

Technical data of the PVC / TPU tube bundles

Media tubes /-hose

The choice of media tubes or hoses carried on the requirements for pressure, temperature or chemical Resistance.

Further, the selection is derived from the need for flexibility.

You can decide whether you use **PTFE**, **PFA** or **PE**.

The stainless steel tubes are available in types **1.4571** and **1.4404**.

Pressure / temperature resistance

PTFE – hose

The following table shows the recommended pressure (0.25 x short-term burst pressure) for the standard sizes with outer diameter 1mm wall thickness.

Other sizes are available on request

Operating temperature (°C)	20	50	75	100	150	200	250
hose diameter	operating pressure (bar)						
6 x 1 mm	12,5	11	9,5	8,5	6,5	5	3,5
8 x 1 mm	9	8	7	6	5	3,5	2,5
10 x 1 mm	7	6	5,5	5	4	3	2
12 x 1mm	6	5	4,5	4	3	2,5	1,5

PTFE – hoses (braided with steel wire)

If the requirement to the pressure resistance is higher the flexibility of a hose shall be preserved. The PTFE hoses (braided with steel wire) can be used with the following pressures

Operating temperature (°C)	at room temperature 20°C (±5°C) app. 250 bar*	
hose diameter	working pressure (bar)	
	dynamic	static
6x 1 mm	275	440
8 x 1 mm	240	385
10 x 1 mm	200	320
12 x 1 mm	175	280
	Min bending radius (mm)	
	50	
	75	

- * Temperature correction factor 100°C x 0,9 / 200°C x 0,8 / 250°C x 0,7 / 350°C x 0,6

Thermal resistance

The maximal ambience temperature of the lines is determined by the cladding material used in each case:

PVC – sheath

max. temperature 100°C, class DE 0200

PA – Outer jacket

max. temperature 110°C flame-retardant acc. UL 94 HB

Corrugated metal hose:

max. temperature 100°C, PVC

Stainless steel

The compressive strength of the inner tubes is dependent on temperature. The following applies:

Pipe size in mm (OD) Tb 316 ss	temperature 20°C	temperature 200°C
6 x 1 mm	390 bar	350 bar
8 x 1 mm	260 bar	235 bar

Bending radius

Tempered	10 x sheath diameter
Tempered with spring wire covering	6 x sheath diameter

Length changes

See separate installation instructions

Storage

Stored or parked drums on the building site must be secured against accidental or unauthorized further rolling. The ends of the tube bundles must be protected against ingress of dirt and moisture. The use of shrink caps is necessary. If pieces are removed, the ends of the tube bundles must be sealed with shrink caps.

Useful remnants must be possibly left on the drum or must be "laying went" on a drum with sufficient core diameter (see details radius)

Transport

The unloading of drums from a transport vehicle must be done over ramps by crane or forklift. They should be unloaded directly at point of use so they will not be rolled over longer distances.

Shocks or impacts must be avoided.

To protect against excessive mechanical stress the necessary "laying went" must be kept to the required minimum.

Laying

For the tube bundles, the same rules should be performed like for electric cables by a specialist.

Here the values given in our assembly instructions must be kept depending on the material, bending radii and temperature limit.

Note for heated tube bundles

This may prevent that the measuring accuracy can be affected. The buyer is responsible for ensuring that this fact is reflected in the specification. Other materials must possibly be used if it can be assumed that these inaccuracies may occur.

The available types of the inner lying hose can just be seen as a recommendation by us