

SERIES 80/81 ANSI RANGE



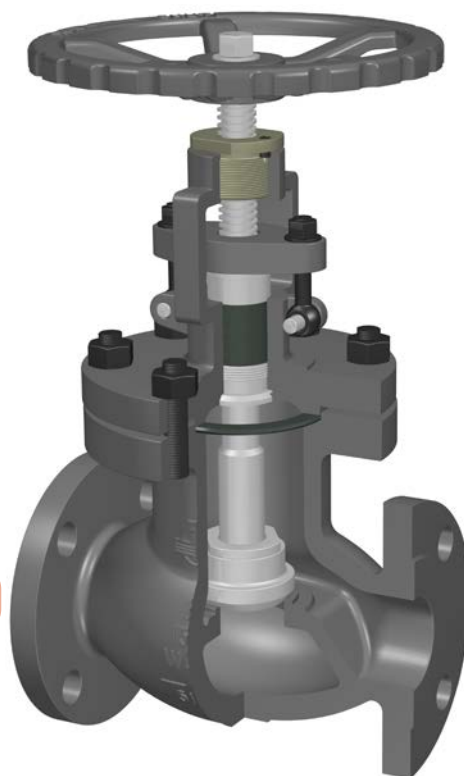
Series 80 Globe Valves are linear motion valves devised for stopping the flow of the service fluid when necessary. They are bolted bonnet, outside screw and yoke, rising handwheel, being the closure element a disc seating against a precisely machined seat thus achieving the positive closure. The atmospheric sealing is achieved by flexible graphite rings. The flow comes upwards underneath the seat, being an unidirectional valve. Weir body leads to higher pressure drop compared to gate valves but operation is quicker and this feature allows to use the valve as regulating valve when arranged with throttling plug. Valves are of easy and safe operation being widely used in power, chemical and oil industry. The range is also comprehensive of a wide offer of different versions and options. The standard operation is achieved by handwheel or gear, depending on valve size and working pressure. Valves can also be arranged for automation with different kinds of actuators.

Outside screw and yoke

Precise machining of components for optimal performance

Back Seat feature

Seat surface can be hardened to increase wear resistance



Ergonomic rising handwheel

Marking for identification and full traceability purpose

Great versatility in end connections, materials and configurations

Main Features / Reference Standards

Design: BS 1873 / ASME B16.34
 Pressure Rating: 150/300/600/900/1500/2500#
 Face to face length: ASME B16.10
 Valve end connections: Flanged RF or RTJ to ASME B16.5
 Welded BW to ASME B16.25
 Marking: MSS SP-25
 Inspections & Tests: API 598
 Unidirectional design. See the arrow on the body for normal flow direction
 Primer painted grey color similar to RAL 7037 for protection during storage and transport (carbon steel body/bonnet)
 Product compliant with Directive 2014/68/EU on Pressure Equipment (PED) and Machinery Directive 2006/42/EC for European Union territory

Main Duties / Limits of use

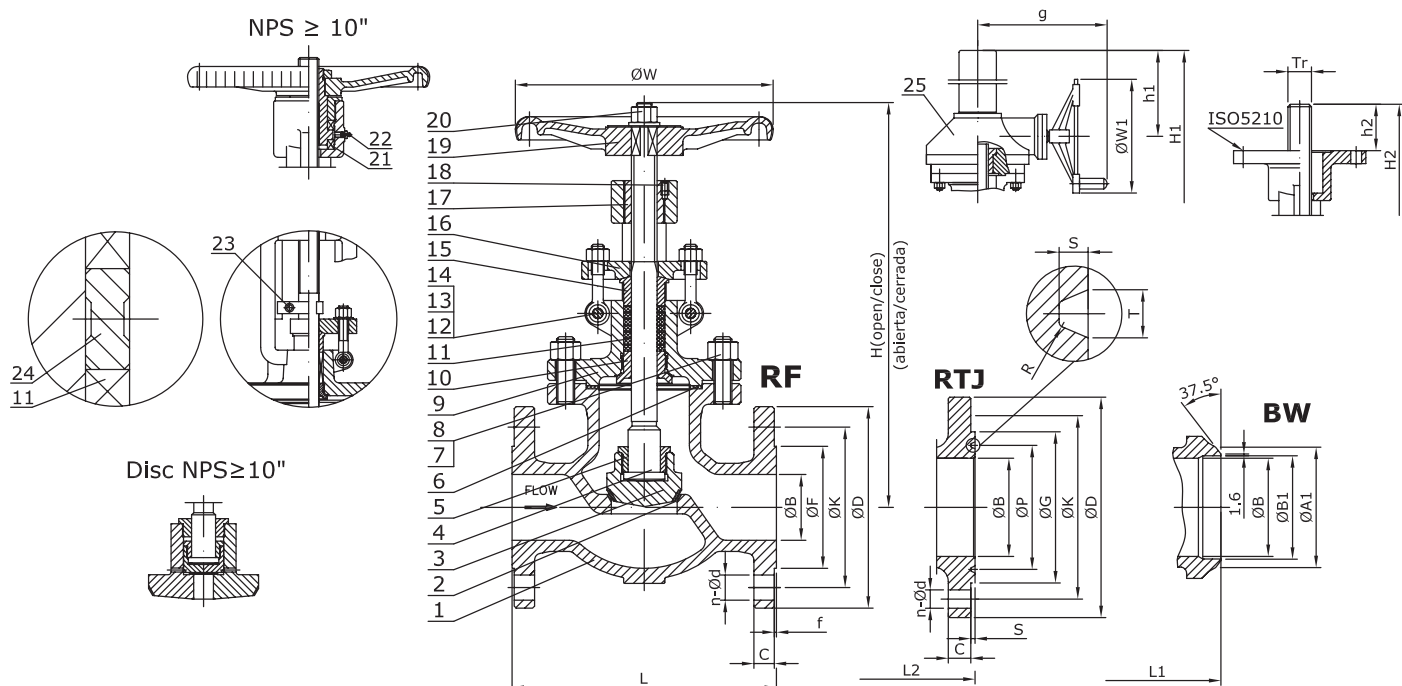
Fluids compatible with materials of construction. Questions referring to chemical resistance, please consult us
 Pressure / Temperature Rating to ASME B16.34. See section "Engineering & Performance Data"
 For products compliant with Directive 2014/68/EU, observe also limits acc. to Annex II tables 6 & 8 (gases & liquids group 1*) and tables 7 & 9 (gases & liquids group 2*) up to category III
 *Classification of fluids (group 1 or 2) acc. to Directive 2014/68/EU, Article 13

Options

Different body materials and trim combinations, different valve connections, angle pattern, Y-Pattern, regulating plug, extended bonnet, bellow seal, pressure seal, welded bonnet, lantern ring with double packing, live loaded packing, chained hand wheel, manual gear, pneumatic, electric or hydraulic actuation, limit switches, execution for aggressive atmosphere, etc. Please consult us

Main Parts and Materials

SERIES 80 ANSI RANGE Class 150



From 2" to 8", the flow direction is acc. to the flow arrow shown in the drawing
From 10" onwards, the flow direction is opposite to the flow arrow shown in the drawing

N°	Part name	A216 WCB (80A0_)	A352 LCB		A217 WC1 (80B1_)	A217 WC6 (80B8_)	A217 WC9 (80B9_)
			Trim 2 (80A82_)	Trim 12 (80A8G_)			
1	Body	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
2	Seat	A216 WCB	Integral+SS304	Integral+HF	HF Overlay		
3	Disc	A105	A182 F304	A182 F316	A182 F1+HF	A182 F11+HF	A182 F22+HF
4	Stem	A182 F6a	A182 F304	A182 F316	A182 F6a		
5	Disc Nut	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
6	Gasket	SS304+Graphite	A182 F304	A182 F316	SS304		
7	Bonnet Bolt	A193 B7	A320 L7		A193 B16		
8	Bonnet Nut	A194 2H	A194 4		A194 4		
9	Bonnet	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
10	Backseat Bushing	A182 F6a	A182 F304	A182 F316	A182 F6a		
11	Packing	Graphite	Graphite		Graphite		
12	Eyebolt Pin	AISI 1025	AISI 1025		A276 410		
13	Gland Eyebolt	A193 B7	A320 L7		A193 B16		
14	Gland Nut	A194 2H	A194 4		A194 4		
15	Packing Gland	A182 F6a	A182 F304		A182 F6a		
16	Gland Flange	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
17	Stem Nut	A439 D2	A439 D2		A439 D2		
18	Retaining Screw	Carbon Steel	Carbon Steel		Carbon Steel		
19	Handwheel	Steel	Steel		Steel		
20	Handwheel Nut	Carbon Steel	Carbon Steel		Carbon Steel		
21	Bearings (1)	Alloy Steel	Alloy Steel		Alloy Steel		
22	Grease Nipple	Carbon Steel	Carbon Steel		Alloy Steel		
23	Splint (1)	Carbon Steel	Carbon Steel		Alloy Steel		
24	Lantern Ring (2)	A276 410	A276 304	A276 316	A276 410		
25	Gear	Assembly	Assembly		Assembly		

(1) 10" and above

(2) On request

Fig. 80A0_	Seat Surface	Disc Surface	Stem
TRIM #1 (80A01)	A216 WCB+13Cr	A105+13Cr	A182 F6a
TRIM #5 (80A05)	A216 WCB+HF	A105+HF	A182 F6a
TRIM #8 (80A08)	A216 WCB+HF	A105+13Cr	A182 F6a

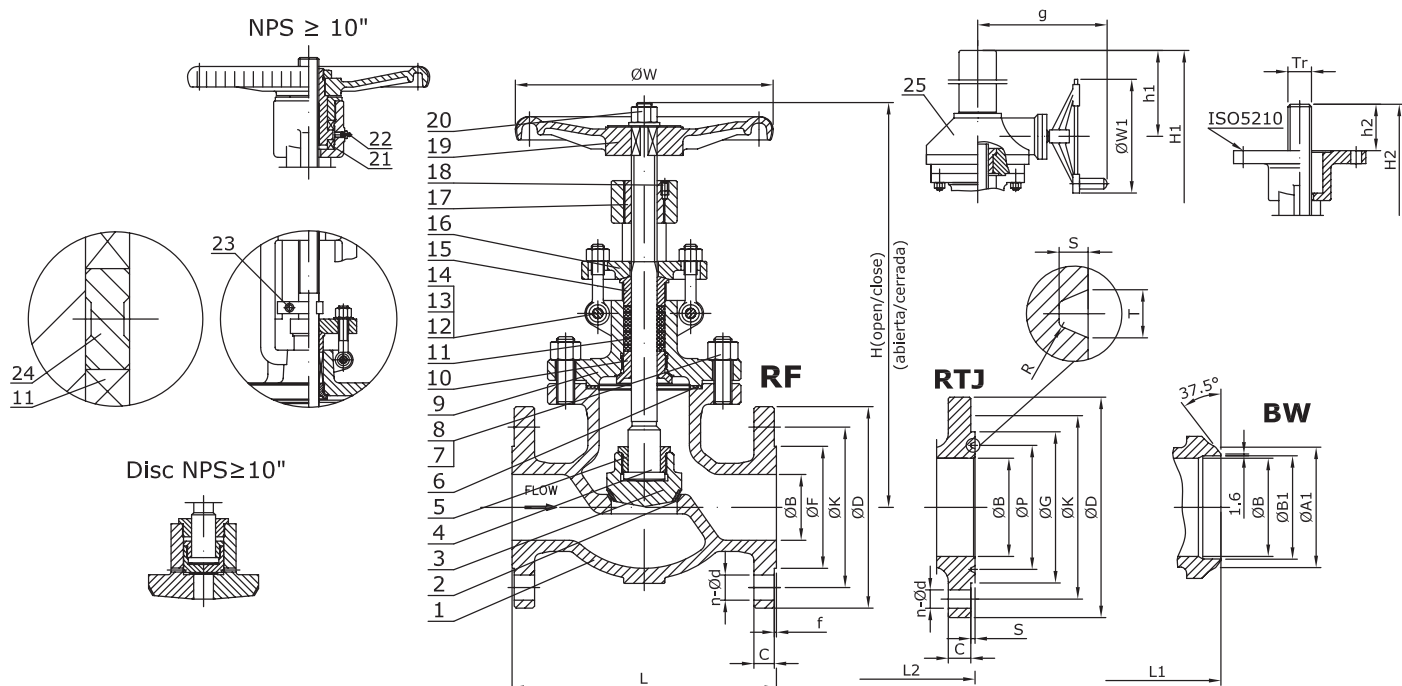
HF = Hard faced

Information / restriction of technical rules need to be observed!
Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information

