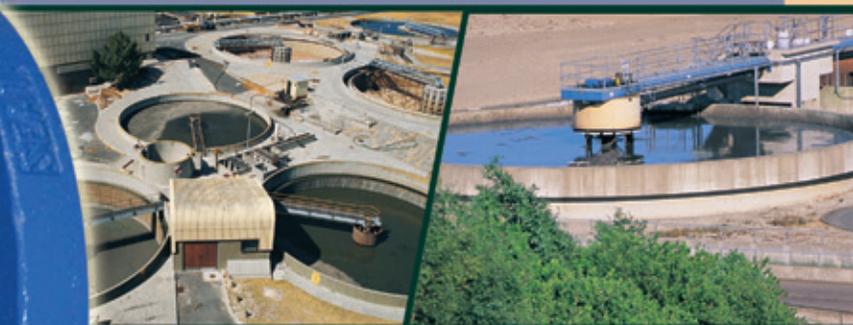


S E R I E S

Eccentric Plug Valve

120



For over 120 years

Homestead® has been

building a reputation

of dependability,

reliability, safety and

uncompromising quality.

120 YEARS of
Dependability

HOMESTEAD®
WATER PRODUCTS

120 years of quality is built into every Homestead®

Dependable Valves for Water, Wastewater & HVAC Service

FEATURES & BENEFITS

BODY: The Homestead eccentric body casting is in ASTM A126 Class B cast iron. Flange thickness, diameter and drilling fully conform to ANSI B16.1 Class 125. Alternative mechanical joint ends are available. A wide range of high quality epoxy coatings can be applied externally and internally to protect the casting integrity and assure long, trouble-free performance.

SEAT: Homestead's eccentric valve seat has been geometrically optimized for low torque operation and extended life. A welded seat of 95% minimum nickel content is incorporated to resist the effects of corrosion and erosion.

STEM SEAL: Homestead's fully adjustable seals assure stem sealing in even the most demanding applications.

BEARINGS: Permanently self lubricated radial bearings are utilized to assure long trouble-free operation.

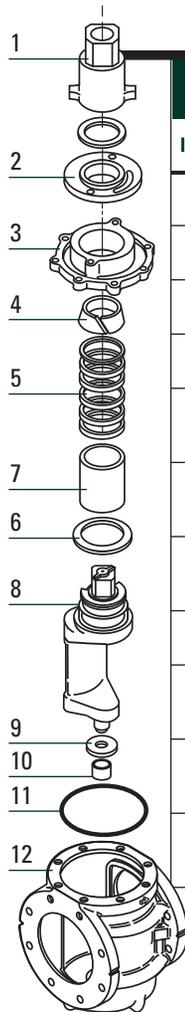
PLUG: Single piece plug/stem is designed for a quick lift camming motion to provide both low torque and reduced wear of the plug face elastomer. A wide range of plug elastomers are available to assure complete fluid compatibility.

BONNET: The high stresses associated with compression gasketing have been eliminated by incorporating high quality o-rings into our bonnet design.

FLOW: Valve ports have been enlarged and tapered to reduce pressure drop and provide enhanced handling of municipal sludges.

POSITION INDICATORS: Travel stops are integral for full travel indication in both directions. Intermediate positions are indicated in 10 degree increments. Positive indication is given on lever and gear operated valves.

- Designed and tested in accordance with AWWA-C517, latest revision
- Exclusive TRUE bi-directional design
- CAD Design
- Unequaled craftsmanship
- Advanced manufacturing procedures



MATERIALS OF CONSTRUCTION

Item	Component	Material	Specification
1	Stop Collar	Cast Iron	A126 Class B
2	Memory Plate	Cast Iron	A126 Class B
3	Bonnet	Cast Iron	A126 Class B
4	Brake Ring	Teflon®	PTFE
5	V-Ring Packing	Neoprene, Buna-N, EPDM	
6	Upper Thrust Washer	Teflon®	PTFE
7	Upper Radial Bearing	Permanently self lubricated	316SS
8	Plug	Cast Iron/Ductile Iron	A126 Class B
9	Lower Thrust Washer	Teflon®	PTFE
10	Lower Radial Bearing	Permanently self lubricated	316SS
11	O-Ring	Neoprene, Buna-N, EPDM	
12	Body	Cast Iron	A126 Class B

Plug Facing Materials

Standard: Neoprene, Buna-N, EPDM Optional: Viton

Eccentric Plug Valve — The Eccentric of Choice.

