

NELES® RE-SERIES V-PORT SEGMENT VALVE

Metso's Neles RE series V-port segment valve are economical high performance valves in a quarter-turn design. They are offered with a variety of trim options from standard and low Cv trims for general applications, to noise/cavitation Q-Trim® for reducing aerodynamic noise and preventing cavitation. Standard units are equipped either diaphragm or cylinder actuators and ND9000® intelligent valve controllers for precise control, reliability and performance monitoring on-line.

FEATURES

Integral body construction

- Integrally flanged R-Series valves feature one piece body construction with no flange rings, inserts or end caps to create potential leak paths, even if the valve is subjected to pipe bending forces. Seating capabilities are totally unaffected by pipeline forces, which assures reliable valve operation.

Accurate control

- Carefully designed V-ported segment, low torque requirements and clearance-free movement result in good control performance. The design provides steady and gentle contact between the seat and segment at all times to minimize friction while providing tightness. Bearings are located inside the valve body providing larger bearing areas, lower bearing loads and longer bearing life.

Safety and environment

- Rotary operation reduces fugitive emissions dramatically compared to a sliding stem design.

Durable metal seat

- The seat of the R-series V-port segment valve is firm and uniquely durable. The seat is designed in such a way that its sealing surface is not located directly in the flow stream. This gives the seat an extended service life. The working principle is a pressure-aided seat which enables good sealing properties at a low pressure difference. The seat is located inside the valve, which prevents forces from the pipe system influencing the sealing effect. Two-way tight seat is available as an option.



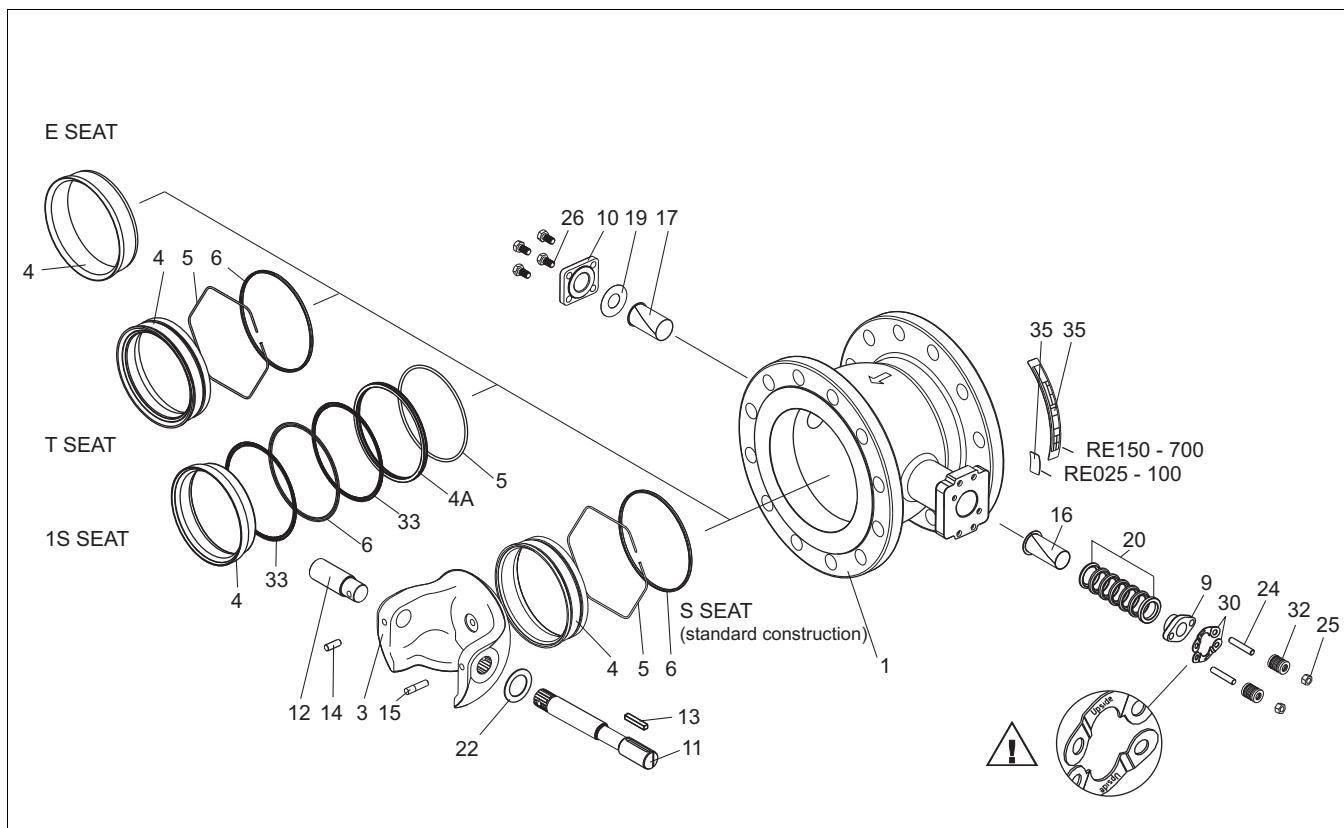
Economical

- Low torque requirements reduce wear, resulting in better reliability. In addition, standard designs carry hard chromium facing on the segment and cobalt based alloy seat, which has been designed to avoid the flow impingement. Together with low load bearing design and live-loaded packing, operational life is improved and maintenance needs are minimized. Low torque combined with the well integrated actuator design provides a lower cost valve unit.

Small flow and low noise/cavitation Q-Trim® options

- DN25/1" valves feature five different segments. They extend the valves' application range to very low-flow high accuracy services, such as additive and coloring lines, pilot plants etc. Cavitation and aerodynamic noise are reduced with the patented Q-Trim® option. This self-cleaning design handles contaminated flows (impure steam, river water, etc.) without plugging.

