### **ACTUATORS**



# PLANETARY GEARBOXES

## SUBSEA



ACTION ON LOSS OF SUPPLIED ENERGY	FAIL LAST
ROV INTERFACE FOR LOCAL OVERRIDE	ISO13628-8 / API 17H Classes; others as per application requirements
WATER DEPT INSTALLATION	ANY
TEMPERATURE RANGE	std -10°C/+70°C extended ranges on request
ORIENTATION	as per application requirements
Material Selection	DSS/SDSS for wetted critical components; high strength materials for internals and torque transmitting and internal parts; customized selections as per application requirements
DESIGN FEATURES	Simple and compact design for minimum overall dimensions. Factory set end stops for perfect valve stroke and alignment.
SPECIAL FEATURES	Customized layout: engineered drive extensions and ROV/Diver intervention fixtures; cu- stomized features to meet any required orientation for installation; Tailor made position indicators according to Client requirements: Local and remote systems featured with single or redundant VDT and /or limit switches
PRODUCT RANGE	from 10kNm up to 600kNm output Torque

#### **General Features**

- fully tailored to meet the application requirements (valve integration, sizing, temperature ranges, stroking time)
- material selection customized in accordance with Client needs and Service requirements
- Fully compensated design: suitable for installation at any water depth
- built-in mechanical override systems for local intervention
- Designed for extended operational life
- redundant seal arrangement applied on all dynamic sealing
- Fully designed and qualified according to API 6A, API 17D, API 6D, API 6DSS, ISO 13628, ISO 10423, ISO 14723.
- API 17D, ISO 13628-8 or tailor-made diver / ROV interfaces.

### **Optional Features**

- Selection of Hydraulic and electric interfaces made in accordance with customer requirements
- subsea retrieval: built-in Diver or ROV operated retrievability systems featured with self-clutching and self-alignment systems and customized lifting arrangement interfaces; Valve interface designed for use of protection or pressure caps
- Customized layout: engineered drive extensions and ROV/Diver intervention fixtures; customized features to meet any required orientation for installation
- Tailor made position indicators according to Client requirements: Local and remote systems featured with single or redundant VDT and /or limit switches
- Protection or pressure retaining caps engineered to protect valve stem and prevent any leakage to the environment after operator removal.



