

FOOT VALVE



Pumps source the water that they will transfer into pipes, from water tanks, wells, pools, lakes or similar reservoirs.

Pumps can be located inside or outside of water reservoir. If they are outside, chamber of pumps should be filled with water to be operated.

To fill with water, a vacuum pump or by-pass system is used. By-pass system transfers water from outlet side of check valve to inlet side of it without opening disc of check valve. It is useless by its own.

There should be a check valve at the beginning of inlet pipe. This check valve is called foot valve. Otherwise, water coming from outlet moves back to reservoir; it is totally useless.

It is a type of check valve which consists of a cylindrical body, a disc inside it, a shaft and shaft housing that hold the disc, a cover carrying seat surface on and a strainer.

Foot valves are designed to be used only in clean water. They should not be used in sewage media.

Strainer prevents any kind of floating items in the water even like fish or snake from going into pipe line.

Foot valves are used at inlet side of pumps running outside of clean water reservoir like pool, well, lake or similar sources.

When pump runs after filling it with water by by-pass valve or other equipment, flow begins. Disc of foot valve opens by effect of flow travelling towards pump. Flow continues its travel by passing around the disc. When pump stops, disc closes by assistance of back flow and gravity. Its closure prevents the water in the pipe line to flow reversely.

Foot valve keeps chamber of pump and inlet of pump filled. Water is not drained back to reservoir. When needed, pump can be run immediately without making any work on it.

Installation Position,

It is installed at the beginning of vertical inlet pipe where it is inside water.

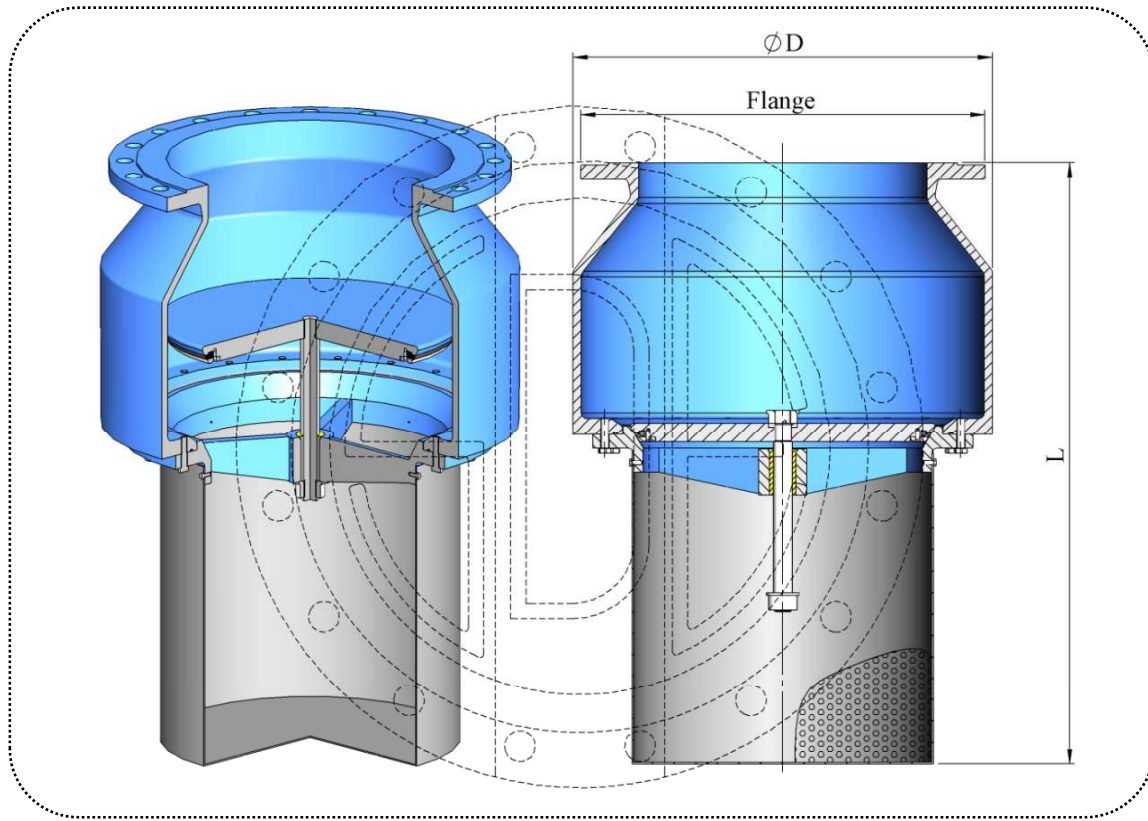
Maintenance,

There is no need for maintenance for these valves that are installed especially in clean water pipe-line. If valve is uninstalled, it is recommended to check disc ring (rubber ring), o-rings and change if necessary. Cleaning inside of the valve is also advised.

