

With pneumatic and electric actuators

ARI-STEVI® 425 / 426

Pneumatic actuator

ARI-DP34-35

- 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

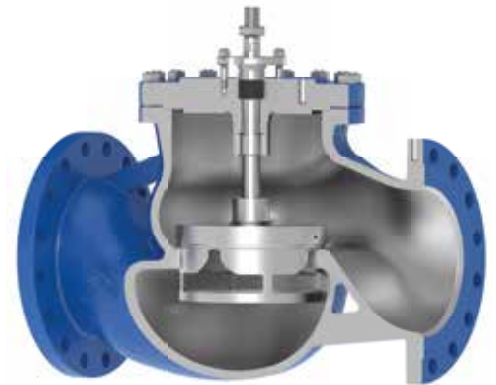
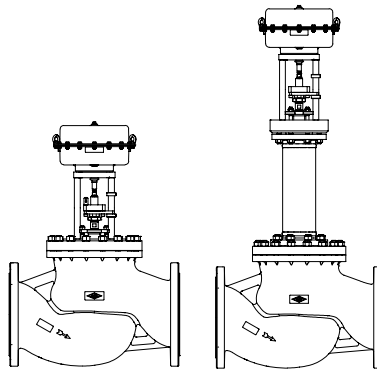


Fig. 425

Page 4

ARI-STEVI® 425 / 426

Electric actuator

AUMA SAR 07.6-16.2

- 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
- Encased linear thrust unit

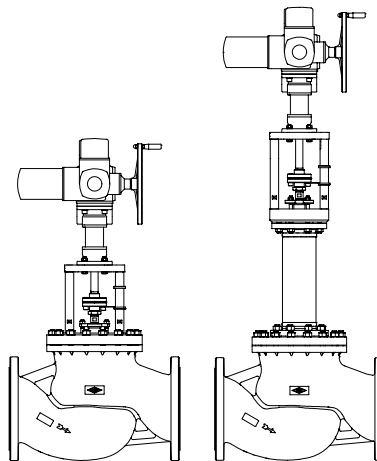


Fig. 426

Page 10

Figure	Nominal pressure	Material	Nominal diameter	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).
22.425 / 22.426	PN16	5.3103	DN300	
34.425 / 34.426	PN25	1.0619+N	DN300-500	
35.425 / 35.426	PN40	1.0619+N	DN300-500	
Other materials and versions on request.				

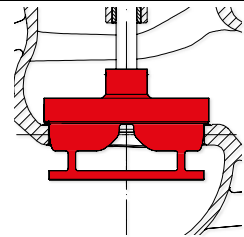
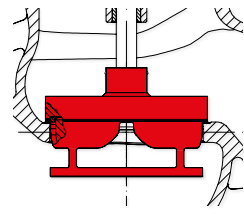
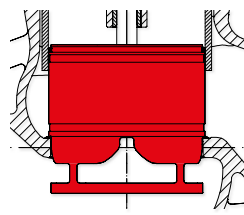
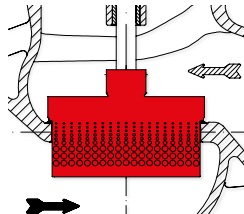
Stem sealing			
Fig. 425	standard	optional	
	II. PTFE-packing -10°C to 250°C	I. EPDM-sealing -10°C to 150°C (allowed for water and steam up to 180°C)	II. Pure graphite-packing -10°C to 450°C

Fig. 426	standard	optional
	III. Stainless steel-bellow with pure graphite -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.
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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
5.3103	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

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

Plug design standard			Guiding	Rangeability
V-port plug metal seat	- Leakage class IV acc. to DIN EN 60534-4 - Flow characteristic: - equal percentage (g/p) (modified) - linear (lin)		Plug shaft / Seat ring	30 : 1
Plug design optional			Guiding	Rangeability
V-port plug with PTFE-soft seal (max. 200°C)	- Leakage class VI acc. to DIN EN 60534-4 - Flow characteristic: - equal percentage (g/p) (modified) - linear (lin)		Plug shaft	30 : 1
V-port plug with pressure balanced plug metal seat Piston seal: PTFE with stainless steel spring (max. 200°C)	- Leakage class IV acc. to DIN EN 60534-4 - Flow characteristic: - equal percentage (g/p) (modified) - linear (lin)		Plug shaft	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 DIN EN 60534-4 - Flow characteristic: - equal percentage (g/p) (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

