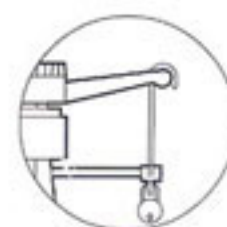
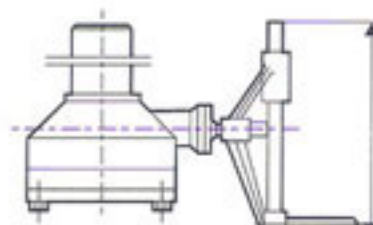


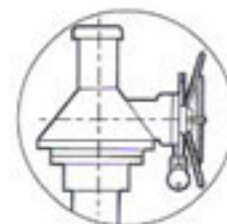
Vacuum Seal Arrangement



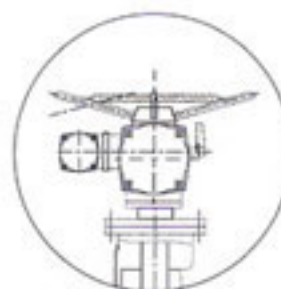
Locking Arrangement



Gear Box



Locking Arrangement



Electrical Actuator



Butt-weld end



RTJ

## MATERIALS OF CONSTRUCTION

DESCRIPTION	WCB	LCB	CF8M	WC6 / WC9 / C5
BODY (1)	ASTM A 216 Gr. WCB	ASTM A 352 Gr. LCB	ASTM A 351 Gr. CF8M	ASTM A 217 Gr. WC6 / WC9 / C5
SEAT RING (2, 3)	WCB + 13% Cr STEEL/ A 217 Gr. CA 15	A 351 Gr. CF8 / AISI 304	A 351 Gr. CF8M / INTEGRAL	A 217 Gr. CA 15
WEDGE (2, 3)	WCB + 13% Cr STEEL/ A 217 Gr. CA 15	A 276 TP 304/ A 351 Gr. CF8	A 276 TP 316/ A 351 Gr. CF8M	A 217 Gr. CA15
STEM (2)	A 276 TP 410	A 276 TP 304	A 276 TP 316	A 276 TP 410
GASKET (2)	SOFT IRON/ SW SS + GRAPHITE	CORRUGATED SS 304/ SW SS + PTFE	CORRUGATED SS 316/ SW SS + GRAPHITE	SOFT IRON/ SW SS + GRAPHITE
BONNET (1)	A 216 Gr. WCB	A 352 Gr. LCB	A 351 Gr. CF8M	A 217 Gr. WC6 / WC9 / C5
JOINT STUDS & NUTS (2)	A 193 Gr. B7 & A 194 Gr. 2H	A 320 Gr. L7 & A 194 Gr.4 / 7	A 193 Gr. B7 & A 194 Gr. 2H	A 193 Gr. B16 & A 194 Gr.4 / 7
BONNET BUSH (2)	A 276 TP 410	A 276 TP 304	A 276 TP 316 / INTEGRAL	A 276 TP 410
GLAND PACKING (2)	GRAPHITE RINGS	PTFE	GRAPHITE RINGS	GRAPHITE RINGS
GLAND BUSH (2)	A 276 TP 410	A 276 TP 304	A 276 TP 316	A 276 TP 410
GLAND FLANGE	A 216 Gr. WCB / A 105 CARBON STEEL	A 216 Gr. WCB / A 182 F 304 CARBON STEEL	A 216 Gr. WCB / A 182 F 316 CARBON STEEL	A 216 Gr. WCB / A 182 F 5 CARBON STEEL
CROSS BOLTS & NUTS	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A
EYE BOLTS & NUTS	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A	A 307 Gr. B & A 563 Gr. A
YOKE SLEEVE	A 439 Gr. D2	A 439 Gr. D2	A 439 Gr. D2	A 439 Gr. D2
HAND WHEEL	MALLEABLE IRON/ DUCTILE IRON	MALLEABLE IRON/ DUCTILE IRON	MALLEABLE IRON/ DUCTILE IRON	MALLEABLE IRON/ DUCTILE IRON

### Also Available :

- (1) Casting in **WCC, LCC, CF8, CF3, CF8C, CN7M, C12, DUPLEX SS, HASTALLOY, MONEL**, also provided against requirement.
- (2) With different combination for WCB valves.
- (3) Special features like Stellite.



