

Control valve in straightway form for combustible gases  
DIN-DVGW type approval  
DN 15 - 150 / 125v-150v

**ARI-STEVI® 470-G / 471-G**

for electric and pneumatic actuators

- DIN-DVGW type approval acc. to DIN EN 13611
- For control of fuel gas-supply systems

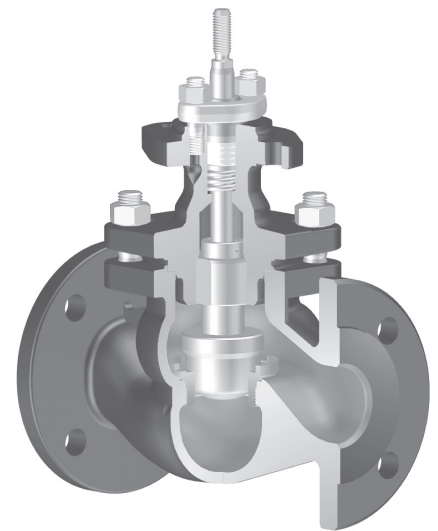
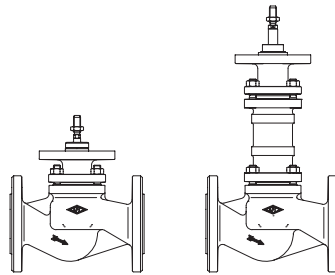


Fig. 470-G

Page 2

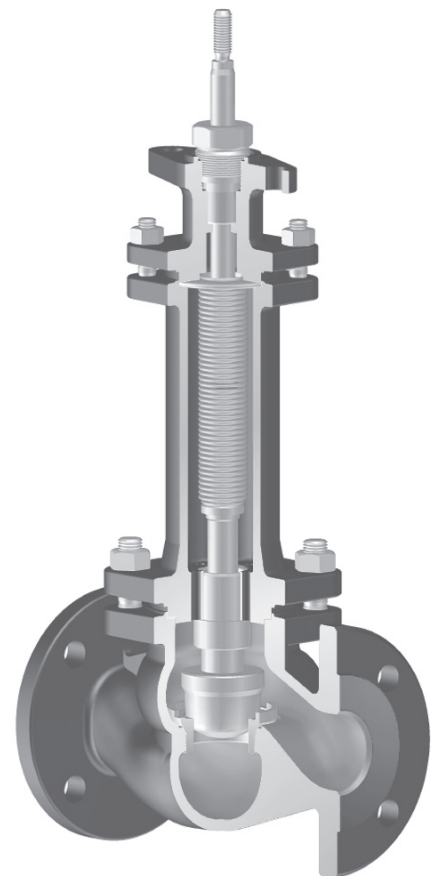


Fig. 471-G

**Features:**

- Compact design
- Precision guided stem
- Roller burnished stem
- Tapered seat ring
- Replaceable seat and plug
- Screwed seat ring
- Kvs-values reducible up to 6 times
- Rangeability 50 : 1
- Post guided plug
- Spring loaded PTFE-V ring packing unit
- Two-ply bellows seal as standard
- Travel indicator

Control valve in straightway form for gas - DIN-DVGW type approval

Figure	Nominal pressure	Material	Nominal diameter
22.470-G / 22.471-G	PN16	EN-JS1049	DN15-150
23.470-G / 23.471-G	PN25	EN-JS1049	DN15-150
32.470-G / 32.471-G	PN16	1.0619+N	DN15-150
34.470-G / 34.471-G	PN25	1.0619+N	DN15-150
35.470-G / 35.471-G	PN40	1.0619+N	DN15-150

<b>Stem sealing</b>			
Fig. 470-G: • PTFE-V-ring unit (only to -10°C useable)			
Fig. 471-G: • DN15-100: Stainless steel-bellow with PTFE-V-ring unit DN125-150: Stainless steel-bellow with NBR-O-ring			
<b>Operative ambient temperature</b>			
EN-JS1049: -10°C to +60°C			
1.0619+N: -20°C to +60°C (Studs and nuts at temperatures below -10°C made of A4-70) (Please indicate when ordering)			
<b>Mounting position</b>			
• horizontal piping: vertical actuator			
• vertical piping: horizontal actuator (observe operating instruction)			
<b>Plug design</b>			
standard: • Parabolic plug with PTFE soft seat (max. 200°C)			
optional: • Parabolic plug, metal seat • Perforated plug, metal seat (refer to page 24)			
<b>Guiding</b>			
• Parabolic plug: post guiding • Perforated plug: post and port guiding			
<b>Flow characteristic</b>			
• Equal percentage or linear (from Kvs 100 modified equal percentage)			
<b>Rangeability</b>			
• 50 : 1 on parabolic plug • 30 : 1 on construction with perforated plug			
<b>Flow direction</b>			
• flow-to-open			
<b>Shut off class (seat / plug leakage classes)</b>			
• Metal / soft seal - Tightness acc. to DIN EN 13611			
• Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4			
<b>Approvals</b>			
• DIN-DVGW type approval acc. to DIN EN 13611 Registration No.: DG-4396CL0133			
<b>Operating ranges</b>			
• Combustible gases acc. to DVGW page G260/1			
<b>Actuator</b>			
• pneumatic: DP32-34 (refer to data sheet Fig. 470/471)			
• electric: ARI-PREMIO 2,2 kN - 12 kN (refer to data sheet Fig. 470/471) AUMA SAR 07.2 - 10.2			
Actuators must be according to DIN EN 13611			
<b>Corrosion protection</b>			
• only for storage and transport			
<b>Accessories</b>			
• Strainer (refer to page 20-21)			
Closing pressures refer to page 4 - 13.			
Technical data for actuator refer to data sheet.			

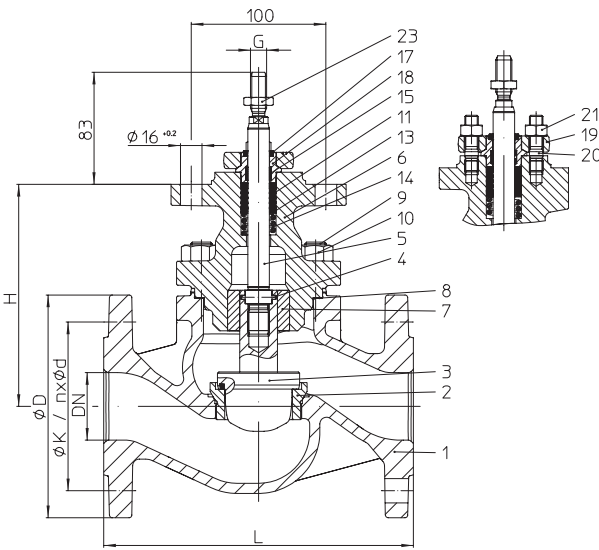


Fig. 470-G

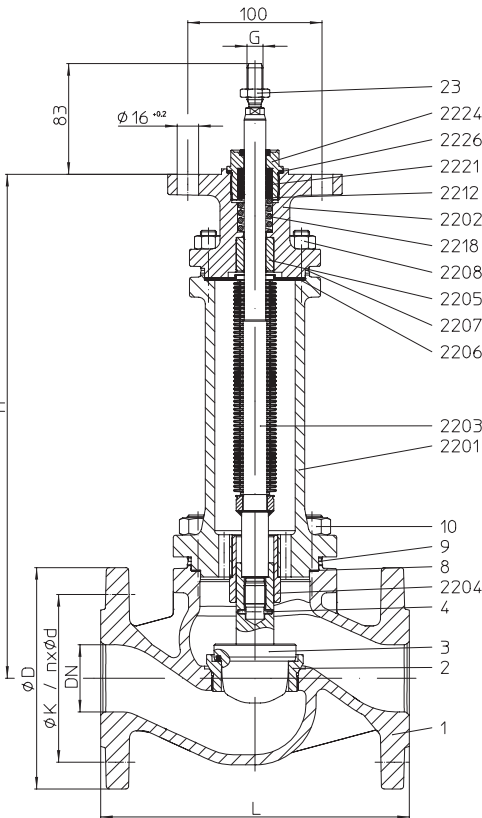


Fig. 471-G (Stem sealing DN15-100)

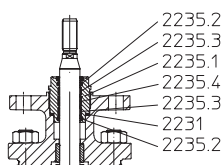


Fig. 471-G (Stem sealing DN125-150)

**Dimensions and weights**

DN		15	20	25	32	40	50	65	80	100	125	150		
L	(mm)	130	150	160	180	200	230	290	310	350	400	480		
Fig. 470-G	H	(mm)	131	131	134	134	165	165	161	194	196	251	256	
	G	(mm)	M10				M12				M16x1,5			
		PN16/25 (kg)	6,8	7,7	8,5	10	14,8	16,5	21	31	45	66	93	
		PN40 (kg)	7,4	8,5	9,5	11,5	16,5	18,5	24	35,5	51,5	77	109	
Fig. 471-G	H	(mm)	288	288	291	291	376	376	385	394	424	577	583	
	G	(mm)	M12						M14 x 1,5			M16 x 1,5		
		PN16/25 (kg)	9,3	10,1	10,8	12,3	17,9	20,2	29,7	37,4	53	80	106	
		PN40 (kg)	11,6	12,5	13,2	13,6	18,5	21	31,2	39,6	56	90	114	

Standard-flange dimensions refer to page 23.

