



**WWT  
International**

# High-Temperature 3 (HT-3) Non-Rotating Protectors (NRP)<sup>™</sup>

**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.
- HT3 Protector design allows for open-hole applications.
- 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 HT3 Specifications

WWT NRP Model	HT3-500
Drill Pipe Size	5.00"
Sleeve Max OD	7.30"
Sleeve Effective OD	6.81"
Collar OD	6.50"
Sleeve Length	12"
Side-Load Rating	2,500 lbs.
Cross-Sectional Area	16.8 in <sup>2</sup>
<b>Total Flow Area</b>	
9-5/8" x 53.5 ppf Csg.	20.8 in <sup>2</sup>
10-3/4" x 55.5 ppf Csg.	38.4 in <sup>2</sup>
13-3/8" x 72 ppf Csg.	83.3 in <sup>2</sup>
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](http://www.wwtco.com)



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