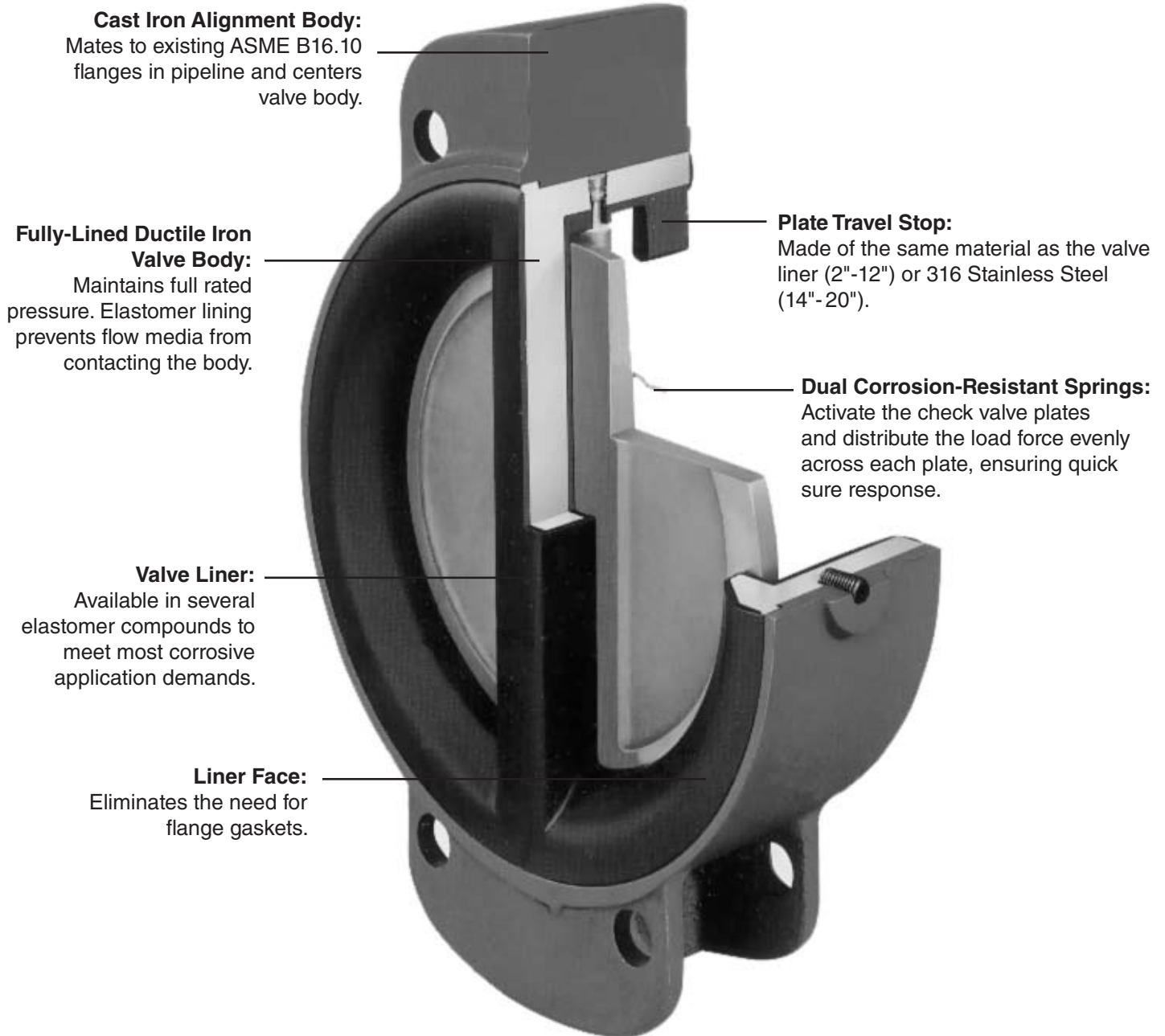


Series 800

If you want cost-effective backflow protection for your piping systems, look at what the Series 800 from Center Line has to offer. It's the only fully elastomer-lined insert check valve available. The ductile iron valve body is completely isolated from line media which can extend the service life of the Series 800 in most applications and makes it an especially economical alternative in applications which would otherwise require check valves made of expensive alloys.



