

# Accessories

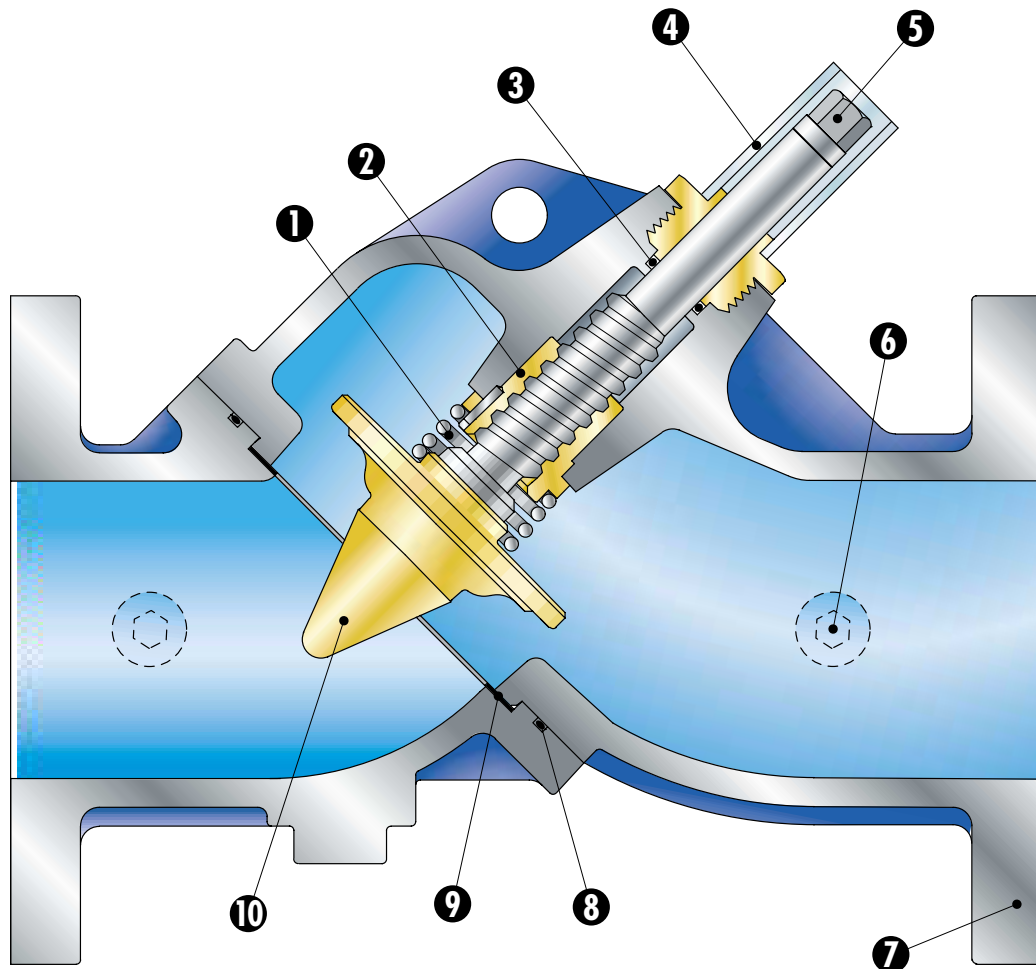
## 3DV™ Combination Valve



## Aurora Pump Accessories

### 3DV Combination Valve - Feature List

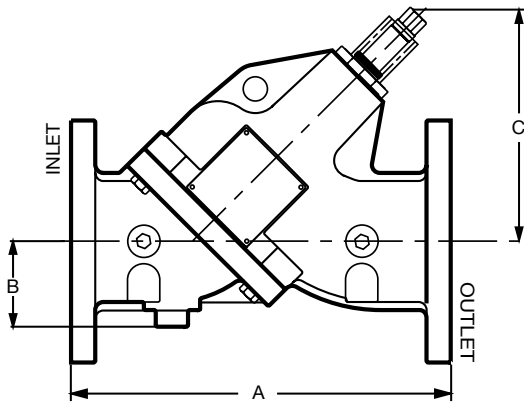
Aurora Pump's 3DVs are a complete line of combination valves with sizes from 1-1/4" to 12". Each of the 12 different sized valves serves the multiple functions of a non-slam check valve, a shutoff valve, and a throttling valve. Flow estimating capability is incorporated with each valve to aid system balancing. The valves are of cast iron construction with stainless steel valve stem and spring along with a bronze disc. The valve is field convertible from a straight to a 90° design. In addition, the stem sealing is capable of being replaced under full system pressure.