Large diameter stem/actuator connection gives added strength for heavy slurry and automation applications.

Low friction corrosion-resistant shaft and thrust bearings create smooth lower torque operation and assure long trouble-free operation.

Large diameter stem/plug is designed for superior (trouble-free) operation in throttling or other services experiencing line vibration.

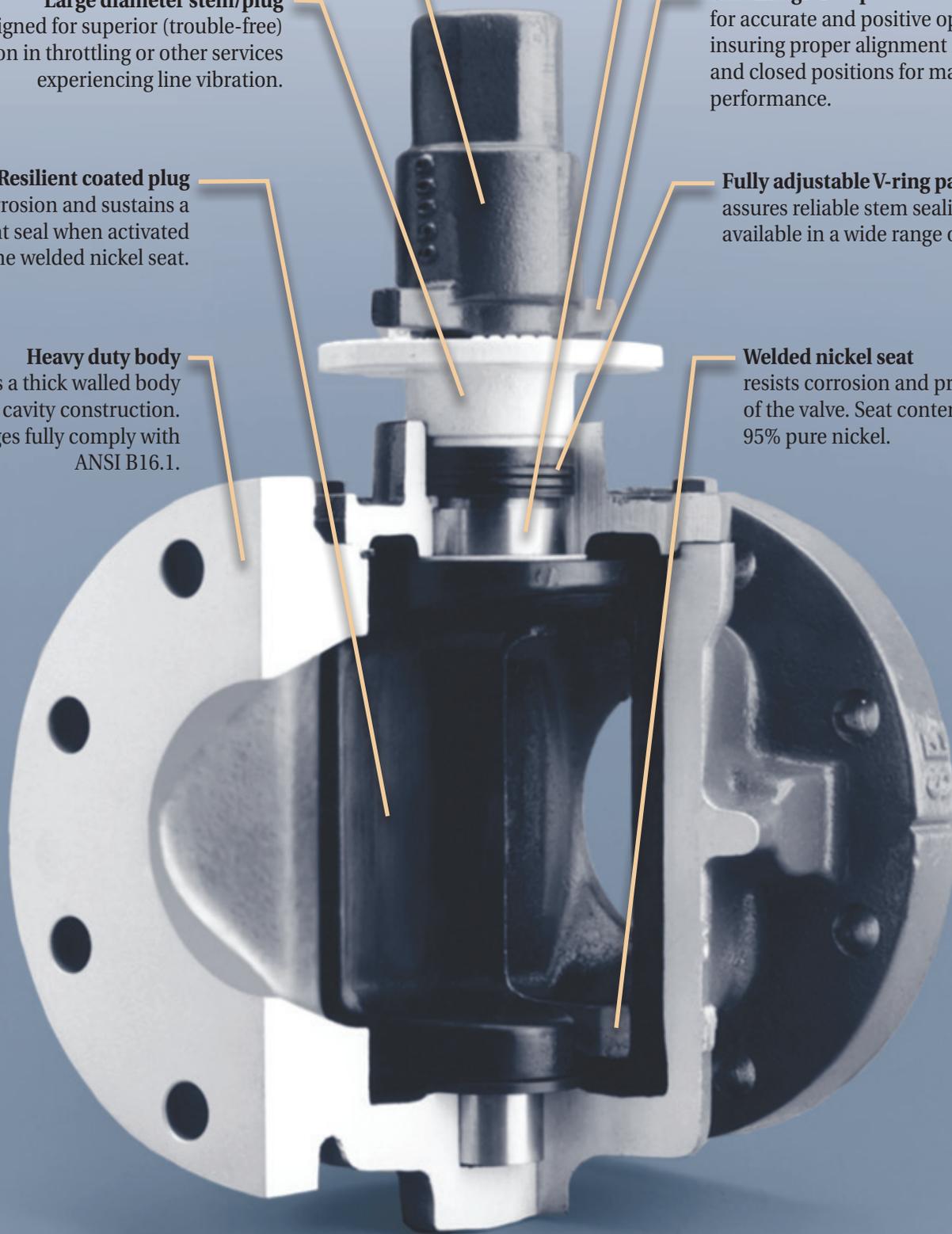
Cast integral stop for accurate and positive operation by insuring proper alignment in the open and closed positions for maximum performance.

