

Tensor Pro MWD

— a high-precision tool for

Product Features

- Suitable for high temperature, high pressure, and ultra-deep wells
- Optimized decoding performance for deep and ultra-deep well conditions
- Flexible interface: QDT pulser, Top mounted pulser
- High-precision orientation Modular to ensure precise trajectory
- Integrated dynamic directional survey to reduce pump stop time during directional survey
- Meticulously optimized process and design for high reliability
- Strong expandability: combined applications including compensated resistivity, azimuth resistivity, Azimuth gamma annular pressure, near-bit, etc.

Mechanical Specifications

Outer diameter of probe tube	1.875 in.				
Outer diameter of drill collar	3.5 in.	4.75 in.	6.75 in.	8.25 in.	9.5 in.
	2 ^{3/8} in. IF	3 ^{1/2} in. IF	4 ^{1/2} in. API IF	6 ^{5/8} in. API Reg	7 ^{5/8} in. API Reg
	2.96 in. x 2.25 in.	4.75 in. x 2.81 in.	6.71 in. x 3.25 in.	7.93 in. x 4.00 in.	9.42 in. x 4.00 in.
	3,500lbf-ft	9,600lbf-ft	30,000lbf-ft	54,000lbf-ft	62,000lbf-ft
	75-165usgpm	100-300usgpm	150-800usgpm	400-1200usgpm	400-1200usgpm
	50°/100 ft	15°/100 ft	10°/100 ft	8°/100 ft	4°/100 ft
Max. overall angle change rate slip	100°/ 100 ft	30°/ 100 ft	21°/ 100 ft	14°/ 100 ft	7°/ 100 ft
	185°C				
	200°C				
	20,000/25000 psi				
	≤1%				
	40-50 lb/bbl evenly mixed, any size				

Directional Sensor Characteristics

Directional Sensor	Three-axis fluxgate quartz accelerometer		
Directional survey	Range	Resolution (MWD)	Accuracy
Well deflection	0–180°	0.1°	± 0.1°
Azimuth	0–360°	1.0°	± 0.5°
Magnetic tool surface	0–360°	1.0°	± 0.5°
Gravity tool surface	0–360°	1.0°	± 0.5°
Magnetic field sum	0–100 μT	0.01 μT	± 0.075 μT
Dip	-90–90°	0.1°	± 0.15°
Gravity sum	0–1.000 g	0.001 g	± 0.001 g
Temperature sensor	Internal integration		
Temperature measurement range	-20 – 200 °C	0.1 °C	±1 °C