Control valve in straightway form with pneumatic actuator ARI-DP

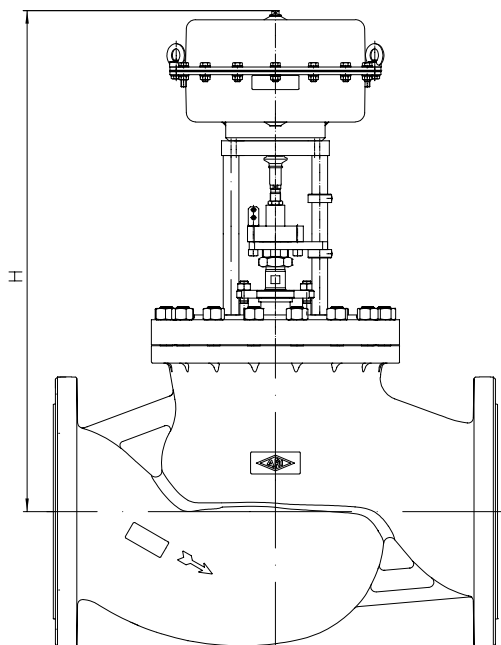


Fig. 425

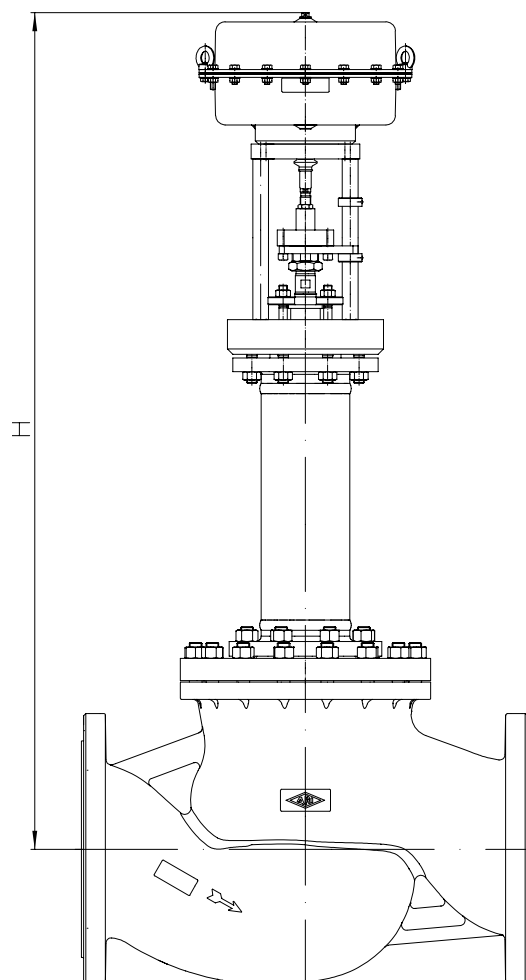
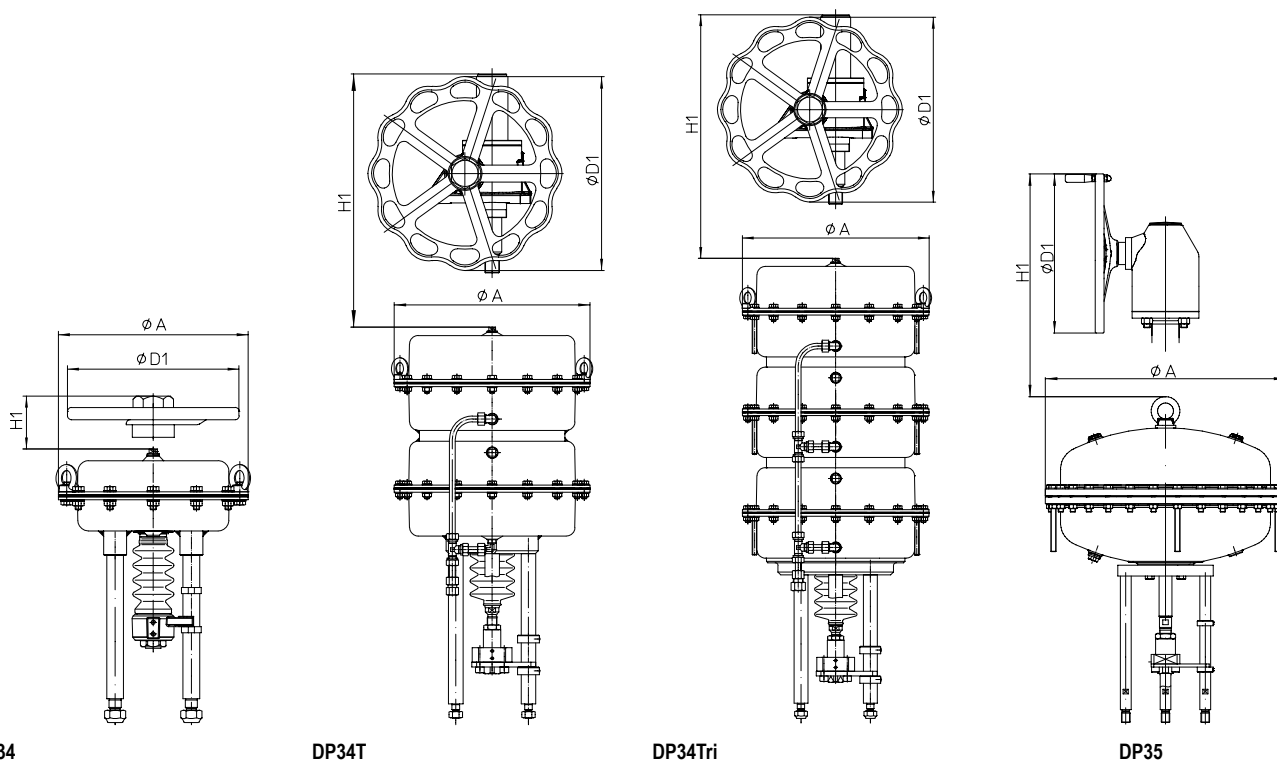