Resilient coated plug resists corrosion and sustains a bubble-tight seal when activated against the welded nickel seat.

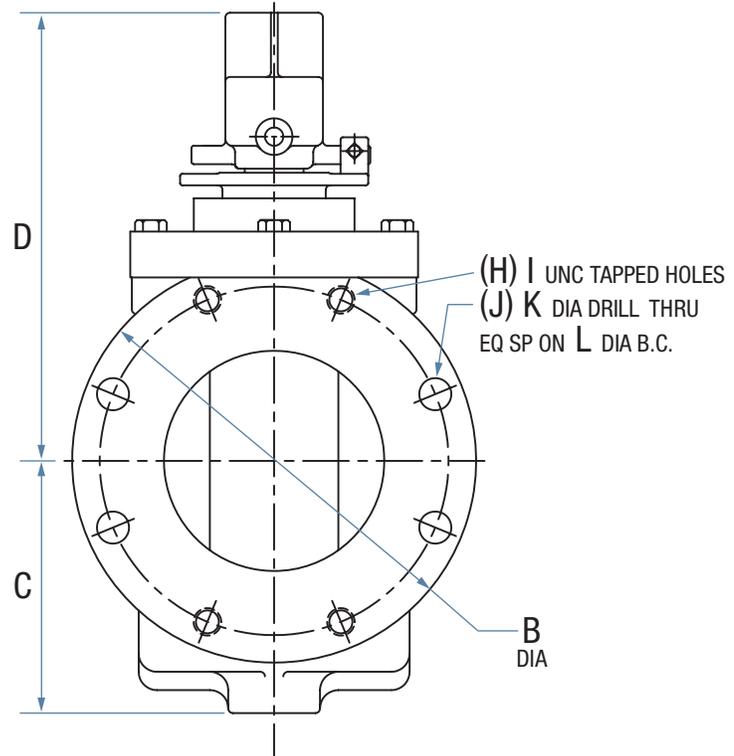
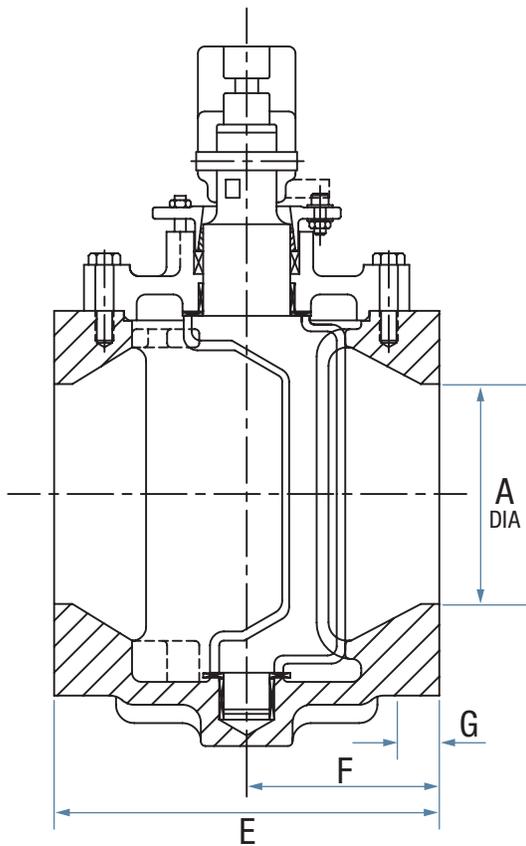
Fully adjustable V-ring packing assures reliable stem sealing and is available in a wide range of materials.

Heavy duty body features a thick walled body cavity construction. Flanges fully comply with ANSI B16.1.

Welded nickel seat resists corrosion and prolongs life of the valve. Seat content is minimum 95% pure nickel.



