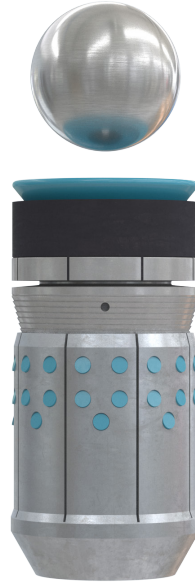


# VapR Dissolvable Frac Plug

Our VapR™ dissolvable frac plug is a fully dissolvable frac plug that provides a dependable method for temporary zonal isolation during frac operations in both vertical and horizontal completions. The compact design eliminates milling and post-frac cleanout leaving no debris to remove from the well. The minimalistic design has 60-70% fewer parts than competitive products, thus leaving less material in the well to be dissolved.

## Applications

- Single or multi-zone applications
- Vertical, deviated, or horizontal wellbores
- Multi-stage frac, plug-n-perf operations



## Features

- Revolutionary design with minimal parts
- Unique bonded seal design
- 60-70% less material than competitive offerings
- Allows reacting fluid to contact both external and internal surfaces
- Larger ID than competitive offerings

## Benefits

- Fewer parts increases reliability and performance
- Allows plug to be run faster than conventional element designs
- Less material for faster dissolution
- Consistent dissolution as the reacting fluid touches all surfaces
- Allows higher production prior to full dissolution

Casing		Plug						
Size in. (mm)	Weight range lbf (kg/m)	Max OD in. (mm)	Min ID in. (mm)	Length in. (mm)	Ball Type	Material	Temp. rating °F (°C)	Pressure rating psi (kPa)
4.500 (114.30)	11.6 (17.26)	3.600 (91.44)	1.200 (30.48)	7.240 (183.90)	Ball in place	Dissolvable	200 (93.33)	10,000 (68,947)
4.500 (114.30)	13.5 – 15.1 (20.09 – 22.47)	3.600 (91.44)	1.200 (30.48)	7.070 (179.58)	Ball in place	Dissolvable	300 (148.89)	10,000 (68,947)
4.500 (114.30)	13.5 – 15.1 (20.09 – 22.47)	3.600 (91.44)	1.650 (41.91)	8.310 (211.07)	Drop ball	Dissolvable	300 (148.89)	10,000 (68,947)
5.500 (139.70)	20.0 – 23.0 (29.76 – 34.22)	4.390 (111.51)	1.975 (50.17)	8.975 (227.97)	Drop ball	Dissolvable	200 (93.33)	10,000 (68,947)
5.500 (139.70)	20.0 – 23.0 (29.76 – 34.22)	4.390 (111.51)	1.380 (35.05)	8.950 (227.33)	Ball in place	Dissolvable	200 (93.33)	10,000 (68,947)