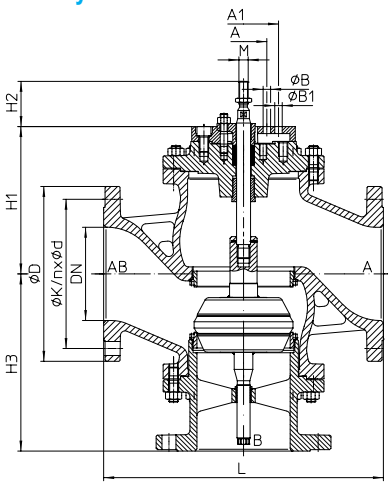


Fig. 423
DN200-250
(e.g.: DP34-34Tri; PREMIO 12-25kN)

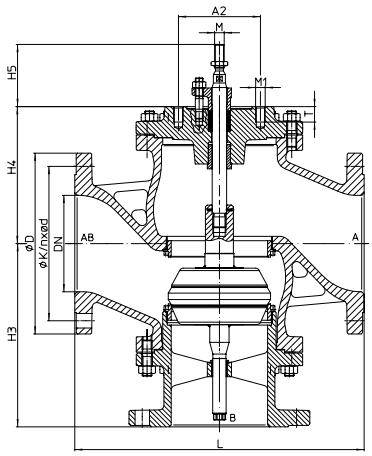


Fig. 423
DN200-250
(e.g.: AUMA SAR 07.6-10.2)

DN			200		250	
Dimensions						
M	Fig. 423	(mm)	M20			
	Fig. 463	(mm)	M16	M20	M16	M20
H1	Fig. 423	(mm)	322		376	
	Fig. 463	(mm)	797	723	857	783
H2	Fig. 423	(mm)	98			
	Fig. 463	(mm)	83	130	83	130
H3	Fig. 423 / 463	(mm)	380		440	
H4	Fig. 423	(mm)	284		344	
H5	Fig. 423	(mm)	130			
A	Fig. 423	(mm)	100			
	Fig. 463	(mm)	100	--	100	--
n x ØB	Fig. 423	(mm)	2 x 16			
	Fig. 463	(mm)	2 x 16	--	2 x 16	--
A1	Fig. 423	(mm)	150			
	Fig. 463	(mm)	--	150	--	150
n x ØB1	Fig. 423	(mm)	4 x 16			
	Fig. 463	(mm)	--	4 x 16	--	4 x 16
A2	Fig. 423	(mm)	170			
n x M1	Fig. 423	(mm)	4 x M20			
T	Fig. 423	(mm)	32			

Face-to-face dimension FTF series 1 according to DIN EN 558				
L		(mm)	600	730

Flanges acc. to DIN EN 1092-1/-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545	
ØD	PN16	(mm)	340	405
	PN25	(mm)	360	425
	PN40	(mm)	375	450
ØK	PN16	(mm)	295	355
	PN25	(mm)	310	370
	PN40	(mm)	320	385
n x Ød	PN16	(mm)	12 x 22	12 x 26
	PN25	(mm)	12 x 26	12 x 30
	PN40	(mm)	12 x 30	12 x 33

Weights				
Fig. 423	PN16	(kg)	235	364
	PN40	(kg)	274	447
Fig. 463	PN16	(kg)	257	387
	PN40	(kg)	283	469

max. permissible thrust		
Fig. 423	(kN)	59,1
Fig. 463	(kN)	34

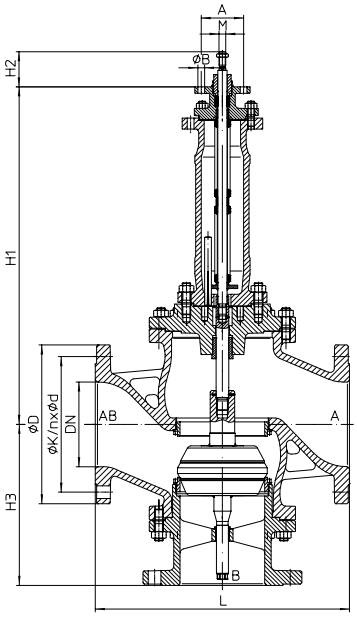


Fig. 463
DN200-250 M16
(e.g.: PREMIO 5-25kN; SAR 07.6 - 14.2)

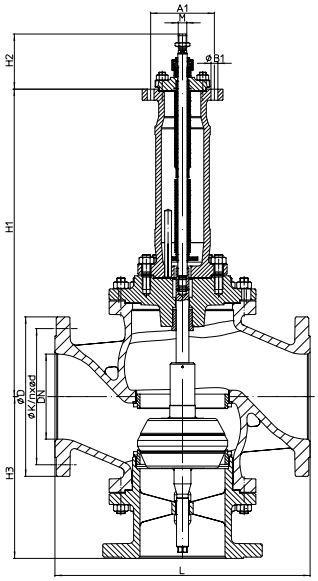


Fig. 463
DN200-250 M20
(e.g.: DP34-34Tri)

