

JFS

BEIJING JOINT FLOW SYSTEM CO.



PLUG VALVE



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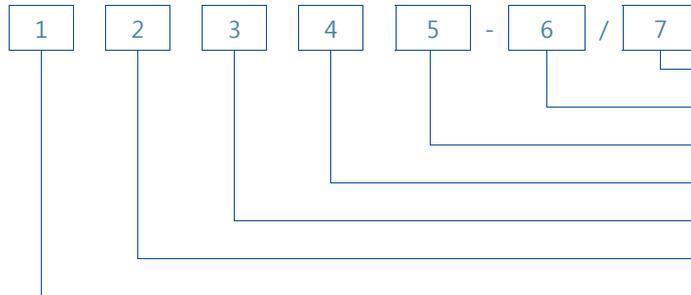
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ORDERING GUIDE



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- Valve Type

1. Valve Type

Type	Plug Valve
Code	6

2. Operation Type

Type	Bare Shaft	Manual	Electric Actuator	Pneumatic	Hydraulic
Code	1	2	3	4	5

*Manual operation includes Hand-wheel and Worm-wheel.

3. Structure Type

Structure	Eccentric type	Multiport type	Lifting type	Lined type	Pressure Balanced
Code	1	2	3	4	5

4. End Type

Type	Flange	Groove	Mechanical Joint	Butt Weld	Socket Weld
Code	1	2	3	4	5

*More end specifications are available on request.

5. Sealing Type

Type	Soft Sealing	Metal Sealing	Oil Sealing
Code	1	2	3

6. Valve Material

Parts	Cast Iron	Ductile Iron	Carbon (Cast) Steel	Stainless Steel	Alloy Steel
Body	B1	B2	B3	B4	B5
Plug	P1	P2	P3	P4	P5

*More material specifications are available on request.

7. Nominal Pressure

PN	1.0(MPa)	1.6(MPa)	2.5(MPa)	125(lb)	150(lb)	250(lb)	300(lb)	600(lb)	900(lb)	1500(lb)
Code	10	16	25	125	150	250	300	600	900	1500

*More pressure specifications are available on request.

ECCENTRIC PLUG VALVE

Plug valves are extremely versatile valves that are found widely in low-pressure sanitary and industrial applications, especially petroleum pipelines, chemical processing and related fields, and power plants.

FEATURE

- Efficient economical flow.
- High capacity.
- Safely and efficiently handle gas.
- Regulate the flow of liquids.
- Self-adjusting stem seal.
- Poison free Epoxy coating surface can meet different media requirements. The Epoxy thickness is not less than 0.3mm.
- Better flow characteristics resulting in less pressure drop across the valve.
- Reduces plugging problems.
- Less erosion, longer service life and reduced pumping costs.

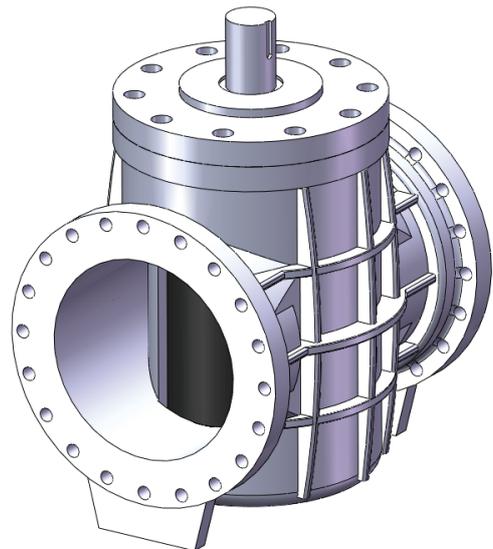


INSTALLATION

The eccentric plug valve is suitable for flow and shut-off in either direction. Seat end downstream is the preferred orientation and any reverse flow requirement should be stated at time of order. For use on fluids with suspended solids, installation with the seat upstream and the valve stem horizontal may be preferable; plug rotation to the top of the valve will ensure smooth operation.

