

03 - 01.1

11.16.GB

**Gate valve
GV 4xx**



GV 4xx



Gate valves NPS 6" to 24", Class 150, 300, 600

Description

Gate valves of the series type GV 4xx are full-bore shut-off valves with fixed or flexible gate. A body, bonnet and yoke is from cast steel, a wedge can be from cast or forged steel and it is guided. A seat is screwed or welded into a body. Sealing surface material comply API 600.

Asbestos-free gasket is used for a body-bonnet connection (Class 600 with RTJ ring), asbestos-free stem packing which it ensures long-time service. Gate valves Gv4xx are designed to be tight in both directions, with non-rising stem with thread ACME 2G-LH and to be actuated with hand wheel or with electromechanic actuator.

Application

Gate valves are designed to use as shut-off valves only. The producer does not guarantee a closure tightness in case of use gate valves for control or throttling application.

Gate valves of the series GV 4xx are designed for applications in petrochemical processing industries, heating and steam circuits in power plants, heating plants, exchanging and transfer stations.

Process media

Gate valves type GV 4xx can be used for non-aggressive liquids, steam, air, oil, crude oil and petroleum products and other liquids and gases compatible with a body material and inner parts.

Installation

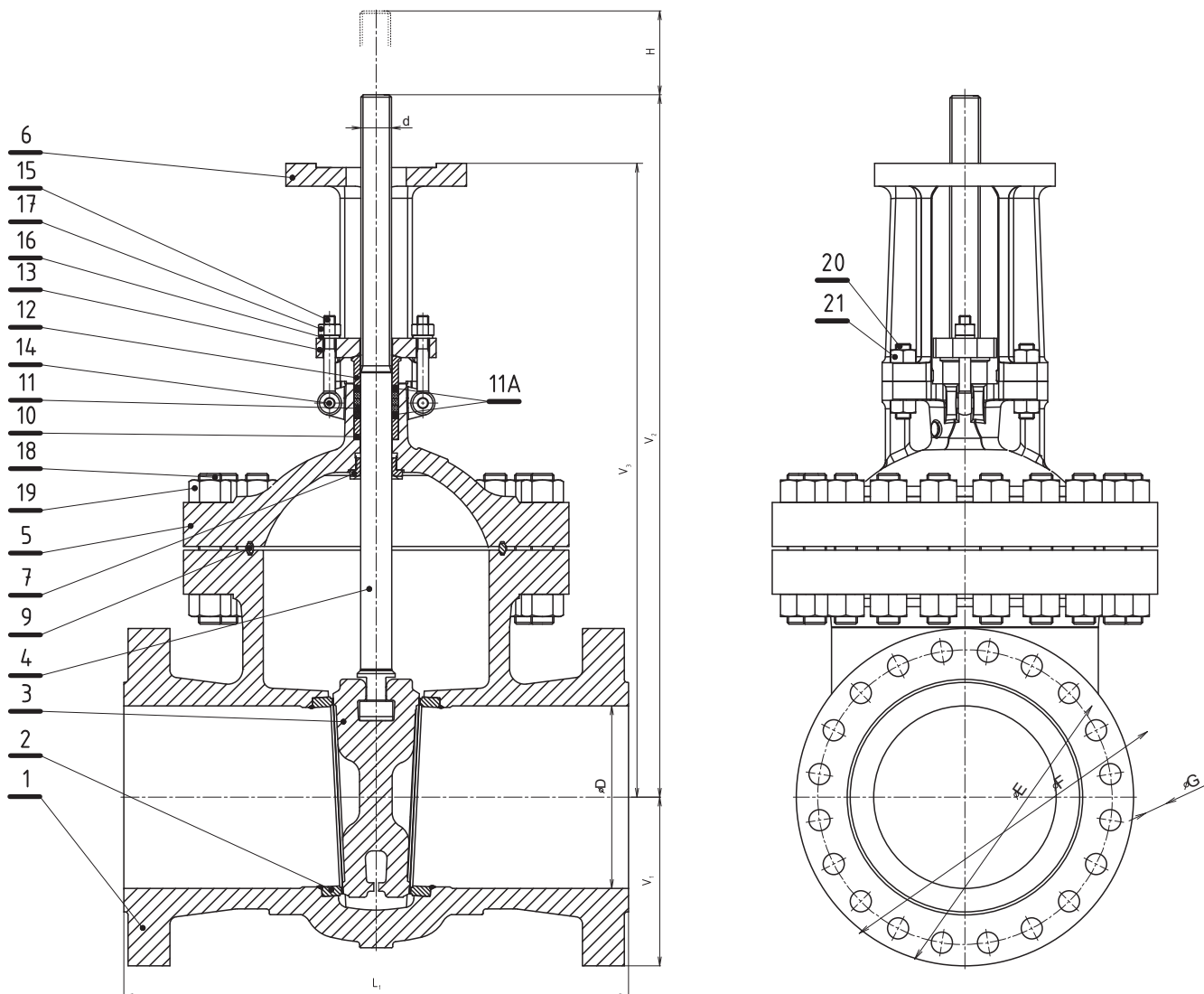
GV 4xx can be installed in any position.

In case of an actuator it is necessary to follow the instructions of the producer.

Technical data

Series	GV 4xx
Type of valve	Gate valve acc. to API 600, ASME B16.34
Nominal size range	NPS 6" to 24"
Nominal pressure	Class 150, 300 and 600
Operating temp. range	-10 to +550°C
Connection	RF (Raised Face), RTJ (Ring Joint Face), LFF (Large Female Face) dle ASME B16.5
Face to face dimensions	Acc. to ASME B16.10
Testing	Acc. to API 598

Dimensions and weights of GV 4xx without actuator, connection acc. to ISO 5210 for multi-turn electric actuators, e.g. AUMA, ROTORK



NPS	Class 150		Class 300		Class 600	
	E [mm] [inch]					
6"					292,1 11,5	
8"					349,2 13,75	
10"					431,8 17	
12"					489,0 19,25	
14"	476,3 18,75	514,4 20,25			527,0 20,75	
16"	539,8 21,25	571,5 22,5			603,2 23,75	
18"	577,9 22,75	628,6 24,75			654,0 25,75	
20"	635,0 25	685,8 27			723,9 28,5	
24"						

