

# FAST FILL

## FLOW SUB

### INNOVATION REVEALED

The **Fast Fill Sub** is ran in conjunction with TCP operations and allows well bore fluids from the annulus to enter the work string and close once the tool reaches a predetermined hydrostatic pressure. The tool can also be closed under predetermined hydrostatic pressure or by applied pump pressure.

### FEATURES

- Safe, economical, simple and reliable
- Can be used with all firing heads
- Multiple shear value settings
- Redress Kits Available

### OPERATIONS

Assemble the Magnum Fast Fill Sub to shear at the correct value to achieve the desired underbalance in the work string. Position the Magnum Fast Fill Sub between the Magnumdisk™ Underbalanced Sub and packer assembly. Run the tool into the well to a predetermined depth to either apply pressure to close the tool or to a specified depth with sufficient hydrostatic pressure to shear the shear screws to close the tool. When the tool shifts close continue to run into the well to perforation depth.

**WARNING:** Only qualified personnel should use or assemble Magnum TCP equipment. Use of Magnum TCP equipment in contrary to our specifications may result in property damage, injury or fatality. If you are not trained in the handling and the use of explosive devices, DO NOT attempt to assemble any Magnum Perforating Systems or Magnum Firing Devices.

\* Other thread types available upon request

O.D. inch (mm)	BOX X PIN CONNECT* inch (mm)	TOOL I.D. inch (mm)	OPERATING RANGE	SHEAR SCREW RATING	LENGTH inch (mm)
3.670 (93.2)	2-7/8 EUE (73.0)	2.0 (50.8)	400°F 10,000 psi (204°C) (68.9MPa)	800 PSI (5.5 MPa)	25.25 (641.4)