3"– 8" HAND OPERATED FLANGED VALVE

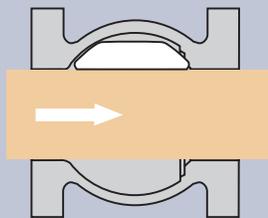


NOTE: Drawings are for illustrative purposes only.
Please request certified drawings for preparing layout and piping diagrams.

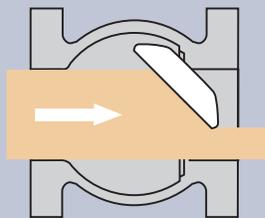
Dimensions (inches)

Size	A	B	C	D	E	F	G	H	I	J	K	L	Wt.
3	3.00	7.50	4.28	9.53	8.00	4.00	.75	–	–	4	.750	6.00	55
4	4.00	9.00	5.18	10.38	9.00	4.50	.94	–	–	8	.750	7.50	74
5	5.00	10.00	5.18	10.38	10.00	5.00	.94	–	–	8	.875	8.50	105
6	6.00	11.00	6.88	12.21	10.50	5.25	1.00	4	.75-10	4	.875	9.50	119
8	8.00	13.50	9.14	16.93	11.50	5.75	1.12	4	.75-10	4	.875	11.75	270

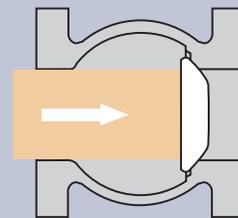
The Homestead Eccentric Operation



In the open position, the Homestead eccentric allows maximum straight-through flow thus minimizing pressure drop.

