

FLEXIBLES (UK) LTD

PTFE SMOOTH BORE HOSE

DESIGN

Hose Liner – Seamless extruded PTFE tube, made from Teflon 62 or 2Fluon CD086 PTFE Polymer. The choice of these grades, together with the extrusion, heat treatment and quality control programmes are designed to produce the best quality PTFE tube possible, ensuring minimum porosity and maximum flexibility.

ALTERNATIVE HOSE LINER

Anti-static PTFE Liner ensures safe dissipation of static charge. Dash sizes to meet American sizes. Big Bore to suit hydraulic fittings.

HOSE BRAID

Braided from AISI grade 304 stainless steel wire, bright hard drawn to a minimum 1700 N/mm² tensile strength.

ALTERNATIVE BRAID OPTIONS

Smooth bore PTFE hose can be supplied with other braids in place of (or on top of) the stainless steel wire braid. These include 316 stainless steel, monel, or non metallic braids like Kevlar, nomex, polyester or glassfibre.

Double braid hose is recommended for higher pressure use, or in applications where the hose may be heavily flexed and in danger of kinking.

External hose covers are also available which include PVC and rubber coverings. Please go to our web site www.adtflex.co.uk to see our full range of hose covers and protections.

APPLICATIONS

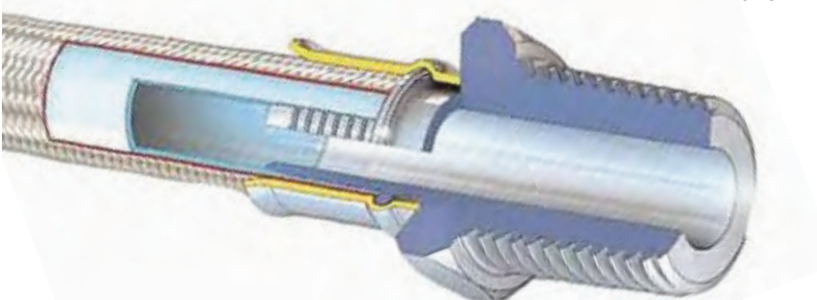
For general purpose use, including high and low pressure steam, chemicals, paints, inks, adhesives, fuels, oils, detergents, refrigerants and foodstuffs.

HOSE PROPERTIES

Temperature resistance – PTFE hose is usable from -70°C upto +260°C dependent upon the braid and the working pressure (see specifications).

Chemical resistance – PTFE is the most chemically resistant material known and is only affected by a small number of very uncommon chemicals.

Flexibility with strength – Smooth bore PTFE hose has excellent dynamic flex life and performs well at high pressures in flexina or vibratina applications.

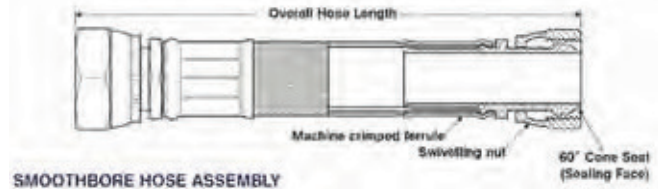


Smooth bore hose assembly with a standard fixed male end fitting.

PTFE SMOOTH BORE HOSE

HOSE ASSEMBLIES

All our smoothbore hose assemblies are available with a wide range of crimped end connections to customer requirements. All hose assemblies are crimped at each end using a hydraulic swaging machine, with specially developed dies, ensuring leak free connections.



SPECIFICATIONS

Stainless steel wire braided hose, single braid and double braid standard wall hose. Maximum working pressures listed below are calculated on the basis of a 3:1 safety factor relative to the burst pressure, so burst pressure (B) X MWP. (If MWP is required based on a 4:1 safety factor, multiply the listed value by 0.75.) Temperature affects the MWP, so for temperatures above 130°C reduce the MPW by 0.5% for each 1°C above 130°C to a maximum of 260°C.

Example: AT 180°C, 180°C - 130°C = 50°C, so reduce the MWP by 50 x 0.5 = 25%.

SINGLE BRAID SPECIFICATIONS

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length	
	in	mm	in	mm	mm	in	mm	in	bar	psi	kg/mtr	lbs/ft
1/8	3.17	0.125	0.76	0.030	5.85	0.230	22	7/8	350	5076	0.065	0.044
3/16	4.76	0.188	0.76	0.030	7.40	0.291	40	1 5/8	320	4641	0.080	0.054
1/4	6.35	0.250	0.63	0.025	8.50	0.335	60	2 3/8	280	4061	0.093	0.062
5/16	7.94	0.313	0.63	0.025	10.15	0.400	70	2 7/8	260	3770	0.110	0.074
3/8	9.53	0.375	0.63	0.025	11.75	0.463	80	3 1/4	220	3190	0.124	0.083
1/2	12.70	0.500	0.76	0.030	14.95	0.589	110	4 3/8	155	2248	0.207	0.139
5/8	15.88	0.625	0.76	0.030	18.35	0.722	150	6	120	1740	0.255	0.171
3/4	19.05	0.750	0.76	0.030	21.65	0.852	200	7 7/8	100	1450	0.315	0.211
1	25.40	1.000	1.00	0.039	28.15	1.108	300	11 7/8	80	1160	0.430	0.288

DOUBLE BRAID SPECIFICATIONS

Bore Size (Nominal)	Bore Size (Actual)		PTFE Tube Wall Thickness		Braid Outside Diameter		Minimum Bend Radius		Maximum Working Pressure		Weight per Unit Length	
	in	mm	in	mm	mm	in	mm	in	bar	psi	kg/mtr	lbs/ft
1/8	3.17	0.125	0.76	0.030	6.85	0.270	20	7/8	380	5511	0.100	0.067
3/16	4.76	0.188	0.76	0.030	8.70	0.343	30	1 1/4	350	5076	0.135	0.091
1/4	6.35	0.250	0.63	0.025	10.05	0.396	40	1 5/8	310	4496	0.160	0.107
5/16	7.94	0.313	0.63	0.025	11.55	0.455	50	2	300	4351	0.190	0.127
3/8	9.53	0.375	0.63	0.025	13.35	0.526	60	2 3/8	250	3625	0.214	0.143
1/2	12.70	0.500	0.76	0.030	16.40	0.646	90	3 5/8	200	2900	0.341	0.229
5/8	15.88	0.625	0.76	0.030	19.95	0.785	130	5 1/8	150	2175	0.416	0.279
3/4	19.05	0.750	0.76	0.030	23.10	0.910	170	6 3/4	120	1740	0.503	0.337
1	25.40	1.000	1.00	0.039	26.90	1.165	270	10 3/4	90	1305	0.700	0.469