



NDL Industries

APPLICATIONSCommercial, Industrial, and Residential CO₂ Refrigeration

CO₂ Copper Fittings

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





CO₂ Copper Fittings

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

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@ndlindustries





CO₂ Fittings

High-pressure copper-iron alloy fittings with High-Quality Performance

- Our high-pressure copper-iron alloy fittings are tested for actual burst pressure with the results exceeding 3 times the design pressure.
- Each fitting is marked with "CO₂ 130 BAR" and OD size for easy field identification.
- Our 1-Year Warranty proves that we have confidence in our fittings, and that they can be trusted in the field.
- Our copper fittings have zero reported failures since 1999.
- NDL ensures copper quality content and strict adherence to meet or exceed ASME B16.22 standards for wall thickness.
- The fittings have tight tolerances on the cup side for a stronger joint with the tube and easier brazing.
- Fittings are poly-bagged within the box, keeping them clean and contaminant-free prior to installation.

Certifications and Approvals

- UL Listed

Symbols

C Copper (cup) manufactured to receive copper tube diameter

FTG Fittings end made to copper tube diameter





CO₂ Fittings

Technical Data

SIZE RANGE	From 3/8" up to 2 1/8"
MATERIAL	Copper alloy CuFe2P C19400
OPERATING TEMPERATURE	-196° C to 150° C / -320° F to 302° F
BURST PRESSURE	>390 bar / >39 MPa / >5656 psi
MAXIMUM OPERATING PRESSURE	130 bar / 13 MPa / 1885 psi at 150° C
APPLICATION	Air conditioning and refrigeration. Designed for high-pressure applications, especially for CO ₂ (R744) systems.
TUBE COMPATIBILITY	Compatible with main pipe types manufactured from copper iron alloys available on the market.





Reducing Bushings (FTG x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO1312	1/2" x 3/8" Reducing Bushing	EA	0.017	7.50
CO21313	1/2" x 12mm Reducing Bushing	EA	0.019	8.50
CO1315	5/8" x 1/2" Reducing Bushing	EA	0.026	12.00
CO1317	5/8" x 3/8" Reducing Bushing	EA	0.026	12.00
CO1321	3/4" x 1/2" Reducing Bushing	EA	0.046	21.00
CO1322	3/4" x 3/8" Reducing Bushing	EA	0.046	21.00
CO1320	3/4" x 5/8" Reducing Bushing	EA	0.049	22.00
CO1326	7/8" x 5/8" Reducing Bushing	EA	0.066	30.00
CO1328	7/8" x 3/8" Reducing Bushing	EA	0.068	31.00
CO1327	7/8" x 1/2" Reducing Bushing	EA	0.068	31.00
CO1325	7/8" x 3/4" Reducing Bushing	EA	0.071	32.00
CO21326	7/8" x 22mm Reducing Bushing	EA	0.071	32.00
CO1340	1-1/8" x 1/2" Reducing Bushing	EA	0.117	53.00
CO1399	1-1/8" x 5/8" Reducing Bushing	EA	0.121	55.00
CO1338	1-1/8" x 3/4" Reducing Bushing	EA	0.123	56.00
CO1337	1-1/8" x 7/8" Reducing Bushing	EA	0.126	57.00
CO21338	1-1/8" x 28mm Reducing Bushing	EA	0.128	58.00
CO1347	1-3/8" x 5/8" Reducing Bushing	EA	0.176	80.00
CO1345	1-3/8" x 7/8" Reducing Bushing	EA	0.194	88.00
CO1343	1-3/8" x 1-1/8" Reducing Bushing	EA	0.203	92.00
CO21344	1-3/8" x 35mm Reducing Bushing	EA	0.220	100.00
CO1353	1-5/8" x 7/8" Reducing Bushing	EA	0.280	127.00
CO1351	1-5/8" x 1-1/8" Reducing Bushing	EA	0.282	128.00
CO1350	1-5/8" x 1-3/8" Reducing Bushing	EA	0.289	131.00
CO21349	1-5/8" x 42mm Reducing Bushing	EA	0.309	140.00
CO1358	2-1/8" x 1-5/8" Reducing Bushing	EA	0.586	266.00
CO1362	2-1/8" x 7/8" Reducing Bushing	EA	0.606	275.00
CO1360	2-1/8" x 1-1/8" Reducing Bushing	EA	0.617	280.00
CO1359	2-1/8" x 1-3/8" Reducing Bushing	EA	0.639	290.00