Main Parts and Materials

SERIES 80 ANSI RANGE Class 150



From 2" to 8", the flow direction is acc. to the flow arrow shown in the drawing
From 10" onwards, the flow direction is opposite to the flow arrow shown in the drawing

N°	Part name	A217 C5 (80C2_)	A217 C12 (80C4_)	CF8 (80I2_)	CF8M (80I0_)	CF3 (80I1_)	CF3M (80I7_)
1	Body	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Seat	HF Overlay		Integral SS304	Integral SS316	Integral SS304L	Integral SS316L
3	Disc	A182 F5+HF	A182 F9+HF	A182 F304	A182 F316	A182 F304L	A182 F316L
4	Stem	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
5	Disc Nut	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
6	Gasket	SS304		SS304	SS316	SS304L	SS316L
7	Bonnet Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
8	Bonnet Nut	A194 4		A194 8	A194 8M	A194 8M	
9	Bonnet	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
10	Backseat Bushing	A182 F6a		SS304	SS316	SS304L	SS316L
11	Packing	Graphite		Graphite		Graphite	
12	Eyebolt Pin	A276 410		A276 304	A276 316	A276 316	
13	Gland Eyebolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
14	Gland Nut	A194 4		A194 8	A194 8M	A194 8M	
15	Packing Gland	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
16	Gland Flange	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
17	Stem Nut	A439 D2		A439 D2		A439 D2	
18	Retaining Screw	Carbon Steel		St. Steel		St. Steel	
19	Handwheel	Steel		Steel		Steel	
20	Handwheel Nut	Carbon Steel		St. Steel		St. Steel	
21	Bearings (1)	Alloy Steel		Alloy Steel		Alloy Steel	
22	Grease Nipple	Alloy Steel		St. Steel		St. Steel	
23	Splint (1)	Alloy Steel		St. Steel		St. Steel	
24	Lantern Ring (2)	A276 410		A276 304	A276 316	A276 316	A276 316L
25	Gear	Assembly		Assembly		Assembly	

(1) 10" and above

(2) On request

Main Valve Parameters - Class 150

SERIES 80 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"	
		DN	50	65	80	100	125	150	200	
End connection	RF	L	203	216	241	292	356	406	495	
		ØB	51	65	76	102	128	152	203	
		ØD	150	180	190	230	255	280	345	
		ØK	120,7	139,7	152,4	190,5	215,9	241,3	298,5	
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9	
		C	14,3	15,9	17,5	22,3	22,3	23,9	27	
		f	2	2	2	2	2	2	2	
		n-Ød	4 - 3/4	4 - 3/4	4 - 3/4	8 - 3/4	8 - 7/8	8 - 7/8	8 - 7/8	
	BW	L1	203	216	241	292	356	406	495	
		Schedule No.(1)	40	-	40	40	-	40	40	
		ØB	51	65	76	102	128	152	203	
		ØA1	60,3	-	91	117	-	172	223	
		ØB1	52,48	-	78	102	-	154	203	
	RTJ	L2	216	229	254	305	369	419	508	
		ØB	51	65	76	102	128	152	203	
		ØD	150	180	190	230	255	280	345	
		ØK	120,7	139,7	152,4	190,5	215,9	241,3	298,5	
		ØG	102	121	133	171	194	219	273	
		ØP	82,55	101,6	114,3	149,23	171,45	193,68	247,65	
		C	17,5	20,7	22,3	22,3	22,3	23,9	27	
		n-Ød	4 - 3/4	4 - 3/4	4 - 3/4	8 - 3/4	8 - 7/8	8 - 7/8	8 - 7/8	
		T	8,74	8,74	8,74	8,74	8,74	8,74	8,74	
		S	6,35	6,35	6,35	6,35	6,35	6,35	6,35	
		R	0,8	0,8	0,8	0,8	0,8	0,8	0,8	
		Top works/Operation	Hand-wheel	H (open)	302	332	355	437	483	517
	H (close)			286	316	338	399	441	472	536
	ØW			200	250	250	300	250	400	450
	Gear with handwheel		H1	-	-	-	-	-	-	-
			h1	-	-	-	-	-	-	-
			g	-	-	-	-	-	-	-
ØW1			-	-	-	-	-	-	-	
With ISO 5210 mounting pad	H2 (open)		327	357	380	442	485	517	600	
	H2 (close)		311	335	353	404	443	472	530	
	h2		80	80	80	80	80	80	80	
	ISO		F07	F07	F07	F10	F12	F12	F14	
	Tr		Tr20×4LH	Tr26×5LH	Tr26×5LH	Tr28×5LH	Tr32×6LH	Tr32×6LH	Tr36×6LH	
	Stroke		16	22	27	38	42	45	70	
	No. of turns		4	4	5	8	7	8	12	
	Torque (Nm) (2)		25	44	58	88	141	180	320	
Kvs-value			33	63	85	158	283	376	692	
Approx. Weight RF (3)			15	22	28	47	56	63	115	
Approx. Weight BW		12	18	23	39	45	50	93		

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 150

SERIES 80 ANSI RANGE



Nominal Size		inch	10"	12"	14"	16"	18"	20"	24"
		DN	250	300	350	400	450	500	600
End connection	RF	L	622	698	787	914	978	978	1295
		ØB	254	305	337	387	438	489	591
		ØD	405	485	535	595	635	700	815
		ØK	362	431,8	476,3	539,8	577,9	635	749,3
		ØF	323,8	381	412,8	469,9	533,4	584,2	692,2
		C	28,6	30,2	33,4	35	38,1	41,3	46,1
		f	2	2	2	2	2	2	2
		n-Ød	12 - 1	12 - 1	12 - 1 1/8	16 - 1 1/8	16 - 1 1/4	20 - 1 1/4	20 - 1 3/8
	BW	L1	622	698	787	914	978	978	1295
		Schedule No.(1)	40	STD	STD	STD	STD	STD	STD
		ØB	254	305	337	387	438	489	591
		ØA1	278	329	362	413	464	516	619
		ØB1	254,5	305	336,5	387,5	438	489	590,5
	RTJ	L2	635	711	800	927	991	991	1308
		ØB	254	305	337	387	438	489	591
		ØD	405	485	535	595	635	700	815
		ØK	362	431,8	476,3	539,8	577,9	635	749,3
		ØG	330	406	425	483	546	597	711
		ØP	304,8	381	396,88	454,03	517,53	558,8	673,1
		C	28,6	30,2	33,4	35	38,1	41,3	46,1
		n-Ød	12 - 1	12 - 1	12 - 1 1/8	16 - 1 1/8	16 - 1 1/4	20 - 1 1/4	20 - 1 3/8
		T	8,74	8,74	8,74	8,74	8,74	8,74	8,74
		S	6,35	6,35	6,35	6,35	6,35	6,35	6,35
		R	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Top works/Operation	Hand-wheel	H (open)	710	882	990	-	-	-	-
		H (close)	638	794	889	-	-	-	-
		ØW	450	500	550	-	-	-	-
	Gear with handwheel	H1	-	-	-	977	1066	1117	1295
		h1	-	-	178	202	235	275	324
		g	-	-	440	440	440	513	513
		ØW1	-	-	460	460	460	530	600
	With ISO 5210 mounting pad	H2 (open)	705	1050	940	1064	-	-	-
		H2 (close)	630	756	846	950	-	-	-
		h2	100	120	140	140	-	-	-
		ISO	F14	F25	F30	F30	-	-	-
		Tr	Tr38×6LH	Tr42×6LH	Tr46×8LH	Tr48×8LH	-	-	-
		Stroke	75	294	94	114	-	-	-
		No. of turns	13	16	12	14	-	-	-
		Torque (Nm) (2)	465	780	1606	2219	-	-	-
Kvs-value		1077	1615	2086	2764	3682	4585	6688	
Approx. Weight RF (3)		248	365	680	880	1150	1350	1700	
Approx. Weight BW		219	321	624	810	1073	1258	1558	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

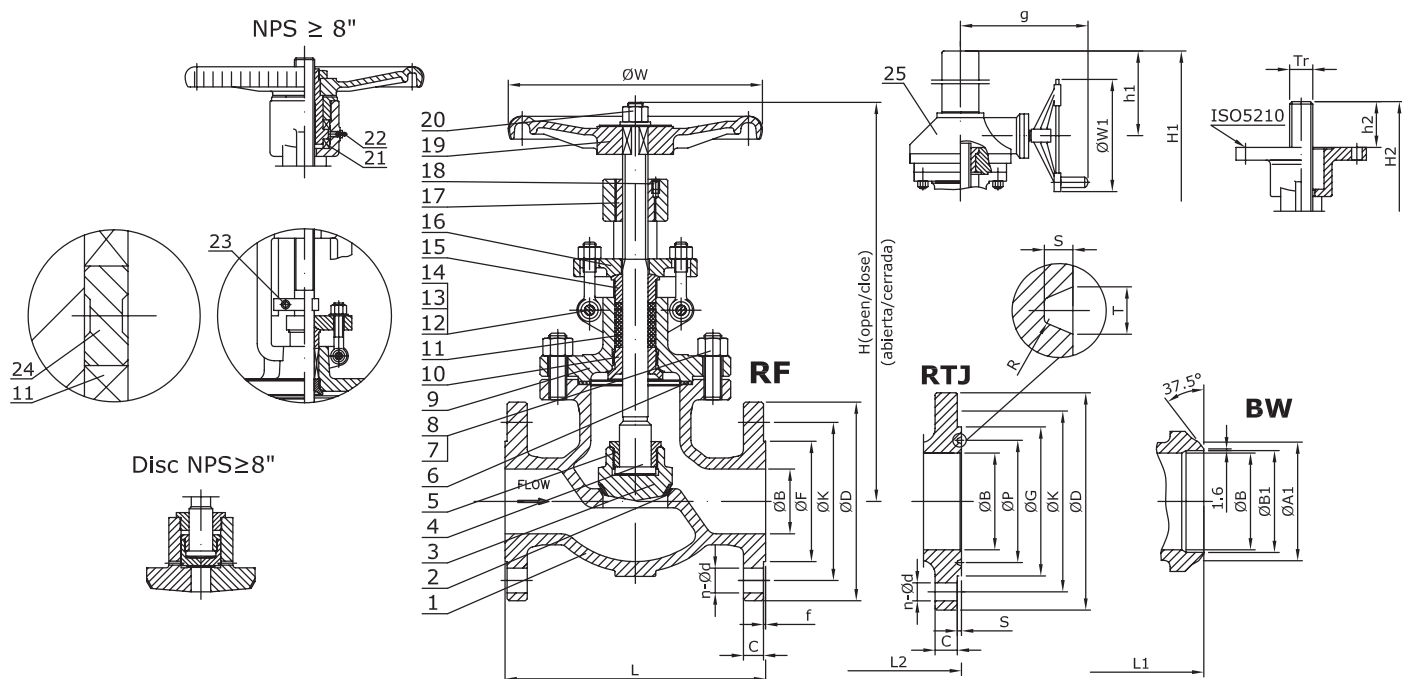
Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 80 ANSI RANGE Class 300



