



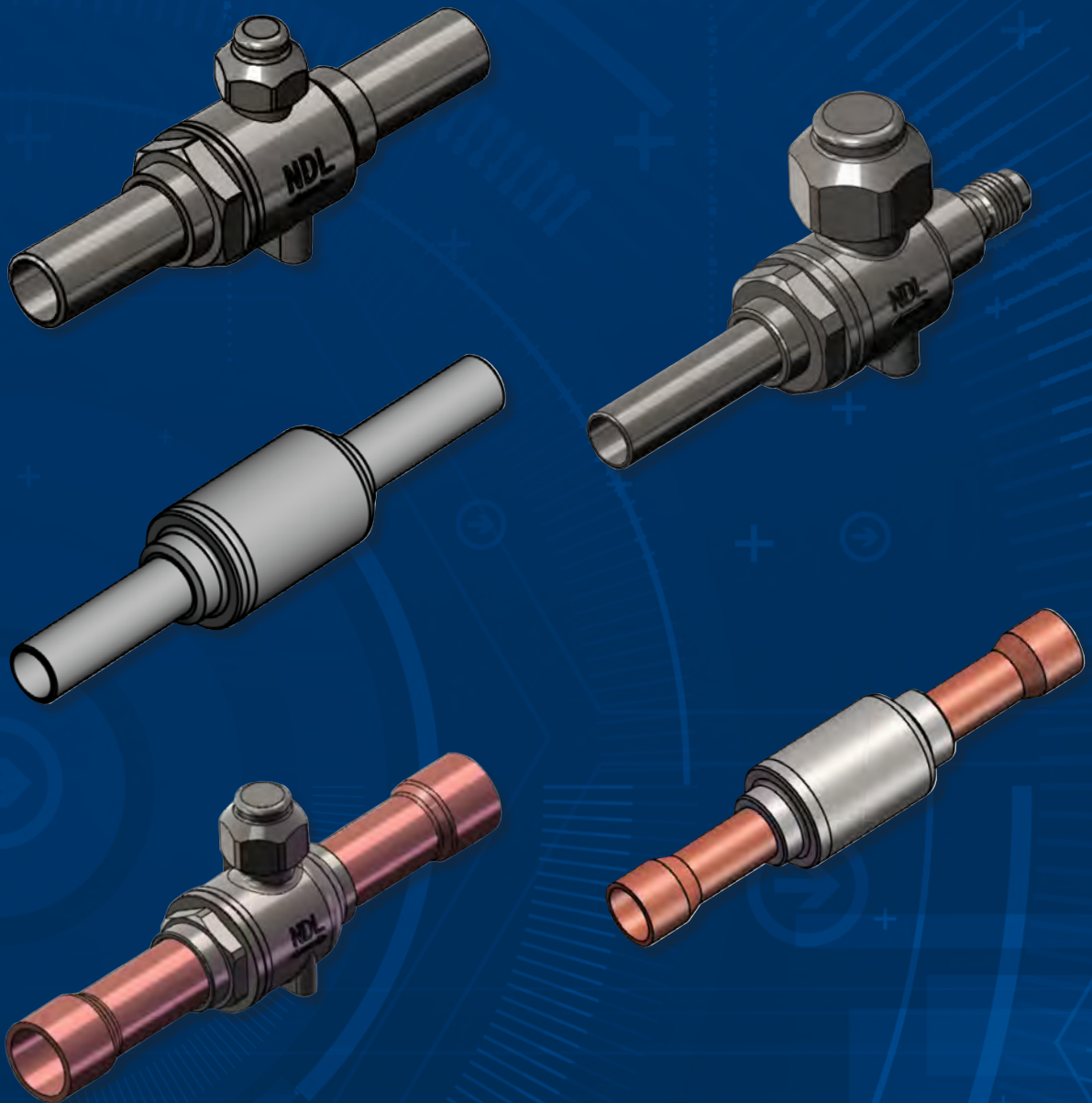
NDL Industries

APPLICATIONS

Commercial and Industrial Refrigeration

CO₂ Valves

Our robust design meets and exceeds the industry standards for holding maximum working pressure, garnering the reliability for transcritical CO₂ refrigeration applications.

**CRN
APPROVED***



Install NDL With Confidence

NDL is the only manufacturer of the CRN approved* ball valve that can hold five times their maximum working pressure, netting a tremendous safety margin for any ball valve used in CO₂ systems.

