

Check Valve Fig. 90G



The Fig. 90G Check Valve is designed for use with Gruvlok couplings, an ASC Engineered Solution, for fast and easy installation on grooved pipe.

Grooved ends conform to the requirements of AWWA C606.

The valve is fitted with a large bonnet closure for ease of field servicing.

All Fig. 90G Check Valves are supplied with a 1/2" NPT pipe plug installed in the bonnet cap.

The valve is available with Bonnet Gaskets and Clapper Seals made from EPDM or Nitrile.

Performance

Pressure Rating: 300 psi (20.7 bar) maximum working pressure.

The Fig 90G must be installed with the arrow on the valve body point in the direction of flow through the pipeline. This valve must be installed on horizontal pipelines only.

Material Specifications

Body

Ductile iron conforming to ASTM A 536, Grade 65-45-12, painted.

Bonnet Cap

Ductile iron conforming to ASTM A 536, Grade 65-45-12, painted.

Bonnet Coupling Housing

Ductile iron conforming to ASTM A 536, Grade 65-45-12, painted.

Clapper

Type 316 Stainless Steel

Clapper Pin

Type 316 Stainless Steel

Bushing

PTFE

Clapper Seat/Bumper/Bonnet Gasket

Grade E (EPDM):

-40°F to 230°F (-40°C to 110°C) (Service Temperature Range)

Recommended for water service, dilute acids, alkaline, oil-free air and many chemical services.

Not For Use In Petroleum Services.

Grade T (Nitrile):

-20°F to 180°F (Service Temperature Range)
(-29°C to 82°C)

Recommended for petroleum products, air with oil vapors, vegetable oils and mineral oils.

Not For Use In Hot Water Services.

Plugs

Malleable iron conforming to ASTM A 47, galvanized.

Closure Bolts & Nuts

Heat treated, oval-neck track head bolts conforming to ASTM A-183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A-563 Grade A or Grade B, or SAE J995 Grade 2. Bolts and nuts are provided zinc electroplated.



PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	

Check Valve Fig. 90G

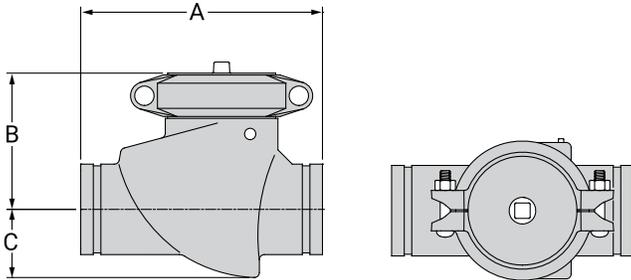


Fig. 90G Check Valve

Nominal Size	O.D.	Nominal Dimensions			Approx. Wt. Ea.
		A	B	C	
In./DN(mm)	In./mm	In./mm	In./mm	In./mm	Lbs./Kg.
2	2.375	9.02	5.12	1.85	11.4
50	60.3	229	30	47	5.2
2½	2.875	9.25	5.34	2.24	21.3
65	73.0	235	136	57	9.7
3	3.500	10.75	5.71	2.76	16.0
80	88.9	273	145	70	7.3
4	4.500	12.01	6.42	3.31	33.3
100	114.3	305	163	84	15.1

CV Values

Nominal Diameter	Size		Flow Coefficients – CV Full Open Valve
	Actual Outside Diameter		
In./mm	In./mm		
2	2.375		80
50	60.3		–
2½	2.875		134
65	73.0		–
3	3.500		210
80	88.9		–
4	4.500		430
100	114.3		–

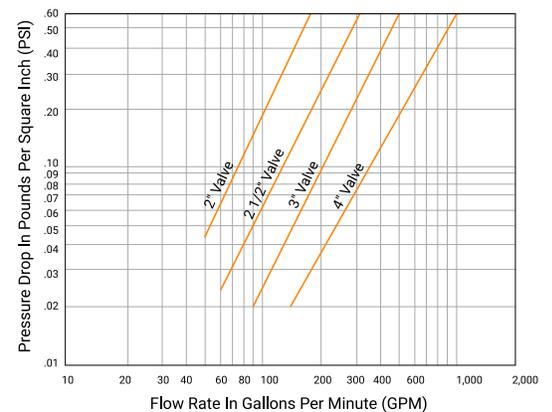
CV values for flow of water are with a full open valve.

Important Note:

The Fig 90G check valve life may be shortened and system damage may occur if check valves are installed too close to a source of unstable flow. Check valves must be installed at a reasonable distance away from pumps, elbows, expanders, reducers or other similar devices. Sound piping practices dictate a minimum of five (5) times the pipe diameter for general use. Distances between three (3) and five (5) diameters are allowable provided the flow velocity is less than 8 feet per second. Distances less than 3 diameters are not recommended.

Flow Characteristics

The chart below expresses the flow of water through a full open valve.



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