



## **Medical Application Clean PEX Pipe & Fittings**

Wirsbo-PEX pipes are made of high-density peroxide crosslinked polyethylene, PEX-a. The raw materials are high density polyethylene, antioxidant, and peroxide.

Wirsbo-cleanPEX is a PEX-a pipe that has been manufactured more carefully and further treated to reduce the number of residual products compared to a standard PEX pipe.

In a dialysis clinic, the dialysis machine is connected to the water distribution system with a custom made Wirsbo-cleanPEX pipe coiled in spiral shape.

Thoroughly tested and approved Wirsbo-cleanPEX pipes according to the stringent requirements for medical application such as dialysis systems. In a dialysis system the smooth surface of Wirsbo-cleanPEX is very important for minimizing the amount of stagnation zones and microbiological growth. The effective roughness of the Wirsbo-cleanPEX pipe is 0.0005mm. The Wirsbo Q&E fittings, a unique coupling for Wirsbo-PEX pipes, also helps reduce these possible risk areas.

Wirsbo-cleanPEX and Wirsbo Q&E can withstand temperature cycles from 20°C to 95°C according to DVGW standards for drinking water. The chosen solution minimizes the number of joints, reducing the stagnation zones and the microbiological growth in the dialysis fluid. Wirsbo Q&E fittings are available in stainless steel and in a plastic material so called PPSU, which is approved by the Food and Drug Administration (FDA in USA). Wirsbo-cleanPEX pipes can be bent, flanged, or shaped according to the customer requirements.

## **Technical Information**

Characteristics	Value	Unit
Temperature range	-100 to +100	°C
Linear coefficient of expansion		
(20°C)	1.4x 10 <sup>4</sup>	m/m°C
(100°C)	2.05 x 10 <sup>4</sup>	m/m°C
Softening Temperature	+133	°C
Specific Heat	2.3	kJ/kg°C
Coefficient of thermal conductivity	0.35	W/m°C
Effective Roughness	0.0005	mm

Outer Diameter		Wall Thickne	ess	
mm	Class 15	Class 12	Class 10	Class 6
6		1.0		
8	1.5		1.0	
10	1.8	1.5		1.0
12	2.2	2.0	1.5	1.0
16			2.2	2.0
18			2.5	2.0
20			2.8	2.0
25			3.5	2.3
32			4.5	3.0

uponor



Wirsbo-clean PEX pipes in Medical Water Treatment systems