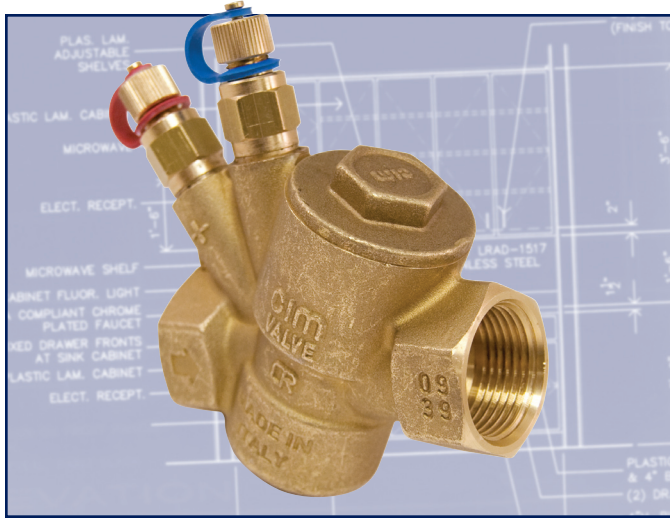


Automatic Balancing Valve

cim790.1

With Removable Cartridge and Integral Test Ports - FIPT x FIPT



Applications:

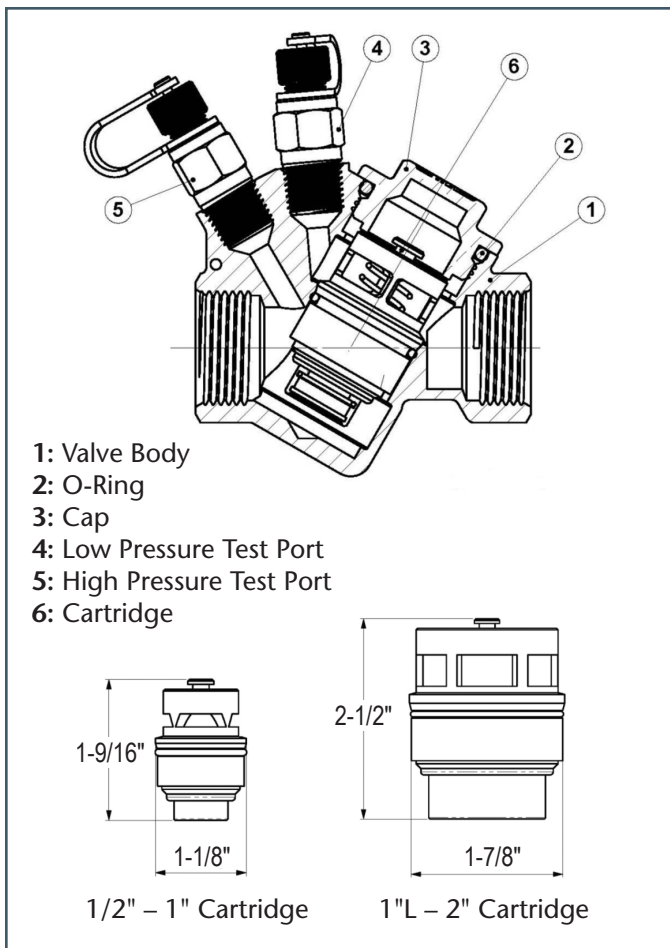
The CIM 790.1 balancing valve is manufactured in accordance with EN ISO 9001 and is designed to provide automatic balance of heating and cooling applications through the use of a removable cartridge that provides a constant flow rate. The CIM 790.1 can be used for constant flow or in a variable flow system where a specific rate is not to be exceeded. The CIM 790.1 balancing valve is available in valve sizes from 1/2" through 2" and is manufactured of corrosion resistant brass. It is suitable for both heating (LPHW) and cooling applications at working pressures up to 300 PSI.