Fig. 426

Heights and weights

DN				300	350	400	500
Fig. 425	DP34	H	(mm)	956	1013	--	--
		PN16	(kg)	411	--	--	--
		PN25 / 40	(kg)	467	608	--	--
	DP34T	H	(mm)	1214	1271	--	--
		PN16	(kg)	482	--	--	--
		PN25 / 40	(kg)	538	679	--	--
	DP34Tri	H	(mm)	1436	1493	--	--
		PN16	(kg)	516	--	--	--
		PN25 / 40	(kg)	572	713	--	--
	DP35	H	(mm)	1395	1452	1469	1576
		PN16	(kg)	681	--	--	--
		PN25 / 40	(kg)	737	878	1136	1532
Fig. 426	DP34	H	(mm)	1584	1642	--	--
		PN16	(kg)	503	--	--	--
		PN25 / 40	(kg)	557	695	--	--
	DP34T	H	(mm)	1842	1900	--	--
		PN16	(kg)	574	--	--	--
		PN25 / 40	(kg)	628	766	--	--
	DP34Tri	H	(mm)	2064	2122	--	--
		PN16	(kg)	608	--	--	--
		PN25 / 40	(kg)	662	800	--	--
	DP35	H	(mm)	2023	2081	2100	2198
		PN16	(kg)	773	--	--	--
		PN25 / 40	(kg)	827	965	1196	1602

Further dimensions refer to page 12.



Actuator data			DP34	DP34T	DP34Tri	DP35
Ø A		(mm)	405			755
Effective diaphragm area		(cm²)	800	1600	2400	2800
Top mounted handwheel	Ø D1	(mm)	400			500
	H1	(mm)	442	635	635	731
	Weight	(kg)	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							300			350			400			500		
V-port plug		Kvs-value				(m³/h)	630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000
		max. diff. pressure ¹⁾				(bar)	14		12	14	12		12			12		10
Perforated plug		Kvs-value				(m³/h)	400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500
		max. diff. pressure ¹⁾				(bar)	30			30			30			30		
Seat-Ø						(mm)	200	250	301	250	301	351	301	351	380	351	380	480
Travel						(mm)	65		90	65	90	120	90	120		120		
DP34 800 cm² Spring closes on air failure  (stem extending by spring)	Spring range (bar)	1,0 - 2,0	Air supply pressure min. (bar)	2,3	I./II./III.	(bar)	1,7	1,0		1,0								
		2,0 - 4,0		4,5	I./II./III.	(bar)	4,1	2,6		2,6								

DN				300			350			400			500		
V-port plug	Kvs-value		(m³/h)	630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000
	max. diff. pressure ¹⁾		(bar)	14		12	14	12		12			12		10
Perforated plug	Kvs-value		(m³/h)	400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500
	max. diff. pressure ¹⁾		(bar)	30			30			30			30		
Seat-Ø			(mm)	200	250	301	250	301	351	301	351	380	351	380	480
Travel			(mm)	65		90	65	90	120	90	120		120		
DP34 800 cm² Spring opens on air failure  (stem retracting by spring)	Air supply pressure min. (bar)	2	I./II./III.	(bar)	1,7	1									
		3	I./II./III.	(bar)	4,1	2,6									
		4	I./II./III.	(bar)	6,6	4,1									
		5	I./II./III.	(bar)	9	5,7									
		6	I./II./III.	(bar)	11,5	7,3									