Stainless Steel Ball Valves

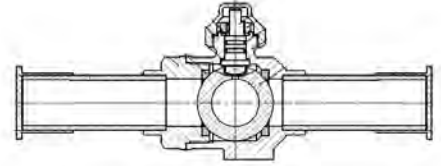
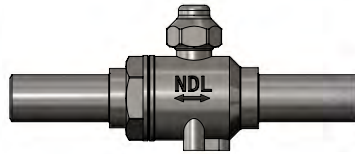
Our improved stainless steel CO₂ ball valves use thicker walls than the industry standard and have an all-around stronger stainless steel design to hold higher pressures. All of our ball valves are 100% helium tested at the factory to ensure unsurpassed performance in the field.

Specifications:

Continuous operating temperature (COT): -40°C to 150°C (-40°F to 302°F)

Maximum working pressure (MWP): 120-140 BAR (1740-2030 PSI)

Compatible with CO₂ (R744), Ammonia (R717), HCFC, HFC, HFO refrigerants, and oils

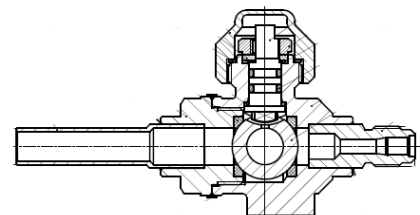


PART NUMBER	CONNECTIONS W		BALL PORT SIZE	KV	CV	MAX. OPERATING PRESSURE		CRN
	MM	NPS, IN	MM	M3/H	GPM	BAR	PSI	
CO2-02S [^]	6		10	0.8	0.9	140	2030	Approved
CO2-03S	10		10	3	3.5	140	2030	Approved
CO2-04S	12		10	5	5.8	140	2030	Approved
CO2-05S	16		14	17	19.7	140	2030	Approved
CO2-06S	18		16.5	17	19.7	140	2030	Approved
CO2-07S	22		18	29	33.5	140	2030	Approved
CO2-09S	28		25	51	59.0	140	2030	Approved
CO2-11S	35		31	81	93.6	140	2030	Approved
CO2-13S	42		37	105	121.4	120	1740	Approved
CO2-03D	DN08	1/4	10	3	3.5	140	2030	Approved
CO2-04D	DN10	3/8	14	9.8	11.3	140	2030	Approved
CO2-05D	DN15	1/2	18	17	19.7	140	2030	Approved
CO2-07D	DN20	3/4	25	40	46.2	140	2030	Approved
CO2-09D	DN25	1	31	59	68.2	140	2030	Approved
CO2-11D	DN32	1-1/4	37	105	121.4	120	1740	Approved
CO2-13D	DN40	1-1/2	37	105	121.4	120	1740	Approved
CO2-17D	DN50	2	50	214	247.4	120	1740	Approved

[^]C19400 copper connections

Stainless Steel Service Valves

Our full port Stainless Steel Service Ball Valves feature the same high quality attributes of the NDL ball valves. The design is ideal for system service applications where gauges must be used. All of our ball valves are 100% helium tested at the factory to ensure proper performance in the field.



Specifications:

Continuous operating temperature (COT): -40°C to 150°C (-40°F to 302°F).

Maximum working pressure: 140 BAR (2030 PSI)

Compatible with CO₂ (R744), Ammonia (R717), HCFC, HFC, HFO refrigerants, and oils

PART NUMBER	CONNECTIONS		BALL PORT SIZE	KV	CV	MAX. OPERATING PRESSURE		CRN
	W, MM	SAE, IN	MM	M3/H	GPM	BAR	PSI	
CO2-HS10	10	1/4"	10	1.1	1.3	140	2030	Approved
CO2-HS12	12	1/4"	10	1.1	1.3	140	2030	Approved

Teflon Seals and Seats

Reduce service calls, refrigerant loss, and environmental contamination with our cone-shaped 100% virgin Teflon seals and seats that will not shrink or leak, eliminating seal replacement during changeovers.

Bottom-Up Installation

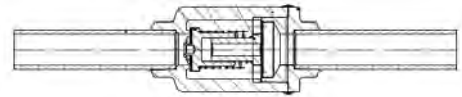
Our stem placement is engineered from the bottom up. If there is an accidental over-pressurization in the valve, it will not blow the stem out with resulting loss of the charge.

Unparalleled Warranty

Our two-year warranty proves confidence. Every valve is tested and serial number stamped. Valves are cleanly packaged in a poly-bag and boxed to prevent contamination in transit to the job sites.