Control valve in 3-way-form

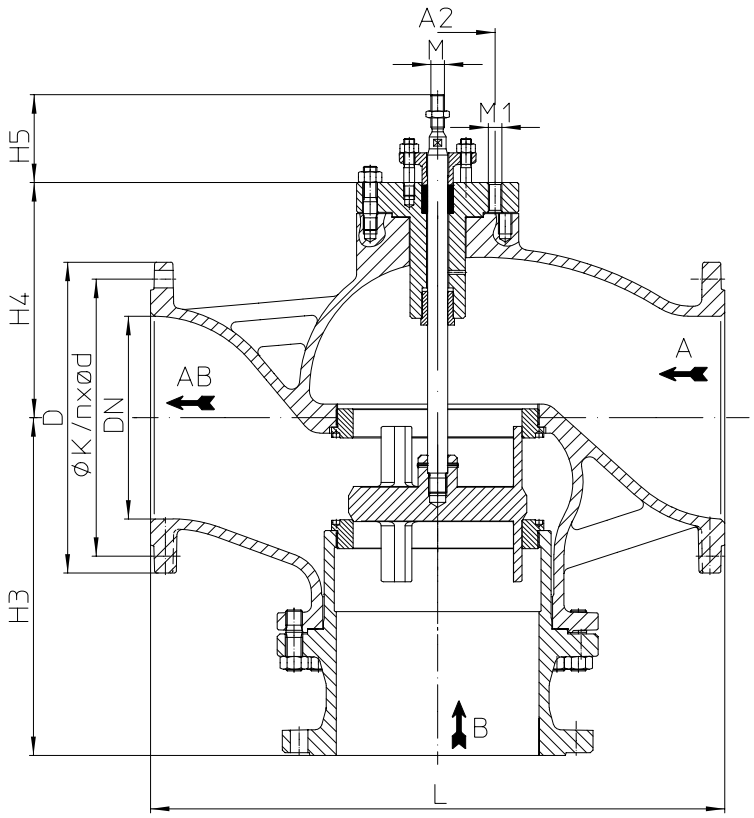
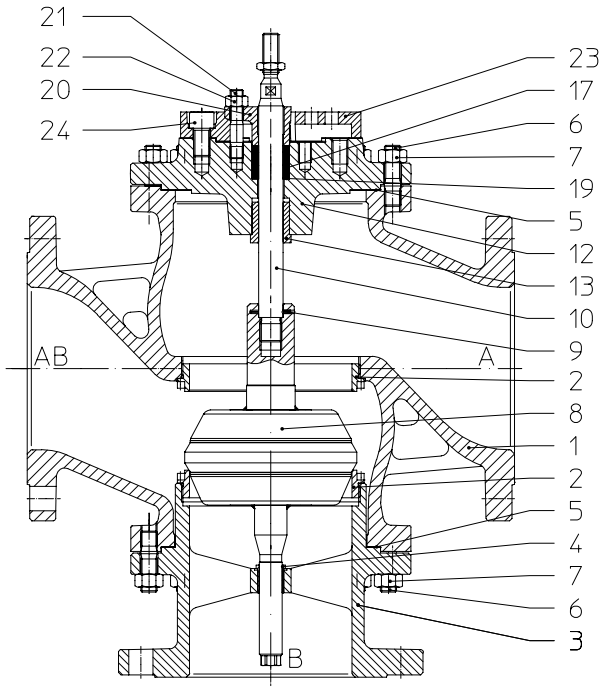
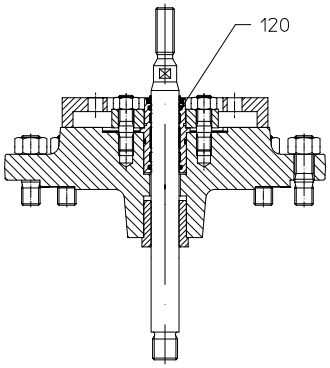


Fig. 423
DN300
(e.g.: DP34-34T; PREMIO 5-25kN; SAR 07.6 - 14.2)

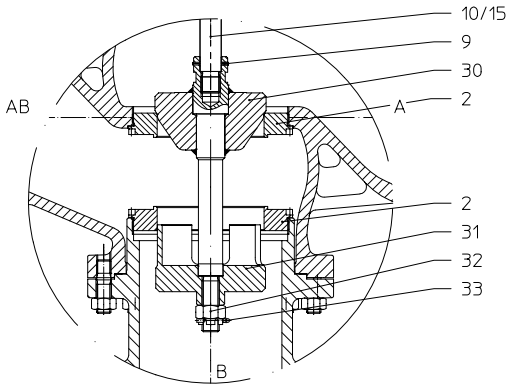
DN			**300**
Dimensions			
M	Fig. 423	(mm)	M20
H3	Fig. 423	(mm)	500
H4	Fig. 423	(mm)	348
H5	Fig. 423	(mm)	130
A2	Fig. 423	(mm)	170
M1	Fig. 423	(mm)	4 x M20
T	Fig. 423	(mm)	44
Face-to-face dimension FTF series 1 according to DIN EN 558			
L		(mm)	850
Flanges acc. to DIN EN 1092-1/-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545
ØD	PN16	(mm)	460
ØK	PN16	(mm)	410
n x Ød	PN16	(mm)	12 x 26
Weights			
Fig. 423	PN16	(kg)	360
max. permissible thrust			
Fig. 423		(kN)	59,1



II. PTFE- / pure graphite-packing



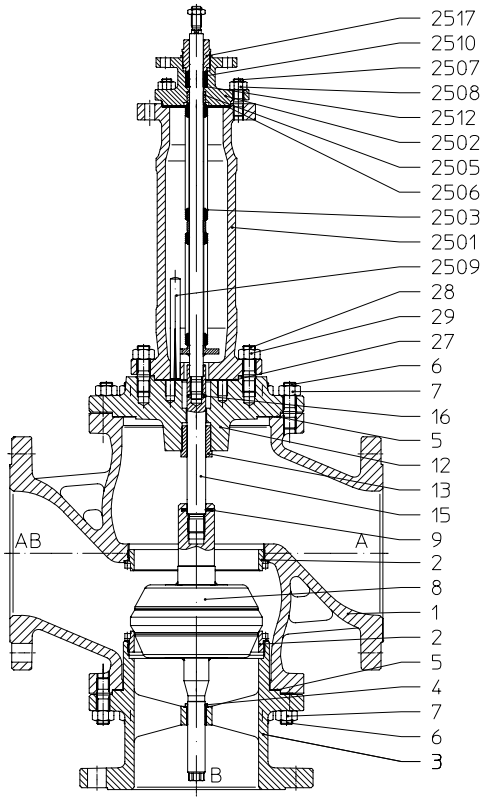
I. EPDM-sealing



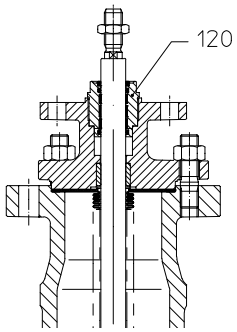
Plug design: Diverting plug

Pos.	Sp.p.	Description	Fig. 12.423	Fig. 22.423	Fig. 34.423 / Fig. 35.463
1		Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2	x	Seat ring	X20Cr13+QT, 1.4021+QT		
3		Bottom flange	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
4		Giude bushing	X20Cr13+QT, 1.4021+QT		
5	x	Gasket	Pure graphite (CrNi laminated with graphite)		
6		Stud	25CrMo4, 1.7218		
7		Hexagon nut	C35E, 1.1181		
8	x	Plug	X20Cr13+QT, 1.4021+QT		
9	x	Clamping sleeve	56Si7, 1.5026		
10	x	Stem	X20Cr13+QT, 1.4021+QT		
12		Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
13		Giude bushing	X20Cr13+QT, 1.4021+QT (hardened)		
15	x	Stem adapter	X20Cr13+QT, 1.4021+QT		
16	x	Clamping sleeve	56Si7, 1.5026		
17		Packing ring	Pure graphite		
19		Washer	X5CrNi18-10, 1.4301		
20		Packing box flange	EN-GJS-400-18U-LT, EN-JS1049		
21		Stud	25CrMo4, 1.7218		
22		Hexagon nut	C35E, 1.1181		
23		Adapter flange	EN-GJS-400-18U-LT, EN-JS1049		
24		Cheese head screw	8.8 - A2B		
30	x	Plug	X20Cr13+QT, 1.4021+QT		
31	x	Plug	X20Cr13+QT, 1.4021+QT		
32	x	Castle nut	C35E, 1.1181		
33		Cotter pin	A4		

