

Wireline Tubing Perforators



RELIABLE & EFFECTIVE FIELD PROVEN DESIGN

FULL RANGE OF SIZES

SLIMLINE VERSIONS AVAILABLE

Description

The DTI Tubing Perforator is a mechanically operated punch assembly which is designed to make a single perforation in the production tubing wall per wireline run.

This is desirable when a circulation flow path needs to be opened up from the tubing to the annulus to enable extra production, for example, or to kill a well.

The DTI Tubing Perforator has an outer body which houses a punch assembly. The punch runs in a moving tapered track, such that upward jarring will expand it through the tubing wall. Continued jarring will then retract it in the same track.

Slimline versions of the tubing perforator are available for applications where there are restriction in the tubing string or the tubing string is reduced in inside diameter by Glass Reinforced Epoxy (GRE) liner.

A modified version of the 3 ½" Tubing Perforator is available with a 0.50" punch diameter.

Operating Principle

A slip type stop can be run and set in the tubing string to give the tubing perforator a platform.

The tubing stop or collar stop can be run as part of the perforator tool string or separately and set at the desired depth.

When the stop is reached, one or two downward jars, will shear a small pin and free the body ready to punch. Punching is carried out by upward jarring.

The tubing stop can also be set by shock shearing a small pin in the body. Upward jarring will then initiate the punch.

If the run is aborted, then downward jarring will retract the punch and trap it in the retracted position.

Features & Benefits

- Enables a single hole to be punched during a wireline run.
- Available as standard for 1.66" 2-3/8", 2-7/8", 3-1/2" & 4-1/2", production tubing.
- Field proven mechanical tubing punch mechanism.
- Operates mechanically via wireline upward jarring to complete the perforating cycle.
- Incorporates a safety release abort mechanism by downward jarring.
- Slimline versions for GRE Tubing.
- Longer punches available for softer tubing.



Applications

Circulation or Kill – Provides access to the casing annulus to circulate or kill the well.

Gas Lift – Provides annular communication for gas lift straddles.

Injection – Opens up the annulus for separated water injector wells.

Emergency Communication – Provides emergency annular communication in the case of Sliding Side Doors failing to open.

Production – Bring in additional productive zones or permit production through a plug tail pipe that cannot be opened using regular methods.

Cementing – Permits cement squeeze operations.

Part Number	Outside Diameter	Punch Diameter	Thread Connection	Length	Tubing/Casing Size
Standard Tubing Perforators					
166DTITP	1.25"	0.250"	5/8-11 UN	20.5"	1.66" 2.3/2.4 LB/FT
190DTITP	1.47"	0.312"	15/16-10 UN	22.7"	1.90" 2.75 LB/FT
206DTITP	1.63"	0.312"	15/16-10UN	22.7"	2 1/16" 3.4 LB/FT
238DTITP	1.84"	0.375"	15/16-10UN	30.5"	2 3/8" 4.0/4.6 LB/FT
278DTITP	2.19"	0.375"	15/16-10UN	30.9"	2 7/8" 6.4/8.6 LB/FT
350DTITP	2.69"	0.438"	1 1/16-10UN	30.9"	3 1/2" 7.7/10.2 LB/FT
350DTITP-050	2.69"	0.500"	1 1/16-10UN	30.9"	3 1/2" 7.7/10.2 LB/FT
450DTITP	3.65"	0.500"	1 1/16-10UN	30.9"	4 1/2" 11.6/12.6 LB/FT
Slimline Tubing Perforators					
350DTITP-S	2.50"	0.438"	1 1/16-10UN	30.9"	3 1/2" 7.7/10.2 LB/FT
450DTITP-S	3.44"	0.500"	1 1/16-10UN	30.9"	4 1/2" 11.6/12.6 LB/FT

We offer optional equipment, alternative sizes, materials and thread connections.

Please contact us for more information.