

# Polished Bore Receptacle and Seal Assembly

The polished bore receptacle (PBR) and seal assembly functions as an expansion joint when extreme movement is expected in the production tubing. As an added application, it can be used as a separation tool for removal of the production tubing.

## APPLICATIONS

- Expansion joint when extreme movement is expected in the production tubing
- Separation tool for removal of production tubing

## BENEFITS

- Allows tubing separation
- Permits upper tubing string to be unseated without removing the packer
- Allows independent retrieval of receptacle and seal assembly

## FEATURES

- Available in numerous stroke lengths and materials
- Metal-to-metal body joints
- Independent dual-packing stacks
- Uninterrupted sealbore
- Teflon® centralizing rings to protect polished bore
- Muleshoe on inner mandrel
- Value designed, based on free issued pipe for inner mandrel

## DESCRIPTION AND OPERATION

The PBR and seal assembly is designed for two specific applications. As an expansion joint, it provides stroke length for extreme tubing movement during well treatment and production. As a separation tool, it allows removal of the production tubing string, while leaving a polished bore and anchor seal assembly set in the packer.

Used as an expansion joint, it is pinned in a shear-up position, assembled on the tubing string, and then run in the well above the packer. The number of shear pins used is determined by the weight of the tubing below the PBR. The shear pins must be of sufficient strength to sustain the weight on the slick joint when running the packer. The pins are sheared by the application of upper forces.

When the unit is used as a separation tool, the tubing string and the seal assembly are removed from the well, leaving the PBR behind.

The unit is furnished with centralizing wiper rings to centralize the inner mandrel inside the polished bore and also to protect the seal area from contamination.

The polished bore receptacle is also available with a relatchable protector sleeve denoted by PBR-PS. When operating the PBR as a separation tool, the relatchable protector sleeve allows the inner mandrel to be removed from, and stabbed back into, the polished receptacle as often as required.

