

SWING CHECK VALVE



Swing check valve is a type of check valve which consists of a big body, a disc inside it, a shaft and a rocker arm that hold the disc, a counter lever and weight.

Main usage area is outlet side of pumps at sewage pipe lines. It can also be used at clean water and raw water pipe lines.

When flow begins, disc is pushed forward by effect of flow and positioned inside valve body. Flow continues its travel in direction of pumping. It is an advantage that when valve is open, pipe line is fully clear without any obstacle.

When pump begins to slow down to stop, disc begins to close. Check valve closes automatically by assistance of back flow and counter weight which is connected to shaft by counter lever. Its closure prevents the water in the pipe line to flow reversely.

Opening angle of disc must not exceed 70 degrees. If it exceeds, in case of a mechanical tightness, flow moves under the disc and required forces for closure cannot occur. Reverse flow begins; pump starts to turn reverse direction. Serious damage may take place.

Installation Position,

Valve should be installed as shaft in horizontal position.

Accessories

Mechanical Limit Switch,

A cam, which is fixed on shaft of check valve, rotates as the disc flaps. When disc closes, cam hits on switch. Switch sends signal to panel at operation room to notify closed position of disc.

Shaft Protection,

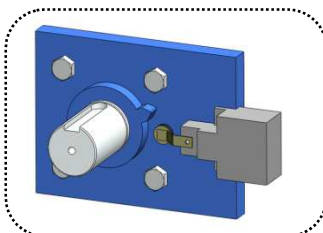
It is a steel pipe to protect open-end of valve shaft from any damage.

Mesh Guard,

It is a protective accessory for the things around the valve against sudden movement of counter lever and weight under operation.

By-pass,

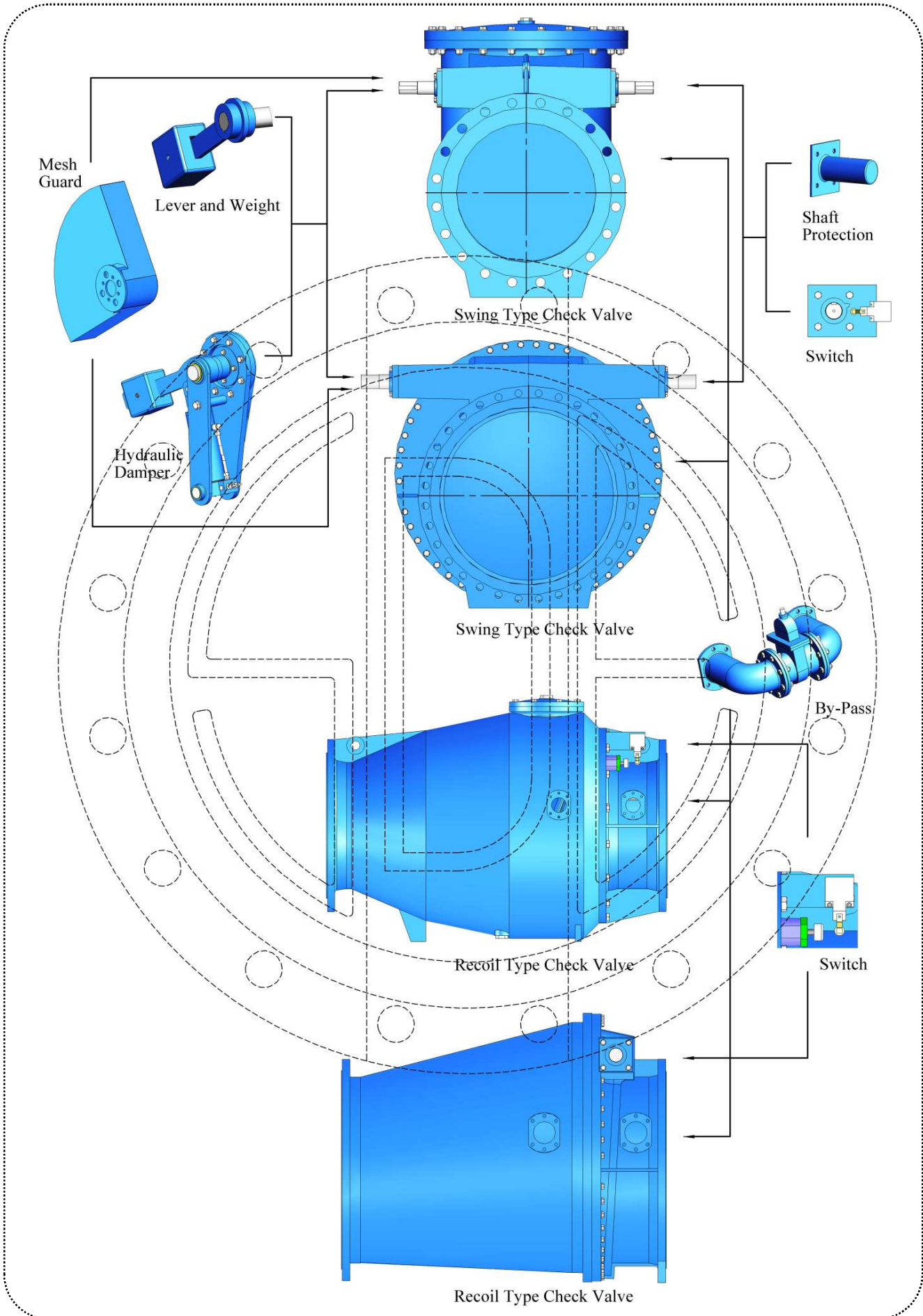
It is a "U" shaped equipment fixed on body, which connects outlet of check valve to inlet from outside of main pipe line. There is a gate valve between two elbows. In closed position of disc, by-pass valve is used to transfer the fluid from outlet side to inlet side. If chamber of pump is emptied, fluid can be transferred into the pump.