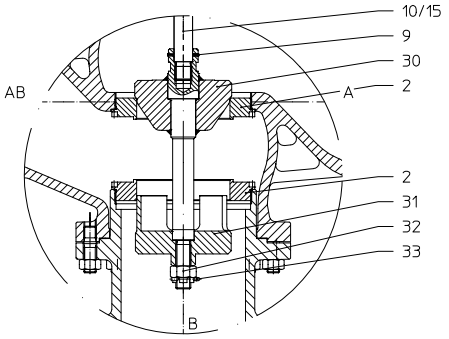
Stem sealings Fig. 423			
17	x	Packing ring	PTFE
17	x	Packing ring	Pure graphite
120	x	EPDM-sealing	EPDM / X20Cr13+QT, 1.4021+QT
	└ Spare parts		



III. PTFE-packing / Pure graphite-packing



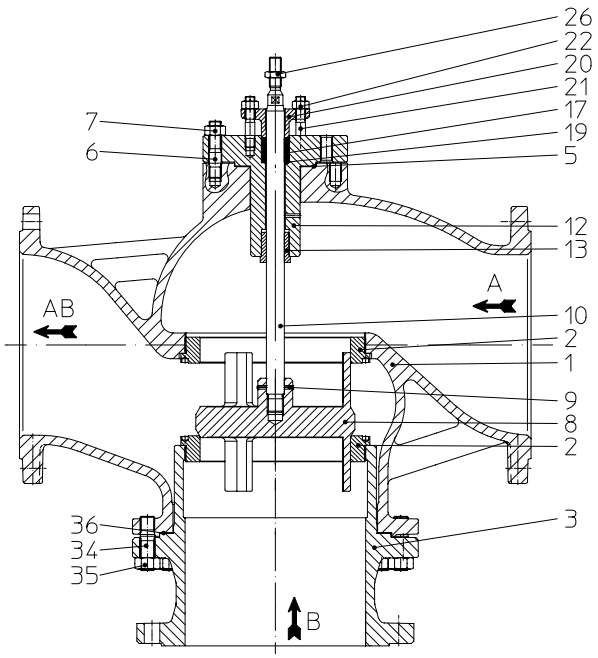
III. Stainless steel bellows seal with EPDM-sealing



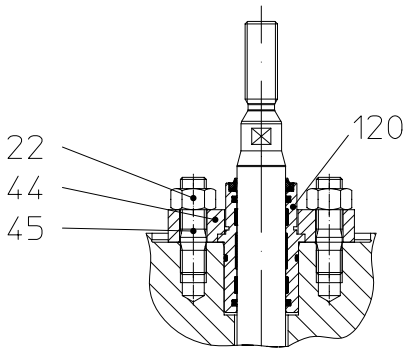
Plug design: Diverting plug

Pos.	Sp.p.	Description	Fig. 12.463	Fig. 22.463	Fig. 34.423 / Fig. 35.463
1		Body	EN-GJL-250 , EN-JL1040	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2	x	Seat ring	X20Cr13+QT, 1.4021+QT		
3		Bottom flange	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
4		Giude bushing	X20Cr13+QT, 1.4021+QT		
5	x	Gasket	Pure graphite (CrNi laminated with graphite)		
6		Stud	25CrMo4, 1.7218		
7		Hexagon nut	C35E, 1.1181		
8	x	Plug	X20Cr13+QT, 1.4021+QT		
9	x	Clamping sleeve	56Si7, 1.5026		
12		Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
13		Giude bushing	X20Cr13+QT, 1.4021+QT (hardened)		
15	x	Stem adapter	X20Cr13+QT, 1.4021+QT		
16	x	Clamping sleeve	56Si7, 1.5026		
2501		Bellows housing	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
2502		Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049		GP240GH+N, 1.0619+N
2503	x	Stem- / Bellows unit	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541		
2505		Giude bushing	X20Cr13+QT, 1.4021+QT (hardened)		
2506	x	Gasket	Pure graphite (CrNi laminated with graphite)		
2507		Stud	25CrMo4, 1.7218		
2508		Hexagon nuts	C35E, 1.1181		
2509		Straight pin	St		
2510	x	Packing ring	Pure graphite		
2512		Washer	X5CrNi18-10, 1.4301		
2517	x	Screw joint	X8CrNiS18-9, 1.4305		
27	x	Gasket	Pure graphite (CrNi laminated with graphite)		
28		Stud	25CrMo4, 1.7218		
29		Hexagon nut	C35E, 1.1181		
30	x	Plug	X20Cr13+QT, 1.4021+QT		
31	x	Plug	X20Cr13+QT, 1.4021+QT		
32	x	Castle nut	C35E, 1.1181		
33		Cotter pin	A4		

Stem sealings Fig. 463			
2510	x	Packing ring	Pure graphite
120	x	EPDM-sealing	EPDM / X20Cr13+QT, 1.4021+QT
	└ Spare parts		



II. PTFE- / pure graphite-packing



I. EPDM-sealing

Pos.	Sp.p.	Description	Fig. 22.423
1		Body	EN-GJS-400-18U-LT, EN-JS1049
2	x	Seat ring	X20Cr13+QT, 1.4021+QT
3		Bottom flange	EN-GJS-400-18U-LT, EN-JS1049
5	x	Gasket	Pure graphite (CrNi laminated with graphite)
6		Stud	25CrMo4, 1.7218
7		Hexagon nut	C35E, 1.1181
8	x	Plug	X20Cr13+QT, 1.4021+QT
9	x	Spring-type straight pin	X10CrNi18-8, 1.4310
10	x	Stem	X20Cr13+QT, 1.4021+QT
12		Stuffing box housing	P250 GH, 1.0460
13		Giude bushing	X20Cr13+QT, 1.4021+QT (hardened)
17	x	Packing ring	PTFE or Pure graphite
19	x	Washer	X5CrNi18-10, 1.4301
20		Packing box flange	EN-GJS-400-18U-LT, EN-JS1049
21		Stud	25CrMo4, 1.7218
22		Hexagon nut	C35E, 1.1181
26		Hexagon nut	17H-A4G
34		Stud	25CrMo4, 1.7218
35		Hexagon nut	C35E, 1.1181
36	x	Gasket	Pure graphite (CrNi laminated with graphite)
44		Packing box flange	EN-GJS-400-18U-LT, EN-JS1049
45		Stud	25CrMo4, 1.7218

Stem sealings Fig. 423			
17	x	Packing ring	PTFE
17	x	Packing ring	Pure graphite
120	x	EPDM-sealing	EPDM / X20Cr13+QT, 1.4021+QT
	└ Spare parts		

myValve® - Your Valve Sizing-Program.

myValve® is a powerful software tool that not only helps you size your system components; it also gives you instant access to all other data about the selected product, such as order information, spare parts drawings, operating instructions, data sheets, etc., whenever you need it.

