

Foam Wiper Ball

Product Description:

Foam technology has been developed that substantially improves the wiping and fluid separation possible when performing cementing pumping operations. Natural rubber foam matrix materials are used in the fabrication of wiper balls that can be used for numerous pumping operations using mono-ID and multi ID bores over a temperature range of 40°F (4°C) through 302 °F (150°C). Unlike Urethane foams, the natural rubber matrix performs well in debris laden fluids and high hydrostatic pressures. Applications for foam wiper balls include mechanical tubular wiping, fluid separation & drill pipe clean out, and it can be used in conjunction with conventional plugs/darts to improve wall cleaning.

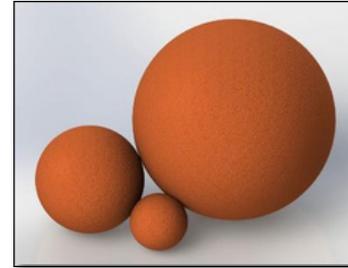


Image is for illustration purposes only.

Foam wiper balls come packaged in individual bags for protection from UV rays caused by sunlight or electrical equipment. Each package includes a label showing its package date, part number and wiping diameters each ball is designed to be used in.

The foam ball sizes and application parameters are listed in Table I.

Nominal Ball Size	Part Number	Min Wiping ID, in. (mm)	Max Wiping ID, in. (mm)	Minimum Restriction, in. (mm)
3-in.	PFB.00003	1.26 (32.0)	2.36 (60.0)	0.63 (16.0)
4-in.	PFB.00004	1.58 (40.0)	2.96 (75.1)	0.79 (20.0)
5-in.	PFB.00005	1.97 (50.0)	3.69 (93.7)	0.98 (25.0)
6-in.	PFB.00006	2.36 (60.0)	4.43 (112.6)	1.18 (30.0)
7-in.	PFB.00007	2.76 (70.0)	5.17 (131.8)	1.38 (35.0)
8-in.	PFB.00008	3.46 (88.0)	6.50 (165.0)	1.73 (44.0)

Table II Foam Wiper Ball pressure Data¹

Nominal Ball Size	Part Number	Restriction ID in (mm)	Restriction Pressure, psi (MPa)	Minimum Restriction, in. (mm)	Min Restriction pressure, psi (Mpa)
3-in.		0.75 (19.0)			
4-in.		0.98 (25.0)			
5-in.	PFB.00003	1.26 (32.0)	300 (2.1)	0.63 (16.0)	2,000 (13.8)
6-in.	PFB.00004	1.50 (38.0)	300 (2.1)	0.79 (20.0)	2,000 (13.8)
7-in.	PFB.00005	1.73 (44.0)	300 (2.1)	0.98 (25.0)	2,000 (13.8)
8-in.	PFB.00006	2.20 (56.0)	300 (2.1)	1.18 (30.0)	2,000 (13.8)
	PFB.00007		500 (3.4)	1.38 (35.0)	2,500 (17.2)
	PFB.00008		500 (3.4)	1.73 (44.0)	2,500 (17.2)

¹ Pressure at 68F (20C). Elevated temperature and fluid dynamics will result in reduction in pressure

Foam Technology Summary

- Foam technology provides a very effective means for mechanical tubular wiping and fluid separation.
- Foam ball technology in some cases can make conventional elastomeric wiper plugs obsolete.
- The possibilities for applications using foam ball technology are endless and dynamic.
- Future applications will continue to revolutionize and highlight the value of foam technology.