Maintenance,

There is no need for maintenance for these valves that are installed especially in clean water pipe-line. If valve is uninstalled, shaft o-rings can be checked and renewed accordingly.

ACCESSORIES OF SWING and RECOIL TYPE CHECK VALVE

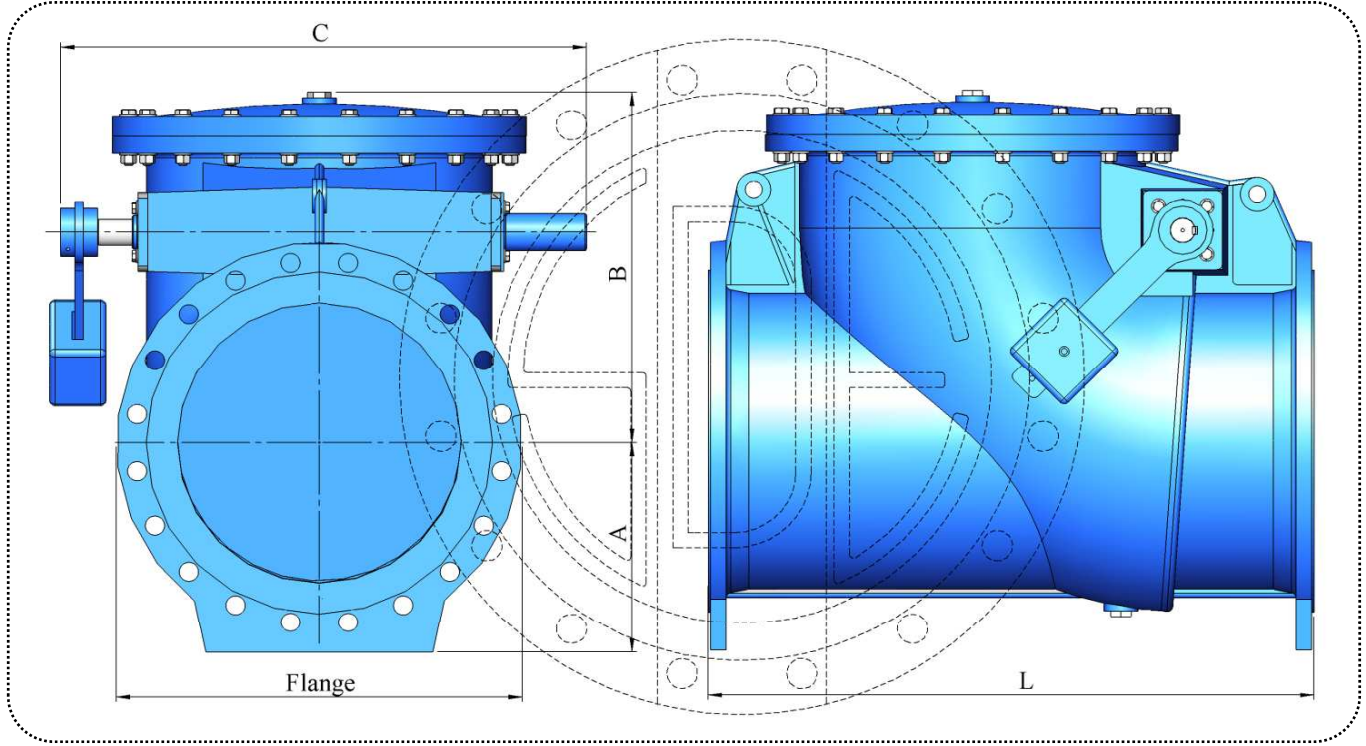


SWING CHECK VALVE

Body Length Standard : EN 558-1, S 10

Valve Standard : EN 12334

Maximum allowable working temperature for all types of our valves is 80 degrees Celcius.



