

RECOIL CHECK VALVE



Recoil check valves have a special design. It is a type of check valve which consists of a big body, a disc inside it and a shaft that holds the disc.

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. Special design of body provides rapid closure of disc. Water, moving reverse direction, spreads in a bigger volume inside wide valve body. Velocity of water decreases. Water, that comes back, does not hit only the disc but also hits valve body. Recoiling water this time hits to reverse flow. Problems created by water are eliminated by water itself. Smooth and silent closure is achieved. 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,

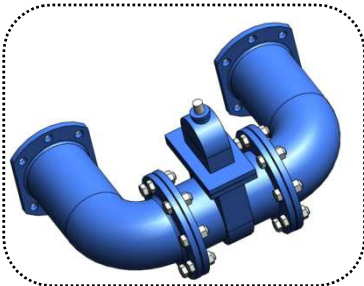
Valve should be installed as shaft in horizontal position.

Accessories,

By-pass,

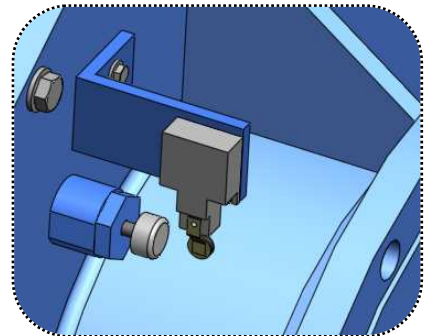
It is "U" shaped equipment fixed on body, which connects outlet of check valve to inlet from outside of main pipe line. There is a gate valve between two elbows.

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.



Mechanical Limit Switch,

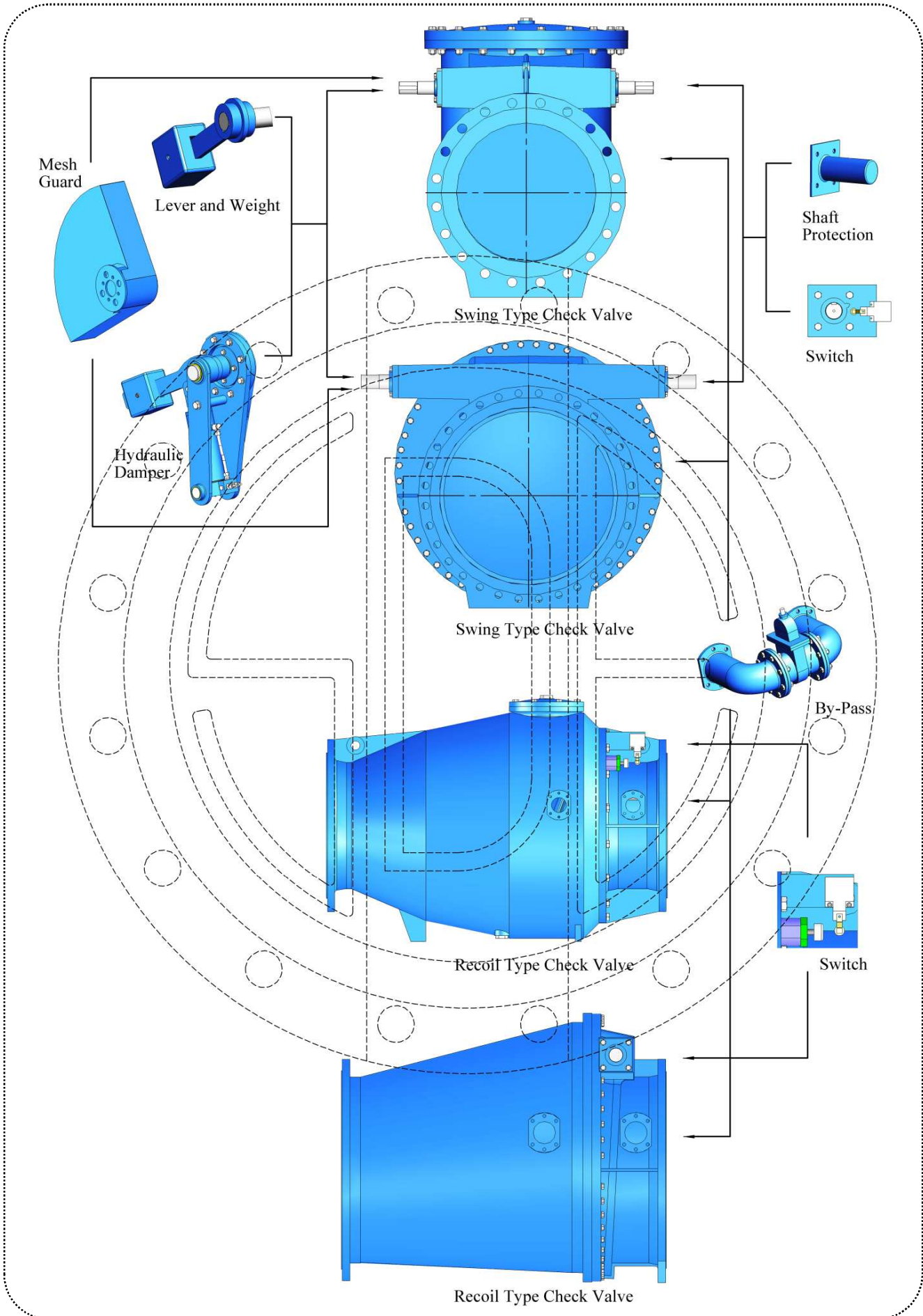
A cam, which is in contact with shaft of check valve, moves backward and forward as the disc flaps. When disc closes, cam hits on switch. Switch sends signal to panel at operation room to notify closed position of disc.