From 2" to 6", the flow direction is acc. to the flow arrow shown in the drawing
From 8" onwards, the flow direction is opposite to the flow arrow shown in the drawing

Nº	Part name	A216 WCB (80A0_)	A352 LCB		A217 WC1 (80B1_)	A217 WC6 (80B8_)	A217 WC9 (80B9_)
			Trim 2 (80A82_)	Trim 12 (80A8G_)			
1	Body	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
2	Seat	A105	Integral+SS304	Integral+HF	HF Overlay		
3	Disc	A105	A182 F304	A182 F316	A182 F1+HF	A182 F11+HF	A182 F22+HF
4	Stem	A182 F6a	A182 F304	A182 F316	A182 F6a		
5	Disc Nut	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
6	Gasket	SS304+Graphite	A182 F304	A182 F316	SS304		
7	Bonnet Bolt	A193 B7	A320 L7		A193 B16		
8	Bonnet Nut	A194 2H	A194 4		A194 4		
9	Bonnet	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
10	Backseat Bushing	A182 F6a	A182 F304	A182 F316	A182 F6a		
11	Packing	Graphite	Graphite		Graphite		
12	Eyebolt Pin	AISI 1025	AISI 1025		A276 410		
13	Gland Eyebolt	A193 B7	A320 L7		A193 B16		
14	Gland Nut	A194 2H	A194 4		A194 4		
15	Packing Gland	A182 F6a	A182 F304		A182 F6a		
16	Gland Flange	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
17	Stem Nut	A439 D2	A439 D2		A439 D2		
18	Retaining Screw	Carbon Steel	Carbon Steel		Carbon Steel		
19	Handwheel	Steel	Steel		Steel		
20	Handwheel Nut	Carbon Steel	Carbon Steel		Carbon Steel		
21	Bearings (1)	Alloy Steel	Alloy Steel		Alloy Steel		
22	Grease Nipple	Carbon Steel	Carbon Steel		Alloy Steel		
23	Splint (1)	Carbon Steel	Carbon Steel		Alloy Steel		
24	Lantern Ring (2)	A276 410	A276 304	A276 316	A276 410		
25	Gear	Assembly	Assembly		Assembly		

(1) 8" and above

(2) On request

Fig. 80A0_	Seat Surface	Disc Surface	Stem
TRIM #1 (80A01)	A105+13Cr	A216 WCB+13Cr	A182 F6a
TRIM #5 (80A05)	A105+HF	A216 WCB+HF	A182 F6a
TRIM #8 (80A08)	A105+HF	A216 WCB+13Cr	A182 F6a

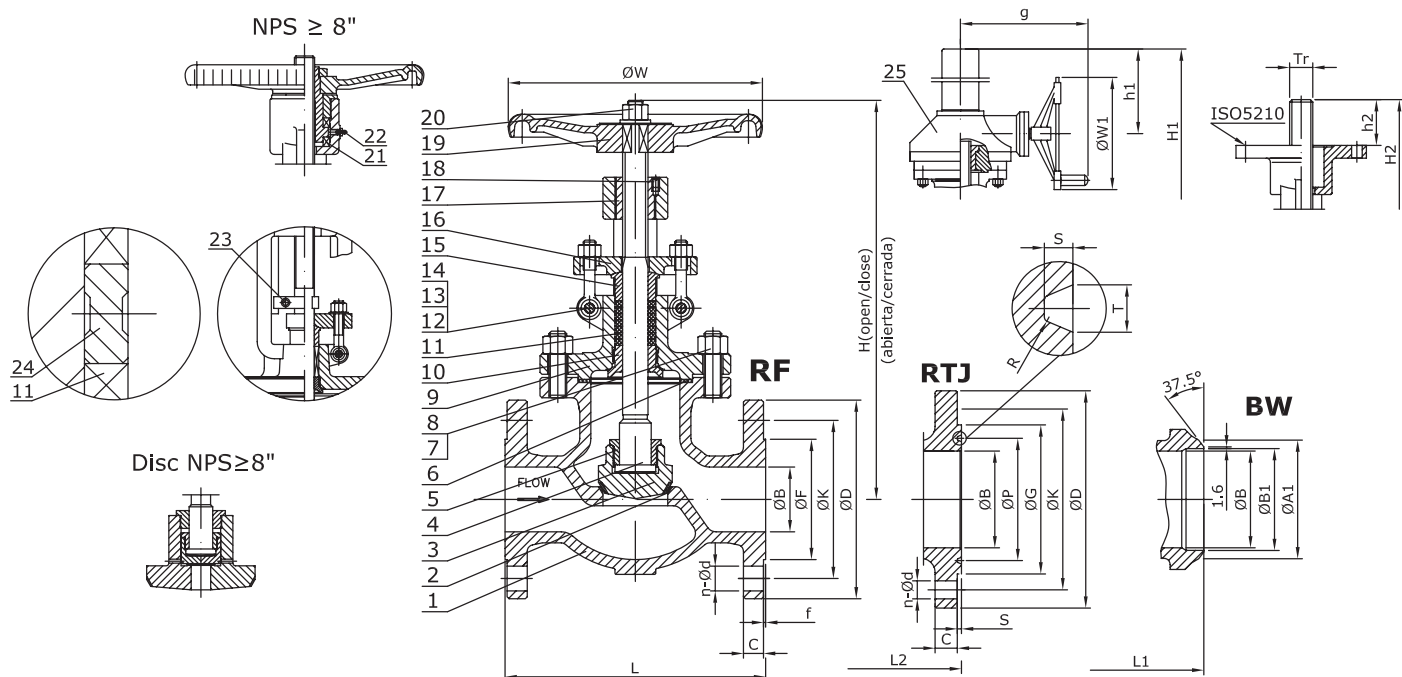
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SERIES 80 ANSI RANGE Class 300



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From 8" onwards, the flow direction is opposite to the flow arrow shown in the drawing

Nº	Part name	A217 C5 (80C2_)	A217 C12 (80C4_)	CF8 (80I2_)	CF8M (80I0_)	CF3 (80I1_)	CF3M (80I7_)
1	Body	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Seat	HF Overlay		Integral SS304	Integral SS316	Integral SS304L	Integral SS316L
3	Disc	A182 F5+HF	A182 F9+HF	A182 F304	A182 F316	A182 F304L	A182 F316L
4	Stem	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
5	Disc Nut	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
6	Gasket	SS304		SS304	SS316	SS304L	SS316L
7	Bonnet Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
8	Bonnet Nut	A194 4		A194 8	A194 8M	A194 8M	
9	Bonnet	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
10	Backseat Bushing	A182 F6a		SS304	SS316	SS304L	SS316L
11	Packing	Graphite		Graphite		Graphite	
12	Eyebolt Pin	A276 410		A276 304	A276 316	A276 316	
13	Gland Eyebolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
14	Gland Nut	A194 4		A194 8	A194 8M	A194 8M	
15	Packing Gland	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
16	Gland Flange	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
17	Stem Nut	A439 D2		A439 D2		A439 D2	
18	Retaining Screw	Carbon Steel		St. Steel		St. Steel	
19	Handwheel	Steel		Steel		Steel	
20	Handwheel Nut	Carbon Steel		St. Steel		St. Steel	
21	Bearings (1)	Alloy Steel		Alloy Steel		Alloy Steel	
22	Grease Nipple	Alloy Steel		St. Steel		St. Steel	
23	Splint (1)	Alloy Steel		St. Steel		St. Steel	
24	Lantern Ring (2)	A276 410		A276 304	A276 316	A276 316	A276 316L
25	Gear	Assembly		Assembly		Assembly	

(1) 8" and above

(2) On request

Main Valve Parameters - Class 300

SERIES 80 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"
		DN	50	65	80	100	125	150	200
End connection	RF	L	267	292	318	356	400	444	559
		ØB	51	65	76	102	128	152	203
		ØD	165	190	210	255	280	320	380
		ØK	127	149,2	168,3	200	235	269,9	330,2
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9
		C	20,7	23,9	27	30,2	33,4	35	39,7
		f	2	2	2	2	2	2	2
		n-Ød	8 - 3/4	8 - 7/8	8 - 7/8	8 - 7/8	8 - 7/8	12 - 7/8	12 - 1
	BW	L1	267	292	318	356	400	444	559
		Schedule No.(1)	40	-	40	40	-	40	40
		ØB	51	65	76	102	128	152	203
		ØA1	60,3	-	91	117	-	172	223
		ØB1	52,48	-	78	102	-	154	203
	RTJ	L2	283	308	334	372	416	460	575
		ØB	51	65	76	102	128	152	203
		ØD	165	190	210	255	280	320	380
		ØK	127	149,2	168,3	200	235	269,9	330,2
		ØG	108	127	146	175	210	241	302
		ØP	82,55	101,6	123,83	149,23	180,98	211,12	269,88
		C	20,7	23,9	27	30,2	33,4	35	39,7
		n-Ød	8 - 3/4	8 - 7/8	8 - 7/8	8 - 7/8	8 - 7/8	12 - 7/8	12 - 1
		T	11,91	11,91	11,91	11,91	11,91	11,91	11,91
		S	7,92	7,92	7,92	7,92	7,92	7,92	7,92
		R	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Top works/Operation	Hand-wheel	H (open)	317	356	384	450	501	538	734
		H (close)	300	332	356	412	459	493	685
		ØW	220	250	300	350	250	450	500
	Gear with handwheel	H1	-	-	-	-	-	-	799
		h1	-	-	-	-	-	-	119
		g	-	-	-	-	-	-	440
		ØW1	-	-	-	-	-	-	460
	With ISO 5210 mounting pad	H2 (open)	337	341	344	459	507	543	719
		H2 (close)	320	318	316	421	465	498	670
		h2	80	80	80	80	80	80	100
		ISO	F07	F12	F12	F12	F14	F14	F16
		Tr	Tr22×5LH	Tr26×5LH	Tr26×5LH	Tr30×5LH	Tr36×6LH	Tr36×6LH	Tr42×8LH
		Stroke	17	23	28	38	42	45	49
		No. of turns	3	5	6	8	7	8	6
		Torque (Nm) (2)	40	77	105	175	293	380	700
Kvs-value		33	63	85	158	283	376	692	
Approx. Weight RF (3)		25	35	42	70	99	120	230	
Approx. Weight BW		20	28	34	57	80	97	194	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 300