Contents:

Module ARI-control valves STEVI-calculation

- Sizing (calculation of flow quantity Kv, volume flow Q, pressure drop Δp, sound level and selecting the valve.)

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 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).
- Extensive catalogue extending over several product groups.

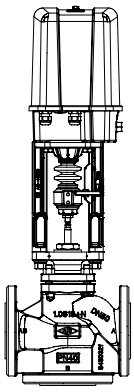
System Requirements:

Windows operating systems, Linux, etc.

Feedwater control valve with pump spill back
DN 25 - 100

ARI-STEVI® 453
Electric actuator
ARI-PREMIO 2,2-15 kN
ARI-PREMIO-Plus 2G 2,2-15 kN

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



Page 2

Fig. 453

Features:

- Compact design
- Precision guided stem
- Burnished stem
- Tapered seat ring
- 2 screwed seatrings
- Reducible kvs-values
- Rangeability 30 : 1
- Post guided plug
- EPDM sealing
- Travel indicator

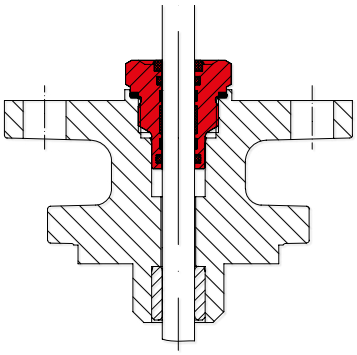
Figure	Nominal pressure	Material	Nominal diameter
35.453	PN40	1.0619+N	DN25 - 100
Other materials and versions on request.			

Information / restriction of technical rules need to be observed!

A production permission acc. to TRB 801 No. 45 is available.

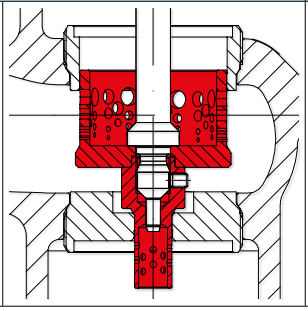
The engineer, designing a system or a plant, is responsible for the selection of the correct valve.

Resistance and fitness must be verified, contact manufacturer for information (refer to Product overview and Resistance list).

Stem sealing	
Fig. 453	**standard**
	
	I. EPDM sealing -10°C to 180°C

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

acc. to manufacturers standard			**-10°C to 120°C**	**150°C**	**180°C**
1.0619+N	PN40	(bar)	40	38,1	36,2

Plug design standard			Guiding	Rangeability
• Perforated plug, metal seat	- Leakage class IV acc. to DIN EN 60534-4 - Flow characteristic: AB --> A equal percentage AB --> B linear		Stem and port guiding	30 : 1

Operation

The feedwater control valve regulates the flow of feedwater to the steam boiler.
It is controlled by a level controller. The target of the control is to keep the level in the boiler constant. The feedwater control valve is normally built into the feed water pressure line. If the water level drops in the boiler, the electrical actuator PREMIO-Plus 2G adjustes a perforated plug in the valve. If the water level in the boiler rises, the perforated plug closes the seat.

Once the feed water amount to the boiler falls below a certain amount, a further perforated plug opens the bypass valve. It ensures that the minimum amount, required for cooling and lubrication of the feed water pump, is always available.

Necessary data for sizing

Medium:	Feed water
Temperature:	..... [°C]
Inlet pressure:	..... [bar(g)] (Pump pressure)
After-pressure:	..... [bar(g)] (Boiler pressure)
Boiler capacity:	..... [t/h]
Pump delivery rate:	..... [m³/h]
Recirculation flowrat:	..... [m³/h]
Actuator PREMIO-Plus 2G:	
Voltage:	.....
Options:	.....

Closing pressures refer to page 5.

Feedwater control valve with pump spill back with electric actuator ARI-PREMIO-Plus 2G

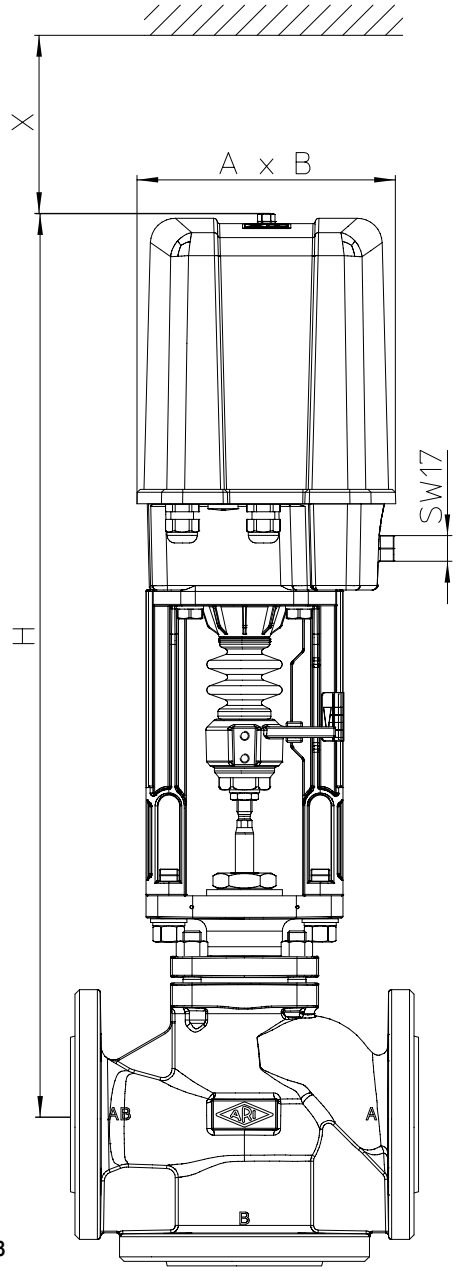


Fig. 453

Actuator data		2,2 - 5 kN	12 - 15 kN
A	(mm)	171	210
B	(mm)	156	184
C	(mm)	50	90
Ø D1	(mm)	90	130
X	(mm)	150	200
Technical data for actuator refer to data sheet ARI-PREMIO/PREMIO-Plus 2G			

Heights and weights

DN				25	32	40	50	65	80	100
Fig. 453	**2,2 kN**	H	(mm)	563	589	595	593	--	--	--
		PN40	(kg)	14	18	22	25	--	--	--
	5 kN	H	(mm)	563	589	595	593	629	645	664
		PN40	(kg)	15	19	22	25	34	45	63
	12 kN	H	(mm)	737	763	769	767	803	819	838
		PN40	(kg)	20	23	27	30	39	49	68
	15 kN	H	(mm)	--	--	--	--	803	819	838
		PN40	(kg)	--	--	--	--	39	49	68

Further dimensions refer to page 6.

max. permissible closing pressures on flow-to-open and P2 = 0.
Note restrictions through pressure-temperature-ratings, refer to page 3.