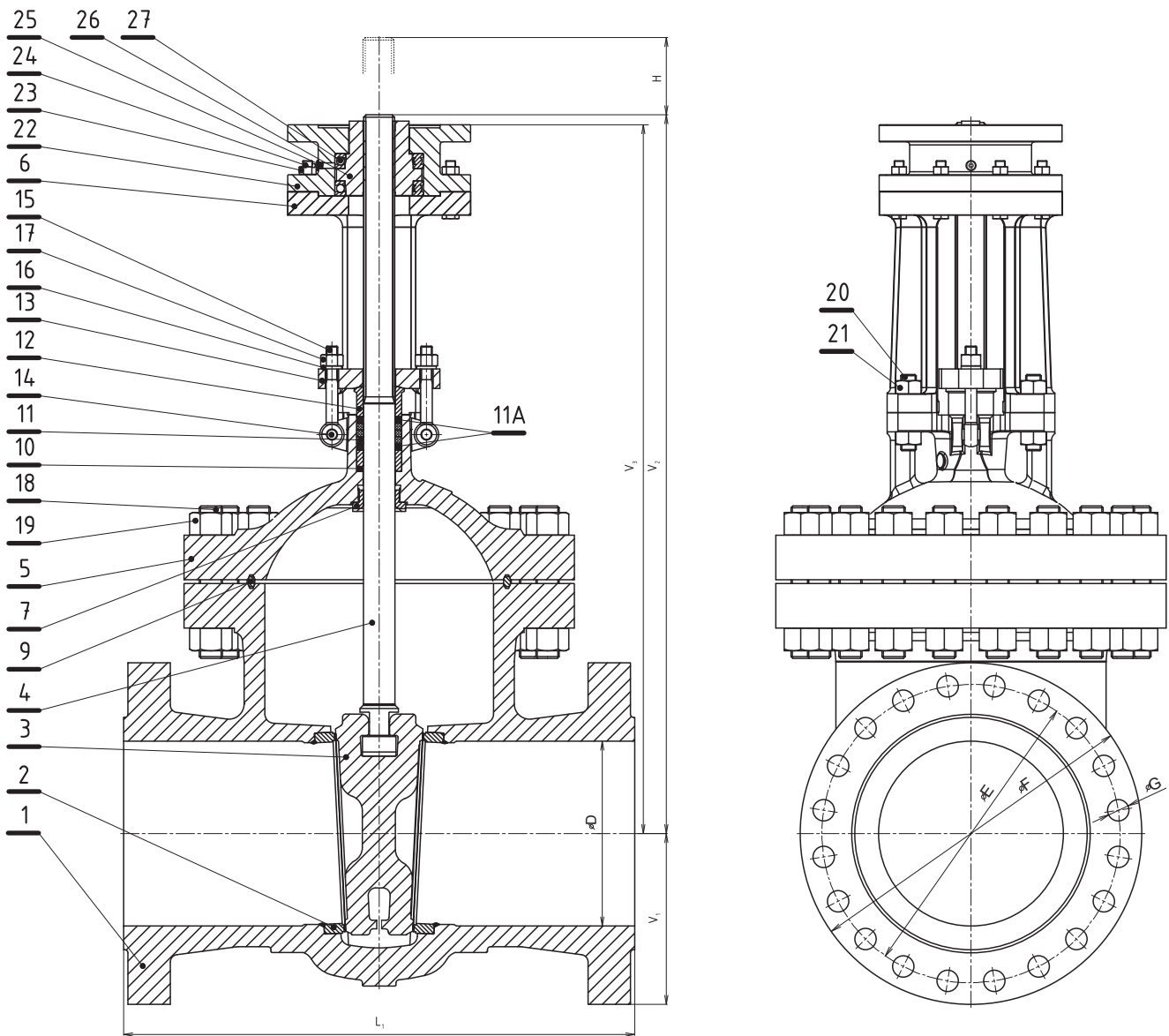
NPS	Class 150		Class 300		Class 600	
	F [mm] [inch]					
6"					355 14	
8"					420 16,5	
10"					510 20	
12"					560 22	
14"	535 21	585 23			605 23,75	
16"	595 23,5	650 25,5			685 27	
18"	635 25	710 28			745 29,25	
20"	700 29,5	775 30,5			815 32	
24"						

NPS	Class 150		Class 300		Class 600	
	n x G					
6"						12 x 1 1/8"
8"						12 x 1 1/4"
10"						16 x 1 3/8"
12"						20 x 1 3/8"
14"	12 x 1 1/8"	20 x 1 1/4"				20 x 1 1/2"
16"	16 x 1 1/8"	20 x 1 3/8"				20 x 1 5/8"
18"	16 x 1 1/4"	24 x 1 3/8"				20 x 1 3/4"
20"	20 x 1 1/4"	24 x 1 3/8"				24 x 1 3/4"
24"						

NPS	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
	L ₁ RF [mm] [inch]			D [mm] [inch]			V ₁ [mm] [inch]			V ₂ [mm] [inch]			V ₃ [mm] [inch]		
6"			559 22			152 6			177,5 6,99			760 29,92			676 26,61
8"			660 26			200 7,88			210 8,27			895 35,24			808 31,81
10"			787 31			248 9,75			255 10,04			1050 41,34			938 36,93
12"			838 33			298 11,75			280 11,02			1166 45,91			1052 41,42
14"	381 15	762 30	889 35	337 13,25	337 13,25	327 12,88	267,5 10,53	292,5 11,52	302,5 11,91	1195 47,05	1215 47,83	1332 52,44	1169 46,02	1188 46,77	1218 47,95
16"	406 16	838 33	994 39	387 15,25	387 15,25	375 14,75	306,5 12,07	325 12,8	342,5 13,48	1363 53,66	1392 54,8	1484 58,43	1263 49,72	1363 53,66	1367 53,82
18"	432 17	914 36	1092 43	438 17,25	432 17	419 16,5	317,5 12,5	355 13,98	372,5 14,7	1554 61,18	1580 62,2	1701 66,97	1440 56,69	1440 56,69	1542 60,71
20"	457 18	991 39	1194 47	489 19,25	483 19	464 18,25	350 13,78	387,5 15,26	407,5 16,67	1630 64,17	1723 67,83	1829 72,01	1604 63,15	1691 66,57	1650 64,96
24"															

NPS	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
	H [mm] [inch]			kg			d [ACME-2G-LH]			Connection ISO 5210		
6"			178,5 7,03			330			1 1/2"			F16
8"			231 9,09			440			1 1/2"			F16
10"			275 10,83			740			2"			F25
12"			327 12,87			980			2"			F25
14"	370 14,57	372 14,65	377 14,84	350	850	1350	1 3/4"	1 3/4"	2 3/8"	F16	F25	F25
16"	413 16,26	417 16,42	430 16,93	550	1030	1720	1 3/4"	2"	2 3/8"	F16	F25	F30
18"	480 18,9	474 18,66	485 19,09	680	1450	2620	2"	2"	2 3/4"	F16	F30	F30
20"	533 20,98	535 21,06	527 20,75	900	1820	3370	2"	2 1/4"	2 3/4"	F25	F25	F30
24"												

Dimensions and weights of GV 4xx without actuator, connection acc. to DIN 3338-C for multi-turn electric actuators, e.g. AUMA, ROTORK



NPS	Class 150		Class 300		Class 600	
	E [mm] [inch]					
6"					292,1	11,5
8"					349,2	13,75
10"					431,8	17
12"					489,0	19,25
14"	476,3	514,4			527,0	20,75
16"	539,8	571,5			603,2	23,75
18"	577,9	628,6			654,0	25,75
20"	635,0	685,8			723,9	28,5
24"						

