

Full Port Ball Valve with Slow Closure Handle

cim 612.1

FIPT x FIPT



Applications:

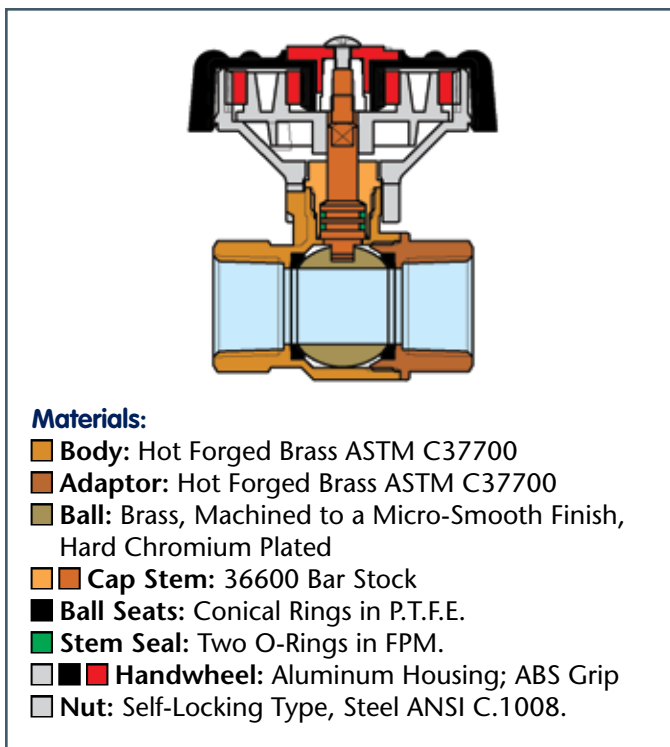
The CIM 612.1 ball valve is manufactured in accordance with EN ISO 9001 and is designed with a speed reducing handwheel for use in applications in which a conventional quarter turn ball valve would not be suitable. Applications include non aggressive fluid and gas for residential and commercial plumbing, industrial applications, agricultural systems, waterworks, saturated steam or high temperature hot water service, as well as oil, gasoline and other hydrocarbon services.

Features:

The CIM 612.1 ball valve, which is built from the Cimberio CIM 11 building block, 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. The CIM 612.1 also features a speed reducing handwheel that requires a 360° rotation to open/close the valve, allowing gradual and controlled operation while preventing concussive damage and surges and vibrations in the piping system by eliminating the "water-hammer" associated with standard "on-off" ball valves.

Threading:

NPT threads ANSI B1.20.1.



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.
- ■ ■ **Handwheel:** Aluminum Housing; ABS Grip
- **Nut:** Self-Locking Type, Steel ANSI C.1008.

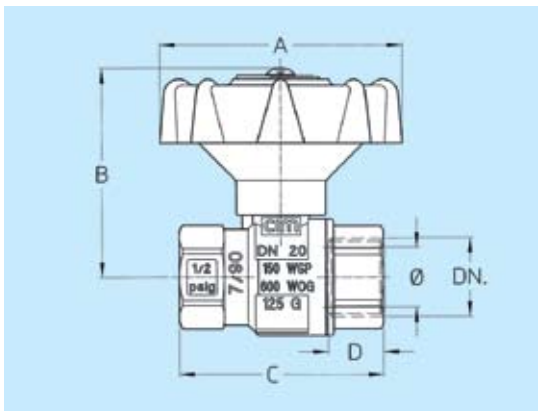
All Cimberio valves qualify for the American Recovery and Reinvestment Act and the Buy American Act.

