

# HYDRAULIC DUMP VALVE

## INNOVATION REVEALED

The **Hydraulic Dump Valve** is run in conjunction with the TCP BHA to provide a communication path between the work string and annulus. The external shifting sleeve is secured to the tool body by brass shear screws and is sealed by elastomers. To expose the production ports, the sleeve is shifted by creating a differential pressure between the work string and annulus.

## FEATURES

- Safe, economical, simple and reliable
- Flow ports designed for large flow area
- Ideal for horizontal perforating
- Activates with a minimum of 750 psi differential
- Well suited for extreme overbalanced perforating
- Redress Kits Available

## OPERATIONS

The Magnum Hydraulic Dump Valve Assembly is primarily used with the Magnum Hydraulic Absolute Pressure Firing Head. The tool is positioned between the firing head and packer. Fill the work string with fluid as the TCP BHA is deployed into the well. To shift the sleeve, apply the calculated combination of applied pressure and hydrostatic pressure down the work string. Once the applied pressure shear the brass shear screws, this will create the differential pressure needed to shift the sleeve exposing the flow ports.

**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 / \*\* Use VITON 90 DURO O-RINGS / \*\*\* Differential Pressure

O.D. inch (mm)	BOX X PIN CONNECT* inch (mm)	TOOL I.D. inch (mm)	OPERATING RANGE **	FLOW PORT FLOW AREA inch <sup>2</sup> (mm <sup>2</sup> )	SHEAR SCREW RATING PSI (MPa)	LENGTH inch (mm)
3.375 (85.7)	2-3/8 EUE (60.3)	1.995 (50.8)	400°F 12,000 psi (232°C) (82.7MPa)	3.14 (2,025.8)	1,000 (6.9)	11 (279.4)
3.750 (95.3)	2-7/8 EUE (73.0)	2.441 (62.0)			925 (6.4)	
4.500 (114.3)	3-1/2 EUE (88.9)	2.992 (76.0)		7.07 (4,561.3)	1,400 (9.6)	13.75 (349.3)