



PRESS FITTINGS

Braze-Free Connection Solutions for HVAC & Plumbing

Application



Plumbing systems



Air conditioning pipelines



Refrigerator and cold chain pipelines



Heating system pipelines



Natural source thermal energy systems



TRADITIONAL

Installation time 17 min
Safety factor 6.5 min

*Tools required: Degreasant, brazing alloys & flux, gas-regulated ignition, kit Scouring pad, gas container, cool with a rag extinguisher, pipe cutter water supply, fire safety equipment, deburring tool, fire monitor, fire project permit.



PRESS FITTINGS

Installation time 8 min
Safety factor 9.9 min

*Tools required: Press jaw, pipe cutter, rag, deburring tool, scouring pad.

Lineup



Straight Coupler
1/4" - 1 5/8"



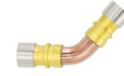
Reducing Coupler
3/8"-1/4" - 1 5/8"-1 1/8"4"



90° Elbow
3/8" - 1 5/8"



Flare-90° Elbow with LOCK
1/4" - 3/4"



45° Elbow
3/4" - 1 5/8"



Charging Valve
1/4" - 1 1/8"



90° Street Elbow
3/4" - 1 5/8"



45° Street Elbow
3/4" - 1 5/8"



End Cap
1/4" - 7/8"



Flare-Connector with LOCK
1/4" - 3/4"

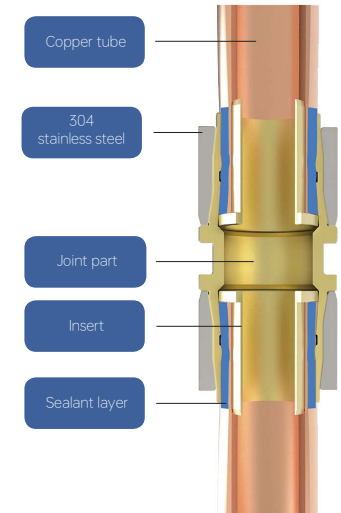


Ball Valve
1/4" - 7/8"



Tee with Charging Port
1/4" - 1 1/8"

Material	Brass and 304 stainless steel
Technical Standard	Comply with ASTM B 320 Standard refrigeration seamless copper pipe
Maximum Operating Pressure	83.4 bar
Burst Pressure	Up to 399.5 bar
Approved Refrigerants	R1234yf, R1234ze, R290, R134a, R410A, R407A, R407C, R407F, R410A, R417A, R448A, R449A, R450A, R452A, R428A, R507, R513A, R718, R32, R290, R744(CO2)
Approved Oils	Mineral oil, POE, PVE, PAG
Temperature Range	-35°C to 10°C
Copper pipe size range	6.35 to 41.3 mm (1/4" to 1 5/8")



•Listed products are not applicable for amino refrigerant systems

Tools

HAND ASSEMBLY TOOL

NPHT0001X1



- The kit includes the hand assembly tool and 7 pairs of assembly jaws which can be exchanged quickly and easily.
- The handle are offset on both sides, allowing full use in places difficult to access.

Jaw Size	1/4(6.35)	3/8(9.52)	1/2(12.7)
		5/8(15.88)	3/4(19.05)
	1 1/8 (28.58)	-	-



TUBE CUTTER

NPTC0001X1

- Using roller bearing technology that makes tube cutting quickly and easily.



DEBURRER

NPTD0001X2

- Using tube deburrer can quickly and clean deburr tubes, edges and steel plates.



TUBE EXPANDER

NPTE0001S2

- The tube expander can adjust the tube diameter to ensure that the copper pipe is regular and smooth.



ABRASIVE MAT

NPAM0001X1

- Using abrasive mat to clean both ends of the copper pipe.



ANAEROBIC SEALANT

NPSL0050X1

- Particularly developed for brass fittings and mandatory use.
- Works for ambient temperature-10 to 30°C
- Reliable for connections, can kill unevenness of copper pipe.



CORDLESS ASSEMBLY TOOL

NPET0001X1

- The electric assembly allows you to install all fittings anywhere with powerful force, 20000mah battery could make up to 100 press connections.

Jaw Size	1/4(6.35)	3/8(9.52)	1/2(12.70)
	5/8(15.88)	3/4(19.05)	7/8(22.23)
	1 1/8 (28.58)	1 3/8(34.93)	1 5/8(41.28)



Insert a suitable insert and put a joint part in



Push the joint part until tube end hit its inner stop, and mark the insertion length around tube surface

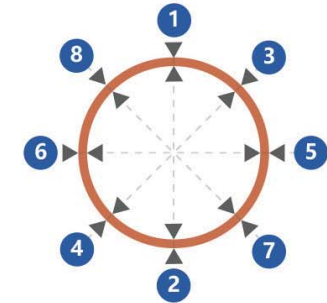


Adjust jaw to proper width and put fitting into the right place.

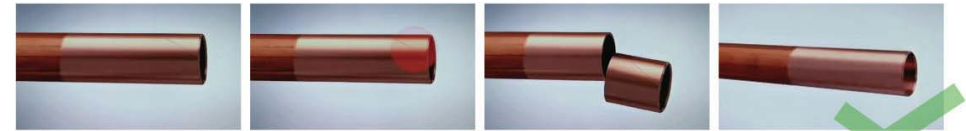


Adjust jaw to proper width and put fitting into the right place.

Please use copper tube with even diameters



Eight points of diameter check



Connection would risk leakage if copper tube with scratches or damages is used. Please cut away the length of the tube with defects to avoid possible leaks.

Copper Tube Selection Table

In compliance with ANSI B16.22

SIZE	inches				mm				Thickness Allowable Error
	OD	Required Thickness	OD Tolerance	Thickness Range of Tube	OD	Required Thickness	OD Tolerance	Thickness Range of Tube	
1/4"(6.35)	0.250	0.031	0.001	0.028-0.035	6.35	0.8	0.024	0.7-0.85	5 %
3/8"(9.52)	0.374	0.031	0.001	0.028-0.035	9.52	0.8	0.024	0.7-0.85	5 %
1/2"(12.7)	0.500	0.031	0.001	0.028-0.035	12.7	0.8	0.024	0.7-0.85	5 %
5/8"(15.88)	0.625	0.039	0.001	0.035-0.043	15.88	1.0	0.030	0.9-1.05	5 %
3/4"(19.05)	0.750	0.039	0.001	0.035-0.043	19.05	1.0	0.030	0.9-1.05	5 %
7/8"(22.23)	0.874	0.043	0.001	0.039-0.047	22.23	1.1	0.033	1.0-1.2	5 %
1+1/8"(28.58)	1.125	0.043	0.001	0.039-0.047	28.58	1.1	0.033	1.0-1.2	5 %
1+3/8"(34.93)	1.375	0.051	0.002	0.047-0.055	34.93	1.3	0.039	1.2-1.4	5 %
1+5/8"(41.28)	1.625	0.059	0.002	0.055-0.063	41.28	1.5	0.045	1.4-1.6	5 %

* Please follow tube selection standard, if not, connection might risk leakage issue.