### everything remotely possible<sup>™</sup>



## ISO 13628-8 Class 1-4 (API 17D) Diver Operated Torque Tool



#### **DESCRIPTION**

This torque tool has been specifically developed to provide the highest level of performance. It has integral torque and turns counting sensors for accurate control. These can be utilised by connecting a FORUM Universal Subsea Display, which would give a visual read-out of live torque feedback and turns count, USD sold separately.

The tool conforms to the ISO 13628-8 Fig 18 Class 1-4 bucket style used extensively in the subsea industry for valve overrides operated by a diver or ROV. The tool has a single lever control for the 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 direction and torque generated by the tool is controlled by a 3 way proportional lever, providing clockwise, anti-clockwise or zero rotation. The motor shares casing oil with the gearbox therefore avoiding the need for a separate compensator.

#### **FEATURES**

ISO 13628-8 Fig 18 (API 17D) Class 1-4

Max Torque 2,700 Nm (2,000 ft lbs)

**Dual Sensor Electronic Turns Counter** 

Internal Strain Gauge

**Latching Wings** 

Complete Diver Control of Socket Torque, Direction of Rotation & Latching Wing

Supplied in offshore suitable transit case



# ISO 13628-8 Class 1-4 (API 17D) Diver Operated Torque Tool

#### **SPECIFICATIONS**

Torque Interface: ISO 13628-8 fig 18 Class 1-4

Torque Range: 540-2,700Nm (400-2,000 ft lbs) (gearbox fitted)

108-540Nm (80-400 ft lbs) (direct drive)

Motor Size: 236 cc

Latching Strength: 1 tonne @ 160 Bar Weight (Air/Water): 41/32kg (90/71 lbs)

Hydraulic: Mineral Oil Electrical Connector: 8 Pin Burton

Sensors: Dual Sensor Inductive Turns count sensor

Hydraulic: Mineral Oil

WHAT'S IN THE BOX
Diver Operated Torque Tool.
Class 1 & 2 Socket (11/16" Sq)
Class 3 socket (1-1/8" Sq)
Class 4 socket(1-1/2" Sq)
Fish Tail handle and cage.

Hose Set (JIC with Swagelok adap-

tors)

Operations & Maintenance Manual.

#### PART NUMBERS & OPTIONS

A019-959-750 Diver Operated Torque Tool
A019-959-750/S Diver Operated Torque Tool Spares

A019-958-152/2 Surface Verification Unit.
A019-958-601 Subsea Verification Unit.
A286-001-050/04 Torque Tool Control System.

A019-901-102 3 Stage Manifold. (Use instead of Torque Tool Control System).

A019-904-400/01 Subsea Torque and Turns Display