

COPPER-IRON FITTINGS FOR REFRIGERATION APPLICATIONS

JOB NAME

CONTRACTOR

JOB LOCATION

WHOLESALE

ENGINEER

STREAMLINE® REP

PRODUCT DESCRIPTION:

Streamline® XHP Copper-Iron Fittings for use in refrigeration applications. Available sizes ranging from 3/8" to 2-5/8" in outside diameter for continuous 130 BAR / 1885 PSI pressure ratings at 120°C / 250°F.

MATERIAL:

Streamline® XHP Copper-Iron Fittings shall be made from material in compliance with UNS C19400 grade of copper alloy.

KEY SPECIFICATIONS:

Streamline® XHP Copper-Iron Fittings are third party listed by UL for continuous operating pressure of 130 BAR / 1885 PSI at a continuous operating temperature of 120°C / 250°F. Streamline® XHP Fittings meet the dimensional requirements of ASME B16.22 or ASME B16.50.

INSTALLATION:

Streamline® XHP material was developed for use with high-pressure refrigerants. Compared to conventional pure copper Cu-DHP (99.9% Cu; UNS C12200), Streamline® XHP material is a CuFe2P alloy (2.1-2.6% iron; UNS C19400). This material's wettability is comparable to that of Cu-DHP.

Streamline® XHP Fittings are not subject to any restrictions for the selection of brazing alloy. Commonly used brazing filler metal types such as BCup Alloy (may contain 0% - 30% Silver - Ag) or Bag Alloy (may contain anywhere between 24% and 93% Silver - Ag) can be used. The brazing alloy chosen must be clarified with the brazing alloy supplier for each specific application. The selection of brazing alloy may depend on a few factors: applicable codes, OEM specifications, vibration, and operating temperatures.

SPECIFICATION LANGUAGE:

Copper-Iron Tube shall conform to the requirements of ASTM B1018. Copper-Iron Fittings shall conform to the dimensional requirements of ASME B16.22 and ASME B16.50. Performance criteria of copper-iron tube and fittings shall conform to UL 207.

- a. Operating pressure: 130 BAR / 1885 PSI Max
- b. Temperature range: 120°C / 250°F Continuous
- c. Tube and fittings shall be listed to UL 207
- d. Tubing shall be marked with 3rd party certification testing agency's logos or trademark, along with the maximum operating pressure

-OR-

Piping systems for CO2 applications shall be made from Streamline® XHP tube and fittings.

REFERENCES:

C19400	Minimum 97.0% Cu, 2.1-2.6% Fe
ASME B16.22	Wrot Copper and Copper Alloy Solder-Joint Pressure Fittings
ASME B16.50	Wrot Copper and Copper Alloy Braze-Joint Pressure Fittings

45° ELBOW • STREET

C x FTG



Item No.	Diameter (OD)	Inner Qty	Weight
X 03312	3/8"	5	0.011
X 03321	1/2"	5	0.02
X 03326	5/8"	5	0.037
X 03330	3/4"	5	0.066
X 03334	7/8"	5	0.106
X 03344	1-1/8"	5	0.213
X 03350	1-3/8"	1	0.385
X 03355	1-5/8"	1	0.624
X 03359	2-1/8"	1	1.486

45° ELBOW

C x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 03012	3/8"	5	0.009
X 03021	1/2"	5	0.02
X 03026	5/8"	5	0.035
X 03030	3/4"	5	0.065
X 03034	7/8"	5	0.106
X 03044	1-1/8"	5	0.21
X 03050	1-3/8"	1	0.387
X 03055	1-5/8"	1	0.627
X 03059	2-1/8"	1	1.486

90° ELBOW • LONG RADIUS STREET ELBOW

C x FTG



Item No.	Diameter (OD)	Inner Qty	Weight
X 02809	3/8"	5	0.013
X 02817	1/2"	5	0.028
X 02822	5/8"	5	0.052
X 02828	3/4"	5	0.091
X 02834	7/8"	5	0.143
X 02847	1-1/8"	5	0.287
X 02350	1-3/8"	1	0.530
X 02355	1-5/8"	1	0.852
X 02359	2-1/8"	1	2.191
X 02363	2-5/8"	1	3.3797

90° LONG RADIUS ELBOW

C x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 02716	3/8"	5	0.013
X 02717	1/2"	5	0.028
X 02722	5/8"	5	0.051
X 02728	3/4"	5	0.090
X 02734	7/8"	5	0.144
X 02747	1-1/8"	5	0.287
X 02055	1-3/8"	1	0.521
X 02063	1-5/8"	1	0.855
X 02072	2-1/8"	1	2.191
X 02082	2-5/8"	1	3.3797

TEE

C x C x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 04000	3/8"	5	0.019
X 04001	1/2"	5	0.038
X 04006	5/8"	5	0.069
X 04017	3/4"	5	0.116
X 04031	7/8"	5	0.215
X 04048	1-1/8"	5	0.411
X 04068	1-3/8"	1	0.743
X 04084	1-5/8"	1	1.216
X 40102	2-1/8"	1	2.646
X 40123	2-5/8"	1	4.399

