



QUALITY  
PERSEVERANCE  
LEADS  
TOGETHER



**BJ VALVES PVT. LTD.**  
Quality Leads

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# LEADING QUALITY IS OUR PIVOT

## About Us

We the B J Valves established in the year 2023. We are experts in manufacturing Diaphragm Valves. We have experienced technocrats and engineers who have been in valve manufacturing field for decades. We are located at Belur Industrial Area, Dharwad, which is equidistant from Pune and Bangalore, Hubli Airport is 30 KMS from our facility, Belgaum airport is at 70 KMS.

## Vision

To be a pre-eminent leader and exemplar of international standards of quality assurance.

## Mission

To achieve, protect and ensure confidence in quality standards and continuous improvement, development and enhancement of quality management system in all work, procedures and operations.

## Our Objectives

- Support & Contribute in the Growth of our valued Suppliers.
- To meet the demands and innovations of diversified customers.
- A stitch in time saves nine, we promise on timely supply.
- Eco Friendly practices at all our workplaces in harmony with nature.
- Reliable Quality Services and Customer Priority stays at focus.



## DIAPHRAGM VALVE

Diaphragm valves are bidirectional. They can be used as on-off and throttling valves. Diaphragm valves offer advantages in certain low-pressure applications not possible with other types of valves. Their fluid passages are smooth and streamlined, minimizing pressure drop. They are suitable for moderate throttling applications, and they exhibit excellent leak-tight characteristics, even when conveying liquids containing suspended solids. The fluid stream is isolated from the working parts of the valve, preventing contamination of the fluid and corrosion of the operating mechanism. Since there is no leak path around the valve stem, the valve is virtually leak-tight. This feature makes the valve indispensable where leakage into or out of the system cannot be tolerated.

The maximum pressure that these valves can be subjected to is a function of the diaphragm material and the service temperature. Also, the rated design life of the valve is influenced by the service conditions. Furthermore, the system hydrostatic test pressure must not exceed the maximum pressure rating of the diaphragm.



### Construction:

Diaphragm valves consist of a rigid body formed with a weir placed in the flow path, a flexible diaphragm which forms the upper pressure boundary of the valve, a compressor which is used to force the diaphragm against the weir, and the bonnet and the handwheel which secure the diaphragm to the body and actuate the compressor.

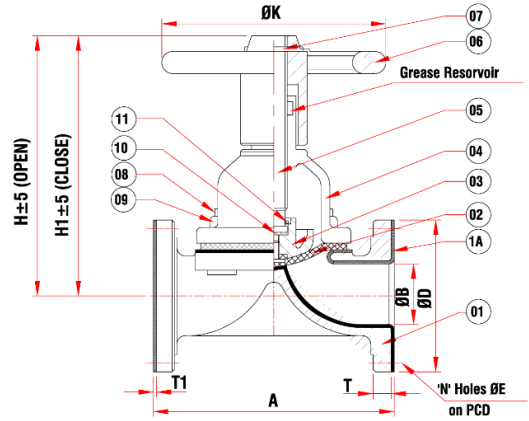
Diaphragm valves are manufactured in a variety of end connections: flanged ends, socket weld ends, butt weld ends or screwed ends. Diaphragm valves are available in a wide choice of body, diaphragm, and lining materials that are suitable for service with a wide variety of chemicals. For severe corrosive applications, diaphragm valves are made of stainless steel or PVC plastics, or they are lined with glass, rubber, plastics, or still other materials.

### Advantages:

The following summarizes some distinct advantages of diaphragm valves;

1. Can be used as on-off and throttling service valves.
2. Offer good chemical resistance due to variety of linings available.
3. Steam leakage is eliminated.
4. Provides bubble-tight service.
5. Does not have pockets to trap solids, slurries, and other impurities.
6. It is suitable for slurries and viscous fluids. These valves are particularly suitable for hazardous chemicals and radioactive fluids.
7. These valves do not permit contamination of flow medium, thus they are used extensively in food processing, pharmaceutical, brewing and other applications which cannot tolerate any contamination.