Size	Fast Order No.	Technical ID No.
1/2"	612-04	CIM612-A04SC
3/4"	612-06	CIM612-A06SC
1"	612-07	CIM612-A07SC
1-1/4"	612-08	CIM612-A08SC
1-1/2"	612-09	CIM612-A09SC
2"	612-10	CIM612-A10SC

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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
A	3-1/8" 80mm	3-1/8" 80mm	3-1/8" 80mm	3-1/8" 80mm	4-5/16" 110mm	4-5/16" 110mm
B	2-5/8" 67mm	2-13/16" 71mm	2-15/16" 75mm	3-5/16" 83.5mm	3-15/16" 99mm	4-3/16" 106.5mm
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
D	11/16" 17mm	3/4" 18.5mm	13/16" 21mm	7/8" 22.5mm	15/16" 23mm	1-1/16" 26.5mm
CH	1" 25mm	1-1/4" 31mm	1-9/16" 40mm	1-15/16" 49mm	2-3/16" 55mm	2-3/4" 69mm
Pounds	0.73	0.98	1.53	2.41	3.25	4.8
Grams	330	445	695	1093	1472	2176

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

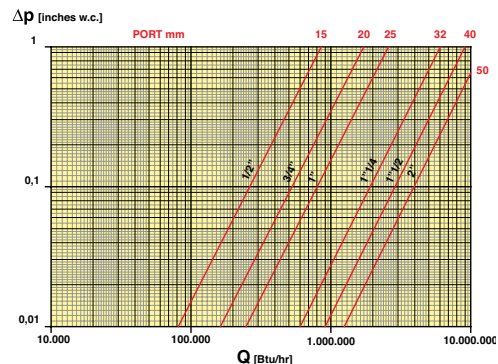
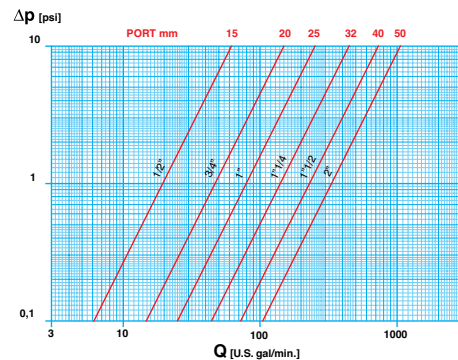
612.1	SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
	Ø mm	15	20	25	32	40	50
	Ø inch	0.59	0.79	0.98	1.26	1.57	1.97
CV	gal/min	19.7	47.4	78.7	142.3	229.1	335.4
CM	N x m	3	5	6	7	10	13
	lb x in	27	44	53	62	89	115
CS	N x m	6	10	12	14	20	26
	lb x in	53	89	106	124	177	230
MT	N x m	10	24	24	45	90	90
	lb x in	89	213	213	399	797	797

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

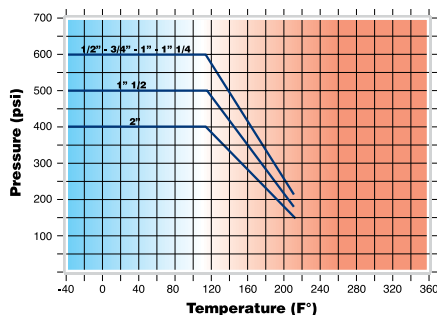
Element: Gas - Specific Gravity: 0.64

612.1	SIZE	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Gas	Ø mm	15	20	25	32	40	50
	Ø inch	0.59	0.79	0.98	1.26	1.57	1.97
FC	BTU/h	455,000	930,000	1,420,000	3,245,000	4,975,000	6,800,000
CM	N x m	3	5	6	7	10	13
	lb x in	27	44	53	62	89	115
CS	N x m	6	10	12	14	20	26
	lb x in	53	89	106	124	177	230
MT	N x m	20	24	26	45	80	80
	lb x in	177	213	230	399	709	709

FLOW AND PRESSURE DROP



PRESSURE/TEMPERATURE RATINGS



Working Pressure: 1/4" – 1-1/4" : 600 PSI

1-1/2" : 500 PSI

2" : 400 PSI

Max. Operating Temperature: Working Limit for Fluids -40° F – 212° F

Test Pressures: According to ISO 5208

Vacuum: the CIM 612.1 Ball Valves can be used for Vacuum: 2x10⁻⁵ PSI