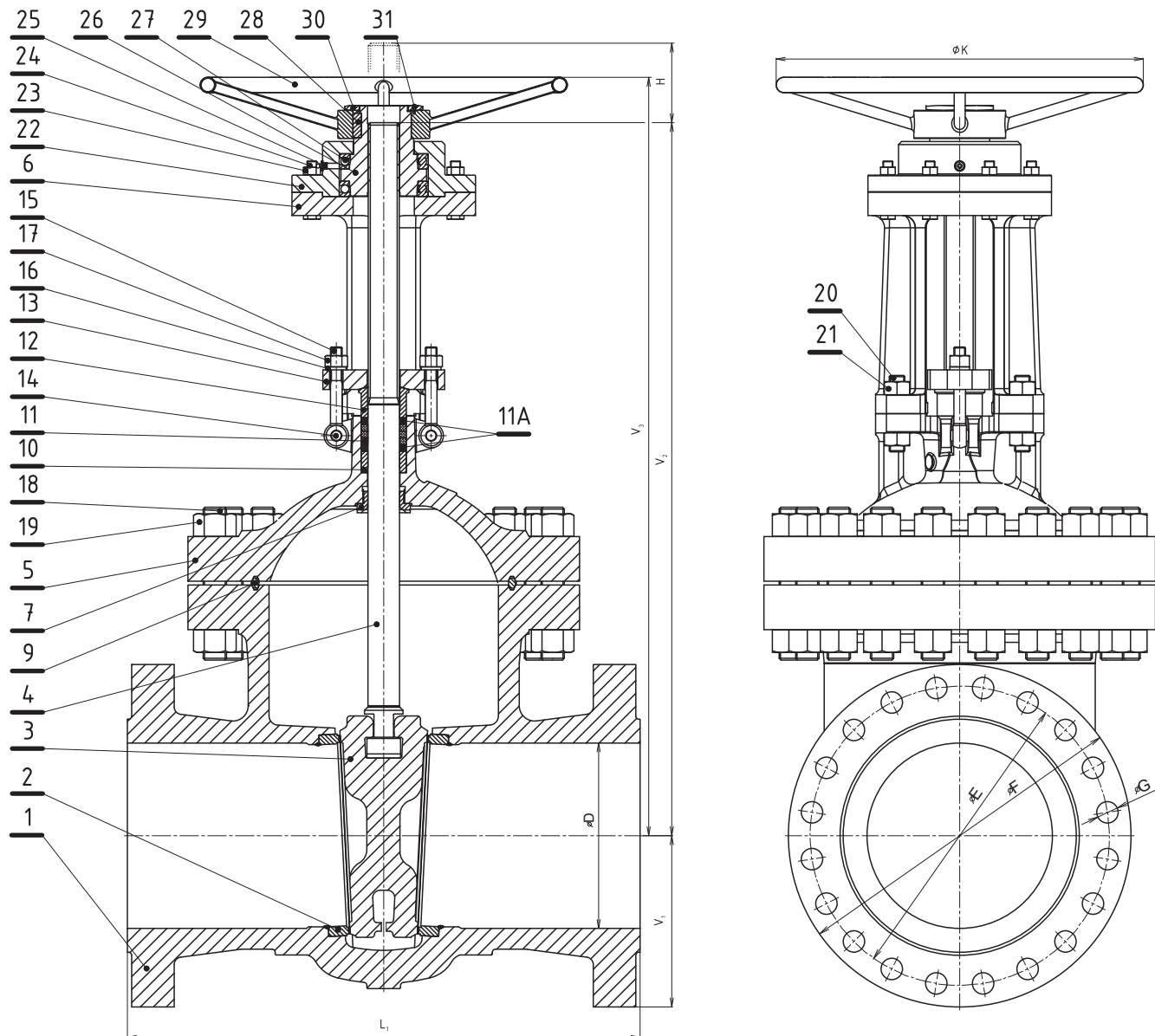
NPS	Class 150		Class 300		Class 600	
	F [mm] [inch]					
6"					355	14
8"					420	16,5
10"					510	20
12"					560	22
14"	535	585			605	23,75
16"	595	650			685	27
18"	635	710			745	29,25
20"	700	775			815	32
24"						

NPS	Class 150		Class 300		Class 600	
	n x G					
6"						12 x 1 1/8"
8"						12 x 1 1/4"
10"						16 x 1 3/8"
12"						20 x 1 3/8"
14"	12 x 1 1/8"	20 x 1 1/4"				20 x 1 1/2"
16"	16 x 1 1/8"	20 x 1 3/8"				20 x 1 5/8"
18"	16 x 1 1/4"	24 x 1 3/8"				20 x 1 3/4"
20"	20 x 1 1/4"	24 x 1 3/8"				24 x 1 3/4"
24"						

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	L ₁ RF [mm] [inch]			D [mm] [inch]			V ₁ [mm] [inch]			V ₂ [mm] [inch]			V ₃ [mm] [inch]		
6"			559 22			152 6			177,5 6,99			760 29,92			786 30,94
8"			660 26			200 7,88			210 8,27			895 35,24			918 36,14
10"			787 31			248 9,75			255 10,04			1050 41,34			1048 41,26
12"			838 33			298 11,75			280 11,02			1166 45,91			1162 45,75
14"	381 15	762 30	889 35	337 13,25	337 13,25	327 12,88	267,5 10,53	292,5 11,52	302,5 11,91	1195 47,05	1215 47,83	1332 52,44	1165 45,87	1188 46,77	1329 52,32
16"	406 16	838 33	994 39	387 15,25	387 15,25	375 14,75	306,5 12,07	325 12,8	342,5 13,48	1363 53,66	1392 54,8	1484 58,43	1373 54,06	1363 53,66	1497 58,94
18"	432 17	914 36	1092 43	438 17,25	432 17	419 16,5	317,5 12,5	355 13,98	372,5 14,7	1554 61,18	1580 62,2	1701 66,97	1550 61,02	1560 61,42	1676 65,98
20"	457 18	991 39	1194 47	489 19,25	483 19	464 18,25	350 13,78	387,5 15,26	407,5 16,67	1630 64,17	1723 67,83	1829 72,01	1604 63,15	1691 66,57	1780 70,08
24"															

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	H [mm] [inch]			kg			d [ACME-2G-LH]			Connection ISO 5210/DIN 3338-C		
6"			178,5 7,03			350			1 ¹ / ₂ "			F16
8"			231 9,09			460			1 ¹ / ₂ "			F16
10"			275 10,83			780			2"			F25
12"			327 12,87			1025			2"			F25
14"	370 14,57	372 14,65	377 14,84	350	850	1400	1 ³ / ₄ "	1 ³ / ₄ "	2 ³ / ₈ "	F16	F25	F25
16"	413 16,26	417 16,42	430 16,93	560	1030	1810	1 ³ / ₄ "	2"	2 ³ / ₈ "	F16	F25	F30
18"	480 18,9	474 18,66	485 19,09	690	1490	2710	2"	2"	2 ³ / ₄ "	F16	F25	F30
20"	533 20,98	535 21,06	527 20,75	900	1820	3460	2"	2 ¹ / ₄ "	2 ³ / ₄ "	F25	F25	F30
24"												

Dimensions and weights of GV 4xx with hand wheel



NPS	Class 150		Class 300		Class 600	
	E [mm] [inch]					
6"					292,1 11,5	
8"					349,2 13,75	
10"					431,8 17	
12"					489,0 19,25	
14"	476,3 18,75	514,4 20,25			527,0 20,75	
16"	539,8 21,25	571,5 22,5			603,2 23,75	
18"	577,9 22,75	628,6 24,75			654,0 25,75	
20"	635,0 25	685,8 27			723,9 28,5	
24"						

NPS	Class 150		Class 300		Class 600	
	F [mm] [inch]					
6"					355 14	
8"					420 16,5	
10"					510 20	
12"					560 22	
14"	535 21	585 23			605 23,75	
16"	595 23,5	650 25,5			685 27	
18"	635 25	710 28			745 29,25	
20"	700 29,5	775 30,5			815 32	
24"						