Caps

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO7004	3/8" Cap	EA	0.007	3.00
CO7006	1/2" Cap	EA	0.011	5.00
CO7007	5/8" Cap	EA	0.018	8.00
CO7008	3/4" Cap	EA	0.031	14.00
CO7009	7/8" Cap	EA	0.062	28.00
CO7011	1-1/8" Cap	EA	0.099	45.00
CO7012	1-3/8" Cap	EA	0.165	75.00
CO7013	1-5/8" Cap	EA	0.220	100.00
CO7014	2-1/8" Cap	EA	0.617	280.00



Reducing Couplings (C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO1019	1/2" x 3/8" Reducing Coupling	EA	0.020	9.00
CO1023	5/8" x 1/2" Reducing Coupling	EA	0.031	14.00
CO1029	3/4" x 5/8" Reducing Coupling	EA	0.057	26.00
CO1035	7/8" x 3/4" Reducing Coupling	EA	0.086	39.00
CO1052	1-1/8" x 1/2" Reducing Coupling	EA	0.132	60.00
CO1049	1-1/8" x 7/8" Reducing Coupling	EA	0.146	66.00
CO1060	1-3/8" x 5/8" Reducing Coupling	EA	0.209	95.00
CO1061	1-3/8" x 1/2" Reducing Coupling	EA	0.214	97.00
CO1059	1-3/8" x 3/4" Reducing Coupling	EA	0.220	100.00
CO1058	1-3/8" x 7/8" Reducing Coupling	EA	0.231	105.00
CO1056	1-3/8" x 1-1/8" Reducing Coupling	EA	0.234	106.00
CO1068	1-5/8" x 3/4" Reducing Coupling	EA	0.298	135.00
CO1067	1-5/8" x 7/8" Reducing Coupling	EA	0.304	138.00
CO1065	1-5/8" x 1-1/8" Reducing Coupling	EA	0.320	145.00
CO1064	1-5/8" x 1-3/8" Reducing Coupling	EA	0.328	149.00
CO1074	2-1/8" x 1-3/8" Reducing Coupling	EA	0.661	300.00
CO1073	2-1/8" x 1-5/8" Reducing Coupling	EA	0.675	306.00



Stake Stop Couplings (C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO10143	3/8" Coupling with Stake Stop	EA	0.009	4.00
CO10144	1/2" Coupling with Stake Stop	EA	0.018	8.00
CO10145	5/8" Coupling with Stake Stop	EA	0.029	13.00
CO10157	3/4" Coupling with Stake Stop	EA	0.051	23.00
CO10146	7/8" Coupling with Stake Stop	EA	0.086	39.00
CO10147	1-1/8" Coupling with Stake Stop	EA	0.152	69.00
CO10148	1-3/8" Coupling with Stake Stop	EA	0.258	117.00
CO10149	1-5/8" Coupling with Stake Stop	EA	0.373	169.00
CO10150	2-1/8" Coupling with Stake Stop	EA	0.818	371.00



45° Elbows (C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO3012	3/8" 45° Elbow	EA	0.012	5.50
CO3021	1/2" 45° Elbow	EA	0.022	10.00
CO3026	5/8" 45° Elbow	EA	0.042	19.00
CO3030	3/4" 45° Elbow	EA	0.068	31.00
CO3034	7/8" 45° Elbow	EA	0.117	53.00
CO3044	1-1/8" 45° Elbow	EA	0.223	101.00
CO3050	1-3/8" 45° Elbow	EA	0.379	172.00
CO3055	1-5/8" 45° Elbow	EA	0.560	254.00
CO3059	2-1/8" 45° Elbow	EA	1.653	750.00