Maintenance,

There is no need for maintenance for these valves that are installed especially in clean water pipe-line.

ACCESSORIES OF SWING and RECOIL TYPE CHECK VALVE

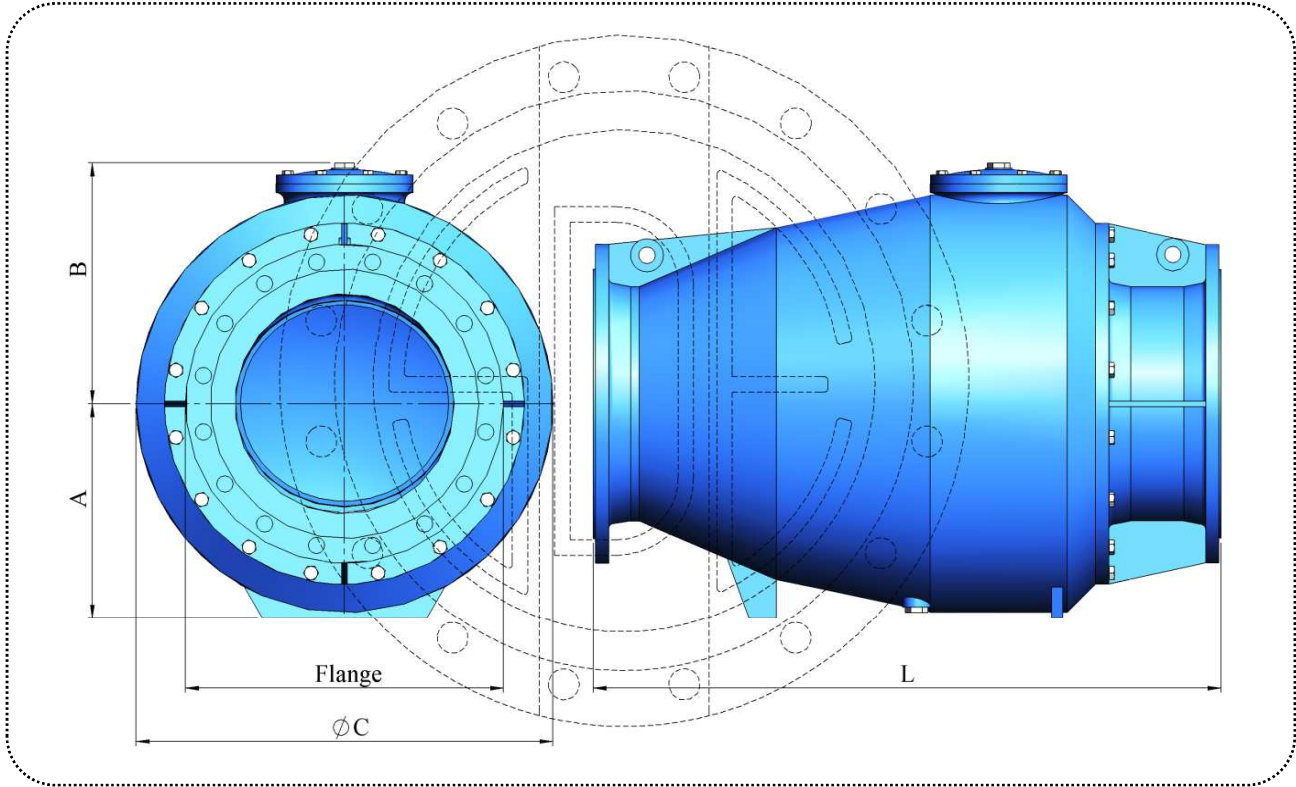


RECOIL CHECK VALVE

Valve Standard : -

Body Length Standard : Special

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



DIMENSIONS

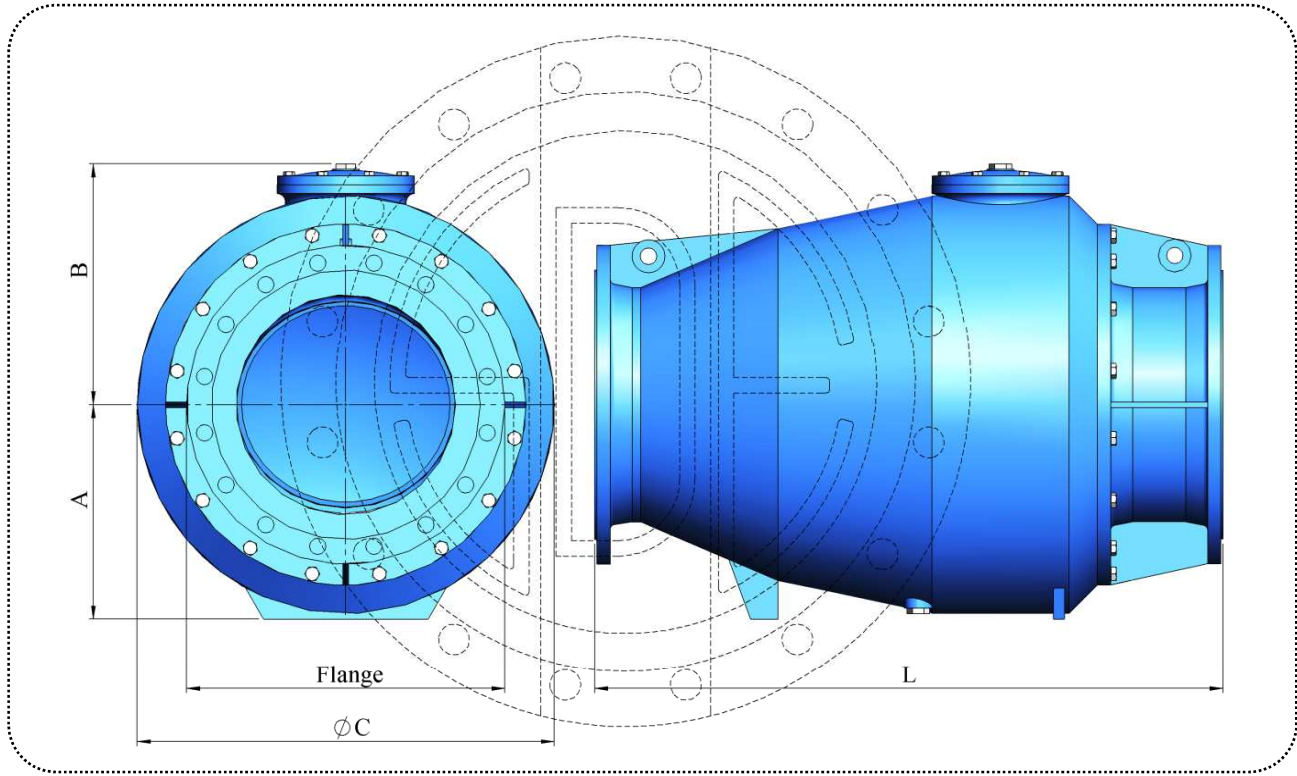
DN	L	PN 10				PN 16				PN 20			
		A	B	C	Kg	A	B	C	Kg	A	B	C	Kg
100	460	174	183	338	63	174	183	338	63	184	193	358	78
125	500	194	203	378	94	194	203	378	94	207	217	404	117
150	610	217	228	423	140	217	228	423	140	227	238	443	175
200	755	253	265	495	218	253	265	495	218	266	279	522	272
250	965	289	303	567	298	295	310	581	299	308	324	607	372
300	1.070	321	338	633	413	331	348	653	413	348	365	685	519
350	1.145	361	379	712	530	371	389	731	533	394	413	777	669
400	1.145	400	420	790	651	410	430	810	658	436	458	862	825
450	1.220	433	454	856	827	449	472	888	837	469	492	928	1.047
500	1.320	469	492	928	988	498	523	987	1.000	508	534	1.006	1.252
550	1.385	505	530	1.000	1.173	539	566	1.069	1.189	546	573	1.082	1.489
600	1.450	541	568	1.072	1.340	580	609	1.150	1.359	583	613	1.157	1.700
650	1.515	579	607	1.147	1.547	603	633	1.196	1.570	621	652	1.232	1.964
700	1.580	616	647	1.222	1.736	626	657	1.242	1.764	659	692	1.308	2.206
750	1.630	662	695	1.314	1.970	665	699	1.321	2.004	698	733	1.386	2.506
800	1.680	695	730	1.380	2.193	701	736	1.393	2.234	741	778	1.471	2.792
900	1.800	760	798	1.511	2.886	767	805	1.524	2.943	806	846	1.602	3.712
1.000	1.920	836	877	1.661	3.622	852	895	1.694	3.699	895	939	1.779	4.675

