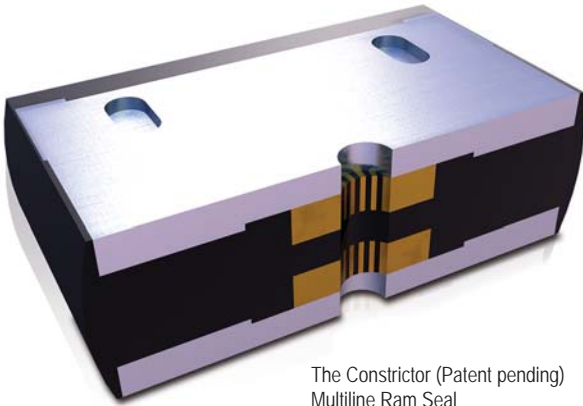


# Constrictor Multi Line Ram Seal

A reliable BOP or Wireline Valve seal is one of the most important safety barriers which prevent the catastrophic release of well pressure and ensures the safety of both personnel and the environment.



The Constrictor (Patent pending) Multiline Ram Seal

## PART NUMBERS - Normal Temperature Range

Part Number	Working Pressure	Size	Line Size	Ram Range
L-9701030345	15,000 psi	3"	Blind to 0.330"	M312
L-9701024611	15,000 psi	4" - 4 1/2"	Blind to 0.330"	M312
L-9701025504	15,000 psi	5" - 5 1/2"	Blind to 0.330"	M312
L-9701013623	15,000 psi	6" - 6 1/2"	Blind to 0.330"	M312
L-9701042591	15,000 psi	9"	Blind to 0.330"	M312

## Features

- 15,000 psi third party witnessed and certified from -10°C to 121°C
- 12 hour gas hold
- Working pressure of 15,000 psi
- Repeated sealing action means fewer redresses required

Operating temperatures in addition to normal range

- Arctic: -46C to 30C
- Elevated: 20C to 180C
- For part numbers please contact sales

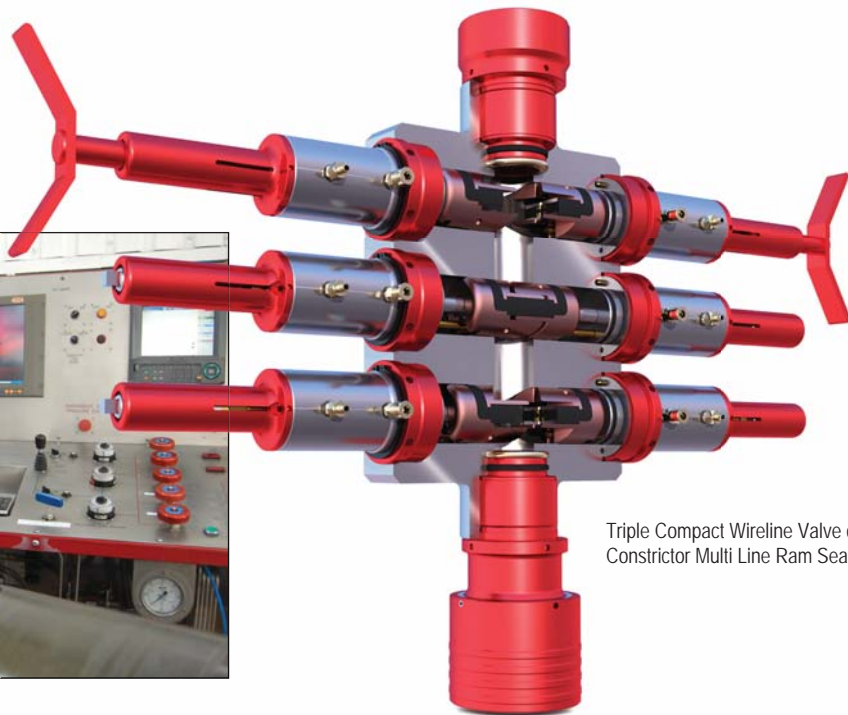


The patent pending Constrictor is the well intervention industry's first multiline seal designed to be third party witnessed and certified at extreme conditions. Seals are certified by gas testing for 12 continuous hours, sealing blind and at temperatures ranging from -46°C to 180°C to best simulate a diversity of working environments. Designed for performance you can trust, the Constrictor Multiline Ram Seal is certified, multi size and long lasting with repeated activation.

The Constrictor is a wireline valve (formerly known as wireline BOP) multiline ram seal that controls well fluids through the wellbore during intervention operations involving braided line or electric line. It has evolved from earlier commercially proven ram seals, improved to be even more reliable, require less maintenance and operate under more challenging pressure and temperature conditions for longer durations.

This technology is the first of its kind to be 3rd party witness tested under extreme pressure, temperature and time conditions and then obtain an independent review certificate. Benefits verified by an independent third party include:

- In the event of unexpected cut and drop, it can seal blind, contain wellbore fluids for at least 12 hours and seal successfully on any wireline up to 5/16".
- The same seal is used for testing of both low and high end temperature range.
- The Constrictor can close on the wireline cable without shearing, allowing crews to perform remedial work on the cable.
- Fits existing Elmar Q Guide™ rams and can be retrofitted to an existing wireline valve while in operation and used repeatedly without degradation, making it suitable for fishing operations.



Triple Compact Wireline Valve c/w Constrictor Multi Line Ram Seal