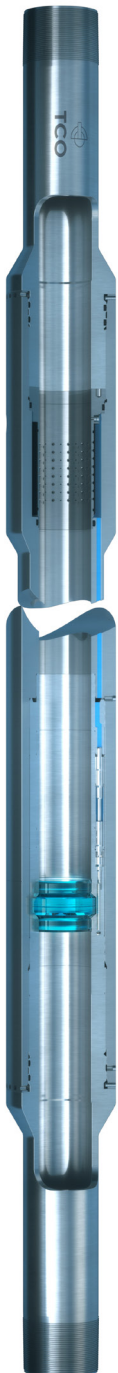


TDP-3



PRODUCT DESCRIPTION

The TDP-3 builds upon TCO's original Tubing Disappearing Glass Plug (TDP), with the addition of improved installation and remote cycling capabilities. The TDP-3 technology incorporates TCO's patented laminated glass material, built into an ISO 14310 Vo certified barrier plug package. This provides a total seal against all fluids under extreme conditions, including situations with high differential pressure across the barrier.

The TDP-3 has been designed and developed to be installed and run as an integrated part of the completion string or liner. This increases the efficiency of the installation process and provides a large bore access when the plug is opened. The TDP-3 incorporates rubber bellows to separate wellbore fluids from the clean fluid. These are also used to keep the TDP-3 cycling mechanism debris free.

Other than the built-in remote opening mechanism, a variety of removal options are available as a contingency. Full ID is always guaranteed after opening.

The TDP-3 can be supplied with up to 6,7 meters debris extension, for use in wells with expected debris issues.

TDP-3

FEATURES & BENEFITS

- Large bore access
- Safer operations
 - No external personnel required
 - SO 14998:2013 certified with axial loads
 - Debris tolerant
 - Built in redundant cycling mechanism
- Lower costs
 - Intervention-free installation
 - Remotely removal of barrier
- Reduced rig time
 - Easy removal compared to deep-set/horizontal wireline plugs
- Laminated glass
- Debris extension
- Integrated Installation
- Large ID
- E-trigger option

APPLICATIONS

- Completion Barrier Glass Plug
- Isolated lower completion while installing upper completion
- Reduce/ eliminate need for intervention operations
- Nitrogen filled tubing
- Completion Testing and Packer Setting
- Remotely Actuated Barrier Device

Case Studies

- [Operator Saves 6MUSD by using TDP-3 HPHT as a barrier](#)
- [TCO Glass Plug TDP-3 HPHT cycled open in well with nitrogen filled tubing saves A/S Norske Shell 24 hours rig-time](#)

OD	ID	Diff. Pressure	Temp.	Abs. Pressure	ISO Cert.	Rating
5,87"	3,00"	552bar/8 000psi	165°C/329°F	1100bar/15 950psi	ISO 14998	Vo Annex A.8
8,00"	4,30"	517bar/7 500psi	150°C/302°F	1128bar/16 365psi	ISO 14310	Vo
8,33"	4,67"	517bar/7 500psi	165°C/329°F	1296bar/18 800psi	ISO 14310	Vo
8,33"	5,88"	448bar/6 500psi	145°C/293°F	896bar/13 000psi	ISO 14310	Vo