Vantage 45

Copper fittings manufactured from 99.9% copper (C12200) for use in HVAC systems, including VRF/VRV and low-GWP refrigerant applications.

45 bar
NOMINAL RATING

C12200
99.9% PURE COPPER

DN8 – DN100
1/4" UP TO 4-1/8"

SPECIFICATIONS

SIZE RANGE	1/4" up to 4-1/8"
DN SIZE RANGE	DN8 up to DN100
MATERIAL	99.9% pure copper (C12200)
OPERATING TEMPERATURE	-10°C to 65°C
MAXIMUM WORKING PRESSURE	Up to 45 bar (4.5 MPa) nominal
REFRIGERANT COMPATIBILITY	R-32, R-410A and emerging low-GWP refrigerants
TUBE COMPATIBILITY	Copper tube to AS/NZS 1571
CONNECTION TYPE	Brazing fittings (flare and compression are not suitable)
MANUFACTURING STANDARDS	AS/NZS 1200, AS/NZS 1571, AS/NZS 5149

COMPLIANCE & STANDARDS

- AS/NZS 1200 – Pressure Equipment
- AS/NZS 1571 – Copper Tube for Refrigeration
- AS/NZS 5149 – Refrigerating Systems and Heat Pumps

TESTING & CERTIFICATION

- Nitrogen purged during brazing to avoid oxidation
- Pressure tested per AS/NZS 5149 prior to service startup
- Manufactured under ISO 9001 quality systems

APPLICATIONS

- Split and ducted air-conditioning systems
- VRF/VRV systems
- Packaged rooftop air-conditioners
- Industrial HVAC applications

WORKING PRESSURE BY SIZE

SIZE	BAR AT 93°C	BAR AT 121°C	BAR AT 150°C
1/4"	51.3	50.2	94.0
3/8"	51.3	50.2	86.7
1/2"	43.8	42.9	73.3
5/8"	40.6	39.8	66.7
3/4"	35.5	34.8	58.0
7/8"	32.7	32.1	56.7
1-1/8"	27.8	27.2	46.7
1-3/8"	24.7	24.2	45.0
1-5/8"	23.0	22.5	43.3
2-1/8"	20.4	20.0	40.0
2-5/8"	18.9	18.5	33.3
3-1/8"	17.8	17.4	31.7
3-5/8"	17.0	16.7	30.0
4-1/8"	16.5	16.1	28.3

Indicative working pressures. 93°C and 121°C values follow ASME B16.22; 150°C values follow EN 14276-2. The 45 bar figure is the nominal product rating. The stated temperature is the reference point for the rating, not a ceiling on gas temperature.

INSTALLATION GUIDELINES

- Use oxygen-free brazing with nitrogen purging to prevent internal oxidation
- Ensure fully brazed joints (flare and compression are not suitable)
- Pressure test to AS/NZS 5149 requirements before system startup