

Tubolit®

Split & DuoSplit Alu

THE ECONOMIC ALTERNATIVE TO
COPPER



- Light, cost efficient and recyclable option
- Pre-insulated piping suitable for refrigerant gases R410A & R407C
- Coating provides good resistance to UV radiation
- Join-split technology for easy and quick installation
- Fulfils the European Pressure Equipment Directive
- Patented join-split adhesive technology to easily split and join the pipes without any tools required

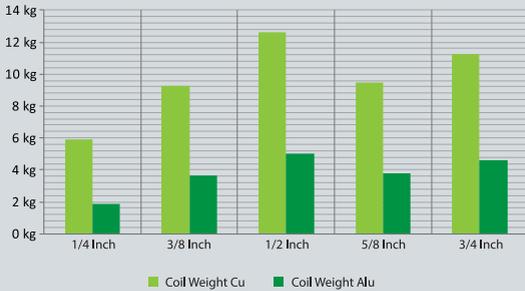
Economic Solution

Aluminum remains one of the most cost-effective materials you can use, with outstanding properties that enable considerable savings – it is three times cheaper than copper – and offers significant technological improvements. Aluminum represents an economic alternative to copper and is not subject to the same price fluctuations.



Light weight

Aluminium is installed like copper, with minor differences. The tools are the same and connection methods and precautions are already known to the industry. Above all, aluminium is easy to form and therefore reduces the cost of installation. For the equivalent burst pressure, aluminium tubes are on average 65% lighter than copper.

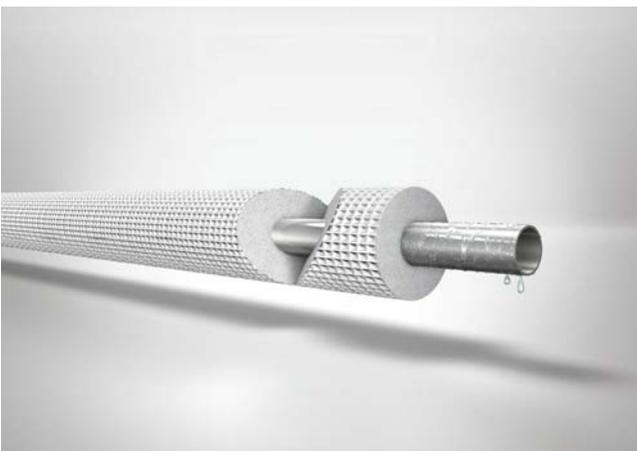
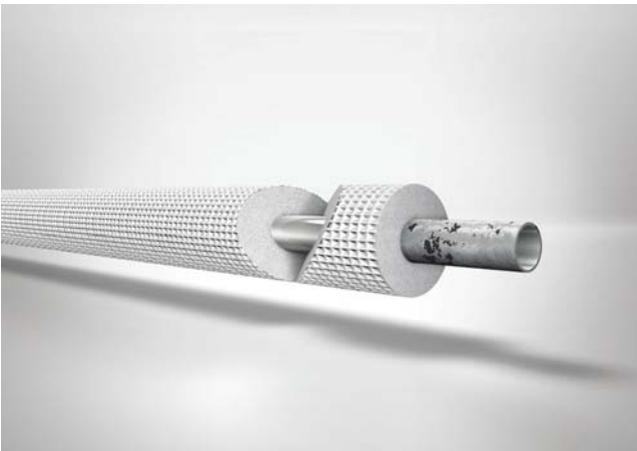


High corrosion resistance

Compared to steel and copper, aluminium has very low corrosion rates. This is due to the protecting oxide layer that forms immediately on the aluminium surface when exposed to the environment. This is a general characteristic that applies to aluminium as "stand alone."

Condensation control

With the original Tubolit closed cell insulation, Tubolit Split & DuoSplit Alu is the perfect solution to connect indoor and outdoor units of split and multi-split air conditioning systems. With proven quality Tubolit Split & DuoSplit protects against moisture and reduces energy losses. In addition it has very good structure-born noise properties.



Installation hints



Clean: Clean tool kit with a wire brush before working with aluminium.

Cut: Push back insulation and cut the pipe with a conventional cutting tool.

Connect: Standard flare nuts or mechanical connections can be used for joining aluminium pipes.

Protect: Protect the joint with a heat shrink sleeve to avoid galvanic corrosion!