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

**Parts**

Pos.	Description	Fig. 22.470-G / Fig. 23.470-G Fig. 22.471-G / Fig. 23.471-G	Fig. 32.470-G / 34.470-G / Fig. 35.470-G Fig. 32.471-G / 34.471-G / Fig. 35.471-G
1	Body	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2	Seat ring *	X20Cr13+QT, 1.4021+QT	
3	Plug *	X20Cr13+QT, 1.4021+QT / PTFE	
4	Spannstift *	A2	
5	Stem *	X20Cr13+QT, 1.4021+QT	
6	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
7	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)	
8	Gasket *	Pure graphite (CrNi laminated with graphite)	
9	Studs	25CrMo4, 1.7218	
10	Hexagon nuts	C35E, 1.1181	
11	V-ring unit *	PTFE	
13	Washer *	X5CrNi18-10, 1.4301	
14	Spring *	X10CrNi18-8, 1.4310	
15	Guiding band *	PTFE25%C	
17	Scraper *	PTFE	
18	Stem guiding *	X8CrNiS18-9, 1.4305	
19	Packing box flange	P250GH, 1.0460	
20	Studs	A4-70	
21	Hexagon nuts	A4	
23	Hexagon nut	17H-A2G	
2201	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2202	Mounting bonnet	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2203	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541	
2204	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)	
2205	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)	
2206	Gasket *	Pure graphite (CrNi laminated with graphite)	
2207	Studs	25CrMo4, 1.7218	
2208	Hexagon nuts	C35E, 1.1181	
2209	Straight pin (ab DN125)	St	
2212	Washer *	X5CrNi18-10, 1.4301	
2218	Spring *	X10CrNi18-8, 1.4310	
2221	V-ring unit *	PTFE	
2224	Screw joint *	X8CrNiS18-9, 1.4305 / PTFE	
2226	Sealing ring *	Cu	
2231	Sealing ring *	Cu	
2235.1	Screw joint *	X8CrNiS18-9, 1.4305	
2235.2	O-ring *	NBR70	
2235.3	Lubricant *	Ceritol	
2235.4	Guiding band *	PTFE	

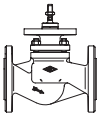
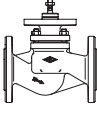
\* Spare parts (Pos. 2235.1 - 2235.4 will be supplied as unit)

Information / restriction of technical rules need to be observed!

A production allowance acc. to TRB 801 No. 45 exists.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

ARI-STEVI® 470-G																														
DN		15					20					25					32			40										
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				18													25				32						40	
		Kvs-value				4														10				16						25
		Travel (mm)				20														20				20						30
	Reduced Kvs-values	Seat-Ø (mm)	3	5	12		3	5	12	18		3	5	12	18	22		22	25		25	32								
		Kvs-value	0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4	6,3		6,3	10		10	16								
		Travel (mm)	20	20	20		20	20	20	20		20	20	20	20	20		20	20		20	20		20	20					
max. permissible thrust (kN)		12,7															18,2													
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																														
max. permissible closing pressure (bar)		16																												
Required thrust at the stem (kN)		--	--	1,1	1,2	--	--	1,1	1,2	1,4	--	--	1,1	1,2	1,4	1,7	1,4	1,7	2,3	1,8	2,5	3,5								
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																														
max. permissible closing pressure (bar)		16																												
Required thrust at the stem (kN)		0,3	0,3	0,4	0,7	0,3	0,3	0,4	0,7	0,9	0,3	0,3	0,4	0,7	0,9	1,2	0,9	1,2	1,7	1,2	1,8	2,6								
DN		50					65					80					100			125			150							
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				50													100				125						150	
		Kvs-value				40														160				250						400
		Travel (mm)				30														30				50						50
	Reduced Kvs-values	Seat-Ø (mm)	32	40		40	50		50	65		65	80		80	100		100	160		100	125								
		Kvs-value	16	25		25	40		40	63		63	100		100	160		160	250		160	250								
		Travel (mm)	20	30		30	30		30	30		30	30		30	30		30	30		30	50								
max. permissible thrust (kN)		18,2										40,6																		
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																														
max. permissible closing pressure (bar)		16																												
Required thrust at the stem (kN)		2,5	3,5	5	3,5	5	7,7	5	7,7	11	7,7	11	16,8	11	16,3	24,4	16,3	24,4	33,9											
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																														
max. permissible closing pressure (bar)		16																												
Required thrust at the stem (kN)		1,8	2,6	3,8	2,6	3,8	6,1	3,8	6,1	9	6,1	9	13,7	9	13,7	21	13,7	21	29,9											

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

max. permissible closing pressures on flow-to-open P2 = 0.  
 Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

ARI-STEVI® 471-G		15					20					25					32			40									
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				18					22					25				32				40					
		Kvs-value				4					6,3					10				16				25					
		Travel (mm)				20					20					20				20				30					
	Reduced Kvs-values	Seat-Ø (mm)	3	5	12		3	5	12	18		3	5	12	18	22		22	25		25	32							
		Kvs-value	0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4	6,3		6,3	10		10	16							
		Travel (mm)	20	20	20		20	20	20	20		20	20	20	20	20		20	20		20	20							
max. permissible thrust (kN)		18,2																											
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																													
max. permissible closing pressure (bar)		16																											
Required thrust at the stem (kN)		--	--	1,4	1,5	--	--	1,4	1,5	1,6	--	--	1,4	1,6	1,7	1,9	1,7	1,9	2,5	1,9	2,6	3,6							
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																													
max. permissible closing pressure (bar)		16																											
Required thrust at the stem (kN)		1,1	1,1	1,2	1,2	1,1	1,1	1,2	1,2	1,3	1,2	1,2	1,3	1,3	1,3	1,3	1,3	1,3	1,9	1,3	1,9	2,7							
ARI-STEVI® 471-G		50					65					80					100					125			150				
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				50					65					80					100				125				150
		Kvs-value				40					63					100					160				250				400
		Travel (mm)				30					30					30					30				50				50
	Reduced Kvs-values	Seat-Ø (mm)	32	40		40	50		50	65		65	80		80	100		80	100		100	125		100	125		100	125	
		Kvs-value	16	25		25	40		40	63		63	100		100	160		100	160		160	250		160	250		160	250	
		Travel (mm)	20	30		30	30		30	30		30	30		30	30		30	30		30	30		30	30		30	50	
max. permissible thrust (kN)		18,2					29,6					40,7																	
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																													
max. permissible closing pressure (bar)		16																											
Required thrust at the stem (kN)		2,6	3,6	5,1	3,6	5,1	7,8	5,1	7,8	11,1	7,8	11,1	16,9	11,1	16,4	24,5	16,4	24,5	34										
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																													
max. permissible closing pressure (bar)		16																											
Required thrust at the stem (kN)		1,9	2,7	3,9	2,7	3,9	6,2	3,9	6,2	9,1	6,2	9,1	13,8	9,1	13,8	21,1	13,8	21,1	30										

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

max. permissible closing pressures on flow-to-open P2 = 0.  
 Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