EXPLODED VIEW



PARTS LIST (standard construction)

Part	Name	BODY MATERIAL	
		Stainless steel	Carbon steel
1	Body	ASTM A351 gr. CF8M	ASTM A216 gr. WCB
3	V-port segment	SIS 2324 + chromium / SIS 2324 / AISI 329	SIS 2324 + chromium / SIS 2324 / AISI 329
4	Seat	Cobalt based alloy / PTFE 1)	Cobalt based alloy / PTFE 1)
4A	Back ring	AISI 316	AISI 316
5	Lock spring	INCONEL 625	INCONEL 625
6	Back seal	Stainless steel + PTFE	Stainless steel+ PTFE
9	Gland follower	ASTM A351 gr. CF8M	ASTM A351 gr. CF8M
10	Blind flange	ASTM A351 gr. CF8M	ASTM A351 gr. CF8M
11	Drive shaft	SIS 2324/AISI 329 duplex SS	SIS 2324/AISI 329 duplex SS
12	Shaft	SIS 2324/AISI 329 duplex SS	SIS 2324/AISI 329 duplex SS
13	Key	SIS 2324/AISI 329	SIS 2324/AISI 329
14	Cylindrical pin	SIS 2324/AISI 329	SIS 2324/AISI 329
15	Cylindrical pin	SIS 2324/AISI 329	SIS 2324/AISI 329
16	Bearing	PTFE + SS net	PTFE + SS net
17	Bearing	PTFE + SS net	PTFE + SS net
19	Sealing plate	Graphite	Graphite
20	Packing	PTFE/Graphite 1)	PTFE/Graphite 1)
22	Filling ring (only low Cv 1"/DN 25)	Stainless Steel AISI 316	Stainless Steel AISI 316
24	Stud	ISO 3506 A4-80/B8M	ISO 3506 A4-80/B8M
25	Hexagon nut	ISO 3506 A4-80/B8M	ISO 3506 A4-80/B8M
26	Hexagon bolt	ISO 3506 A4-80/B8M	ISO 3506 A4-80/B8M
30	Retainer Plate	AISI 316	AISI 316
32	Spring stack	SIS 2324 & CrMo Steel + ENP	SIS 2324 & CrMo Steel + ENP
33	Back-up ring	PTFE	PTFE
35	Identification plate	AISI 304	AISI 304

1) Alternative materials

TECHNICAL SPECIFICATIONS

Type

Integrally flanged V-port segment, quarter-turn valve

Pressure ratings are as follows:

Body: ASME 150-300, PN 10-40, see page 5

Trim: See tables on page 5.

Sizes

Inch 1", 1 1/2", 2", 2 1/2", 3", 4", 6", 8", 10", 12", 14", 16", 20", 24", 28"

DN 25, 40, 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 500, 600, 700

End-connections

Flanged

Face-to-face dimensions

ASME/ISA S75.04, IEC 534-3-2.

Temperature range

-50 °C ... +260 °C / -58...+500 °F.

Inherent flow characteristic

Equal percentage.

Fire safety

Fire safe design to meet API 607, 3rd edition.

Shut-off classification

IEC 60534-4/ANSI/FCI 70.2 Class IV, optionally Class V with high

Δp testing pressure.

10 x ISO 5208 Rate D.

See also table on this page.

Flow capacity

See table on this page.

Valve trim rotation

Clockwise to close.

Maximum Cv-coefficients for RE-series valves

Size		Metal seat, S	Q-Trim	Metal seat, 1S	Q-Trim with 1S	Soft seat, T2
DN	Inch	C _v 100 % ¹⁾	C _v 100 % ²⁾	C _v 100 % ¹⁾	C _v 100 % ²⁾	C _v 100 % ¹⁾
25	1	45	—	24	—	21
40	1 1/2	110	—	58	—	61
50	2	180	47	115	30	110
65	2 1/2	280	96	210	72	215
80	3	420	160	342	130	340
100	4	620	250	510	210	520
150	6	1260	540	1160	500	1070
200	8	2030	880	1910	830	1760
250	10	3210	1510	3050	1440	2830
300	12	4490	2140	4340	2070	4080
350	14	6440	3160	6220	3050	5750
400	16	8510	4180	8330	4090	7630
500	20	13020	6600	12560	6370	—
600	24	—	—	19700	9230	—
700	28	—	—	25300	13700	—

1) 100 % corresponds to 95° turning angle

2) For Q-R-valves, 100 % corresponds to 90° turning angle

OPTIONS

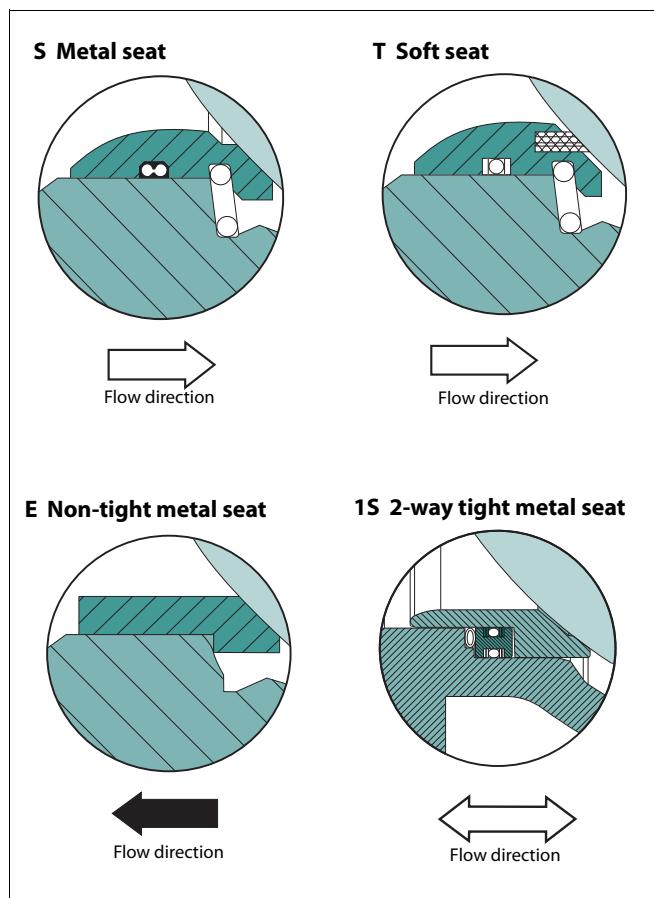
Q-trim: Inch 2", 2 1/2", 3", 4", 6", 8", 10", 12", 14", 16", 20", 24", 28"
DN 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 500, 600, 700

Reduced Cv trim: For DN 25 / 1" valve only.

Valve body and seat test

All valves manufactured by Metso undergo pressure testing. The test pressure of R-series valve body is 1.5 x the pressure rating and the standard test pressure of seat is 1.1 x the maximum permissible shut-off pressure or lower depending on size and material. The test medium is water containing a corrosion inhibitor. Seat design options shown on the next page.

