

EPDM rubber covered (RC/BK) 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



EPDM rubber covered (RC/BK) grade hoses performance

Nominal hose bore size		Actual bore size		Bioflex Ultra grade (cover)	Helical wire	Maximum working pressure of hose		Burst pressure		Minimum bend radius	
in	mm	in	mm			bar	psi	bar	psi	in	mm
1/8	9.5	0.382	9.7	RC/BK/SI	-	80	1160	500	7200	1/8	19
1/4	15	0.516	13.1	RC/BK/SI	✓	70	1015	400	5800	1 1/2	38
3/8	16	0.638	16.2	RC/BK/SI	✓	65	940	380	5500	1 1/4	45
1/2	20	0.760	19.3	RC/BK/SI	✓	60	870	300	4350	2	50
5/8	22	0.870	22.1	RC/BK/SI	✓	55	800	220	3200	2 1/2	55
1	25	1.012	25.7	RC/BK/SI	✓	50	720	200	2900	2 3/4	70
1 1/4	32	1.268	32.2	RC/BK/SI	✓	45	650	180	2600	4	100
*1 1/2	35	1.370	34.8	RC/BK/SI	✓	40	580	160	2320	4	100
1 3/4	40	1.516	38.5	RC/BK/SI	✓	40	580	160	2320	5 1/2	140
*2	48	1.866	47.4	RC/BK/SI	✓	35	500	140	2000	6 3/4	170
2 1/2	50	2.012	51.1	RC/BK/SI	✓	30	430	120	1750	8	200
3	65	2.508	63.7	RC/BK/SI	✓	20	290	80	1160	11 3/4	300
3 1/2	80	3.024	76.8	RC/BK/SI	✓	15	218	60	870	13 1/4	350

RC = Blue EPDM rubber cover, BK = Black EPDM rubber cover, SI = Silicone rubber cover

*The 5/8", 1 1/8" and 1 1/4" 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.

Technical specifications

	EPDM rubber covered (RC/BK) grade hoses
Nominal bore size	9.5 - 80 mm (0.375 - 3 in)
Actual bore size	9.7 - 76.8 mm (0.382 - 3.024 in)
Length	15 - 30 m (50 - 100 Ft)
Outside diameter	15.5 - 92.8 mm (0.61 - 3.654 in)
Max. operating pressure	80 bar (1160 psi)
Burst pressure	60 - 500 bar (870 - 7,200 psi)
Certification and compliance	3.1 Traceability, 3-A 62-02, Anti-static to BS5173 section 103.13 part 6.2 and 6.3, ATEX, EN16643:2016, EU Regulation 10/2011, FDA (materials), Fireproof to BS5173 section 103.13 part 6.2 and 6.3, ISO 14001:2015, ISO 9001:2015, OHSAS 18001:2015, USP Class
Operating temperature	-40 °C to 150 °C (-40 °F to 302 °F)
Bend radius	19 - 350 mm (0.75 - 13.75 in)
Weight per unit length	0.22 - 4.3 kg/m (0.15 - 2.96 lb/ft)
Cover	EPDM
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

	EPDM rubber covered (RC/BK) grade hoses
Helical wire	Stainless steel 316
Liner tube	PTFE
Braid	Stainless steel

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