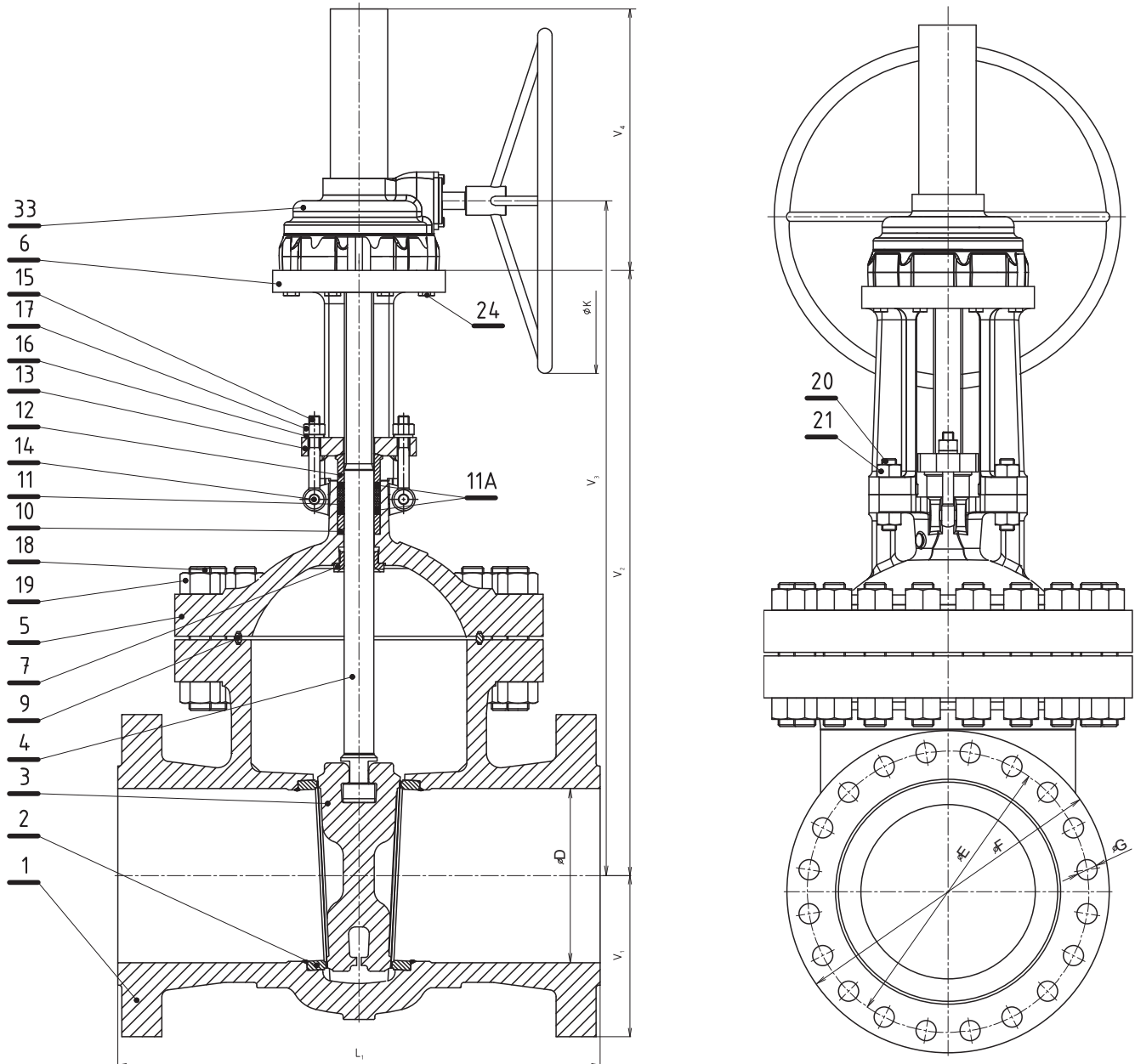
NPS	Class 150		Class 300		Class 600	
	n x G					
6"						12 x 1 1/8"
8"						12 x 1 1/4"
10"						16 x 1 3/8"
12"						20 x 1 3/8"
14"	12 x 1 1/8"	20 x 1 1/4"				20 x 1 1/2"
16"	16 x 1 1/8"	20 x 1 3/8"				20 x 1 5/8"
18"	16 x 1 1/4"	24 x 1 3/8"				20 x 1 3/4"
20"	20 x 1 1/4"	24 x 1 3/8"				24 x 1 3/4"
24"						

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	L ₁ RF [mm] [inch]			D [mm] [inch]			V ₁ [mm] [inch]			V ₂ [mm] [inch]			V ₃ [mm] [inch]		
6"			559 22			152 6			177,5 6,99			760 29,92			
8"			660 26			200 7,88			210 8,27			895 35,24			
10"			787 31			248 9,75			255 10,04			1050 41,34			
12"			838 33			298 11,75			280 11,02			1166 45,91			
14"	381 15	762 30	889 35	337 13,25	337 13,25	327 12,88	267,5 10,53	292,5 11,52	302,5 11,91	1195 47,05	1215 47,83	1332 52,44			
16"	406 16	838 33	994 39	387 15,25	387 15,25	375 14,75	306,5 12,07	325 12,8	342,5 13,48	1363 53,66	1392 54,8	1484 58,43			
18"	432 17	914 36	1092 43	438 17,25	432 17	419 16,5	317,5 12,5	355 13,98	372,5 14,7	1554 61,18	1580 62,2	1701 66,97			
20"	457 18	991 39	1194 47	489 19,25	483 19	464 18,25	350 13,78	387,5 15,26	407,5 16,67	1630 64,17	1723 67,83	1829 72,01			
24"															

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	H [mm] [inch]			kg			K [mm] [inch]			* max.Δp [Mpa]		
6"			178,5 7,03			345			500 19,7			,---
8"			231 9,09			450			500 19,7			,---
10"			275 10,83			770			600 23,6			7,0
12"			327 12,87			1020			600 23,6			5,0
14"	370 14,57	372 14,65	377 14,84	350	850	1390	500 19,7	600 23,6	700 27,6	,---	,---	3,5
16"	413 16,26	417 16,42	430 16,93	550	1030	1800	500 19,7	600 23,6	700 27,6	,---	3,5	2,5
18"	480 18,9	474 18,66	485 19,09	680	1480	2690	500 19,7	700 27,6	800 31,5	,---	3,0	2,0
20"	533 20,98	535 21,06	527 20,75	900	1810	3420	600 23,6	700 27,6	800 31,5	,---	2,0	1,5
24"												

* Maximal pressure drop restriction. In case of higher pressure drop, use gearbox with hand wheel

Dim. and weights of GV 4xx with multi-turn bevel gearbox ROTORK HOB/MPR



NPS	Class 150		Class 300	Class 600
	E [mm] [inch]			
6"			292,1 11,5	
8"			349,2 13,75	
10"			431,8 17	
12"			489,0 19,25	
14"	476,3 18,75	514,4 20,25	527,0 20,75	
16"	539,8 21,25	571,5 22,5	603,2 23,75	
18"	577,9 22,75	628,6 24,75	654,0 25,75	
20"	635,0 25	685,8 27	723,9 28,5	
24"				

