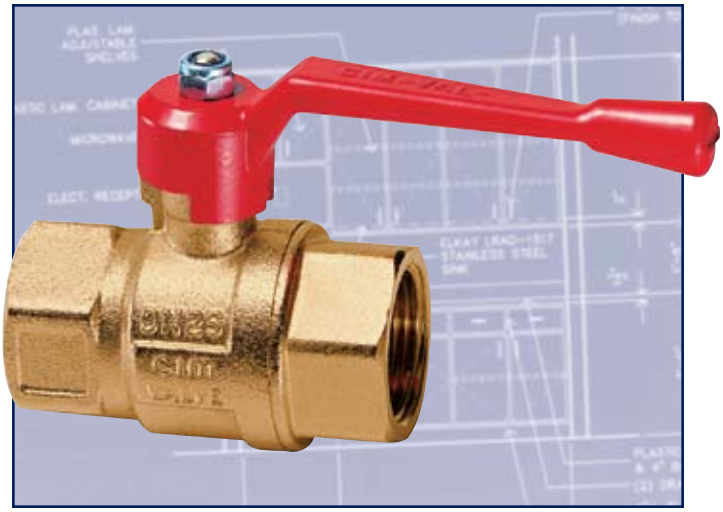
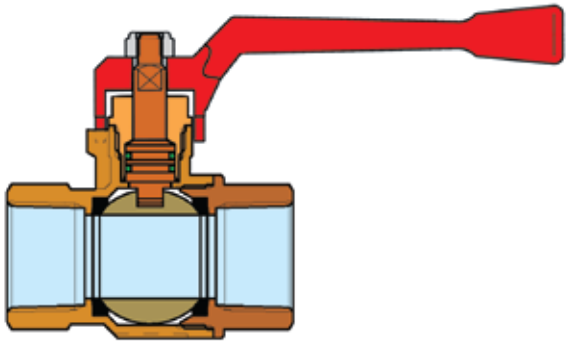
Full Port Heavy Pattern Ball Valve

cim12.1

Lever Handle • FIPT x FIPT • UL/CSA/AGA Listed





Materials:

- **Body:** Hot Forged Brass ASTM C37700
- **Adaptor:** Hot Forged Brass ASTM C37700
- **Ball:** Brass, Machined to a Micro-Smooth Finish, Hard Chromium Plated
- **Cap Stem:** 36600 Bar Stock
- **Ball Seats:** Conical Rings in P.T.F.E.
- **Stem Seal:** Two O-Rings in FPM.
- **Handle:** Hard Duraluminum Alloy Epoxy Painted Red RAL 3000
- **Nut:** Self-Locking Type, Steel ANSI C.1008.

All Cimberio valves qualify for the American Recovery and Reinvestment Act and the Buy American Act.

Applications:

The CIM 12.1 ball valve is manufactured in accordance with EN ISO 9001 and is designed for use with non aggressive fluids and gases, applications include: residential and commercial plumbing, industrial applications, agricultural systems, waterworks, saturated steam or high temperature hot water services, condensate lines, as well as oil, gasoline and other hydrocarbon services.

Features:

The CIM 12.1 ball valve is a full port ball valve built with a heavy pattern body that offers increased thread depth, and includes a unique blast proof/impact proof 3 part stem design that allows handle option flexibility. The standard CIM 12.1 is equipped with a corrosion resistant coated lever handle. Tee, locking, nylon isolation, and slow closure handles are also available.

Threading:

NPT threads ANSI B1.20.1.

Size	Fast Order No.	Technical ID No.
1/2"	12-04	CIM12-A04LH
3/4"	12-06	CIM12-A06LH
1"	12-07	CIM12-A07LH
1-1/4"	12-08	CIM12-A08LH
1-1/2"	12-09	CIM12-A09LH
2"	12-10	CIM12-A10LH
2-1/2"	12-11	CIM12-A11LH
3"	12-12	CIM12-A12LH
4"	12-14	CIM12-A14LH

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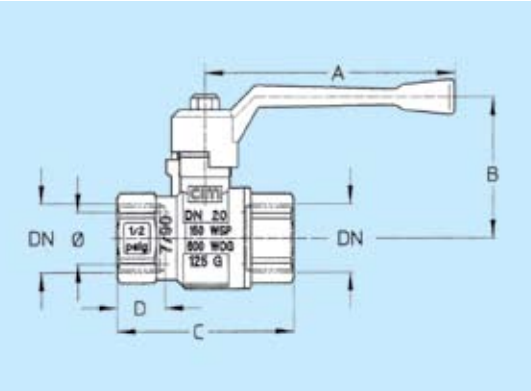