RECOIL CHECK VALVE

Valve Standard : -

Body Length Standard : EN 558-1, S 48

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



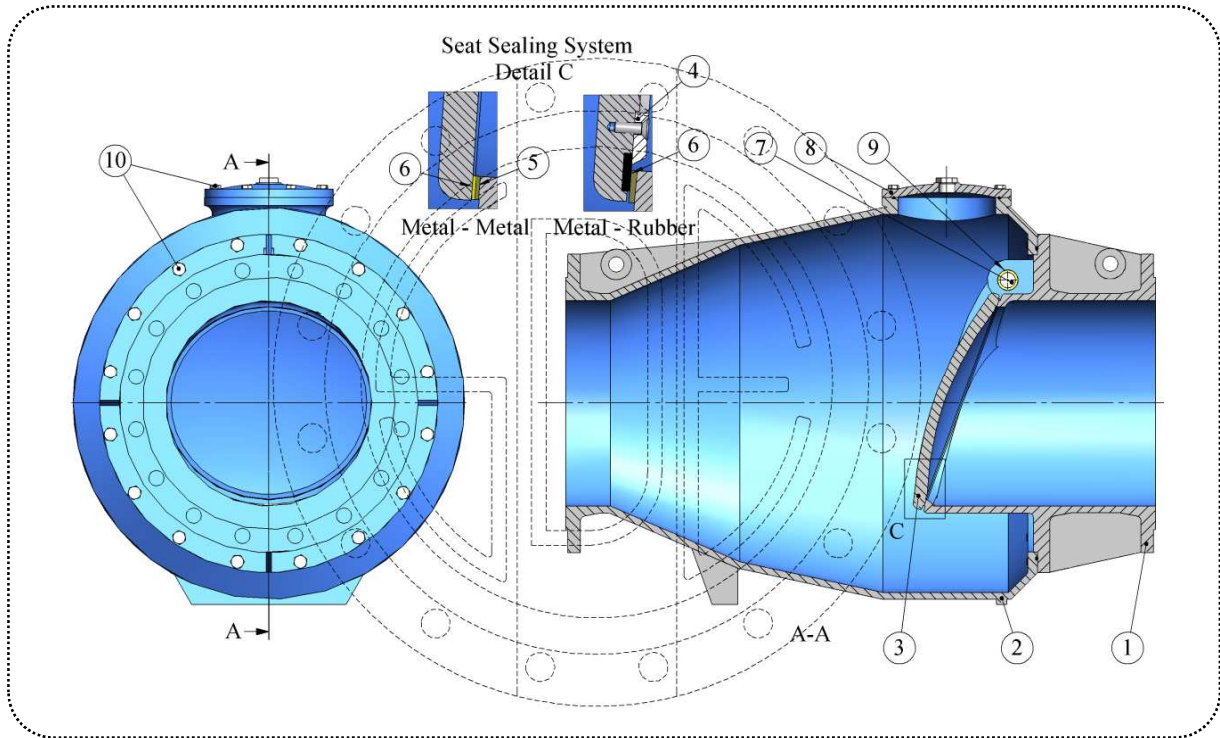
DIMENSIONS

DN	L	PN 10				PN 16				PN 20			
		A	B	C	Kg	A	B	C	Kg	A	B	C	Kg
600	1.300	541	568	1.072	1.305	580	609	1.150	1.373	583	613	1.157	1.656
650	1.400	579	607	1.147	1.517	603	633	1.196	1.597	621	652	1.232	1.927
700	1.500	616	647	1.222	1.714	626	657	1.242	1.805	659	692	1.308	2.179
750	1.600	662	695	1.314	1.961	665	699	1.321	2.066	698	733	1.386	2.495
800	1.700	695	730	1.380	2.200	701	736	1.393	2.320	741	778	1.471	2.800
900	1.900	760	798	1.511	2.925	767	805	1.524	3.090	806	846	1.602	3.761
1.000	2.100	836	877	1.661	3.706	852	895	1.694	3.925	895	939	1.779	4.780

DN	L	PN 25				PN 40							
		A	B	C	Kg	A	B	C	Kg				
600	1.300	583	613	1.157	1.656	613	644	1.216	2.141				
650	1.400	621	652	1.232	1.927	647	680	1.285	2.487				
700	1.500	659	692	1.308	2.179	682	716	1.353	2.808				
750	1.600	698	733	1.386	2.495	729	766	1.448	3.214				
800	1.700	741	778	1.471	2.800	777	816	1.543	3.604				
900	1.900	806	846	1.602	3.761	849	891	1.688	4.878				
1.000	2.100	895	939	1.779	4.780	921	967	1.832	6.191				

Inch	L	ANSI 125				ANSI 150							
		A	B	C	Kg	A	B	C	Kg				
24	1.300	583	613	1.157	1.656	583	613	1.157	1.656				
26	1.400	621	652	1.232	1.927	621	652	1.232	1.927				
28	1.500	659	692	1.308	2.179	659	692	1.308	2.179				
30	1.600	698	733	1.386	2.495	698	733	1.386	2.495				
32	1.700	741	778	1.471	2.800	741	778	1.471	2.800				
36	1.900	806	846	1.602	3.761	806	846	1.602	3.761				
40	2.100	895	939	1.779	4.780	895	939	1.779	4.780				

