

# TUBES FOR PLUMBING

## EN 10255

With proven reliability, FERPINTA's plumbing tubes comply with the EN 10255 standard and are suitable for the most diverse applications: in general, domestic or industrial fluid and non-flammable gas (water, air or non-flammable gas at low pressure, fire-fighting networks) piping installations.

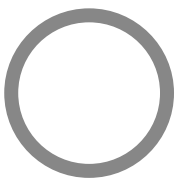
They are also applicable in structural contexts other than conduction (e.g. greenhouses).

All products are subject to hydro-static testing, done in accordance with standard pressures, and non-destructive testing (induced currents).

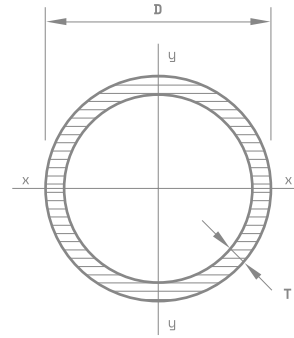
The rigorous control process guarantees meticulous sizing and complete traceability.

These tubes, according to their use, may be available with smooth, threaded, or grooved ends, rough rolled or hot-dip galvanized.

## DIMENSIONAL RANGE



# DIMENSIONAL PROPERTIES



## TABLE TYPES L1 AND L2

Type L1				Tipo L2				
Diameter (thread)	Tolerance Ø		Thickness	Tolerances (mín.)	Tolerance Ø		Thickness	Tolerances (mín.)
	(máx)	(mín.)			(máx)	(mín.)		
13,5 (1/4")	13,9	13,2	2.00	1.84	13,6	13,2	1.80	1.66
17,2 (3/8")	17,4	16,7	2.00	1.84	17,1	16,7	1.80	1.66
21,3 (1/2")	21,7	21,0	2.30	2.12	21,4	21,0	2.00	1.84
26,9 (3/4")	27,1	26,4	2.30	2.12	26,9	26,4	2.30	2.12
33,7 (1")	34,0	33,2	2.90	2.67	33,8	33,2	2.60	2.39
42,4 (1 1/4")	42,7	41,9	2.90	2.67	42,5	41,9	2.60	2.39
48,3 (1 1/2")	48,6	47,8	2.90	2.67	48,4	47,8	2.90	2.67
60,3 (2")	60,7	59,6	3.20	2.94	60,2	59,6	2.90	2.67
76,1 (2 1/2")	76,3	75,2	3.20	2.94	76,0	75,2	3.20	2.94
88,9 (3")	89,4	87,9	3.60	3.31	88,7	87,9	3.20	2.94
114,3 (4")	114,9	113,0	4.00	3.68	113,9	113,0	3.60	3.31

## SERIES TABLE

Diameter (thread)	Tolerance		Heavy series			Medium series		
	(máx)	(mín)	Thickness	Tolerances (máx)	(mín)	Thickness	Tolerances (máx)	(mín)
10,2 (1/8")	10,6	9,8	2,60	2,86	2,34	2,00	2,20	1,80
13,5 (1/4")	14,0	13,2	2,90	3,19	2,61	2,30	2,53	2,07
17,2 (3/8")	17,5	16,7	2,90	3,19	2,61	2,30	2,53	2,07
21,3 (1/2")	21,8	21,0	3,20	3,52	2,88	2,60	2,86	2,34
26,9 (3/4")	27,3	26,5	3,20	3,52	2,88	2,60	2,86	2,34
33,7 (1")	34,2	33,3	4,00	4,40	3,60	3,20	3,52	2,88
42,4 (1 1/4")	42,9	42,0	4,00	4,40	3,60	3,20	3,52	2,88
48,3 (1 1/2")	48,8	47,9	4,00	4,40	3,60	3,20	3,52	2,88
60,3 (2")	60,8	59,7	4,50	4,95	4,05	3,60	3,96	3,24
76,1 (2 1/2")	76,6	75,3	4,50	4,95	4,05	3,60	3,96	3,24
88,9 (3")	89,5	88,0	5,00	5,50	4,50	4,00	4,40	3,60
114,3 (4")	115,0	113,1	5,40	5,94	4,86	4,50	4,95	4,05
139,7 (5")	140,8	138,5	5,40	5,94	4,86	5,00	5,50	4,50
165,1 (6")	166,5	163,9	5,40	5,94	4,86	5,00	5,50	4,50

**Thickness**

(T)

**Medium (M) and heavy (H) series**

± 10%

**Light type 2 (L2) and light type 1 (L1)**+ Limited by mass tolerance  
- 8%**Linear mass****Medium (M) and heavy (H) series**

± 7,5% in ≥10t ties

**Light type 2 (L2) and light type 1 (L1)**

+ 10% / -8% in individual tubes

**Exact length**

(L)

	Length	Tolerance
Normalized	6 ou 6,4	+ 150 -50mm
Exact	L ≤ 6	0 / +10mm
	6 < L ≤ 12	0 / +15mm
	L > 12	0 / + by agreement

**Ovalization**

(T)

The tolerance is included in the diameter tolerance

**Straightness**

For tubes with an outside diameter of 33.7 mm (1") or more, the straightness deviation for any length (L) of tube shall not exceed 0.002 L.

