



TD Drilling Machines

Pipe Sizes : 1/2- through 2-inch



T.D. Williamson, Inc.

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TD Drilling Machines
6- to 14-inches of travel

Description

Drilling machines are used to make connections to pipelines, tanks and plant piping without shutdown and are used to make hot taps in preparation for plugging machine applications.

The TD-XX or TD-1XX Drilling Machine is a manual or power-driven machine which taps into pipe while under pressure. It is used for making taps on 1/2- through 2-inch (DN 13 - DN 50) pipe without shutdown. It can be used to install 3/4- through 2-inch completion plugs in tapping nipples to permit recovery of tapping valves and to install TDW PIG-SIG[®] Scraper Passage Indicators.



Hole Saw (various sizes)

Features

The model TD-XX or TD-1XX Drilling Machine is available in several versions: models have total travel lengths ranging from 6- to 14-inches (depending on the version).

The TD Drilling Machine is very compact, from 18.6- to 35.3-inches in total length (depending on version). O-ring seals take the place of adjustable packing. O-Ring Top seal keeps water and dust away from the thrust bearing.

The TD Drilling Machine meets NACE Standard MR0175-93, sulfide stress cracking resistant metallic material for oilfield equipment. Its maximum working pressure is 740 psig (50bar). Its operating temperature is -20°F (-29°C) to 180°F (82°C).

Other features include: Lightweight 14 pounds for the TD-12 (other models range from 9 to 17 lbs depending on length). Versatile 1/16- through 2-inch taps. This machine is compatible with TD Williamson's T-101 Drilling Machine. It allows for easy completion plug installation, since the feed mechanism matches our SHORTSTOPP[®] threaded completion plug at 12 threads per inch. Black liquid nitride corrosion resistant finish is the latest in protective coatings.

Options

T.D. Williamson, Inc., is committed to providing you with the exact product to assist you in planning, budgeting and meeting the specifications for your individual application needs. The following options are available:

Optional O-Rings can be provided to accommodate different service applications.

The TD Drilling Machines are furnished with a ratchet crank for manual operation. An optional hand-held air motor can also be used.

Adapter piece can be either 1-inch NPT male or a 2-inch NPT female that offers compatibility to the T-101.

Note: Boring bar length also varies with adapter type. Drill is recessed with 1-inch NPT male adapter (Model TD-XX), resulting in no separate adapter required when used with a 1-inch NPT valve.



1-inch Threaded Adapter

ISO 9001 Certified

Toll Free

1-888-TDWmSon (839-6766)



Drilling Machine



■ The cap locks the feed and rotation of machine to set and retrieve completion plugs. (12 tpi)

| Item | Lb. | Kg. | Part Number |
|---|-----|-----|-------------------|
| TD-XX (1-inch NPT male end) | | | 05-1088-0000-SUFF |
| TD-1XX (2-inch NPT female end) | | | 05-1088-1000-SUFF |
| Includes: | | | |
| Ratchet Crank | | | 00-1443-0001 |
| Cap | | | 05-1088-0006 |
| Purge Valve | | | 00-6390-0001 |
| Optional Equipment: | | | |
| Air Motor Pistol Grip | 6 | 3 | 00-1508-0001 |
| Air Motor Angle Grip | 8 | 4 | 05-2160-0000 |
| Drive Socket | | | 00-1509-0002 |
| Steel Carrying Case (Std.) | 15 | 7 | 05-1088-0500-xx |
| Plug Holder for 2-inch THREAD-O-RING™ Plug | | | 08-2120-0000 |
| Plug Holder for 2- and 3-inch SHORTSTOPP® Completion Plug | | | 05-0185-0001 |

Operating Specifications

Maximum Operating Pressure/Temperatures

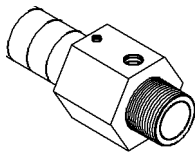
740 psi (50 bar) @ -20°F - 180°F (-29°C - 82°C)

* Note: For higher temperature rating, consult factory.

Drilling Machine Specifications

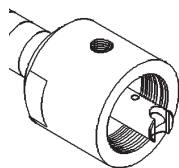
| Item | inches | mm |
|---------------------------------|------------------|-----|
| Boring Bar Extension/Revolution | 0.083 | 2.1 |
| Feed Mechanism | Hand-Fed Machine | |

TD Drilling Machines -1-inch Male End (NPT)



| Model | Travel (inches) | Lbs. | Overall Length | Part Number |
|-------|-----------------|------|----------------|-----------------|
| TD-06 | 6 | 9 | 18.6 | 05-1088-0000-06 |
| TD-08 | 8 | 10 | 22.6 | 05-1088-0000-08 |
| TD-10 | 10 | 11 | 26.6 | 05-1088-0000-10 |
| TD-12 | 12 | 14 | 30.6 | 05-1088-0000-12 |
| TD-14 | 14 | 15 | 34.6 | 05-1088-0000-14 |