DIMENSIONS

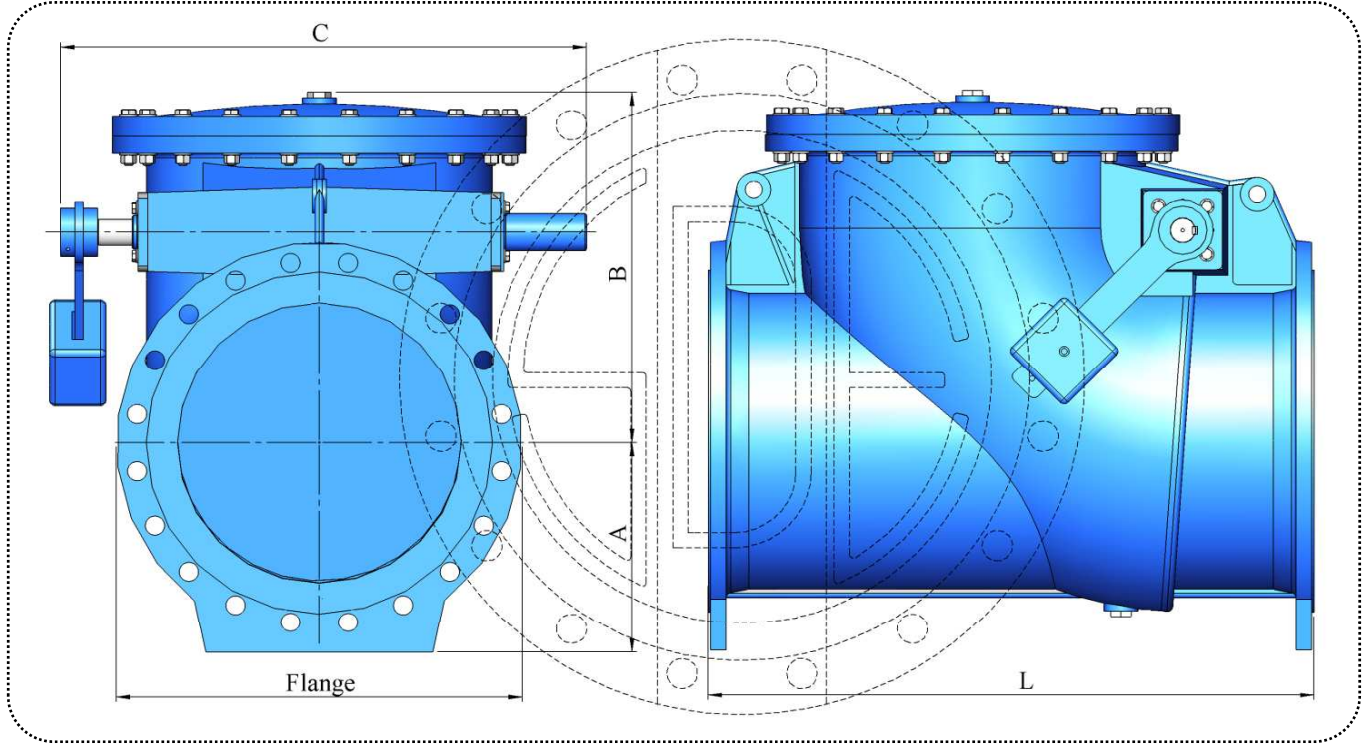
DN	L	PN 10				PN 16				PN 20			
		A	B	C	Kg	A	B	C	Kg	A	B	C	Kg
200	495	180	373	505	145	180	373	505	147	190	390	531	181
250	622	208	418	576	180	213	426	588	183	223	443	614	226
300	698	233	459	640	239	240	471	659	247	253	492	691	310
350	787	263	508	716	348	270	520	736	363	288	549	780	451
400	914	293	557	793	453	300	569	812	476	320	602	864	595
450	965	318	598	857	579	330	618	889	616	345	642	928	765
500	1.067	345	642	928	739	368	679	985	787	375	691	1.004	975
550	1.143	373	687	998	895	399	730	1.065	967	404	738	1.078	1.186
600	1.219	400	732	1.068	1.047	430	781	1.145	1.121	433	785	1.152	1.399
650	1.320	429	779	1.142	1.261	448	809	1.190	1.332	461	832	1.225	1.676
700	1.420	458	826	1.216	1.457	465	838	1.235	1.548	490	879	1.299	1.951
750	1.490	493	883	1.305	1.739	495	887	1.312	1.850	520	928	1.376	2.336
800	1.560	518	924	1.369	2.038	523	932	1.382	2.164	553	981	1.459	2.760
900	1.730	568	1.005	1.497	2.529	573	1.013	1.510	2.730	603	1.062	1.587	3.454
1.000	1.900	625	1.099	1.644	3.043	638	1.119	1.676	3.265	670	1.172	1.760	4.123