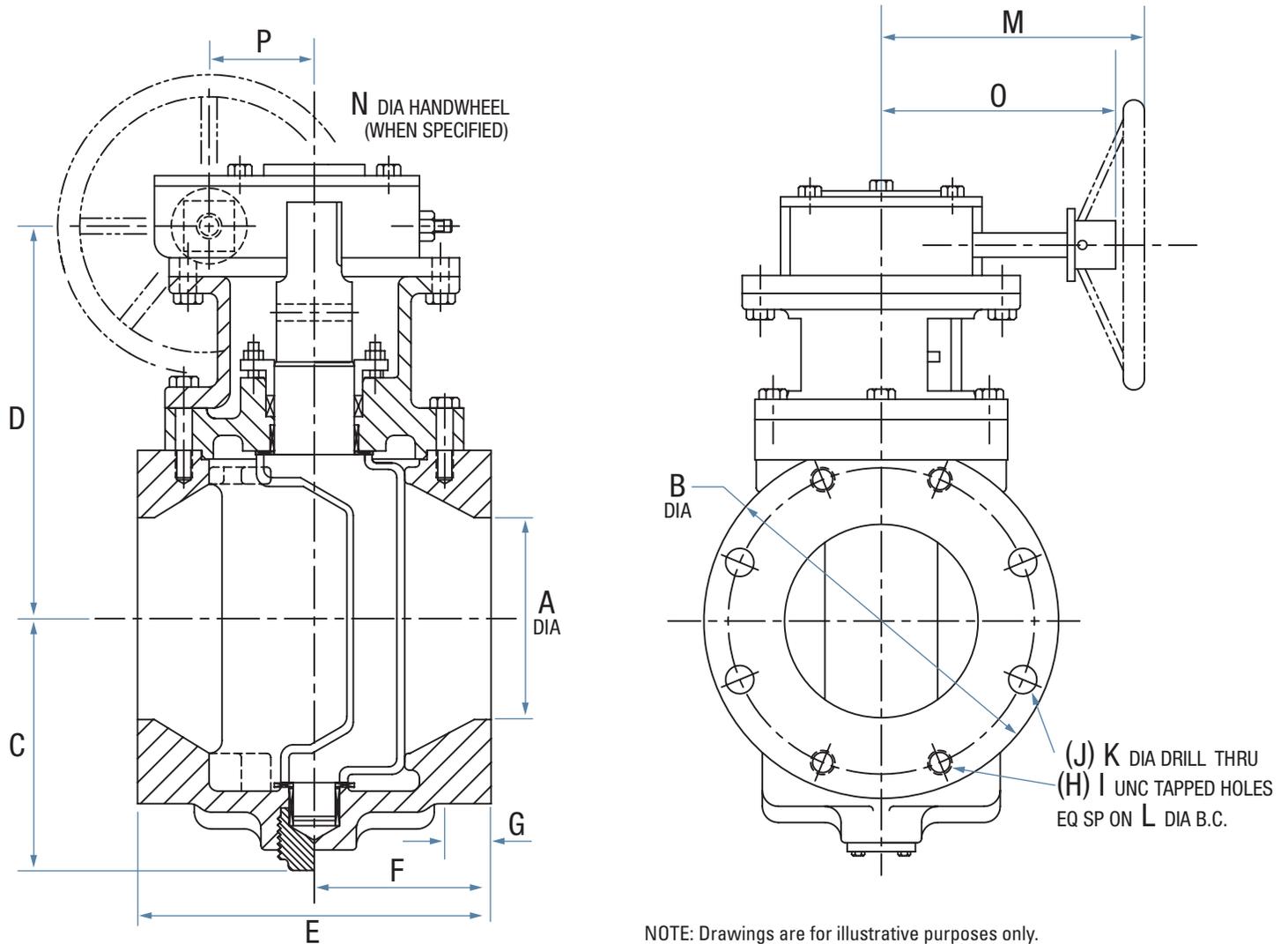


The Homestead eccentric plug opens and closes freely, without scraping the body walls, therefore there is no plug binding. Flow remains straight making this eccentric ideal for gases, liquids, and slurries.



Simple quarter-turn operation achieves positive shut-off in either direction. The long-lasting resilient plug remains in full contact with the eccentric raised seat. Pressure and flow assist in producing an even tighter seal when flow is in the direction shown above.