TD Drilling Machines - 2-inch Female End (NPT)



| Model | Travel (inches) | Lbs | Overall Length | Part Number |
|--------|-----------------|-----|----------------|-----------------|
| TD-106 | 6 | 11 | 19.3 | 05-1088-1000-06 |
| TD-108 | 8 | 12 | 23.3 | 05-1088-1000-08 |
| TD-110 | 10 | 14 | 27.3 | 05-1088-1000-10 |
| TD-112 | 12 | 16 | 31.3 | 05-1088-1000-12 |
| TD-114 | 14 | 17 | 35.3 | 05-1088-1000-14 |



| Drills for TD-XX | Drill Diameter | | Drill Length | | Part Number |
|------------------|----------------|------|--------------|-----|--------------|
| | Inches | DN | Inches | mm | |
| | 1/2 | 12.7 | 6 | 150 | 05-1096-0005 |
| | 9/16 | 14.3 | 6 | 150 | 05-1096-0006 |
| | 5/8 | 15.9 | 6 | 150 | 05-1096-0007 |
| | 11/16 | 17.5 | 6 | 150 | 05-1096-0008 |
| | 3/4 | 19.1 | 6 | 150 | 05-1096-0009 |
| | 13/16 | 20.6 | 6 | 150 | 05-1096-0010 |
| | 7/8 | 22.2 | 6 | 150 | 05-1096-0011 |

* Drill Holder for 1/16- to 5/32-inch drills 05-1099-XXXX

* Drill not included

| Drills for TD-1XX | Drill Diameter | | Drill Length | | Valve Size | | Part Number |
|-------------------|----------------|------|--------------|-----|------------|-------|--------------|
| | Inches | DN | Inches | mm | Inches | mm | |
| | 1/2 | 12.7 | 6 | 150 | 1-1/4 - 2 | 32-50 | 05-0203-0005 |
| | 1/2 | 12.7 | 22-1/4 | 565 | 1 | 25 | 05-0189-0001 |
| | 3/4 | 19.0 | 6 | 150 | 1-1/4 - 2 | 32-50 | 05-0203-0009 |
| | 3/4 | 19.0 | 22-1/4 | 565 | 1 | 25 | 05-0189-0002 |
| | 1 | 25.0 | 6 | 150 | 1-1/4 - 2 | 32-50 | 05-0203-0012 |
| | 1-1/4 | 32.0 | 6 | 150 | 1-1/2 - 2 | 40-50 | 05-0203-0013 |
| | 1-7/16 | 36.5 | 7-3/8 | 187 | 1-1/2 - 2 | 40-50 | 05-0193-0001 |

| Hole Saws/Cutters and Holder Pilots for TD-1XX | Nominal Tap Size | | Actual Cutter Diameter | | Size-on-Size | | Not Size-on-Size |
|--|------------------|--------|------------------------|--------------|--------------------------|-----------------------|-----------------------|
| | Inch | DN | Inch | mm | Hole Saw/Cutter Part No. | Holder Pilot Part No. | Holder Pilot Part No. |
| | 1 | 25 | 1-1/16 | 26.1 | 00-1151-0033 | 05-1095-0000 | 05-1095-0000 |
| 1-1/4 | 32 | 1-5/16 | 33.3 | 00-1151-0005 | 05-1130-0000 | 05-1130-0000 | |
| 1-1/2 | 38 | 1-9/16 | 39.7 | 00-1151-0009 | 05-0275-0000 | 05-0290-0000 | |
| 2 | 50 | 1-7/8 | 47.6 | 05-0179-0002 | 05-0204-0000 | 05-0207-0000 | |

| Threaded Valve Adapters for TD-1XX (Not required for TD-XX model) | Nominal Adapter Diameter | | Part Number | Maximum Pressure (Limited by Drilling Machine) | |
|--|--------------------------|----|-----------------|---|-----|
| | Inches | DN | | psi | Bar |
| | 1 | 25 | 06-1223-0001 | 740 | 50 |
| | 1-1/4 | 32 | 00-0757-0012 | 740 | 50 |
| | 1-1/2 | 38 | 00-0757-0011 | 740 | 50 |
| | 2 | 50 | 00-0706-0015 | 740 | 50 |
| | 3 | 80 | 06-1303-0001-02 | 740 | 50 |

| Valve Dimensions for Making Taps | Nominal Size | | Minimum Bore | |
|----------------------------------|--------------|----|--------------|------|
| | Inches | DN | Inches | mm |
| | 1 | 25 | 15/16 | 24 |
| | 2 | 50 | 2-1/16 | 52.4 |