Technical Data - Tubolit Split & DuoSplit Alu

Brief description	Tubolit Split/DuoSplit Alu is a reliable pre-insulated system solution to connect the indoor and outdoor units of split and multi-split air conditioning systems. The system consists of aluminium pipe(s), insulation material, a UV resistant coating and matching accessories.
Material type	Insulation: foam material based on polyethylene. Pipes: soft annealed seamless drawn refrigeration aluminium according to EN 754-2, 2008 Facing: polyolefin- copolymer coating.
Colour	White
Material Special Information	Tubolit closed cell insulation material with polyolefin-copolymer textured coating.
Applications	Split- and multi-split air conditioning systems and cooling counters.
Special Features	Durable solution, resistant against mechanical strain and UV radiation. Suitable for refrigeration gases R410A and R407C.
Assembly	No special tools required. Matching accessories to facilitate assembly. Insulation should be kept uncut at the whole applied length and glued to the pipe at both ends. Additional protection of insulation tube ends with tape is recommended.

Property	Value/Assessment	Test ¹	Special Remarks
Temperature Range			
Temperature Range	Max. service temperature	+ 100 °C	Tested acc. to EN 14707 and EN 14313
	Min. service temperature ¹	- 50 °C	
Thermal Conductivity			
Thermal Conductivity	ϑ_m 0 °C	[36 + 0,1 · ϑ_m + 0,0008 · ϑ_m^2]/1000	Declared acc. to EN ISO 13787 Tested according to EN ISO 8497
	$\lambda \leq 0.036$ W/(m · K)		
Water vapour diffusion resistance			
Water vapour diffusion resistance	Only for non-slit insulation and coating: μ	$\geq 5,000$	Tested according to EN 13469
Fire performance			
Reaction to fire	Euroclass	E	Classified acc. to EN 13501-1 Tested according to EN ISO 11925-2
Other technical features			
Dimensions and tolerances	In accordance with EN 14313, table 1 and 2		
UV resistance	Good		D 5795 Tested acc. to EN ISO 4892
Pipe size and burst pressure	1/4" x 0.8 mm 266 bar 6 x 1.0 mm 365 bar 3/8" x 1.0 mm 218 bar 10 x 1.0 mm 207 bar 1/2" x 1.0 mm 160 bar 12 x 1.0 mm 170 bar 5/8" x 1.2 mm 153 bar 16 x 1.2 mm 152 bar 3/4" x 1.2 mm 126 bar 18 x 1.2 mm 134 bar		

1. For temperatures below -0 °C please contact our Technical Department to request the corresponding technical information.

^{*1} Further documents such as test certificates and approvals can be requested using the registration number given.

All statements and technical information are based on results obtained under typical conditions. It is the responsibility of the recipient to verify with us that the information is appropriate for the specific use intended. Armaflex 520 or Armaflex HT 625 Adhesive must be used to guarantee proper installation. Installation instructions are available.

Tubolit Split Alu pre-insulated coils (metric)



Code	Pipe diameter [mm]	Pipe wall thickness [mm]	Outer-Ø [mm] of insulation	Roll length [m]	Thickness [mm]	Rolls/carton	m/carton
TA-ME-09X06/E50	6	1.0	24	50	9.0	1	50
TA-ME-09X10/E50	10	1.0	28	50	9.0	1	50
TA-ME-09X12/E50	12	1.0	30	50	9.0	1	50
TA-ME-09X16/E25	16	1.2	34	25	9.0	1	25
TA-ME-09X18/E25	18	1.2	36	25	9.0	1	25

Tubolit Split Alu pre-insulated pipe, coils (inch)



Code	Pipe diameter [inch]	Pipe diameter [mm]	Pipe wall thickness [mm]	Outer-Ø [mm] of insulation	Roll length [m]	Thickness [mm]	Rolls/carton	m/carton
TA-ZO-09X06/E50	1/4	6.35	0.8	24	50	9.0	1	50
TA-ZO-09X10/E50	3/8	9.52	1.0	28	50	9.0	1	50
TA-ZO-09X12/E50	1/2	12.7	1.0	31	50	9.0	1	50
TA-ZO-09X16/E25	5/8	15.875	1.2	34	25	9.0	1	25
TA-ZO-09X19/E25	3/4	19.05	1.2	37	25	9.0	1	25

Tubolit DuoSplit Alu pre-insulated coils (metric)



Code	Pipe diameter [mm]	Pipe wall thickness [mm]	Outer-Ø [mm] of insulation	Roll length [m]	Thickness [mm]	Rolls/carton	m/carton
TAM-09X0610/E25	6/10	1,0 / 1,0	24 / 28	25	9.0	1	25
TAM-09X0612/E25	6/12	1,0 / 1,0	24 / 30	25	9.0	1	25
TAM-09X0616/E25	6/16	1,0 / 1,2	24 / 34	25	9.0	1	25
TAM-09X1016/E25	10/16	1,0 / 1,2	30 / 34	25	9.0	1	25
TAM-09X1018/E25	10/18	1,0 / 1,2	30 / 36	25	9.0	1	25