SERIES 80 ANSI RANGE



Nominal Size		inch	10"	12"	14"	16"	18"	20"	24"
		DN	250	300	350	400	450	500	600
End connection	RF	L	622	711	838	863	977	1016	1346
		ØB	254	305	337	387	432	483	584
		ØD	445	520	585	650	710	775	915
		ØK	387,4	450,8	514,4	571,5	628,6	685,8	812,8
		ØF	323,8	381	412,8	469,9	533,4	584,2	692,2
		C	46,1	49,3	52,4	55,6	58,8	62	68,3
		f	2	2	2	2	2	2	2
		n-Ød	16 - 1 1/8	16 - 1 1/4	20 - 1 1/4	20 - 1 3/8	24 - 1 3/8	24 - 1 3/8	24 - 1 5/8
	BW	L1	622	711	838	863	977	1016	1346
		Schedule No.(1)	40	STD	STD	STD	STD	STD	STD
		ØB	254	305	337	387	432	483	584
		ØA1	278	329	362	413	464	516	619
		ØB1	254,5	305	336,5	387,5	438	489	590,5
	RTJ	L2	638	727	854	879	993	1035	1368
		ØB	254	305	337	387	432	483	584
		ØD	445	520	585	650	710	775	915
		ØK	387,4	450,8	514,4	571,5	628,6	685,8	812,8
		ØG	356	413	457	508	575	635	749
		ØP	323,85	981	419,1	469,9	533,4	584,2	692,15
		C	46,1	49,3	52,4	55,6	58,8	62	68,3
		n-Ød	16 - 1 1/8	16 - 1 1/4	20 - 1 1/4	20 - 1 3/8	24 - 1 3/8	24 - 1 3/8	24 - 1 5/8
		T	11,91	11,91	11,91	11,91	11,91	13,49	16,66
		S	7,92	7,92	7,92	7,92	7,92	9,53	11,13
		R	0,8	0,8	0,8	0,8	0,8	1,5	1,5
Top works/Operation	Hand-wheel	H (open)	875	-	-	-	-	-	-
		H (close)	800	-	-	-	-	-	-
		ØW	550	-	-	-	-	-	-
	Gear with handwheel	H1	805	1025	1192	1371	1473	1574	1803
		h1	156	186	204	235	299	355	406
		g	440	440	440	440	513	513	588
		ØW1	460	460	460	460	530	600	600
	With ISO 5210 mounting pad	H2 (open)	877	1053	1124	1352	1480	1602	-
		H2 (close)	802	945	1025	1236	1353	1460	-
		h2	120	140	140	140	160	160	-
		ISO	F25	F30	F30	F30	F35	F35	-
		Tr	Tr42×6LH	Tr46×8LH	Tr48×8LH	Tr52×8LH	Tr55×8LH	Tr60×8LH	-
		Stroke	75	108	99	116	127	142	-
		No. of turns	13	14	12	15	16	18	-
		Torque (Nm) (2)	1125	1800	2100	2500	2800	3300	-
Kvs-value		1077	1615	2086	2764	3575	4467	6544	
Approx. Weight RF (3)		389	580	1080	1200	1550	1950	-	
Approx. Weight BW		340	506	979	1067	1384	1745	-	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

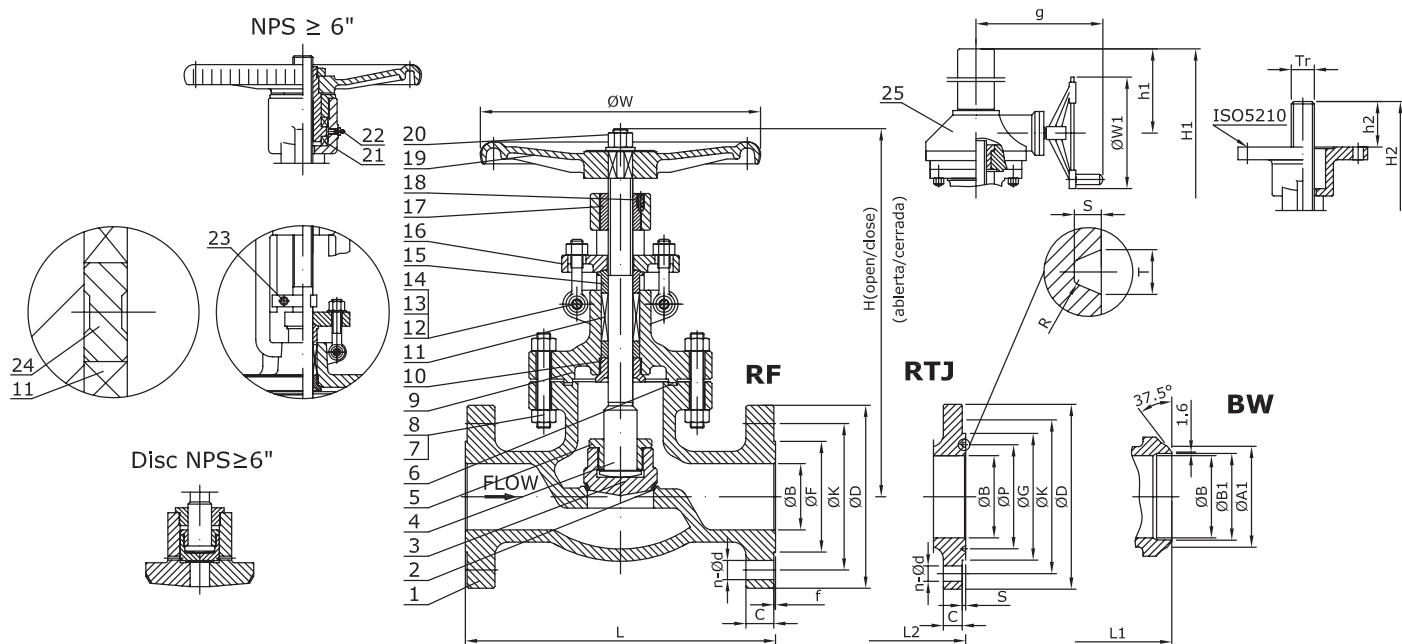
Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 80 ANSI RANGE Class 600



From 2" to 4", the flow direction is acc. to the flow arrow shown in the drawing
From 6" onwards, the flow direction is opposite to the flow arrow shown in the drawing

N°	Part name	A216 WCB (80A0_)	A352 LCB		A217 WC1 (80B1_)	A217 WC6 (80B8_)	A217 WC9 (80B9_)
			Trim 2 (80A82_)	Trim 12 (80A8G_)			
1	Body	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
2	Seat	A105	Integral+SS304	Integral+HF	HF Overlay		
3	Disc	A105	A182 F304	A182 F316	A182 F1+HF	A182 F11+HF	A182 F22+HF
4	Stem	A182 F6a	A182 F304	A182 F316	A182 F6a		
5	Disc Nut	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
6	Gasket	SS304+Graphite	A182 F304	A182 F316	SS304		
7	Bonnet Bolt	A193 B7	A320 L7		A193 B16		
8	Bonnet Nut	A194 2H	A194 4		A194 4		
9	Bonnet	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
10	Backseat Bushing	A182 F6a	A182 F304	A182 F316	A182 F6a		
11	Packing	Graphite	Graphite		Graphite		
12	Eyebolt Pin	AISI 1025	AISI 1025		A276 410		
13	Gland Eyebolt	A193 B7	A320 L7		A193 B16		
14	Gland Nut	A194 2H	A194 4		A194 4		
15	Packing Gland	A182 F6a	A182 F304		A182 F6a		
16	Gland Flange	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
17	Stem Nut	A439 D2	A439 D2		A439 D2		
18	Retaining Screw	Carbon Steel	Carbon Steel		Carbon Steel		
19	Handwheel	Steel	Steel		Steel		
20	Handwheel Nut	Carbon Steel	Carbon Steel		Carbon Steel		
21	Bearings (1)	Alloy Steel	Alloy Steel		Alloy Steel		
22	Grease Nipple	Carbon Steel	Carbon Steel		Alloy Steel		
23	Splint (1)	Carbon Steel	Carbon Steel		Alloy Steel		
24	Lantern Ring (2)	A276 410	A276 304	A276 316	A276 410		
25	Gear	Assembly	Assembly		Assembly		

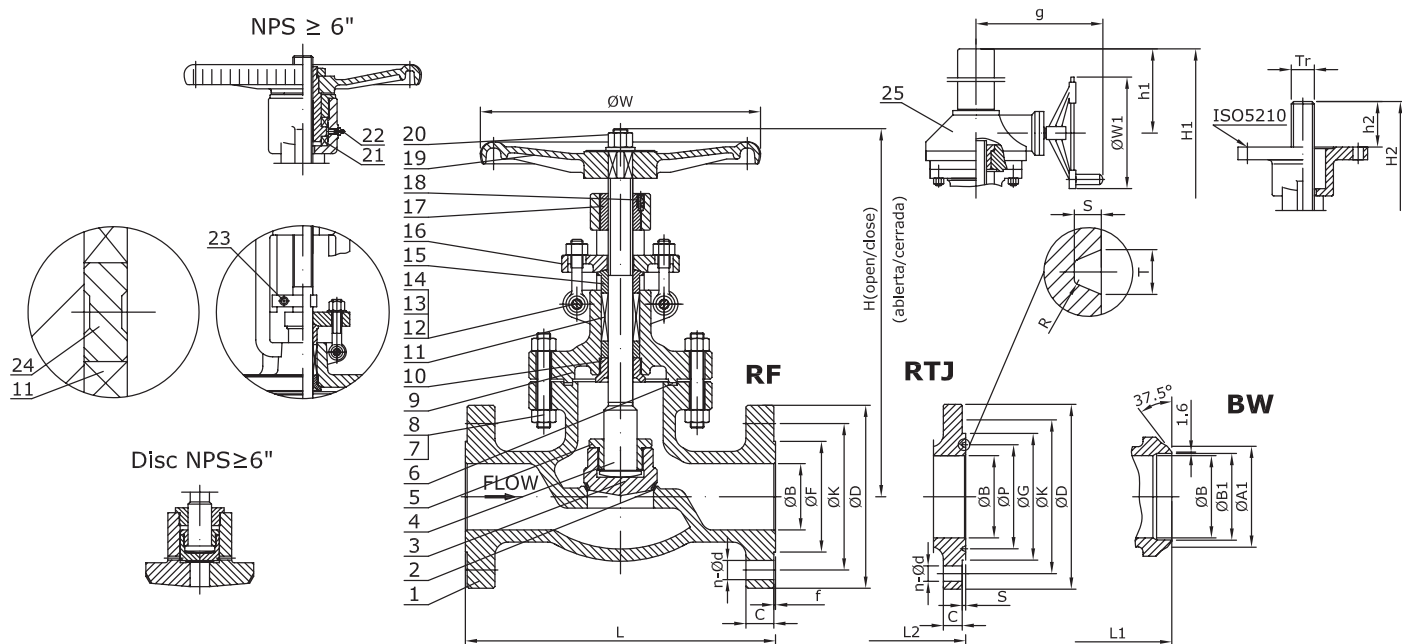
(1) 6" and above
(2) On request

Fig. 80A0_	Seat Surface	Disc Surface	Stem
TRIM #1 (80A01)	A105+13Cr	A216 WCB+13Cr	A182 F6a
TRIM #5 (80A05)	A105+HF	A216 WCB+HF	A182 F6a
TRIM #8 (80A08)	A105+HF	A216 WCB+13Cr	A182 F6a