ARI-STEVI® 470-G Electric actuator ARI-PREMIO		15					20				25					32		40								
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				18										25			32			40				
		Kvs-value				4										10			16			25				
		Travel (mm)				20										20			20			30				
	Reduced Kvs-values	Seat-Ø (mm)	3	5	12		3	5	12	18		3	5	12	18	22		22	25		25	32				
Kvs-value		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4	6,3		6,3	10		10	16					
Travel (mm)		20	20	20		20	20	20	20		20	20	20	20	20		20	20		20	20					
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																										
Actuator <sup>1)</sup>	Closing pressure (bar)				16	16				16	16	16				16	16	16	16	16	16	14,5	16	13,4	7,4	
ARI-PREMIO 2,2 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)			53					53						53				53			53			79	
Actuator <sup>1)</sup>	Closing pressure (bar)																					16			16	16
ARI-PREMIO 5 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)																					53			53	79
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																										
Actuator <sup>1)</sup>	Closing pressure (bar)	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	13,2
ARI-PREMIO 2,2 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)			53					53						53				53			53			79	
Actuator <sup>1)</sup>	Closing pressure (bar)																									16
ARI-PREMIO 5 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)																									79
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																										
Actuator <sup>1)</sup>	Closing pressure (bar)	13,4	7,4	3,8	7,4	3,8	1,4	3,7	1,3				1,3													
ARI-PREMIO 2,2 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79	79				79													
Actuator <sup>1)</sup>	Closing pressure (bar)	16	16	16	16	16	8,8	15,9	8,8	5,2	8,8	5,2	2,8	5,2	2,9	1,4	2,9	1,4								
ARI-PREMIO 5 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79	79				79		79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)						16	16	16	16	16	16	10,6	16	11	6,7	11	6,7	4,4							
ARI-PREMIO 12 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)						79	79	79				79		79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)													14		14,5	8,9	14,5	8,9	6						
ARI-PREMIO 15 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)												79		79	132	79	132								
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																										
Actuator <sup>1)</sup>	Closing pressure (bar)	16	13,2	8,1	13,2	8,1	4,5	8	4,4	2,7	4,4	2,7	1,5	2,7	1,5		1,5									
ARI-PREMIO 2,2 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79	79				79		79		79									
Actuator <sup>1)</sup>	Closing pressure (bar)		16	16	16	16	12,7	16	12,7	8,2	12,7	8,2	5,1	8,2	5,1	3,1	5,1	3,1	2							
ARI-PREMIO 5 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79	79				79		79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)						16	16	16	16	16	16	13,8	16	13,8	8,7	13,8	8,7	6							
ARI-PREMIO 12 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)						79	79	79				79		79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)													16		16	11,1	16	11,1	7,6						
ARI-PREMIO 15 kN	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)												79		79	132	79	132								

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

<sup>2)</sup> Indicated operating times with 50Hz.

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 471-G Electric actuator ARI-PREMIO**

DN		15					20					25					32			40									
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)				18												25				32				40			
		Kvs-value				4													10				16				25		
		Travel (mm)				20													20				20				30		
	Reduced Kvs-values	Seat-Ø (mm)	3	5	12		3	5	12	18		3	5	12	18	22				22	25				25	32			
		Kvs-value	0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6/ 1	4	6,3				6,3	10				10	16			
		Travel (mm)	20	20	20		20	20	20	20		20	20	20	20	20				20	20				20	20			

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator <sup>1)</sup>	Closing pressure (bar)				16	16				16	16	16				16	16	16	16	16	16	13	16	12,3	6,7	
<b>ARI-PREMIO 2,2 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53					53					53					53			53		79				
Actuator <sup>1)</sup>	Closing pressure (bar)																						16		16	16
<b>ARI-PREMIO 5 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)																53			53		79				

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator <sup>1)</sup>	Closing pressure (bar)	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	12,4
<b>ARI-PREMIO 2,2 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53					53					53					53			53		79				
Actuator <sup>1)</sup>	Closing pressure (bar)																									16
<b>ARI-PREMIO 5 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)																					79				

DN		50				65			80			100			125			150		
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)			50			65			80			100			125			150
		Kvs-value			40			63			100			160			250			400
		Travel (mm)			30			30			30			30			50			50
	Reduced Kvs-values	Seat-Ø (mm)	32	40		40	50		50	65		65	80		80	100		100	125	
		Kvs-value	16	25		25	40		40	63		63	100		100	160		160	250	
		Travel (mm)	20	30		30	30		30	30		30	30		30	30		30	50	

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator <sup>1)</sup>	Closing pressure (bar)	12,3	6,7	3,3	6,7	3,3	1,1	3,3	1,1		1,1														
<b>ARI-PREMIO 2,2 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79			79														
Actuator <sup>1)</sup>	Closing pressure (bar)	16	16	15,6	16	15,6	8,6	15,6	8,6	5,1	8,6	5,1	2,7	5,1	2,8	1,3	2,8	1,3							
<b>ARI-PREMIO 5 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79			79			79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)			16		16	16	16	16	16	16	10,5	16	10,9	6,6	10,9	6,6	4,3							
<b>ARI-PREMIO 12 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)			79		79		79			79			79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)												13,9	14,4	8,9	14,4	8,9	5,9							
<b>ARI-PREMIO 15 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)												79	79	132	79	132								

**Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4**

Actuator <sup>1)</sup>	Closing pressure (bar)	16	12,4	7,6	12,4	7,6	4,2	7,6	4,2	2,6	4,2	2,6	1,4	2,5	1,4				1,4							
<b>ARI-PREMIO 2,2 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)	53	79		79			79			79			79												
Actuator <sup>1)</sup>	Closing pressure (bar)		16	16	16	16	12,4	16	12,4	8	12,4	8	5	8	4,9	3	4,9	3	2							
<b>ARI-PREMIO 5 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)		79		79			79			79			79	132	79	132									
Actuator <sup>1)</sup>	Closing pressure (bar)						16		16	16	16	16	13,7	16	13,7	8,6	13,7	8,6	5,9							
<b>ARI-PREMIO 12 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)						79		79				79		79	132	79	132								
Actuator <sup>1)</sup>	Closing pressure (bar)												16		16	11,1	16	11,1	7,6							
<b>ARI-PREMIO 15 kN</b>	Operating time <sup>2)</sup> (s) (Op. speed 0,38 mm/s)												79		79	132	79	132								

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

<sup>2)</sup> Indicated operating times with 50Hz.

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 470-G Electric actuator AUMA SAR (MATIC)**

DN		40		50		65		80		100		125		150											
	Standard <sup>4)</sup> Kvs-value	Seat-Ø (mm)		40		50		65		80		100		125		150									
		Kvs-value		25		40		63		100		160		250		400									
		Travel (mm)		30		30		30		30		30		50		50									
	Reduced Kvs-values	Seat-Ø (mm)		25	32	32	40	40	50	50	65	65	80	80	100	100	125								
		Kvs-value		10	16	16	25	25	40	40	63	63	100	100	160	160	250								
		Travel (mm)		20	20	20	30	30	30	30	30	30	30	30	30	30	50								
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																									
Actuator <sup>1)</sup> <b>AUMA SAR 07.2</b> Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	shut off	16	16	16	16	16	16	16	16	16	16	16	16	15,9										
		controlling <sup>3)</sup>	16	16	16	16	16	16	16	16	16	16	11,2	16	11,2	6,5									
	Torque (Nm)		15		15		15		15		20		15		20		30								
	Operating time <sup>2)</sup> (s)		54		56		54		56		56		56												
	Output drive (rpm)		5,6		8		5,6		8		8		8												
Actuator <sup>1)</sup> <b>AUMA SAR 07.6</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off										16	16	16	16	15	16	15	10,3						
		controlling <sup>3)</sup>											16	16	10,1	16	10,5	6,3	10,5	6,3	4,1				
	Torque (Nm)										30		30		50		30		50		60	50	60		
	Operating time <sup>2)</sup> (s)										64		64		64		55		64		55				
	Output drive (rpm)										5,6		5,6		5,6		11		5,6		11				
Actuator <sup>1)</sup> <b>AUMA SAR 10.2</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off												16	16	16	16	16	16	16					
		controlling <sup>3)</sup>													16	16	15	16	15	10,3					
	Torque (Nm)														60		60		70		60		70	90	
	Operating time <sup>2)</sup> (s)														64		64		55		64		55		
	Output drive (rpm)														5,6		5,6		11		5,6		11		
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																									
Actuator <sup>1)</sup> <b>AUMA SAR 07.2</b> Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	shut off	16	16	16	16	16	16	16	16	16	16	16	16	16										
		controlling <sup>3)</sup>	16	16	16	16	16	16	16	16	16	16	14,7	16	14,7	9,2									
	Torque (Nm)		15		15		15				15		20		15		20		30						
	Operating time <sup>2)</sup> (s)		54		56		54		56		56		56		56										
	Output drive (rpm)		5,6		8		5,6		8		8		8		8										
Actuator <sup>1)</sup> <b>AUMA SAR 07.6</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off										16	16	16	16	16	16	16	12,2						
		controlling <sup>3)</sup>											16	16	13,2	16	13,2	8,3	13,2	8,3	5,7				
	Torque (Nm)												30		30		40		30		40		60	40	60
	Operating time <sup>2)</sup> (s)												64		64		64		55		64		55		
	Output drive (rpm)												5,6		5,6		5,6		11		5,6		11		
Actuator <sup>1)</sup> <b>AUMA SAR 10.2</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off												16	16	16	16	16	16						
		controlling <sup>3)</sup>													16	16	16	16	16	12,2					
	Torque (Nm)														60		60		60		60		80		
	Operating time <sup>2)</sup> (s)														64		64		55		64		55		
	Output drive (rpm)														5,6		5,6		11		5,6		11		

