

## Teflon and fluoropolymer hoses without braid - general information

Non-reinforced smooth-walled and corrugated unbraided hoses made of PTFE or other fluoropolymers (e.g. PFA, FEP, PVDF). Designed for low pressures. Used for all media and applications, particularly in laboratory technology, the semiconductor industry and other *high-tech* applications. Visual control of fluid flow through transparent or translucent hose wall.

*For basic information on PTFE and other fluoropolymers and the possible danger of static electricity, see the previous section "Teflon hoses - general information".*



### Smooth-walled hoses - PTFE



#### SMTO

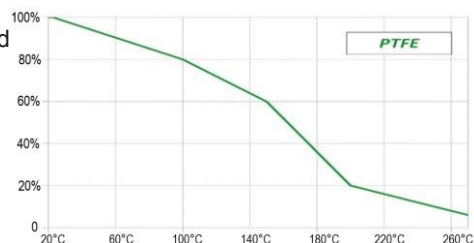
##### Smooth-walled Teflon general purpose hose Hose

**material:** smooth PTFE (Teflon)

**Operating temperature:** -60°C to +260°C  
(temperature-dependent operating pressure)

Lightweight, translucent smooth-bore PTFE hose with excellent chemical resistance. Suitable for low-pressure installations of chemicals, paints, fuels, oils, lubricants, air, gases, water, steam and water-based fluids - in all types of industry. As it is chemically inert and does not contain components that could penetrate into the internal medium, it can be used for food substances. Compliant with FDA 21 CFR

177.1550, EU 10/2011, EC 1935/2004 and Italian D.M. 174 06/04/2004. The hose is antistatic (does not dissipate electrical charges for non-conductive substances). Not recommended for pneumatic plug-in connectors. Can also be used as a mechanical cable or tendon guide due to the low coefficient of friction and self-lubricating properties of Teflon. Flame-retardant (UL94 V-0) and with a high oxygen index (LOI). Safety factor n = 3:1. For operating temperatures above 20°C, the operating pressure drop must be taken into account according to the table or diagram:



Temperature dependence of burst pressure and working pressure (hose ZC-SMTO-...)	temperature	20°C	60°C	100°C	140°C	180°C	220°C	260°C
	pressure	100%	91%	80%	64%	37%	16%	9%

index	internal diameter [mm]	external diameter [mm]	wall thickness [mm]	working pressure 20°C (n=3) [bar].	Burst pressure 20°C [bar]	bend radius [mm]	weight [g/m]	standard length [m]
ZC-SMTO-01X03	1	3	1	56	168	15	13,5	100
ZC-SMTO-02X04	2	4	1	27	81	20	22	50
ZC-SMTO-03X04	3	4	0,5	10	30	25	13	100
ZC-SMTO-03X05	3	5	1	22	66	25	29	50
ZC-SMTO-03X06	3	6	1,5	30	90	25	49	50
ZC-SMTO-04X06	4	6	1	18	54	30	37	50
ZC-SMTO-05X08	5	8	1,5	20	60	35	71	50
ZC-SMTO-06X08	6	8	1	14	42	40	51	50
ZC-SMTO-07X10	7	10	1,5	16	48	50	93	50
ZC-SMTO-08X10	8	10	1	12	36	60	66	50
ZC-SMTO-09X12	9	12	1,5	13	39	70	113	50
ZC-SMTO-10X12	10	12	1	10	30	90	80	50
ZC-SMTO-12X14	12	14	1	8	24	110	95	50
ZC-SMTO-12.5X15	12,5	15	1,25	9	27	130	120	50
ZC-SMTO-13X15	13	15	1	8	24	180	102	50
ZC-SMTO-14X16	14	16	1	7	21	250	109	50
ZC-SMTO-15X18	15	18	1,5	8	24	320	167	50
ZC-SMTO-20X22	20	22	1	3	9	700	152	50