HF = Hard faced

Main Parts and Materials

SERIES 80 ANSI RANGE Class 600



From 2" to 4", the flow direction is acc. to the flow arrow shown in the drawing
From 6" onwards, the flow direction is opposite to the flow arrow shown in the drawing

Nº	Part name	A217 C5 (80C2_)	A217 C12 (80C4_)	CF8 (80I2_)	CF8M (80I0_)	CF3 (80I1_)	CF3M (80I7_)
1	Body	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Seat	HF Overlay		Integral SS304	Integral SS316	Integral SS304L	Integral SS316L
3	Disc	A182 F5+HF	A182 F9+HF	A182 F304	A182 F316	A182 F304L	A182 F316L
4	Stem	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
5	Disc Nut	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
6	Gasket	SS304		SS304	SS316	SS304L	SS316L
7	Bonnet Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
8	Bonnet Nut	A194 4		A194 8	A194 8M	A194 8M	
9	Bonnet	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
10	Backseat Bushing	A182 F6a		SS304	SS316	SS304L	SS316L
11	Packing	Graphite		Graphite		Graphite	
12	Eyebolt Pin	A276 410		A276 304	A276 316	A276 316	
13	Gland Eyebolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
14	Gland Nut	A194 4		A194 8	A194 8M	A194 8M	
15	Packing Gland	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
16	Gland Flange	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
17	Stem Nut	A439 D2		A439 D2		A439 D2	
18	Retaining Screw	Carbon Steel		St. Steel		St. Steel	
19	Handwheel	Steel		Steel		Steel	
20	Handwheel Nut	Carbon Steel		St. Steel		St. Steel	
21	Bearings (1)	Alloy Steel		Alloy Steel		Alloy Steel	
22	Grease Nipple	Alloy Steel		St. Steel		St. Steel	
23	Splint (1)	Alloy Steel		St. Steel		St. Steel	
24	Lantern Ring (2)	A276 410		A276 304	A276 316	A276 316	A276 316L
25	Gear	Assembly		Assembly		Assembly	

(1) 6" and above

(2) On request

Main Valve Parameters - Class 600

SERIES 80 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"
		DN	50	65	80	100	125	150	200
End connection	RF	L	292	330	356	432	508	559	660
		ØB	51	65	76	102	128	152	200
		ØD	165	190	210	275	330	355	420
		ØK	127	149,2	168,3	215,9	266,7	292,1	349,2
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9
		C	25,4	28,6	31,8	38,1	44,5	47,7	55,6
		f	7	7	7	7	7	7	7
		n-Ød	8 - 3/4	8 - 7/8	8 - 7/8	8 - 1	8 - 1 1/8	12 - 1 1/8	12 - 1/4
	BW	L1	292	330	356	432	508	559	660
		Schedule No.(1)	80	-	80	80	-	80	80
		ØB	51	65	76	102	128	152	200
		ØA1	60,3	-	91	117	-	172	223
		ØB1	49,22	-	73,5	97	-	146,5	193,5
	RTJ	L2	295	333	359	435	511	562	663
		ØB	51	65	76	102	128	152	200
		ØD	165	190	210	275	330	355	420
		ØK	127	149,2	168,3	215,9	266,7	292,1	349,2
		ØG	108	127	146	175	210	241	302
		ØP	82,55	101,6	123,83	149,23	180,98	211,12	269,88
		C	25,4	28,6	31,8	38,1	44,5	47,7	55,6
		n-Ød	8 - 3/4	8 - 7/8	8 - 7/8	8 - 1	8 - 1 1/8	12 - 1 1/8	12 - 1/4
		T	11,91	11,91	11,91	11,91	11,91	11,91	11,91
		S	7,92	7,92	7,92	7,92	7,92	7,92	7,92
		R	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Top works/Operation	Hand-wheel	H (open)	360	409	446	536	678	783	937
		H (close)	333	377	410	498	632	731	866
		ØW	220	250	350	400	250	500	550
	Gear with handwheel	H1	-	-	-	-	-	867	1006
		h1	-	-	-	-	-	130	149
		g	-	-	-	-	-	440	440
		ØW1	-	-	-	-	-	460	460
	With ISO 5210 mounting pad	H2 (open)	380	424	456	540	682	787	926
		H2 (close)	353	392	420	502	636	735	855
		h2	80	80	80	80	103	120	140
		ISO	F12	F14	F14	F14	F25	F25	F30
		Tr	Tr22×5LH	Tr30×5LH	Tr30×5LH	Tr32×6LH	Tr42×8LH	Tr42×8LH	Tr46×8LH
		Stroke	27	32	36	38	46	52	71
		No. of turns	5	6	7	6	6	7	9
		Torque (Nm) (2)	160	289	385	365	615	800	1658
Kvs-value		33	63	85	158	283	376	667	
Approx. Weight RF (3)		30	44	55	100	178	235	410	
Approx. Weight BW		23	34	42	77	142	191	346	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 600

SERIES 80 ANSI RANGE



Nominal Size		inch	10"	12"	14"	16"	18"	20"	24"
		DN	250	300	350	400	450	500	600
End connection	RF	L	787	838	889	991	1092	1194	1397
		ØB	248	299	327	375	419	464	559
		ØD	510	560	605	685	745	815	940
		ØK	431,8	489	527	603,2	654	723,9	838,2
		ØF	323,8	381	412,8	469,9	533,4	584,2	692,2
		C	63,5	66,7	69,9	76,2	82,6	88,9	101,6
		f	7	7	7	7	7	7	7
		n-Ød	16 - 1 3/8	20 - 1 3/8	20 - 1 1/2	20 - 1 5/8	20 - 1 3/4	24 - 1 3/4	24 -2
	BW	L1	787	838	889	991	1092	1194	1397
		Schedule No.(1)	80	80	80	80	80	80	80
		ØB	248	299	327	375	419	464	559
		ØA1	278	329	362	413	464	516	619
		ØB1	243	289	317,5	363,5	409,5	455,5	547,5
	RTJ	L2	790	841	892	994	1095	1200	1407
		ØB	248	299	327	375	419	464	559
		ØD	510	560	605	685	745	815	940
		ØK	431,8	489	527	603,2	654	723,9	838,2
		ØG	356	413	457	508	575	635	749
		ØP	323,85	981	419,1	469,9	533,4	584,2	692,15
		C	63,5	66,7	69,9	76,2	82,6	88,9	101,6
		n-Ød	16 - 1 3/8	20 - 1 3/8	20 - 1 1/2	20 - 1 5/8	20 - 1 3/4	24 - 1 3/4	24 -2
		T	11,91	11,91	11,91	11,91	11,91	13,49	16,66
		S	7,92	7,92	7,92	7,92	7,92	9,53	11,13
		R	0,8	0,8	0,8	0,8	0,8	1,5	1,5
Top works/Operation	Hand-wheel	H (open)	941	-	-	-	-	-	-
		H (close)	856	-	-	-	-	-	-
		ØW	600	-	-	-	-	-	-
	Gear with handwheel	H1	1061	1215	1294	1431	1568	1705	2003
		h1	180	223	265	302	355	412	471
		g	513	513	513	588	588	698	613
		ØW1	530	530	600	600	600	800	800
	With ISO 5210 mounting pad	H2 (open)	916	1100	-	-	-	-	-
		H2 (close)	839	1010	-	-	-	-	-
		h2	140	140	-	-	-	-	-
		ISO	F30	F35	-	-	-	-	-
		Tr	Tr52×8LH	Tr55×8LH	-	-	-	-	-
		Stroke	77	90	-	-	-	-	-
		No. of turns	10	11	-	-	-	-	-
		Torque (Nm) (2)	2355	3100	-	-	-	-	-
Kvs-value		1026	1547	2014	2644	3444	4214	6123	
Approx. Weight RF (3)		585	1050	1280	1600	2800	3500	4600	
Approx. Weight BW		482	928	1100	1372	2512	3146	4162	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

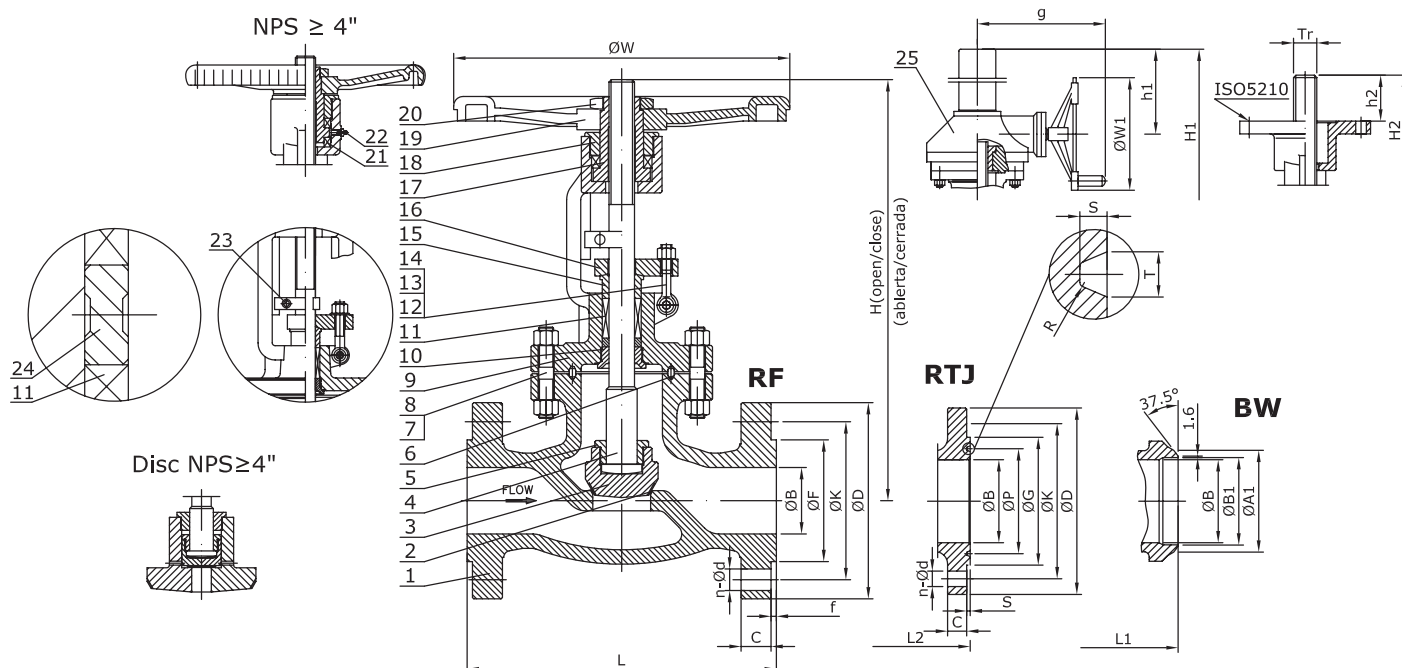
Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 80 ANSI RANGE Class 900