# WEIR TYPE DIAPHRAGM VALVE



No	Part Name	Material	No	Part Name	Material
1	Body	CI/DI/Alloy Steel	06	Handwheel	CI
1A	Lining	Rubber	07	Handwheel Pin	Steel
02	Diaphragm	Rubber/PTFE + Rubber Pad	08	Body Studs & Nuts	Steel
03	Compressor	CI	09	Thrust Washer	Nylon
04	Bonnet	CI/DI/Alloy Steel	10	Compressor Pin	Steel
05	Spindle	Steel			

Design Standard: BS: BS5156, DIN3202

Flanged Ends To: ANSI #150, PN10, BS10, Table D, E&F

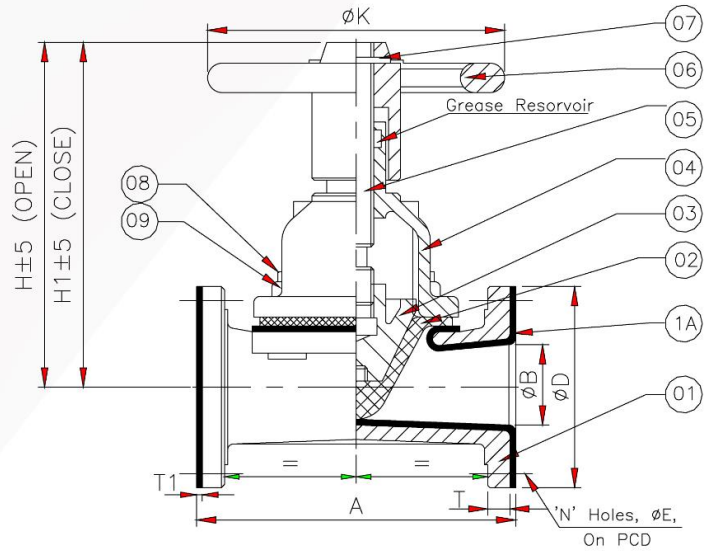
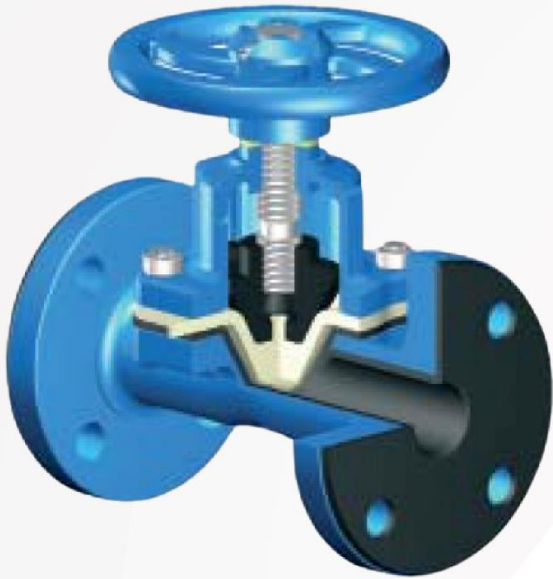
Body Lining: Ebonite (Hard), Natural, Butyl, Neoprene, EPDM, Nitrile

Diaphragm: Natural, Butyl, Neoprene, EPDM, Nitrile, Hypalon & PTFE with Rubber Pad

		Size	DN	25	32	40	50	65	80	100	125	150	200	250	300	
UNLINED RF	H	mm		140	139	172	190	230	242	326	391	468	683	839	997	
	H1	mm		132	127	152	166	197	206	276	326	390	563	694	822	
	A	mm	BS		127	146	159	190	216	254	305	356	406	521	635	749
			DIN		160	180	200	230	290	310	350	400	480	600	730	850
	Wt.	Kg	BS		4.2	6.4	7.5	12	18	23	34	50	69	150	220	300
			DIN		4.4	6.6	8.5	12.5	19	25	36	52	75	160	235	315
RUBBER LINED FF	H	mm		143	142	175	193	233	245	330	395	472	687	843	1001	
	H1	mm		133	130	155	169	200	209	280	330	394	567	698	826	
	A	mm	BS		133	152	165	196	222	260	313	364	414	529	643	757
			DIN		160	180	200	230	290	310	350	400	480	600	730	850
	Wt.	Kg	BS		5	7	8.5	13	19	25	36	53	73	155	227	307
			DIN		5.5	8	9.5	14.5	20	27	38	55	79	165	242	322
	Ø B(min)	mm		26	32	38	51	63.5	76	102	127	152	203	254	305	
	Ø K	mm		120	120	120	164	220	240	270	270	360	460	600	700	

