



INTERVENTION TOOL TEST POTS



From left to right Intervention Tool Test Pots 80019, 80024, 80025 and 80020

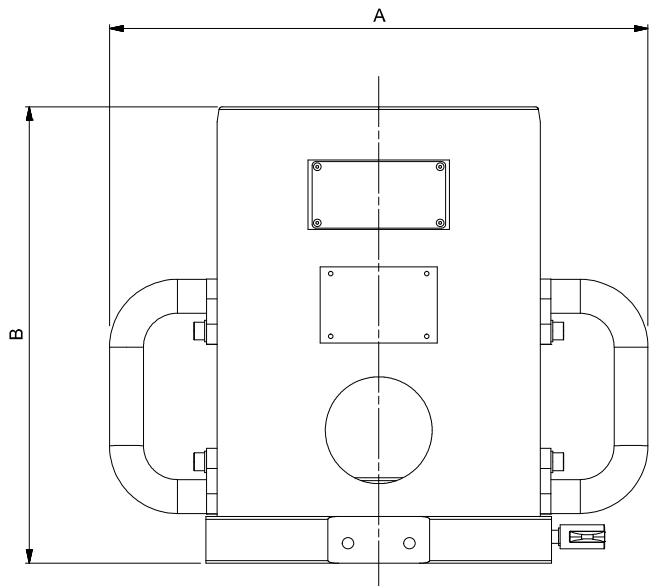
These reaction pots allow for the accurate testing of API rotary intervention tools.

- Conform to ISO 13628-8:2002 and API 17D
- Customer specific solutions also available
- Lightweight all aluminium construction
- Incorporated lifting handles
- Eye bolts provided on larger units



4	INTERVENTION TOOL TEST POTS
80019	ISO 13628-8:2002 Class 4 Intervention Tool Test Pot
80024	ISO 13628-8:2002 Class 5 Intervention Tool Test Pot
80025	ISO 13628-8:2002 Class 6 Intervention Tool Test Pot
80020	API 17D Class 7 Intervention Tool Test Pot
81018	Deck Mount Kit for API Verification Pot

Model	Class 4	Class 5	Class 6	Class 7
Part Number	80019	80024	80025	80020
Dimensions (mm)	A	372	403	428
	B	215	246	326
Weight (kg)	17.5	22.0	51.0	48.0





INTERVENTION TOOL VERIFICATION KITS

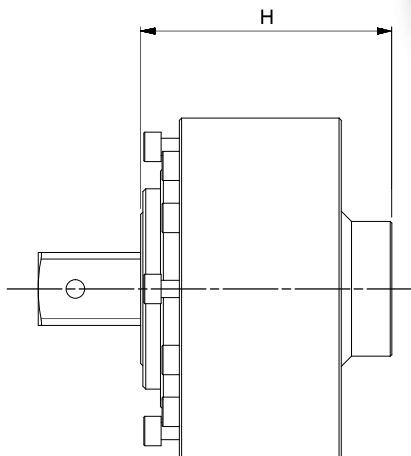
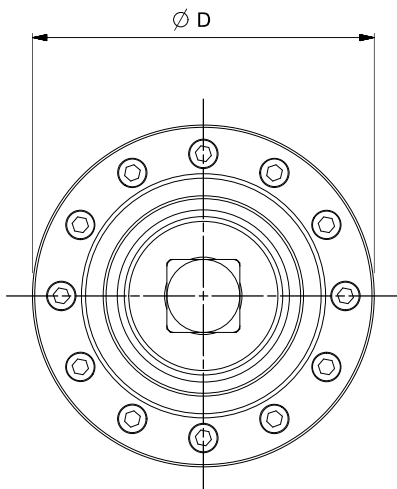


4	INTERVENTION TOOL TORQUE VERIFICATION KIT
60278.xxx	3,000 N·m ISO 13628 Class 4 Intervention Tool Torque Verification Kit
60281.xxx	10,000 N·m ISO 13628 Class 5 Intervention Tool Torque Verification Kit
60282.xxx	15,000 N·m ISO 13628 Class 6 Intervention Tool Torque Verification Kit
60279.xxx	25,000 N·m API 17D Class 7 (short) Intervention Tool Test Kit
60280.xxx	40,000 N·m API 17D Class 7 (short) Intervention Tool Test Kit

Other test pots and Torque Verification Kits are available for standard and non-standard API Intervention tool test and verification. Please contact Norbar.