Maximum allowable leakage		
Size DN / inch	Metal seat	Soft seat
25 / 1	1.50 ml/min	0.15 ml/min
40 / 1 1/2	2.40 ml/min	0.24 ml/min
50 / 2	3.00 ml/min	0.30 ml/min
65 / 2 1/2	3.90 ml/min	0.39 ml/min
80 / 3	4.80 ml/min	0.48 ml/min
100 / 4	6.00 ml/min	0.60 ml/min
150 / 6	9.00 ml/min	0.90 ml/min
200 / 8	12.00 ml/min	1.20 ml/min
250 / 10	15.00 ml/min	1.50 ml/min
300 / 12	18.00 ml/min	1.80 ml/min
350 / 14	21.00 ml/min	2.10 ml/min
400 / 16	24.00 ml/min	2.40 ml/min
500 / 20	30.00 ml/min	—
600 / 24	36.00 ml/min	—
700 / 28	42.00 ml/min	—



SEAT DESIGNS

S Metal seat

Seat:	316 SS + Cobalt based hard facing
Spring:	Inconel 625
Seat seal:	Filled PTFE lipseal / SS Elgiloy spring
Temp. Range:	-50 °C... +260 °C / -58 °F ...+500 °F
Service:	General

T Soft seat

Seat:	316 SS with PTFE + X-treme®, sizes 1" - 6" 316 SS with PTFE + C25 % insert, sizes 8" - 28"
Spring:	Inconel 625
Seat seal:	Filled PTFE lipseal
Back seal:	PTFE
Temp. Range:	-50 °C... +260 °C / -58 °F ...+500 °F
Service:	General service with tight shut-off.

E Non-tight metal seat

Seat:	Cobalt based alloy
Temp. Range:	-50 °C... +260 °C / -58 °F ...+500 °F
Service:	Extremely erosive applications, non-tight.
NOTE !	Flow direction is reversed.

1S 2-way tight metal seat

Seat:	316 SS + Cobalt based hard facing
Spring:	Inconel 625
Seat seal:	Viton GF
Temp. range:	-30 °C... +200 °C / -22 °F ...+186 °F
Service:	General

CONSTRUCTION OPTIONS

Low C_v trims



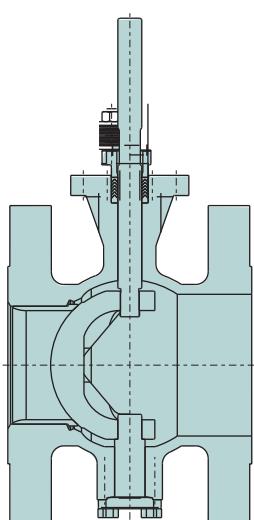
Reduced C_v trims are available on the DN25/1" valve to control very low flows with high accuracy. The narrow orifice is a selfflushing design because the trim orifice is continually increasing.

Q-trim™ valve trim for cavitation/noise abatement

Liquid cavitation and aerodynamic noise problems can be solved with the patented Q-Trim™ valve trim. This design employs the two well-known principles of dividing the pressure drop into a series of small pressure drops and of separating the flow stream into many small jet streams. The use of these two principles combined with the rotation of the attenuator elements provides a combination of cavitation/noise abatement with high rangeability, high capacity and capability to handle impure fluids.

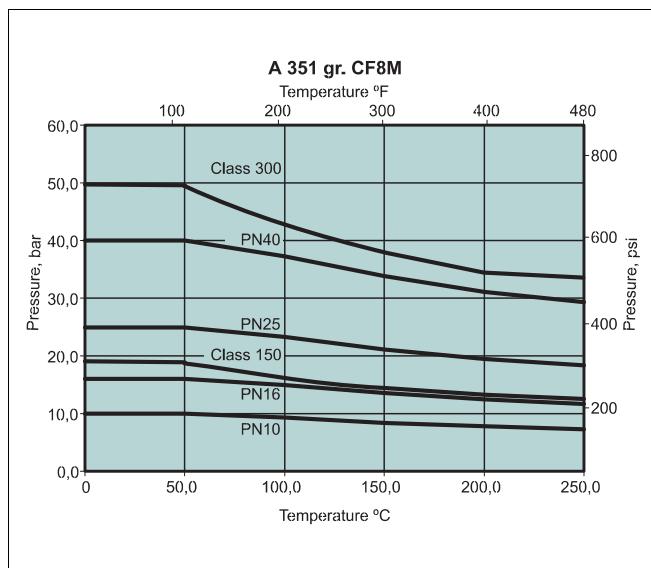


Erosion resistant version

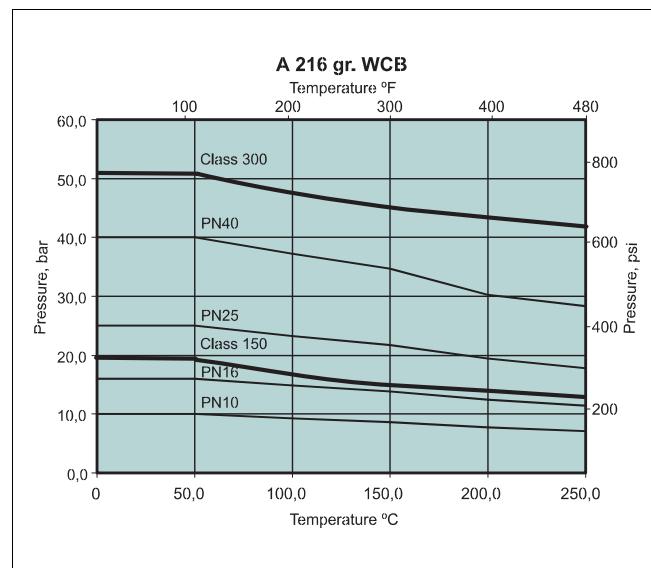


This heavy duty erosion resistant design handles contaminated flows and abrasive media at a favorable cost/useable life ratio. The seat is machined from cobalt chromium alloy and the seat design is changed from normal to reverse flow for maximum abrasion resistance. This version should not be used for isolation service since the seat is not in contact with the segment.