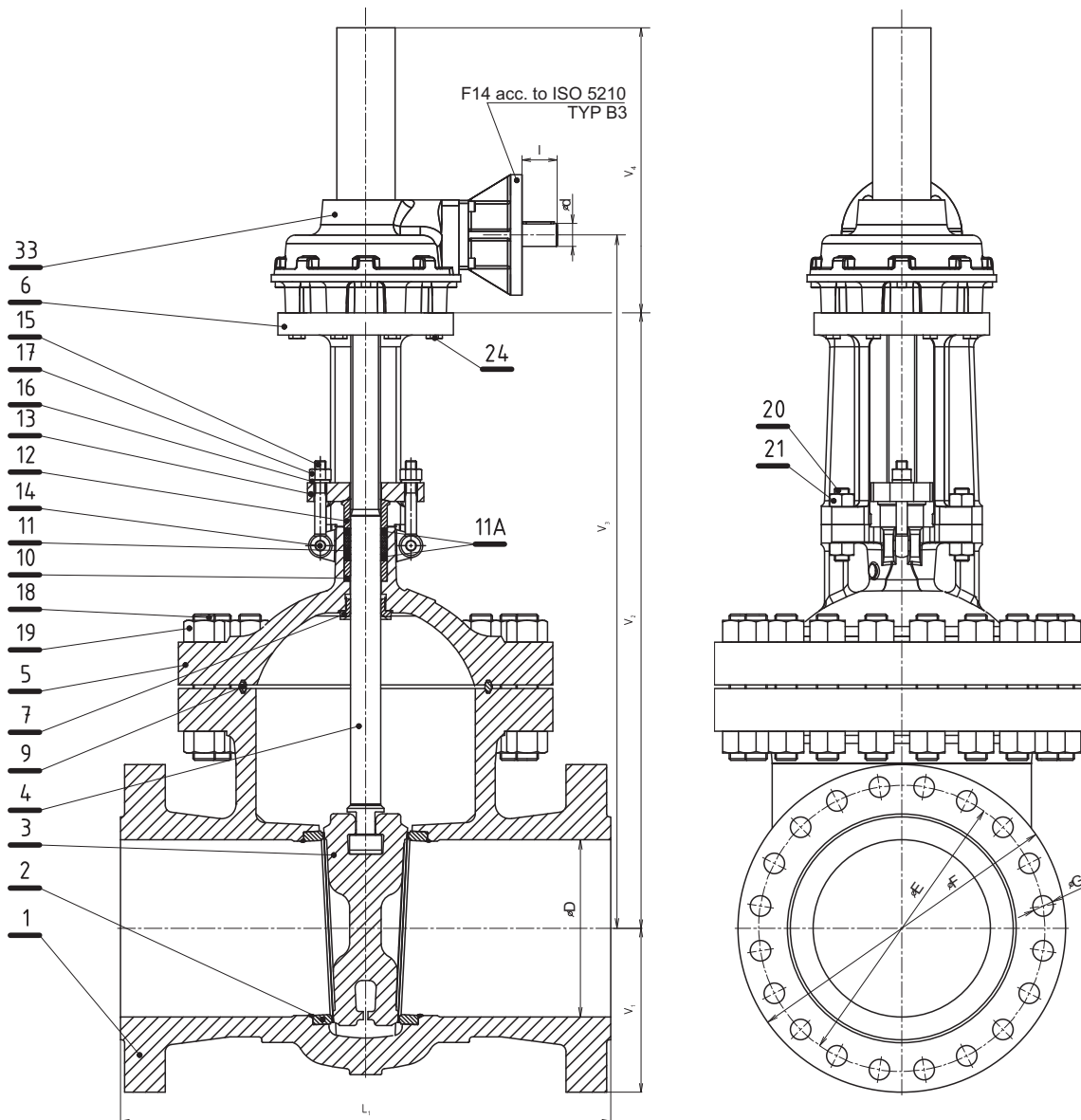
NPS	Class 150		Class 300	Class 600
	F [mm] [inch]			
6"			355 14	
8"			420 16,5	
10"			510 20	
12"			560 22	
14"	535 21	585 23	605 23,75	
16"	595 23,5	650 25,5	685 27	
18"	635 25	710 28	745 29,25	
20"	700 29,5	775 30,5	815 32	
24"				

NPS	Class 150	Class 300	Class 600
	n x G		
6"			12 x 1 1/8"
8"			12 x 1 1/4"
10"			16 x 1 3/8"
12"			20 x 1 3/8"
14"	12 x 1 1/8"	20 x 1 1/4"	20 x 1 1/2"
16"	16 x 1 1/8"	20 x 1 3/8"	20 x 1 5/8"
18"	16 x 1 1/4"	24 x 1 3/8"	20 x 1 3/4"
20"	20 x 1 1/4"	24 x 1 3/8"	24 x 1 3/4"
24"			

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	L ₁ RF [mm] [inch]			D [mm] [inch]			V ₁ [mm] [inch]			V ₂ [mm] [inch]			V ₃ [mm] [inch]		
6"			559 22			152 6			177,5 6,99			676 26,61			773 30,43
8"			660 26			200 7,88			210 8,27			808 31,81			905 35,63
10"			787 31			248 9,75			255 10,04			938 36,93			1058 41,65
12"			838 33			298 11,75			280 11,02			1052 41,42			1172 46,14
14"	381 15	762 30	889 35	337 13,25	337 13,25	327 12,88	267,5 10,53	292,5 11,52	302,5 11,91	1169 46,02	1188 46,77	1218 47,95	1266 49,84	1308 51,5	1338 52,68
16"	406 16	838 33	994 39	387 15,25	387 15,25	375 14,75	306,5 12,07	325 12,8	342,5 13,48	1263 49,72	1363 53,66	1367 53,82	1360 53,54	1483 58,39	1503 59,17
18"	432 17	914 36	1092 43	438 17,25	432 17	419 16,5	317,5 12,5	355 13,98	372,5 14,7	1440 56,69	1440 56,69	1542 60,71	1537 60,51	1560 61,42	1678 66,06
20"	457 18	991 39	1194 47	489 19,25	483 19	464 18,25	350 13,78	387,5 15,26	407,5 16,67	1604 63,15	1691 66,57	1650 64,96	1724 67,87	1811 71,3	1786 70,31
24"															

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	V ₄ [mm] [inch]			kg			K [mm] [inch]			ROTORK HOM/MPR		
6"			332 13,07			355			600 23,6			HOB5
8"			332 13,07			465			600 23,6			HOB5
10"			459 18,07			795			600 23,6			HOB7
12"			459 18,07			1035			600 23,6			HOB7
14"	432 17,01	459 18,07	559 22,01	375	905	1405	600 23,6	600 23,6	600 23,6	HOB5	HOB7	HOB7
16"	532 20,94	459 18,07	597 23,5	575	1085	1810	600 23,6	600 23,6	500 19,7	HOB5	HOB7	HOB9
18"	632 24,88	697 27,44	697 27,44	705	1540	2710	600 23,6	600 23,6	500 19,7	HOB5	HOB9	HOB9
20"	659 25,94	659 25,94	797 31,38	955	1875	3460	600 23,6	600 23,6	500 19,7	HOB7	HOB7	HOB9
24"												

Dimensions and weights of GV 4xx with bevel gearbox ROTORK IB for multi-turn electric actuators, e.g. AUMA, ROTORK



	Class 150	Class 300	Class 600
NPS	E [mm] [inch]		
6"			292,1 11,5
8"			349,2 13,75
10"			431,8 17
12"			489,0 19,25
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18"	577,9 22,75	628,6 24,75	654,0 25,75
20"	635,0 25	685,8 27	723,9 28,5
24"			