- I. Fig. 425: EPDM-sealing
 II. Fig. 425: PTFE- / pure graphite-packing
 III. Fig. 426: 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							300			350			400			500		
V-port plug		Kvs-value		(m³/h)		630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000	
		max. diff. pressure ¹⁾		(bar)		14		12	14	12		12			12		10	
Perforated plug		Kvs-value		(m³/h)		400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500	
		max. diff. pressure ¹⁾		(bar)		30			30			30			30			
Seat-Ø				(mm)		200	250	301	250	301	351	301	351	380	351	380	480	
Travel				(mm)		65		90	65	90	120	90	120		120			
DP34T 1600 cm² Spring closes on air failure  (stem extending by spring)	Spring range (bar)	0,4 - 1,2	Air supply pressure min. (bar)	1,7	I./II./III.	(bar)	1,2											
		1,0 - 2,0		2,5	I./II./III.	(bar)	4,1	2,6		2,6								
		2,0 - 4,0		4,5	I./II./III.	(bar)	9	5,7		5,7								

DN					300			350			400			500		
V-port plug	Kvs-value			(m³/h)	630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000
	max. diff. pressure ¹⁾			(bar)	14		12	14	12		12			12		10
Perforated plug	Kvs-value			(m³/h)	400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500
	max. diff. pressure ¹⁾			(bar)	30			30			30			30		
Seat-Ø				(mm)	200	250	301	250	301	351	301	351	380	351	380	480
Travel				(mm)	65		90	65	90	120	90	120		120		
DP34T 1600 cm² Spring opens on air failure  (stem retracting by spring)	Air supply pressure min. (bar)	1,5	I./II./III.	(bar)	1,7	1										
		2	I./II./III.	(bar)	4,1	2,6										
		3	I./II./III.	(bar)	9	5,7										
		4	I./II./III.	(bar)	14	8,9										
		5	I./II./III.	(bar)	18,9	12										
		6 ²⁾	I./II./III.	(bar)	23,8	15,2										

I. Fig. 425: EPDM-sealing

II. Fig. 425: PTFE- / pure graphite-packing

III. Fig. 426: 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							300			350			400			500		
V-port plug		Kvs-value	(m³/h)				630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000
		max. diff. pressure ¹⁾	(bar)				14		12	14	12		12			12	10	
Perforated plug		Kvs-value	(m³/h)				400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500
		max. diff. pressure ¹⁾	(bar)				30			30			30			30		
Seat-Ø			(mm)				200	250	301	250	301	351	301	351	380	351	380	480
Travel			(mm)				65		90	65	90	120	90	120		120		
DP34Tri 2400 cm² Spring closes on air failure  (stem extending by spring)	Spring range (bar)	0,4 - 1,2	Air supply pressure min. (bar)	1,7	I./II./III.	(bar)	2,1 a)	1,3 a)		1,3 a)								
		1,0 - 2,0		2,5	I./II./III.	(bar)	6,6 a)	4,1 a)		4,1 a)								
		2,0 - 4,0		4,5	I./II./III.	(bar)	14 a)	8,9 a)		8,9 a)								

- I. Fig. 425: EPDM-sealing
 II. Fig. 425: PTFE- / pure graphite-packing
 III. Fig. 426: 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 f) 2,5 bar

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

DN							300			350			400			500			
V-port plug	Kvs-value					(m³/h)	630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000	
	max. diff. pressure ¹⁾					(bar)	14		12	14	12		12			12		10	
Perforated plug	Kvs-value					(m³/h)	400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500	
	max. diff. pressure ¹⁾					(bar)	30			30			30			30			
Seat-Ø						(mm)	200	250	301	250	301	351	301	351	380	351	380	480	
Travel						(mm)	65		90	65	90	120	90	120		120			
DP35 2800 cm² Spring closes on air failure  (stem extending by spring)		Spring range (bar)	1,8 - 3,8	Air supply pressure min. (bar)	4,3	I./II./III.	(bar)	23	14,7	7,8	14,7	7,8	4,3	7,8	4,3	3,6	4,3	3,6	2,2