3"– 24" GEAR OPERATED FLANGED VALVE

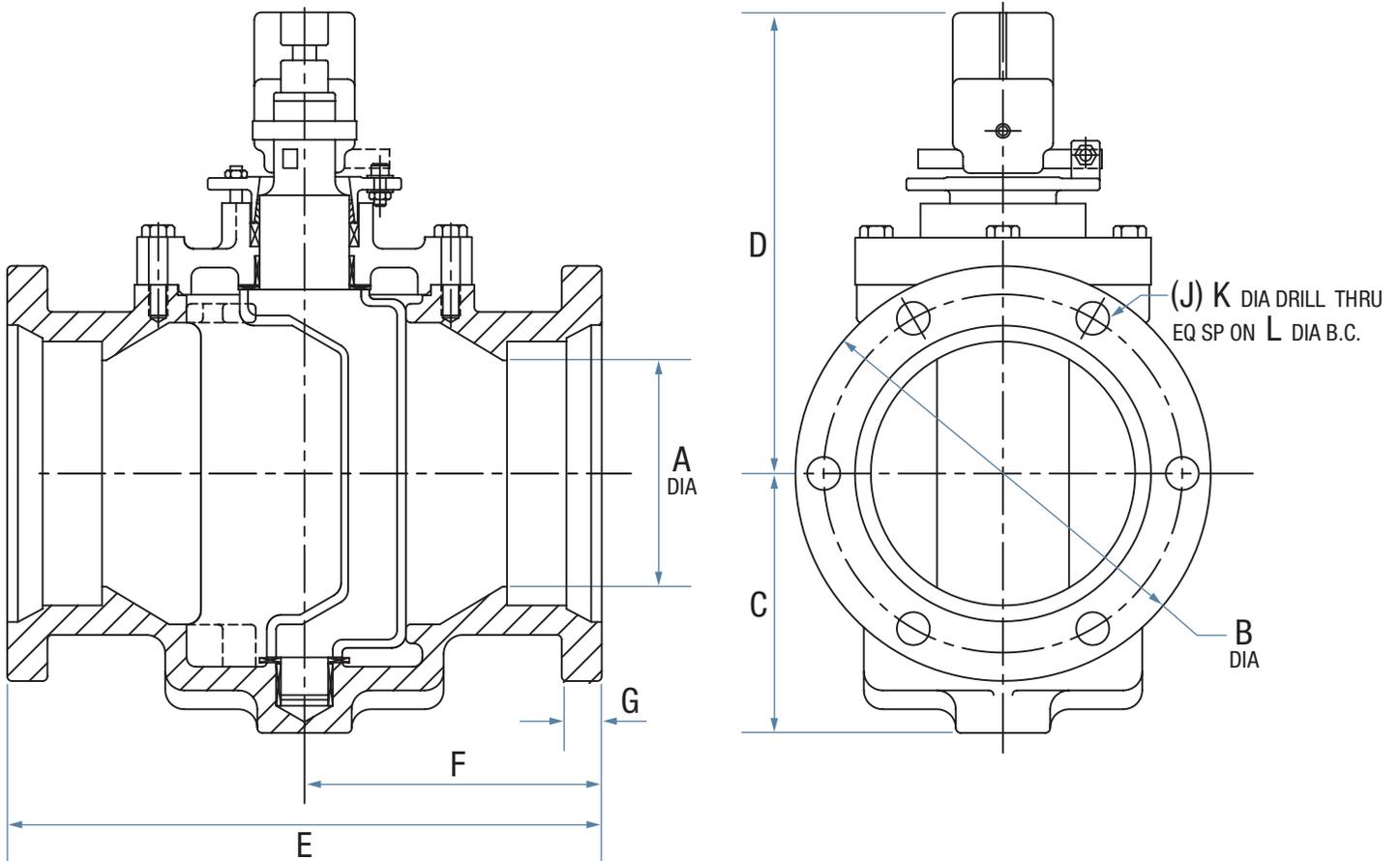


NOTE: Drawings are for illustrative purposes only.
Please request certified drawings for preparing layout and piping diagrams.

Dimensions (inches)

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Wt.
3	3.00	7.50	4.28	7.16	8.00	4.00	.75	–	–	4	.750	6.00	7.31	6.00	6.75	2.76	81
4	4.00	9.00	5.18	7.92	9.00	4.50	.94	–	–	8	.750	7.50	7.31	6.00	6.75	2.76	100
5	5.00	10.00	5.18	7.92	10.00	5.00	.94	–	–	8	.875	8.50	7.31	6.00	6.75	2.76	142
6	6.00	11.00	6.88	11.66	10.50	5.25	1.00	4	.75-10	4	.875	9.50	7.62	12.00	6.75	2.76	156
8	8.00	13.50	9.14	13.50	11.50	5.75	1.12	4	.75-10	4	.875	11.75	8.19	12.00	7.25	3.54	331
10	10.00	16.00	10.06	16.88	13.00	6.50	1.19	4	.88-9	8	1.00	14.25	8.19	12.00	7.25	3.54	538
12	12.00	19.00	14.71	19.38	14.00	7.00	1.25	4	.88-9	8	1.00	17.00	8.19	12.00	7.25	3.54	645
14	14.00	21.00	15.81	20.38	17.00	8.50	1.38	8	1.00-8	4	1.12	18.75	10.75	12.00	9.84	4.84	810
16	16.00	23.50	17.38	22.19	17.75	8.88	1.44	8	1.00-8	8	1.12	21.25	13.82	16.00	10.82	6.14	1022
18	18.00	25.00	19.00	23.75	21.50	10.75	1.56	8	1.12-7	8	1.25	22.75	17.82	24.00	10.82	6.14	1358
20	20.00	27.50	21.50	30.25	23.50	11.75	1.69	12	1.12-7	8	1.25	25.00	22.45	30.00	15.31	6.05	1798
24	24.00	32.00	23.03	32.58	42.00	21.00	1.88	8	1.25-7	12	1.38	29.50	22.45	30.00	15.31	6.05	3350