IN-LINE MAINTENANCE

In the unlikely event of gland leakage, the stem seals can be easily replaced without removing the bonnet. Access to the body for cleaning or inspection does not require removal from the line.



POWER OPERATION

Pneumatic, electric actuator is available, complete with accessories such as limit switches, positioners when required.

ECCENTRIC PLUG VALVE

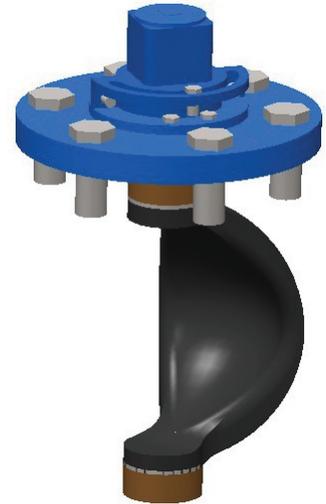
CONSTRUCTION

{Body} The eccentric plug valve body casting is in cast iron using high pressure molding techniques for consistent quality and precision.

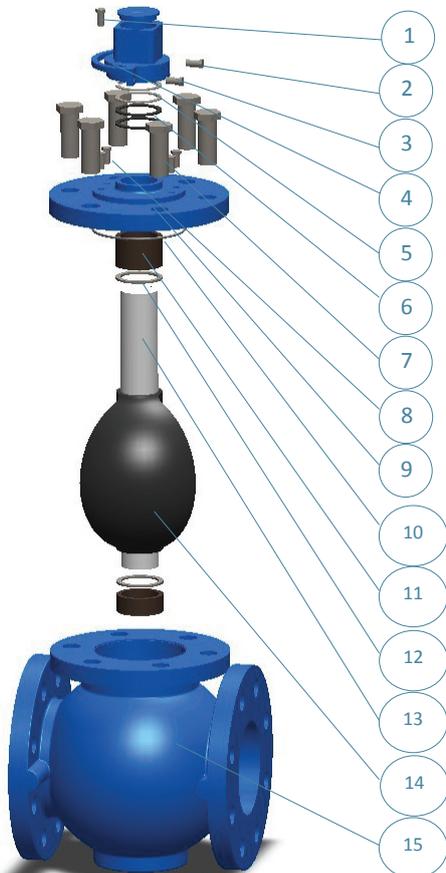
{Plug} The plug of the eccentric plug valve is supported on integral trunnions. Its face is covered with an elastomer, providing tight shut off even under vacuum conditions. High integrity corrosion free sealing is achieved by a variety of abrasion resistant elastomers which protect the plug right up to the trunnions. When assembled, the light compression of the elastomers onto PTFE thrust washers, prevents entry of abrasive materials into the bearings.

{Seat} The eccentric plug valve incorporates as standard, a welded nickel seat for corrosion and erosion resistance specially profiled for low torques and extended seat life.

{Stem Seal} High integrity sealing by combining the advantages of a resilient and abrasion resistant U-cap seal.



PARTS LIST & MATERIAL (<DN350/14")



No.	Parts Name	Material
1	Open Limit Bolt	Steel
2	Locking Bolt	Steel
3	Close Limit Bolt	Steel
4	Torque Collar	Cast Iron / Stainless Steel
5	Retaining Ring	Spring Steel
6	U-Cup Seal	Elastomeric
7	Cap Screw	Steel
8	Travel Block	
9	Bonnet	Cast Iron / Stainless Steel
10	O-Ring	Elastomeric
11	Bearing	Stainless Steel / Bronze
12	Thrust Washer	PTFE
13	Plug	Cast Iron / Stainless Steel
14	Plug Lining	Elastomeric
15	Body	Cast Iron / Stainless Steel

*More material specifications are available on request.