FOOT VALVE

Valve Standard : -

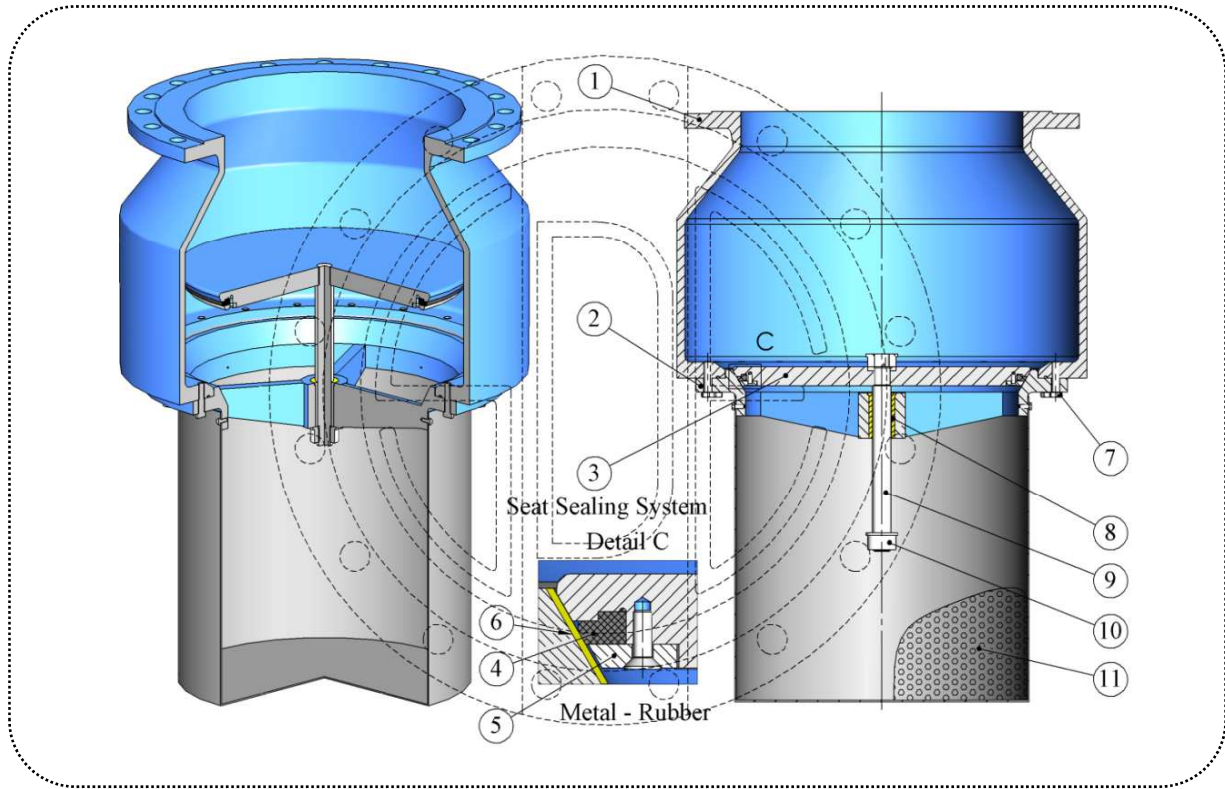
Maximum allowable working temperature for all types of our valves is 80 degrees Celcius.