Control valve in straightway form with electric actuator AUMA

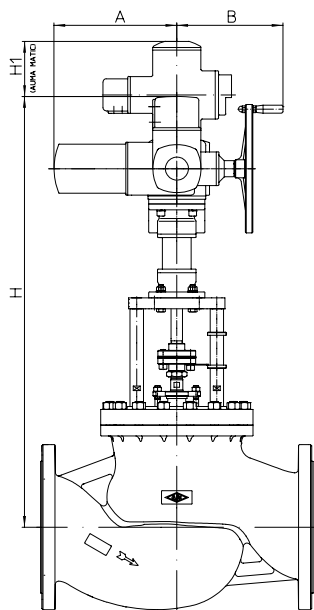


Fig. 425

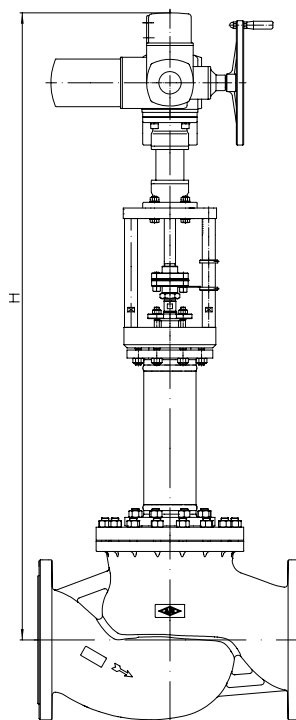


Fig. 426

Actuator data		SAR 07.6	SAR 10.2	SAR 14.2	SAR 14.6	SAR 16.2
A	(mm)	265	283	389		430
B	(mm)	249	254	336	339	365
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				300	350	400	500
Fig. 425	SAR 07.6 with LE 25.1	H	(mm)	1204	1391	1428	1515
		PN16	(kg)	402	--	--	--
		PN25 / 40	(kg)	458	599	857	1253
	SAR 10.2 with LE 50.1	H	(mm)	1291	1348	1385	1472
		PN16	(kg)	410	--	--	--
		PN25 / 40	(kg)	466	607	865	1261
	SAR 14.2 with LE 70.1	H	(mm)	1405	1497	1534	1621
		PN16	(kg)	467	--	--	--
		PN25 / 40	(kg)	523	664	922	1318
	SAR 14.6 with LE 100.1	H	(mm)	1405	1497	1534	1621
		PN16	(kg)	469	--	--	--
		PN25 / 40	(kg)	525	666	924	1320
Fig. 426	SAR 07.6 with LE 25.1	H	(mm)	1832	2020	2039	2137
		PN16	(kg)	497	--	--	--
		PN25 / 40	(kg)	548	686	917	1323
	SAR 10.2 with LE 50.1	H	(mm)	1919	1977	1996	2094
		PN16	(kg)	505	--	--	--
		PN25 / 40	(kg)	556	694	925	1331
	SAR 14.2 with LE 70.1	H	(mm)	2033	2126	2145	2243
		PN16	(kg)	562	--	--	--
		PN25 / 40	(kg)	613	751	982	1388
	SAR 14.6 with LE 100.1	H	(mm)	2033	2126	2145	2243
		PN16	(kg)	564	--	--	--
		PN25 / 40	(kg)	615	753	984	1390
	SAR 16.2 with LE 200.1	H	(mm)	2046	2239	2258	2356
		PN16	(kg)	616	--	--	--
		PN25 / 40	(kg)	667	805	1036	1442

For version with AUMA SAR Ex other heights.

Further dimensions refer to page 12.