SWING CHECK VALVE

Body Length Standard : EN 558-1, S 48

Valve Standard : EN 12334

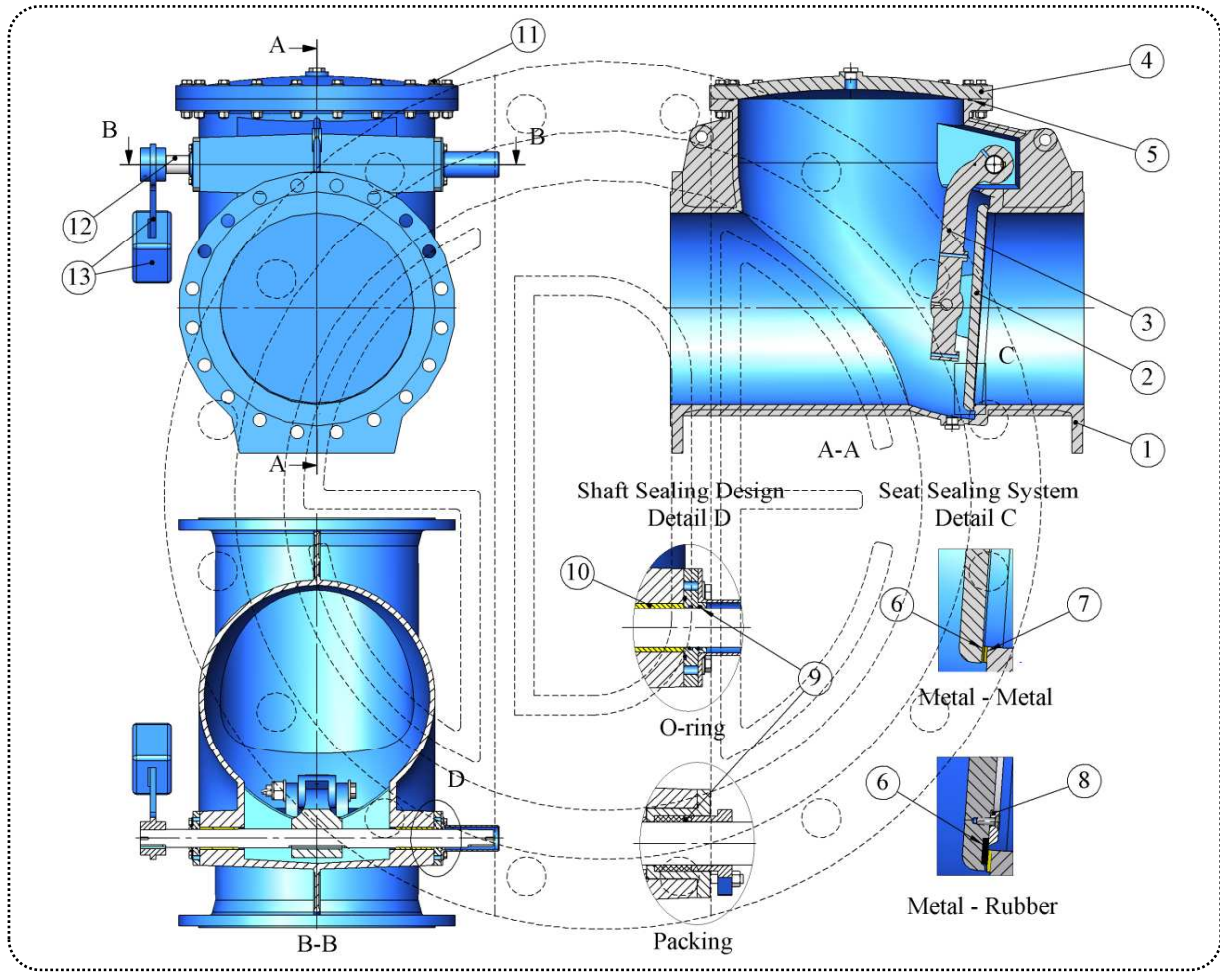
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DIMENSIONS