ECCENTRIC PLUG VALVE

ELASTOMERS SELECTION

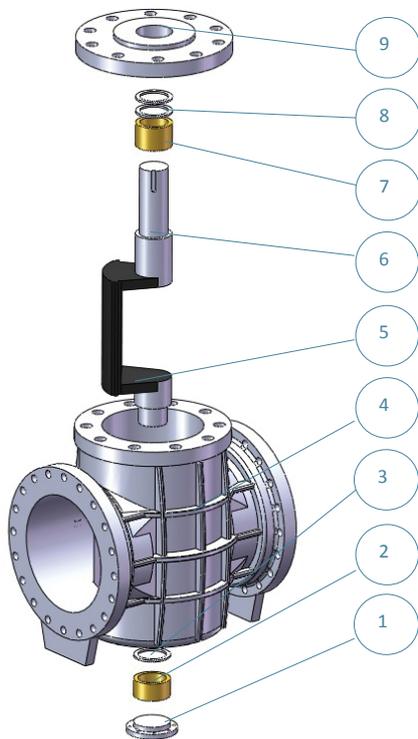
{Nitrile} A general purpose material sometimes referred to as BUNA-N or HYCAR with a -10° C to 100° C temperature range. Used on sewage, water, hydrocarbon and mineral oils.

{EPDM} An excellent polymer for use on chilled water through to LP steam applications having a temperature range of -10° C to 120° C. Resistance to many acids, alkalis, detergents, phosphate esters, alcohols and glycols is an added benefit.

{Neoprene} This versatile material shows outstanding resistance to abrasion and ozone. Chemical resistance to a wide range of petroleum based products and dilute acids and alkalis. Temperature range -10° C to 100° C.

{Viton} Retention of mechanical properties at high temperature is an important feature of this elastomer: temperature range is -10° C to 200° C. It also has excellent resistance to oils, fuels, lubricants and most mineral acids and aromatic hydrocarbons.

PARTS LIST & MATERIAL (≥DN350/14")

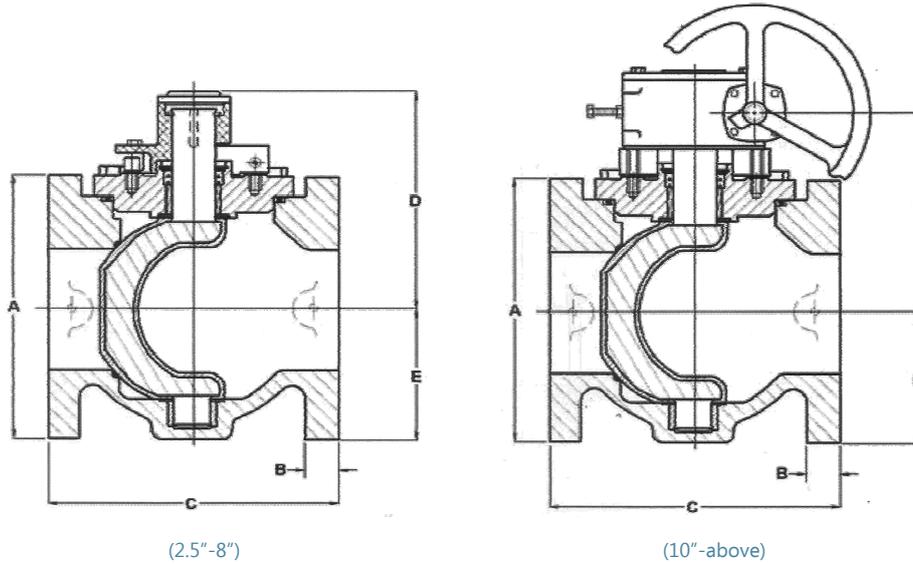


No.	Parts Name	Material
1	Bottom Cap	Cast Iron / Stainless Steel
2	Down Bearing	Stainless Steel / Bronze
3	Down Thrust Washer	PTFE
4	Body	Cast Iron / Stainless Steel
5	Plug Lining	Elastomeric
6	Plug	Ductile Iron / Cast Iron / Stainless Steel
7	Bearing	Stainless Steel / Bronze
8	Thrust Washer	PTFE
9	Bonnet	Cast Iron / Stainless Steel

*More material specifications are available on request.