	Class 150	Class 300	Class 600
NPS	F [mm] [inch]		
6"			355 14
8"			420 16,5
10"			510 20
12"			560 22
14"	535 21	585 23	605 23,75
16"	595 23,5	650 25,5	685 27
18"	635 25	710 28	745 29,25
20"	700 29,5	775 30,5	815 32
24"			

	Class 150	Class 300	Class 600
NPS	n x G		
6"			12 x 1 1/8"
8"			12 x 1 1/4"
10"			16 x 1 3/8"
12"			20 x 1 3/8"
14"	12 x 1 1/8"	20 x 1 1/4"	20 x 1 1/2"
16"	16 x 1 1/8"	20 x 1 3/8"	20 x 1 5/8"
18"	16 x 1 1/4"	24 x 1 3/8"	20 x 1 3/4"
20"	20 x 1 1/4"	24 x 1 3/8"	24 x 1 3/4"
24"			

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	L ₁ RF [mm] [inch]			D [mm] [inch]			V ₁ [mm] [inch]			V ₂ [mm] [inch]			V ₃ [mm] [inch]		
6"			559 22			152 6			177,5 6,99			676 26,61			883 34,76
8"			660 26			200 7,88			210 8,27			808 31,81			1015 39,96
10"			787 31			248 9,75			255 10,04			938 36,93			1168 45,98
12"			838 33			298 11,75			280 11,02			1052 41,42			1282 50,47
14"	381 15	762 30	889 35	337 13,25	337 13,25	327 12,88	267,5 10,53	292,5 11,52	302,5 11,91	1169 46,02	1188 46,77	1218 47,95	1266 49,84	1308 51,5	1449 57,05
16"	406 16	838 33	994 39	387 15,25	387 15,25	375 14,75	306,5 12,07	325 12,8	342,5 13,48	1263 49,72	1363 53,66	1367 53,82	1470 57,87	1483 58,39	1652 65,04
18"	432 17	914 36	1092 43	438 17,25	432 17	419 16,5	317,5 12,5	355 13,98	372,5 14,7	1440 56,69	1440 56,69	1542 60,71	1647 64,84	1680 66,14	1831 72,09
20"	457 18	991 39	1194 47	489 19,25	483 19	464 18,25	350 13,78	387,5 15,26	407,5 16,67	1604 63,15	1691 66,57	1650 64,96	1724 67,87	1811 71,3	1935 76,18
24"															

	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600	Class 150	Class 300	Class 600
NPS	V ₄ [mm] [inch]			kg			ROTORK IB + VSTUP			d x l [mm]		
6"			359 14,13			365			IB7 - F14			30x51
8"			359 14,13			475			IB7 - F14			30x51
10"			397 15,63			810			IB9 - F14			30x60
12"			497 19,57			1050			IB9 - F14			30x60
14"	459 18,07	497 19,57	497 19,57	385	920	1420	IB7 - F14	IB9 - F14	IB9 - F14	30x51	30x60	30x60
16"	559 22,01	497 19,57	636 25,04	585	1100	1850	IB7 - F14	IB9 - F14	IB11 - F14	30x51	30x60	30x60
18"	659 25,94	636 25,04	736 28,98	715	1580	2750	IB7 - F14	IB11 - F14	IB11 - F14	30x51	30x60	30x60
20"	597 23,5	597 23,5	736 28,98	970	1890	3500	IB9 - F14	IB9 - F14	IB11 - F14	30x60	30x60	30x60
24"												

Material specification

Item	Name Trim Nr.	WCB	WCC	LCB	LCC	WC6	WC9	C5	C12	CF8M
		1, 5, 8, 12	1, 5, 8, 12	12	12	5, 8	5, 8	5	5	10, 12
1	Body	A216 WCB	A216 WCC	A352 LCB	A352 LCC	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8M
2	Seat *	A106 Gr.B + overlay	A106 Gr.B + overlay	A350 LF2 + overlay	A350 LF2 + overlay	A182 F5 + overlay	A182 F5 + overlay	A182 F5 + overlay	A182 F321 + overlay	A182 F316
3	Gate *	A216 WCB + overlay	A216 WCC + overlay	A352 LCB + overlay	A352 LCC + overlay	A217 WC6 + overlay	A217 WC9 + overlay	A217 C5 + overlay	A217 C12 + overlay	A351 CF8M + overlay
4	Stem *	A276 410T								
5	Bonnet	A216 WCB	A216 WCC	A352 LCB	A352 LCC	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8M
6	Yoke	A216 WCB	A216 WCC	A352 LCB	A352 LCC	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8M
7	Back seat *	A182 F6a Cl.3								
10	Bushing *	A182 F6a Cl.2								
12	Bushing *	A182 F6a Cl.2								
13	Gland flange	A105								
14	Pin	A182 F316								
15	Eyebolt	A307 Gr. B								
16	Washer flexible	Carbon steel								
17	Nut	A194 2H								
18	Bolt	A193 B7	A320 L7M			A193 B7			A194 8M	
19	Nut	A194 2H	A194 7M			A194 2H			A194 8M	
20	Bolt	A193 B7								
21	Nut	A194 2H								
22	Bonnet	A105								
23	Nut	DIN 934								
24	Bolt	DIN 931								
25	Grease fitting	Carbon steel								
26	Stem nut	CuAl10Fe3Mn2								
27	Bearing	Std.								
28	Feather	DIN 6885								
29	Hand wheel	Welded								
30	Secure nut	1.1106								
31	Flexible pin	DIN 1481								
32	Bolt	DIN 938								
33	Bevel gearbox	ROTORK								

Sealing surface material acc. to TRIM

Item	Name	TRIM			
		1	5	8	12
2	Seat *	13 Cr	Stellite	Stellite	Stellite
3	Gate *	13 Cr	Stellite	13 Cr	18Cr-8Ni-Mo

* acc. to API 600

Sealing material specification

Item	Class	All material execution
9	150	Gasket (graphite)
	300	Spiral wound graphite
	600	RTJ ring
11	150-600	Die formed graphite rings
11A	150-600	Braided graphite

The valve complete specification No. for ordering gate valve GV 4xx

		XX	XXX	X	XXXX	XXX	/	XXX	-	XXX	
1. Valve	Gate valve	GV									
2. Series and execution	Gate valve from cast steel		4 2								
	Gate valve from stainless steel		4 3								
	Standard			0							
	Pressure taking			1							
	By-pass			2							
	Drainage			3							
	Deaeration			4							
	Stopper			5							
3. Type of actuating	Without - conn. ISO 5210 Type A			0							
	Without - conn. ISO 5210 Type B			1							
	Hand wheel			2							
	Hand wheel with gearbox			3							
	Actuator			4							
	Actuator with gearbox			5							
4. Connection	Flange RF (Raised Face)				1						
	Flange RTJ (Ring Joint Face)				2						
	Flange LFF (Large Female Face)				3						
5. Body material	Carbon steel A216 WCB				1						
	Carbon steel A216 WCC				2						
	Carbon steel A352 LCB				3						
	Carbon steel A352 LCC				4						
	CrMo steel A217 WC6				5						
	CrMo steel A217 WC9				6						
	CrMo steel A217 C5				7						
	CrMo steel A217 C12				8						
	Stainless steel A351 CF8M				9						
6. Seat sealing TRIM Gate / Seat	13Cr / 13Cr Trim 1				1						
	Stellite 6 / Stellite 6 Trim 5				5						
	13Cr / Stellite 6 Trim 8				8						
	18Cr-18Ni-Mo / A182 F316 Trim 10				0						
	18Cr-18Ni-Mo / Stellite 6 Trim 12				2						
7. Packing	Graphite				1						
	Graphite + Ietern ring				2						
8. Nominal pressure	Class 150					1 5 0					
	Class 300					3 0 0					
	Class 600					6 0 0					
9. Temperature	Graphite optionaly with latern ring							3 0 0			
								4 0 0			
									4 2 5		
									5 0 0		
									5 5 0		
10. Nominal diameter	DN (NPS)									XXX	

