



SEAMLESS TUBES FOR HYDRAULIC AND PNEUMATIC POWER SYSTEMS

These small seamless tubes (OD from 6 to 80 mm), are normalized in controlled atmosphere after being cold drawn. This delivery condition gives the tubes a fine grain and a good deformability at room temperature.

APPLICATIONS

This kind of tubes is mainly used for pressure power systems for the flow of hydraulic fluids or of compressed gases in pneumatic and hydraulic equipments.

NORM

EN 10305-4

DIMENSIONAL TOLERANCES ACCORDING TO EN 10305-4

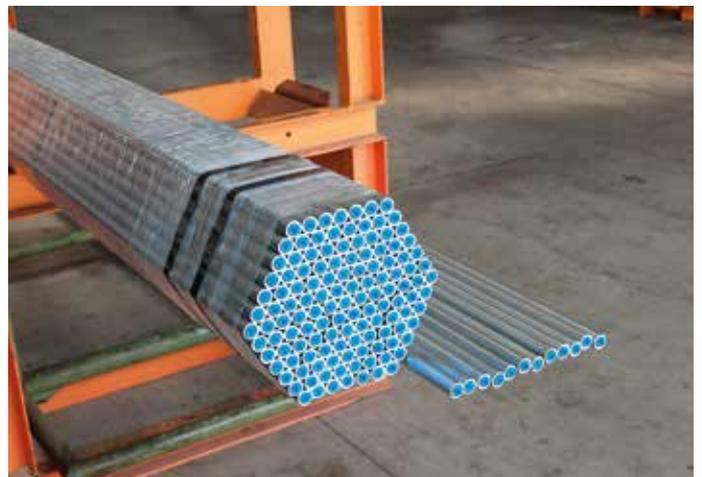
OD: see dimensional table for tubes for hydraulic and pneumatic power systems;

ID: see dimensional table for tubes for hydraulic and pneumatic power systems;

ECCENTRICITY: $\frac{\text{Max W.T.} - \text{min. W.T.}}{\text{Max. W.T.} + \text{min. W.T.}} \times 100 \leq 10 \%$

STRAIGHTNESS: 0.0015 L;

L = total length of the tube, the max. values are to be checked on the total tube length.





ELECTRO-PLATING

Superficial electro-platings may extend life and resistance to elements exposure of tubes for hydraulic and pneumatic power systems. These treatments cover the external surface of the tubes with a thin layer, in range of micron (μm), of metals like Chromium (Cr) and Zinc (Zn), able to prevent corrosion.

NORM

EN ISO 2081 (that replaces the previous EN 12329) rules the features of the various kinds of electro-coating.

The following table briefly describes name and features of the main galvanic treatments.

Coating name	Min coating thickness (μm)	Name	Appearance	Resistance to salt spray (h)
Fe/Zn5/A	5	Clear	Trasparent, clear to bluish	48
Fe/Zn5/B		Bleached	Transparent, with slight iridescence	
Fe/Zn5/F		Black	Black	
Fe/Zn5/C		Iridescent	Yellow Iridescent	72
Fe/Zn5/D		Opaque	Olive green	
Fe/Zn8/A	8	Clear	Trasparent, clear to bluish	72
Fe/Zn8/B		Bleached	Transparent, with slight iridescence	
Fe/Zn8/F		Black	Black	
Fe/Zn8/C		Iridescent	Yellow Iridescent	120
Fe/Zn8/D		Opaque	Olive green	
Fe/Zn12/A	12	Clear	Trasparent, clear to bluish	120
Fe/Zn12/F		Black	Black	
Fe/Zn12/C		Iridescent	Yellow Iridescent	192
Fe/Zn12/D		Opaque	Olive green	
Fe/Zn25/A	25	Clear	Trasparent, clear to bluish	192
Fe/Zn25/F		Black	Black	
Fe/Zn25/C		Iridescent	Yellow Iridescent	360
Fe/Zn25/D		Opaque	Olive green	