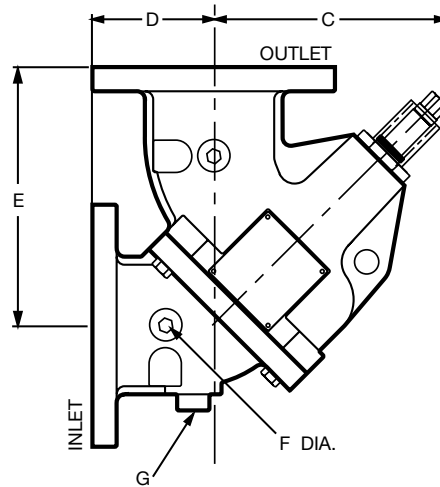
1. STAINLESS STEEL SPRING corrosion resistant anti-chatter
2. BRONZE THREAD GUIDE protects stem, no lock ups
3. O-RING SEALED STEM can be replaced under full system pressure
4. EASY-TO-READ STEM INDICATING SCALE graduated in number of turns
5. STAINLESS STEEL STEM corrosion resistant with standard hex head
6. TEMPERATURE/FLOW MEASURING PORTS/DRAIN PORTS (ON OPPOSITE SIDE) easy access for readings
7. ANSI 125# FLANGED ON SIZES ABOVE 2-1/2", NPT THREADS ON 2-1/2" AND SMALLER, BOTH NPT OR FLANGE AVAILABLE ON 2-1/2" 175 PSI maximum pressure
8. O-RING SEALED VALVE BODY superior seal in enclosed groove
9. REPLACEABLE SOFT SEAT provides positive shut off
10. BRONZE VALVE DISC designed to reduce turbulence

FIELD CONVERTIBLE TO 90° DESIGN ALLOWS FOR REPLACEMENT OF STANDARD ELBOW.

# Engineering Details



(IN-LINE, AS SUPPLIED)



(90° FIELD CONVERTED)