Features:

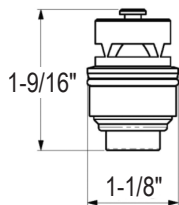
- Specially designed cartridge makes it difficult for dirt and debris to accumulate — debris won't compromise valve accuracy
- Provides constant flow to a pre-set rate through the use of a removable cartridge
- Cartridge can be easily removed without the use of a special tool for quick change-out, inspection, and cleaning
- System remains balanced even under fluctuating pressure
- Saves time — no need to balance and re-balance system
- Compact installation
- Accurate to within 5% of specified flow rate

Connection:

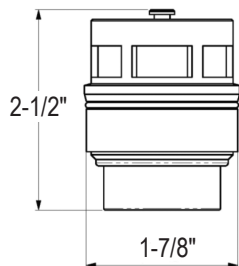
NPT threads ANSI B1.20.1.



- 1: Valve Body
- 2: O-Ring
- 3: Cap
- 4: Low Pressure Test Port
- 5: High Pressure Test Port
- 6: Cartridge



1/2" – 1" Cartridge



1" L – 2" Cartridge

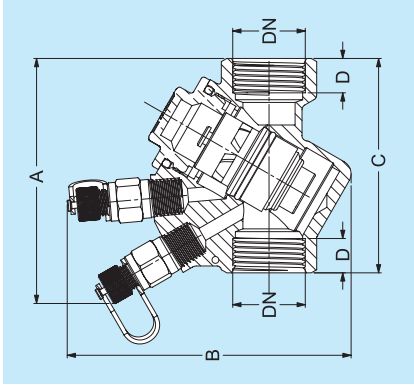
Size	Fast Order No.
1/2"	790-04
3/4"	790-06
1"	790-07
1" L	790-07L
1-1/4"	790-08
1-1/2"	790-09
2"	790-10