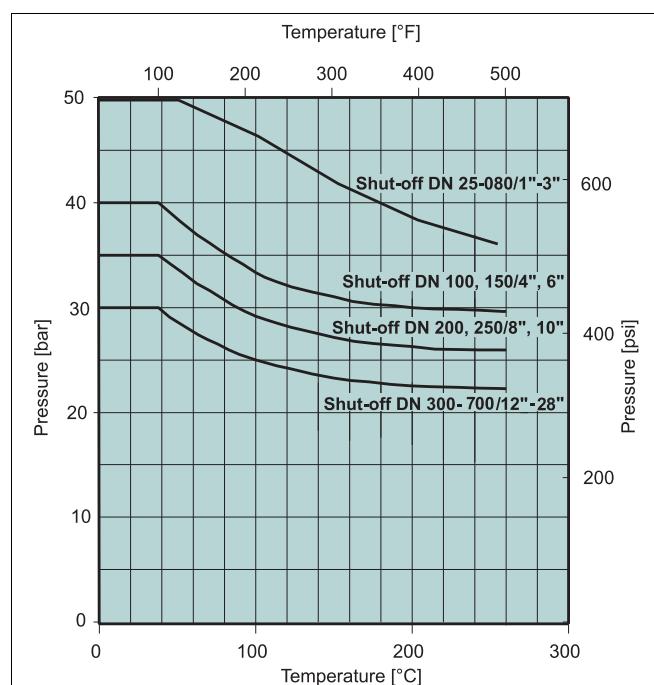
BODY PRESSURE RATINGS



Maximum operating pressure differential in shut-off service

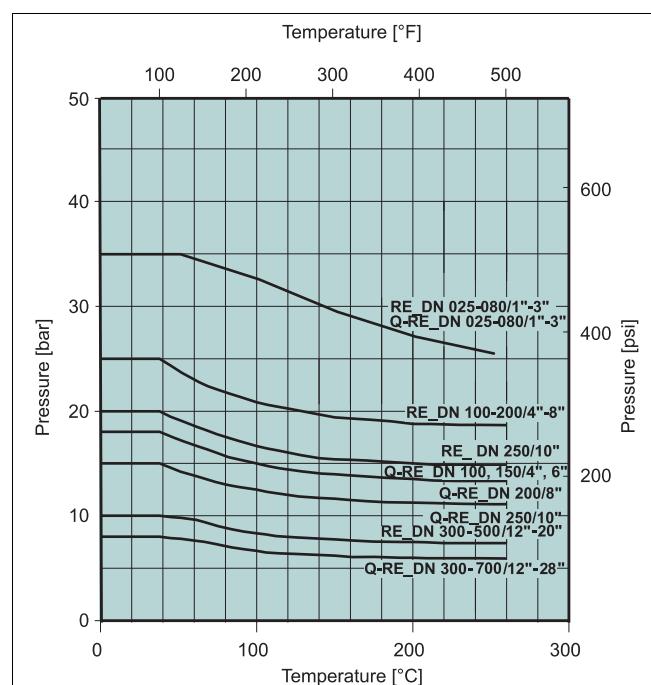


Maximum operating pressure differential in control service



Note:

- 1) RE-valves are not recommended for applications with high on-off cycling rate. X- or L-series valves should be used in these cases.
- 2) Please observe body rating for material in question when determining maximum allowable shut-off pressure differential.

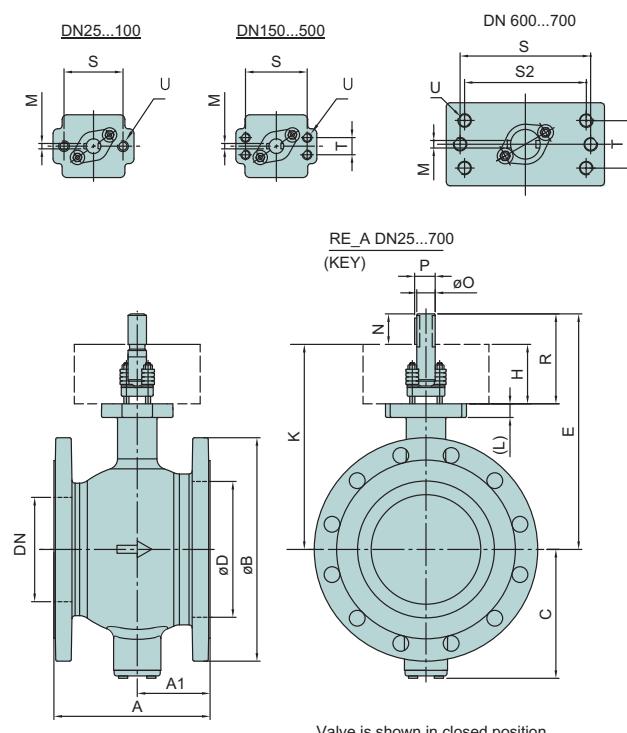


Note:

Given maximum allowable throttling differential pressures are based on mechanical strength of the parts only. Nelprof analysis determines actual throttling dp capability, taking into account trim velocity, exit velocity, noise and cavitation.

