

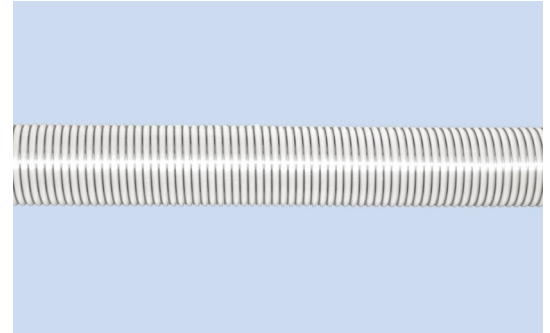
# Tube only (TO) grade hoses



Bioflex Ultra

## Features and benefits

- Natural or anti-static patented PTFE liner
- Very flexible, yet kink resistant
- Smooth bore for uninterrupted fluid flow and ease of cleaning
- High temperature and pressure capability
- Chemical resistant
- PTFE-lined and non-lined end fittings with laser etched ferrule for ultimate traceability
- Range of braid, cover and external protection options available



## Tube only (TO) grade hoses performance

Nominal hose bore size		Actual bore size		Bioflex Ultra grade	Helical wire	Maximum working pressure of hose		Burst pressure		Minimum bend radius	
in	mm	in	mm			bar	psi	bar	psi	in	mm
3/8	9.5	0.382	9.7	TO	-	5	72	20	290	3/8	35
1/2	15	0.516	13.1	TO	✓	5	72	20	290	2 1/2	60
3/4	16	0.638	16.2	TO	✓	5	72	20	290	2 1/2	64
1/2	20	0.760	19.3	TO	✓	5	72	20	290	3	75
*3/4	22	0.870	22.1	TO	✓	4	60	16	230	3 1/2	90
1	25	1.012	25.7	TO	✓	4	60	16	230	4 1/4	110
1 1/4	32	1.268	32.2	TO	✓	3	43	12	175	5 1/2	140
*1 1/4	35	1.370	34.8	TO	✓	2	29	8	116	6 1/2	160
1 1/2	40	1.516	38.5	TO	✓	2	29	8	116	7	180
*1 1/2	48	1.866	47.4	TO	✓	2	29	8	116	11	280
2	50	2.012	51.1	TO	✓	2	29	8	116	12	200

TO = Tube only

\*The 3/8", 1/2" and 3/4" hose sizes are only suitable for use with PTFE lined sanitary clamp (or triclover) end fittings and PTFE lined I-Line end fittings.

\*\* The maximum working pressure (MWP) of a hose assembly is limited to the lowest of the MWP's of either of the two end fittings, or of the hose itself as listed above. The MWP of the hose reduces as the operating temperature increases, consult Aflex Hose for guidance.

Note: 2 1/2" & 3" tube only (TO grade) cannot be ordered as an assembly.

## Technical specifications

	Tube only (TO) grade hoses
Nominal bore size	9.5 - 50 mm (0.375 - 2 in)
Actual bore size	9.7 - 51.1 mm (0.382 - 2.012 in)
Length	25 - 30 m (80 - 100 Ft)
Outside diameter	12 - 58.9 mm (0.47 - 2.32 in)
Max. operating pressure	5 bar (72 psi)
Burst pressure	8 - 20 bar (116 - 290 psi)
Certification and compliance	3.1 Traceability, 3-A 62-02, ATEX, EN16643:2016, EU Regulation 10/2011, FDA (materials), ISO 14001:2015, ISO 9001:2015, OHSAS 18001:2015, USP Class VI
Bend radius	35 - 300 mm (1.375 - 12 in)
Weight per unit length	0.06 - 1.25 kg/m (0.04 - 0.84 lb/ft)
Braid type	None
Cover	None
Hose external protection options	Protection coil, Safeguard, Scuff rings
End fitting	3-A sanitary fittings, 90° elbow fittings, BSP and NPT threaded fittings, CAM and groove fittings, DIN 11851 fittings, JIC fittings, PTFE dip pipe fittings, Sanitary triclamp fittings, SMS and RJT fittings, Swivel flange fittings
Labelling options	Colour Coding, Standard
Vacuum resistance	Usable at vacuum -0.9 bar up to 200 °C (392 °F)

## Materials of construction

	Tube only (TO) grade hoses
Helical wire	Stainless steel 316
Liner tube	PTFE

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12 December 2025