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

DN			300			350			400			500		
V-port plug	Kvs-value	(m³/h)	630	1000	1500	1000	1500	1800	1500	1800	2500	1800	2500	4000
	max. diff. pressure ¹⁾	(bar)	14		12	14	12		12			12		10
Perforated plug	Kvs-value	(m³/h)	400	630	1000	630	1000	1500	1000	1500	1800	1500	1800	2500
	max. diff. pressure ¹⁾	(bar)	30			30			30			30		
Seat-Ø		(mm)	200	250	301	250	301	351	301	351	380	351	380	480
Travel		(mm)	65		90	65	90	120	90	120		120		
SAR 07.6 with LE 25.1	Closing pressure I./II./III.	(bar)	6,4	4	2,2	4	2,2	1,5	2,2	1,5		1,5		
	Differential pressure ²⁾	(bar)	3,3	2,1	1,4	2,1	1,4	1	1,4	1		1		
	Torque	(Nm)	60			60			60			60		
	Operating time (50Hz)	(s)	71		68	71	68	65	68	65		65		
	Output drive	(rpm)	11		16	11	16	22	16	22		22		
SAR 10.2 with LE 50.1	Closing pressure I./II./III.	(bar)	11	7	4,1	7	4,1	3	4,1	3	2,5	3	2,5	1,5
	Differential pressure ²⁾	(bar)	5,6	3,6	2,4	3,6	2,4	1,8	2,4	1,8	1,5	1,8	1,5	1
	Torque	(Nm)	120			120			120			120		
	Operating time (50Hz)	(s)	59		56	59	56	55	56	55		55		
	Output drive	(rpm)	11		16	11	16	22	16	22		22		
SAR 14.2 with LE 70.1	Closing pressure I./II./III.	(bar)	19,3	12,3	7,7	12,3	7,7	5,6	7,7	5,6	4,8	5,6	4,8	2,9
	Differential pressure ²⁾	(bar)	9,3	6	4	6	4	3	4	3	2,5	3	2,5	1,6
	Torque	(Nm)	250			250			250			250		
	Operating time (50Hz)	(s)	70			70		64	70	64		64		
	Output drive	(rpm)	8		11	8	11	16	11	16		16		
SAR 14.6 with LE 100.1	Closing pressure I./II./III.	(bar)	39,3	25,2	16,3	25,2	16,3	12	16,3	12	10,2	12	10,2	6,3
	Differential pressure ²⁾	(bar)	15,8	10,1	6,7	10,1	6,7	5	6,7	5	4,3	5	4,3	2,7
	Torque	(Nm)	500			500			500			500		
	Operating time (50Hz)	(s)	70			70		64	70	64		64		
	Output drive	(rpm)	8		11	8	11	16	11	16		16		
SAR 16.2 with LE 200.1	Closing pressure I./II./III.	(bar)	40	40	28,2	40	28,2	20,8	28,2	20,8	17,8	20,8	17,8	11,1
	Differential pressure ²⁾	(bar)	27	17,3	11,5	17,3	11,5	8,5	11,5	8,5	7,3	8,5	7,3	4,6
	Torque	(Nm)	1000			1000			1000			1000		
	Operating time (50Hz)	(s)	61			61		56	61	56		56		
	Output drive	(rpm)	8		11	8	11	16	11	16		16		

I. Fig. 425: EPDM-sealing

II. Fig. 425: PTFE- / pure graphite-packing

III. Fig. 426: Bellows seal

¹⁾ max. differential pressure drop

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

Control valve in straightway form

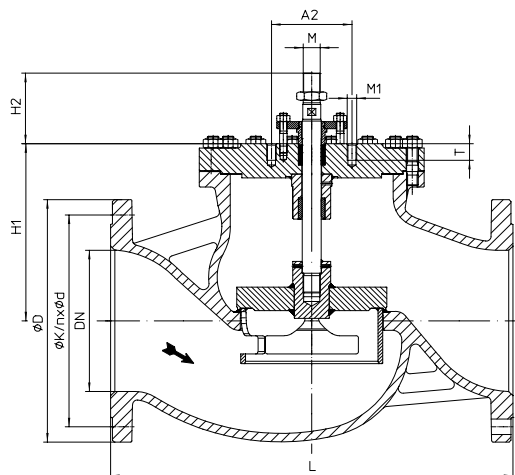


Fig. 425
DN300-500
(e.g.: DP34-35; AUMA 07.6-16.2)

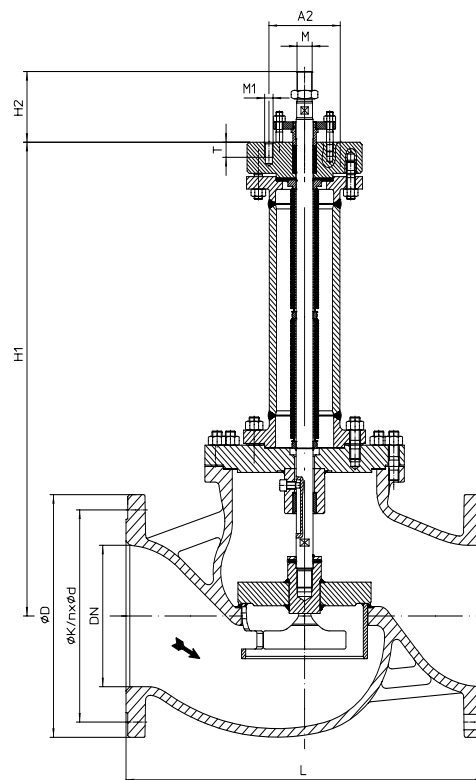


Fig. 426
DN300-500
(e.g.: DP34-35; AUMA 07.6-16.2)