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

Automatic Balancing Valve

With Removable Cartridge and Integral Test Ports - FIPT x FIPT

cim790.1

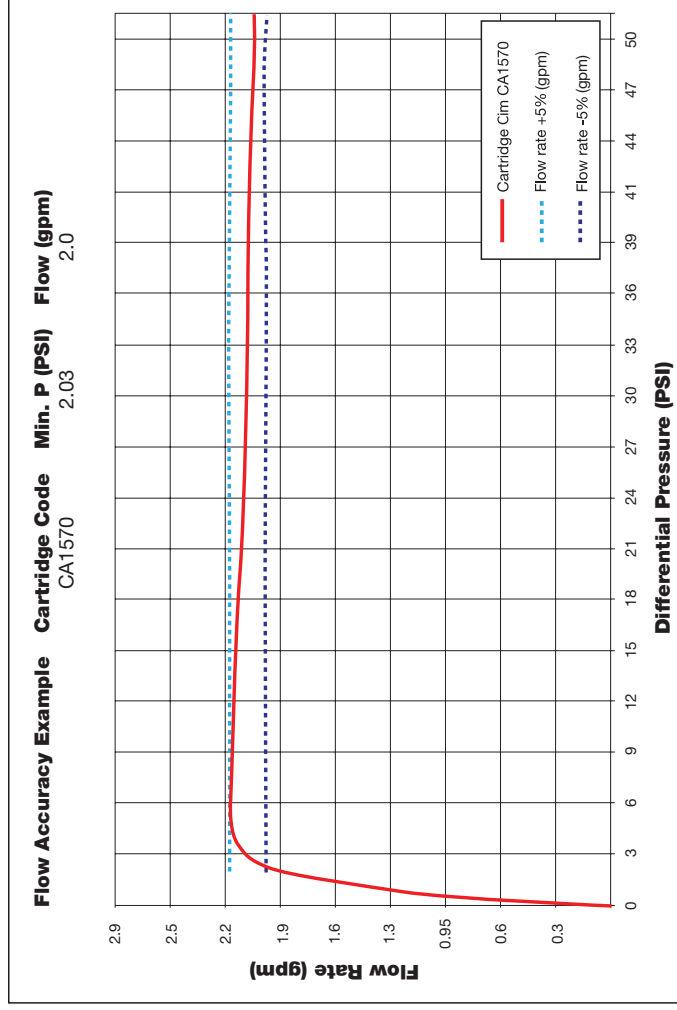


Size	1/2"	3/4"	1"	1" L	1-1/4"	1-1/2"	2"
A	3-1/2" 89mm	3-1/2" 89mm	3-11/16" 93mm	4-15/16" 125mm	4-15/16" 125mm	4-15/16" 125mm	5-1/8" 130mm
B	4-1/16" 103mm	4-1/16" 103mm	4-1/16" 103mm	5-9/16" 141mm	5-9/16" 141mm	5-9/16" 141mm	5-9/16" 141mm
C	3-1/16" 78mm	3-1/16" 78mm	3-3/8" 85mm	4-7/8" 123mm	4-7/8" 123mm	4-7/8" 123mm	5-3/16" 132mm
D	7/16" 11.5mm	1/2" 12.5mm	9/16" 14.5mm	9/16" 14.5mm	11/16" 16.8mm	11/16" 16.8mm	13/16" 21.1mm
Flow Rate (gpm)	0.1 - 11	0.1 - 11	0.1 - 11	5 - 42	5 - 42	5 - 42	5 - 42
Pounds	1.12	1.17	1.36	3.32	3.37	3.51	3.77
Grams	510	530	615	1505	1530	1590	1710

Cartridges for 1/2" - 1" Valves*			
Cim No.	Flow (gpm)	Min. Δp (PSI)	Kv
CA1170	0.15	1	0.16
CA1230	0.33	1.16	0.31
CA1300	0.5	1.45	0.42
CA1430	1.0	1.74	0.81
CA1510	1.5	1.89	1.12
CA1570	2.0	2.03	1.47
CA1725	2.5	2.03	1.90
CA1730	3.0	2.03	2.07
CA1740	3.5	2.32	2.31
CA1750	4.0	3.05	2.32
CA2070	4.5	3.19	2.51
CA2074	5.0	3.19	2.66
CA2077	5.5	3.19	2.95
CA2082	6.0	3.34	3.21
CA2086	6.5	3.34	3.57
CA2088	7.0	3.34	3.82
CA2092	7.5	3.48	4.19
CA2094	8.0	3.48	4.32
CA2099	9.0	3.63	4.81
CA2103	10.0	3.77	5.10
CA2109	11.0	4.06	5.35

Cartridges for 1" L - 2" Valves*			
Cim No.	Flow (gpm)	Min. Δp (PSI)	Kv
CA3094	5	1.74	3.79
CA3102	6	1.89	4.32
CA3112	7	2.03	5.04
CA3118	8	2.03	5.61
CA3125	9	2.32	5.91
CA3132	10	2.47	6.37
CA3138	11	2.61	6.81
CA3142	12	2.61	7.19
CA3148	13	2.76	7.62
CA3156	14	3.05	8.05
CA3161	15	3.19	8.39
CA4148	16	2.90	9.40
CA4152	16	3.05	9.28
CA4156	18	3.05	10.31
CA4164	19	3.05	10.89
CA4168	20	3.19	11.19
CA4176	22	3.34	12.05
CA4182	24	3.48	12.86
CA4191	26	3.63	13.66
CA4194	29	3.77	14.82
CA4200	30	3.92	15.16
CA4205	32	4.06	15.87
CA4211	34	4.35	16.30
CA4217	36	4.50	16.97
CA4222	38	4.79	17.36
CA4229	40	4.93	18.01
CA4235	42	5.22	18.38

* Cartridge should not exceed ASHRAE recommended flow rate for valve size.



Working Pressure: 300 PSI

Max. Operating Temperature: Working Limit for Fluids -4° F - 248° F

Test Pressures: According to ISO 5208