



**WWT
International**

High-Temperature (HT) Non-Rotating Protectors (NRP)[™]

**Reduce rotary torque • Protect against casing, riser, and drill pipe wear
Reduce buckling, heat checking, vibration and stick-slip**



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 1989.
- On/off-site technical support 24/7.

Model HT Specifications

WWT NRP Model	HT-350	HT-400	HT-500	HT-550	HT-578
Drill Pipe Size	3.50"	4.00"	5.00"	5.50"	5.88"
Sleeve Max OD	5.50"	5.88"	7.25"	7.75"	8.00"
Collar OD	5.00"	5.50"	6.50"	7.00"	7.38"
Sleeve Effective OD	5.20"	5.54"	6.83"	7.34"	7.62"
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.
Cross-Sectional Area	11.6 in ²	11.5 in ²	17.0 in ²	18.6 in ²	18.5 in ²
Total Flow Area					
7" x 29 ppf Csg.	8.8 in ²	6.0 in ²			
7" x 26 ppf Csg.	9.7 in ²	6.9 in ²			
7-5/8" x 39 ppf Csg.	13.2 in ²	10.4 in ²			
9-5/8" x 53.5 ppf Csg.	36.0 in ²	33.1 in ²	20.6 in ²	14.8 in ²	11.6 in ²
10-3/4" x 55.5 ppf Csg.	53.6 in ²	50.7 in ²	38.2 in ²	32.5 in ²	29.2 in ²
13-3/8" x 72 ppf Csg.	98.5 in ²	95.7 in ²	83.1 in ²	77.4 in ²	74.1 in ²
Collar Material	6061-T651 Extruded Aluminum Alloy				
Sleeve Material	HNBR				
Max. Temperature	330° F (166° C)				



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WWT International supports your operations from start to finish with full-service onsite mobilization and support 24/7. To find out more, visit:

www.wwtco.com



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