ECCENTRIC PLUG VALVE

DIMENSION (175PSI / ≤14")



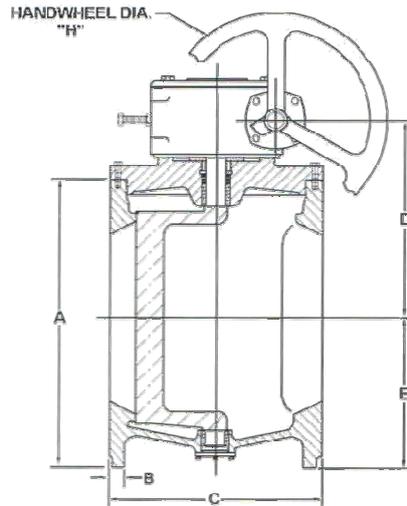
DN (mm)	NPS (inch)	A	B	C	D	E	F	G
65	2-1/2	178	17	191	157	89	137	152
80	3	191	19	203	157	95	142	152
100	4	229	23	254	213	146	192	152
125	5	254	23	254	213	146	192	152
150	6	280	25	267	213	146	192	152
200	8	343	28	292	271	199	245	305
250	10	406	30	330	-	226	295	305
300	12	482	32	356	-	254	228	305
350	14	533	35	432	-	330	338	305

*Flange dimensions refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.

ECCENTRIC PLUG VALVE

DIMENSION (150PSI / ≥14")



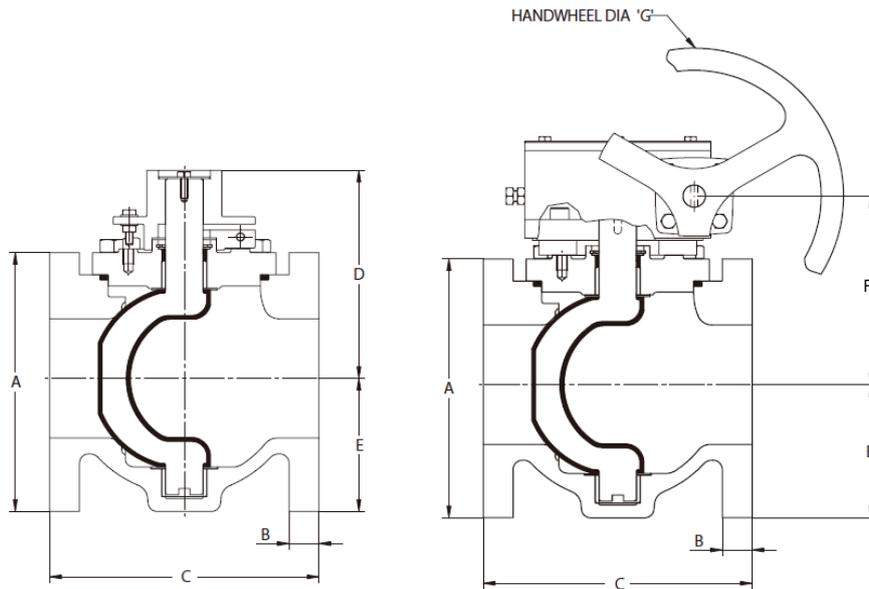
DN (mm)	NPS (inch)	A	B	C	D	E	H
350	14	533	35	431	382	330	457
400	16	591	36	450	401	355	457
450	18	635	39	546	432	381	457
500	20	698	42	597	519	406	457
600	24	813	47	1067	581	549	610
750	30	984	53	1295	701	629	610
900	36	1168	60	1524	838	736	610
1050	42	1346	66	1829	955	736	762
1200	48	1511	70	2133	955	914	762
1350	54	1683	76	2438	955	914	762

*Flange dimensions refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.

