



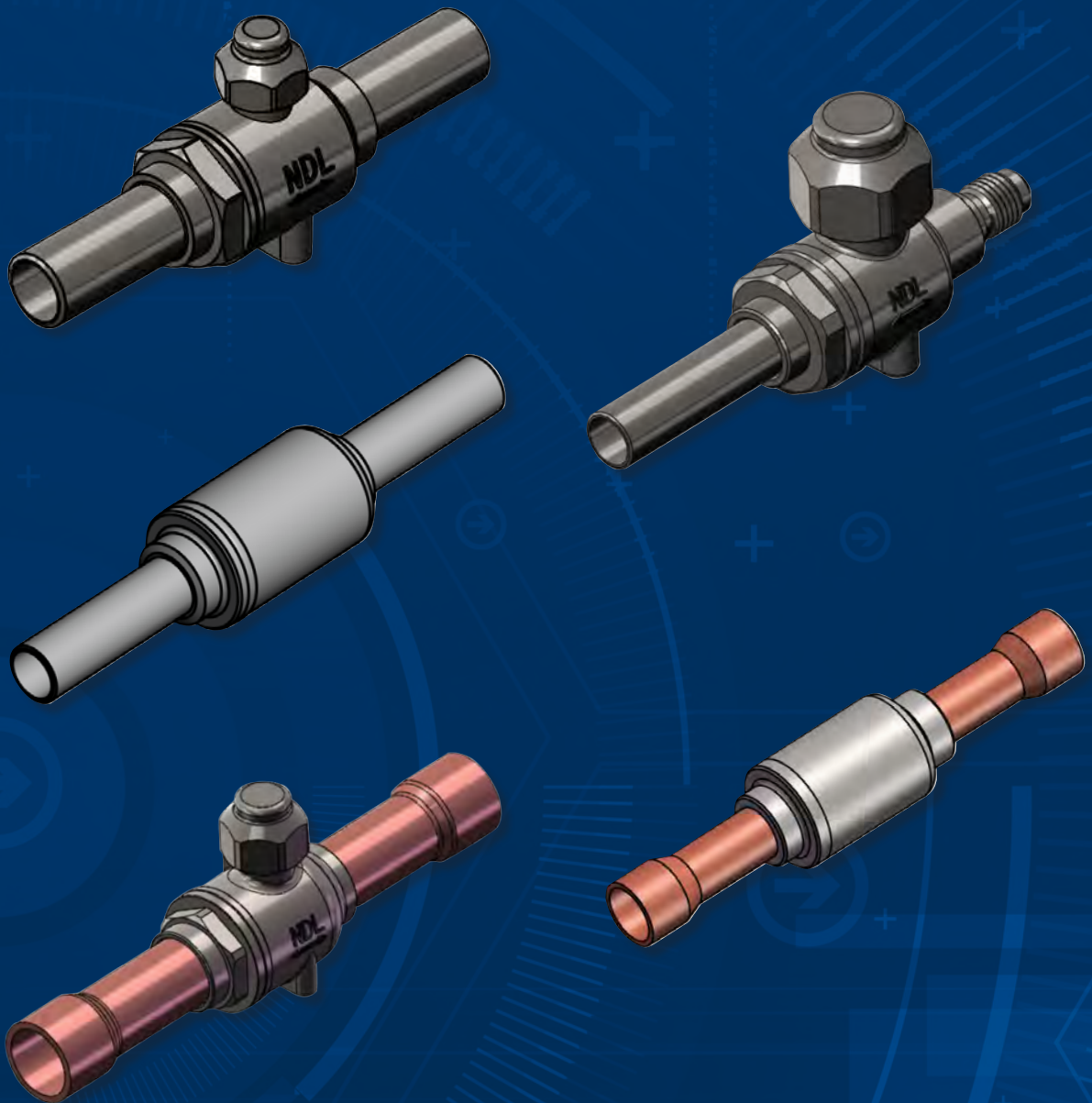
NDL Industries

**APPLICATIONS**

Commercial and Industrial Refrigeration

# CO<sub>2</sub> Valves

Our robust design meets and exceeds the industry standards for holding maximum working pressure, garnering the reliability for transcritical CO<sub>2</sub> 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 CO<sub>2</sub> systems.

## Stainless Steel Ball Valves

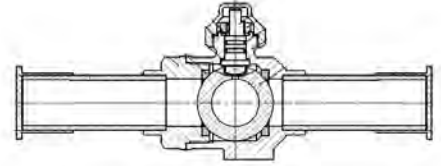
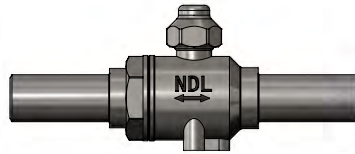
Our improved stainless steel CO<sub>2</sub> ball valves use thicker walls than the industry standard and have an all-around stronger stainless steel design to hold higher pressures. All of our ball valves are 100% helium tested at the factory to ensure unsurpassed performance in the field.

### 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)

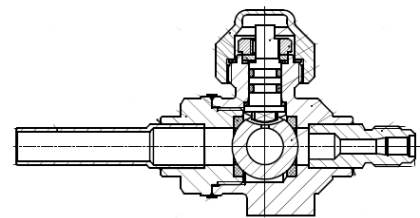
Compatible with R717 and R744 refrigerant and oils



PART NUMBER	CONNECTIONS W	BALL PORT SIZE	KV	CV	MAX. OPERATING PRESSURE		CRN
	MM	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	10	3	3.5	140	2030	Approved
CO2-04D	DN10	14	9.8	11.3	140	2030	Approved
CO2-05D	DN15	18	17	19.7	140	2030	Approved
CO2-07D	DN20	25	40	46.2	140	2030	Approved
CO2-09D	DN25	31	59	68.2	140	2030	Approved
CO2-11D	DN32	37	105	121.4	120	1740	Approved
CO2-13D	DN40	37	105	121.4	120	1740	Approved
CO2-17D	DN50	50	214	247.4	120	1740	Approved

## Stainless Steel Service Valves

Our full port Stainless Steel Service Ball Valves feature the same high quality attributes of the NDL ball valves. The flare end makes this design 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 R744 refrigerants and oils

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

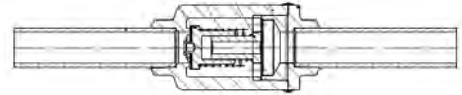
Our stem placement is engineered from the bottom up. If there is an accidental over-pressurization in the valve, it will not blow the stem out with resulting loss of the charge.

## 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: 150 BAR (2175 PSI)

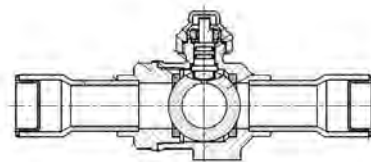
Standard spring minimum opening pressure differential = 0.3 bar

Compatible with R744 and R717 refrigerants

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 CO<sub>2</sub> Ball Valves

Our C194 Copper CO<sub>2</sub> 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 R744 refrigerant 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.

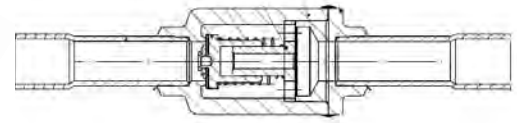
## Stainless Steel Body

The NDL CO<sub>2</sub> 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.

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

## Specifications:

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

Maximum working pressure: 150 BAR (2175 PSI)

Standard spring minimum opening pressure differential = 0.3bar

Compatible with R744 refrigerant

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



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

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