

Smooth-bore hoses - other fluoropolymers (PFA, FEP, PVDF)



VERSILON™PFA

Smooth-walled PFA general purpose hose

Material: PFA
Shore (D) hardness: 60
Operating temperature: -200°C to +260°C
 (working pressure dependent on temperature)

A lightweight transparent smooth-walled hose made of natural (non-regenerated) fluoropolymer PFA (perfluoroalkoxy), a material with properties similar to PTFE. The hose is characterised by excellent chemical resistance, temperature stability in dimensions and shape, a very smooth, microporous inner and outer surface, high pressure resistance and resistance to cracking caused by excessive stresses. The good transparency of the hose allows easy observation of the level or flow. UV-resistant. Suitable for low-pressure installations of aggressive chemicals or when high purity and chemical inertness of the hose material is required. Widely used in laboratories, chemical and pharmaceutical industries. Due to its excellent insulating properties (dielectric strength 3-4 times greater than PTFE), it is used in the electronics and semiconductor industries. The hose is not antistatic (does not dissipate electrical charges for non-conductive substances). Not recommended for pneumatic plug-in connections. Flame-retardant (UL94 V-0) and high oxygen index (LOI). Safety factor $n = 4:1$. For operating temperatures above 20°C, the working pressure drop must be taken into account according to the table.

A VERSILON PFA-F version for food substances and beverages compliant with FDA 21 CFR 177.1550 and EU 10/2011 is available on special request for use in the food and pharmaceutical industries (minimum order quantities apply).

index	internal diameter [mm]	inside diameter tolerance ± [mm].	external diameter [mm]	wall thickness ss [mm]	wall thickness tolerance ± [mm].	working pressure 23°C [bar] (n=4)	burst pressure 23°C [bar]	bend radius [mm]	weight [g/m]	standard length [m]
VE-CHEMPFA-03X06	3	0,1	6	1,50	0,1	19,5	78	24	45,6	50
VE-CHEMPFA-04X06	4	0,1	6	1	0,1	13,5	54	36	33,8	50
VE-CHEMPFA-06X08	6	0,1	8	1	0,1	9,75	39	64	47,3	50
VE-CHEMPFA-08X10	8	0,1	10	1	0,1	7,75	31	100	60,8	50
VE-CHEMPFA-09X12	9	0,1	12	1,5	0,1	9,75	39	96	106,4	50
VE-CHEMPFA-10X12	10	0,2	12	1	0,2	7	28	144	74,3	50

Temperature dependence of burst and working pressure (VERSILON PFA and VERSILON FEP hoses)	temperature	20°C	50°C	75°C	100°C	150°C	200°C	250°C
	pressure	100%	87%	77%	68%	53%	39%	28%



VERSILON™FEP

Smooth-walled FEP general purpose hose

Material: FEP
Shore (D) hardness: 55
Operating temperature: -200°C to +206°C
 (working pressure dependent on temperature)

A lightweight transparent smooth-walled hose made from the natural (non-regenerative) fluoropolymer FEP (fluorinated ethylene propylene), a material with properties similar to PTFE. The hose is characterised by excellent chemical resistance, temperature stability in dimensions and shape, and smooth inner and outer surfaces. The good transparency of the hose allows easy observation of the level or flow of the fluid. UV resistant. Designed for low pressure installations of aggressive chemicals or when high purity and chemical inertness of the hose material is required. Widely used in laboratories, the chemical and pharmaceutical industries. Used in the electronics and semiconductor industries due to its excellent insulating properties.

Hose is not antistatic (does not dissipate electrical charges for non-conductive substances). Not recommended for pneumatic plug-in connections. Flame retardant (UL94 V-0) and high oxygen index (LOI). Safety factor $n = 4:1$. For operating temperatures above 20°C, the working pressure drop must be taken into account according to the table (above).

A VERSILON FEP-F version for food substances and beverages compliant with FDA 21 CFR 177.1550 and EU 10/2011 is available on special request for use in the food and pharmaceutical industries (minimum order quantities apply).

index	internal diameter [mm]	inside diameter tolerance ± [mm].	external diameter [mm]	wall thickness ss [mm]	wall thickness tolerance ± [mm].	working pressure 23°C [bar] (n=4)	burst pressure 23°C [bar]	bend radius [mm]	weight [g/m]	standard length [m]
VE-CHEMFEP-02X04	2	0,1	4	1	0,1	13	52	16	20,3	50
VE-CHEMFEP-04X06	4	0,1	6	1	0,1	8,5	34	36	33,8	50
VE-CHEMFEP-06X08	6	0,1	8	1	0,1	6,25	25	64	47,3	50
VE-CHEMFEP-08X10	8	0,1	10	1	0,1	4,75	19	100	60,8	50
VE-CHEMFEP-09X12	9	0,1	12	1,5	0,1	6,25	25	96	106,4	50
VE-CHEMFEP-10X12	10	0,1	12	1	0,1	4,25	17	144	74,3	50

FEP heat-shrinkable sheaths - see the "Sheaths" section in the DEVICES AND ACCESSORIES section. PVDF hose - see chapter

"Air hoses" in the PNEUMATICS section.