ECCENTRIC PLUG VALVE

DIMENSION (PN10 & 16 / <DN350)



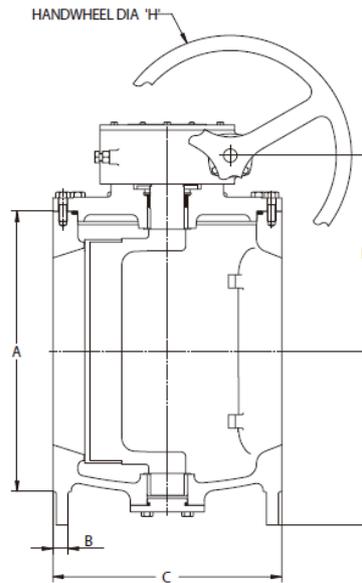
DN (mm)	NPS (inch)	A	B	C	D	E	F	G
65	2-1/2	178	20	191	157	89	137	152
80	3	191	22	203	157	95	142	152
100	4	229	24	229	184	114	160	152
125	5	254	26	254	211	146	192	152
150	6	279	26	267	213	146	192	152
200	8	343	30	292	271	194	245	305
250	10	406	32	330	-	226	295	305
300	12	483	32	356	-	254	338	305

*Flange dimensions refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.

ECCENTRIC PLUG VALVE

DIMENSION (PN10&16 / ≥DN350)



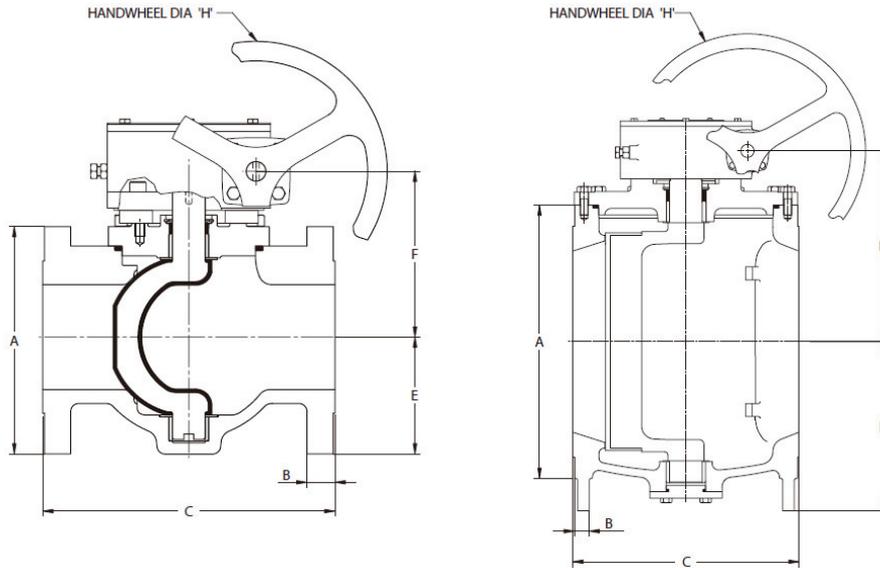
DN (mm)	NPS (inch)	A	B	C	D	E	H
350	14	533	35	431	383	330	457
400	16	591	36	450	402	356	457
450	18	635	40	546	432	381	457
500	20	699	43	597	519	406	457
600	24	813	48	1067	581	549	610
700	28	984	54	1295	701	629	610
800	32	984	54	1295	701	629	610
900	36	1168	60	1524	838	737	610
1000	40	1346	67	1829	956	737	762
1200	48	1511	70	2134	956	914	762
1400	56	1683	76	2438	956	914	762

*Flange dimensions refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.

ECCENTRIC PLUG VALVE

DIMENSION (PN25)



DN (mm)	NPS (inch)	A	B	C	E	F	H
65	2-1/2	191	27	241	89	152	152
80	3	210	28	282	95	175	152
100	4	254	32	305	114	179	152
125	5	279	35	381	146	211	152
150	6	318	36	403	146	211	152
200	8	381	41	419	210	257	305
250	10	445	48	457	226	353	305
300	12	521	51	502	254	375	305
350	14	584	54	470	330	383	457
400	16	648	57	492	356	402	457
450	18	711	60	487	381	432	457
500	20	775	64	635	406	519	457
600	24	914	70	1089	549	581	610
700	28	1092	76	1318	629	701	610
800	32	1092	76	1318	629	701	610
900	36	1270	86	1549	737	838	610

*Flange dimensions refer to Catalogue of Accessory: Series 8 – Flange.

*More dimension specifications are available on request.