Tubolit DuoSplit Alu pre-insulated pipe, coils (inch)



Code	Pipe diameter [inch]	Pipe diameter [mm]	Pipe wall thickness [mm]	Outer-Ø [mm] of insulation	Roll length [m]	Thickness [mm]	Rolls/carton	m/carton
TAZ-09X0610/E25	1/4 / 3/8	6,35 / 9,525	1,0 / 1,0	24 / 28	25	9.0	1	25
TAZ-09X0612/E25	1/4 / 1/2	6,35 / 12,7	1,0 / 1,0	28 / 31	25	9.0	1	25
TAZ-09X0616/E25	1/4 / 5/8	6,35 / 15,87	1,0 / 1,2	24 / 34	25	9.0	1	25
TAZ-09X1012/E25	3/8 / 1/2	9,52 / 12,7	1,0 / 1,0	28 / 31	25	9.0	1	25
TAZ-09X1016/E25	3/8 / 5/8	9,52 / 15,87	1,0 / 1,2	28 / 34	25	9.0	1	25
TAZ-09X1019/E25	3/8 / 3/4	9,52 / 19,05	1,0 / 1,2	28 / 37	25	9.0	1	25

Tubolit Split & DuoSplit Alu shrinking tubes



Length 100.0 mm, Colour Black

Code	Description	Pieces/bag	Bag/carton
SK-TB-24/6	Heat shrinkable tubes for 1/4" and 6 mm pipes	10	10
SK-TB-32/8	Heat shrinkable tubes for 3/8-1/2" and 10-12 mm pipe	10	10
SK-TB-39/13	Heat shrinkable tubes for 5/8-3/4" and 16-18 mm pipes	10	10

Remark

Total carton content is 10 bags/100 pieces.

Tubolit Split & DuoSplit Accessories sae-flare fittings



SAE Flare Fittings are suitable when the installation of refrigeration tubes is difficult due to soldering in restricted environments. They come with a nut and compression ferrule and can easily be installed using a wrench. The Armacell refrigeration connections fit most thermostatic valves, manometers, dehydrating filters and other components with flare type joints.

Metric measurements					Inch measurements					
Code	inch	Pieces/ bag	Pipe wall thickness [mm]	Bag/ carton	Code	inch	Pieces/ bag	Pipe wall thickness [mm]	Bag/ carton	
SF-FM-006	-	10	1.0	10	SF-FZ-006	1/4	10	0.8	10	
SF-FM-010	-	10	1.0	10	SF-FZ-010	3/8	10	0.8	10	
SF-FM-012	-	10	1.0	10	SF-FZ-012	1/2	10	0.8	10	
SF-FM-016	-	10	1.0	10	SF-FZ-016	5/8	10	1.0	10	
-		-	-	-	SF-FZ-019	3/4	5	1.0	10	

Remark

The SAE flare fittings are supplied in small bags of 10 sets, each carton contains 10 bags; one set contains a stiffener sleeve, a compression ferrule and a union nut.

Technical properties

No copper sealing necessary - compression ferrule - tight up to 10-7 mbar l/s or < 0.5 g/a Helium for all refrigerants (CFC, HFC, HCFC).

Subjected to internal testing according to DIN 3859 and by CETIM:

* Reverse-bending strength test: no leakage after 10 million, cycles at 50 Hz under normal pressure

* Helium-leakage detector (gas-tightness): < 0.5 g/year (10-5 mbarl/s)

* Burst pressure test (4 times nominal pressure): no leakage

* Temperature cycle test (5 cycles at -40 °C to -120 °C at 10 bar He): no leakage CETIM, internal and field test results.

Regulations

Corresponds to the new standards and regulations of the CEN for refrigeration installations (EN 378/1 - EN 378/2).

Tubolit Split & DuoSplit Accessories sae calibration tool



Calibration tools to match SAE-Flare Fittings.

Metric measurements				Inch measurements				
Code	Pieces/bag	Bag/carton	Outer- Ø [mm]	Code	Pieces/bag	Bag/carton	Outer- Ø [mm]	
SF-CTM-006 ●	1	10	6	SF-CTZ-010 ●	1	10	3/8	
SF-CTM-010 ●	1	10	10	SF-CTZ-012 ●	1	10	1/2	
SF-CTM-012 ●	1	10	12	SF-CTZ-016 ●	1	10	5/8	
SF-CTM-016 ●	1	10	16	SF-CTZ-019 ●	1	5	3/4	

● Not a stock item. Delivery on request.

Tubolit Split & DuoSplit Accessories toolbox sae calibration tool



Inch measurements		
Code	Outer- Ø [mm]	Pieces/carton
SF-CBZ-06-16 ●	1/4" / 3/8" 1/2" / 5/8"	5

● Not a stock item. Delivery on request.