## DESIGN FEATURES :

- Design standard as per API 600 / ISO 10434 / ASME B16.34
- API 602 / ISO 15761
- Flange details as per ASME B 16.5 / MSS SP 44 / B16.47
- Butt weld ends as per ASME B 16.25.
- Face to face dimension as per ASME B 16.10 / BS 2080.
- Testing Standards API 598 / BSEN-12266 Part – I / MSS –SP-61
- Gasket sealing design as per ASME B 16.20
- Threaded seat ring design up to 4", above that seal welding design for seat rings.
- Solid and Flexible wedge design.
- Corrugated Soft Iron Gaskets for 150# Gate Valves unless, otherwise, specified.
- Tongue & groove for spiral wound gasket design for 300#, 600#, 900#, 1500#, 2500# Gate Valves, against request
- Extended stem can be provided on request.

## SPECIAL FEATURES :

- With Gear operation – If the applied force exceeds 350 N.
- With Limit Switch arrangements for Open and Close position.
- With Electrical / Pneumatic actuators
- With Lantern ring arrangement for Vacuum services.
- With Stelling
- With IBR Certification.
- With NACE MR 0175.
- With Position indicators.
- Locking arrangement.

## TOLERANCES :-

- A) Face to Face : +/- 2.0mm upto NPS 10" and smaller,  
+/- 3mm for NPS 12 & larger

## FACE TO FACE / END-TO-END DIMENSIONS FOR GATE VALVES

(Class 150, 300, 600, 900, 1500 & 2500)