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

<sup>2)</sup> Indicated operating times with 50Hz.

<sup>3)</sup> Restrictions through max. permissible torque of the actuator at controlling operation.

<sup>4)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.



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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 471-G Electric actuator AUMA SAR (MATIC)**

DN		40		50		65		80		100		125		150						
	Standard <sup>4)</sup> Kvs-value	Seat-Ø (mm)		40		50		65		80		100		125		150				
		Kvs-value		25		40		63		100		160		250		400				
		Travel (mm)		30		30		30		30		30		50		50				
	Reduced Kvs-values	Seat-Ø (mm)	25	32	32	40	40	50	50	65	65	80	80	100	100	125				
		Kvs-value	10	16	16	25	25	40	40	63	63	100	100	160	160	250				
		Travel (mm)	20	20	20	30	30	30	30	30	30	30	30	30	30	50				
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>																				
Actuator <sup>1)</sup> <b>AUMA SAR 07.2</b> Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	shut off	16	16	16	16	16	16	16	16	16	16	16	16	15,8					
		controlling <sup>3)</sup>	16	16	16	16	16	16	16	16	16	16	11	16	11	6,4				
	Torque (Nm)		15		15		15		15		20		15	20	30					
	Operating time <sup>2)</sup> (s)		54	56	54		56		56		56		56							
	Output drive (rpm)		5,6	8	5,6		8		8		8		8							
Actuator <sup>1)</sup> <b>AUMA SAR 07.6</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off										16	16	16	16	15	16	15	10,2	
		controlling <sup>3)</sup>											16	16	10	16	10,4	6,3	10,4	6,3
	Torque (Nm)											30	30	45	30	45	60	45	60	
	Operating time <sup>2)</sup> (s)											64	64	64	64	55	64	55		
	Output drive (rpm)											5,6	5,6	5,6	11	5,6	11			
Actuator <sup>1)</sup> <b>AUMA SAR 10.2</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off											16	16	16	16	16	16	16	
		controlling <sup>3)</sup>												16	16	15	16	15	10,2	
	Torque (Nm)												60	60	70	60	70	90		
	Operating time <sup>2)</sup> (s)												64	64	55	64	55			
	Output drive (rpm)												5,6	5,6	11	5,6	11			
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>																				
Actuator <sup>1)</sup> <b>AUMA SAR 07.2</b> Output drive Form A TR 20 x 4 - LH	Closing pressure (bar)	shut off	16	16	16	16	16	16	16	16	16	16	16	16	16					
		controlling <sup>3)</sup>	16	16	16	16	16	16	16	16	16	16	14,5	16	14,5	9,1				
	Torque (Nm)		15		15		15		15		20		15	20	25					
	Operating time <sup>2)</sup> (s)		54	56	54		56		56		56		56							
	Output drive (rpm)		5,6	8	5,6		8		8		8		8							
Actuator <sup>1)</sup> <b>AUMA SAR 07.6</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off										16	16	16	16	16	16	16	12,1	
		controlling <sup>3)</sup>											16	16	13,1	16	13,1	8,3	13,1	8,3
	Torque (Nm)											30	30	40	30	40	55	40	55	60
	Operating time <sup>2)</sup> (s)											64	64	64	64	55	64	55		
	Output drive (rpm)											5,6	5,6	5,6	11	5,6	11			
Actuator <sup>1)</sup> <b>AUMA SAR 10.2</b> Output drive Form A TR 26 x 5 - LH	Closing pressure (bar)	shut off											16	16	16	16	16	16	16	
		controlling <sup>3)</sup>												16	16	16	16	16	12,1	
	Torque (Nm)												60	60	60	80				
	Operating time <sup>2)</sup> (s)												64	64	55	64	55			
	Output drive (rpm)												5,6	5,6	11	5,6	11			

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

<sup>2)</sup> Indicated operating times with 50Hz.

<sup>3)</sup> Restrictions through max. permissible torque of the actuator at controlling operation.

<sup>4)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.



max. permissible closing pressures on flow-to-open P2 = 0.  
 Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 470-G Pneumatic actuator ARI-DP**
**Operation mode: Spring closes on air failure**

DN		50			65			80			100			125			150			
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)	50			65			80			100			125			150		
		Kvs-value	40			63			100			160			250			400		
		Travel (mm)	30			30			30			30			50			50		
	Reduced Kvs-values	Seat-Ø (mm)	32	40	40	50	50	65	65	80	65	80	80	100	100	125	100	125		
		Kvs-value	16	25	25	40	40	63	63	100	100	160	160	250	250		160	250		
		Travel (mm)	20	30	30	30	30	30	30	30	30	30	30	30	30	30	30	50		

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator	Spring range (bar)	Air supply pressure min. (bar)	Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611																			
			0,2-1,0	0,4-1,2	0,8-2,4	1,5-2,5	0,2-1,0	0,4-1,2	0,8-2,4	1,5-3,0	2,0-4,0	0,2-1,0	0,4-1,2	0,8-2,4	1,5-3,0	2,1-3,0	2,0-4,0	2,4-3,6				
Actuator DP32	Spring range (bar)	Air supply pressure min. (bar)	1,2																			
			1,4																			
			2,7	10,9	5,8	2,7	5,8	2,7		2,6												
			2,8	16																		
Actuator DP33	Spring range (bar)	Air supply pressure min. (bar)	1,2																			
			1,4	6,7a	3,1a	1a	3,1a	1a														
			2,7	16	13,6	7,8	13,6	7,8	3,8	7,7	3,8	1,9	3,8	1,9		1,9						
			3,3		16	16	16	16	11,1	16	11,1	6,7	11,1	6,7	3,7	6,7	3,9		3,9			
			4,5						16		16	10,2	16	10,2	5,9	10,2	6,1		6,1			
Actuator DP34	Spring range (bar)	Air supply pressure min. (bar)	1,2		3,1e	1e	3,1e	1e														
			1,4		13,7d	7,9d	13,7d	7,9d	3,9d	7,8	3,8	1,9	3,8	1,9		1,9						
			2,7		16b	16b	16b	16b	12,3b	16	12,2	7,5	12,2	7,5		7,5	4,4	2,4	4,4	2,4	1,4	
			3,3														6,5		6,5	4,3		
			3,3						16a		16	16	16	16	15,7	16	16		16			
			4,5															9,5		9,5	6,4	
			4												16							

**Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4**

Actuator	Spring range (bar)	Air supply pressure min. (bar)	Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4																			
			0,2-1,0	0,4-1,2	0,8-2,4	1,5-2,5	2,0-3,3	0,2-1,0	0,4-1,2	0,8-2,4	1,5-3,0	2,0-4,0	0,2-1,0	0,4-1,2	0,8-2,4	1,5-3,0	2,1-3,0	2,0-4,0	2,4-3,6			
Actuator DP32	Spring range (bar)	Air supply pressure min. (bar)	1,2																			
			1,4	6,7	3,9	2,1	3,9	2,1		2												
			2,7	16	11,4	6,9	11,4	6,9	3,8	6,8	3,7	2,2	3,7	2,2	1,2	2,2	1,2		1,2			
			2,8																			
			3,6																			
Actuator DP33	Spring range (bar)	Air supply pressure min. (bar)	1,2	4,4a	2,3a	1,1a	2,3a	1,1a		1												
			1,4	13,6a	8,3a	5a	8,3a	5a	2,6a	4,9	2,6	1,5	2,6	1,5		1,5						
			2,7		16	12,7	16	12,7	7,2	12,6	7,1	4,5	7,1	4,5	2,7	4,5	2,7		2,7			
			3,3			16		16	15,2	16	15,2	9,8	15,2	9,8	6,1	9,8	6,1		6,1			
			4,5						16		16	13,6	16	13,6	8,6	13,6	8,6		8,6			
Actuator DP34	Spring range (bar)	Air supply pressure min. (bar)	1,2		8,4e	5e	8,4e	5e	2,6e	4,9	2,6	1,5	2,6	1,5		1,5						
			1,4		16d	12,8d	16d	12,8d	7,3d	12,7	7,2	4,5	7,2	4,5	2,7	4,5	2,7	1,6	2,7	1,6	1	
			2,7			16b		16b	16b	16	16	10,7	16	10,7	6,7	10,7	6,7	4,1	6,7	4,1	2,8	
			3,3															8,5		8,5	5,8	
			3,3									16		16	16	16	16		16			
			4,5																11,7		11,7	8
			4																			

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

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 471-G Pneumatic actuator ARI-DP**

Operation mode: Spring closes on air failure

DN		15					20					25					32		40					
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)	18					22					25					32		40				
		Kvs-value	4					6,3					10					16		25				
		Travel (mm)	20					20					20					20		30				
	Reduced Kvs-values	Seat-Ø (mm)	3	5	12		3	5	12	18		3	5	12	18	22		22	25		25	32		40
		Kvs-value	0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6 1		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6 1	4		0,25/ 0,16/ 0,1	0,63/ 0,4	2,5/ 1,6 1	4	6,3		6,3	10		10	16		40
		Travel (mm)	20	20	20		20	20	20	20		20	20	20	20	20		20	20		20	20		40

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator	Spring range (bar)	Air supply pressure min. (bar)	Tightness values (bar)																			
			(Values for DP32, DP33, DP34 actuators)																			

**Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4**

Actuator	Spring range (bar)	Air supply pressure min. (bar)	Leakage class IV values (bar)																			
			(Values for DP32, DP33, DP34 actuators)																			

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

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 471-G Pneumatic actuator ARI-DP**
**Operation mode: Spring closes on air failure**

DN		50			65			80			100			125			150		
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)		50		65		80		100		125		150					
		Kvs-value		40		63		100		160		250		400					
		Travel (mm)		30		30		30		30		30		50		50			
	Reduced Kvs-values	Seat-Ø (mm)	32	40		40	50		50	65		65	80		80	100		100	125
		Kvs-value	16	25		25	40		40	63		63	100		100	160		160	250
		Travel (mm)	20	30		30	30		30	30		30	30		30	30		30	50

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator DP32	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2																		
		0,4-1,2	Air supply pressure min. (bar)		1,4																		
		0,8-2,4	Air supply pressure min. (bar)		2,7	9,8	5,1	2,3	5,1	2,3		2,3											
		1,5-2,5	Air supply pressure min. (bar)		2,8	16																	
		2,0-3,3	Air supply pressure min. (bar)		3,6																		
Actuator DP33	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2																		
		0,4-1,2	Air supply pressure min. (bar)		1,4	5,7a)	2,4a)		2,4a)														
		0,8-2,4	Air supply pressure min. (bar)		2,7	16	12,9	7,3	12,9	7,3	3,6	7,3	3,6	1,7	3,6	1,7		1,7					
		1,5-3,0	Air supply pressure min. (bar)		3,3		16	16	16	16	10,9	16	10,9	6,6	10,9	6,6	3,6	6,6	3,7	3,7			
		2,0-4,0	Air supply pressure min. (bar)		4,5					16		16	10,1	16	10,1	5,8	10	6		6			
Actuator DP34	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2		2,5e)		2,5e)														
		0,4-1,2	Air supply pressure min. (bar)		1,4		13d)	7,4d)	13d)	7,4d)	3,6d)	7,4b)	3,6b)	1,8b)	3,6b)	1,8b)		1,7					
		0,8-2,4	Air supply pressure min. (bar)		2,7		16b)	16b)	16b)	16b)	12b)	16	12	7,4	12	7,4	4,1	7,3	4,2	2,3	4,2	2,3	1,3
		1,5-3,0	Air supply pressure min. (bar)		3,3														6,4		6,4	4,2	
		2,1-3,0	Air supply pressure min. (bar)		3,3					16a)		16	16	16	16	16	15,6	16	16		16		
		2,0-4,0	Air supply pressure min. (bar)		4,5															9,4		9,4	6,3
2,4-3,6	Air supply pressure min. (bar)		4											16									

**Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611**

Actuator DP32	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2																		
		0,4-1,2	Air supply pressure min. (bar)		1,4	5,5	3,1	1,6	3,1	1,6		1,6											
		0,8-2,4	Air supply pressure min. (bar)		2,7	16	10,6	6,4	10,6	6,4	3,5	6,4	3,5	2,1	3,5	2,1	1,1	2,1	1,1	1,1			
		1,5-2,5	Air supply pressure min. (bar)		2,8																		
		2,0-3,3	Air supply pressure min. (bar)		3,6																		
Actuator DP33	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2	3,2a)	1,6a)		1,6a)														
		0,4-1,2	Air supply pressure min. (bar)		1,4	12,4a)	7,5a)	4,5a)	7,5a)	4,5a)	2,3a)	4,5	2,3	1,3	2,3	1,3		1,3					
		0,8-2,4	Air supply pressure min. (bar)		2,7	16	16	12,2	16	12,2	6,9	12,2	6,9	4,4	6,9	4,4	2,6	4,3	2,6	2,6			
		1,5-3,0	Air supply pressure min. (bar)		3,3			16		16	14,9	16	14,9	9,7	14,9	9,7	6	9,6	6	6			
		2,0-4,0	Air supply pressure min. (bar)		4,5						16		16	13,5	16	13,5	8,5	13,4	8,4	8,4			
Actuator DP34	Spring range (bar)	0,2-1,0	Air supply pressure min. (bar)		1,2		7,6e)	4,5e)	7,6e)	4,5e)	2,4e)	4,5b)	2,4b)	1,3b)	2,4b)	1,3b)		1,3					
		0,4-1,2	Air supply pressure min. (bar)		1,4		16d)	12,3d)	16d)	12,3 d)	7d)	12,3b)	7b)	4,4b)	7b)	4,4b)	2,6b)	4,4	2,6	1,5	2,6	1,5	
		0,8-2,4	Air supply pressure min. (bar)		2,7			16b)		16b)	16b)	16	16	10,5	16	10,5	6,6	10,5	6,5	4	6,5	4	2,7
		1,5-3,0	Air supply pressure min. (bar)		3,3														8,5		8,5	5,8	
		2,1-3,0	Air supply pressure min. (bar)		3,3								16		16	16	16	16	16		16		
		2,0-4,0	Air supply pressure min. (bar)		4,5															11,6		11,6	8
2,4-3,6	Air supply pressure min. (bar)		4																				

Air supply pressure max. of pneumatic actuators DP:

max. permissible 6 bar

Air supply pressure max. limit of control valve:

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

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

## Control valve in straightway form for gas - DIN-DVGW type approval

Figure	Nominal pressure	Material	Nominal diameter
22.470-G / 22.471-G	PN16	EN-JS1049	DN125v-150v
23.470-G / 23.471-G	PN25	EN-JS1049	DN125v-150v
32.470-G / 32.471-G	PN16	1.0619+N	DN125v-150v
34.470-G / 34.471-G	PN25	1.0619+N	DN125v-150v
35.470-G / 35.471-G	PN40	1.0619+N	DN125v-150v

**Stem sealing**

Fig. 470-G: • NBR-O-ring

Fig. 471-G: • Stainless steel-bellow with NBR-O-ring

**Umgebungstemperatur**

EN-JS1049: -10°C to +60°C

1.0619+N: -20°C to +60°C

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

(Please indicate when ordering)

**Mounting position**

- horizontal piping:  
vertical actuator
- vertical piping:  
horizontal actuator (observe operating instruction)

**Plug design**

standard: • Parabolic plug with PTFE soft seat (max. 200°C)

optional: • Parabolic plug, metal seat

• Perforated plug, metal seat

**Guiding** • Parabolic plug: post guiding

• Perforated plug: post and port guiding (refer to page 24)

**Flow characteristic**

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

**Rangeability**

- 50 : 1 on parabolic plug
- 30 : 1 at construction with perforated plug

**Flow direction**

• gegen Schließrichtung

**Shut off class (seat / plug leakage classes)**

• Metal / Soft seal - Tightness acc. to DIN EN 13611

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

**Approvals**

 • DIN-DVGW type approval acc. to DIN EN 13611  
Registration No: **DG-4396CL0133**
**Operating ranges**

• Combustible gases acc. to DVGW page G260/1

**Actuator**

• pneumatic: DP34T-34Tri (refer to data sheet Fig. 470/471)

• electric: AUMA SAR 14.2 (refer to data sheet Fig. 470/471)

Actuators must be according to DIN EN 13611

**Corrosion protection**

• only for storage and transport

**Accessories**

• Strainer (refer to page 20-21)

Closing pressures refer to page 16 - 19.

Technical data for actuator refer to data sheet.

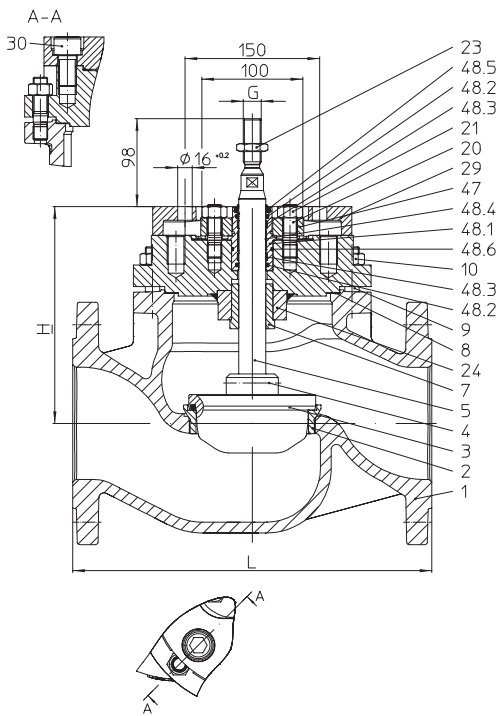


Fig. 470-G

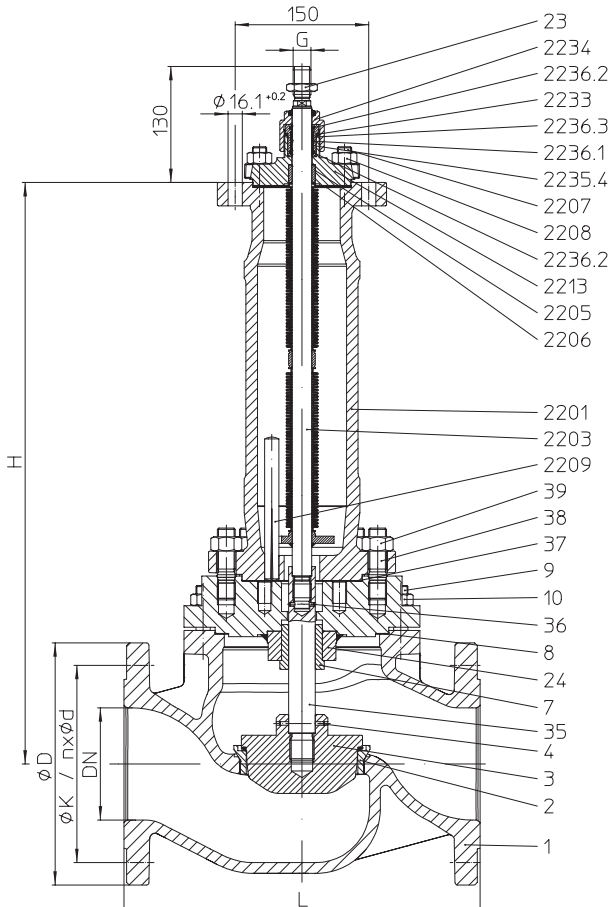


Fig. 471-G

**Dimensions and weights**

DN			125v	150v
L		(mm)	400	480
Fig. 470-G	H	(mm)	242	272
	G	(mm)		M20
		PN16/25 (kg)	66	93
		PN40 (kg)	77	109
Fig. 471-G	H	(mm)	649	679
	G	(mm)		M20
		PN16/25 (kg)	84	110
		PN40 (kg)	111	140

Standard-flange dimensions refer to page 23.

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

**Parts**

Pos.	Description	Fig. 22.470-G / Fig. 23.470-G Fig. 22.471-G / Fig. 23.471-G	Fig. 32.470-G / 34.470-G / Fig. 35.470-G Fig. 32.471-G / 34.471-G / Fig. 35.471-G
1	Body	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2	Seat ring *	X20Cr13+QT, 1.4021+QT	
3	Plug *	X20Cr13+QT, 1.4021+QT	
4	Straight spin *	X10CrNi18-8, 1.4310	
5	Stem *	X20Cr13+QT, 1.4021+QT	
7	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)	
8	Gasket *	Pure graphite (CrNi laminated with graphite)	
9	Studs	25CrMo4, 1.7218	
10	Hexagon nuts	C35E, 1.1181	
20	Studs	25CrMo4, 1.7218	
21	Hexagon nuts	C35E, 1.1181	
23	Hexagon nut	17H-A2G	
24	Stuffing box housing	P265 GH, 1.0425 / P250 GH, 1.0460	
29	Adapter flange	EN-GJS-400-18U-LT, EN-JS1049	
30	Hexagon socket head screw	A2-70	
35	Stem adapter	X20Cr13+QT, 1.4021+QT	
36	Straight pin	X10CrNi18-8, 1.4310	
37	Gasket *	Pure graphite (CrNi laminated with graphite)	
38	Studs	25CrMo4, 1.7218	
39	Hexagon nuts	C35E, 1.1181	
47	Packing box flange	S235JR, 1.0037	
48.1	Stem guiding	X20Cr13+QT, 1.4021+QT	
48.2	O-ring	NBR70	
48.3	Lubricant	Ceritol	
48.4	Guiding band	PTFE	
48.5	Scraper	NBR	
48.6	O-ring	NBR70	
2201	Bellows housing	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2203	Stem- / Bellows unit *	X20Cr13+QT, 1.4021+QT / X6CrNiTi18-10, 1.4541	
2205	Guide bushing	X20Cr13+QT, 1.4021+QT (hardened)	
2206	Gasket *	Pure graphite (CrNi laminated with graphite)	
2207	Studs	25CrMo4, 1.7218	
2208	Hexagon nuts	C35E, 1.1181	
2209	Straight pin (ab DN125)	St	
2213	Stuffing box housing	EN-GJS-400-18U-LT, EN-JS1049	GP240GH+N, 1.0619+N
2233	Sealing ring	X6CrNiMoTi17-12-2, 1.4571	
2234	Sleeve nut	X20Cr13+QT, 1.4021+QT / PTFE	
2236.1	Stem guiding *	X8CrNiS18-9, 1.4305	
2236.2	O-ring *	NBR70	
2236.3	Lubricant *	Ceritol	
2236.4	Guiding band *	PTFE	

\* Spare parts (Pos. 2236.1 - 2236.4 will be supplied as unit)

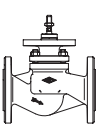
Information / restriction of technical rules need to be observed!

