



Pump-Down Kit Available
for Horizontal Applications

LONG RANGE SERIES™ (GEN 1)

INNOVATION REVEALED

Designed to meet a variety of down hole conditions, Nine's Long Range™ revolutionary slim design composite plug allows you to get more from every investment. Engineered to pass through damaged casing, restricted internal casing diameters, and existing casing patches in the wellbore, Nine's Long Range™ slim plug introduces a cost-effective option for both vertical and horizontal wells.

BETTER MATERIALS FOR BETTER RESULTS

Although the slim plug design has existed for decades, Nine's incorporation of composite material and aluminum construction has created new downhole solutions for a range of conditions. Specifically, the millable and easily removable Long Range plug has made it possible for wells previously marked for abandonment to be re-completed—thus increasing overall production and profitability.

- Can be configured as a Ball Drop or Bridge Plug
- Can be deployed on wireline or coiled tubing
- Unique pump-down element design requires less fluid and pump pressure to deploy plug horizontally
- Dependable cast iron slips secure plug in place
- Positive lock-up feature to ensure lock-up of multiple plugs in a single wellbore
- Custom O.D. available upon request
- Patented Technology

The millable and easily removable Long Range plug has made it possible for wells marked for abandonment to be re-completed.

PROVEN PERFORMANCE

Nine's Long Range Plug™ has been documented in the following SPE papers:

- SPE 146559 "A Unique Plug for a Restricted Wellbore"
- SPE 159751 "Solid Expandable Liner System With Custom Composite Frac Plugs Enable Recovery Of Lost Reserves In The Piceance Basin"
- SPE 162852 "Unique Solution to Repair Casing Failure in a HTHP Wellbore Allows for Successful Multi-Stage Stimulation Treatment in an Unconventional Reservoir"

CASING SPECS				PLUG SPECS					OPERATING RANGES		
O.D. inch (mm)	Weight Range lb/ft kg/m	Min I.D. inch (mm)	Max I.D. inch (mm)	O.D. inch (mm)	Ball Drop Min. I.D. inch (mm)	Flo-Back Min. inch (mm)	Length inch (mm)	Ball Size inch (mm)	Setting Tool	Low Temp/ High PSI	Mid Temp/ High PSI
4-1/2 (114.3)	15.10-21.60 (22.5-32.2)	3.500 (88.9)	3.826 (97.2)	3.06 (77.7)	0.50 (12.7)	0.50 (12.7)	32.1 (815.3)	1.75 (44.5)	Magnum "A-1" or 2-1/8" Multi-Stage	250°F (121°C) 10K psi (68.9 Mpa) Yellow Composite/ HSN Elastomer	300°F (149°C) 10K psi (68.9 Mpa) Blue Composite/ Buna-N Elastomer
4-1/2 (114.3)	9.50-18.80 (14.1-28.0)	3.640 (92.5)	4.090 (103.9)	3.19 (81.0)	0.50 (12.7)	0.50 (12.7)	32.3 (820.4)	1.75 (44.5)			
5.00 (127.0)	18.00-21.40 (26.7-31.8)	4.126 (104.8)	4.276 (108.6)	3.50 (88.9)	0.50 (12.7)	0.50 (12.7)	32.1 (815.3)	1.75 (44.5)			
5-1/2 (139.7)	20.00-32.60 (29.8-48.6)	4.250 (108.0)	4.778 (121.4)	3.75 (95.3)	0.50 (12.7)	0.50 (12.7)	31.1 (789.9)	1.75 (44.5)	Magnum "A-1", Baker #20 or 3-5/8" Compact	250°F (121°C) 10K psi (68.9 Mpa) Yellow Composite/ HSN Elastomer	300°F (149°C) 10K psi (68.9 Mpa) Blue Composite/ Buna-N Elastomer
5-1/2 (139.7)	17.00-26.80 (25.3-39.9)	4.500 (114.3)	4.892 (124.3)	3.92 (99.6)	0.50 (12.7)	0.50 (12.7)	30.2 (767.1)	2.13 (54.0)			

Casing Specs are according to API Tubing/Casing Dimension Chart Information.

Optional pump down kit sizes

DART OD IN. (MM)	DUROMETER	MATERIAL
3.25 (82.6)	70	Nitrile
3.75 (95.3)		
4.000 (101.6)		
6.00 (152.4)		

Bridge plug conversion kit available



For more information, and to find a representative near you, visit nineenergyservice.com