DIMENSIONS

Series RE

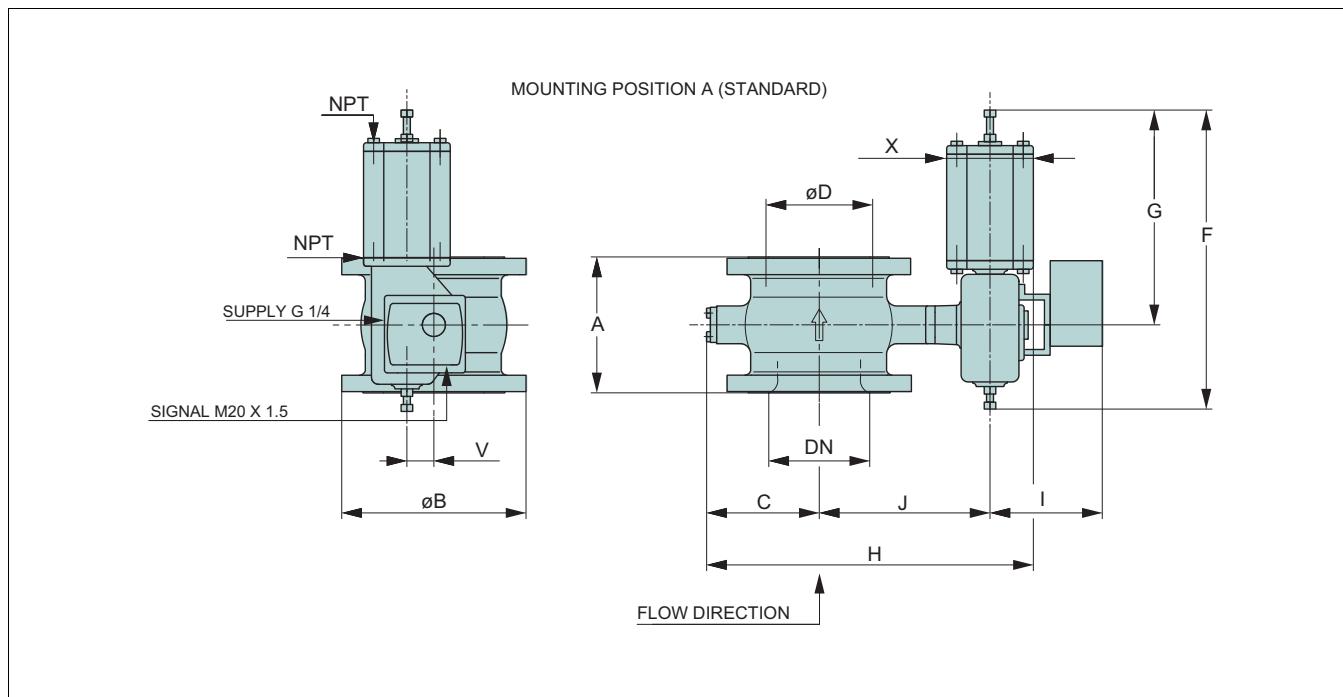


Valve is shown in closed position

DN/inch	Dimensions, mm									Shaft dimensions, mm						
										RE_A (Key)						
	A1	A	C	øD	K	S/S2	T	U	L	H	E	R	øO	M	P	N
25/1"	51	102	56	33	182	70	-	M10	15.5	80	207	105	15	4.76	17	25
40/1 1/2"	57	114	65	49	188.5	70	-	M10	15.5	80	213.5	105	15	4.76	17	25
50/2"	62	124	91	60	199.5	70	-	M10	15.5	80	224.5	105	15	4.76	17	25
65/2 1/2"	72.5	145	97	75	205	70	-	M10	15.5	80	231	105	15	4.76	17	25
80/3"	82.5	165	108	89	232	90	-	M12	16	90	267	125	20	4.76	22.2	35
100/4"	97	194	120	113	241	90	-	M12	16	90	276	125	20	4.76	22.2	35
150/6"	114.5	229	174	164	290	110	32	M12	22	90	335	135	25	6.35	27.8	46
200/8"	111.5	243	201	205	345	130	32	M12	22	110	395	160	30	6.35	32.9	51
250/10"	138.5	297	251	259	387	130	32	M12	26	110	445	168	35	9.53	39.1	58
300/12"	154	338	269	300	445	160	40	M16	26	120	485	188	40	9.53	44.2	68
350/14"	175	400	311	350	486	160	40	M16	29	120	513	200	45	12.70	50.4	80
400/16"	160	400	353	400	553	160	55	M20	29	140	584	230	50	12.70	55.5	90
500/20"	233	508	420	500	618	230	90	M27	40	180	727	292	70	19.05	78.2	119
600/24"	355	610	490	600	704	330/304.7	120	M30	40	220	838	354	75	19.05	81.9	134
700/28"	295	710	539	700	768	330/304.7	120	M30	55	220	914	366	85	22.23	95.3	146

DN/inch	Flange dimensions (B) and weights											
	ASME 150		ASME 300		PN 10		PN 16		PN 25		PN 40	
	øB	Kg	øB	Kg	øB	Kg	øB	Kg	øB	Kg	øB	Kg
25/1"	108	3.6	124	4.9	115	4.6	115	4.6	115	4.6	115	4.6
40/1 1/2"	127	4.6	155	7.5	150	6.2	150	6.2	150	6.2	150	6.2
50/2"	152	7.4	165	9.5	165	8.8	165	8.8	165	8.8	165	8.8
65/2 1/2"	185	13	185	13	185	13	185	13	185	13	185	13
80/3"	191	14	210	19	200	16	200	16	200	16	200	16
100/4"	229	21	254	29	220	18	220	18	235	21	235	21
150/6"	279	39	318	54	285	37	285	37	300	42	300	42
200/8"	343	62	381	83	340	56	340	60	360	64	375	71
250/10"	406	91	450	139	405	85	405	84	425	101	450	125
300/12"	483	142	520	199	460	124	460	123	485	148	520	182
350/14"	534	203	584	284	505	178	520	183	555	223	580	266
400/16"	597	264	648	355	565	234	580	239	620	290	660	346
500/20"	699	550	775	600	670	415	715	435	730	530	755	700
600/24"	815	967	915	1165	780	900	840	973	845	1033	890	1039
700/28"	925	1249	1035	1512	897	1088	910	1129	960	1209	-	-