DN				25					32				40				50			
Straight through	Kvs-value		(m^3/h)	1	1,6	2,5	4	**6,3**	2,5	4	6,3	**10**	4	6,3	10	**16**	6,3	10	16	**25**
	Seat-Ø A		(mm)	27					27			31	27		31	41	27	31	41	51
Bypass	Kvs-value		(m^3/h)	0,1	0,16	0,25	0,40	**0,63**	0,25;	0,4	0,63	**1,0**	0,4	0,63	1,0	**1,6**	0,63	1,0	1,6	**2,5**
	Seat-Ø B		(mm)	8					8				8			13	8		13	
max. differential pressure [1]			(bar)	40					40				40				40			
Travel			(mm)	20					20				20				20			
2,2 kN	Closing pressure	I.	(bar)	15,4					15,4			11,6	15,4		11,6	6,4	15,4	11,6	6,4	4
	Operating time		(s)	53					53				53				53			
	Operating speed [2]		(mm/s)	0,38																
5 kN	Closing pressure	I.	(bar)	38,5					38,5			29,2	38,5		29,2	16,6	38,5	29,2	16,6	10,6
	Operating time		(s)	53					53				53				53			
	Operating speed		(mm/s)	0,38																
12 kN	Closing pressure	I.	(bar)	40					40				40				40			27,2
	Operating time		(s)	53					53				53				53			
	Operating speed		(mm/s)	0,38																

DN				65				80				100			
Straight through	Kvs-value		(m^3/h)	10	16	25	**40**	16	25	40	**63**	25	40	63	**100**
	Seat-Ø A		(mm)	41	41	51	66	41	51	66	81	51	66	81	101
Bypass	Kvs-value		(m^3/h)	1,0	1,6	2,5	**4**	1,6	2,5	4,0	**6,3**	2,5	4,0	6,3	**10**
	Seat-Ø B		(mm)	25				25				25			
max. differential pressure [1]			(bar)	40				40				40			
Travel			(mm)	30				30				30			
5 kN	Closing pressure	I.	(bar)	16,5	16,5	10,5	6,2	16,5	10,5	6,2	4	10,5	6,2	4	2,5
	Operating time		(s)	79				79				79			
	Operating speed		(mm/s)	0,38											
12 kN	Closing pressure	I.	(bar)	40	40	27,1	16,1	40	27,1	16,1	10,6	27,1	16,1	10,6	6,8
	Operating time		(s)	79				79				79			
	Operating speed		(mm/s)	0,38											
15 kN	Closing pressure	I.	(bar)	40	40	34,3	20,4	40	34,3	20,4	13,4	34,3	20,4	13,4	8,6
	Operating time		(s)	79				79				79			
	Operating speed		(mm/s)	0,38											
Further operating speeds: refer to data sheet ARI-PREMIO / PREMIO-Plus 2G															

$$\text{Operating time [s]} = \frac{\text{Travel [mm]}}{\text{Operating speed [mm/s]}}$$

I. EPDM sealing

[1] Max. differential pressure drop with flow
[2] Based on a frequency of 50Hz the control speed and power consumption of the synchronous motors PREMIO 2,2kN are 20% higher at frequency of 60 Hz.

Feedwater control valve with pump spill back

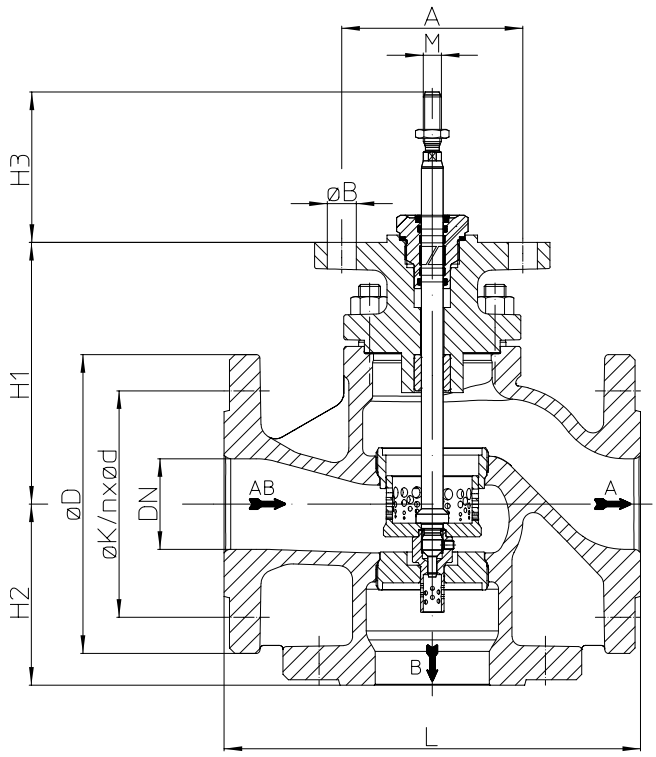
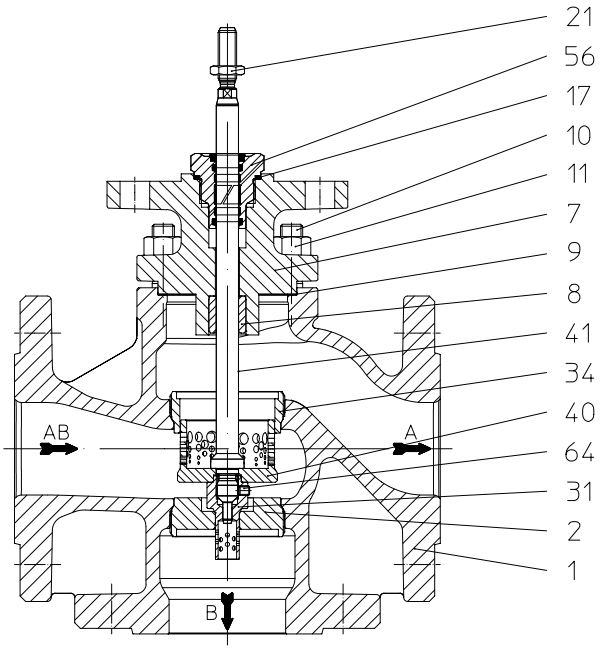