\*Due to continuous developments we reserve the rights to change the specifications without notice

# STRAIGHT THROUGH TYPE DIAPHRAGM VALVE



No	Part Name	Material	No	Part Name	Material
1	Body	CI/DI/Alloy Steel	05	Spindle	Steel
1A	Lining	Rubber	06	Handwheel	CI
02	Diaphragm	Rubber/PTFE + Rubber Pad	07	Handwheel Pin	Steel
03	Compressor	CI	08	Body Studs & Nuts	Steel
04	Bonnet	CI/DI/Alloy Steel			

**Design Standard:** BS: BS5156, DIN3202

**Flanged Ends To:** ANSI #150, PN10, BS10, Table D, E&F

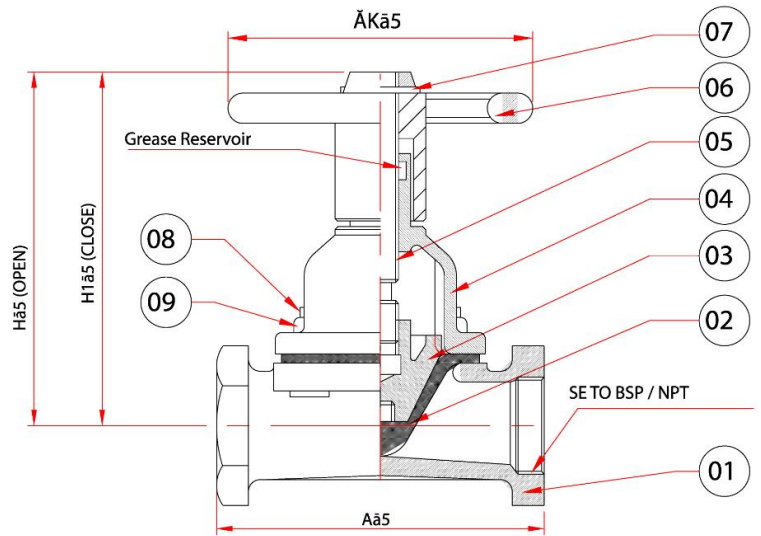
**Body Lining:** Ebonite (Hard), Natural, Butyl, Neoprene, EPDM, Nitrile

**Diaphragm:** Natural, Butyl, Neoprene, EPDM, Nitrile, Hypalon & PTFE with Rubber Pad

	Size	DN	25	32	40	50	65	80	100	125	150	200	250	300
			H	mm	135	135	135	195	221	284	291	308	411	485
UNLINED RF	H1	mm	123	123	123	176	197	254	258.5	270.5	360	422.5	525.5	662
	A	mm	BS	127	146	159	190	216	254	305	356	406	521	635
DIN			160	180	200	230	290	310	350	400	480	600	730	850
Wt.	Kg	BS	4.3	6.5	7	10.5	15.5	22.5	30	44	63	112	170	258
		DIN	4.8	7.5	8	11.5	16.5	25.5	32	46	69	126	185	273
RUBBER LINED FF	H	mm	138	138	138	198	224	287	295	318	415	489	602	761
	H1	mm	126	126	126	179	200	257	262.5	274.5	364	426.5	529.5	666
A	mm	BS	133	152	165	196	222	260	313	364	414	529	643	757
		DIN	160	180	200	230	290	310	350	400	480	600	730	850
Wt.	Kg	BS	4.5	7	8	12	17	24	34	48	71	121	190	278
		DIN	5	8	9	13.5	18	27	34	48	71	121	190	278
Ø B(min)	mm	26	32	38	51	63.5	76	102	127	152	203	254	305	
Ø K	mm	120	120	120	164	220	240	270	270	360	460	600	700	

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# SCREWED END WEIR TYPE & ST TYPE DIAPHRAGM VALVE



No	Part Name	Material	No	Part Name	Material
01	Body	CI/DI/Alloy Steel	06	Handwheel	CI
02	Diaphragm	Rubber/PTFE + R/P	07	Handwheel Pin	Steel
03	Compressor	CI	08	Body Studs & Nuts	Steel
04	Bonnet	CI/DI/Alloy Steel	09	Thrust Washer	Nylon
05	Spindle	Steel	10	Compressor Pin	Steel

