

Technical Data Specification - HVAC tubes

Version 0

Date 17-Jul-19

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Diameter x wall thickness (mm)	12x1,2	15x1,2	18x1,2	22x1,5	28x1,5	35x1,5	42x1,5	54x1,5	66,7x1,5	76,1x2	88,9x2	108x2
Specification *												
Length (mm)	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000	6000
Outside protection	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Contiflo ®	Electrolytic galvanized	Electrolytic galvanized
Inside protection	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	Burned-in oil	N/A	N/A
Zinc layer	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	8-15 µm	≥8 µm; Fe/Zn8B	≥8 µm; Fe/Zn8B
Tube norm	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3	10305-3
Surface	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4	S4
Steel quality	E190 +CR2	E190 +CR2	E190 +CR2	E190 +CR2	E320 +CR2	E320 +CR2	E320 +CR2	E320 +CR2	E320 +CR2	E260 +CR2	E260 +CR2	E260 +CR2
Tensile strength (Rm)	≥ 270 MPa	≥ 270 MPa	≥ 270 MPa	≥ 270 MPa	≥ 410 MPa	≥ 410 MPa	≥ 410 MPa	≥ 410 MPa	≥ 410 MPa	≥ 340 MPa	≥ 340 MPa	≥ 340 MPa
Upper yield strength (Rp)	≥ 190 MPa	≥ 190 MPa	≥ 190 MPa	≥ 190 MPa	≥ 320 MPa	≥ 320 MPa	≥ 320 MPa	≥ 320 MPa	≥ 320 MPa	≥ 260 MPa	≥ 260 MPa	≥ 260 MPa
Elongation (A5)	≥ 26%	≥ 26%	≥ 26%	≥ 26%	≥ 19%	≥ 19%	≥ 19%	≥ 19%	≥ 19%	≥ 21%	≥ 21%	≥ 21%
Tolerance outside diameter	± 0,07 mm	± 0,07 mm	± 0,07 mm	± 0,07 mm	± 0,07 mm	± 0,10 mm	± 0,10 mm	± 0,20 mm	± 0,20 mm	± 0,20 mm	± 0,40 mm	± 0,60 mm
Tolerance wall thickness *	± 0,12 mm	± 0,12 mm	± 0,12 mm	± 0,15 mm	± 0,15 mm	± 0,15 mm	± 0,15 mm	± 0,15 mm	± 0,15 mm	± 0,20 mm	± 0,20 mm	± 0,20 mm
Tolerance length	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm	-0 / +50 mm
Tube end finishing	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free	Burr-free
Bundle size	104	215	254	215	104	67	67	61	37	37	19	19
Bundle shape	U-bracket	U-bracket	U-bracket	U-bracket	U-bracket	U-bracket	U-bracket	Hexagonal	Hexagonal	Hexagonal	Hexagonal	Hexagonal
Certificate	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2

* Other specifications according to EN 10305-3: 2016

** Tata always tests the tubes: flattening, widening and Eddy Current leak test and rejects any failing tubes. However based on the 2.2 certificate this will not be reported on the certificate.