3"– 8" HAND OPERATED MECHANICAL JOINT VALVE

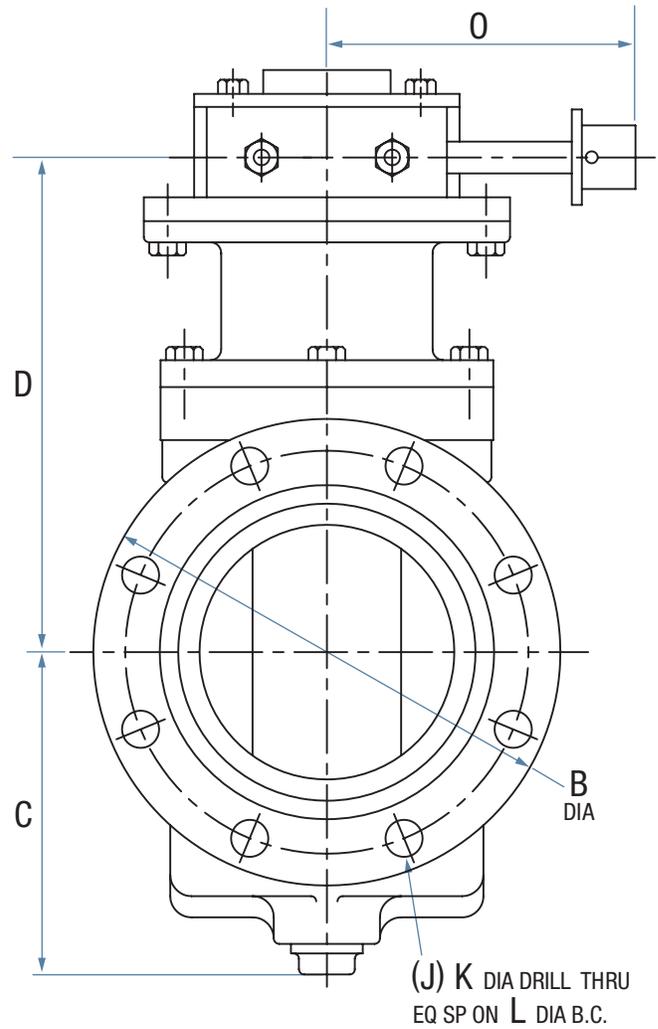
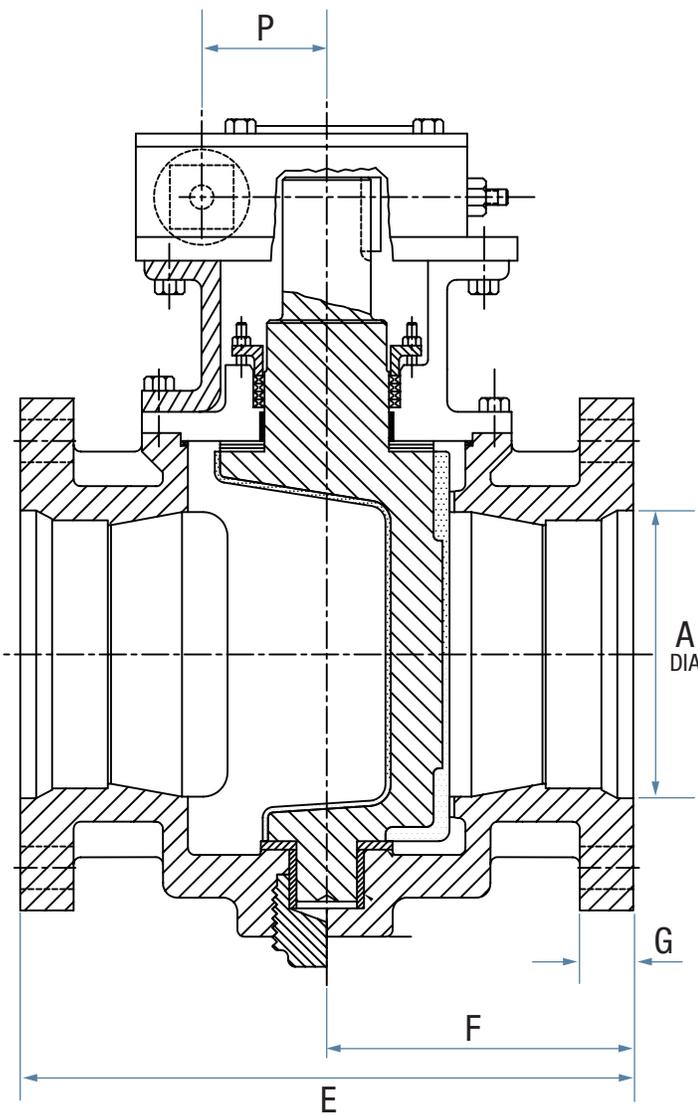


NOTE: Drawings are for illustrative purposes only.
Slotted holes not shown.
Please request certified drawings for preparing layout and piping diagrams.

