



September 2015

1821 and 1821B (see next page) Shutoff Valves provide reliable, trouble-free service on clean gas.

In abnormally hot, dirty, or corrosive conditions, most shutoff valves can deteriorate and fail to shut off tightly. Frequent, periodic checking of all valves is urged.

**1821 High Pressure Valves**—large port, ball-type valves with bronze bodies, chromium-plated bronze balls, and teflon seats and packing. Can be installed with flow in either direction.

Valve is UL listed according to:

Guide YRPV: Natural gas Guide YSDT: LP gas

Guide YRBX: Flammable liquid

Guide MHKZ:#6 oil at 250 F and 250 psi



Natural gas, oil, or water: 600 psi at 265 F

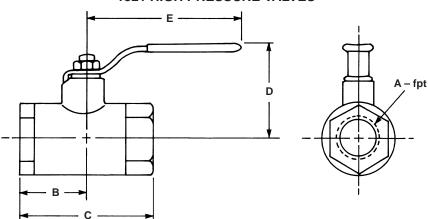
LP gas: 250 psi

Saturated steam: 150 psi

For 1/4" through 2" size, see 1821B section.



#### **1821 HIGH PRESSURE VALVES**



1821 ball valves are available for oxygen service. They are not UL listed. To order, specify: 1821-5-C. 1821 ball valves are also available with locking handles. They are not UL listed. To order, specify: 1821-5-LH.

DIMENSIONS SHOWN ARE SUBJECT TO CHANGE. PLEASE OBTAIN CERTIFIED PRINTS FROM FIVES NORTH AMERICAN COMBUSTION, INC. IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

Valve		din	nensions in i	inches			scfh natu	scfh natural gas	
designation	Α	В	С	D	Е	C <sub>v</sub> rating	1 osi drop	1"wc	wt, lb
1821-5 1821-6	2½ 3	3¼ 3¾	6½ 6¾	41/ <sub>8</sub> 41/ <sub>8</sub>	8	440 390	33 600 29 800	25 400 22 500	17.8 19.4

Capacities based on 0.6 sp gr gas at pressure drops shown with 1 psi inlet pressure.

**1821B ball valves** are constructed of heavy duty forged brass. They are designed for industrial, residential and commercial use on steam, water, oil or gas. Their full ports allow for a maximum of flow and a minimum of pressure drop or turbulence. The valve is CGA certified, UL listed, and FM approved.

1821B ball valves can be ordered with the option to be cleaned for oxygen service. A locking handle option is also available.











# **Pressure Ratings:**

125 psi: Natural gas; CSA certified Class 3371 90;

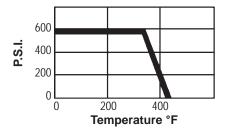
ANSI/ASME B16.33/B16.38 400 psi: Natural gas; UL guide YRPV 400 psi: #6 oil at 250 F; UL guide MHKZ 600 psi: W.O.G. non-shock (water, oil, gas) 150 psi: W.S.P. (working steam pressure)

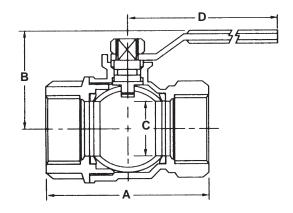
FM Approved Class 1140

### **1821B HIGH PRESSURE VALVES**

# **Materials**

Body - Forged Brass ASTM C37700 Chrome Plated Ball - Forged Brass ASTM C37700 Packing Nut - Forged Brass ASTM C37700 Stem - Forged Brass ASTM C37700 Lock Washer - Chrome Plated Steel Seat - Teflon Stem O-Ring - Viton® Stem Packing - Teflon Handle Nut - Chrome Plated Steel Handle - Chrome Plated Steel

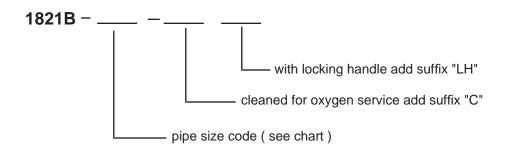




	Valve		dimension	S	I	
1821B	size	Α	В	С	D	C <sub>v</sub> rating
-03	1/4"	1.81	1.41	.39	2.95	11.84
-02	3/8"	1.85	1.41	.39	2.95	11.84
-01	1/2"	2.48	1.53	.59	2.95	20.25
-0	3/4"	2.71	1.93	.79	3.74	41.83
-1	1"	3.30	2.40	1.00	4.72	78.38
-2	1¼"	3.78	2.59	1.25	4.72	132.10
-3	1½"	4.17	3.22	1.57	5.90	206.96
-4	2"	5.00	3.50	2.00	5.90	346.00

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IF SPACE LIMITATIONS OR OTHER CONSIDERATIONS MAKE EXACT DIMENSION(S) CRITICAL.

# **Order Information**



Examples: 1821B-1; 1821B-1-C; 1821B-1-LH; 1821B-1-CLH

**WARNING:** Situations dangerous to personnel and property may exist with the operation and maintenance of any combustion equipment. The presence of fuels, oxidants, hot and cold combustion products, hot surfaces, electrical power in control and ignition circuits, etc., are inherent with any combustion application. Parts of this product may exceed 160F in operation and present a contact hazard. Fives North American Combustion, Inc. urges compliance with National Safety Standards and Insurance Underwriters recommendations, and care in operation.