DIMENSIONS

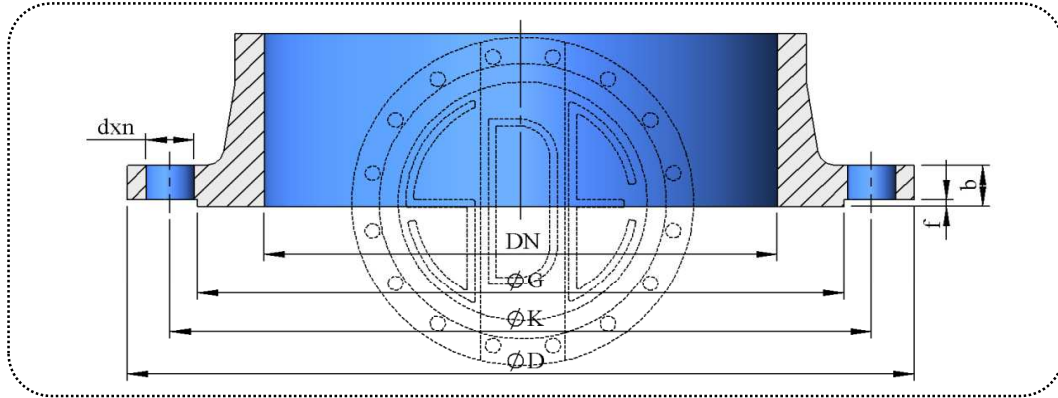
DN	L	PN 10		PN 16		PN 20		PN 25		Inch	ANSI 125	
		D	Kg	D	Kg	D	Kg	D	Kg		D	Kg
200	400	349	69	352	72	356	84	356	84	8	356	84
250	500	412	97	416	101	420	117	420	117	10	420	117
300	600	476	129	480	134	485	155	485	155	12	485	155
350	700	539	163	544	172	550	200	550	200	14	550	200
400	800	603	206	609	221	615	259	615	259	16	615	259
450	900	666	255	673	275	679	321	679	321	18	679	321
500	1.000	729	317	737	344	744	405	744	405	20	744	405
550	1.100	793	386	801	420	809	494	809	494	22	809	494
600	1.200	856	465	865	508	873	598	873	598	24	873	598
650	1.300	920	563	929	617	938	729	938	729	26	938	729
700	1.400	983	666	993	732	1.003	865	1.003	865	28	1.003	865
750	1.500	1.047	795	1.057	875	1.068	1.039	1.068	1.039	30	1.068	1.039
800	1.600	1.110	931	1.121	1.026	1.132	1.219	1.132	1.219	32	1.132	1.219
900	1.800	1.237	1.182	1.249	1.313	1.262	1.564	1.262	1.564	36	1.262	1.564
1.000	2.000	1.364	1.481	1.377	1.655	1.391	1.978	1.391	1.978	40	1.391	1.978
1.050	2.100	1.427	1.699	1.442	1.903	1.456	2.268	1.456	2.268	42	1.456	2.268
1.100	2.200	1.491	1.968	1.506	2.208	1.521	2.629	1.521	2.629	44	1.521	2.629
1.200	2.400	1.618	2.378	1.634	2.672	1.650	3.205	1.650	3.205	48	1.650	3.205
1.300	2.600	1.745	2.847	1.762	3.195							
1.400	2.800	1.871	3.360	1.890	3.817							
1.500	3.000	1.998	3.984	2.018	4.542							
1.600	3.200	2.125	4.697	2.146	5.371							
1.700	3.400	2.252	5.510									
1.800	3.600	2.379	6.379									
1.900	3.800	2.506	7.446									
2.000	4.000	2.633	8.660									

FOOT VALVE



No	Name	Material	Description	EN Standard	Material No
1-2-3	Body, Cover, 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
4	Disc Ring	NBR - EPDM	Rubber	-	-
5	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
6	Seat	316 L	Stainless Steel Welding	12072	1.4430
		CuAl8	Aluminium Bronze Welding	14640 S Cu 6100	2.0921
7	Bolts	A2 - A 4	Stainless Steel	-	-
8	Bearing	CC 331G-GS	Aluminium Bronze	CuAl10Fe2-C	2.0940.01
9-10	Shaft and Shaft Nut	420	Stainless Steel	X20Cr13	1.4021
		304		X5CrNi 18-10	1.4301
		316		X5CrNiMo17-12-2	1.4401
		431		X17CrNi16-2	1.4057
11	Strainer	304	Stainless Steel	X5CrNi 18-10	1.4301
		316		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							