TDP-PO
PUMP OPEN

PRODUCT DESCRIPTION

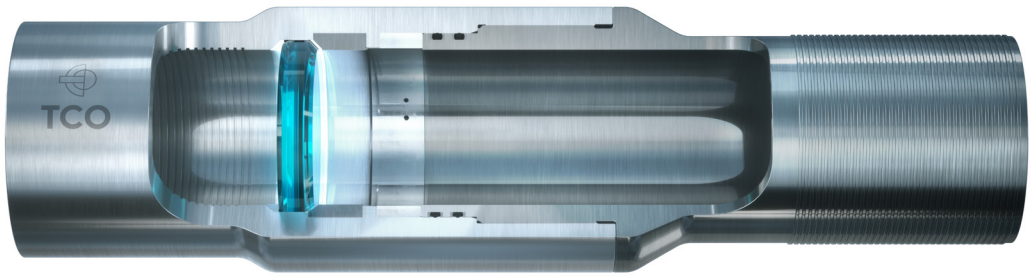
The TDP-PO is installed and run as an integrated part of the completion string. This eliminates the need for interention to set the plug. Once installed, the TDP-PO provides a means of pressurizing the tubing string for packer setting and tubing testing. For the removal process, the TDP-PO is opened by applied surface pressure, fully intervention free. Once the TDP-PO is opened, full bore access i maintained with no restrictions.

TCO's patented laminated glass material provides a secure, non-corrodible seal under high temperature and axial loads, capable of withholding extreme levels of differential pressure from above and below. Upon removal, the glass material breaks into minute particles which can be safely circulated to surface. No debris trap is required. The TDP-PO contains an internal pump-open device as the primary removal option. The system is simple to operate and does not require TCO personnel on-site. The TCO TDP-PO device is set to open at a specific differential pressure.

Simply increase surface pressure to a pre-set value and the plug will shear open.
TCO delivers TDP-PO in standard and customized bore diameters. Higher Pressure and emperature ratings can be evaluated upon request.

TECHNICAL SPECIFICATIONS

- Available in sizes from 2 7/8" to 5 1/2"
- Up to 302°F and 10 000psi differential rating
- ISO 14998 V0 rated gas tight barrier
- Operation optimization: Run as an integrated part of the tubing and opened remotely
- Intervention free installation and primar removal



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FEATURES & BENEFITS

- Intervention free installation
- Intervention free opening
- No external personnel required
- Remotely opened by pressure
- Reduced rig time
- Large bore access
- High debris tolerance
- ISO Vo and V6 tested

APPLICATIONS

- Packer setting device
- Fluid loss control device
- Tubing pressure testing

Case Studies

- TCO's Pump Open plug Used as Well Barrier and Packer Setting Device in the Middle East
- TCO TDP-PO (Pump Open) Eliminating Slick Line Operations in Highly Deviated Wells

OD	ID	Diff. Pressure	Temp.	Abs. Pressure	ISO Cert.	Rating
3,65"	2,45"	345bar/5 000psi	100°C/212°F	1034bar/15 000psi	ISO 14998	V6
3,75"	2,45"	517bar/7 500psi	150°C/302°F	1034bar/15 000psi	ISO 14998	V5 Annex A.3
5,00"	3,00"	690bar/10 000psi	150°C/302°F	1034bar/15 000psi	ISO 14998	Vo Annex A.8
5,44"	3,88"	517bar/7 500psi	150°C/302°F	1034bar/15 000psi	ISO 14998	Vo Annex A.8
5,44"	3,88"	620bar/9 000psi	150°C/302°F	1034bar/15 000psi	ISO 14310	V6
5,55"	3,88"	690bar/10 000psi	150°C/302°F	1034bar/15 000psi	ISO 14310	V6
5,88"	4,26"	690bar/10 000psi	150°C/302°F	1034bar/15 000psi	ISO 14310	V6
6,50"	4,80"	620bar/9 000psi	150°C/302°F	1034bar/15 000psi	ISO 14310	V6
7,09"	4,77"	620bar/9 000psi	150°C/302°F	1034bar/15 000psi	ISO 14310	V6