CLASS	NPS in	1/2"	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"	32"	36"	40"	42"	WT. IN KG.		
																												F/E	B/E	
CLASS 150	DN mm	15	20	25	40	50	65	80	100	381	150	200	250	300	350	400	450	500	550	600	650	700	750	800	900	1000	1050			
	L1 (RF)	108	117	127	165	178	191	203	229	254	267	292	330	356	381	406	432	457	482.6	508	559	610	610	660	711	762	813			
	L2 (BWE)	-	-	-	-	216	241	263	305	125	403	419	457	502	572	610	660	711	-	813	902	991	991	1105	1105	1219	1067	1397		
	L3 (RTJ)	-	-	-	-	191	203	216	241	264	279	305	343	368	394	419	445	470	-	521	-	-	-	-	-	-	-	-		
	ØH	86	86	145	145	200	200	250	250	250	300	300	400	450	450	500	500	600	600	600	600	450	450	500	500	600	760	760		
	A	172	187	258	278	375	393	473	570	664	765	995	1178	1375	1525	1735	1905	2095	2340	2525	2820	3010	3200	3251	3850	4381	4602			
	F/E	4.5	5.5	7.5	12	21	32	34	57.5	805	98	147	253	356.5	517.5	832.5	805	1046	1075	1300	1600	1920	2300	2550	3500	4815	5300			
	B/E	-	-	-	-	18	25	28	45	74	90	135	228	340	486	598	770	1006	-	1180	1550	860	2240	2490	3420	4840	5275			
	CLASS 300	DN mm	15	20	25	40	50	65	80	100	-	150	200	250	300	350	400	450	500	-	600	650	700	750	800	900	-	-		
		L1 (RF)	140	152	165	191	216	241	283	305	-	403	419	457	502	762	838	914	991	-	1143	1245	1346	1397	1689	1981	-	-		
L2 (BWE)		-	-	-	-	216	241	283	305	-	403	419	457	502	762	838	914	991	-	1143	1245	1346	1397	1689	1981	-	-			
L3 (RTJ)		-	-	-	-	232	257	298	321	-	419	435	473	518	778	854	930	1010	-	1165	-	-	-	-	-	-	-			
ØH		86	86	145	145	200	200	250	250	-	300	300	400	450	450	500	500	600	-	600	450	450	500	500	600	600	-	-		
A		172	186	262	278	394	431	494	585	-	842	1034	1240	1424	1605	1845	1970	2125	-	2580	2820	3010	3200	3251	3840	-	-			
F/E		7	8	12	19	27.5	50.5	55	84	-	185.5	402.5	402.5	667	822	1207	1420	1903	-	2668	3090	3400	3500	4000	4540	-	-			
B/E		-	-	-	-	21	40	45	64	-	140	175	175	567	700	1155	1250	1700	-	2448	2840	3130	3310	3640	4220	-	-			
CLASS 600		DN mm	15	20	25	40	50	65	80	100	-	150	200	250	300	350	400	450	500	-	600	-	-	-	-	-	-	-		
		L1 (RF)	165.1	190.5	215.9	241.3	292	330	356	432	-	559	660	787	838	889	991	1092	1194	-	1397	-	-	-	-	-	-	-		
	L2 (BWE)	-	-	-	-	292	330	356	432	-	559	660	787	838	889	991	1092	1194	-	1397	-	-	-	-	-	-	-			
	L3 (RTJ)	-	-	-	-	295	333	359	435	-	562	663	790	841	892	994	1095	1200	-	1407	-	-	-	-	-	-	-			
	ØH	86	86	145	145	250	250	300	350	-	450	500	550	600	600	600	600	600	-	600	-	-	-	-	-	-	-			
	A	172	186	262	283	428	492	534	680	-	918	1122	1252	1550	1735	1845	2105	2275	-	2688	-	-	-	-	-	-	-			
	F/E	9.5	10.5	16.5	21	40	63	83	145	-	305	510	805	1081	1506	1850	2380	2786	-	4380	-	-	-	-	-	-	-			
	B/E	-	-	-	-	35	58	77	135	-	280	475	760	1010	1420	1460	2285	2650	-	4280	-	-	-	-	-	-	-			
	CLASS 900	DN mm	15	20	25	40	50	65	80	100	-	150	200	250	300	350	400	450	500	-	600	-	-	-	-	-	-	-		
		L1 (RF)	216	229	254	305	368	419	381	457	-	610	737	838	965	1029	1130	1219	1321	-	1549	-	-	-	-	-	-	-		
L2 (BWE)		216	229	254	305	368	419	381	457	-	610	737	838	965	1029	1130	1219	1321	-	1549	-	-	-	-	-	-	-			
L3 (RTJ)		-	-	-	-	371	422	384	460	-	613	740	841	968	1038	1140	1232	1334	-	1568	-	-	-	-	-	-	-			
ØH		110	130	-	-	250	250	300	350	-	500	600	600	600	650	650	760	760	-	450	-	-	-	-	-	-	-			
A		260	300	-	-	660	705	800	902	-	1137	1438	1556	1715	1902	2051	2256	2800	-	3150	-	-	-	-	-	-	-			
F/E		11	16	-	-	103	145	155	210	-	485	855	1040	1590	2210	2990	3860	4880	-	7290	-	-	-	-	-	-	-			
B/E		-	-	-	-	80	120	120	170	-	380	700	820	1340	1880	2555	3290	4040	-	6110	-	-	-	-	-	-	-			
CLASS 1500		DN mm	15	20	25	40	50	65	80	100	-	150	200	250	300	350	400	450	500	-	600	-	-	-	-	-	-	-		
		L1 (RF)	216	229	254	305	368	419	470	546	-	705	832	991	1130	1257	1384	1537	1664	-	1943	-	-	-	-	-	-	-		
	L2 (BWE)	216	229	254	305	368	419	470	546	-	705	832	991	1130	1257	1384	1537	1664	-	1943	-	-	-	-	-	-	-			
	L3 (RTJ)	-	-	-	-	371	422	473	+549	-	711	841	1000	1146	1276	1407	1559	1686	-	1972	-	-	-	-	-	-	-			
	ØH	110	130	130	250	250	300	350	-	500	450	450	600	650	650	760	760	450	-	450	-	-	-	-	-	-	-			
	A	260	300	300	390	660	705	860	937	-	1226	1422	1686	1997	2162	2486	2762	3102	-	3721	-	-	-	-	-	-	-			
	F/E	11	18	19	35	103	145	185	335	-	725	1170	1925	3255	4105	6940	8990	11120	-	16260	-	-	-	-	-	-	-			
	B/E	-	-	-	-	80	120	150	230	-	550	930	1530	2650	3190	5990	7730	9550	-	13760	-	-	-	-	-	-	-			
	CLASS 2500	DN mm	15	20	25	40	50	65	80	100	-	150	200	250	300	-	-	-	-	-	-	-	-	-	-	-	-	-		
		L1 (RF)	264	273	308	384	451	508	578	673	-	914	1022	1270	1422	-	-	-	-	-	-	-	-	-	-	-	-	-		
L2 (BWE)		264	273	308	384	451	508	578	673	-	914	1022	1270	1422	-	-	-	-	-	-	-	-	-	-	-	-	-			
L3 (RTJ)		-	-	-	-	387	454	514	584	683	-	927	1038	1292	1445	-	-	-	-	-	-	-	-	-	-	-	-			
ØH		130	130	250	300	350	450	450	500	-	600	600	800	800	-	-	-	-	-	-	-	-	-	-	-	-	-			
A		304	315	368	445	753	870	870	1073	-	1451	1610	2096	2292	-	-	-	-	-	-	-	-	-	-	-	-	-			
F/E		19	21	40	62	125	200	240	485	-	1580	2430	4564	7170	-	-	-	-	-	-	-	-	-	-	-	-	-			
B/E		-	-	-	-	90	150	170	370	-	1290	1990	3790	5990	-	-	-	-	-	-	-	-	-	-	-	-	-			

\* - Supplied only with Flanged end connections.

Sizes not covered in above standards are as per manufacturer standard.