DN	L	PN 10				PN 16				PN 20			
		A	B	C	Kg	A	B	C	Kg	A	B	C	Kg
200	500	180	373	505	145	180	373	505	154	190	390	531	183
250	600	208	418	576	180	213	426	588	191	223	443	614	229
300	700	233	459	640	239	240	471	659	259	253	492	691	317
350	800	263	508	716	348	270	520	736	382	288	549	780	464
400	900	293	557	793	453	300	569	812	499	320	602	864	611
450	1.000	318	598	857	579	330	618	889	651	345	642	928	793
500	1.100	345	642	928	739	368	679	985	833	375	691	1.004	1.007
550	1.200	373	687	998	895	399	730	1.065	1.024	404	738	1.078	1.229
600	1.300	400	732	1.068	1.047	430	781	1.145	1.191	433	785	1.152	1.454
650	1.400	429	779	1.142	1.261	448	809	1.190	1.414	461	832	1.225	1.739
700	1.500	458	826	1.216	1.457	465	838	1.235	1.641	490	879	1.299	2.021
750	1.600	493	883	1.305	1.739	495	887	1.312	1.967	520	928	1.376	2.425
800	1.700	518	924	1.369	2.038	523	932	1.382	2.304	553	981	1.459	2.869
900	1.900	568	1.005	1.497	2.529	573	1.013	1.510	2.905	603	1.062	1.587	3.618
1.000	2.100	625	1.099	1.644	3.043	638	1.119	1.676	3.476	670	1.172	1.760	4.323

SWING CHECK VALVE



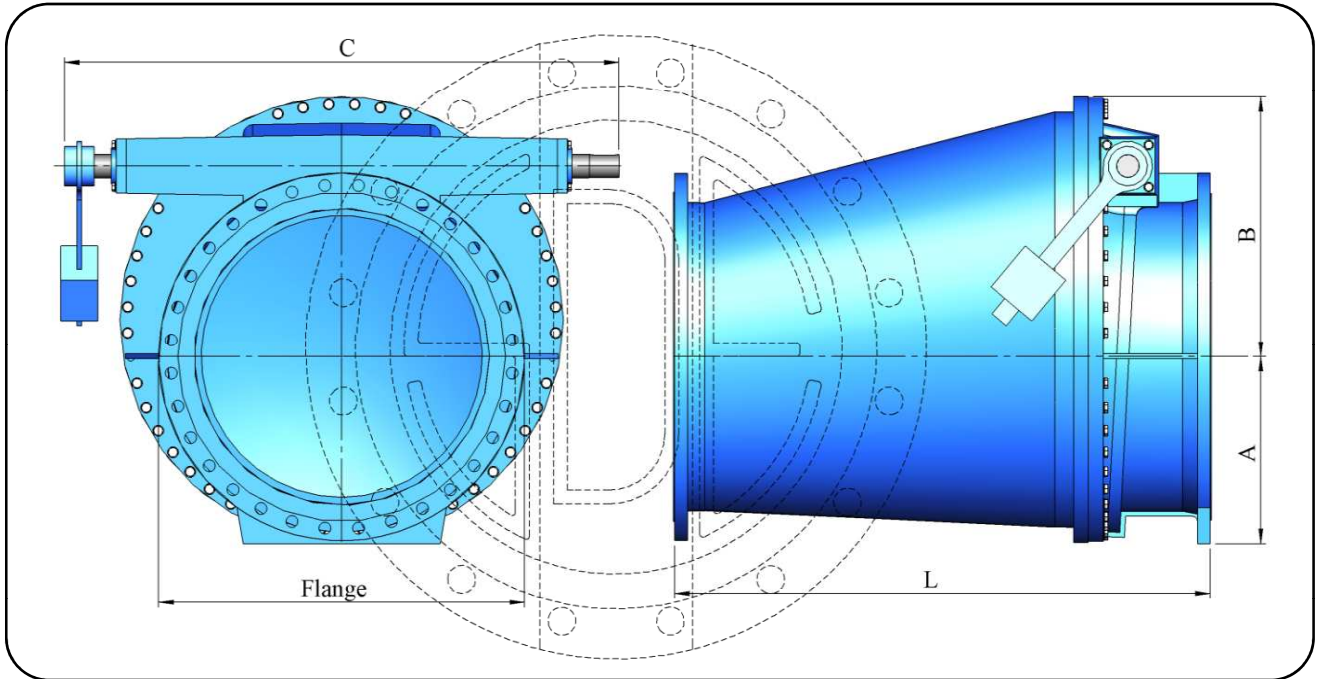
No	Part Name	Material	Description	EN Standard	Material No
1-4	Body and Top Cover	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
2	Disc	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		304	Stainless Steel Casting	G - X6CrNi 18-9	1.4308
		316		G-X6CrNiMo 18-10	1.4408
		CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
3	Rocker Arm	GGG 50	Ductile Iron	EN-GJS-500-7	0.7050
5	O-Rings	NBR - EPDM	Rubber	-	-
6-7	Body and Disc Seats	316 L	Stainless Steel Welding	12072	1.4430
		CuAl8	Aluminium Bronze Welding	14640 S Cu 6100	2.0921
6	Disc Seat	NBR - EPDM	Rubber	-	-
8	Retainer Ring	304	Stainless Steel	X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
9	Sealing	NBR - EPDM	Rubber	-	-
		Packing	Non Asbestos	-	-
10	Bearing	Rg 5	Bronze	CC 491 K	2.1096.01
11	Bolts Nuts	Galvanized	Steel	-	-
		A 2 - A 4	Stainless Steel	-	-
12	Shaft	420	Stainless Steel	X20Cr13	1.4021
		304		X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		431		X17CrNi16-2	1.4057
13	Lever Weight	GGG 50	Ductile Iron	EN-GJS-500-7	0.7050
Coating		WRAS approved fusion bonded epoxy. 300 microns dft as standard.			
Maximum allowable working temperature for all types of our valves is 80 degrees Celcius.					

