Altech

Product datasheet

130 BAR COPPER REFRIGERANT

Copper refrigerant pipes

Altech 130 bar copper refrigerant pipes are made of a high strength copper alloy containing 2% steel (CuFe2P) to meet the installation requirements for transcritical CO2 refrigeration systems and other high-pressure applications. Altech copper refrigerant pipes are installed in the same way as traditional cooling pipes, i.e. by standardised brazing, bending with traditional tools and joining with standardised copper fittings designed for high pressure or with copper alloy CuFe2P/K65.

Product properties

- Ideally suited for transcritical CO2 systems
- Fabricated in extra strong copper alloy containing 2% steel (CuFe2P)
- Low weight compared with thick-walled copper pipes
- Traditional handling methods and installation equipment
- Compatible with fittings in the same alloy (CuFe2P/K65)
- Clearly marked and easily identified to simplify distinction from traditional refrigerant pipes designed for lower pressure

Material

Copper alloy CuFe2P, with chemical composition in accordance with EN 12449 (CW107C) and UNS C19400.

Specifications

Dimensional tolerances: EN 12735-1
Internal cleanliness: EN 12735-1
Mechanical properties: EN 12449, VdTÜV WB567
Delivery form: straight lengths with end caps
Labelling (example): Altech 130 bar, 9.52 x 0.65, CuFe2P R420, 130 bar/1740 psi

Item no	Outside diameter (mm | in)		Material thickness (mm)	Max operating pressure (bar)	Hardness	Length (m)
K5188050	9.52	3/8"	0.65	130	R300/R420	5
K5188052	12.70	1/2"	0.85	130	R300/R420	5
K5188054	15.87	5/8"	1.05	130	R300/R420	5
K5188056	19.05	3/4"	1.30	130	R300/R420	5
K5188058	22.23	7/8"	1.50	130	R300/R420	5
K5188060	28.57	1 1/8"	1.90	130	R300/R420	5
K5188062	34.92	1 3/8"	2.30	130	R300/R420	5
K5188064	41.27	1 5/8"	2.70	130	R300/R420	5

1. 130 bar (1740 psi) at an operating temperature of 150 °C (250 °F)
2. R300/R420 heat treatment in accordance with EN 12449 and VdTÜV WB567

130 BAR COPPER REFRIGERANT

Refrigerant fittings for installation of transcritical CO2 refrigeration systems and other high-pressure applications.

Dimensions	3/8″–1 5/8″	Material	Copper alloy K65
Max. operating pressure	130 bar	Labelling	>B< and dimension

Brazing bend 90° inside x inside brazing

Item no	Dimension
K5188100	3/8″
K5188102	1/2″
K5188104	5/8″
K5188106	3/4″
K5188108	7/8″
K5188110	1 1/8″
K5188112	1 3/8″
K5188114	1 5/8″
K5188115	2 1/8″

Brazing bend 45° inside x inside brazing

Item no	Dimension
K5188620	3/8″
K5188622	1/2″
K5188624	5/8″
K5188606	3/4″
K5188608	7/8″
K5188610	1 1/8″
K5188612	1 3/8″
K5188614	1 5/8″

Brazing bend 90° inside x outside brazing

Item no	Dimension
K5188682	3/8″
K5188684	1/2″
K5188686	5/8″
K5188688	3/4″
K5188690	7/8″
K5188692	1 1/8″
K5188694	1 3/8″
K5188696	1 5/8″

Brazing bend 45° outside x inside brazing

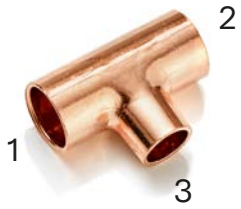
Item no	Dimension
K5188514	3/4″
K5188516	7/8″
K5188518	1 1/8″
K5188520	1 3/8″
K5188522	1 5/8″

Tee, inside brazing

Item no	Dimension
K5188200	3/8″
K5188206	1/2″
K5188214	5/8″
K5188218	3/4″
K5188222	7/8″
K5188228	1 1/8″
K5188232	1 3/8″
K5188236	1 5/8″
K5188207	2 1/8″