Fig. 453

DN			25	32	40	50	65	80	100
Dimensions									
M	Fig. 453	(mm)	M10				M14 x 1,5		
H1	Fig. 453	(mm)	115	141	147	154	181	197	216
H2	Fig. 453	(mm)	75	80	90	100	120	130	150
H3	Fig. 453	(mm)	83						
A	Fig. 453	(mm)	100						
ØB	Fig. 453	(mm)	2 x Ø 16						
Face-to-face dimension FTF series 1 according to DIN EN 558									
L		(mm)	160	180	200	230	290	310	350
Flanges acc. to DIN EN 1092-1/-2									
ØD	PN40	(mm)	115	140	150	165	185	200	235
ØK	PN40	(mm)	85	100	110	125	145	160	190
n x Ød	PN40	(mm)	4 x 14	4 x 18	4 x 18	4 x 18	8 x 18	8 x 18	8 x 22
Weights									
Fig. 453	PN40	(kg)	9	13	16	19	28	39	57
max. perm. closing forces									
Fig. 453		(kN)	12,7				29,5		

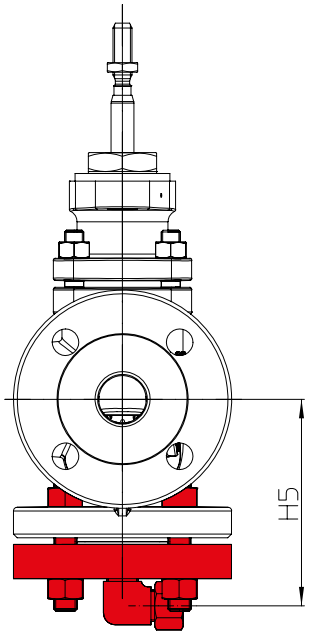


Pos.	Ers.	Description	Fig. 35.453
1		Body	GP240GH+N, 1.0619+N
2	x	Seat ring	X20Cr13+QT, 1.4021+QT (hardened)
7		Mounting bonnet	GP240GH+N, 1.0619+N
8		Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)
9	x	Gasket	Pure graphite (CrNi laminated with graphite)
10		Studs	25CrMo4, 1.7218
11		Hexagon nuts	C35E, 1.1181
17	x	Sealing ring	Cu / Soft iron
21		Hexagon nuts	17H-A2G
31	x	Plug	X20Cr13+QT, 1.4021+QT
34	x	Seat ring	X20Cr13+QT, 1.4021+QT (hardened)
40	x	Plug	X20Cr13+QT, 1.4021+QT
41	x	Stem	X20Cr13+QT, 1.4021+QT
64		Grub screw	A2

Stem sealing Fig. 453			
56	x	EPDM sealing	X8CrNiS18-9, 1.4305 / EPDM
	└ Spare parts		

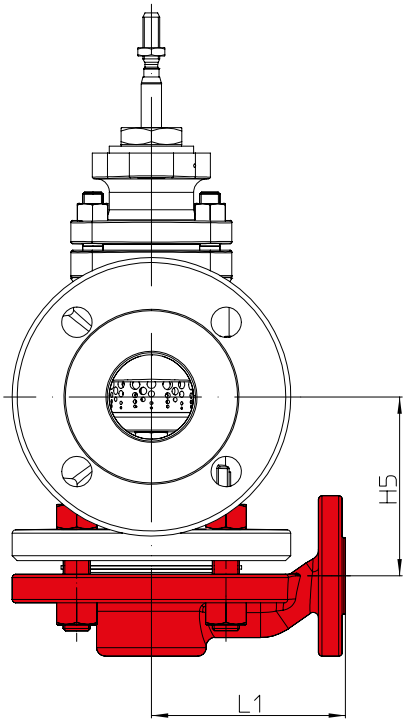
Options: Adapter flange (to make compatible to other design)

DN25 - 32



DN		25	32
Dimensions			
H5	(mm)	109	115
Connection Bypass		90°-elbow 1/2"	

DN40 / 50 / 80



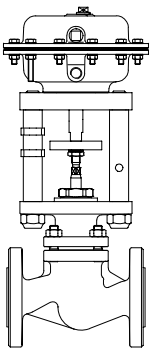
DN		40	50	80
Dimensions				
L1	(mm)	115	115	155
H5	(mm)	111	106	190
Flange connection Bypass		DN15 PN40		DN40 PN40

ARI-Armaturen Albert Richter GmbH & Co. KG, D-33750 Schloß Holte-Stukenbrock,
Tel. +49 52 07 / 994-0, Telefax +49 52 07 / 994-158 or 159 Internet: http://www.ari-armaturen.com E-mail: info.vertrieb@ari-armaturen.com

With pneumatic actuator

ARI-STEVI® BBD 415
Pneumatic actuator

- Required air supply pressure max. 6 bar
- Options:
  - Assembly of additional devices
  - Lever



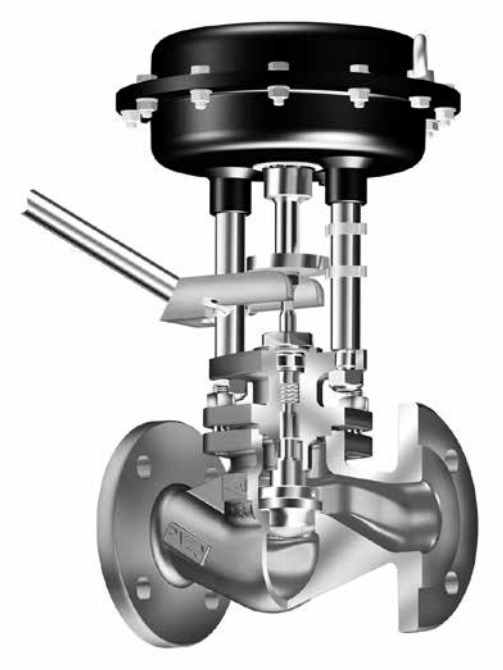


Fig. 415

Figure	Nominal pressure	Material	Nominal diameter
35.415	PN40	1.0619+N	DN 25 - 50
Other materials and versions on request.			

