WWT High-Temperature (HT) Non-Rotating Protectors (NRP)™

- WW
- Reduce rotary torque
 Protect against casing and riser wear
 - Reduce buckling, heat checking, vibration and stick slip



Model HT Specifications

NRP Model	HT-350	HT-400	HT-500	HT-550	HT-578
Drill Pipe Size	3-1/2"	4"	5"	5-1/2"	5-7/8"
Sleeve OD	5-1/2"	5-7/8"	7-1/4"	7-3/4"	8"
Collar OD	5"	5-1/2"	6-1/2"	7"	7-3/8"
Sleeve Length	10"	10"	10"	10"	10"
Overall Length	20"	20"	20"	20"	20"
Side-Load Rating	1,500 lbs.	1,500 lbs.	2,000 lbs.	2,000 lbs.	2,500 lbs.
Total Flow Area					
5-1/2" Casing					
7" Casing	8.3 in. ²	6.184 in. ^{2*}			
9-5/8" Casing	37 in. ²	33.1 in. ²	18 in. ²	16.3 in. ²	13.5 in. ²
13-3/8" Casing	99 in. ²	97 in. ²	78 in. ²	77 in. ²	74.1 in. ²
Collar Material	6061-T651 Extruded Aluminum Alloy				
Sleeve Material	HNBR				
Max. Temperature	300° F (149° C)				

*29 ppf max weight for 7" casing

Features and Benefits

- Positive protection against casing and riser wear during drilling operations.
- Significant torque reduction created by our patented fluid bearing design allows for improved ROP.
- Compatible with most oil-, synthetic- and water-based drilling fluids.
- Optimum operating performance range of 30 - 250 RPM.
- Reduces drillstring and surface equipment stress.
- Each assembly accepts up to 30,000 lbs. of axial force before slippage.
- Installation time: less than 1 minute.
- Free, no-obligation confidential torque, drag and wear analysis.
- Global leadership in some of the world's most challenging drilling environments since 1990.
- On/off-site technical support and direction.

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