SWING CHECK VALVE

Valve Standard : EN 558-1, S 48

Body Length Standard : EN 12334

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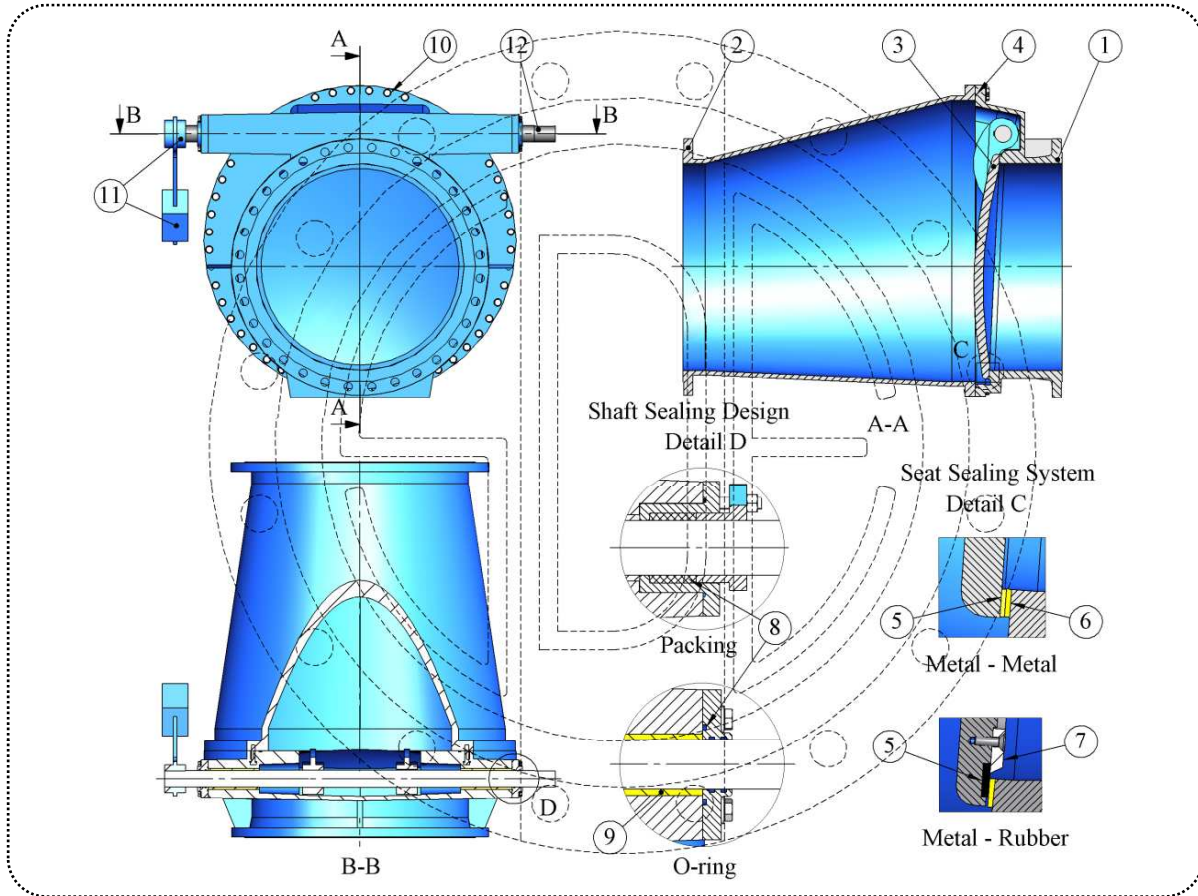
DIMENSIONS

