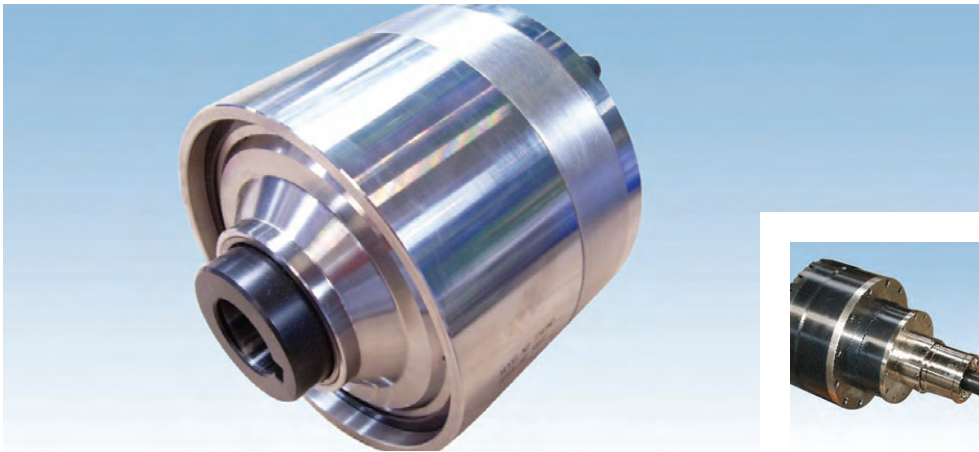


NORBAR TORQUE TOOLS TORQUE MULTIPLIERS AND TRANSDUCERS FOR USE IN INTERVENTION TOOLS



Norbar gearboxes and transducers are becoming the industry standard for use in sub sea torque intervention tools.

Available as

- Gearbox only
- Gearbox with integral torque transducer (as shown above)
- Gearbox with separate torque transducer

Gearbox

- Precision epicyclical gear design for high efficiency in a small, lightweight package
- Supplied specifically for use in pressure compensated oil filled sub sea intervention tools with oil filling/drain holes and no grease
- Various ratios available with maximum output torques from 1000 to 300,000 N.m
- Input and output drives can be provided to customer requirements
- Manufactured from standard Norbar components for trusted reliability and availability of spares
- Reaction can be either bolted or dowed (or combination of both)

Gearbox with Integral Transducer

- Gearbox specifications as above
- Designed to allow integration into the smallest housing possible to reduce weight and size of complete intervention tool
- Transducer is integral part of the gearbox annulus and is made from stainless steel
- Available for torques up to 3000 N.m (740 lbf.ft) and larger capacities on request
- Torque signal output available in mV/V, 4 to 20mA as 2 or 4 wire versions
- Torque accuracy +/- 2% of reading or better
- Supplied with fully traceable bi-directional torque calibration

Torque Transducers

- Based on the standard range of Norbar Annular transducers but specifically for use in pressure compensated oil filled sub sea intervention tools
- Oil filling/drain holes in sleeve
- All stainless steel construction
- Torque signal output in mV/V
- Supplied with UKAS bi-directional torque certification



For more details on all Norbar products please contact:

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