



THE IDEAL MWD TOOL

XEM™ IS THE IDEAL MWD TOOL for all directional applications by giving precision inclination/azimuth, full MWD, gamma-ray logging, and bore/annular pressure while drilling (PWD), during every connection — allowing for performance drilling in over-balanced, under-balanced, and high LCM environments.

CONSIDER. Efficiency

Extreme Engineering™'s Survey on Connection™ allows for zero NPT as XEM™ works independently of the drilling process.

CONSIDER. Versatility

Ideal for all over-balanced and under-balanced applications, creating optimal performance in air drilling environments. Choose the data you need, from MWD quality toolfacing for steering and gamma for formation correlation, on demand.

CONSIDER. Reliability

Our 24/7 Command Center watches all the activity of your rig in real-time and proactively troubleshoots while you drill.

CONSIDER. Cost

Reduced drilling time and personnel on-site means a considerable cost savings to the client.

CONSIDER. Safety

Added safety by eliminating lithium battery use, and costly personnel on the wellsite.





Description	Ø4.75"	Ø6.50"	Ø8.00"
Gap Sub ID	2.688 ± 0.005"	2.813 ± 0.005"	3.500 ± 0.002"
Gap Sub OD	4.750 ± 0.025"	6.500 ± 0.025"	8.000 ± 0.025"
OD With Hard Banding	4.825 ± 0.025"	6.575 ± 0.025"	No Hard Banding
Available End Connections	NC 38 (3-1/2 IF)	NC 46 (4-1/2 XH)	6-5/8 Regular
Connection Makeup Torque	9,400 ft.lbs	23,000 ft.lbs	39,000 ft.lbs
Rotation**	Up to 200 RPM, 20-80 RPM Typical		
Shock	1000g, 1/2 msec, 1/2 Sine Shock		
Vibration	30 g, 30 - 500 Hz		
Max. Operating Pressure	15,000 psi		
Max. Operating Temperature	150°C (300°F)		
Min. Storage/Transportation Temperature	-40°C (-40°F)		
Max. Sand Content by Volume	2%		
Max. LCM Content	No Limits		
Max. Axial Load	100,000 lbs Compression 500,000 lbs Tension	200,000 lbs Compression 1,000,000 lbs Tension	300,000 lbs Compression 1,200,000 lbs Tension
Torsional Strength of Gap at 150°C	10,000 ft.lbs	20,000 ft.lbs	55,000 ft.lbs
Gap Sub Overall Length	44.2"		
Gap Sub Re-cut Length	6.50" Pin End & 4.75" Box End		5.50" Pin End & 4.75" Box End
Max. Dogleg Severity Rotating	15°/30m Slick Collars 25°/30m Flex Collars	10°/30m Slick Collars 15°/30m Flex Collars	8°/30m Slick Collars 13°/30m Flex Collars
Recommended Max. Flow Rate	1.2 m ³ /min (317 GPM)	2.0 m ³ /min (528 GPM)	4.0 m ³ /min (1056 GPM) ⁽¹⁾ 3.4 m ³ /min (900 GPM) ⁽²⁾
Required Collar Bore(s)	2-11/16" ID Collar	2-13/16" ID Collar	3-1/2" ID Collar ⁽¹⁾ 3-1/4" ID Collar ⁽²⁾
Drilling Fluid	Water Based Mud/Oil Based Mud/Air		
Electrical Resistance	> 1 kΩ typ.		
Tool Length (Probe Dependent)	Min. 235" & Max. 365"		
Max. Tool Weight (w/o collar)	270 lb	430 lb	610 lb

***Contact Extreme Engineering™ for maximum Dogleg severity if a different size Flex Collar is to be used

**Must be checked versus mating BHA connections

(1) Collar ID 3-1/2" (2) Collar ID 3-1/4" (3) Collar ID can be no more than 1/16" greater than the specified collar ID

(4) Max temperature range for alkaline batteries is 50° C.

Use of Dynamx™ is suggested in air drilling applications.