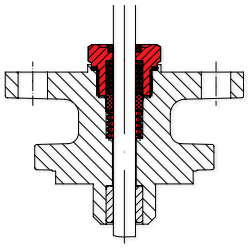
Information / restriction of technical rules need to be observed!

A production permission acc. to TRB 801 No. 45 is available.

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

Resistance and fitness must be verified (contact manufacturer for information, refer to Product overview and Resistance list).

Stem sealing

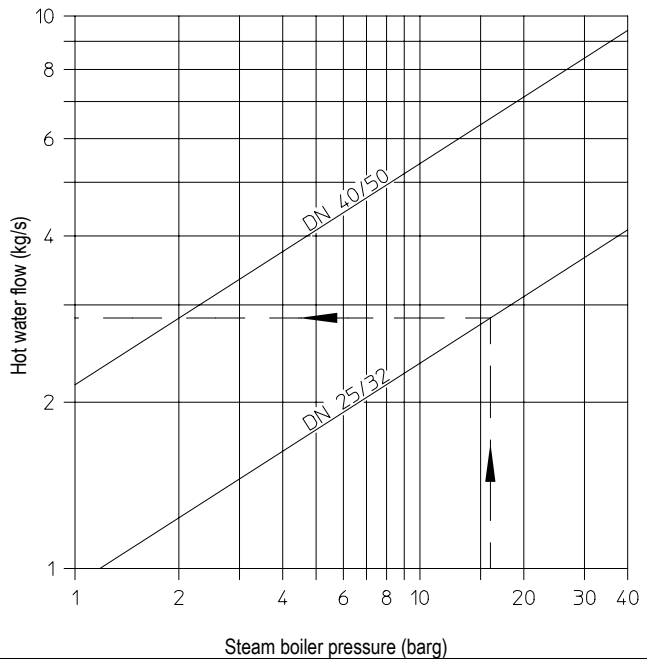
Fig. 415	standard
	
	I. PTFE-V-ring unit -10°C to 240°C

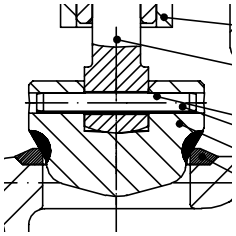
Pressure-temperature-ratings

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

acc. to manufacturers standard			-10°C to 120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C
1.0619+N	PN40	(bar)	40	38,1	35	32	28	25,7	23,8	13,1

Capacity chart



Plug design standard			Guiding
Isolation plug with marginal seat, stellited, metal seat	- Leakage class 1 acc. to DIN 3230 T3 / BN		Stem

Auxiliary engergy

- Max. permissible air supply pressure: 6 bar
- Air supply acc. to DIN IEC 60654-2
- Water free from dirt and corrosives, max. temperature +80°C

Accessories

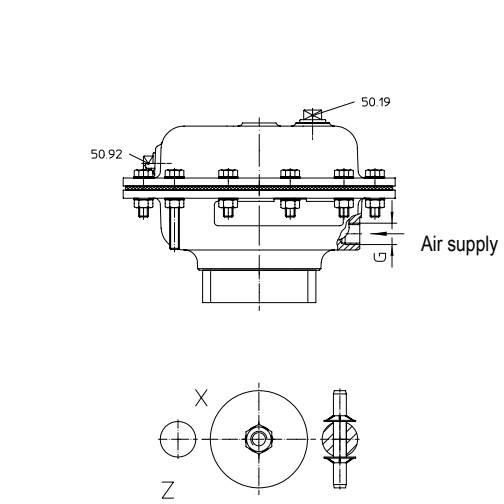
Lever

Solenoid valve

Limit switch

Air set including gauge (in combination with solenoid valve)

Straight through blow down valve



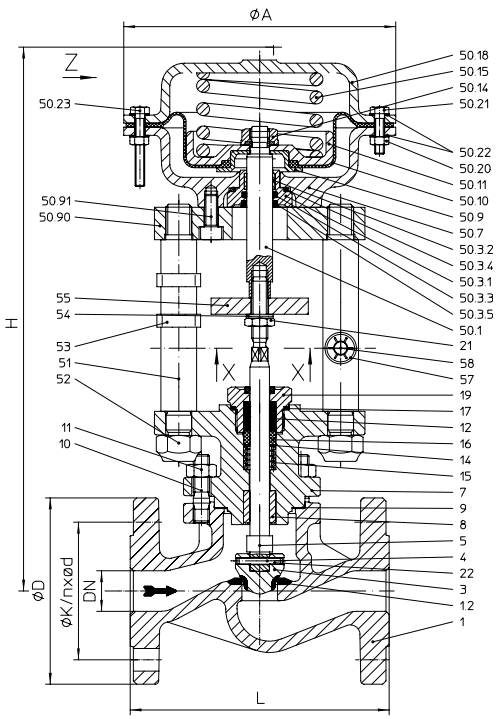
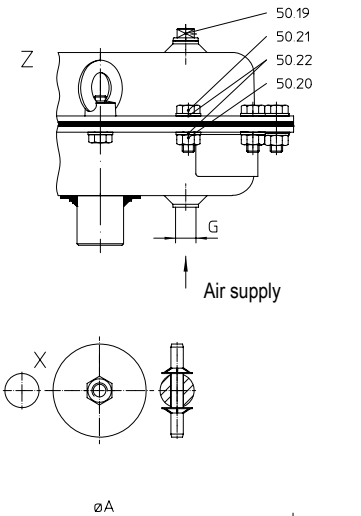