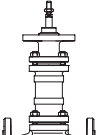
A production allowance acc. to TRB 801 No. 45 exists.

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

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

ARI-STEVI® 470-G								
DN		125v			150v			
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)			125			150
		Kvs-value			250			400
		Travel (mm)			50			50
	Reduced Kvs-values	Seat-Ø (mm)	80	100		100	125	
		Kvs-value	100	160		160	250	
		Travel (mm)	30	30		30	50	
max. permissible thrust (kN)		59,1						
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>								
max. permissible closing pressure (bar)		16						
Required thrust at the stem (kN)		11,1	16,3	24,4	16,3	24,4	33,9	
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>								
max. permissible closing pressure (bar)		16						
Required thrust at the stem (kN)		9	13,8	21,1	13,8	21,1	30	

ARI-STEVI® 471-G								
DN		125v			150v			
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)			125			150
		Kvs-value			250			400
		Travel (mm)			50			50
	Reduced Kvs-values	Seat-Ø (mm)	80	100		100	125	
		Kvs-value	100	160		160	250	
		Travel (mm)	30	30		30	50	
max. permissible thrust (kN)		34						
<b>Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611</b>								
max. permissible closing pressure (bar)		16						
Required thrust at the stem (kN)		11,1	16,4	24,5	16,4	24,5	34	
<b>Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4</b>								
max. permissible closing pressure (bar)		16						
Required thrust at the stem (kN)		9,1	13,8	21,1	13,8	21,1	30	

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.





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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 470-G Pneumatic actuator ARI-DP**

Operation mode: Spring closes on air failure

DN		125v			150v		
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)		125		150	
		Kvs-value		250		400	
		Travel (mm)		50		50	
	Reduced Kvs-values <sup>3)</sup>	Seat-Ø (mm)	80	100	100	125	
		Kvs-value	100	160	160	250	
		Travel (mm)	30	30	30	50	

Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611

Actuator DP34T	Air supply pressure min. (bar)	Air supply pressure min. (bar)	Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611						
			1,5	1,9b)					
Actuator DP34Tri	0,2-1,0 0,4-1,2 0,8-2,4 1,5-3,0 2,1-3,0 2,0-4,0	1,5 1,7 2,9 3,5 3,5 4,5	1,5	1,9b)					
			1,7	7,5b)	4,3b)	2,4b)	4,3b)	2,4b)	1,3b)
			2,9	16	11,7	7,1	11,7	7,1	4,7
			3,5			15,4		15,4	10,5
			3,5		16		16		
			4,5			16		16	14,7
Actuator DP34Tri	0,2-1,0 0,4-1,2 0,8-2,4 1,5-3,0	1,5 1,7 2,9 3,5	1,5	4,7d)	2,5d)	1,2d)	2,4d)	1,2d)	
			1,7	13,1d)	8d)	4,7d)	8d)	4,7d)	3d)
			2,9	16b)	16b)	11,8b)	16b)	11,8b)	8b)
			3,5			16a)		16	16

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

Actuator DP34T	Air supply pressure min. (bar)	Air supply pressure min. (bar)	Shut off class: Metal seat - Leakage class IV acc. to DIN EN 1349 or IEC 60534-4						
			1,5	4,5b)	2,7b)	1,6b)	2,7b)	1,6b)	1b)
Actuator DP34Tri	0,2-1,0 0,4-1,2 0,8-2,4 1,5-3,0 2,1-3,0 2,0-4,0	1,5 1,7 2,9 3,5 3,5 4,5	1,5	4,5b)	2,7b)	1,6b)	2,7b)	1,6b)	1b)
			1,7	10,6b)	6,6b)	4,1b)	6,6b)	4,1b)	2,7b)
			2,9	16	14,5	9,2	14,5	9,2	6,3
			3,5			16		16	12,4
			3,5		16		16		
			4,5						16
Actuator DP34Tri	0,2-1,0 0,4-1,2 0,8-2,4 1,5-3,0	1,5 1,7 2,9 3,5	1,5	7,6d)	4,7d)	2,8d)	4,7d)	2,8d)	1,9d)
			1,7	16d)	10,6d)	6,6d)	10,6d)	6,6d)	4,5d)
			2,9		16b)	14,2b)	16b)	14,2b)	9,8b)
			3,5			16a)		16a)	16a)

Air supply pressure max. of pneumatic actuators DP:

max. permissible 6 bar

Air supply pressure max. limit of control valve:

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

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

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

Richtwerte für die Auswahl der Kegel beachten, siehe „Auswahl ARI-STEVI“ im Technischen Anhang.

**ARI-STEVI® 471-G Pneumatic actuator ARI-DP**

Operation mode: Spring closes on air failure

DN		125v			150v		
	Standard <sup>3)</sup> Kvs-value	Seat-Ø (mm)		125		150	
		Kvs-value		250		400	
		Travel (mm)		50		50	
	Reduced Kvs-values <sup>3)</sup>	Seat-Ø (mm)	80	100	100	125	
		Kvs-value	100	160	160	250	
		Travel (mm)	30	30	30	50	

Shut off class: Metal / Soft seal - Tightness acc. to DIN EN 13611

Actuator DP34T	Air supply pressure min. (bar)		Air supply pressure min. (bar)	Tightness acc. to DIN EN 13611					
				1,5	1,7e)	4,2e)	2,3e)	4,2e)	2,3e)
Actuator DP34Tri	Air supply pressure min. (bar)	0,2-1,0	1,5	1,7e)	4,2e)	2,3e)	4,2e)	2,3e)	1,3e)
		0,4-1,2	1,7	7,3e)	11,6b)	7b)	11,6b)	7b)	4,6b)
		0,8-2,4	2,9	16b)	16a)	16	15,3a)	10,5a)	
		1,5-3,0	3,5						
		2,1-3,0	3,5						
		2,0-4,0	4,5						14,6
Actuator DP34Tri	Air supply pressure min. (bar)	0,2-1,0	1,5	4,5g)	2,4g)	1,1g)	2,4g)	1,1g)	
		0,4-1,2	1,7	12,9f)	7,9f)	4,7f)	7,9f)	4,7f)	3f)
		0,8-2,4	2,9	16d)	16d)	11,8d)	16d)	11,8d)	8d)

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

Actuator DP34T	Air supply pressure min. (bar)		Air supply pressure min. (bar)	Leakage class IV acc. to DIN EN 1349 or IEC 60534-4					
				1,5	4,4e)	2,6e)	1,5e)	2,6e)	1,5e)
Actuator DP34Tri	Air supply pressure min. (bar)	0,2-1,0	1,5	4,4e)	6,5e)	4e)	6,5e)	4e)	2,7e)
		0,4-1,2	1,7	10,5e)	14,4b)	9,1b)	14,4b)	9,1b)	6,2b)
		0,8-2,4	2,9	16b)	16a)	16a)	16a)	12,4a)	
		1,5-3,0	3,5						
		2,1-3,0	3,5						
		2,0-4,0	4,5						16
Actuator DP34Tri	Air supply pressure min. (bar)	0,2-1,0	1,5	7,4g)	4,6g)	2,8g)	4,6g)	2,8g)	1,8g)
		0,4-1,2	1,7	16f)	10,5f)	6,6f)	10,5f)	6,6f)	4,5f)
		0,8-2,4	2,9		16d)	14,1d)	16d)	14,1d)	9,7d)

Air supply pressure max. of pneumatic actuators DP:

max. permissible 6 bar

Air supply pressure max. limit of control valve:

max. permissible a) 5 bar b) 4,5 bar c) 4 bar d) 3,5 bar e) 3 bar f) 2,5 bar g) 2 bar

<sup>3)</sup> Not for perforated plug (presentation ref. to page 24) refer to „Selection STEVI“, refer to techn. annex.