RE - B1C

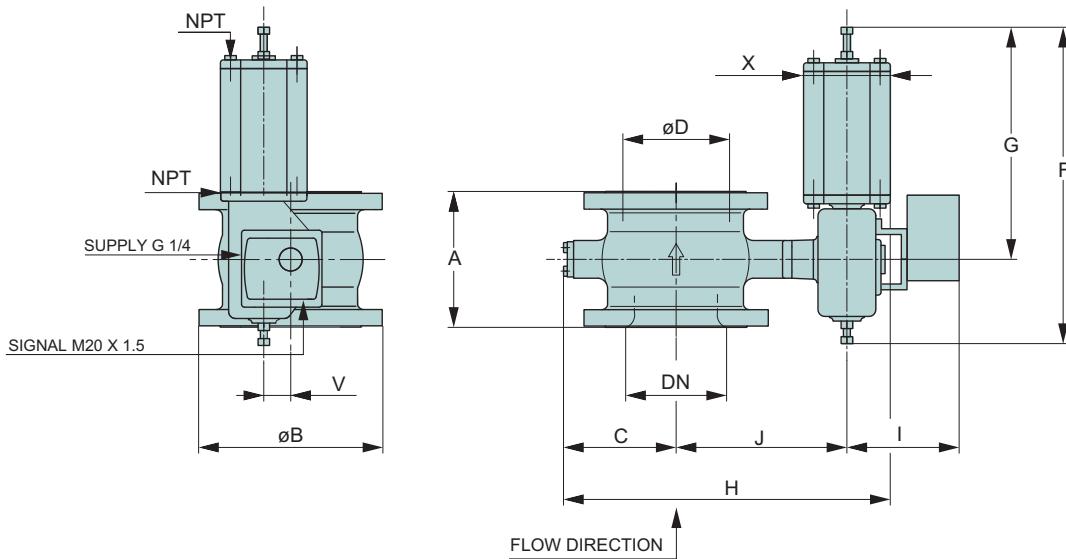


Type	Max Δp 1)	Dimensions, mm										NPT	REJ_PN10			REK_PN16			REL_PN25			REM_PN40			REC_ASME 150			RED_ASME 300						
		NPS	DN	A	C	ϕD	F	G	X	V	J		ϕB	b_1	kg	ϕB	b_1	kg	ϕB	b_1	kg													
RE_01-B1C6	50	1	25	102	56	33/38*	400	260	90	36	240	341	310	1/4	115	18	11.9	115	18	11.9	115	18	11.9	108	18	11.9	124	18	11.9					
RE_1H-B1C6	50	1.5	40	114	65	49	400	260	90	36	247	357	310	1/4	150	18	13.5	150	18	13.5	150	18	13.5	135	18	13.5	155	18	14.3					
RE_02-B1C6	50	2	50	124	91	60	400	260	90	36	258	394	310	1/4	165	20	16.1	165	20	16.1	165	20	16.1	152	20	16.1	165	20	16.8					
RE_2H-B1C6	50	2.5	65	145	97	75	400	260	90	36	265	410	310	1/4	185	22	18	185	22	18	185	22	18	185	22	18	-	-	-					
RE_03-B1C6	50	3	80	165	108	89	400	260	90	36	290	443	310	1/4	200	20	23	200	20	23	200	24	23	191	24	21	210	24	26					
RE_04-B1C6	40	4	100	194	120	113	400	260	90	36	299	464	310	1/4	220	20	25.3	220	20	25.3	235	24	28.3	235	24	28.3	254	24	34.3					
RE_06-B1C6	10						400	260	90	36	348	567	310	1/4	44.3			44.3			49.3			49.3			46.3			51.3				
RE_06-B1C9	25	6	150	229	174	164	455	315	110	43	349	578	305	1/4	285	22	50	285	22	50	300	28	55	300	28	55	279	28	52	57				
RE_06-B1C11	40						540	375	135	65	355	597	310	3/8	57			57			62			62			318	28	59	64				
RE_08-B1C6	4						400	260	90	36	403	649	310	1/4	63			67			71			78			69			90				
RE_08-B1C9	15	8	200	243	201	205	455	315	110	43	404	660	305	1/4	340	24	70	340	24	73	360	30	77	375	34	84	343	30	75	96				
RE_08-B1C11	32						540	375	135	51	410	679	310	3/8	77			80			84			84			381	34	82	103				
RE_10-B1C9	7						455	315	110	43	446	752	310	1/4	99			106			115			139			104			152				
RE_10-B1C11	15	10	250	297	251	259	540	375	135	51	452	771	310	3/8	405	26	121	405	26	121	425	32	137	450	38	144	406	32	121	159				
RE_10-B1C13	29						635	445	175	65	468	807	325	3/8	426		144			160			161			450	38	137	174					
RE_10-B1C17	35						770	545	215	78	483	842	340	1/2	144		144			160			184			450	38	162	197					
RE_12-B1C11	7						540	375	135	51	482	819	310	3/8	144			159			168			182			162			219				
RE_12-B1C13	19	12	300	338	269	300	635	445	175	65	498	855	325	3/8	460	26	159	460	28	159	485	34	183	520	42	217	483	34	177	234				
RE_12-B1C17	30						770	545	215	78	513	890	340	1/2	182		182			240			243			520	42	200	257					
RE_14-B1C13	9						635	445	175	65	514	913	325	3/8	213			241			258			281			301			319				
RE_14-B1C17	21	14	350	400	311	350	840	575	215	97	548	967	340	1/2	505	26	236	520	30	241	555	38	303	580	46	324	534	38	261	342				
RE_14-B1C20	27						1075	725	265	121	632	1118	390	1/2	565	26	312	580	32	317	620	40	368	660	50	424	597	40	323	433	361			
RE_16-B1C17	15						840	575	215	97	609	1071	355	1/2	293			375			349			426			483			414				
RE_16-B1C20	21	16	400	400	353	400	1075	725	265	121	723	1286	390	1/2	670	26	547	715	42	566	730	46	661	755	57	831	700	41.3	681	775	64	731		
RE_16-B1C25	16	20	500	508	430	500	1075	725	265	121	723	1286	390	1/2	670	26	547	715	42	566	730	46	661	755	57	831	700	41.3	681	775	64	731		
RE_24-B1C25	9	24	600	610	497	600	1075	725	265	121	842	1498	390	1/2	780	28	1034	840	40	1105	845	46	1165	890	60	1171	1296	815	46.1	1100	1225	915	68.3	1298
RE_24-B1C32	19						1370	920	395	153	944	1686	430	3/4	895	30	1345	910	42	1386	960	50	1467	-	-	-	925	69.9	1506	1696	1035	88.9	1770	
RE_28-B1C40	10	28	700	710	547	700	1370	920	395	153	944	1686	430	3/4	895	30	1535	910	42	1386	1576	50	1657	-	-	-	925	69.9	1506	1696	1035	88.9	1770	
RE_28-B1C40	23						1670	1150	505	194	993	1756	450	3/4	895	30	1535	910	42	1386	1576	50	1657	-	-	-	925	69.9	1506	1696	1035	88.9	1770	

1) Max Δp in on-off service with actuator load factor 0.6 and supply pressure 5 bar

