

The 171N Threaded Ball Valves are UL listed and FM Ap- proved for use in fire protection systems. Valves have a rugged, dependable design, meeting rigid specification for residential, commercial and industrial applications. The two piece 171N full port design is available in sizes 1/4" through 4". All valves conform to MSS-SP-11 0, MSS-SP-25 and Federal Specification WW-V-35B Type II, Class A Style 3. The valves are available in triple stem seal, hard chrome plated ball, blow-out proof stem, with an adjustable packing gland; and provide a bubble tight shut off and a floating ball for an economical solution.



**UL** **FM**  
**US** **APPROVED**

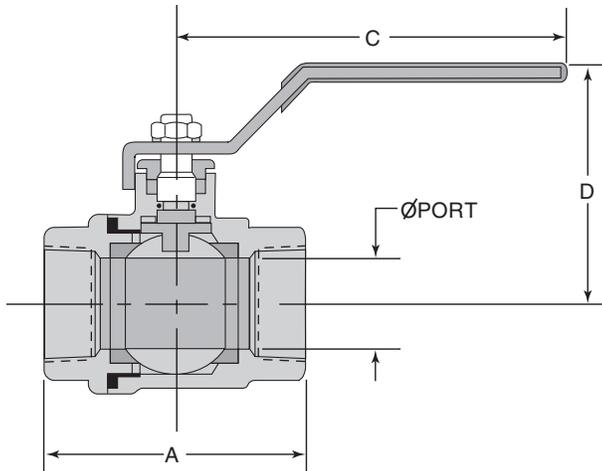
For Listing/Approval Details and Limitations, visit our website at [www.anvilstar.com](http://www.anvilstar.com) or contact an Anvil®/AnvilStar™ Sales Representative.

**MATERIAL SPECIFICATIONS**

- BODY:** Brass, ASTM B124, Alloy C37700
- RETAINER:** Brass, ASTM B124, Alloy C37700
- BALL:** Brass, ASTM B124, Alloy C37700 Chrome Plated
- STEM:** Brass, ASTM B124, Alloy C37700 Nickel Plated
- SEAT RING:** PTFE
- PACKING:** PTFE
- PACKING NUT:** Steel, Zinc
- PACKING GLAND:** Brass, ASTM B124, Alloy C37700 Nickel Plated

- FRICTION WASHER:** PTFE
- STEM O-RING:** NBR 75 Shore A
- HANDLE:** Steel, Zinc Plated to 2", Aluminum to 4"
- HANDLE COVER:** Yellow PVC Coated to 2", Yellow Enamel to 4"
- HANDLE NUT:** Steel, Zinc Plated
- AVAILABLE OPTIONS\***
- LEVER HANDLE:** 1/4" - 4"

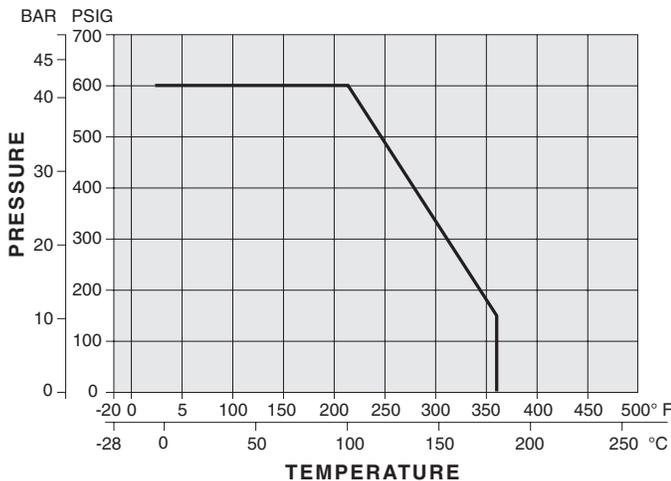
PROJECT INFORMATION		APPROVAL STAMP	
Project:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			



**FIGURE 171N FULL PORT**

Nominal Size	Port Dia.	A	C	D	Cv	Approx. Wt. Ea.
In./mm	In./mm	In./mm	In./mm	In./mm		Lbs./Kg
1/4 8	3/8 10	2 51	3 1/8 98	1 3/4 45	6	0.3 0.1
3/8 10	3/8 10	2 51	3 3/8 98	1 3/4 45	7	0.3 0.1
1/2 15	9/16 14	2 1/16 62	3 3/8 98	1 7/8 48	19	0.4 0.2
3/4 20	3/4 19	2 1/16 68	4 13/16 122	2 1/4 57	35	.7 0.3
1 25	15/16 24	3 1/16 78	4 13/16 122	2 1/16 62	50	1.0 0.5
1 1/4 32	1 1/4 32	3 3/16 87	6 152	3 3/16 78	104	2.0 0.9
1 1/2 40	1 1/16 40	3 3/8 98	6 152	3 3/16 84	268	3.1 1.4
2 50	1 15/16 49	4 3/16 110	6 3/8 162	3 3/16 97	309	4.2 1.9
2 1/2 65	2 3/16 65	5 3/16 141	8 1/16 205	5 127	629	8.0 3.7
3 80	3 3/8 79	6 1/16 164	8 3/8 205	5 1/16 138	1018	12.0 5.9
4 100	3 3/16 100	7 3/8 194	10 1/4 260	6 3/16 160	1622	22.0 10.0

**PRESSURE VS. TEMPERATURE**



**Notes:**

- Dimensions of solder joint ends conform to ANSI B16.22. Solder end valves are designed to be used with solders not exceeding a melting point of 470°F/250°C. Higher temperatures may damage the seal material.
- For solder joint valves, the pressure/temperature rating is dependent on the solder material used. Please refer to the limitations listed in ANSI B16.18.

3. Rate of Flow Calculations for liquids: To determine the flow rate of a liquid passing through a valve, use the following formula:

$$Q_L = C_v \left( \sqrt{\frac{\Delta P}{S_L}} \right)$$

Where:  $Q_L$  = flow of liquid in gallons per minute (GPM)  
 $C_v$  = flow coefficient  
 $\Delta P$  = pressure drop (PSI)  
 $S_L$  = specific gravity of liquid