Diaphragm: Natural, Butyl, Neoprene, EPDM, Nitrile, PTFE + Rubber Pad (Only in W-Type)

\*CI-IS 210 FG 260 (GG 25)

DI-BS 2789 420/12 (GGG 40)

CF8-ASTM A351 Gr CF8 (INVESTMENT CASTING)

CF8M-ASTM A351 Gr CF8M (INVESTMENT CASTING)

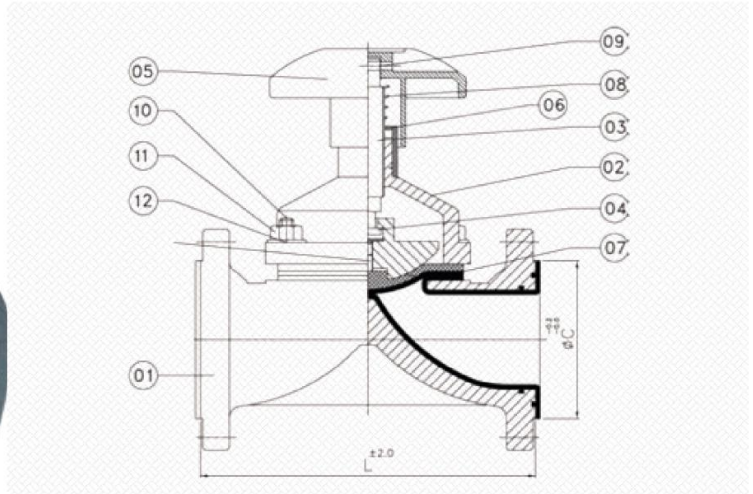
CF8M-ASTM A351 Gr CF8M (INVESTMENT CASTING)

\*\*Ss304 with Washer for CI/DI Body with PTFE Diaphragm

	Weir Type							ST Type					
	Size	DN	25	32	40	50		Size	DN	25	32	40	50
H	Mm		140	139	172	190	H	Mm		137	141	138	203
H1	Mm		132	127	152	166	H1	Mm		125	129	126	184
A	CI/DI		108	121	140	165	A	CI/DI		108	121	140	165
Mm	Alloy Steel		127	146	159	190	Mm	Alloy Steel		127	146	159	190
K	Mm		120	120	120	164	K	Mm		120	120	120	164
Wt.	CI/DI		3.2	4	6	8	Wt.	CI/DI		3.8	5.7	6	8
Kg	Alloy Steel		4	5	7	9	Kg	Alloy Steel		4.5	6.5	7	9

\*Due to continuous developments we reserve the rights to change the specifications without notice

# PTFE LINED DIAPHRAGM VALVE



No	Part Name	Material	No	Part Name	Material
01	Lined Body	Ductile Iron GGG40.3 FEP Lined	07	Diaphragm (Pin Type)	PTFE Backed with Rubber
02	Bonnet	Ductile Iron/WCB	08	Compression	Spring S.S.
03	Spindle	C.S PTFE Coated	09	Dowell	Pin Spring Steel
04	Compressor	Pin Type Ductile Iron/WCB	10	Stud	S.S.
05	Handwheel	ABS/Metallic	11	Nut	S.S.
06	Opening Indicator	HDPE	12	Plain Washer	S.S.