MULTIPLIERS FOR SUBSEA

4	MULTIPLIERS FOR INTEGRATION INTO SUBSEA INTERVENTION TOOLS
77331	HT5 5:1 for Subsea Intervention Tools
77301	HT5 5:1 for Subsea Splined Output



Model	HT5 5:1 Subsea	
Part Number	77331 77301	
Dimensions (mm)	D	119
	H	88
Weight (kg)	TBC	



HARSH ENVIRONMENT INSTRUMENT

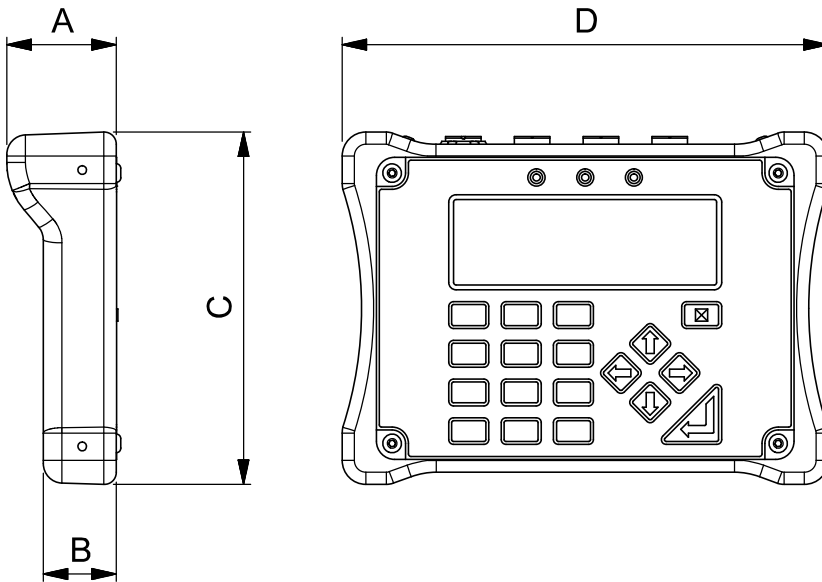


TTL-HE is a portable torque measuring instrument designed for use in harsh environments. The TTL-HE operating on battery power with one of the 'HE' range of transducers connected, has an ingress protection rating of IP65/IP67. Typical operating environments are where high humidity, water or salt water spray and dust may be an issue. Features include; 10 measurement modes, 13 units of torque (with additional user units feature), 12 pairs of limits and text displayed in 11 languages.

- Instrument accuracy of $\pm 0.05\%$ ($\pm 0.1\%$ when below 10% of transducer capacity)
- System accuracy with a typical Norbar transducer, $\pm 0.5\%$ from 20% of transducer capacity
- IP65/67 rated
- Bi-directional calibration
- Battery power use in harsh environments (mains supply for charging)
- All features are in common with TST and TTT instruments
- Supplied in IP67 rated carry case
- 5 digit resolution for all Norbar transducers
- 240 x 64 pixel dot matrix display with update rate of twice per second
- Please contact Norbar for full details of available transducers

4 HARSH ENVIRONMENT RANGE

43217 TTL-HE Instrument (inc. IP67 rated carry case)
Supplied with clockwise and counter-clockwise calibration



Model	TTL-HE	
Part Number	43217	
Dimensions (mm)	A	45
	B	30
	C	145
	D	200
Weight (kg)	4.9	

TTL-HE INSTRUMENT AND TRANSDUCER KITS



4 TTL-HE INSTRUMENT AND TRANSDUCER KITS

60287.LOG	5,000 N·m M/M TTL-HE Kit, inc. Lead	(Class 4)
60295.LOG	10,000 N·m M/M TTL-HE Kit, inc. Lead	(Class 5)
60296.LOG	15,000 N·m M/M TTL-HE Kit, inc. Lead	(Class 6)
60289.LOG	40,000 N·m M/M TTL-HE Kit, inc. Lead	(Class 7)

Note: Kits for use with Intervention Tool Test Pots