RECOIL CHECK VALVE



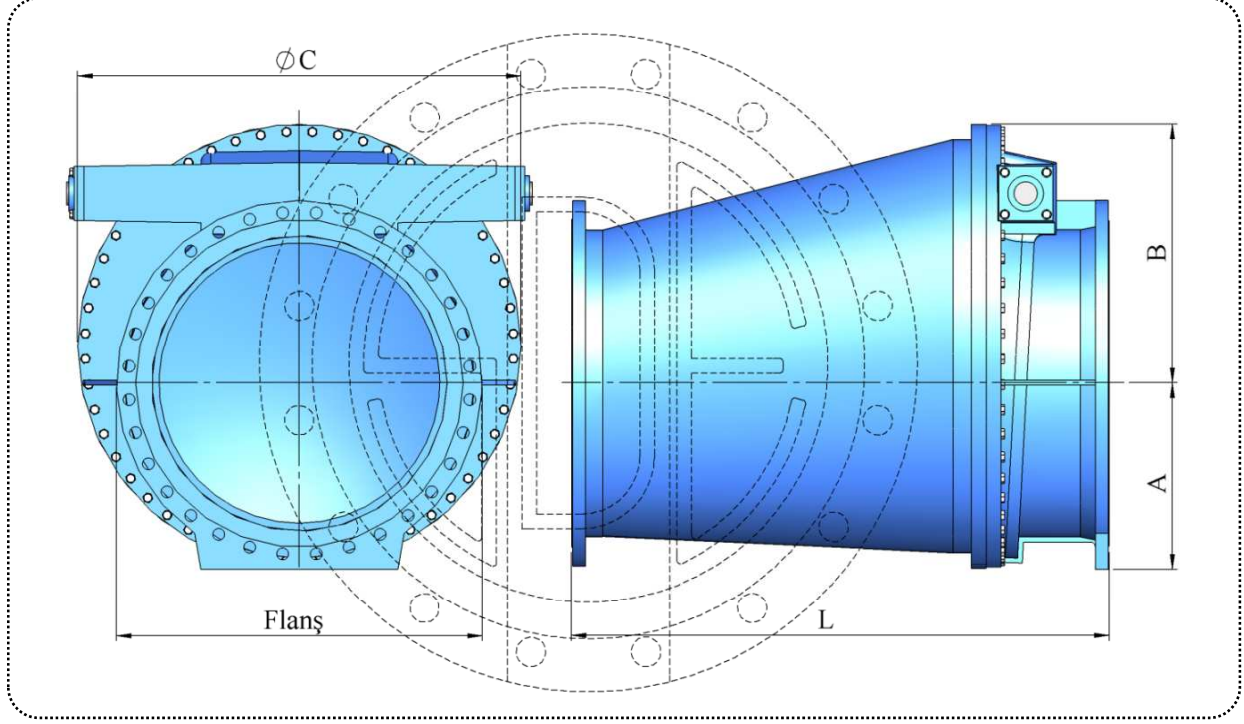
No	Item Name	Material	Description	EN Standard	Material No
1-2-8	Body and Covers	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
3	Disc	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		304	Stainless Steel Casting	G - X6CrNi 18-9	1.4308
		316		G - X6CrNiMo 18-10	1.4408
		CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
4	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
5	Body Seat	316 L	Stainless Steel Welding	12072	1.4430
		CuAl8	Aluminium Bronze Welding	14640 S Cu 6100	2.0921
6	Disc Seat	316 L	Stainless Steel Welding	12072	1.4430
		CuAl8	Aluminium Bronze Welding	14640 S Cu 6100	2.0921
		NBR - EPDM	Rubber	-	-
7	Shaft	420	Stainless Steel	X20Cr13	1.4021
		304		X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		431		X17CrNi16-2	1.4057
9	Bearings	Rg 5	Bronze	CC 491 K	2.1096.01
10	Bolts	Galvanized	Steel	-	-
		A 2 - A 4	Stainless Steel	-	-
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.					

RECOİL ÇEKVALF

Vana Boyu Standardı : EN 558-1, S 48

Vana Standardı : -

Ürünlerimizin kullanılacağı, izin verilen en yüksek sıcaklık, 80 derece santigrad'dır.