**Design Standard:** BS: BS5156, DIN3202

**Flanged Ends To:** ANSI #150, PN10, BS10, Table D, E&F

BS EN558-2, TABLE-7, SERIES-7 EN12266-1(2003), TABLE A3, DIN320

**Lining:** PFA-ASTM D 3307, FEP-ASTM D 2116, ETFE-ASTM D 3159, PVDF- ASTM D 3322, PP-ASTM D 4101

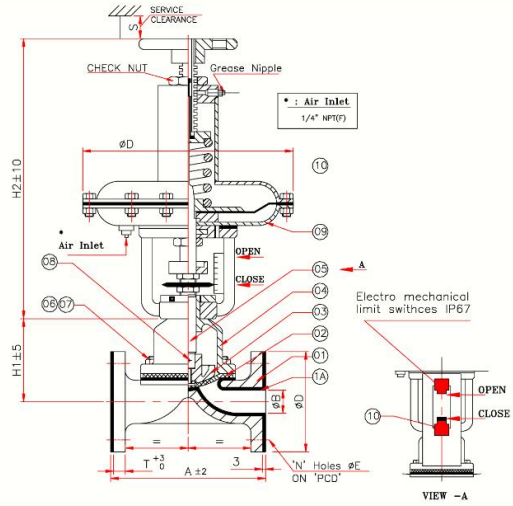
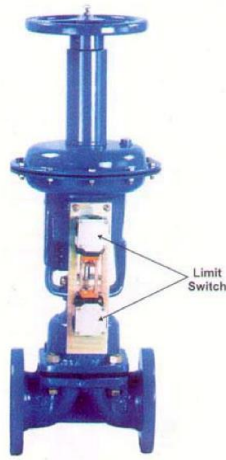
\*Ductile Iron GGG40.3/ASTM A395, Cast Steel ASTM A216 Gr. WCB, ASTM A351 Gr. CF8/ S.S.304, ASTM A351 Gr. CF8M/ S.S.316

Size	DN	15	20	25	40	50	65	80	100	125	150	200	250
L	mm	108	117	127	159	190	216	254	305	353	406	520	635
C	mm	35	43	51	73	92	104	127	158	185	214	266	320
Torque	Nm	80	85	115	155	155	190	200	245	300	360	Available on Request	

\*Due to continuous developments we reserve the rights to change the specifications without notice



# WEIR TYPE DIAPHRAGM VALVE WITH SINGLE ACTING NORMALLY CLOSED (AIR TO OPEN) PNEUMATIC ACTUATOR WITH EMERGENCY HANDWHEEL



No	Part Name	Material	No	Part Name	Material
01	Body	Cl/DI/Alloy Steel	05	Spindle	Steel
1A	Lining	Rubber	06	Body Studs	Steel
02	Diaphragm	Rubber/PTFE + Rubber Pad	07	Body Nuts	Steel
03	Compressor	Cl	08	Compressor Pin	Steel (EN42)
04	Bonnet	Cl/DI/Alloy Steel	09	Actuator	-

Design Standard: BS: BS5156, DIN3202

Flanged Ends To: ANSI # 150, PN10, BS10, Table D, E&F

Body Lining: Ebonite (Hard), Natural, Butyl, Neoprene, EPDM, Nitrile

Diaphragm: Natural, Butyl, Neoprene, EPDM, Nitrile, Hypalon & PTFE with Rubber Pad

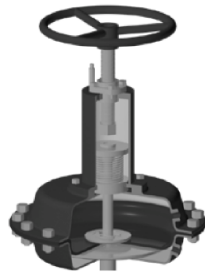
	Size	DN	25	32	40	50	65	80	100	125	150	200	250	
			mm	77	85	109	99	130	140	205	235	285	405	450
UNLINED RF	H1	mm	470	490	490	670	700	740	740	770	1080	1130	-	
	A	mm	BS	127	146	159	190	216	254	305	356	406	521	635
			DIN	160	180	200	230	290	310	350	400	480	600	730
		S	200	200	200	200	250	250	300	300	300	350	350	
RUBBER LINED FF	H1	mm	475	495	495	675	705	745	745	775	1085	1130	-	
	A	mm	BS	133	152	165	196	222	260	313	364	414	529	643
			DIN	160	180	200	230	290	310	350	400	480	600	730
		S	200	200	200	200	250	250	300	300	800	350	350	
ACTUATOR MODEL			1018RWT	1018RWT	1035RWT	1002RWT	1002RWT	1003RWT	1003RWT	1005RWT	1005RWT	A2=300RWT	A2=300RWT	

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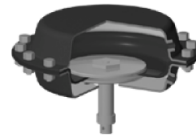
# PNEUMATIC ACTUATOR FOR WEIR TYPE DIAPHRAGM VALVES



AF Reverse Acting



AF Direct Acting



AF Double Acting



## MAIN FEATURES

- Weir & Straight through type, with rubber diaphragms and PTFE / rubber backed diaphragms.
- Rugged columnness design.
- Single acting (Direct and reverse actions) or Double Acting.
- Visual position indicator for open / close.
- Possibility of assembly of additional devices / accessories.
- Operating ambient temperatures  $-20^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ .
- Fully traceable at the manufacture facility, identified by aluminum riveted plates.
- Top mounted emergency hand wheels for manual operation on Single Acting Optional for Double Acting