Strainer, Y-pattern with flanges (SG iron, Cast steel)

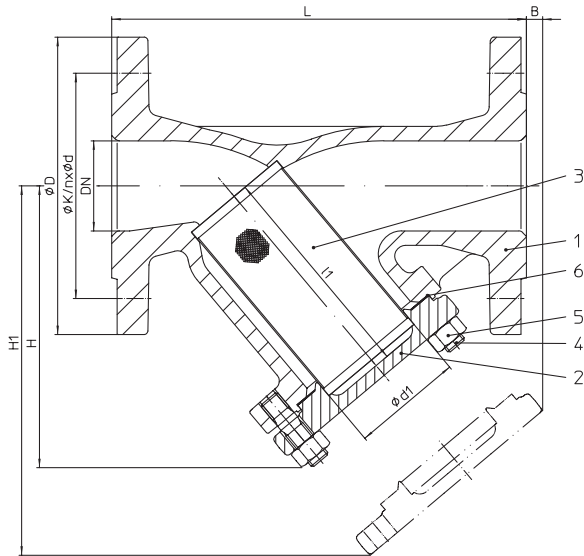


Figure	Nominal pressure	Material	Nominal diameter
22.050	PN16	EN-JS1049	DN15-300
23.050	PN25	EN-JS1049	DN15-150
34.050	PN25	1.0619+N	DN15-200
35.050	PN40	1.0619+N	DN15-200

A supporting basket is necessary, with higher differential pressures, dependent on clogging-up (DN >125 standard)

Test: • TA - Luft TÜV-Test-No. 922-9204866

To prevent ingress of foreign bodies, provide a strainer in the pipe in front of the valve which mesh-width is not larger than 1.5 mm.

Further technical data and constructions for ARI-Strainer refer to corresponding data sheet.

**Dimensions**

		DN	15	20	25	32	40	50	65	80	100	125	150
L		(mm)	130	150	160	180	200	230	290	310	350	400	480
H		(mm)	90	100	115	125	150	160	180	215	235	275	305
H1		(mm)	135	150	180	205	235	250	285	330	365	425	480
B		(mm)	10	10	25	35	45	45	25	40	55	65	50
l1		(mm)	56	68	82	98	114	119	134	149	169	199	224
Ød1		(mm)	23	28	36	42	50	61,5	78,5	89,5	109,5	137,5	160
Normal screen	Mesh-width	(mm)	1	1	1	1	1	1	1,25	1,25	--	--	--
	Kvs-value <sup>1)</sup>	(m <sup>3</sup> /h)	6,9	10,8	17,8	26,1	36,7	61	98,6	146	--	--	--
	Zeta-value	--	1,7	2,2	2	2,5	3	2,7	2,9	3,1	--	--	--
Fine screen	Mesh-width	(mm)	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25	0,25
	Kvs-value <sup>1)</sup>	(m <sup>3</sup> /h)	6,2	10,1	16,8	24,3	32,9	49,5	80,3	115	189	303	405
	Zeta-value	--	2,1	2,5	2,2	2,8	3,8	4,1	4,4	4,9	4,4	4,5	4,9
Ratio of the free screen surface area to the area of the nominal diameters.			10	8,4	8,3	7,1	6,8	5,2	4,4	3,7	2,8	2,7	2,4
Zeta-value ... range of tolerance for Kvs-values acc. to VDI/VDE 2173										Standard-flange dimensions refer to page 23			
<sup>1)</sup> Kvs-values based upon clean screen !													

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

**Weights**

Figure-No.	DN	15	20	25	32	40	50	65	80	100	125	150
22.050	(kg)	3,5	4	5,5	7	9	12	16	21	28	41	58
23.050	(kg)	3,5	4	5,5	7	9	12	16	21	32	47	64
34./35.050	(kg)	4	5	6	8	10	13	19	24,5	35	51	71

**Parts**

Pos.	Description	Fig. 22./23.050	Fig. 34./35.050
1	Body	EN-JS1049, EN-GJS-400-18U-LT	GP240GH+N, 1.0619+N
2	Cover	DN ≤65: EN-JS1049, EN-GJS-400-18U-LT DN >65: P265 GH, 1.0425	DN ≤65: P250 GH, 1.0460 DN >65: P265 GH, 1.0425
3	Screen *	X5CrNi18-10, 1.4301	
3.1	Supporting basket	DN >125: X5CrNi18-10, 1.4301	
4	Stud	25CrMo4, 1.7218	
5	Hexagon nut	C35E, 1.1181	
6	Gasket *	Pure graphite (CrNi laminated with graphite)	
<b>* Spare part</b>			

Information / restriction of technical rules need to be observed!

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

A production allowance acc. to TRB 801 No. 45 exists.

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



**Standard-flange dimensions**

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

DN			15	20	25	32	40	50	65	80	100	125	150
PN16	ØD	(mm)	95	105	115	140	150	165	185	200	220	250	285
PN16	ØK	(mm)	65	75	85	100	110	125	145	160	180	210	240
PN16	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	4x18	8x18	8x18	8x18	8x22
PN25	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300
PN25	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250
PN25	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26
PN40	ØD	(mm)	95	105	115	140	150	165	185	200	235	270	300
PN40	ØK	(mm)	65	75	85	100	110	125	145	160	190	220	250
PN40	n x Ød	(mm)	4x14	4x14	4x14	4x18	4x18	4x18	8x18	8x18	8x22	8x26	8x26

**Please indicate when ordering:**

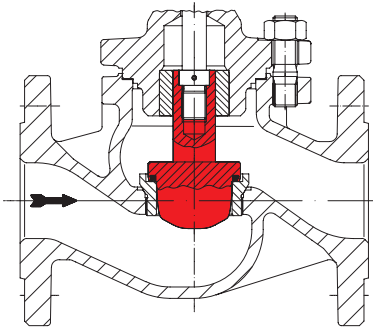
- Figure-No.
- Nominal diameter
- Nominal pressure
- Body material
- Plug design
- Kvs-value
- Flow characteristic
- Stem sealing
- Actuator
- Special design / accessories

**Example:**

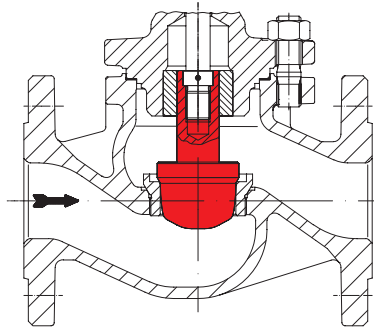
Figure 35.470-G, Nominal diameter DN100, Nominal pressure PN40, Body material 1.0619+N, Parabolic plug, Kvs 160, Equal percentage, V-ring unit.

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

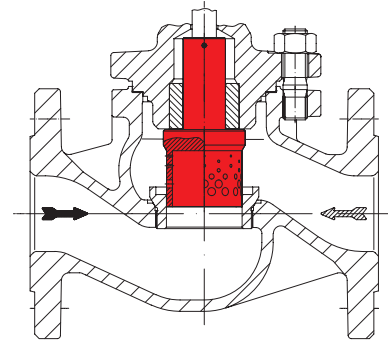
**Plug design**



Parabolic plug with PTFE soft seat and post guiding



Parabolic plug with post guiding

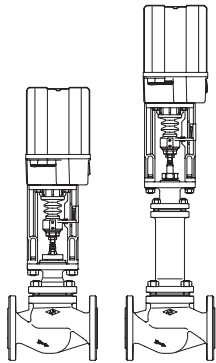


Perforated plug with post and port guiding

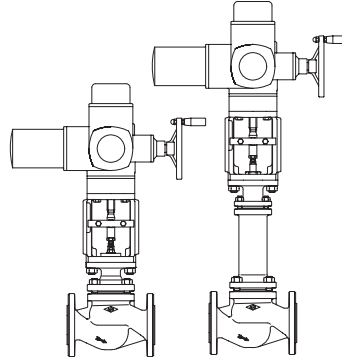
➔ Flow direction for gas and steam to reduce the sound level

▨ Flow direction for liquids to reduce the cavitation

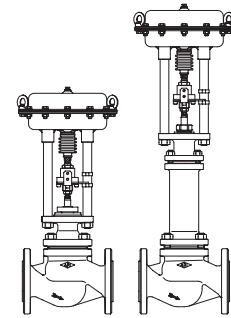
**Actuator design**



ARI-PREMIO



AUMA SAR



ARI-DP

Technical data for control valves with mounted actuator refer to data sheet „ARI-STEVI® 470 / 471 with electric and pneumatic actuators“