45° Street Elbows (FTG x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO3312	3/8" 45° Street Elbow	EA	0.011	5.00
CO3321	1/2" 45° Street Elbow	EA	0.022	10.00
CO3326	5/8" 45° Street Elbow	EA	0.042	19.00
CO3330	3/4" 45° Street Elbow	EA	0.077	35.00
CO3334	7/8" 45° Street Elbow	EA	0.117	53.00
CO3344	1-1/8" 45° Street Elbow	EA	0.227	103.00



45° Street Elbows (FTG x C) - Continued

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO3350	1-3/8" 45° Street Elbow	EA	0.388	176.00
CO3355	1-5/8" 45° Street Elbow	EA	0.567	257.00
CO3359	2-1/8" 45° Street Elbow	EA	0.992	450.00



90° Long Radius Elbows (C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO2716	3/8" 90° Long Radius Elbow	EA	0.017	7.50
CO2717	1/2" 90° Long Radius Elbow	EA	0.036	16.50
CO2722	5/8" 90° Long Radius Elbow	EA	0.066	30.00
CO2728	3/4" 90° Long Radius Elbow	EA	0.121	55.00
CO2734	7/8" 90° Long Radius Elbow	EA	0.119	54.00
CO2747	1-1/8" 90° Long Radius Elbow	EA	0.320	145.00
CO2055	1-3/8" 90° Long Radius Elbow	EA	0.628	285.00
CO2063	1-5/8" 90° Long Radius Elbow	EA	1.190	540.00
CO2072	2-1/8" 90° Long Radius Elbow	EA	3.097	1405.00



90° Long Radius Street Elbows (FTG x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO2809	3/8" 90° Long Radius Street Elbow	EA	0.018	8.00
CO2817	1/2" 90° Long Radius Street Elbow	EA	0.037	17.00
CO2822	5/8" 90° Long Radius Street Elbow	EA	0.064	29.00
CO2828	3/4" 90° Long Radius Street Elbow	EA	0.123	56.00
CO2834	7/8" 90° Long Radius Street Elbow	EA	0.168	76.00
CO2847	1-1/8" 90° Long Radius Street Elbow	EA	0.342	155.00
CO2350	1-3/8" 90° Long Radius Street Elbow	EA	0.606	275.00
CO2355	1-5/8" 90° Long Radius Street Elbow	EA	1.149	521.00
CO2359	2-1/8" 90° Long Radius Street Elbow	EA	3.086	1400.00



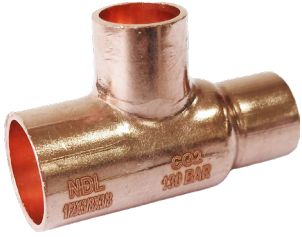
Tees (C x C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO4000	3/8" Tee	EA	0.022	10.00
CO4001	1/2" Tee	EA	0.049	22.00
CO4006	5/8" Tee	EA	0.073	33.00
CO4017	3/4" Tee	EA	0.134	61.00
CO4031	7/8" Tee	EA	0.201	91.00
CO4048	1-1/8" Tee	EA	0.441	200.00
CO4068	1-3/8" Tee	EA	0.734	333.00
CO4084	1-5/8" Tee	EA	1.054	478.00
CO40102	2-1/8" Tee	EA	2.371	1075.50