Fig. 415
DN 25 - 32



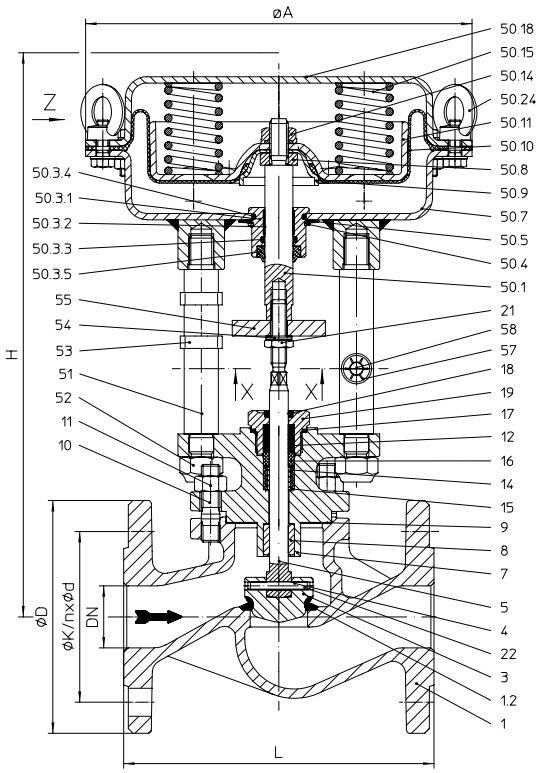


Fig. 415
DN 40 - 50

DN			**25**	**32**	**40**	**50**
Seat-Ø		(mm)	22	27	37	47
Travel		(mm)	8	7	10	13
Kvs-value						
standard		(m^3/h)	6,4	6,4	14,7	14,7
Face-to-face dimension FTF series 1 according to DIN EN 558						
L		(mm)	160	180	200	230
Flanges acc. to DIN EN 1092-1/-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545			
Ø D	PN40	(mm)	115	140	150	165
Ø K		(mm)	85	100	110	125
n x Ø d1		(mm)	4 x 14	4 x 18	4 x 18	4 x 18
Dimensions						
H		(mm)	336	336	364	370
Ø A		(mm)	168	168	250	250
G		(inch)	1/4“	1/4“	1/4“	1/4“
Weight						
35.415		(kg)	13	15	18,3	21,5

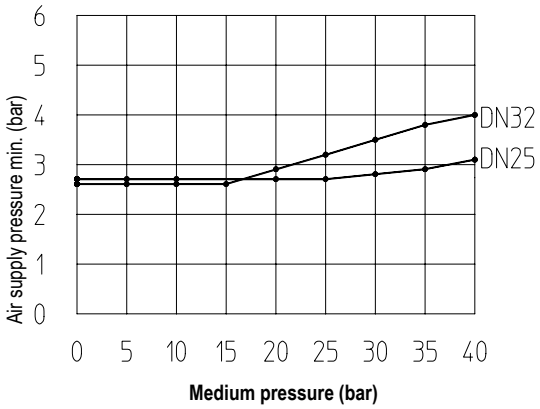
Pos.	Sp.p.	Description	Fig. 35.415 DN 25 - 32	Fig. 35.415 DN 40 - 50
1		Body	GP240GH+N, 1.0619+N	
1.2		Seat ring	Stellit 21	
3	x	Plug	X6CrNiMoTi17-12-2, 1.4571 / Stellit 6	
4	x	Locking pin	X10CrNi18-8, 1.4310	
5	x	Stem	X20Cr13+QT, 1.4021+QT	
7		Mounting bonnet	GP240GH+N, 1.0619+N	
8		Giude bushing	X20Cr13+QT, 1.4021+QT (hardened)	
9	x	Gasket	Novaphit SSTC (CrNi laminated with graphite)	
10		Stud	25CrMo4, 1.7218	
11		Hexagon nuts	C35E, 1.1181	
12	x	V-ring unit	PTFE	
14	x	Washer	X5CrNi18-10, 1.4301	
15	x	Compression spring	X10CrNi18-8, 1.4310	
16	x	Bush	PTFE (strengthened)	
17	x	Gasket	Cu / Soft iron	
19	x	Screw joint	X8CrNiS18-9, 1.4305 / PTFE	
21		Hexagon nuts	17H - A4G	
22	x	Locking pin	X10CrNi18-8, 1.4310	
50.1		Stem DP	X20Cr13+QT, 1.4021+QT	
50.3.1	x	Stem guiding	X20Cr13+QT, 1.4021+QT	
50.3.2	x	Guide bush	PTFE + 25%C	
50.3.3	x	O-ring (Stem)	NBR 70	
50.3.4	x	O-ring (Guiding)	NBR 70	
50.3.5	x	Scraper	PTFE GF	
50.4		Retaining ring	--	FSt - A2B
50.5		Disc spring	--	C75S, 1.1248
50.7		Diaphragm housing	EN-JS1049, EN-GJS-400-18U-LT	DD13+QT, 1.0335+QT
50.8		Bush	--	X20Cr13+QT, 1.4021+QT
50.9		Diaphragm flange	11SMnPb30+C, 1.0718+C	DD13+QT, 1.0335+QT
50.10	x	Diaphragm	50 NBR 253	
50.11		Diaphragm plate	11SMnPb30+C, 1.0718+C	
50.14		Collar nut with sealing ring	8 - A2B	
50.15	x	Compression spring	SH	
50.18		Diaphragm hood	EN-JS1049, EN-GJS-400-18U-LT	DD13+QT, 1.0335+QT
50.19		Screwed cap	PP	
50.20		Hexagon nut	8 - A2G	
50.21		Hexagon screw	8.8 - A2G	
50.22		Washer	St - A2G	
50.23		Hexagon screw	8.8 - A2G	
50.24		Eye nut	--	C15, 1.0401 - A4G
50.90		Traverse	S235JR, 1.0037	
50.91		Cheese head screw	8.8 - A2B	
50.92		Screwed cap	PP	
51		Distance column	X20Cr13+QT, 1.4021+QT	
52		Hexagon nut	8 - A2B	
53		2-ear clamp	St	
54		Lock washer pair	St	
55		Travel indicator	X20Cr13+QT, 1.4021+QT	
57		Washer disc	C75S, 1.1248	
58		Parallel pin	A1	
	└ Spare parts			

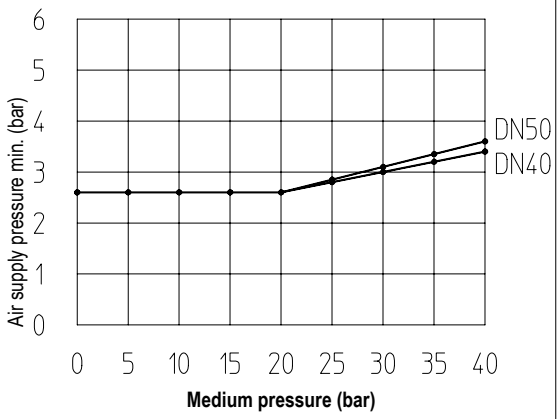
Capacity chart

on flow-to-close

DN	Spring range (bar)	Filling volume (l)
25	1,55 - 2,50	0,25
32	1,55 - 2,40	0,25
40	1,6 - 2,4	1,1
50	1,4 - 2,4	1,1

Spring closes on air failure (NC)
(Extended stem on air failure)





Please indicate when ordering:

- Figure-No.
- Nominal diameter
- Nominal pressure
- Stem sealing
- Special design / accessories

Example:

Figure 35.415; Nominal diameter DN40; Nominal pressure PN40; Stem sealing: PTFE-V-ring unit

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