**Hot-dip galvanizing coating:  
EN 10240**

Minimum local thickness of the coating on the interior surface: 55 µm.

## TABLE OF DIMENSIONS

**Non-alloyed steel tubes suitable for welding and threading (fluid conduction)**

EN 10255

Nominal diameter (DIN) (mm)	Thread size (inches)	Specified outside diameter	Tubes per tie	Series M		Series H		Type L1		Type L2	
				Thickness	Mass	Thickness	Mass	Thickness	Mass	Thickness	Mass
10	3/8	17,2	100	2,3	0,84	2,9	1,02	2,0	0,742	1,8	0,67
15	1/2	21,3	169	2,6	1,21	3,2	1,44	2,3	1,08	2	0,96
20	3/4	26,9	127	2,6	1,56	3,2	1,87	2,3	1,39	2,3	1,38
25	1	33,7	127	3,2	2,41	4,0	2,93	2,9	2,20	2,6	1,98
32	1 1/4	42,4	91	3,2	3,10	4,0	3,79	2,9	2,82	2,6	2,54
40	1 1/2	48,3	91	3,2	3,56	4,0	4,37	2,9	3,24	2,9	3,23
50	2	60,3	61	3,6	5,03	4,5	6,19	3,2	4,49	2,9	4,08
65	2 1/2	76,1	37	3,6	6,42	4,5	7,93	3,2	5,73	3,2	5,71
80	3	88,9	19	4,0	8,36	5,0	10,3	3,6	7,55	3,2	6,72
100	4	114,3	19	4,5	12,20	5,4	14,5	4	10,8	3,6	9,75
125	5	139,7	10	5	16,60	5,4	17,9	-	-	-	-
150	6	165,1	10	5	19,80	5,4	21,3	-	-	-	-

## STEEL GRADES

Steel grade	Chemical properties				Mechanical properties		
	% by mass				R <sub>eh</sub> (mín.)	R <sub>m</sub>	A % (mín.)
	C % máx.	Mn % máx.	P % máx.	S % máx.	MPa	MPa	
S195 T	0,20	1,40	0,035	0,03	195	320-520	20

# SUPPLY CONDITIONS

## PACKAGING

The material is available in geometric ties, strapped with steel bands, in hexagonal, square, and/or rectangular shapes. To facilitate handling (loading/unloading), all the ties are supplied with polyester straps suitable for the weight of the tie.

## LABELING

Each tie is supplied with a label attached by a metal clip, ensuring the identification of the product and consequently its traceability.

## SURFACE PROTECTION

During manufacture, all tubes are coated with a protective oil, which has a high hydrophobing power, to protect the surface against corrosion. Unless otherwise stated by the customer at the time of the order/inquiry.

## CERTIFICATE

On shipment, all orders are accompanied by the respective inspection certificate according to EN 10204, in accordance with the product's applicable standard.

# SUPPLY OPTIONS

## DIP GALVANIZATION

Hot-dip galvanized tubes can be supplied, according to EN 10240 A.1/A.2 or ISO 1461, providing greater protection against corrosion.

## SPECIAL TOLERANCES

Special tolerances must be requested when inquiring/ordering.

## WELDING

Possibility of removing the internal welding bead. Possibility of defining the position of the weld bead, according to target value and/or face of the tube.

## SUITABILITY FOR GALVANIZATION

Possibility of supplying tubes with chemical properties that guarantee their suitability for hot-dip galvanization.

## CARBON EQUIVALENT VALUE (CEV)

Possibility to specify the CEV value at the time of inquiry/order.

## LENGTH

Capacity to supply tubes with specific lengths, requested at the time of inquiry/order.

## SPECIFIC (OR SPECIAL) DEFORMATION OPERATIONS

Tubes can be supplied, according to the most demanding deformation capabilities.

## PACKAGING

The ties can be configured, according to the client's indications, at the time of the inquiry/order. Possibility of using packaging with anticorrosion protection (VCI).

## LABORATORY TESTS

Possibility of requesting specific laboratory tests, not foreseen in the applicable standard (anisotropy, salt fog, metallography, thickness elongation, among others).

# APPLICATION AREAS



INDUSTRY



CONSTRUCTION



ENERGY



ENGINEERING  
AND ARCHITECTURE