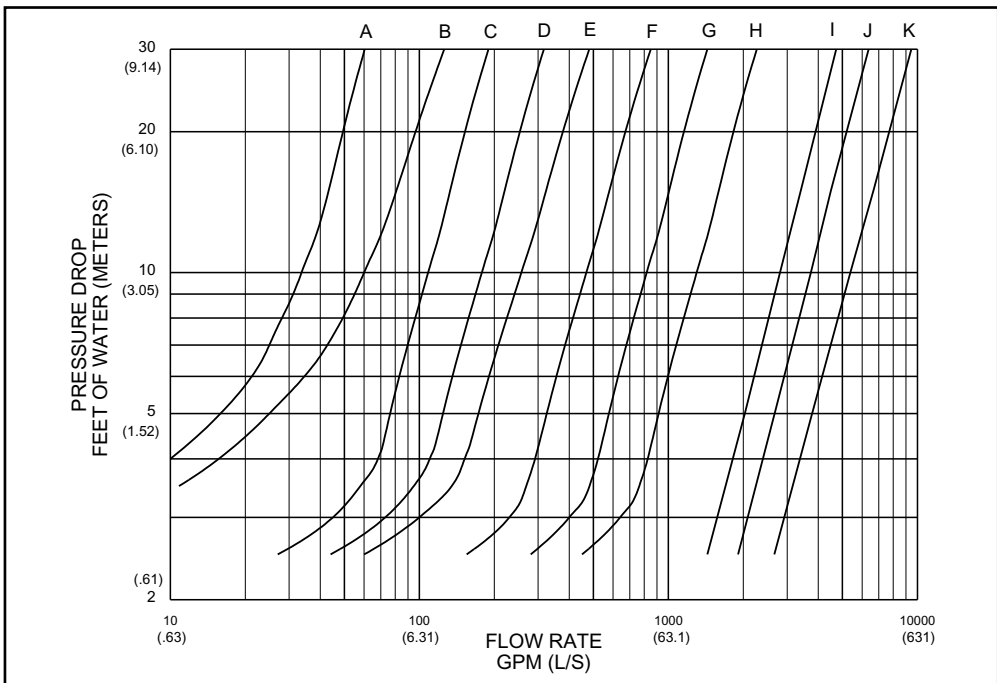
3DV DIMENSION IN INCHES (mm)									
MODEL	INLET & OUTLET	A	B	C	D	E	F (NPT)	G (PIPE SIZE)	WEIGHT LBS. (kg)
3DV125	1-1/4 NPT	6.50 (165)	1.18 (30)	4.25 (108)	2.63 (67)	3.88 (98)	1/4	1/2	7.25 (3.3)
3DV150	1-1/2 NPT	7.00 (178)	1.38 (35)	4.38 (111)	2.93 (74)	4.13 (105)	1/4	1/2	8.25 (3.7)
3DV2	2 NPT	8.00 (203)	1.75 (44)	4.50 (114)	3.00 (76)	5.00 (127)	1/4	1/2	12 (5.4)
3DV250 THD	2-1/2 NPT	11.88 (302)	2.38 (60)	7.13 (181)	3.63 (92)	8.25 (210)	1/4	1	32 (14.6)
3DV250 FLG	2-1/2 FLANGE	10.63 (270)	2.38 (60)	7.13 (181)	3.00 (76)	7.63 (194)	1/4	1	43 (19.5)
3DV3	3 FLANGE	11.75 (298)	2.63 (67)	7.38 (187)	3.75 (95)	8.00 (203)	1/4	1	49 (22.0)
3DV4	4 FLANGE	13.88 (353)	3.13 (80)	7.63 (194)	4.30 (109)	9.63 (245)	1/4	1-1/4	76 (34.5)
3DV5	5 FLANGE	17.63 (448)	3.63 (92)	9.13 (232)	5.25 (133)	12.38 (314)	1/4	1-1/4	100 (45.4)
3DV6	6 FLANGE	20.38 (518)	4.50 (114)	9.75 (248)	6.13 (156)	14.25 (362)	1/4	2	190 (86.2)
3DV8	8 FLANGE	25.88 (657)	5.88 (149)	15.00 (381)	7.88 (200)	18.00 (457)	1/4	2	380 (172)
3DV10	10 FLANGE	30.00 (762)	7.13 (181)	17.00 (432)	10.00 (254)	20.00 (508)	1/4	2	610 (277)
3DV12	12 FLANGE	36.00 (914)	8.50 (216)	20.00 (508)	12.00 (305)	24.00 (610)	1/4	2	1140 (517)

**NOTES:**

1. All dimensions in inches (mm).
2. Dimensions may vary  $\pm 1/8$  (3).
3. Maximum working temperature 230°F.
4. "G" is boss for pipe support (supplied by others).  
Boss to fit inside pipe size listed (sch 80/40).
5. Maximum working pressure 175 P.S.I.
6. Not for construction purposes unless certified.
7. Outlet and inlet flanges - 125# ANSI flat face.  
(2-1/2 and larger)

# Materials of Construction/Pressure Drop Curve

MATERIALS OF CONSTRUCTION	
Valve Body	Cast Iron, ASTM A48
Gland	Bronze, ASTM B62
Stem	Stainless Steel, ANSI 304
Stem Bushing	Bronze, ASTM B62
Spring	Stainless Steel, ANSI 302
Disc	Bronze, ASTM B62
O-Rings	Buna-N
Soft Seat	Buna-N
Drain Plugs	Wrought Steel
Pressure/Temperature Parts	Bronze/Buna-N
Cap Screws	Wrought Steel
Position Indicator	Clear Polymer



Valve Model	Curve Letter	Max Flow GPM
3DV125	A	50
3DV150	B	125
3DV2	C	200
3DV250	D	250
3DV3	E	350
3DV4	F	700
3DV5	G	1250
3DV6	H	1500
3DV8	I	3000
3DV10	J	4000
3DV12	K	7000

## TYPICAL SPECIFICATION

The contractor shall furnish and install in location an Aurora 3DV Combination Valve Model \_\_\_\_\_, Size \_\_\_\_". The valve shall perform the functions of a non-slam check valve, shutoff valve and throttling valve. Flow estimating capability will be incorporated with each valve to aid system balancing. The valve shall be of cast iron construction with bronze disc and stainless steel valve stem and spring. Each valve will be equipped with metering ports and drain ports that are interchangeable. The valve shall be field convertible from straight to angle type designs. Stem sealing shall be capable of being replaced under full system pressure.

**NOTE:** Aurora Pump reserves the right to make revisions to its products and their specifications, and to this bulletin and related information, without notice.

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