Flow direction is opposite to the flow arrow shown in the drawing to make advantage of medium pressure itself to close the disc

N°	Part name	A216 WCB (80A0_)	A352 LCB		A217 WC1 (80B1_)	A217 WC6 (80B8_)	A217 WC9 (80B9_)
			Trim 15 (80A8K_)	Trim 16 (80A8L_)			
1	Body	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
2	Seat	A105	Integral+HF	Integral+HF	HF Overlay		
3	Disc	A105	A182 F304+HF	A182 F316+HF	A182 F1+HF	A182 F11+HF	A182 F22+HF
4	Stem	A182 F6a	A182 F304	Nitronic 50	A182 F6a		
5	Disc Nut	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
6	Gasket	SS304+Graphite	SS304	SS316	SS304		
7	Bonnet Bolt	A193 B7	A320 L7		A193 B16		
8	Bonnet Nut	A194 2H	A194 4		A194 4		
9	Bonnet	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
10	Backseat Bushing	A182 F6a	A182 F304	A182 F316	A182 F6a		
11	Packing	Graphite	Graphite		Graphite		
12	Eyebolt Pin	AISI 1025	AISI 1025		A276 410		
13	Gland Eyebolt	A193 B7	A320 L7		A193 B16		
14	Gland Nut	A194 2H	A194 4		A194 4		
15	Packing Gland	A182 F6a	A182 F304	A182 F316	A182 F6a		
16	Gland Flange	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
17	Stem Nut	A439 D2	A439 D2		A439 D2		
18	Retaining Screw	Carbon Steel	Carbon Steel		Carbon Steel		
19	Handwheel	Steel	Steel/ Acero		Steel		
20	Handwheel Nut	Carbon Steel	Carbon Steel		Carbon Steel		
21	Bearings (1)	Alloy Steel	Alloy Steel		Alloy Steel		
22	Grease Nipple	Carbon Steel	Carbon Steel		Alloy Steel		
23	Splint (1)	Carbon Steel	Carbon Steel		Alloy Steel		
24	Lantern Ring (2)	A276 410	A276 304	A276 316	A276 410		
25	Gear	Assembly	Assembly		Assembly		

(1) 4" and above

(2) On request

Fig. 80A0_	Seat Surface	Disc Surface	Stem
TRIM #1 (80A01)	A105+13Cr	A216 WCB+13Cr	A182 F6a
TRIM #5 (80A05)	A105+HF	A216 WCB+HF	A182 F6a
TRIM #8 (80A08)	A105+HF	A216 WCB+13Cr	A182 F6a

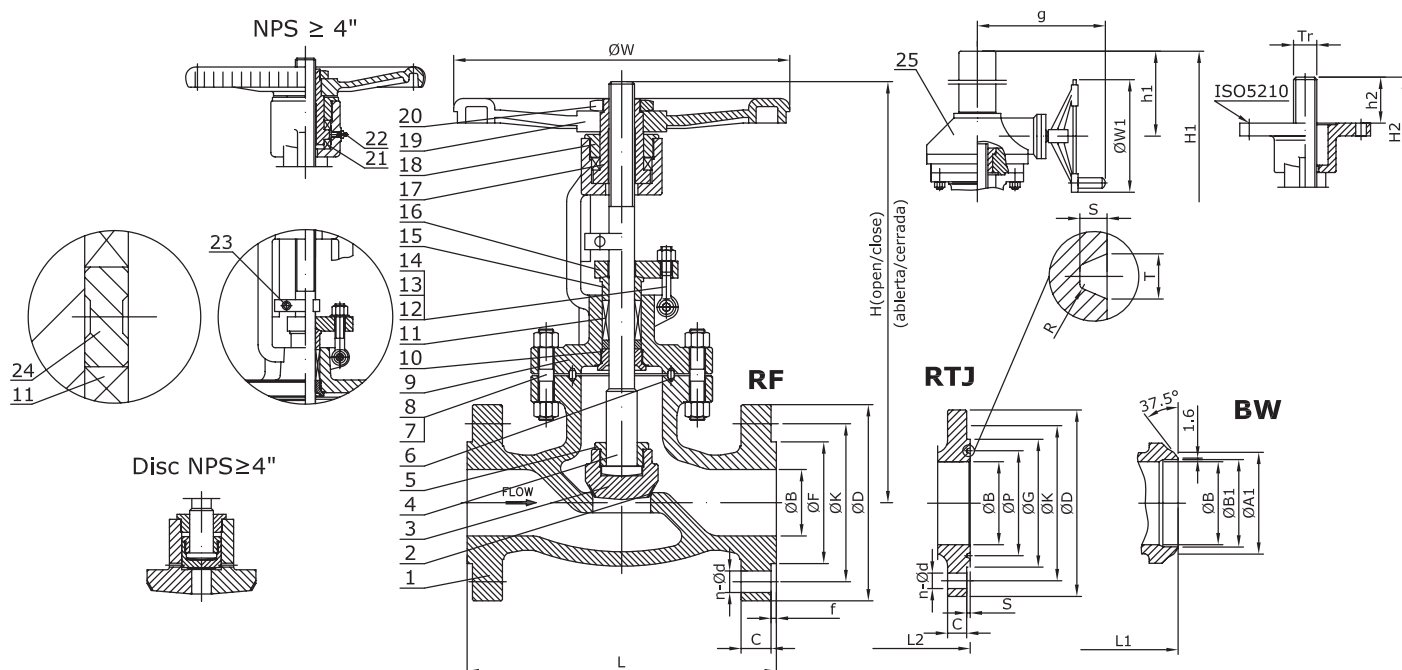
HF = Hard faced

Information / restriction of technical rules need to be observed!
Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information

Main Parts and Materials

SERIES 80 ANSI RANGE Class 900



Flow direction is opposite to the flow arrow shown in the drawing to make advantage of medium pressure itself to close the disc

N°	Part name	A217 C5 (80C2_)	A217 C12 (80C4_)	CF8 (80I2_)	CF8M (80I0_)	CF3 (80I1_)	CF3M (80I7_)
1	Body	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Seat	HF Overlay		Integral+HF		Integral+HF	
3	Disc	A182 F5+HF	A182 F9+HF	A182 F304+HF	A182 F316+HF	A182 F304L+HF	A182 F316L+HF
4	Stem	A182 F6a		A182 F304	Nitronic 50	A182 F304L	Nitronic 50
5	Disc Nut	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
6	Gasket	SS304		SS304	SS316	SS304L	SS316L
7	Bonnet Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
8	Bonnet Nut	A194 4		A194 8	A194 8M	A194 8M	
9	Bonnet	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
10	Backseat Bushing	A182 F6a		SS304	SS316	SS304L	SS316L
11	Packing	Graphite		Graphite		Graphite	
12	Eyebolt Pin	A276 410		A276 304	A276 316	A276 316	
13	Gland Eyebolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
14	Gland Nut	A194 4		A194 8	A194 8M	A194 8M	
15	Packing Gland	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
16	Gland Flange	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
17	Stem Nut	A439 D2		A439 D2		A439 D2	
18	Retaining Screw	Carbon Steel		St. Steel		St. Steel	
19	Handwheel	Steel		Steel		Steel	
20	Handwheel Nut	Carbon Steel		St. Steel		St. Steel	
21	Bearings (1)	Alloy Steel		Alloy Steel		Alloy Steel	
22	Grease Nipple	Alloy Steel		St. Steel		St. Steel	
23	Splint (1)	Alloy Steel		St. Steel		St. Steel	
24	Lantern Ring (2)	A276 410		A276 304	A276 316	A276 316	A276 316L
25	Gear	Assembly		Assembly		Assembly	

(1) 4" and above
(2) On request

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
Kvs-values in m³/h / Torques in Nm / Weights in kg
For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 900

SERIES 80 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"
		DN	50	65	80	100	125	150	200
End connection	RF	L	368	419	381	457	559	610	737
		ØB	48	62	73	98	123	146	191
		ØD	215	245	240	290	350	380	470
		ØK	165,1	190,5	190,5	235	279,4	317,5	393,7
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9
		C	38,1	41,3	38,1	44,5	50,8	55,6	63,5
		f	7	7	7	7	7	7	7
		n-Ød	8 - 7/8	8 -1	8 - 7/8	8 - 1 1/8	8 - 1 1/4	12 - 1 1/8	12 - 1 3/8
	BW	L1	368	419	381	457	559	610	737
		Schedule No.(1)	160	-	160	120	-	120	100
		ØB	48	62	73	98	123	146	191
		ØA1	60,3	-	91	117	-	172	223
		ØB1	38,16	-	66,5	92	-	140	189
	RTJ	L2	371	422	384	460	562	613	740
		ØB	48	62	73	98	123	146	191
		ØD	215	245	240	290	350	380	470
		ØK	165,1	190,5	190,5	235	279,4	317,5	393,7
		ØG	124	137	156	181	216	241	308
		ØP	95,25	107,95	123,83	149,23	180,98	211,12	269,88
		C	38,1	41,3	38,1	44,5	50,8	55,6	63,5
		n-Ød	8 - 7/8	8 -1	8 - 7/8	8 - 1 1/8	8 - 1 1/4	12 - 1 1/8	12 - 1 3/8
		T	11,91	11,91	11,91	11,91	11,91	11,91	11,91
		S	7,92	7,92	7,92	7,92	7,92	7,92	7,92
		R	0,8	0,8	0,8	0,8	0,8	0,8	0,8
Top works/Operation		Hand-wheel	H (open)	558	618	662	748	802	842
	H (close)		521	587	635	717	762	795	-
	ØW		280	250	300	400	250	600	-
	Gear with handwheel	H1	-	-	-	-	-	932	1117
		h1	-	-	-	-	-	125	157
		g	-	-	-	-	-	440	513
		ØW1	-	-	-	-	-	460	460
	With ISO 5210 mounting pad	H2 (open)	570	626	667	756	811	852	1037
		H2 (close)	520	589	640	725	771	805	958
		h2	80	80	80	80	115	140	140
		ISO	F12	F14	F14	F14	F30	F30	F30
		Tr	Tr26×5LH	Tr32×6LH	Tr32×6LH	Tr36×6LH	Tr48×8LH	Tr48×8LH	Tr52×8LH
		Stroke	50	37	27	31	40	47	79
		No. of turns	10	6	5	5	5	6	10
		Torque (Nm) (2)	105	178	232	460	772	1002	1905
Kvs-value		21	53	77	145	258	342	607	
Approx. Weight RF (3)		85	97	105	160	298	400	715	
Approx. Weight BW		71	81	88	132	252	340	613	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 900