Reducing Tees (C x C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO4002	1/2" x 1/2" x 3/8" Reducing Tee	5	0.041	18.6
CO4007	5/8" x 5/8" x 1/2" Reducing Tee	5	0.073	33.1
CO4008	5/8" x 5/8" x 3/8" Reducing Tee	5	0.071	32.2
CO4018	3/4" x 3/4" x 5/8" Reducing Tee	5	0.108	49.0
CO4019	3/4" x 3/4" x 1/2" Reducing Tee	5	0.128	58.1
CO4032	7/8" x 7/8" x 3/4" Reducing Tee	5	0.165	74.8
CO4033	7/8" x 7/8" x 5/8" Reducing Tee	5	0.165	74.8
CO4034	7/8" x 7/8" x 1/2" Reducing Tee	5	0.165	74.8
CO4049	1-1/8" x 1-1/8" x 7/8" Reducing Tee	5	0.300	136.1
CO4050	1-1/8" x 1-1/8" x 3/4" Reducing Tee	5	0.273	123.8
CO4069	1-3/8" x 1-3/8" x 1-1/8" Reducing Tee	EA	0.520	235.9
CO4070	1-3/8" x 1-3/8" x 7/8" Reducing Tee	EA	0.461	209.1
CO4071	1-3/8" x 1-3/8" x 3/4" Reducing Tee	EA	0.428	194.1
CO4085	1-5/8" x 1-5/8" x 1-3/8" Reducing Tee	EA	0.873	396.0
CO4086	1-5/8" x 1-5/8" x 1-1/8" Reducing Tee	EA	1.014	459.9
CO4087	1-5/8" x 1-5/8" x 7/8" Reducing Tee	EA	1.058	479.9
CO40103	2-1/8" x 2-1/8" x 1-5/8" Reducing Tee	EA	2.205	1000.2



Reduced Tees (C x C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO4004	1/2" x 3/8" x 3/8" Reducing Tee	EA	0.042	19.00
CO4010	5/8" x 1/2" x 1/2" Reducing Tee	EA	0.066	30.00
CO4059	1-1/8" x 7/8" x 1/2" Reducing Tee	EA	0.355	161.00



Service Tees (C x C x C)

PART #	OD - DESCRIPTION	BOX QTY	WT (LB)	WT (G)
CO4001S	1/2" x 1/2" x 10 mm Reducing Tee	EA	0.055	25.00
CO4006S	5/8" x 5/8" x 10 mm Reducing Tee	EA	0.066	32.00
CO4017S	3/4" x 3/4" x 10 mm Reducing Tee	EA	0.110	50.00
CO4031S	7/8" x 7/8" x 10 mm Reducing Tee	EA	0.183	83.00
CO4048S	1-1/8" x 1-1/8" x 10 mm Reducing Tee	EA	0.30	136.00
CO4068S	1-3/8" 1-3/8" x 10 mm Reducing Tee	EA	0.551	250.00
CO4084S	1-5/8" x 1-5/8" x 10 mm Reducing Tee	EA	0.772	350.00
CO40102S	2-1/8" x 2-1/8" x 10 mm Reducing Tee	EA	1.764	800.00



FAST ORDER TURNAROUND

Our Operations Center is strategically located in the Memphis, Tennessee metro area to streamline delivery and bolster the customer service that NDL is known for throughout the industry.



We Focus on Quality and Service So You Can Install with Confidence.

Since 1998, it has been our mission to stay ahead of the curve as an industry leader in the HVAC, Refrigeration, and Plumbing markets. We have achieved this over the years by placing a heavy emphasis on quality, innovation, and maintaining a global team of experienced professionals to deliver top-notch service. We continue to hold ourselves to the highest standards, never sacrificing our commitment to our customers or our product that has what made us the company we are today.

What you can expect from us:

- Fast order turnaround
- Real-time order communications
- Field-experienced sales and technical support
- Parts packaged in contractor-friendly sized bags
- High-quality control standards for superior fit and finish



Innovative HVAC-R Products That Exceed Expectations.

We began our journey looking for the best ACR copper fitting and we engineered a design that now exceeds industry standards. We maintain the same high-quality standards and performance expectations with our filter driers, refrigeration ball valves, and other HVAC and refrigeration products.

Learn more about our high-quality products with zero reported failures at ndlinc.com.



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

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