Dimensions (inches)

Size	A	B	C	D	E	F	G	H	I	J	K	L	Wt.
3	3.00	7.69	4.28	9.53	11.50	5.75	.94	–	–	4	.750	6.18	63
4	4.00	9.12	5.18	10.38	14.25	7.12	1.00	–	–	4	.875	7.50	97
6	6.00	11.13	6.88	12.21	15.75	7.87	1.06	–	–	6	.875	9.50	154
8	8.00	13.38	9.14	16.93	17.38	8.69	1.12	–	–	6	.875	11.75	317

3"– 24" GEAR OPERATED MECHANICAL JOINT VALVE



NOTE: Drawings are for illustrative purposes only.
Slotted holes not shown.

Please request certified drawings for preparing layout and piping diagrams.

Dimensions (inches)

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Wt.
3	3.00	7.69	4.28	7.16	11.50	5.75	.94	–	–	4	.750	6.18	–	–	6.75	2.75	89
4	4.00	9.12	5.18	7.94	14.25	7.12	1.00	–	–	4	.875	7.50	–	–	6.75	2.75	123
6	6.00	11.13	6.88	11.63	15.75	7.87	1.06	–	–	6	.875	9.50	–	–	6.75	3.56	191
8	8.00	13.38	9.14	13.50	17.38	8.69	1.12	–	–	6	.875	11.75	–	–	7.25	3.56	382
10	10.00	15.69	10.06	16.88	19.38	9.69	1.18	–	–	8	.875	14.00	–	–	7.25	3.56	562
12	12.00	17.88	14.19	19.38	20.75	10.38	1.25	–	–	8	.875	16.25	–	–	7.25	3.56	680
14	14.00	20.31	15.81	20.38	24.50	12.25	1.31	–	–	10	.875	18.75	–	–	9.84	4.84	841
16	16.00	22.56	17.38	22.19	27.25	13.62	1.38	–	–	12	.875	21.00	–	–	10.82	6.14	1136
18	18.00	24.83	19.00	23.75	29.25	14.62	1.44	–	–	12	.875	23.25	–	–	10.82	6.14	1494
20	20.00	27.08	20.50	30.25	31.00	15.50	1.50	–	–	14	.875	25.50	–	–	15.31	6.05	2517
24	24.00	31.58	23.03	32.58	42.00	21.00	1.62	–	–	16	.875	30.00	–	–	15.31	6.05	2714

SERIES 120 ECCENTRIC PLUG VALVES

SUGGESTED SPECIFICATIONS



- Valve design shall conform to AWWA C517 – Latest revision.
- Bodies, bonnets and 3"-8" plugs shall be made from Gray Iron castings, ASTM A-126, Class B per AWWA C517, Section 4.4.1.5. Plugs 10" and larger shall be made from Ductile Iron castings, ASTM A-536 65-45-12 per AWWA C517-09, Section 4.4.3.1. Body wall thickness shall meet AWWA C517, Section 4.4.1.4.
- Plug elastomers shall be bonded in accordance with ASTM D429, method B per AWWA C517, Section 4.4.5.
- End flanges shall be integral with the valve body. Flange drilling and thickness shall conform to ANSI B16.1 (Cast Iron Pipe Flanges and Flanged Fittings) for pressure Class 125. Flanges shall be finished in accordance with MSS SP-6 (Finishes for Contact Faces of Connecting End Flanges of Ferrous Valves and Fittings).
- Mechanical joint ends shall conform to ANSI/AWWA C111/A21.11.
- Face-to-Face dimensions of flanged end valves shall conform to ANSI B16.10 up to and including 12" size.
- Valves shall be rated for 175 psi CWP for sizes 3" through 12"; 150 psi CWP for valves 14" through 72".
- Valves shall conform to MSS SP-108 (Resilient Seated-Eccentric Cast Iron Plug Valves)
- Port areas of valves 24" and smaller shall be not less than 80% of pipe area; valves 30" and larger shall be not less than 70% of pipe area.
- Upper and lower bearings shall be replaceable, permanently self lubricated.
- Welded seats shall be a minimum 1/8" thick 95% minimum nickel content.
- Stem seals shall be gland type multiple V-ring packing, field adjustable and replaceable without valve disassembly, conforming to AWWA C517, Section 4.4.7.