

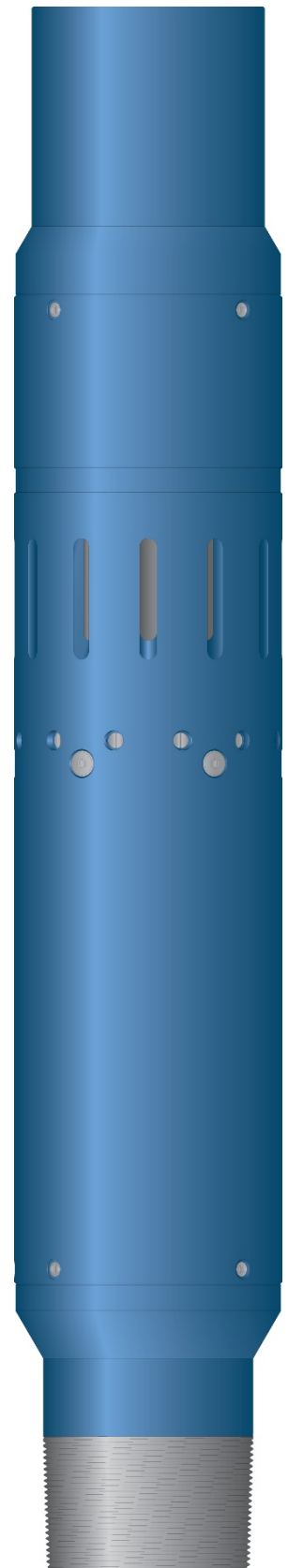
RC Millable Valve

The SUREstack™ RC Millable Valve is a ball activated fracturing sleeve designed for multiple frac stages in a well bore. High flow circumferential ports located on the housing of the sleeve permits continuous communication to the reservoir for high pressure fracturing operations and production. This system uses low specific gravity balls, which encourages flow back when the well is put on production. Specially designed anti-rotational features are incorporated into the sleeve to ensure reliable seat mill-out performance. Utilizing a designated shifting tool, the valve sleeve can be closed to shut-off water producing intervals or for interval production evaluation.

The SUREstack™ RC Millable Valve is available in 0.063, 0.094 and 0.125 inch (1.60, 2.39 and 3.18 mm) ball increments, allowing for increased interval density to optimize production and to permit higher achievable fracturing pump rates.

Features and Benefits

- Compact design for ease of handling (no pup joints required)
- Improved ball seat geometric features to enhance production capability, ball on seat pressure rating, and ball off seat performance
- Simple valve, with only 4 main components
- Extremely short valve, allowing for tighter stages
- Up to 42 stages when run with a SUREstart™ Valve
- Re-closable, designed for open-hole applications
- Utilizes easy to mill ball seat from Gryphon's other millable valves
- Compatible with all types of Gryphon's fracturing balls including dissolvables
- Rated to 400° F (204° C) with standard trim, elastomer upgrades available



See specification table on next page

Specifications								
Size	Weight	Max. O.D.	Seat Increment	Post Millout I.D.	Max. Ball Size	Max. Seat I.D.	Min. Ball Size	Min. Seat I.D.
in mm	lb/ft kg/m	in mm	in mm	in mm	in mm	in mm	in mm	in mm
4-1/2 114.3	15.10 22.47	5.400 137.16	0.125 3.18	3.701 94.01	3.125 79.38	3.350 85.09	3.125 79.38	3.015 76.58
			0.063 1.60		3.375 85.73	3.328 84.53	0.875 22.23	0.813 20.65
	11.60 - 13.50 17.26 - 20.09	5.750 146.05	0.125 3.18	3.875 98.43	3.625 92.08	3.515 89.28	3.125 79.38	3.015 76.58
			0.094 2.39		3.750 95.25	3.671 93.24	3.469 88.11	3.390 86.11
			0.063 1.60		3.375 85.73	3.328 84.53	0.875 22.23	0.813 20.65
5-1/2 139.7	23.00 34.23	7.000 177.80	0.125 3.18	4.500 114.30	4.500 114.30	4.390 111.51	3.875 98.43	3.765 95.63
			0.094 2.39		3.750 95.25	3.671 93.24	3.469 88.11	3.390 86.11
			0.063 1.60		3.375 85.73	3.328 84.53	1.500 38.10	1.453 36.91
	0.125 3.18		4.625 117.48	4.625 117.48	4.515 114.68	3.875 98.43	3.765 95.63	
	0.094 2.39			3.750 95.25	3.671 93.24	3.469 88.11	3.390 86.11	
	0.063 1.60			3.375 85.73	3.328 84.53	1.500 38.10	1.453 36.91	
	17.00 25.30	7.000 177.80	0.125 3.18	4.750 120.65	4.750 120.65	4.640 117.86	3.875 98.43	3.765 95.63
			0.094 2.39		3.750 95.25	3.671 93.24	3.469 88.11	3.390 86.11
			0.063 1.60		3.375 85.73	3.328 84.53	1.500 38.10	1.453 36.91