# ROV / DIVER TORQUE MULTIPLIER GEN-2

TORQUE & TURNS FEEDBACK
MULTICLASS END EFFECTOR
SUBSEA TORQUE ADJUSTMENT

### **Descriptions**

The Torque Multiplier Tool Gen-2 is a compact and ROV friendly multiclass torque tool designed for operating Class 1-4 subsea valves and MQC plates up to 1200 Nm torque applications.

The Torque Multiplier Tool (TMT) is a fully mechanical ROV manipulator/diver torque tool that require no hydraulic or electric power- and communication. Reducing the risk of hydraulic fluid spill, hose management and electrical cables.

The tool comes with a mechanical latch system for standard API 17D bucket.

Torque & Turns display is powered by batteries and is turned on/off or reset using flashing illumination.

The Torque Setting System (calibration/operation) enables the operator to both adjust and verify torque output when subsea.

The Torque Multiplier Tool has a built-in memory function that enables logging of valve operations when required. The logging files is transferred to laptop thru USB adaptor cable.

Other end effector available upon request (paddle valves)

## **Typical Operations**

- Class 1-4 valve operations up to 1200 Nm
- Paddle valve operations
- MQC plate latch / de-latch
- ROV / Diver Intervention works

#### **Features**

- Mechanical torque Tool.
- □ Class 1 4 multiclass end effector.
- No hydraulic power required (No leakage).
- □ No electric power & communication required.
- Torque and Turns feedback display.
- ROV adjustable clutch for safe valve operations.
- Mechanical latch mechanism.
- ROV and diver operable.
- Environmental Friendly compensation fluid.



#### **SPECIFICATIONS**

#### INTERVENTION TORQUE MULTIPLIER

#### General technical specification

Type
Part number
Weight (in air / Submerged
Dimensions (L x H)
Running torque
Breakout torque
Output interface
Latch Mechanism
Gear Ratio

#### **Environmental data**

Design Lifetime
Depth Rating
Operating Temperature
Storage Temperature
Compensation Fluid
Compensation Volume

#### Design codes and standards

ISO NORSOK API

#### **Display**

Supply Voltage COMS - (transferring log) Optional

#### **ROV** interface

Operation & handling

ROV TOOLING 2203099 40 kg / 30 kg

780 x 310 (incl. grabber bar, flex joint and fishtail)

1000 Nm 1200 Nm API Class 1 - 4 Spring Force 1:5,29

25 Years

ROV Working Depth -15 / +50 °C -15 / +70 °C

Panolin Atlantis 0,995 ml

ISO13628-1.....

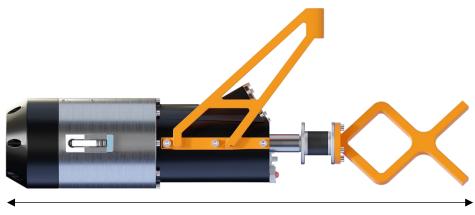
NORSOK E-001/M-001/R-002...

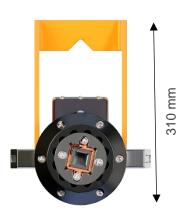
API 17D

AA Battery USB

ROV / Diver Fish tail / D handle

API Class 1 - 4





780 mm