SERIES 80 ANSI RANGE



Nominal Size		inch	10"	12"	14"	16"	18"	20"	24"
		DN	250	300	350	400	450	500	600
End connection	RF	L	838	965	1029	1130	1219	1321	1549
		ØB	238	282	311	356	400	445	533
		ØD	545	610	640	705	785	855	1040
		ØK	469,9	533,4	558,8	616	685,8	749,3	901,7
		ØF	323,8	381	412,8	469,9	533,4	584,2	692,2
		C	69,9	79,4	85,8	88,9	101,6	108	139,7
		f	7	7	7	7	7	7	7
		n-Ød	16 - 1 3/8	20 - 1 3/8	20 - 1 1/2	20 - 1 5/8	20 - 1 7/8	20 - 2	20 - 2 1/2
	BW	L1	838	965	1029	1130	1219	1321	1549
		Schedule No.(1)	100	100	100	100	100	100	100
		ØB	238	282	311	356	400	445	533
		ØA1	278	329	362	413	464	516	619
		ØB1	236,5	281	308	354	398,5	443	532
	RTJ	L2	841	968	1039	1140	1232	1334	1568
		ØB	238	282	311	356	400	445	533
		ØD	545	610	640	705	785	855	1040
		ØK	469,9	533,4	558,8	616	685,8	749,3	901,7
		ØG	362	419	467	524	594	648	772
		ØP	323,85	381	419,1	469,9	533,4	584,2	692,15
		C	69,9	79,4	85,8	88,9	101,6	108	139,7
		n-Ød	16 - 1 3/8	20 - 1 3/8	20 - 1 1/2	20 - 1 5/8	20 - 1 7/8	20 - 2	20 - 2 1/2
		T	11,91	11,91	16,66	16,66	19,84	19,84	26,97
		S	7,92	7,92	11,13	11,13	12,7	12,7	15,88
		R	0,8	0,8	1,5	1,5	1,5	1,5	2,4
Top works/Operation	Hand-wheel	H (open)	-	-	-	-	-	-	-
		H (close)	-	-	-	-	-	-	-
		ØW	-	-	-	-	-	-	-
	Gear with handwheel	H1	1237	1450	1596	1750	1889	2028	2306
		h1	208	245	301	344	400	442	544
		g	513	513	588	588	613	613	698
		ØW1	530	530	600	600	600	800	800
	With ISO 5210 mounting pad	H2 (open)	1127	1320	-	-	-	-	-
		H2 (close)	1022	1230	-	-	-	-	-
		h2	160	160	-	-	-	-	-
		ISO	F35	F35	-	-	-	-	-
		Tr	Tr62×8LH	Tr65×10LH	-	-	-	-	-
		Stroke	105	90	-	-	-	-	-
		No. of turns	13	9	-	-	-	-	-
		Torque (Nm) (2)	2877	3850	-	-	-	-	-
Kvs-value		940	1503	1824	2382	3138	3874	5579	
Approx. Weight RF (3)		900	1450	3250	4200	-	-	-	
Approx. Weight BW		758	1254	3027	3931	-	-	-	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

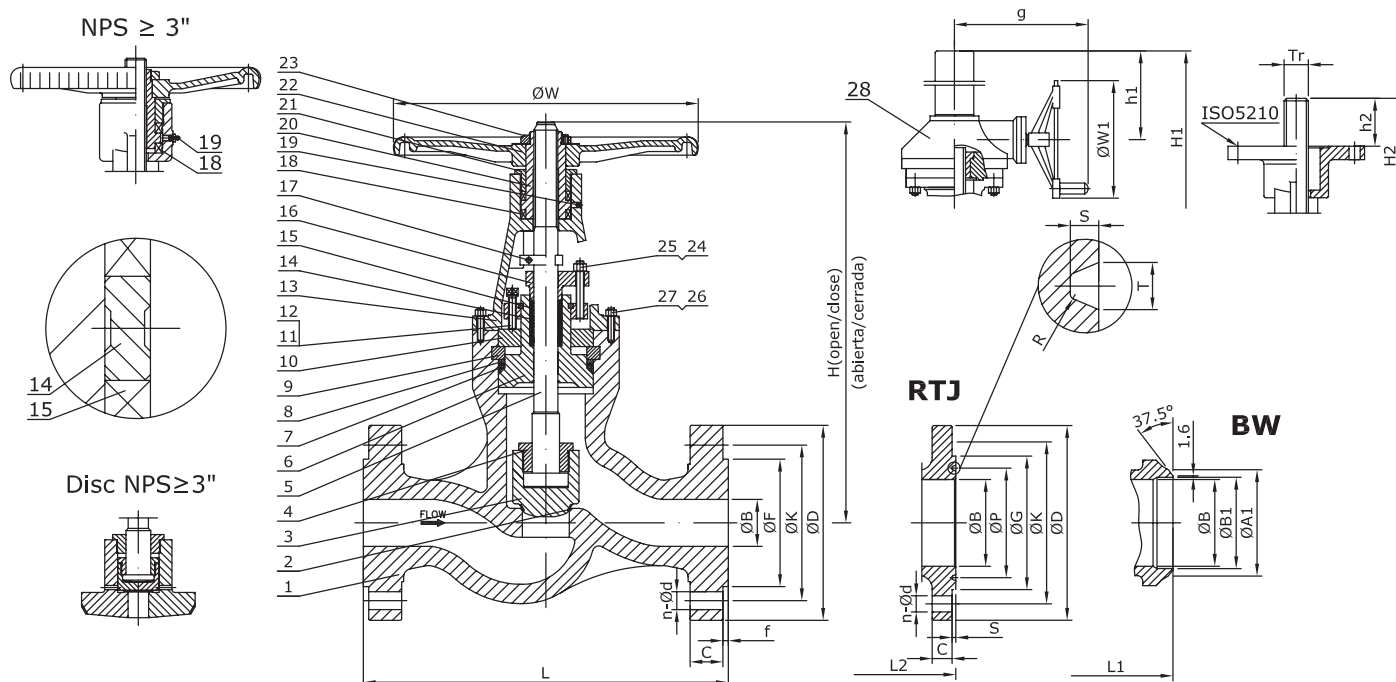
Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16

Main Parts and Materials

SERIES 81 ANSI RANGE Class 1500&2500



Flow direction is opposite to the flow arrow shown in the drawing to make advantage of medium pressure itself to close the disc

N°	Part name	A216 WCB (81A0_)	A352 LCB		A217 WC1 (81B1_)	A217 WC6 (81B8_)	A217 WC9 (81B9_)
			Trim 15 (81A8K_)	Trim 16 (81A8L_)			
1	Body	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
2	Seat	A105	Integral+HF	Integral+HF	HF Overlay		
3	Disc	A105	A182 F304+HF	A182 F316+HF	A182 F1+HF	A182 F11+HF	A182 F22+HF
4	Disc Nut	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
5	Stem	A182 F6a	A182 F304	Nitronic 50	A182 F6a		
6	Bonnet	A105	A350 LF2		A182 F1	A182 F11	A182 F22
7	Gasket	SS304+Graphite	SS304+Graphite	SS316+Graphite	SS304+Graphite		
8	Gasket Washer	A182 F6a	A182 F304	A182 F316	A182 F6a		
9	Split Ring	A105	A350 LF2		A182 F1	A182 F11	A182 F22
10	Retainer Ring	A105	A350 LF2		A182 F1	A182 F11	A182 F22
11	Screw	A193 B7	A320 L7		A193 B16		
12	Nut	A194 2H	A194 4		A194 4		
13	Yoke	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
14	Lantern Ring(1)	A276 410	A276 304	A276 316	A276 410		
15	Packing	Graphite	Graphite		Graphite		
16	Gland Flange	A216 WCB	A352 LCB		A217 WC1	A217 WC6	A217 WC9
17	Splint	Carbon Steel	Carbon Steel		Alloy Steel		
18	Bearings (2)	Alloy Steel	Alloy Steel		Alloy Steel		
19	Grease Nipple	Carbon Steel	Carbon Steel		Alloy Steel		
20	Stem Nut	A439 D2	A439 D2		A439 D2		
21	Stem Nut	Carbon Steel	Carbon Steel		Carbon Steel		
22	Handwheel	Steel	Steel		Steel/ Acero		
23	Handwheel Nut	Carbon Steel	Carbon Steel		Carbon Steel		
24	Bolt	A193 B7	A320 L7		A193 B16		
25	Nut	A194 2H	A194 4		A194 4		
26	Bolt	A193 B7	A320 L7		A193 B16		
27	Nut	A194 2H	A194 4		A194 4		
28	Gear	Assembly	Assembly		Assembly		

(1) On request

(2) 3" and above

Fig. 81A0_	Seat Surface	Disc Surface	Stem
TRIM #1 (81A01)	A105+13Cr	A216 WCB+13Cr	A182 F6a
TRIM #5 (81A05)	A105+HF	A216 WCB+HF	A182 F6a
TRIM #8 (81A08)	A105+HF	A216 WCB+13Cr	A182 F6a

HF = Hard faced

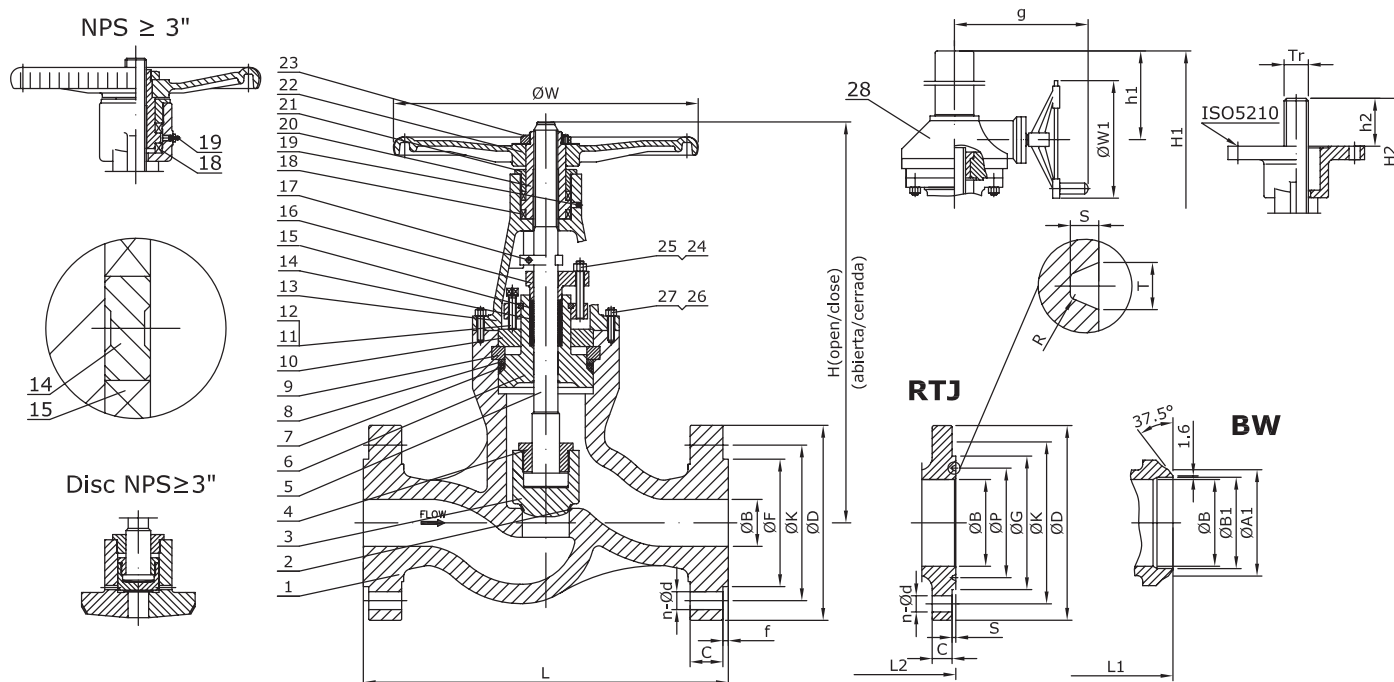
Information / restriction of technical rules need to be observed!