DN	L	PN 10				PN 16			
		A	B	C	Kg	A	B	C	Kg
1.050	2.200	653	1.102	1.755	3.315	663	1.117	1.780	3.631
1.100	2.300	681	1.147	1.829	3.795	688	1.158	1.845	4.194
1.200	2.500	738	1.239	1.976	4.779	753	1.263	2.015	5.272
1.300	2.700	798	1.336	2.133	6.115	803	1.344	2.146	6.698
1.400	2.900	848	1.417	2.264	7.752	853	1.425	2.277	8.512
1.500	3.100	903	1.506	2.408	9.846	920	1.534	2.454	10.869
1.600	3.300	968	1.611	2.579	12.300	975	1.623	2.598	13.540

DN	L	PN 20				PN 25			
		A	B	C	Kg	A	B	C	Kg
1.050	2.200	696	1.172	1.868	4.441	696	1.172	1.868	4.441
1.100	2.300	723	1.214	1.937	5.089	723	1.214	1.937	5.089
1.200	2.500	775	1.299	2.074	6.395	775	1.299	2.074	6.395

Inch	L	ANSI 125				ANSI 150			
		A	B	C	Kg	A	B	C	Kg
42	2.200	696	1.172	1.868	4.441	696	1.172	1.868	4.441
44	2.300	723	1.214	1.937	5.089	723	1.214	1.937	5.089
48	2.500	775	1.299	2.074	6.395	775	1.299	2.074	6.395

SWING CHECK VALVE

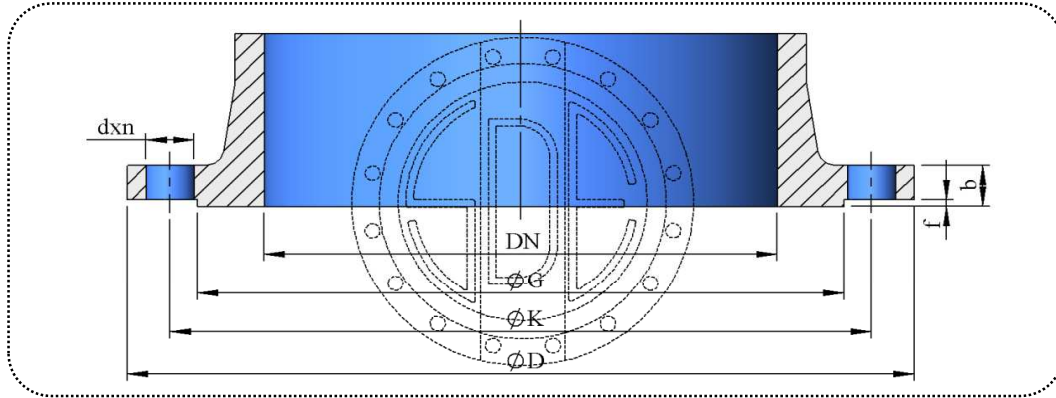


No	Part Name	Material	Description	EN Standard	Material No
1-2	Inlet and Outlet Body	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		ST 37-2	Steel Construction	EN 10025	1.0037
3	Disc	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		304	Stainless Steel Casting	G - X6CrNi 18-9	1.4308
		316		G-X6CrNiMo 18-10	1.4408
		CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
4	O-Ring	NBR - EPDM	Rubber	-	-
5-6	Seats	316 L	Stainless Steel Welding	12072	1.4430
		CuAl8	Aluminium Bronze Welding	14640 S Cu 6100	2.0921
5	Disc Seat	NBR - EPDM	Rubber	-	-
7	Retainer Ring	304	Stainless Steel	X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
8	Sealing	NBR - EPDM	Rubber	-	-
		Packing	Non Asbestos	-	-
9	Bearing	Rg 5	Bronz	CC 491 K	2.1096.01
10	Bolts and Nuts	Galvanized	Steel	-	-
		A 2 - A 4	Stainless Steel	-	-
11	Lever, Weight	GGG 50	Ductile Iron	EN-GJS-500-7	0.7050
12	Shaft	420	Stainless Steel	X20Cr13	1.4021
		304		X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		431		X5CrNiMo17-12-2	1.4401

Coating WRAS approved fusion bonded epoxy. 300 microns dft as standard.

