Torque Tool Class 1-4







This torque tool has been specifically developed to provide the highest level of performance. It has integral torque and turns counting sensors. When matched with a FORUM supplied torque tool control manifold, it can provide precise feedback on torque response of any subsea operation. These can alternatively be utilised by connecting a FORUM Universal Subsea Display (supplied), which would give a visual read-out of live torque feedback and turns count.

The tool conforms to the ISO 13628-8 Fig 18 Class 1-4 bucket interface used extensively in the subsea industry for valve overrides operated by ROV. The tool has latching wings allowing the tool to hold on to the interface. The latching wings are hydraulically driven forward, and spring retracted. Thus, in the case of a loss of hydraulic power the wings will release. The tool uses a high specification drive motor for consistent torque output characteristics, even if used with direct hydraulic pressure control without the feedback sensor. The motor shares casing oil with the gearbox therefore avoiding the need for a separate compensator.

Note that for applying torques less than 108Nm (80 ft lbs) the class 1&2 tool is recommended.

Key Features

ISO 13628-8 Fig 18 (API 17D) Class 1-4 Max Torque 2,700 Nm (2,000 ft lbs) Dual range Dual Sensor Electronic Turns Counter Internal Strain Gauge Latching Wings Supplied in offshore suitable transit case

What's in the Box

Torque Tool
Class 1 & 2 Socket (11/16" Sq)
Class 3 socket (1-1/8" Sq)
Class 4 socket (1-1/2" Sq)
JIC Hose Set
Low range motor
Turns and torque Display
8 Pin Burton Dummy
Operations & Maintenance Manual



Specifications

Torque interface ISO 13628-8 fig 18 Class 1-4

405-2700Nm (300-2000 ft lbs) (80cc motor fitted) Torque range

81-405Nm (60-300 ft lbs) (12.5cc motor fitted)

12.5cc nominal and 80cc nominal Motor size

Latching strength 1 tonne @ 160 Bar

Weight (air/water) 0.10 deg secant latitude RMS

Hydraulic Mineral Oil (Tellus 32)

Electrical connector 8 Pin Burton

Dual Sensor Inductive Turns count sensor Sensors

Internal Strain Gauge

Part numbers & options

TX00100-580-00 Torque Tool System with USD, sockets, case, hoses, handle

TX00100-570-00 Spares Kit, Torque Tool and USD components

TX00100-570-01 Spares Kit, Torque Tool only

A019-958-152/2 Surface Verification Unit

Subsea Verification Unit A019-958-601

Flying Lead Tool TL0017-0000-00

Torque Tool Control System. (alternative to USD) A286-001-050/04

A019-959-150 17H (High Torque) Nose Adapter

A019-959-400 Petrobras Nose Adapter Kit

