

TD Drilling Machines

Pipe Sizes : 1/2- to 2-inch



T.D. Williamson

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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 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

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			05-0185-0001
Plug Holder for 2- and 3-inch SHORTSTOPP® Completion Plug			08-2120-0000

Operating Specifications

Maximum Operating Pressure/Temperatures

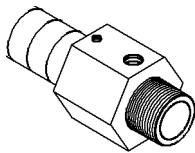
740 psi (50 bar) @ -20°F - 180°F (-29°C - 82°C)

* Note: For higher temperature rating, consult factory.

Drilling Machine Specifications

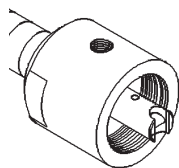
Item	inches	mm
Boring Bar Extension/Revolution	0.083	2.1
Feed Mechanism	Hand-Fed Machine	

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