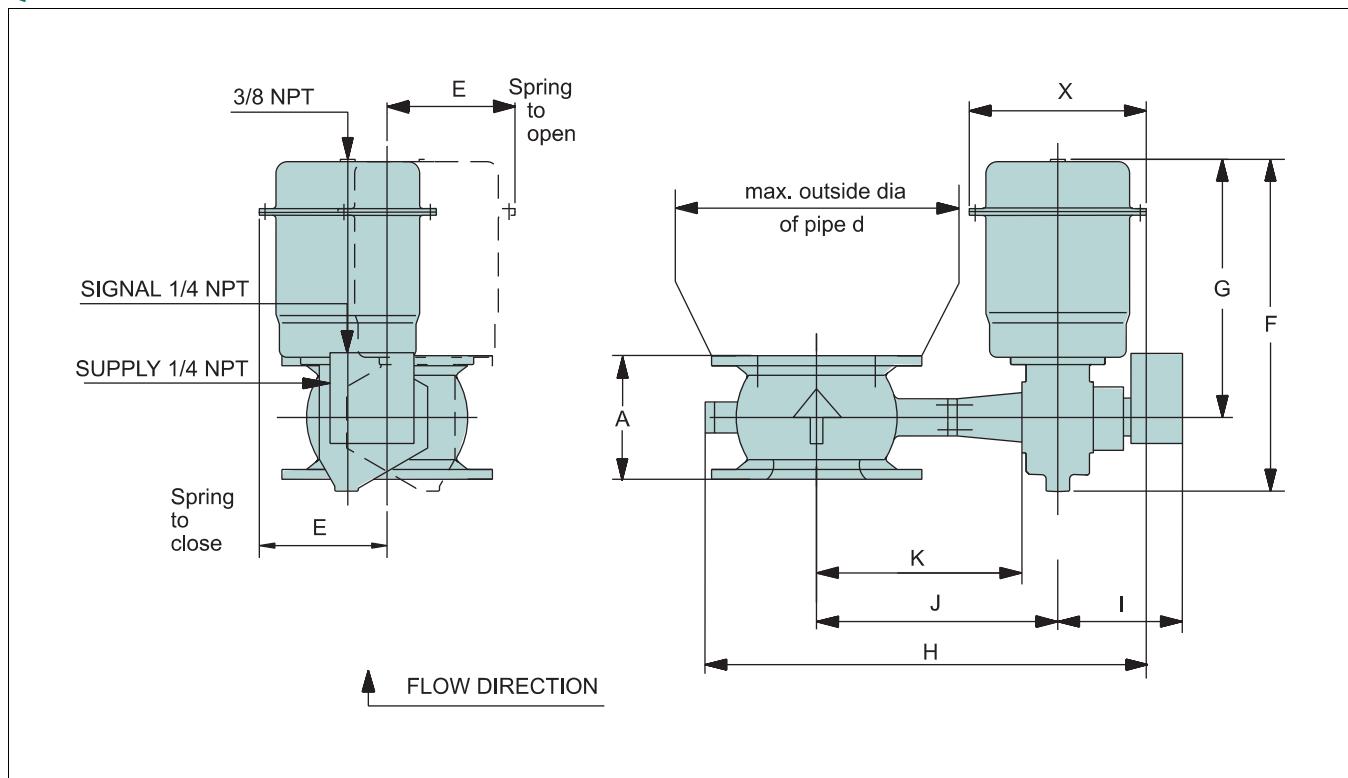
RE - B1J, B1JA

MOUNTING POSITION A (STANDARD)



Type	Max Δp1	Dimensions, mm										REJ_PN10			REK_PN16			REL_PN25			REM_PN40			REC_ASME 150			RED_ASME 300					
		NPS	DN	A	C	øD	F	G	X	V	J	H	Imax	NP T	øB	b1	kg	øB	b1	kg	øB	b1	kg	øB	b1	kg	øB	b1	kg			
RE_01-B1J6/B1JA6	50/50	1	25	102	56	33/38*	485	368	110	36	239	352	305	3/8	115	18	21	115	18	21	115	18	21	108	18	21	124	18	21			
RE_1H-B1J6/B1JA6	50/50	1.5	40	114	65	49	485	368	110	36	246	368	305	3/8	150	18	23	150	18	23	150	18	23	127	18	23	155	18	24			
RE_02-B1J6/B1JA6	50/50	2	50	124	91	60	485	368	110	36	257	404	305	3/8	165	20	25	165	20	25	165	20	25	152	20	25	165	20	26			
RE_2H-B1J6/B1JA6	50/50	2.5	65	145	97	75	485	368	110	36	264	418	305	3/8	185	22	26	185	22	26	185	22	26	185	22	26	-	-	-			
RE_03-B1J6/B1JA6	25/50	3	80	165	108	89	485	368	110	36	289	454	305	3/8	200	20	32	200	20	32	200	24	32	191	24	30	210	24	35			
RE_04-B1J6/B1JA6	12/50	4	100	194	120	113	485	368	110	36	298	475	305	3/8	220	20	34	220	20	34	235	24	37	235	24	37	229	24	38			
RE_06-B1J6/B1JA6	-/25	6	150	229	174	164	485	368	110	36	347	578	305	3/8	285	22	53	285	22	53	300	28	58	300	28	58	279	28	55			
RE_01-B1J8/B1JA8	50/50	1	25	102	56	33/38*	560	420	135	43	240	364	305	3/8	115	18	25	115	18	25	115	18	25	108	18	25	124	18	25			
RE_1H-B1J8/B1JA8	50/50	1.5	40	114	65	49	560	420	135	43	247	380	305	3/8	150	18	27	150	18	27	150	18	27	127	18	27	155	18	28			
RE_02-B1J8/B1JA8	50/50	2	50	124	91	60	560	420	135	43	258	416	305	3/8	165	20	29	165	20	29	165	20	29	152	20	29	165	20	30			
RE_2H-B1J8/B1JA8	50/50	2.5	65	145	97	75	560	420	135	43	265	430	305	3/8	185	22	30	185	22	30	185	22	30	185	22	30	-	-	-			
RE_03-B1J8/B1JA8	50/50	3	80	165	108	89	560	420	135	43	290	466	305	3/8	200	20	36	200	20	36	200	24	36	200	24	36	191	24	34			
RE_04-B1J8/B1JA8	50/50	4	100	194	120	113	560	420	135	43	299	487	305	3/8	220	20	38	220	20	38	235	24	41	235	24	41	229	24	42			
RE_06-B1J8/B1JA8	10/25	6	150	229	174	164	560	420	135	43	348	590	305	3/8	285	22	57	285	22	57	300	28	62	300	28	62	279	28	59			
RE_06-B1J10/B1JA10	40/40						650	490	175	51	355	617	225	3/8			70		70		75		75		72				77			
RE_08-B1J6/B1JA6	-/12	8	200	243	201	205	485	368	110	36	403	661	305	3/8	340	24	72	340	24	76	360	30	80	375	34	87	343	30	78			
RE_08-B1J8/B1JA8	-/12	8	200	243	201	205	560	420	135	43	404	673	305	3/8	340	24	76	340	24	80	360	30	84	375	34	91	343	30	82			
RE_08-B1J10/B1JA10	15/25						650	490	175	51	410	700	310	3/8			90		93		97		104		95				116			
RE_08-B1J12/B1JA12	32/35						800	620	215	65	426	736	235	1/2			118		120		124		132		123				144			
RE_10-B1J10/B1JA10	5/15	10	250	297	251	259	650	490	175	51	452	790	310	3/8	405	26	119	405	26	119	425	32	135	450	38	159	406	32	124	450	38	172
RE_10-B1J12/B1JA12	20/25						800	620	215	65	468	827	325	1/2			147		147		163		187		145				200			
RE_10-B1J16/B1JA16	35/35						990	760	265	78	483	867	340	1/2			200		200		216		240		218				253			
RE_12-B1J12/B1JA12	8/18	12	300	338	269	300	800	620	215	65	498	875	325	1/2	460	26	185	460	28	185	485	34	209	520	42	243	483	34	203	520	42	260
RE_12-B1J16/B1JA16	20/25						990	760	265	78	513	916	340	1/2			228		228		252		217		246				303			
RE_12-B1J20/B1JA20	30/30						1200	935	395	97	534	1000	270	3/4			303		303		327		361		321				378			
RE_14-B1J16/B1JA16	11/22	14	350	400	311	350	990	760	265	78	529	973	340	1/2	505	26	282	520	30	287	555	38	327	580	46	370	534	38	307	584	46	388
RE_14-B1J20/B1JA20	30/30						1200	935	395	97	548	1057	355	3/4			357		362		402		445		382				463			
RE_16-B1J20/B1JA20	19/25	16	400	400	353	400	1200	935	395	97	609	1161	355	3/4	565	26	414	580	32	419	620	40	470	660	50	526	597	40	444	648	50	535
RE_16-B1J25/B1JA25	30/30						1530	1200	505	121	632	1238	390	3/4			590		595		646		702						711			
RE_20-B1J25/B1JA25	25/25	20	500	508	430	500	1530	1200	505	121	723	1406	390	1/2	670	47	765	715	47	785	730	47	880	755	57	1050	699	47	900	775	62	950
RE_24-B1J32/B1JA32	18/18	24	600	610	497	600	1885	1435	540	153	879	1577	427	1	780	28	1574	840	40	1645	845	46	1705	890	60	1711	815	46.1	1640	915	68.3	1838
RE_28-B1JV32/B1JA32	13/13	28	700	710	547	700	1885	1435	540	153	943	1691	427	1	895	30	1760	910	42	1801	960	50	1882	-	-	-	925	69.9	1921	1035	88.9	2185