Ordering example: **GV 420 0 1151 600/425 - 200**

DN	NPS
150	6"
200	8"
250	10"
300	12"
350	14"
400	16"
450	18"
500	20"
600	24"

Maximal permissible overpressures acc. to ASME B16.34-2013 [Mpa]

Material	CLASS	Temperature [°C]																
		RT ¹⁾	50	100	150	200	250	300	325	350	375	400	425	450	475	500	538	550
A216 WCB	150	1,96	1,92	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	---	---	---	---	---
	300	5,11	5,11	4,66	4,51	4,38	4,19	3,98	3,87	3,76	3,64	3,47	2,88	---	---	---	---	---
	600	10,21	10,02	9,32	9,02	8,76	8,39	7,96	7,74	7,51	7,27	6,94	5,75	---	---	---	---	---
A216 WCC	150	1,98	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	---	---	---	---	---
	300	5,17	5,17	5,15	5,02	4,86	4,63	4,29	4,14	4,00	3,78	3,47	2,88	---	---	---	---	---
	600	10,34	10,34	10,30	10,03	9,72	9,27	8,57	8,26	8,00	7,57	6,94	5,75	---	---	---	---	---
A352 LCB ⁴⁾	150	1,84	1,82	1,74	1,58	1,38	1,21	1,02	0,93	0,84	---	---	---	---	---	---	---	---
	300	4,80	4,75	4,53	4,39	4,25	4,08	3,87	3,76	3,64	---	---	---	---	---	---	---	---
	600	9,60	9,49	9,07	8,79	8,51	8,16	7,74	7,52	7,28	---	---	---	---	---	---	---	---
A352 LCC ⁴⁾	150	1,98	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	---	---	---	---	---	---	---	---
	300	5,17	5,17	5,15	5,02	4,86	4,63	4,29	4,14	4,00	---	---	---	---	---	---	---	---
	600	10,34	10,34	10,30	10,03	9,72	9,27	8,57	8,26	8,00	---	---	---	---	---	---	---	---
A217 WC6 ²⁾	150	1,98	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	0,46	0,37	0,28	0,14	---
	300	5,17	5,17	5,15	4,97	4,80	4,63	4,29	4,14	4,03	3,89	3,65	3,52	3,37	3,17	2,57	1,49	1,27
	600	10,34	10,34	10,30	9,95	9,59	9,27	8,57	8,26	8,04	7,76	7,33	7,00	6,77	6,34	5,15	2,98	2,54
A217 WC9 ²⁾	150	1,98	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	0,46	0,37	0,28	0,14	---
	300	5,17	5,17	5,15	5,03	4,86	4,63	4,29	4,14	4,03	3,89	3,65	3,52	3,37	3,17	2,82	1,84	1,56
	600	10,34	10,34	10,30	10,03	9,72	9,27	8,57	8,26	8,04	7,76	7,33	7,00	6,77	6,34	5,65	3,69	3,13
A217 C5 ²⁾	150	2,00	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	0,46	0,37	0,28	0,14	---
	300	5,17	5,17	5,15	5,03	4,86	4,63	4,29	4,14	4,03	3,89	3,65	3,52	3,37	2,79	2,14	1,37	1,2
	600	10,34	10,34	10,30	10,03	9,72	9,27	8,57	8,26	8,04	7,76	7,33	7,00	6,77	5,57	4,28	2,74	2,41
A217 C12 ²⁾	150	2,00	1,95	1,77	1,58	1,38	1,21	1,02	0,93	0,84	0,74	0,65	0,55	0,46	0,37	0,28	0,14	---
	300	5,17	5,17	5,15	5,03	4,86	4,63	4,29	4,14	4,03	3,89	3,65	3,52	3,37	3,17	2,82	1,75	1,50
	600	10,34	10,34	10,30	10,03	9,72	9,27	8,57	8,26	8,04	7,76	7,33	7,00	6,77	6,34	5,65	3,50	3,00
A351 CF8M	150	1,90	1,84	1,62	1,48	1,37	1,21	1,02	0,93	0,84	0,74	0,65	0,55	0,46	0,37	0,28	0,14	---
	300	4,96	4,81	4,22	3,85	3,57	3,34	3,16	3,09	3,03	2,99	2,94	2,91	2,88	2,87	2,82	2,52	2,50
	600	9,93	9,62	8,44	7,70	7,13	6,68	6,32	6,18	6,07	5,98	5,89	5,83	5,77	5,73	5,65	5,00	4,98

1) -29°C to 38°C

2) Normalized annealed material only.

4) Maximal temperature = 345°C

Maximal permissible overpressures acc. to ASME B16.34-2013 [psig]

