

PKB Retrievable Bridge Plugs







NO SPECIAL SETTING TOOL REQUIRED
HUNDREDS OF RELIABLE DEPLOYMENTS
DOUBLE ELEMENT SYSTEM

Description

DTI's PKB retrievable bridge plug meets the need for a low-cost, easy to run downhole plug in 2-3/8" to 4-1/2" completions with a 5,000 psi maximum working pressure. It is designed to be run and set in the well on slickline without any special setting tools and run and pulled using standard GS pulling tools.

It is typically supplied with melon or prong type equalizing devices however it is adaptable and can be used as a gauge hanger, standing valve or injection valve.

The PKB Bridge Plug lower slips are activated by stopping the wireline quickly to shock shear the activation pin, setting down weight then engaging the lower slips with the tubing wall. Jarring down sets the element and then further jarring down sets the upper slips. Picking up the tool string removes the sheared GS Pulling Tool from the bridge plug upper fish neck and the running prong closes the equalising ports as it's moved up out of the bridge plug. A lock ring traps the setting force into the element so that it will not release during subsequent pressure reversals.

The bridge plug has also been adapted to be used as a packer as part of a straddle sleeve and for gas lift systems.

Deployment and Operation

- The PKB Bridge Plug can be run on a standard slickline tool string using a standard GS Pulling Tool.
- The lower slip is set first by shock shearing a light retaining pin.
- Jarring down against the lower slips energises the element and then the upper slips to retain the set element.
- A check set tool can be used to confirm that the plug is set correctly.
- Pulling is carried out again by jarring up on an inner GS profile, using a standard GS pulling on a standard slickline tool string.

Features & Benefits

- Low cost.
- Set on slickline with standard setting tools such as GS Pulling Tool, Link Jar and Stem Bar.
- Simple setting procedure for dependable operation.
- Can be converted to deploy injection valves or standing valves or can be used as a hanger.
- Variants of this plug can be run and set on coiled tubing or using powered setting tools.
- 5,000 psi working pressure.



Applications

Well Testing

The retrievable PKB Plug provides a reliable, pressure-tight barrier so that zones can be isolated and well integrity can be tested.

Christmas Tree Replacement

With a prong type or melon type equalizing device the bridge plug can be used as a well barrier to enable Christmas Tree replacement or repair.

Hanger

The PKB Plug can create a permanent nipple profile or tag point below the upper completion for deployment of conventional plugs, injection valves or chokes. It can be used as a hanger for the deployment of jointed tubing or coiled tubing inside and below the existing production string, enabling you to extend the life of your well with the installation of velocity strings or injections strings.

Injection

Replacing bottom sub with and flapper or poppet injection valve the bridge plug can be used for injection of fluids whilst providing a barrier to pressure from below.

Anchor

A polished bore receptable and a latch can provide an anchor point for the installation of an upper completion, such as a cable deployed ESP string with a pressure-controlled safety valve (also available from DTI - see below), to enable isolation above and below the packer.

Part Number	Running OD	Tubing Size	Pressure Rating	Material
Prong Type Equalizing				
238PKB2-1	1.85"	2 3/8" 4.6 lb/ft	5,000 psi	AISI 4140 80KSI
278PKB2-5	2.25"	2 7/8" 6.4 lb/ft	5,000 psi	AISI 4140 80KSI
350PKB2-1	2.72"	3 1/2" 9.2 lb/ft	5,000 psi	AISI 4140 80KSI
450PKB2-1	3.72"	4 ½" 12.6 lb/ft	5,000 psi	AISI 4140 80KSI
Melon Type Equalizing				
238PKB2	1.85"	2 3/8" 4.6 lb/ft	5,000 psi	AISI 4140 80KSI
278PKB2	2.25"	2 7/8" 6.4 lb/ft	5,000 psi	AISI 4140 80KSI
350PKB2	2.72"	3 ½" 9.2 lb/ft	5,000 psi	AISI 4140 80KSI
450PKB2-3	3.72"	4 1/2" 12.6 lb/ft	5,000 psi	AISI 4140 80KSI

We offer optional equipment, alternative sizes, pressure ratings, materials and thread connections. **Please contact us for more information.**