QPX-RE



DN	Actuator QPX	Max shut-off Δp bar RE, Q-RE	Max control Δp bar RE	Max control Δp bar Q-RE	Dimensions, mm										Total weight, kg	
					A	E	F	G	H	I	J	K	X	Pipe d	ASME 150	ASME 300
25	1	50	35	-	102	142	382	330	388	160	225	182	213	230	19	20,5
40	1	50	35	-	114	142	382	330	404	160	232	189	213	245	20	23
50	1	50	35	35	124	142	382	330	441	160	243	200	213	265	22	25
80	2	35	25	18	165	142	382	330	506	172	284	232	213	330	38	43
100	2	35	25	18	194	156	480	389	527	172	293	241	228	350	45	53
150	2 3	28 40	25 25	18 18	229 229	156 190	480 565	389 446	630 657	191 214	342 346	290 290	228 274	450 410	63 78	78 93
200	3 4	16 35	16 25	15 15	243 243	190 228	565 635	446 495	739 768	191 214	401 407	345 345	274 320	520 485	101 121	122 142
250	4 5	20 35	20 20	10 10	297 297	228 276	635 768	495 608	860 906	214 243	449 464	387 387	320 382	570 540	150 205	198 253
300	5	25	10	8	338	276	768	608	982	214	522	445	382	650	256	313
350	5	12	10	8	400	276	768	608	1065	243	563	486	382	735	317	398
400	5	8	8	8	400	276	768	608	1174	243	630	553	382	870	378	470

HOW TO ORDER

Example: The following example is for an RE flanged valve, with an ASME Class 300 body (D), standard construction (A), 3" size with WCB carbon steel body (D), duplex stainless steel V-port segment with HCr chromium coating (J), duplex stainless steel shaft and pins, PTFE bearings on SS316 net (J), metal seats (S), live loaded PTFE V-ring packing (T), flange facing roughness Ra 3.2 - 6.3, smooth finish (/-).

2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
RE	D	A	03	D	J	J	S	T	/

1. Sign	Trim codes
---	standard V-port (no sign)
Q-	Low noise and anti-cavitation trim (for DN 50 / 2" and bigger)
C005-	Maximum Cv = 0.5 (for DN 25 / 1" only)
C015-	Maximum Cv = 1.5 (for DN 25 / 1" only)
C05-	Maximum Cv = 5.0 (for DN 25 / 1" only)
C15-	Maximum Cv = 15.0 (for DN 25 / 1" only)

6. Sign	Body & screw materials	
D	ASTM A216 gr. WCB / 1-0619	(blind flange & gland bolting SS A4-80/B8M)
A	ASTM A351 gr. CF8M / 1.4408	(blind flange & gland bolting SS A4-80/B8M)

Note: Bodies have double material marking.

2. Sign	Product series
RE	Flanged one piece body, V-port segment, face-to-face acc. to ISA S75.04 and DIN/IEC Part 3-2.

7. Sign	Segment materials
J	Type AISI 329+HCr
S	Type AISI 329

3. Sign	Pressure rating and flange drilling
C	ASME 150 (1" - 28")
D	ASME 300 (1" - 28")
J	PN 10 (DN 200 - DN 700)
K	PN 16 (DN 100 - DN 700)
L	PN 25 (DN 200 - DN 700)
M	PN 40 (DN 25 - DN 600)
R	JIS 10K flanges, based on body casting of ASME 300 (1" - 28")
S	JIS 16K flanges, based on body casting of ASME 300 (1" - 28")
T	JIS 20K flanges, based on body casting of ASME 300 (1" - 28")
Y	Special, to be specified

8. Sign	Shaft, pin & bearing materials
J	Type AISI 329 & PTFE on SS316 net

9. Sign	SEAT
S	316 SS + Cobalt based hard facing, back seal PTFE lip seal.
T	X-treme, metal body, back seal PTFE lip seal, sizes 1"-6" PTFE+C25 %, metal body, back seal PTFE lip seal, size 8"- 28"
E	Cobalt based alloy, erosion-resistant version non-tight.
1S	316 SS + Cobalt based hard facing, 2-way tight metal seat

10. Sign	Stem packing & blind flange seal
T	PTFE V-rings, live loaded
G	Graphite rings, live loaded (fire-safe)

11. Sign	Flange facing
/ -	ASME B16.5 (Ra 3.2 – 6.3 / RMS 125-250) Cover EN1092-1 Type B1

4. Sign	Construction
A	Standard, drive shaft with ANSI keyway to actuator

5. Sign	Size
	Inch 1", 1 1/2", 2", 2 1/2", 3", 4", 6", 8", 10", 12", 14", 16", 20", 24", 28" DN 25, 40, 50, 65, 80, 100, 150, 200, 250, 300, 350, 400, 500, 600, 700

Subject to change without prior notice.

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