

3G Torque Tool

Forum Subsea Technologies' third generation (3G) tool offers full ISO 13628-8 Class 1-4 torque and automatic socket selection subsea without the need to recover to the surface to change sockets or swap motors.

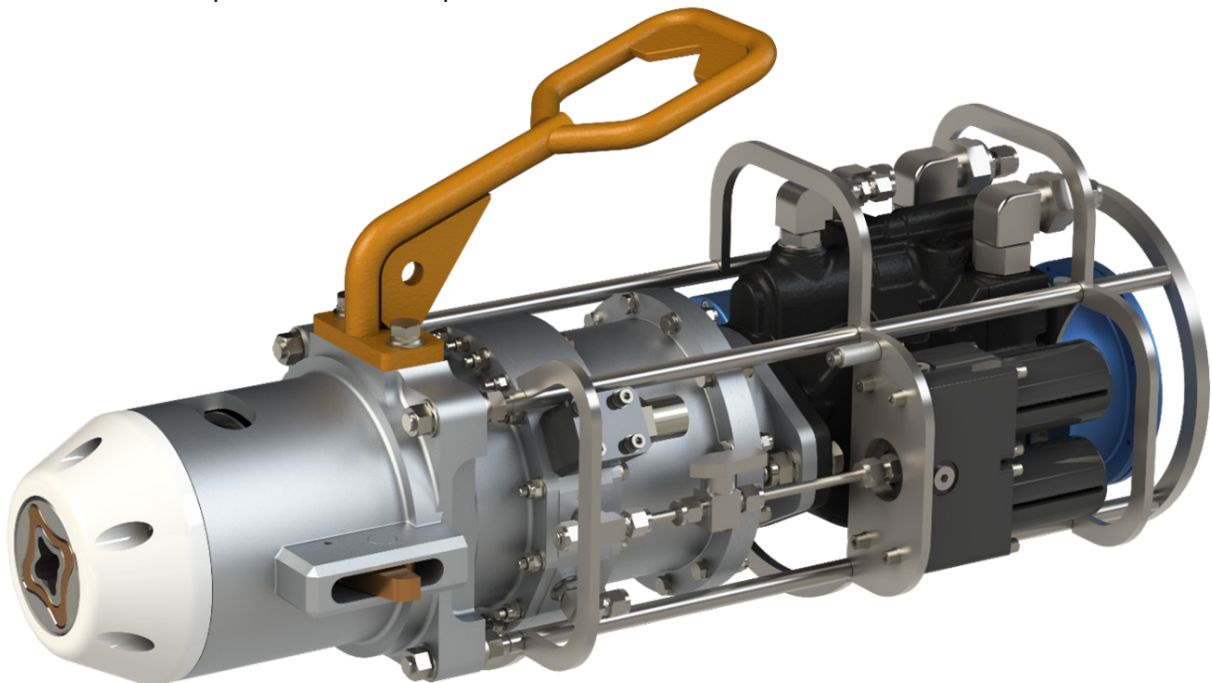
The three sockets in the multi-class end effector cover the full Class 1 to 4 torque range and are selected by inserting the nose of the tool onto the receptacle.

A single hydraulic motor eliminates the possibility of accidental gear shifts or gears jamming subsea. Coupled with a Forum valve pack with a proportional pressure and flow control valve and Forum Subsea Technologies software, the tool provides precise torque control and interlocks to prevent accidental over torque application. Alternative control solutions are available on FET XLX-Evo and XLX-C ROV systems.

The 3G Torque Tool is fitted with Type D handle as standard (other options available on request) and supplied with operating hoses and an Operation & Maintenance Manual.

Part Numbers & Options

A019-966-451	3G ISO Class 1-4 Torque Tool
A286-001-050	Torque Tool Control System
A019-958-152/2	Surface Verification Unit
A019-958-601	Subsea Verification Unit
TL0017-0000-00	Flying Lead Orientation Tool (FLOT)
A019-966-440	3G Torque Tool FLOT Adaptor



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Features

- ISO 13628-8 Class 1-4 Torque Tool
- Multi-Class End Effector with Automatic Socket Selection
- Subsea Selectable Torque and Speed
- Torque and Turns Feedback
- Fail-Safe Latching Wings
- D Type Handle

Specifications

Standard Interface:	API 17D: 2013, Figure 12 Class 1-4 ISO 13628-8:2006, Figure 18 Class 1-4
Socket Sizes:	1 1/16" (17.5 mm) Square, Class 1+2 1-1/8" (28.6 mm) Square, Class 3 1-1/2" (38.1 mm) Square, Class 4
Torque Ranges:	
Low Range:	65-780 Nm @ 15-180 bar (48-575 ft-lbs @ 218-2610 psi)
High Range:	400-2900 Nm @ 25-180 bar (295-2140 ft-lbs @ 363-2610 psi)
Speed: Low Range:	Up to 36 rpm at full flow rate
High Range:	Up to 10 rpm at full flow rate
Latching Wings:	6600 kg holding force at 207 bar
Typical Repeatability:	± 6% (variation at full load)
Hydraulic Supply:	Max supply pressure 207 bar (3,000 psi) At 8 L/min – 12 L/min
Hydraulic Fluid:	Mineral Oil – Shell Tellus 32 or similar
Electronic Connector:	8 Pin Burton 15 Shell bulkhead connector (P/N 5507-1508-0004)
Sensors:	Turns Count sensor (1/80th turn resolution) Internal Strain Gauge
Handle:	D-Type (other options available)
Materials:	Steel motor, stainless steel and aluminium bronze sockets and drive components, aluminium body, acetal nose cone
Weight: (Air/Water)	51/40 kg (113/88lbs)
Maximum Water Depth:	4,000 msw (13,123 fsw)

