

# Drill Collar Data & Performance Sheet

## 5-1/4" x 2-1/4" Spiral DC with NC40 (4 FH)

### TUBE BODY DATA

Tube OD	5.250	in.
Wall Thickness	1.500	in.
Tube ID	2.250	in.
Material Grade	110,000	psi.
Tensile Yield Strength	1,312,106	lbs.
Torsional Yield Strength	88,721	ft-lbs.
Tube Burst	48,125	psi.
Tube Collapse	41,250	psi.

### CONNECTION DATA

Connection	NC40 (4 FH)
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### CONNECTION PERFORMANCE

Make Up Torque (API)	16,800	ft-lbs. (1.0 FF)
	19,320	ft-lbs. (1.15 FF)
Connection Tensile Yield	884,200	lbs.
Connection Torsional Yield	26,900	ft-lbs.

### ENGINEERING DATA

Approximate Length	30	ft.		
Drift Diameter	2.125	in.		
Adj. Weight	60.08	lbs. / ft.		
Displacement	0.9180	gal. / ft.	0.0219	bbls. / ft.
	0.2065	gal. / ft.	0.0049	bbls. / ft.
Capacity	0.2065	gal. / ft.	0.0049	bbls. / ft.
BSR	2.138			

### 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 Servicers, 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.