DN	300	350	400	500
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Dimensions										
M	Fig. 425 / 426	(mm)	M36 x 1,5							
H1	Fig. 425	(mm)	377	434		471		558		
	Fig. 426	(mm)	1005	1063		1083		1180		
H2	Fig. 425 / 426	(mm)	150							
A2	Fig. 425 / 426	(mm)	170	250	170	250	170	250	170	250
n x M1	Fig. 425 / 426	(mm)	4 x M20	4 x M27	4 x M20	4 x M27	4 x M20	4 x M27	4 x M20	4 x M27
T	Fig. 425 / 426	(mm)	35	42	35	42	35	42	35	42

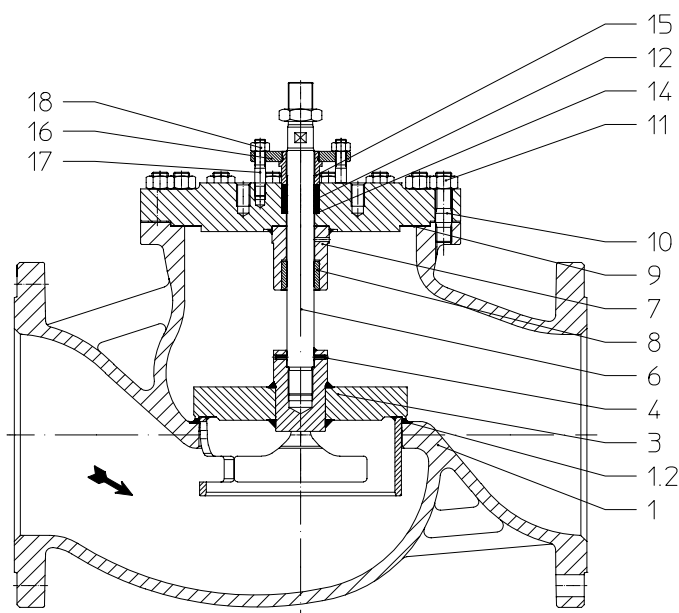
Face-to-face dimension FTF series 1 according to DIN EN 558					
L	(mm)	850	980	1100	1350 (acc. to manufacturers standard)

Flanges acc. to DIN EN 1092-1/-2			Flange holes / -thickness tolerances acc. to DIN 2533/2544/2545			
ØD	PN16	(mm)	460	520	580	715
	PN25	(mm)	485	555	620	730
	PN40	(mm)	515	580	660	755
ØK	PN16	(mm)	410	470	525	650
	PN25	(mm)	430	490	550	660
	PN40	(mm)	450	510	585	670
n x Ød	PN16	(mm)	12 x 26	16 x 26	16 x 30	20 x 33
	PN25	(mm)	16 x 30	16 x 33	16 x 36	20 x 36
	PN40	(mm)	16 x 33	16 x 36	16 x 39	20 x 42

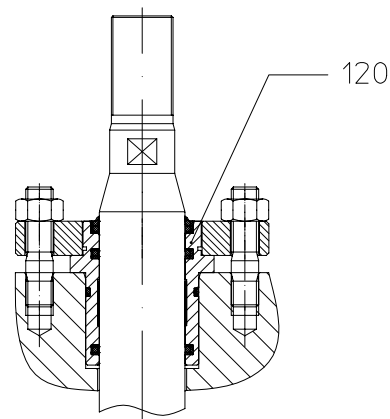
Weights						
Fig. 425	PN16	(kg)	360	444	--	--
	PN25	(kg)	393	538	811	1195
	PN40	(kg)	416	557	815	1211
Fig. 426	PN16	(kg)	452	532	--	--
	PN25	(kg)	484	626	871	1253
	PN40	(kg)	506	644	875	1281