Installation, Operating and Maintenance Manual can be downloaded at www.comeval.es

The engineer, designing a system or a plant, is responsible for the selection of the correct valve
Product suitability must be verified, contact manufacturer for information

Main Parts and Materials

SERIES 81 ANSI RANGE Class 1500&2500



Flow direction is opposite to the flow arrow shown in the drawing to make advantage of medium pressure itself to close the disc

Nº	Part name	A217 C5 (81C2_)	A217 C12 (81C4_)	CF8 (81I2_)	CF8M (81I0_)	CF3 (81I1_)	CF3M (81I7_)
1	Body	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
2	Seat	HF Overlay		Integral+HF		Integral+HF	
3	Disc	A182 F5+HF	A182 F9+HF	A182 F304+HF	A182 F316+HF	A182 F304L+HF	A182 F316L+HF
4	Disc Nut	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
5	Stem	A182 F6a		A182 F304	Nitronic 50	A182 F304L	Nitronic 50
6	Bonnet	A182 F5	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
7	Gasket	SS304+Graphite		SS304+Graphite	SS316+Graphite	SS316+Graphite	SS316L+Graphite
8	Gasket Washer	A182 F6a		A182 F304	A182 F316	A182 F304L	A182 F316L
9	Split Ring	A182 F5	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
10	Retainer Ring	A182 F5	A182 F9	A182 F304	A182 F316	A182 F304L	A182 F316L
11	Screw	A193 B16		A193 B8	A193 B8M	A193 B8M	
12	Nut	A194 4		A194 8	A194 8M	A194 8M	
13	Yoke	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
14	Lantern Ring(1)	A276 410		A276 304	A276 316	A276 316	A276 316L
15	Packing	Graphite		Graphite		Graphite	
16	Gland Flange	A217 C5	A217 C12	A351 CF8	A351 CF8M	A351 CF3	A351 CF3M
17	Splint	Alloy Steel		St. Steel		St. Steel	
18	Bearings (2)	Alloy Steel		Alloy Steel		Alloy Steel	
19	Grease Nipple	Alloy Steel		St. Steel		St. Steel	
20	Stem Nut	A439 D2		A439 D2		A439 D2	
21	Stem Nut	Carbon Steel		St. Steel		St. Steel	
22	Handwheel	Steel		Steel		Steel	
23	Handwheel Nut	Carbon Steel		St. Steel		St. Steel	
24	Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
25	Nut	A194 4		A194 8	A194 8M	A194 8M	
26	Bolt	A193 B16		A193 B8	A193 B8M	A193 B8M	
27	Nut	A194 4		A194 8	A194 8M	A194 8M	
28	Gear	Assembly		Assembly		Assembly	

(1) On request

(2) 3" and above

Main Valve Parameters - Class 1500

SERIES 81 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"	14"
		DN	50	65	80	100	125	150	200	250	300	350
End connection	RF	L	368	419	470	546	673	705	832	991	1130	1257
		ØB	48	61	70	92	115	136	178	222	263	289
		ØD	215	245	265	310	375	395	485	585	675	750
		ØK	165,1	190,5	203,2	241,3	292,1	317,5	393,7	482,6	571,5	635
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9	323,8	381	412,8
		C	38,1	41,3	47,7	54	73,1	82,6	92,1	108	123,9	133,4
		f	7	7	7	7	7	7	7	7	7	7
		n-Ød	8 - 7/8	8 - 1	8 - 1 1/4	8 - 1 3/8	8 - 1 5/8	12 - 1 1/2	12 - 1 3/4	12 - 2	16 - 2 1/8	16 - 2 3/8
	BW	L1	368	419	470	546	673	705	832	991	1130	1257
		Schedule No.(1)	160	-	160	120	-	120	120	120	120	120
		ØB	48	61	70	92	115	136	178	222	263	289
		ØA1	60,3	-	91	117	-	172	223	278	329	362
		ØB1	38,16	-	66,5	92	-	140	182,5	230	273	300
	RTJ	L2	371	422	473	549	676	711	842	1001	1146	1276
		ØB	48	61	70	92	115	136	178	222	263	289
		ØD	215	245	265	310	375	395	485	585	675	750
		ØK	165,1	190,5	203,2	241,3	292,1	317,5	393,7	482,6	571,5	635
		ØG	124	137	168	194	229	248	318	371	438	489
		ØP	95,25	107,95	136,53	161,93	193,68	211,14	269,88	323,85	381	419,1
		C	38,1	41,3	47,7	54	73,1	82,6	92,1	108	123,9	133,4
		n-Ød	8 - 7/8	8 - 1	8 - 1 1/4	8 - 1 3/8	8 - 1 5/8	12 - 1 1/2	12 - 1 3/4	12 - 2	16 - 2 1/8	16 - 2 3/8
		T	11,91	11,91	11,91	11,91	11,91	13,49	16,66	16,66	23,01	26,97
		S	7,92	7,92	7,92	7,92	7,92	9,53	11,13	11,13	14,27	15,88
		R	0,8	0,8	0,8	0,8	0,8	1,5	1,5	1,5	1,5	2,4
Top works/Operation	Hand-wheel	H (open)	632	681	718	848	969	1059	-	-	-	-
		H (close)	592	649	691	805	925	1014	-	-	-	-
		ØW	300	250	350	500	250	600	-	-	-	-
	Gear with handwheel	H1	-	-	-	-	-	1105	1245	1449	1760	1990
		h1	-	-	-	-	-	128	180	229	280	325
		g	-	-	-	-	-	513	513	513	588	588
		ØW1	-	-	-	-	-	460	530	530	600	600
	With ISO 5210 mounting pad	H2 (open)	635	682	717	949	1019	1071	1188	1440	-	-
		H2 (close)	595	650	690	915	979	1026	1105	1356	-	-
		h2	80	80	80	140	140	140	140	180	-	-
		ISO	F14	F14	F14	F30	F30	F30	F30	F35	-	-
		Tr	Tr30×5LH	Tr36×6LH	Tr36×6LH	Tr42×8LH	Tr52×8LH	Tr52×8LH	Tr58×8LH	Tr70×10LH	-	-
		Stroke	40	33	27	34	40	45	83	84	-	-
		No. of turns	3	5	6	8	7	8	6	13	-	-
		Torque (Nm) (2)	220	309	375	1106	1557	1890	2785	4445	-	-
Kvs-value		21	55	81	145	256	338	594	594	1307	1571	
Approx. Weight RF (3)		85	131	165	280	453	580	900	1350	3400	4300	
Approx. Weight BW		71	110	139	244	389	496	757	1105	3036	3789	

- (1) Other schedule nos. on request
 (2) Torque includes 30% of safety factor
 (3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance
 Kvs-values in m³/h / Torques in Nm / Weights in kg
 For more information about flanged and welded ends refer to page 16

Main Valve Parameters - Class 2500

SERIES 81 ANSI RANGE



Nominal Size		inch	2"	2-1/2"	3"	4"	5"	6"	8"	10"	12"
		DN	50	65	80	100	125	150	200	250	300
End connection	RF	L	451	508	578	673	794	914	1022	1270	1422
		ØB	38	49	57	73	93	111	146	184	219
		ØD	235	265	305	355	420	485	550	675	760
		ØK	171,4	196,8	228,6	273	323,8	368,3	438,2	539,8	619,1
		ØF	92,1	104,8	127	157,2	185,7	215,9	269,9	323,8	381
		C	50,9	57,2	66,7	76,2	92,1	108	127	165,1	184,2
		f	7	7	7	7	7	7	7	7	7
		n-Ød	8 - 1 1/8	8 - 1 1/4	8 - 1 3/8	8 - 1 5/8	8 - 1 7/8	8 - 2 1/8	12 - 2 1/8	12 - 2 5/8	12 - 2 7/8
	BW	L1	451	508	578	673	794	914	1022	1270	1422
		Schedule No.(1)	160	-	160	160	-	160	160	160	160
		ØB	38	49	57	73	93	111	146	184	219
		ØA1	60,3	-	91	117	-	172	223	278	329
		ØB1	42,82	-	66,5	87,5	-	132	173	216	257
	RTJ	L2	454	514	584	683	807	927	1038	1292	1444
		ØB	38	49	57	73	93	111	146	184	219
		ØD	235	265	305	355	420	485	550	675	760
		ØK	171,4	196,8	228,6	273	323,8	368,3	438,2	539,8	619,1
		ØG	133	149	168	203	241	279	340	425	495
		ØP	101,6	111,13	127	157,18	190,5	228,6	279,4	342,9	406,4
		C	50,9	57,2	66,7	76,2	92,1	108	127	165,1	184,2
		n-Ød	8 - 1 1/8	8 - 1 1/4	8 - 1 3/8	8 - 1 5/8	8 - 1 7/8	8 - 2 1/8	12 - 2 1/8	12 - 2 5/8	12 - 2 7/8
		T	11,91	13,49	13,49	16,66	19,84	19,84	23,01	30,18	33,32
		S	7,92	9,53	9,53	11,13	12,7	12,7	14,27	17,48	17,48
		R	0,8	1,5	1,5	1,5	1,5	1,5	1,5	2,4	2,4
Top works/Operation	Hand-wheel	H (open)	632	727	798	887	-	-	-	-	-
		H (close)	602	687	750	845	-	-	-	-	-
		ØW	450	250	500	600	250	-	-	-	-
	Gear with handwheel	H1	-	-	-	917	-	1105	1376	1595	1821
		h1	-	-	-	120	-	175	222	276	328
		g	-	-	-	513	-	513	588	613	613
		ØW1	-	-	-	460	-	530	600	600	600
	With ISO 5210 mounting pad	H2 (open)	632	796	918	901	952	990	1250	-	-
		H2 (close)	602	693	760	859	908	945	1190	-	-
		h2	80	115	140	140	152	160	160	-	-
		ISO	F14	F30	F30	F30	F35	F35	F40	-	-
		Tr	Tr36×6LH	Tr42×8LH	Tr42×8LH	Tr52×8LH	Tr65×10LH	Tr65×10LH	Tr80×10LH	-	-
		Stroke	30	104	158	42	44	45	60	-	-
		No. of turns	5	6	7	6	6	7	9	-	-
		Torque (Nm) (2)	475	832	1095	1560	3021	4100	5600	-	-
Kvs-value		14	36	52	87	161	216	387	615	903	
Approx. Weight RF (3)		100	163	210	500	931	1250	2400	3300	4200	
Approx. Weight BW		77	124	158	421	779	1044	2369	2718	3370	

(1) Other schedule nos. on request

(2) Torque includes 30% of safety factor

(3) RTJ weight increases approx. by 10%

Dimensions in mm (except for bolt holes - Ød -, which are in inch units) subject to manufacturing tolerance

Kvs-values in m³/h / Torques in Nm / Weights in kg

For more information about flanged and welded ends refer to page 16