Size Port inch Port mm	1/2" 0.59" 15mm	3/4" 0.79" 20mm	1" 0.98" 25mm	1-1/4" 1.26" 32mm	1-1/2" 1.57" 40mm	2" 1.97" 50mm	2-1/2" 2.48" 63mm	3" 2.99" 76mm	4" 3.94" 100mm
A	3-1/8" 80mm	3-15/16" 100mm	3-15/16" 100mm	4-3/4" 120mm	5-15/16" 150mm	5-15/16" 150mm	9-7/16" 240mm	9-7/16" 240mm	12-1/4" 310mm
B	2-1/16" 52mm	2-3/16" 56mm	2-3/8" 60mm	2-7/8" 73mm	3-1/2" 89mm	3-3/4" 96mm	4-3/4" 121mm	5-3/16" 132mm	6-1/8" 155mm
C	2-7/16" 61mm	2-11/16" 68mm	3-1/4" 82mm	3-5/8" 92mm	4-1/4" 107mm	4-15/16" 125mm	5-15/16" 151mm	6-3/4" 171mm	8-1/8" 206mm
D	11/16" 17mm	3/4" 18.5mm	13/16" 21mm	7/8" 22.5mm	15/16" 23mm	1-1/16" 26.5mm	1-1/16" 27mm	1-1/8" 28mm	1-3/8" 35mm
CH	1" 25mm	1-1/4" 31mm	1-9/16" 40mm	1-15/16" 49mm	2-3/16" 55mm	2-3/4" 69mm	3-3/8" 86mm	3-15/16" 100mm	4-7/8" 123mm
Pounds Grams	0.49 220	0.79 360	1.3 590	2.02 915	2.99 1355	4.54 2060	9.38 4255	13.69 6210	22.05 10,000

CV CM CS MT

CV: Capacity in "U.S. gal/min" at pressure drop of "1 PSI"

CM: Working Torque in "lb x in"

CS: Starting Torque in "lb x in"

MT: Torque Breaking Point on the Stem in "lb x in"

Element: Water - Temperature: 59.9˚ F

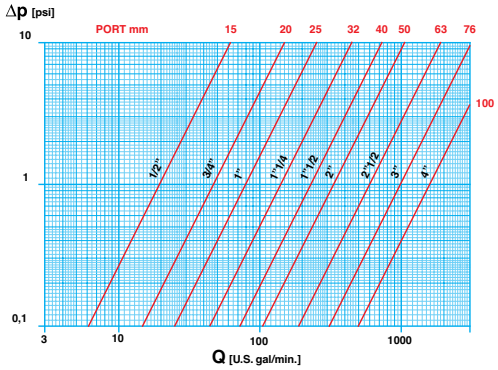
12.1	SIZE Ø mm Ø inch	1/2" 15 0.59	3/4" 20 0.79	1" 25 0.98	1-1/4" 32 1.26	1-1/2" 40 1.57	2" 50 1.97	2-1/2" 63 2.48	3" 76 2.99	4" 100 3.94
CV	gal/min	19.7	47.4	78.7	142.3	229.1	335.4	601.5	983.1	1582
CM	N x m lb x in	3 27	5 44	6 53	7 62	10 89	13 115	16 142	20 177	30 266
CS	N x m lb x in	6 53	10 89	12 106	14 124	20 177	26 230	32 283	40 354	60 531
MT	N x m lb x in	10 89	24 213	24 213	45 399	90 797	90 797	280 2480	280 2480	550 4872

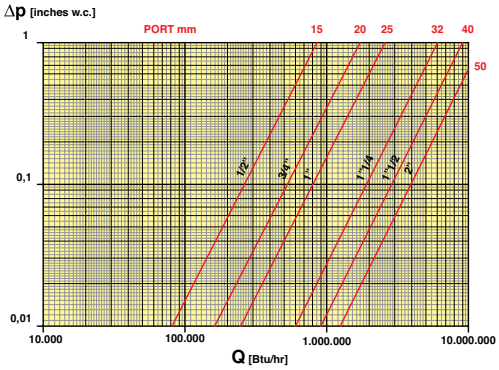
FC: Capacity is determined by the quantity in BTU/h of a gas of 0.64 SG which can be passed with a pressure drop equal to 0.3" water column

Element: Gas - Specific Gravity: 0.64

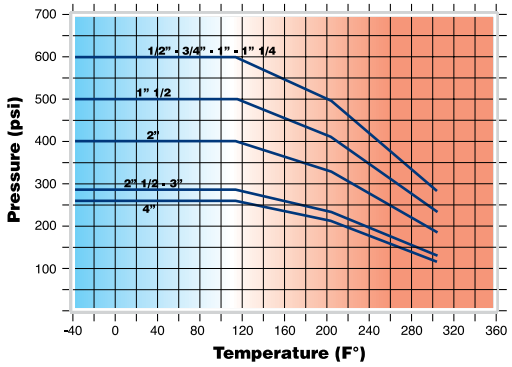
12.1	SIZE Ø mm Ø inch	1/2" 15 0.59	3/4" 20 0.79	1" 25 0.98	1-1/4" 32 1.26	1-1/2" 40 1.57	2" 50 1.97
FC	BTU/h	455,000	930,000	1,420,000	3,425,000	4,975,000	6,800,000
CM	N x m lb x in	3 27	5 44	6 53	7 62	10 89	13 115
CS	N x m lb x in	6 53	10 89	12 106	14 124	20 177	26 230
MT	N x m lb x in	10 89	24 213	24 213	45 399	90 797	90 797

FLOW AND PRESSURE DROP





PRESSURE/TEMPERATURE RATINGS



Working Pressure: 1/2" – 1-1/4" : 600 PSI
1-1/2" : 500 PSI
2" : 400 PSI
2-1/2" – 3" : 290 PSI
4" : 261 PSI

Max. Operating Temperature: Working Limit for Fluids -40˚ F – 302˚ F

Test Pressures: According to ISO 5208

Vacuum: the CIM 12.1 Ball Valve can be used for Vacuum: $2x10^{-5}$ PSI