Stainless Steel Check Valves

The Stainless Steel Check Valves ascribe with the same high quality attributes of the NDL ball valves. As an essential component of any refrigeration system, its full body stainless steel design ensures failure-free field performance. All of our ball valves are 100% helium tested at the factory to ensure optimal performance in the field.



Specifications:

Continuous operating temperature (COT):
-40°C to 150°C (-40°F to 302°F)

Maximum working pressure: 140 BAR (2030 PSI)

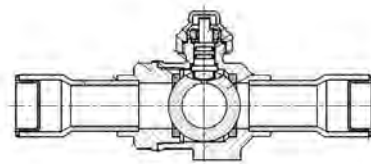
Standard spring minimum opening pressure differential = 0.3 BAR (4.35 PSI)

Compatible with CO₂ (R744), HCFC, HFC, HFO refrigerants, and oils.

PART NUMBER	CONNECTIONS W	KV	CV	MAX. OPERATING PRESSURE		CRN
	MM	M3/H	GPM	BAR	PSI	
CO2-CVS10M	10	1.5	1.7	140	2030	Approved
CO2-CVS12M	12	1.8	2.1	140	2030	Approved
CO2-CVS16M	16	3.3	3.8	140	2030	Pending
CO2-CVS22M	22	5	5.8	140	2030	Pending
CO2-CVS28M	28	*	*	*	*	Pending
CO2-CVS32M	32	*	*	*	*	Pending
CO2-CVS42M	42	*	*	*	*	Pending

C194 Copper CO₂ Ball Valves

Our C194 Copper CO₂ Ball Valves use thicker walls than the industry standard and have C19400 copper stubs for easy installation. All of our ball valves are 100% helium tested at the factory to ensure high performance in the field.



Specifications:

Continuous operating temperature (COT): -40°C to 150°C (-40°F to 302°F)

Maximum working pressure (MWP):
120-140 BAR (1740-2030 PSI)

Compatible with CO₂ (R744), HCFC, HFC, HFO refrigerants, and oils.

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

CRN Approved

NDL Industries is FIRST in the industry to receive CRN approval* for pressures up to 140 bar.

Sizes and Connections

A wide range of sizes and connection types makes our valves compatible with main pipe types manufactured from copper iron alloys and stainless steel.

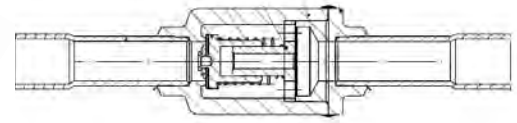
Stainless Steel Body

The NDL CO₂ valves feature a stainless steel body for stainless steel and copper-iron alloy connections.

Tested for High Quality

Each valve is helium tested at the factory to guarantee leak-free performance.

C194 Copper Check Valves



The C194 Copper Check Valves embody the same high quality attributes of the NDL ball valves. These high quality valves are an essential component of any refrigeration system with the robust attributes necessary for failure-free field performance. All of our valves are 100% helium tested at the factory to ensure uncompromised performance in the field.

Specifications:

Continuous operating temperature (COT): -40°C to 150°C (-40°F to 302°F)

Maximum working pressure: 140 BAR (2030 PSI)

Standard spring minimum opening pressure differential = 0.3 BAR (4.35 PSI)

Compatible with CO₂ (R744), HCFC, HFC, HFO refrigerants, and oils.

PART NUMBER	CONNECTIONS ODS	KV	CV	MAX. OPERATING PRESSURE		CRN
	IN	M3/H	GPM	BAR	PSI	
CO2-CVK014	1/4"	0.5	0.6	140	2030	Pending
CO2-CVK038	3/8"	1.5	1.7	140	2030	Pending
CO2-CVK012	1/2"	1.8	2.1	140	2030	Pending
CO2-CVK058	5/8"	3.3	3.8	140	2030	Pending
CO2-CVK034	3/4"	5	5.8	140	2030	Pending
CO2-CVK078	7/8"	5	5.8	*	*	Pending
CO2-CVK118	1-1/8"	*	*	*	*	Pending
CO2-CVK138	1-3/8"	*	*	*	*	Pending
CO2-CVK158	1-5/8"	*	*	*	*	Pending

*Quebec CRN 0C05607.6 Additional provincial certification numbers pending



Explore our full line of high-quality HVAC-R and plumbing products.

ndlinc.com | 1-866-635-6888 | sales@ndlinc.com

NDL-REFRIG-CO2-092022