Resilient Seated Check Valves



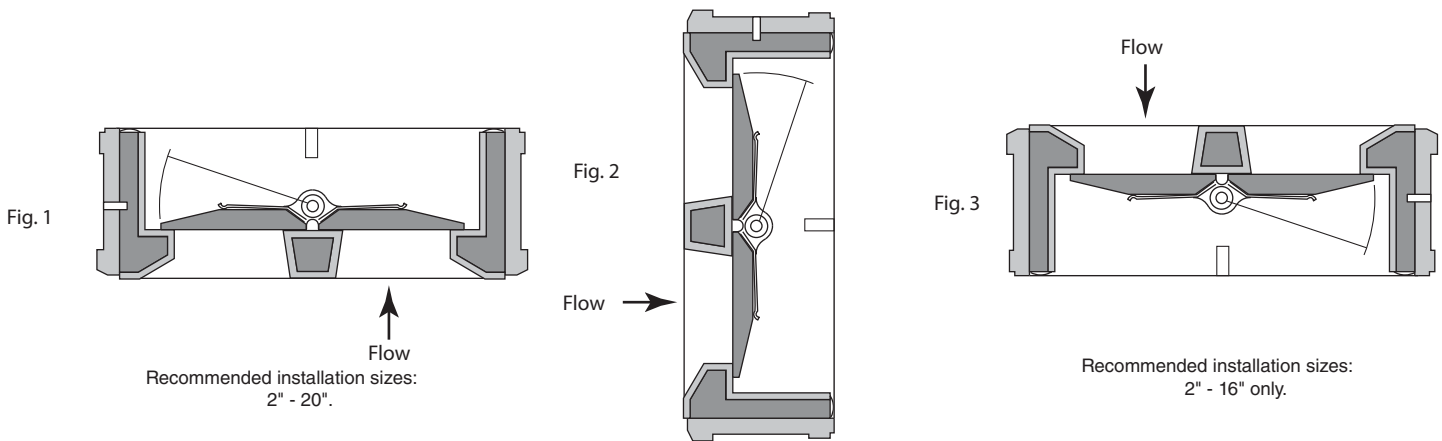
Series 800

- Available in sizes 2" to 20".
- Only fully elastomer lined check valve available.
- Bubble-tight shutoff from 25 to 150 psi ΔP. Lower minimum pressure available on request.
- Wide range of available elastomers; Buna-N or EPDM standard.
- Check valves compatible with ASME B16.1, Class 125 (Iron) or B16.5, Class 150 (Steel) flanges.
- Use of dual springs distributes the load force evenly across each plate, resulting in quick response to flow reversal.
- Commercial cleaning available for non-silicone and O₂ service.
- PED Certification available for sizes 2" to 24".

Liner Temperature Ratings

Material	Temperature Ratings °F
Buna-N (Standard)	+10 to 180
EPDM (Standard)	-30 to 275
Neoprene	+20 to 200
Viton	+10 to 400
Hypalon	0 to 275

Some flow media may further restrict the published temperature limits and/or significantly reduce seat life. Consult factory for additional information.



Note: Valve should be installed with shaft in the vertical position in a horizontal pipe. This view rotated 90° for pictorial clarity.

C_v Values – Valve Sizing Coefficients (US-GPM @ 1ΔP)

Valve Size	C _v	Cracking Pressure To Open Valve (Inches of Water Column)*		
		Figure 1	Figure 2	Figure 3
2"	36	14	10	5
2 ½"	62	18	12	6
3"	123	11	7	2
4"	281	10	6	2
5"	522	14	10	6
6"	1033	12	8	5
8"	2158	12	9	5
10"	3368	14	13	8
12"	5068	15	10	6
14"	6465	20	12	6
16"	9172	20	12	6
18"	12,853	16	10	–
20"	17,398	24	16	–

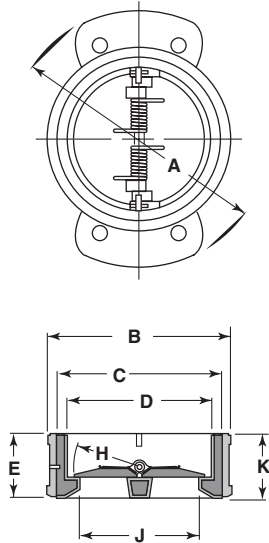
*Figures are approximate. 1" of water column = .036 psi.

Series 800

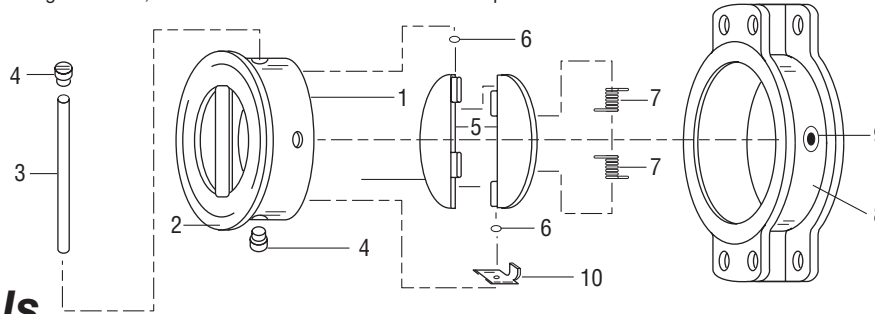
Dimensions (in [mm]) and Weights (lbs [kg])

For installation and maintenance instructions, please refer to the IOM manual available at www.cranevalvelit.com

