

FIG. 90G

Check Valves



The Fig 90G Check Valve is designed for use with Anvil Gruvlok couplings 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.

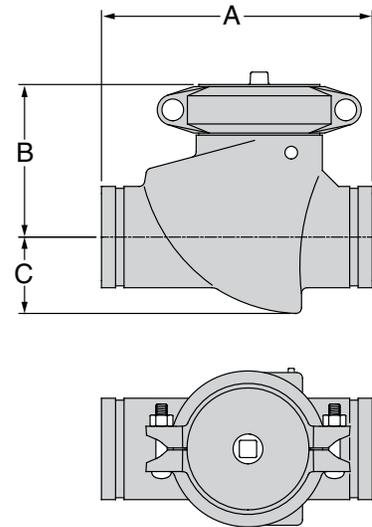
CLOSURE BOLTS & NUTS: Heat treated, oval-neck track head bolts conforming to ASTM A-183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A-563 Grade A or Grade B, or SAE J995 Grade 2. Bolts and nuts are provided zinc electroplated.

PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

FIG. 90G

Check Valves

FIGURE 90G CHECK VALVE					
Nominal Size	O.D.	Nominal Dimensions			Approx. Wt. Ea.
		A	B	C	
<i>in./DN(mm)</i>	<i>in./mm</i>	<i>in./mm</i>	<i>in./mm</i>	<i>in./mm</i>	<i>Lbs./Kg.</i>
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		
Size		Flow Coefficients – CV
Nominal Diameter	Actual Outside Diameter	Full Open Valve
<i>in./mm</i>	<i>in./mm</i>	
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.

