TYGON hoses® pharmaceutical and biotechnology



PHARMA PURE™

Peristaltic pump hose for biopharmaceutical applications - low flaking

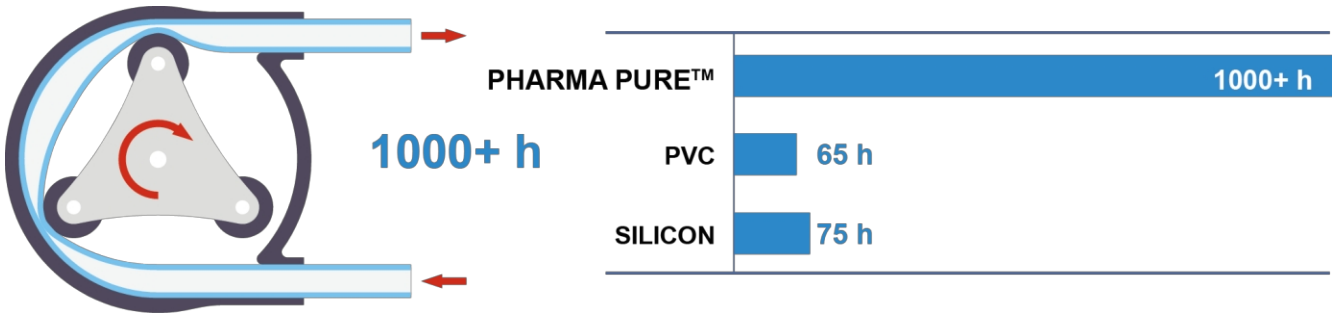
Material: TPE (thermoplastic elastomer)
Max. operating temp: + 135°C
Brittleness temp: - 67°C
Hardness: 65° Shore (A)
Density: 0.92 g/cm3

A top-quality, flexible hose in natural white, designed specifically for the pharmaceutical industry, biotechnology and laboratories. The unique feature of this hose is its very high resistance to spallation ("spallation" - the chipping of micro-particles of hose material due to the pressure of the peristaltic pump rotor), which ensures very high fluid purity. It has high fatigue resistance, an exceptionally long service life in peristaltic pump operation - many times that of any silicone hose (1000 h). It also has very low permeability to gaseous media and low absorption of transferred products. Ideal for use in in vitro cell culture collection and culture processes, vaccine manufacturing, bioreactors, sterile filling lines, fermentation, extraction and purification (purification) processes. The non-transparent wall of the hose protects sensitive products from UV radiation. The hose complies with USP Class VI and European Pharmacopoeia 3.2.9 requirements and is completely non-cytotoxic, non-haemolytic and non-pyrogenic. It meets the requirements of FDA 21 CFR 177.2600 for food contact. Multiple steam, ethylene oxide or radiation sterilisation possible (up to 2.5 Mrad). Flame retardant (UL 94-HB). Length of full hose reel 7.5 m.

index	internal diameter [mm]	external diameter [mm]	wall thickness [mm]	Operating pressure* 23°C / 82°C [bar].	vacuum 23°C / 82°C [mm Hg].	bend radius [mm]
VE-AL242606	0,8	4	1,6	2,62 / 1,59	760 / 760	12,7
VE-AL242002	1,6	3,2	0,8	1,38 / 0,9	760 / 760	12,7
VE-AL242003	1,6	4,8	1,6	1,86 / 1,24	760 / 760	12,7
VE-AL242006	3,2	4,8	0,8	0,69 / 0,55	760 / 254	19,1
VE-AL242007	3,2	6,4	1,6	1,65 / 0,83	760 / 760	19,1
VE-AL242012	4,8	8	1,6	1,38 / 0,69	760 / 635	19,1
VE-AL242017	6,4	9,6	1,6	1,03 / 0,48	760 / 381	31,8
VE-AL242019	6,4	12,7	3,2	1,79 / 0,9	760 / 760	31,8
VE-AL242022	8	11,1	1,6	0,9 / 0,48	760 / 254	38,1
VE-AL242027	9,6	12,7	1,6	0,69 / 0,41	381 / 127	44,5
VE-AL242029	9,6	15,9	3,2	1,31 / 0,69	760 / 760	38,1
VE-AL242038	12,7	19,1	3,2	1,03 / 0,48	760 / 508	63,5
VE-AL242046	15,9	22,3	3,2	0,83 / 0,41	635 / 254	69,9
VE-AL242053	19,1	25,4	3,2	0,69 / 0,28	381 / 127	95,3

* - working pressure determined in relation to burst pressure with a safety factor of 1:5

HOSE LIFE IN THE PERISTALTIC PUMP



Service life in operating hours (h) until hose failure for different hose types. Hose 6.4 x 9.6 mm, standard 3 roller peristaltic pump, 600 rpm at 23°C, no back pressure. Indicative data.