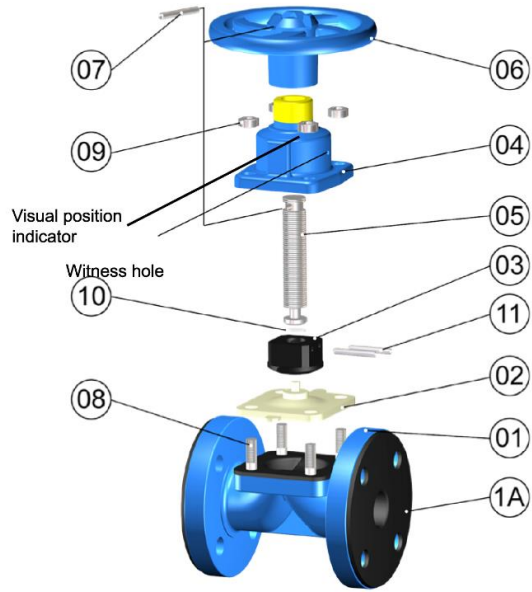
## WORKING PRINCIPLE

- Direct Acting actuator is designed to operate from a normally open position. Air pressure on the top side of actuator diaphragm closes the valve and the spring opens the valve when the air is released from the actuator.
- Reverse Acting actuator is designed to operate from a normally closed position. Air pressure on the bottom side of the actuator diaphragm opens the valve. When air is released spring closes the valve.
- Double Acting actuator is designed to open or close through the air supply remaining on the last position if no further air supply /exhaust.

## CONTROL ACCESSORIES

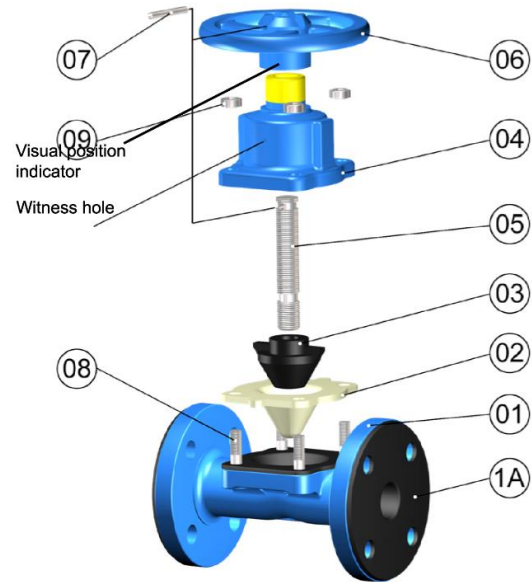
There is a number of control accessories available to be assembled on our actuators. These accessories are comprehensive of limit switches (mechanical or inductive type), proximity sensors, solenoid valves, air speed regulators, positioners, air gauge sets and many other customized solutions. Control accessories may be specified and provided by the customer, however, only those accessories installed and tested at our facilities are covered by a performance guarantee.

**WEIR TYPE  
DIAPHRAGM  
VALVE**



No	Part Name	Material	No	Part Name	Material
1	Body	CI/DI/Alloy Steel	06	Handwheel	CI
1A	Lining	Rubber	07	Handwheel Pin	Steel
02	Diaphragm	Rubber/PTFE + Rubber Pad	08	Body Studs	Steel
03	Compressor	CI	09	Body Nuts	Steel
04	Bonnet	CI/DI/Alloy Steel	10	Thrust Washer	Nylon
05	Spindle	Steel	11	Compressor Pin	Steel

**STRAIGHT  
THROUGH  
TYPE  
DIAPHRAGM  
VALVE**



No	Part Name	Material	No	Part Name	Material
1	Body	CI/DI/Alloy Steel	05	Spindle	Steel
1A	Lining	Rubber	06	Handwheel	CI
02	Diaphragm	Rubber/PTFE + Rubber Pad	07	Handwheel Pin	Steel
03	Compressor	CI	08	Body Studs	Steel
04	Bonnet	CI/DI/Alloy Steel	09	Body Nuts	Steel



## INDUSTRIES WE SERVE

1. Equipment Manufacturers
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7. Fertilizers
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12. Sewage Treatment
13. Pharmaceuticals
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15. Water Treatment
16. Steel & Allied Industry
17. D. M. Plant

## BJ VALVES PVT. LTD.

Quality Leads

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