

Drill Collar Data & Performance Sheet

4-3/4" x 2-1/4" Spiral DC with NC38 (3-1/2 IF)

TUBE BODY DATA

Tube OD	4.750	in.
Wall Thickness	1.250	in.
Tube ID	2.250	in.
Material Grade	110,000	psi.
Tensile Yield Strength	1,123,119	lbs.
Torsional Yield Strength	73,460	ft-lbs.
Tube Burst	45,294	psi.
Tube Collapse	39,585	psi.

CONNECTION DATA

Connection	NC38 (3-1/2 IF)
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CONNECTION PERFORMANCE

Make Up Torque (API)	11,000	ft-lbs. (1.0 FF)
	12,650	ft-lbs. (1.15 FF)
Connection Tensile Yield	711,800	lbs.
Connection Torsional Yield	17,600	ft-lbs.

ENGINEERING DATA

Approximate Length	30	ft.		
Drift Diameter	2.125	in.		
Adj. Weight	46.73	lbs. / ft.		
Displacement	0.7140	gal. / ft.	0.0170	bbls. / ft.
Capacity	0.2065	gal. / ft.	0.0049	bbls. / ft.
BSR	1.917			

Notes:

- Ensure sufficient MUT is applied to the connection. Stick and slip is very damaging to connections and can induce higher-than-planned torque. Adjust MUT according to thread compound friction factor. Higher MUT values may be used under extreme conditions and is recommended when downhole torque and/or backoff is a concern.
- Dimensions, wall thickness, and lengths shown above are nominal. Figures may exclude the effects of wear, stress relief, boreback, ID chamfers, and/or spiral features.

The technical information contained herein, including the product performance sheet and other attached documents, has been extracted from information available from the manufacturer and is for reference only and not a recommendation. The user is fully responsible for the accuracy and suitability of use of the technical information. Patterson Services, Inc. cannot assume responsibility for the results obtained through the use of this material. No expressed or implied warranty is intended. Drill Collar properties are calculated based on uniform OD and wall thickness. No safety factor is applied. Weight, displacement, and capacity are approximate and can vary by $\pm 10\%$ (or more) depending on OD, specified wall, wall tolerance, and internal coating options. It is the responsibility of the customer and the end user to determine the appropriate performance ratings, acceptable use of the product, maintain safe operational practices, and to apply a prudent safety factor suitable for the application.