Reduced tee, inside brazing

Item no	Dimension
K5188202	1/2 x 3/8 x 3/8″
K5188204	1/2 x 1/2 x 3/8″
K5188208	5/8 x 1/2 x 1/2″
K5188210	5/8 x 5/8 x 3/8″
K5188212	5/8 x 5/8 x 1/2″
K5188216	3/4 x 3/4 x 5/8″
K5188220	7/8 x 7/8 x 3/4″
K5188224	1 1/8 x 7/8 x 1/2″
K5188226	1 1/8 x 1 1/8 x 7/8″
K5188230	1 3/8 x 1 3/8 x 1 1/8″
K5188234	1 5/8 x 1 5/8 x 1 3/8″
K5188626	3/4 x 3/4 x 1/2″
K5188628	7/8 x 7/8 x 1/2″
K5188630	7/8 x 7/8 x 5/8″
K5188632	1 1/8 x 1 1/8 x 3/4″
K5188634	1 3/8 x 1 3/8 x 3/4″
K5188638	1 3/8 x 1 3/8 x 7/8″
K5188640	1 5/8 x 1 5/8 x 3/4″
K5188642	1 5/8 x 1 5/8 x 7/8″
K5188644	1 5/8 x 1 5/8 x 1 1/8″



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Joint inside x inside brazing

Item no	Dimension
K5188400	3/8″
K5188402	1/2″
K5188404	5/8″
K5188406	3/4″
K5188408	7/8″
K5188410	1 1/8″
K5188412	1 3/8″
K5188414	1 5/8″
K5188401	2 1/8″

Reducer inside x inside brazing

Item no	Dimension
K5188646	1/2 x 3/8″
K5188648	5/8 x 1/2″
K5188650	3/4 x 5/8″
K5188652	7/8 x 3/4″
K5188654	1 1/8 x 1/2″
K5188656	1 1/8 x 7/8″
K5188658	1 3/8 x 1/2″
K5188660	1 3/8 x 5/8″
K5188662	1 3/8 x 3/4″
K5188664	1 3/8 x 7/8″
K5188666	1 3/8 x 1 1/8″
K5188668	1 5/8 x 3/4″
K5188670	1 5/8 x 7/8″
K5188672	1 5/8 x 1 1/8″
K5188674	1 5/8 x 1 3/8″
K5188647	2 1/8 x 1 5/8″

Reducer outside x inside brazing

Item no	Dimension
K5188300	1/2 x 3/8″
K5188302	5/2 x 3/8″
K5188304	5/8 x 1/2″
K5188306	3/4 x 3/8″
K5188308	3/4 x 1/2″
K5188310	3/4 x 5/8″
K5188312	7/8 x 3/8″
K5188676	7/8 x 1/2″
K5188314	7/8 x 5/8″
K5188316	7/8 x 3/4″
K5188318	1 1/8 x 5/8″
K5188320	1 1/8 x 3/4″
K5188322	1 1/8 x 7/8″
K5188324	1 3/8 x 1 1/8″
K5188680	1 5/8 x 7/8″
K5188326	1 5/8 x 1 3/8″
K5188678	1 1/8 x 1/2″
K5188301	2 1/8 x 1 5/8″

Reducer outside x inside brazing

Item no	Dimension
K5188524	1/2″ x 12 mm
K5188526	5/8″ x 15 mm
K5188528	3/4″ x 18 mm
K5188530	7/8″ x 22 mm
K5188532	1 1/8″ x 28 mm
K5188534	1 3/8″ x 35 mm
K5188536	1 5/8″ x 42 mm

End cap, inside brazing

Item no	Dimension
K5188501	3/8″
K5188500	1/2″
K5188502	5/8″
K5188504	3/4″
K5188506	7/8″
K5188508	1 1/8″
K5188510	1 3/8″
K5188512	1 5/8″
K5188503	2 1/8″