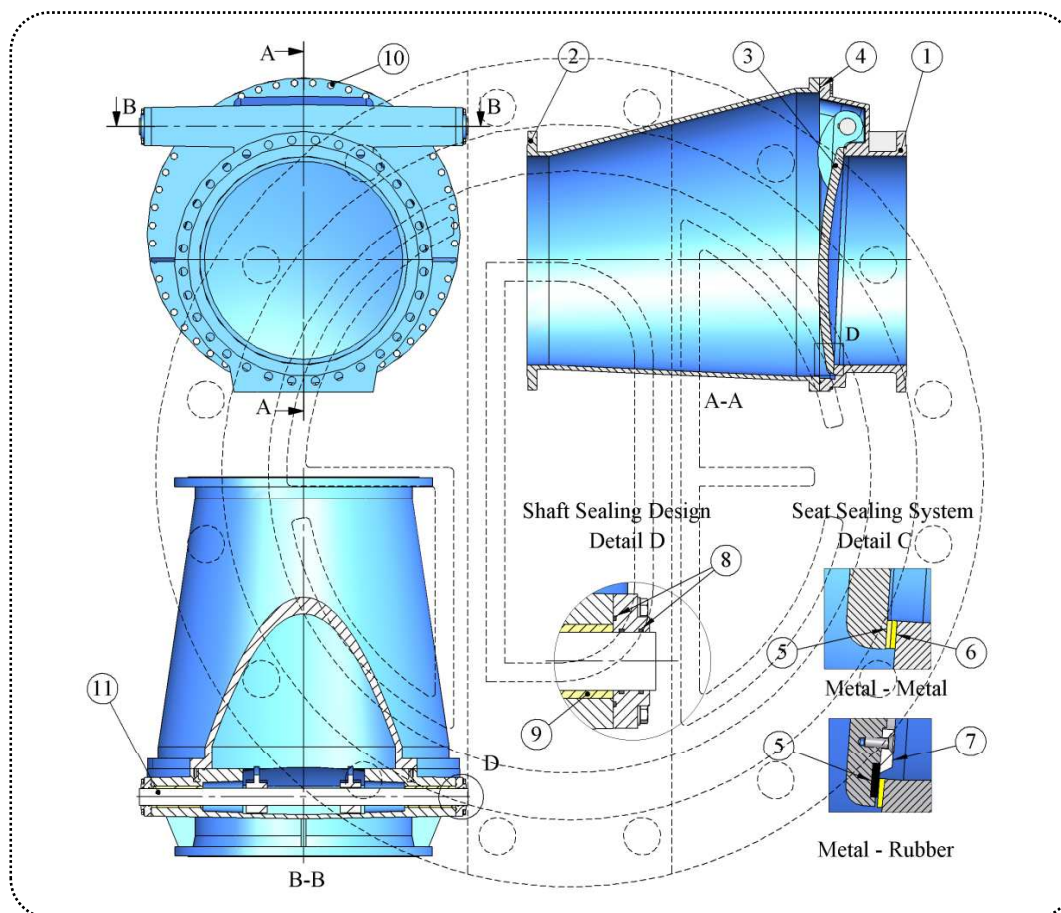
ÖLÇÜLER

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

İnç	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

RECOIL CHECK VALVE

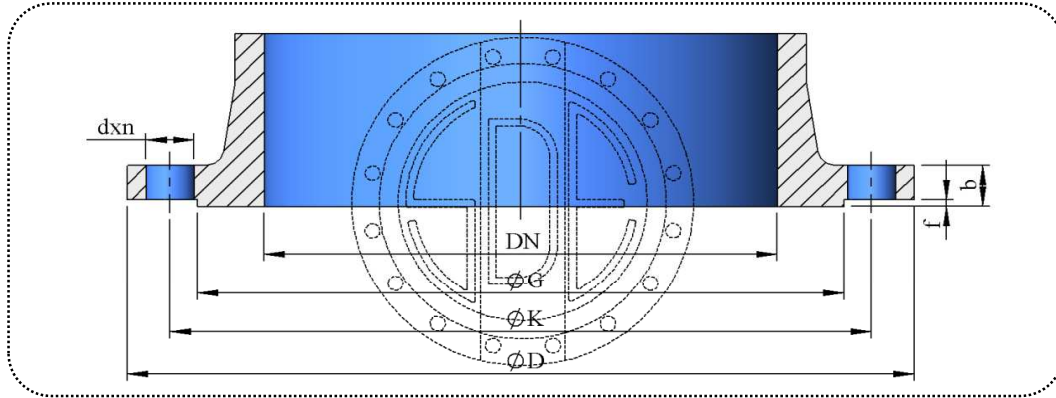


No	Part Name	Material	Description	EN Standard	Material No
1-2	Inlet and Outlet Body	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		ST 37-2	Steel Construction	EN 10025	1.0037
3	Disc	GGG 40	Ductile Iron	EN-GJS-450-15	0.7040
		GGG 50		EN-GJS-500-7	0.7050
		304	Stainless Steel Casting	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	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							