



C194 Copper Ball Valves

TECHNICAL SPECIFICATIONS SUBMITTAL FORM

Job Name:	Submittal Date:	Wholesaler:
Job Location:	Engineer/Architect:	Contractor:

Product Use:

Full port ball valve for use in refrigeration, commercial HVAC, VRF, multi-mini split, sub-critical and trans-critical applications. Specifically designed for CO₂ refrigeration.

Design and Features:

- Full port valves with 2030 PSI (140 Bar) working pressure on sizes up to 1-3/8" and 1740 PSI (120 Bar) working pressure on sizes 1-5/8" and 2-1/8"
- Compatible with CO₂ (R744), HCFC, HFC, HFO refrigerants, and oils
- Teflon (PTFE) seals
- Rupture-proof encapsulated stem and bi-directional flow
- Stainless steel body
- 100% leak tested
- Stamped with serial number and packaged in poly-bag
- Two-year warranty

CO₂-C Sizes, Ball Port Sizes, Kv/Cv, and Pressure Ratings

PART NUMBER	CONNECTION ODS	BALL PORT SIZE	KV	CV	MAX. OPERATING PRESSURE	
	IN	MM	M3/H	GPM	BAR	PSI
CO2-02C	1/4"	10	0.8	0.9	140	2030
CO2-03C	3/8"	10	3	3.5	140	2030
CO2-04C	1/2"	10	5	5.8	140	2030
CO2-05C	5/8"	14	17	19.7	140	2030
CO2-06C	3/4"	18	17	19.7	140	2030
CO2-07C	7/8"	19	29	33.5	140	2030
CO2-09C	1-1/8"	25	51	59.0	140	2030
CO2-11C	1-3/8"	31	81	93.6	140	2030
CO2-13C	1-5/8"	37	105	121.4	120	1740
CO2-17C	2-1/8"	50	214	247.4	120	1740

Operating Specifications:

- Temperature: -40° to 302°F (-40°C to 150°C)
- Burst Pressure: 5 times the working pressure
- Life Expectancy: >50,000 cycles

Certifications and Approvals:

- RoHS
- CRN-approved
- CE-approved



CO₂-C Materials

PART	MATERIAL
STUBOUTS	C19400 Copper
SEALS & SEATS	Teflon (PTFE)
CAP	Stainless Steel
STEM	Stainless Steel
LOCK NUT	Stainless Steel
BODY	Stainless Steel
BALL	Stainless Steel



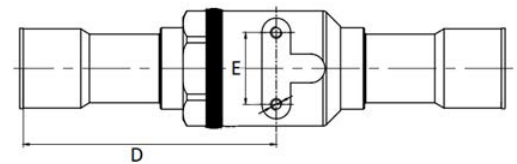
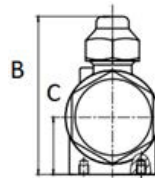
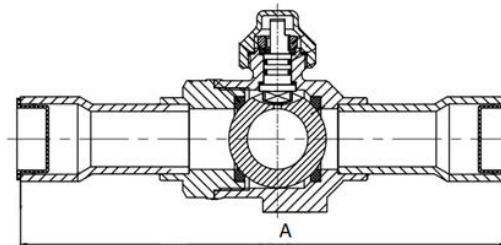
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CO2-C Dimensions

Model	ODS	A		B		C		D		E	
	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN
CO2-02C	1/4"	115	4.53"	56.1	2.21"	19	0.75"	59.8	2.35"	16	0.63"
CO2-03C	3/8"	130	5.12"	56.1	2.21"	19	0.75"	67.3	2.65"	16	0.63"
CO2-04C	1/2"	140	5.51"	56.1	2.21"	19	0.75"	72.3	2.85"	16	0.63"
CO2-05C	5/8"	148	5.83"	56.2	2.21"	15	0.59"	78.3	3.08"	22	0.87"
CO2-06C	3/4"	148	5.83"	63	2.48"	19	0.75"	77.8	3.06"	30	1.18"
CO2-07C	7/8"	185	7.28"	63	2.48"	19	0.75"	95.8	3.77"	30	1.18"
CO2-09C	1-1/8"	200	7.87"	82.8	3.26"	30	1.18"	105.8	4.17"	30	1.18"
CO2-11C	1-3/8"	210	8.27"	98.7	3.89"	29.8	1.17"	110.7	4.36"	48	1.89"
CO2-13C	1-5/8"	240	9.45"	108.5	4.27"	34	1.34"	124.4	4.90"	55	2.17"
CO2-17C	2-1/8"	275	10.83"	129.9	5.11"	45.5	1.79"	157.5	6.20"	74	2.91"

Part Selection

CO2-02C	1/4" C194 Ball Valve
CO2-03C	3/8" C194 Ball Valve
CO2-04C	1/2" C194 Ball Valve
CO2-05C	5/8" C194 Ball Valve
CO2-06C	3/4" C194 Ball Valve
CO2-07C	7/8" C194 Ball Valve
CO2-09C	1-1/8" C194 Ball Valve
CO2-11C	1-3/8" C194 Ball Valve
CO2-13C	1-5/8" C194 Ball Valve
CO2-17C	2-1/8" C194 Ball Valve



The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of a product.

All installations must completely comply with all NDL Industries warnings and instructions, national state and local codes and all applicable ANSI standards.

NDL Industries product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Customer

Service. NDL Industries reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on NDL products previously or subsequently sold.



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