max. permissible thrust		
Fig. 425 / 426	(kN)	250



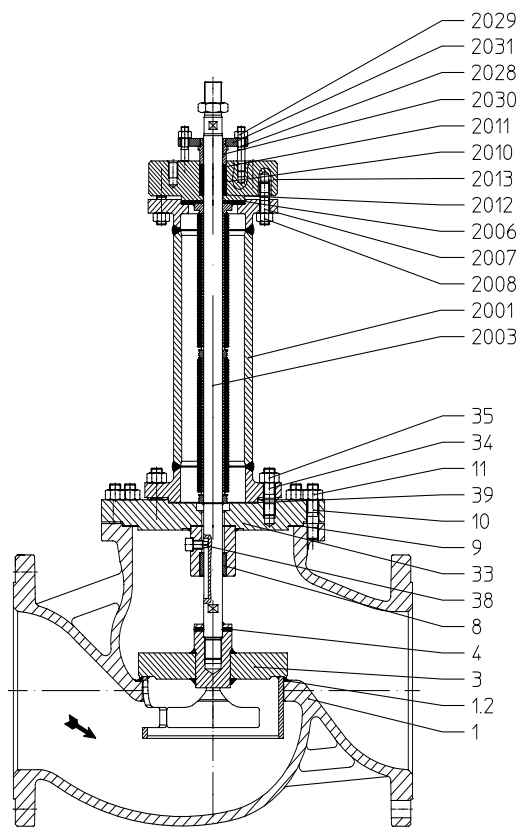


II. PTFE- / pure graphite-packing

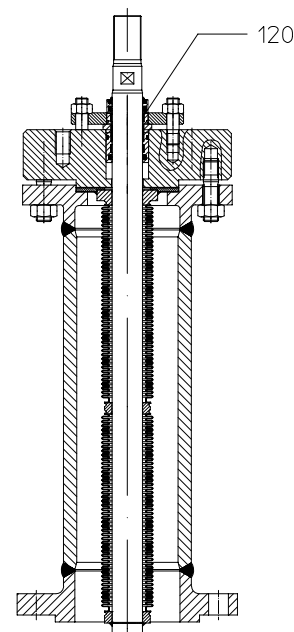


I. EPDM-sealing

Pos.	Sp.p.	Description	Fig. 22.425	Fig. 34.425 / Fig. 35.425
1		Body	5.3103	1.0619+N
1.2		Seat	1.4021+QT	1.4551
3	x	Plug	1.0425 + 1.0037 / 1.4551	
4	x	Clamping sleeve	1.4310	
6	x	Stem	1.4021+QT	
7		Stuffing box housing	1.0425 + 1.0037	
8		Guide bushing	1.4021+QT	
9	x	Gasket	Pure graphite (CrNi laminated with graphite)	
10		Stud	1.7218	
11		Hexagon nuts	1.1181	
12	x	Packing ring	PTFE or Pure graphite	
14		Washer	1.4301	
15	x	Packing follower	1.4021+QT	
16		Packing box flange	1.4021+QT	
17		Stud	1.7218	
18		Hexagon nuts	1.1181	
Stem sealings Fig. 425				
12	x	Packing ring	PTFE	
12	x	Packing ring	Pure graphite	
120	x	EPDM-sealing	EPDM / 1.4305	
L Spare parts				



III. PTFE- / pure graphite-packing



III. EPDM-sealing

Pos.	Sp.p.	Description	Fig. 22.426	Fig. 34.426 / Fig. 35.426
1		Body	5.3103	1.0619+N
1.2		Seat	1.4021+QT	1.4551
3	x	Plug	1.0425 + 1.0037 / 1.4551	
4	x	Clamping sleeve	1.4310	
8		Guide bushing	1.4021+QT	
9	x	Gasket	Pure graphite (CrNi laminated with graphite)	
10		Stud	1.7218	
11		Hexagon nuts	1.1181	
2001		Bellows housing	1.0425 / 1.0345	
2003	x	Stem- / Bellows unit	1.4021+QT / 1.4541	
2006	x	Gasket	Pure graphite (CrNi laminated with graphite)	
2007		Stud	1.7218	
2008		Hexagon nuts	1.1181	
2010	x	Packing ring	PTFE or Pure graphite	
2011	x	Packing ring	PTFE or Pure graphite	
2012		Washer	1.4301	
2013		Stuffing box housing	1.0460	
2028		Stud	A4	
2029		Hexagon nuts	A4	
2030	x	Packing follower	1.4021+QT	
2031		Packing box flange	1.4021+QT	
33		Flange	1.0425	
34		Stud	1.7218	
35		Hexagon nuts	1.1181	
38		Cheese head screw	A2-70	
39	x	Gasket	Pure graphite (CrNi laminated with graphite)	

Stem sealings Fig. 426

120	x	EPDM-sealing	EPDM / 1.4021+QT
2010	x	Packing ring	PTFE or Pure graphite
2011	x	Packing ring	PTFE or Pure graphite
L Spare parts			

