

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 (braid and cover)	Helical wire	**Maximum working pressure of hose		Burst pressure		Minimum bend radius	
in	mm	in	mm			bar	psi	bar	psi	in	mm
¼	9.5	0.382	9.7	TO	-	5	72	20	290	1¼	35
				SS	-	80	1,160	500	7,200	¼	19
				RC/BK/SI	-	80	1,160	500	7,200	¼	19
½	15	0.516	13.1	TO	✓	5	72	20	290	2¼	60
				SS	✓	70	1,015	400	5,800	1½	38
				PB	✓	35	500	140	2,000	1½	38
				RC/BK/SI	✓	70	1,015	400	5,800	1½	38
¾	16	0.638	16.2	TO	✓	5	72	20	2,90	2¼	64
				SS	✓	65	940	380	5,500	1¼	45
				PB	✓	33	480	130	1,900	1¼	45
				RC/BK/SI	✓	65	940	380	5,500	1¼	45
¾	20	0.760	19.3	TO	✓	5	72	20	290	3	75
				SS	✓	60	870	300	4,350	2	50
				PB	✓	30	440	120	1,750	2	50
				RC/BK/SI	✓	60	870	300	4,350	2	50
* ¾	22	0.870	22.1	TO	✓	4	60	16	230	3¼	90
				SS	✓	55	800	220	3,200	2¼	55
				PB	✓	27.5	400	110	1,600	2¼	55
				RC/BK/SI	✓	55	800	220	3,200	2¼	55
1	25	1.012	25.7	TO	✓	4	60	16	230	4¼	110
				SS	✓	50	720	200	2,900	2¼	70
				PB	✓	25	360	100	1,450	2¼	70
				RC/BK/SI	✓	50	720	200	2,900	2¼	70
1¼	32	1.268	32.2	TO	✓	3	43	12	175	5½	140
				SS	✓	45	650	180	2,600	4	100
				PB	✓	23	330	90	1,300	4	100
				RC/BK/SI	✓	45	650	180	2,600	4	100
* 1¼	35	1.370	34.8	TO	✓	2	29	8	116	6¼	160
				SS	✓	40	580	160	2,320	4	100
				PB	✓	20	290	80	1,160	4	100
				RC/BK/SI	✓	40	580	160	2,320	4	100
1½	40	1.516	38.5	TO	✓	2	29	8	116	7	180
				SS	✓	40	580	160	2,320	5½	140
				PB	✓	20	290	80	1,160	5½	140
				RC/BK/SI	✓	40	580	160	2,320	5½	140
* 1½	48	1.866	47.4	TO	✓	2	29	8	116	11	280
				SS	✓	35	500	140	2,000	6¼	170
				PB	✓	18	250	72	1,040	6¼	170
				RC/BK/SI	✓	35	500	140	2,000	6¼	170
2	50	2.012	51.1	TO	✓	2	29	8	116	12	300
				SS	✓	30	430	120	1,750	8	200
				PB	✓	15	215	60	870	8	200
				RC/BK/SI	✓	30	430	120	1,750	8	200
2½	65	2.508	63.7	SS	✓	20	290	80	1,160	11¼	300
				PB	✓	12	174	48	696	11¼	300
				RC/BK/SI	✓	20	290	80	1,160	11¼	300
				SS	✓	15	218	60	870	13¼	350
3	80	3.024	76.8	PB	✓	10	145	40	580	13¼	350
				RC/BK/SI	✓	15	218	60	870	13¼	350

TO = Tube only, SS = Stainless steel braid, PB = Polypropylene braid, SS,RC/FP = Fireproof rubber cover, RC = Blue EPDM rubber cover, BK = Black EPDM rubber cover, SI = Silicone rubber cover, KYB = Kynar braid

*The ¾", 1¼" and 1½" 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: 2½" & 3" tube only (TO grade) cannot be ordered as an assembly.

Technical specifications

	EPDM rubber covered (RC/BK) grade hoses
Nominal bore size	9.5 - 80 mm
Nominal bore size	0.375 - 3 in
Actual bore size	9.7 - 76.8 mm
Actual bore size	0.382 - 3.024 in
Actual bore size	9.7 - 76.8 mm (0.382 - 3.024 in)
Max Length	15 - 30 m
Length	15 - 30 m
Length	50 - 100 Ft
Outside diameter	0.61 - 3.654 in (15.5 - 92.8 mm)
Max. operating pressure	1160 psi (80 bar)
Burst pressure	870 - 7,200 psi (60 - 500 bar)
Certification and compliance	(EU) 10/2011, 3.1 Traceability, 3-A 62-02, Anti-static to BS5173 section 103.13 part 6.2 and 6.3, ATEX, EN16643:2016, 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 VI
Operating temperature	-40 °F to 302 °F (-40 °C to 150 °C)
Bend radius	19 - 350 mm
Bend radius	0.75 - 13.75 in
Bend radius	0.75 - 13.75 in (19 - 350 mm)
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	Color coding, Standard
Vacuum resistance	Usable at vacuum -0.9 bar up to 200 °C (392 °F)

Note: Max length is dependant on bore size

Materials of construction

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

Disclaimer: The information contained in this document is believed to be correct but Aflex Hose Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the users' responsibility to ensure product suitability for use within their application. Bioflex, Corroflon, Corroline, Hyperline FX, Pharmaline are registered trademarks of Aflex Hose Limited. A member of Watson-Marlow Fluid Technology Group, A Spirax-Sarco Engineering plc company.



wmfts.com/global
11 July 2025