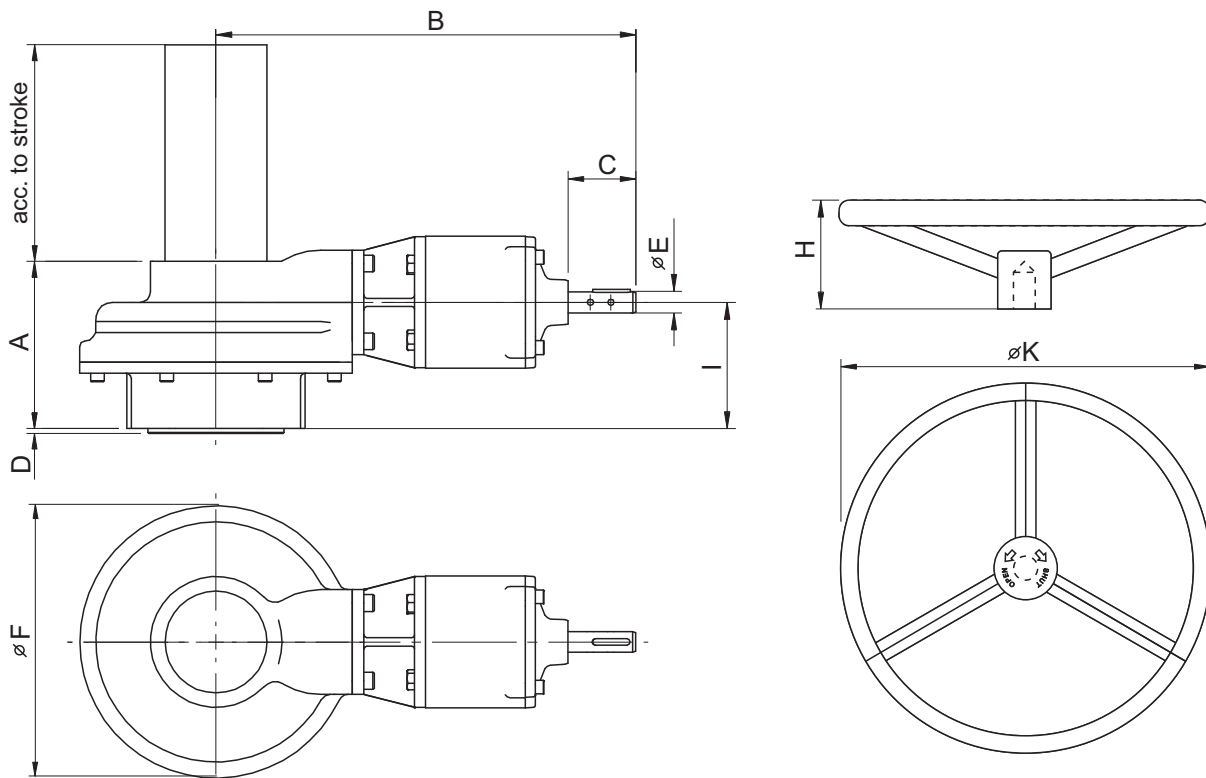
Material	CLASS	Temperature [°F]														
		RT ¹⁾	200	300	400	500	600	650	700	750	800	850	900	950	1000	1050
A216 WCB	150	285	260	230	200	170	140	125	110	95	80	---	---	---	---	---
	300	740	680	655	635	605	570	550	530	505	410	---	---	---	---	---
	600	1480	1360	1310	1265	1205	1135	1100	1060	1015	825	---	---	---	---	---
A216 WCC	150	290	260	230	200	170	140	125	110	95	80	---	---	---	---	---
	300	750	750	730	705	665	605	590	555	505	410	---	---	---	---	---
	600	1500	1500	1455	1405	1330	1210	1175	1110	1015	825	---	---	---	---	---
A352 LCB	150	265	255	230	200	170	140	125	---	---	---	---	---	---	---	---
	300	695	660	640	615	585	550	535	---	---	---	---	---	---	---	---
	600	1395	1320	1275	1230	1175	1105	1065	---	---	---	---	---	---	---	---
A352 LCC	150	290	260	230	200	170	140	125	---	---	---	---	---	---	---	---
	300	750	750	730	705	665	605	590	---	---	---	---	---	---	---	---
	600	1500	1500	1455	1405	1330	1210	1175	---	---	---	---	---	---	---	---
A217 WC6 ²⁾	150	290	260	230	200	170	140	125	110	95	80	65	50	35	20	---
	300	750	750	720	695	665	605	590	570	530	510	485	450	320	215	145
	600	1500	1500	1445	1385	1330	1210	1175	1135	1065	1015	975	900	640	430	290
A217 WC9 ²⁾	150	290	260	230	200	170	140	125	110	95	80	65	50	35	20	---
	300	750	750	730	705	665	605	590	570	530	510	485	450	385	265	175
	600	1500	1500	1455	1410	1330	1210	1175	1135	1065	1015	975	900	755	535	350
A217 C5 ²⁾	150	290	260	230	200	170	140	125	110	95	80	65	50	35	20	---
	300	750	750	730	705	665	605	590	570	530	510	485	375	275	200	145
	600	1500	1500	1455	1410	1330	1210	1175	1135	1065	1015	975	745	550	400	290
A217 C12 ²⁾	150	290	260	230	200	170	140	125	110	95	80	65	50	35	20	---
	300	750	750	730	705	665	605	590	570	530	510	485	450	375	255	170
	600	1500	1500	1455	1410	1330	1210	1175	1135	1065	1015	975	900	755	505	345
A351 CF8M	150	275	235	215	195	170	140	125	110	95	80	65	50	35	20	---
	300	720	620	560	515	480	450	440	435	425	420	420	415	385	365	360
	600	1440	1240	1120	1025	955	900	885	870	855	845	835	830	775	725	720

1) -29°C to 38°C

2) Normalized annealed material only.

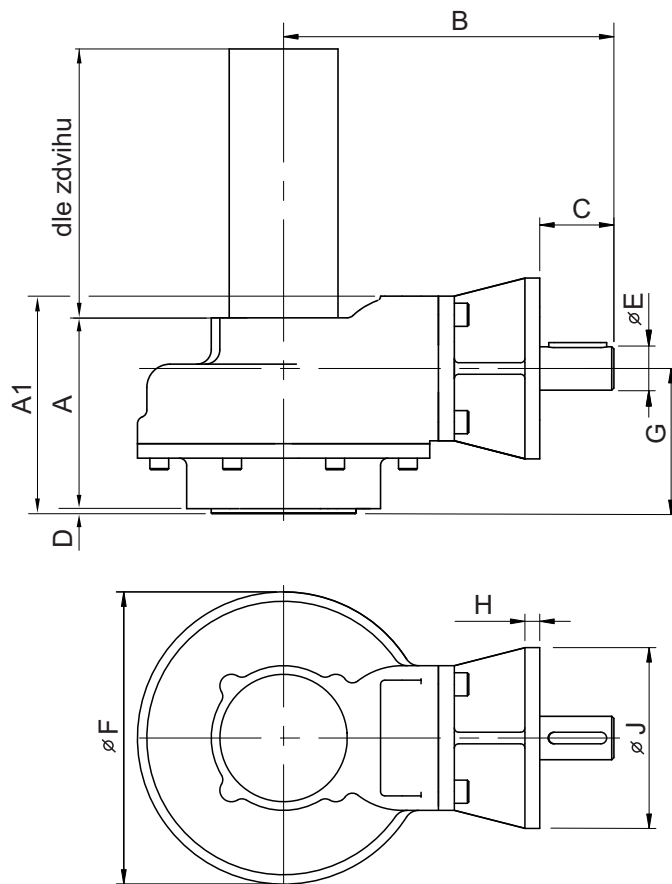
4) Maximal temperature = 345°C

Gearboxes with hand wheel Rotork HOB/MPR



	Převod	Výstup	A [mm] [inch]	B [mm] [inch]	C [mm] [inch]	D [mm] [inch]	E [mm] [inch]	F [mm] [inch]	I [mm] [inch]	H [mm] [inch]	K [mm] [inch]	Hmotnost Kg
HOB5	4:1	F16	132 5.2	228 8.98	106 4.17	5 0,197	20 0,787	202 7.95	97 3.82	150 5,91	600 24	24
HOB7	6:1	F25	159 6.26	251 9.88	66 2,6			267 10.51	120 4.72			45
HOB9	24:1	F30	197 7.76	474 18.66		500 20	355 13.82	136 5.35	83			
HOB11	36:1	F35	237 9.33	519 20.43	412 16.22		176 6.93	142				

Gearboxes Rotork IB for multi-turn actuators e.g. AUMA, ROTORK



	Převod	Výstup	Vstup	A [mm] [inch]	A1 [mm] [inch]	B [mm] [inch]	C [mm] [inch]	D [mm] [inch]	E [mm] [inch]	F [mm] [inch]	G [mm] [inch]	H [mm] [inch]	J [mm] [inch]	Hmotnost Kg
IB7	4:1	F16	F14	170 6.69	159 6.26	251 9.88	51 2.01	5 0,197	30 1,18	260 10.24	120 4.72	15 0,59	175 6,89	35
IB9	6:1	F25		197 7.76	197 7.76	332 13.07	60 2,36			412 16.22	136 5.35			70
IB11	6:1	F30		237 9.33	237 9.33	377 14.84				176 6.93	125			
IB13	8:1	F35		254 10	254 10	432 17.01	192 7.56			200				



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