REDUCING

X 04004	1/2" x 3/8" x 3/8"	5	0.038
X 04002	1/2" x 1/2" x 3/8"	5	0.029
X 04010	5/8" x 1/2" x 1/2"	5	0.068
X 04008	5/8" x 5/8" x 3/8"	5	0.044
X 04007	5/8" x 5/8" x 1/2"	5	0.062
X 04019	3/4" x 3/4" x 1/2"	5	0.106
X 04018	3/4" x 3/4" x 5/8"	5	0.108
X 04034	7/8" x 7/8" x 1/2"	5	0.165
X 04033	7/8" x 7/8" x 5/8"	5	0.165
X 04032	7/8" x 7/8" x 3/4"	5	0.165
X 04050	1-1/8" x 1-1/8" x 3/4"	5	0.273
X 04049	1-1/8" x 1-1/8" x 7/8"	5	0.300
X 14071	1-3/8" x 1-3/8" x 3/4"	1	0.428
X 04070	1-3/8" x 1-3/8" x 7/8"	1	0.461
X 04069	1-3/8" x 1-3/8" x 1-1/8"	1	0.520
X 04086	1-5/8" x 1-5/8" x 1-1/8"	1	1.014
X 04085	1-5/8" x 1-5/8" x 1-3/8"	1	0.873
X 40103	2-1/8" x 2-1/8" x 1-5/8"	1	2.205

COUPLING • REDUCING

C x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 01019	1/2" x 3/8"	5	0.015
X 01023	5/8" x 1/2"	5	0.026
X 01029	3/4" x 5/8"	5	0.042
X 01035	7/8" x 3/4"	5	0.068
X 01052	1-1/8" x 1/2"	5	0.134
X 01049	1-1/8" x 7/8"	5	0.137
X 01061	1-3/8" x 1/2"	1	0.231
X 01060	1-3/8" x 5/8"	1	0.234
X 01059	1-3/8" x 3/4"	1	0.236
X 01058	1-3/8" x 7/8"	1	0.240
X 01056	1-3/8" x 1-1/8"	1	0.243
X 01068	1-5/8" x 3/4"	1	0.384
X 01067	1-5/8" x 7/8"	1	0.379
X 01065	1-5/8" x 1-1/8"	1	0.381
X 01064	1-5/8" x 1-3/8"	1	0.395
X 01073	2-1/8" x 1-5/8"	1	0.670

FITTING • REDUCING

FTG x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 01312	1/2" x 3/8"	5	0.015
X 21313	1/2" x 12mm	5	0.013
X 01317	5/8" x 3/8"	5	0.026
X 01315	5/8" x 1/2"	5	0.026
X 01322	3/4" x 3/8"	5	0.045
X 01321	3/4" x 1/2"	5	0.043
X 01320	3/4" x 5/8"	5	0.043
X 11328	7/8" x 3/8"	5	0.072
X 01327	7/8" x 1/2"	5	0.064
X 01326	7/8" x 5/8"	5	0.069
X 01325	7/8" x 3/4"	5	0.065
X 21326	7/8 x 22mm	5	0.073
X 01340	1-1/8" x 1/2"	5	0.132
X 01399	1-1/8" x 5/8"	5	0.133
X 01338	1-1/8" x 3/4"	5	0.132
X 01337	1-1/8" x 7/8"	5	0.137
X 21338	1-1/8 x 28mm	5	0.139
X 01343	1-3/8" x 1-1/8"	1	0.233
X 21344	1-3/8 x 35mm	1	0.260
X 01353	1-5/8" x 7/8"	1	0.380
X 01350	1-5/8" x 1-3/8"	1	0.380
X 21349	1-5/8 x 42mm	1	0.425
X 01360	2-1/8" x 1-1/8"	1	0.838
X 01358	2-1/8" x 1-5/8"	1	0.948
X 01367	2-5/8" X 2-1/8"	1	1.295

COUPLING • WITH STOP

C x C



Item No.	Diameter (OD)	Inner Qty	Weight
X 10143	3/8"	5	0.009
X 10144	1/2"	5	0.017
X 10145	5/8"	5	0.032
X 10157	3/4"	5	0.057
X 10146	7/8"	5	0.090
X 10147	1-1/8"	5	0.172
X 10148	1-3/8"	1	0.311
X 10149	1-5/8"	1	0.513
X 10150	2-1/8"	1	1.093
X 10151	2-5/8"	1	1.7681

CAP

C



Item No.	Diameter (OD)	Inner Qty	Weight
X 07004	3/8"	5	0.006
X 07006	1/2"	5	0.013
X 07007	5/8"	5	0.024
X 07008	3/4"	5	0.037
X 07009	7/8"	5	0.060
X 07011	1-1/8"	5	0.115
X 07012	1-3/8"	1	0.201
X 07013	1-5/8"	1	0.340
X 07014	2-1/8"	1	0.661