

Fluoropolymer chemical hoses (PFA) - for the most aggressive chemicals



ULTRAPURA PLATINUM

Special hose with visualisation of chemical flow, aseptic

Inner layer: transparent PFA polymer

Reinforcement: AISI 302 stainless steel spiral

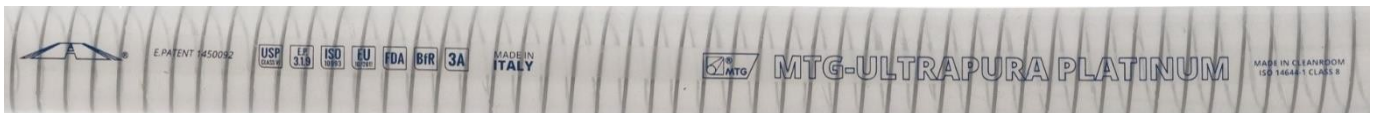
Outer layer: Transparent silicone

Operating temp: -30°C to +150°C

Low-pressure suction and delivery hose with a **transparent** inner layer of chemically resistant PFA and a thick outer layer of **transparent** silicone. Suitable for a variety of applications in the pharmaceutical, cosmetic, food and chemical industries where **observation of the fluid flow** is required in addition to the highest purity, asepticity and chemical resistance.

Perfluoroalkoxy PFA (a fluoropolymer with properties similar to Teflon) inner layer, transparent, mirror-smooth, odourless and tasteless, chemically inert, meeting high hygienic requirements (FDA, USP, European EU). Reinforced with a stainless steel spiral for good vacuum resistance. The thick outer layer made of platinum-cross-linked silicone with a smooth surface is characterised by its non-adhesion properties (the hose does not "stick") and low coefficient of friction. It can be easily cleaned with a weak detergent.

The hose design combines the advantages of PFA with the flexibility of silicone and its temperature resistance. The hose has a small minimum bend radius, is flexible and elastic at low and elevated temperatures, is resistant to cyclic bending according to ASTM D 2176 and to dynamic loads.



Cleaning:

hot water	steam	oxidising acids (peracetic, nitric), hydrogen peroxide (3%)	non-oxidizing acids (phosphoric acid) (5%)	chlorine, sodium hypochlorite (200 ppm)	sodium hydroxide (3%)
95°C / 30 min	135°C / 30 min	max 80°C / 30 min	max 80°C / 30 min	80°C / a few minutes	max 80°C / 30 min

Standards and hygiene requirements: inner layer: USP Class VI, 3-A Sanitary Standards 18-03 Class I, 10/2011/EU, FDA, ISO 10993-4, -10, -11, non-cytotoxic (ISO 10993 Part 5), ICH Q3D; outer layer: USP Class VI, 3-A Sanitary Standards 18-03 Class I, D.M. 21/03/73, FDA, BfR, European Pharmacopoeia 3.1.9, ISO 10993-4, -10, -11, non-cytotoxic (ISO 10993 Part 5).

Hose according to 1935/2004/EC, 2023/2006/EC (GMP), made in Cleanroom ISO 14644-1 Class 8, free of phthalates, adipates, nitrosamines, substances of animal origin, substances subject to EC 1907/2006 (REACH).

Chemical resistance check: PTFE chemical resistance table (pre-selection), PFA resistance table (available from Tubes International, pre-selection), confirmation of resistance and conditions of use by Tubes International.

Fitting: Spigot ("tail" to hose) ends should be used which are smooth and have no sharp or high notches which could cut or damage the PFA inner layer when clamped. The diameter of the spigot should be exactly matched to the diameter of the hose to ensure tightness. Installation with collets or clamps (clamps).

index	inside diameter [mm].	outside diameter [mm].	wall thickness [mm].	working pressure [bar].	burst pressure [bar].	vacuum [bar]	bend radius [mm].	mass [kg/m]	Roll length [m]
MT-ULTRAPURA-PL-13	13	23	5	3	9	0,9	45	0,42	20
MT-ULTRAPURA-PL-19	19	29	5	3	9	0,9	65	0,65	20
MT-ULTRAPURA-PL-25	25	35	5	3	9	0,9	85	0,80	20
MT-ULTRAPURA-PL-38	38	48	5	1	3	0,9	135	1,10	20
MT-ULTRAPURA-PL-51	51	61	5	1	3	0,9	180	1,60	20

Note: Indexes highlighted in colour - most commonly used.



ULTRAPURA PLATINUM hose DN25 with hygienic angle adapter TRICLOVER (NH-TCR90-050-22-025) in steel AISI 316 stainless steel, mounted with a collet (TI-LS1-37-16-SS) in AISI 304 stainless steel.