

DSBP

DEEP SET BYPASS PLUG



PRODUCT DESCRIPTION

The DSBP (Deep Set Bypass Plug) can be used in subsea wells and conventional wells. In a subsea well, the DSBP functions as one of the two primary barriers required for the temporary suspension of the well. The DSBP barrier is ISO 14998 Vo qualified, with a large bore ID, E-trigger for closing the bypass sleeve and a balanced cycling device for opening the plug. The design of the DSBP is based on well proven TCO plug technology, utilizing only the best and most reliable solutions from the strongest player on the field.

The DSBP is run in hole in open position to allow for autofill and fluid displacement through the bypass sleeve. Upon landing completion and completed displacement, the bypass sleeve is remotely closed by transmitting a pressure key to the E-trigger device, -no intervention is required. Once the E-trigger recognizes the pressure key, the bypass sleeve will close in locked position to establish a full ISO 14998 Vo gas tight barrier, allowing for packer setting and tubing testing, and long-term suspension of the well.

Once the well is ready for production, the DSBP can be cycled open remotely with pressure pulses from surface. The opening mechanism is based on a hydrostatically pressure balanced counter. With the pressure balanced counter, the opening mechanism will self-balance the hydrostatic fluid column and set this as reference point, and only 2 400psi applied surface pressure is needed to cycle the plug open by shattering the glass barrier.

Once the plug is open, you are left with full bore ID for optimized production rates. The pressure cycling can be done from rig or alternatively LWI/IMR or host platforms, making the rig available for other operations. The remote opening function saves rig time and eliminates the operational risks of intervention.

TCO's patented laminated glass barrier material provides a secure, non-corrodible barrier under high temperatures and axial loads, and is capable of withstanding high differential pressure from both sides.

TECHNICAL SPECIFICATIONS

- Up to 150°C /302°C and 6 500psi differential pressure
- ISO 14998 Vo rated gas tight barrier
- Operation optimization: Run as an integrated part of the tubing and opened remotely
- Intervention free

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FEATURES & BENEFITS

- High debris tolerance
- Full bore access
- Customer specified activation pressure
- Balanced opening mechanism
- No personnel required
- Remotely operated
- Reduced rig time
- Intervention-less completion

APPLICATIONS

- Deep-set Vo barrier
- Subsea wells
- Conventional wells
- Deep water
- Batch completions
- Suspending wells
- Nipple down BOP and work-over riser, move rig to the next well
- Return with LWI to cycle open the deep-set barrier remotely

OD	ID	Diff. Pressure	Temp.	Abs. Pressure	ISO Cert.	Rating
8,33"	5,80"	448bar/6 500psi	150°C/302°F	690bar/10 000psi*	ISO 14998	Vo Annex A.8
5,96"	4,00"	517bar/7 500psi	150°C/302°F	690bar/10 000psi*	ISO Vo Q2 2022	Vo

* Bypass open: 690bar/10 000psi – bypass closed: 1034bar/ 15 000psi