Valve Size	A	B	C	D	E	F	G	H	J	K	Weight
2 (50)	6.25 (158.75)	4.00 (101.60)	3.31 (84.14)	2.62 (66.68)	2.06 (52.39)	4.75 (120.65)	0.69 (17.46)	1.12 (47.63)	1.88 (47.63)	2.12 (53.98)	5 (2.27)
2 1/2 (65)	7.00 (177.80)	4.75 (120.65)	3.88 (98.43)	3.12 (79.38)	2.06 (52.39)	5.50 (139.70)	0.69 (17.46)	1.44 (36.51)	2.31 (58.74)	2.12 (53.98)	6 (2.72)
3 (80)	7.50 (190.50)	5.25 (133.35)	4.56 (115.89)	3.62 (92.08)	2.06 (52.39)	6.00 (152.40)	0.69 (17.46)	1.62 (41.28)	2.75 (69.85)	2.12 (53.98)	8 (3.63)
4 (100)	9.25 (234.95)	6.75 (171.45)	5.62 (142.88)	4.62 (117.48)	2.44 (61.91)	7.50 (190.50)	0.69 (17.46)	2.12 (53.98)	3.44 (87.31)	2.50 (63.50)	15 (6.81)
5 (125)	10.62 (269.88)	7.62 (193.68)	6.75 (171.45)	5.69 (144.46)	2.56 (64.93)	8.50 (215.90)	0.81 (20.64)	2.66 (67.47)	4.44 (112.71)	2.62 (66.68)	20 (9.08)
6 (150)	12.00 (304.80)	8.75 (222.25)	7.88 (200.03)	6.75 (171.45)	3.06 (77.79)	9.50 (241.30)	0.81 (20.64)	3.16 (80.17)	5.56 (141.29)	3.12 (79.38)	26 (11.80)
8 (200)	14.50 (368.30)	10.62 (269.88)	10.00 (254.00)	8.75 (222.25)	3.81 (96.84)	11.75 (298.45)	0.81 (20.64)	4.16 (105.57)	7.56 (192.09)	3.88 (98.43)	43 (19.52)
10 (250)	16.88 (428.63)	13.25 (336.55)	12.12 (307.98)	10.88 (276.23)	3.94 (100.01)	14.25 (361.95)	0.94 (23.81)	5.12 (130.18)	9.06 (230.19)	4.00 (101.60)	58 (26.33)
12 (300)	19.450 (495.30)	16.00 (406.40)	14.38 (365.13)	12.88 (327.03)	5.06 (128.59)	17.00 (431.80)	0.94 (23.81)	6.25 (158.75)	10.81 (274.64)	5.12 (130.18)	100 (45.40)
14 (350)	22.50 (571.50)	17.62 (447.68)	15.62 (396.88)	14.12 (358.78)	7.00 (177.80)	18.75 (476.25)	1.06 (26.99)	6.75 (171.45)	12.06 (306.39)	7.12 (180.98)	135 (61.29)
16 (400)	24.88 (631.83)	20.12 (511.18)	17.75 (450.85)	16.12 (409.58)	6.25 (158.75)	21.25 (539.75)	1.06 (26.99)	7.75 (196.85)	14.00 (355.60)	6.38 (161.93)	170 (77.18)
18 (450)	25.25 (641.35)	21.50 (546.10)	20.00 (508.00)	18.12 (460.37)	7.12 (180.97)	22.75 (577.85)	1.19 (30.16)	8.75 (222.25)	16.00 (406.14)	7.25 (184.15)	220 (99.88)
20 (500)	27.50 (698.50)	23.50 (596.90)	21.88 (555.62)	20.12 (511.17)	8.38 (212.72)	25.00 (635.00)	1.19 (30.16)	9.75 (247.65)	18.12 (469.90)	8.50 (215.90)	287 (130.30)



Note: Preferred mounting of check valves of any manufacturer is 8 pipe diameters downstream from the pump discharge or pipe elbow. If this is not feasible, the valve should be mounted downstream as far as possible. This recommendation is not exclusive to Center Line valves, but common practice in valve and piping engineering. Its purpose is to reduce the likelihood of turbulent flow through the valve, which could shorten valve life due to component vibration.



Bill of Materials

Item	Description	Materials	Optional Materials
1*	Valve Body	Ductile Iron	No option available
2*	Liner (Molded to Item 1)	Buna-N or EPDM	Neoprene, Hypalon, Viton
3	Shaft	316 Stainless Steel	Monel
4	Shaft Plug (Qty. 2)	316 Stainless Steel	Monel
5	Plate (Qty. 2)	2" 316 Stainless Steel 2 1/2 "-5" Aluminum Bronze 6"-20" Ductile Iron	2"-12" Monel 2 1/2 "-12" 316 Stainless Steel 6"-20" Aluminum Bronze
6	Thrust Washer (Qty. 4)	PTFE	No option available
7	Spring (Qty. 2)	316 Stainless Steel	No option available
8	Alignment Body	Cast Iron	No option available
9	Set Screw	Carbon Steel	No option available
10	Plate Travel Stop	316 Stainless Steel (14"-20")	No option available

* Items 1 and 2 must be ordered together.