



- Branding: Freo-Pipe®
- Reference standard: EN 1736:2008
- Applications:
 - Connection of indoor/outdoor units of direct expansion systems working with the following refrigerant gases:
 - R410A;
 - R32;
 - R134a;
 - R404a;
 - R407c.
 - Generic transport of refrigerant gases, liquid or vapor, pressurized or non-pressurized;
 - Not compatible with R22.
- Usage conditions:
 - Temperature range (TS): -30°C +110°C (-22°F + 230 °F). Resistant to peaks of 130°C (265°F);
 - Maximum operative pressure (PS): 60 bar (0 - 870 PSI). Tested at 78 bar (1130 PSI);
 - Design pressure (PD): 100 bar (1450 PSI).
- 7-layer MLT. Structure:
 - Long-chain polyamide;
 - Aluminum film;
 - High-strength synthetic fiber braiding;
 - High barrier plastic polymer layer;
 - Anti-wear, anti-UV, anti-abrasion and chemically inert external coating layer;
 - Closed cell expanded polyethylene insulation;
 - Anti-UV polyethylene protective coating, white or grey (improved anti-UV resistance).
- Tube technical specifications:

Nominal diameter (inch)	1/4	3/8	1/2	5/8
Nominal internal diameter (mm)	5,2	8,4	12,6	13,8
Internal diameter tolerance (mm)	0,1	0,1	0,1	0,1
Nominal external diameter (mm)	9,5	13	15,5	19,9
External diameter tolerance (mm)	0,15	0,15	0,15	0,2
Minimum burst pressure (bar PSI)	500 7900	400 5800	320 4800	300 4300
Length variation at working pressure	± 1%	± 1%	± 1%	± 1%
Minimum bending radius (mm)	65	95	130	170
Weight without insulation (g/m)	64	102	110	176
Weight with insulation (g/m)	100	142	150	220



- **Insulation technical specifications (optional):**
 - Thermal conductivity: 0,0397 W/m·K;
 - Resistance to water vapor diffusion: 5482 μ ;
 - **Structure;**
 - Closed-cell polyethylene foam insulation sheathing (PE-LD), 6 mm thickness (possibility to supply with different thickness on request);
 - Scratch-resistant finish film in closed-cell polyethylene foam (PE-LD), white or grey UV-Pro special to improve the resistance to solar aggression.
- **Permeability (EN 1736:2008 Par. 7):**
 - Class 1.
- **Fittings technical specifications:**
 - 3-pieces fittings kit;
 - Patented design;
 - Fittings completely made of brass;
 - Special treatment on flare to achieve leak-free connection with the machines;
 - For the fittings kit installation instructions, refer to Freo-Pipe® installation manual.
- **Supply methods:**
 - Rolls with long length (>1000m) without insulation, supplied with fitting and tested at 78 bar;
 - 50 m rolls without insulation, without fittings, tested at 78 bar;
 - 4, 8, 12 & 16 meters rolls with insulation, supplied with fittings and tested at 78 bar;
 - 4, 8, 12 & 16 meters coupled rolls with insulation (1/4"+1/2", 1/4"+5/8", 3/8"+5/8") supplied with fittings and tested at 78 bar;
 - Ready-to-use and tested kits in multiple lengths with fittings.
- **Installation:**
 - Freo-Pipe® usage is reserved to F-GAS certified professionals;
 - It's mandatory to follow all the procedures in the product installation manual.
- **Transport and storage:**
 - Ensure the storage of the product is cool and dry;
 - Always remember to plug the ends;
 - In case of prolonged storage of the product in a wet environment, take extra care while pulling the vacuum on the plant.

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