Maximum allowable working temperature for all types of our valves is 80 degrees Celcius.

FLANGE DIMENSIONS



Nominal Dia	Outside Dia	Raised Face		Flange Holes			Flange Thickness	Outside Dia	Raised Face		Flange Holes			Flange Thickness
		Dia	Height	Circle Dia.	Dia	Num ber			Dia	Height	Circle Dia.	Dia	Num ber	
DN	D	G	f	K	d	n	b	D	G	f	K	d	n	b
PN 10								PN 16						
100	220	158	3	180	19	8	19	220	158	3	180	19	8	19
125	250	188	3	210	19	8	19	250	188	3	210	19	8	19
150	285	212	3	240	23	8	19	285	212	3	240	23	8	19
200	340	268	3	295	23	8	20	340	268	3	295	23	12	20
250	395	320	3	350	23	12	22	405	320	3	355	28	12	22
300	445	370	4	400	23	12	25	460	378	4	410	28	12	25
350	505	430	4	460	23	16	25	520	438	4	470	28	16	27
400	565	482	4	515	28	16	25	580	490	4	525	31	16	28
450	615	532	4	565	28	20	26	640	550	4	585	31	20	30
500	670	585	4	620	28	20	27	715	610	4	650	34	20	32
600	780	685	5	725	31	20	30	840	725	5	770	37	20	36
700	895	800	5	840	31	24	33	910	795	5	840	37	24	40
800	1.015	905	5	950	34	24	35	1.025	900	5	950	41	24	43
900	1.115	1.005	5	1.050	34	28	38	1.125	1.000	5	1.050	41	28	47
1.000	1.230	1.110	5	1.160	37	28	40	1.255	1.115	5	1.170	44	28	50
1.200	1.455	1.330	5	1.380	41	32	45	1.485	1.330	5	1.390	50	32	57
1.400	1.675	1.535	5	1.590	44	36	46	1.685	1.530	5	1.590	50	36	59
1.500	1.785	1.640	5	1.700	44	36	48	1.820	1.640	5	1.710	57	36	63
1.600	1.915	1.760	5	1.820	50	40	49	1.930	1.750	5	1.820	57	40	65
1.800	2.115	1.950	5	2.020	50	44	52	2.130	1.950	5	2.020	57	44	69
2.000	2.325	2.150	5	2.230	50	48	55	2.345	2.150	5	2.230	62	48	73
2.200	2.550	2.370	5	2.440	57	52	59	2.555	2.360	5	2.440	62	52	80
PN 25								PN 40						
100	235	162	3	190	23	8	19	235	162	3	190	23	8	19
125	270	188	3	220	28	8	19	270	188	3	220	28	8	24
150	300	218	3	250	28	8	20	300	218	3	250	28	8	26
200	360	278	3	310	28	12	22	375	285	3	320	31	12	30
250	425	335	3	370	31	12	25	450	345	3	385	34	12	35
300	485	395	4	430	31	16	28	515	410	4	450	34	16	40
350	555	450	4	490	34	16	30	580	465	4	510	37	16	44
400	620	505	4	550	37	16	32	660	535	4	585	41	16	48
450	670	548	4	600	37	20	34	685	560	4	610	41	20	50
500	730	615	4	660	37	20	37	755	615	4	670	44	20	52
600	845	720	5	770	41	20	42	890	735	5	795	50	20	58
700	960	820	5	875	44	24	47	995	840	5	900	50	24	63
800	1.085	930	5	990	50	24	51	1.140	960	5	1.030	57	24	68
900	1.185	1.030	5	1.090	50	28	56	1.250	1.070	5	1.140	57	28	73
1.000	1.320	1.140	5	1.210	57	28	60	1.360	1.180	5	1.250	57	28	80
1.200	1.530	1.360	5	1.420	57	32	69	1.575	1.385	5	1.460	62	32	88
1.400	1.755	1.570	5	1.640	62	36	74	1.795	1.600	5	1.680	62	36	98
1.500	1.865	1.680	5	1.750	62	40	75	1.910	1.700	5	1.790	70	40	102
1.600	1.975	1.790	5	1.860	62	40	81	2.025	1.815	5	1.900	70	40	108
1.800	2.195	2.000	5	2.070	70	44	88							
2.000	2.425	2.230	5	2.300	70	48	95							