

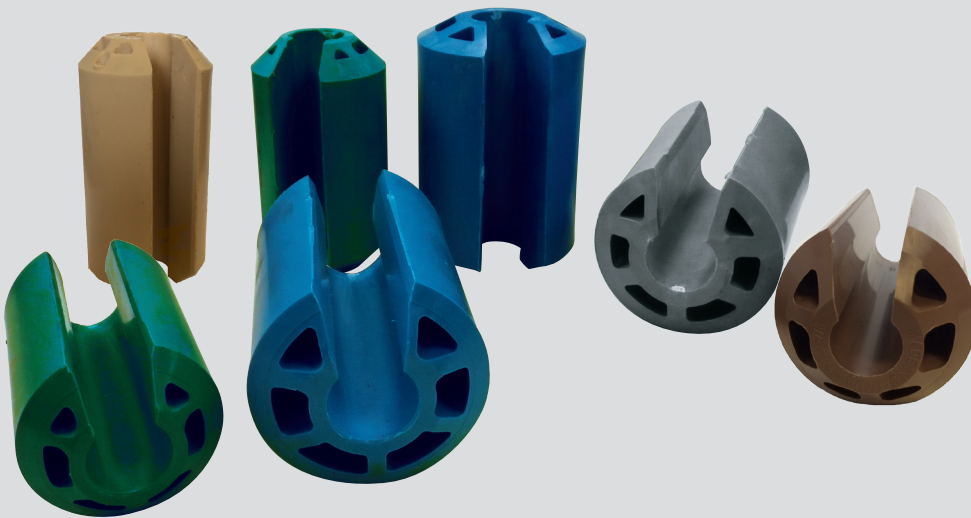
## ToughGrip™ Rod Guide

ToughGrip™ Rod Guides reduce operating costs on pumping wells and are an economical alternative to molded-on and spin-thru centralizers. With our proprietary design, ToughGrip™ Rod Guides have an increased flow area compared to our competitors.

ToughGrip™ Rod Guides are field installed on the rod string with our easy to use installation tool. They reduce rod and tubing wear, work over frequency, lifting costs and maintenance.

### Features

- Industry leading gripping power on sucker rod and continuous rod
- Increased flow area in tubing with unique part cross section
- Proprietary Nylon blend delivers high strength, flexibility, impact strength, lubricity and wear life
- Working temperature rating of 104 °C (218 °F)
- Manufactured and tested to precisely engineered standards in an ISO 9001 facility
- Colour coded by rod size for easy identification
- Rapid field installation down to 0 °C (32 °F) with available installation tool
- Installation tool is four feet in length, allowing for safe connection processes



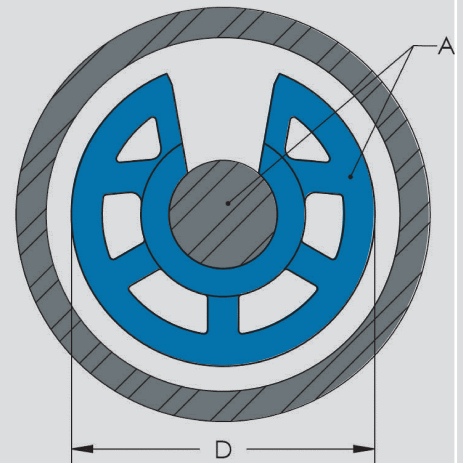
TOUGHGRIP™ ROD GUIDE

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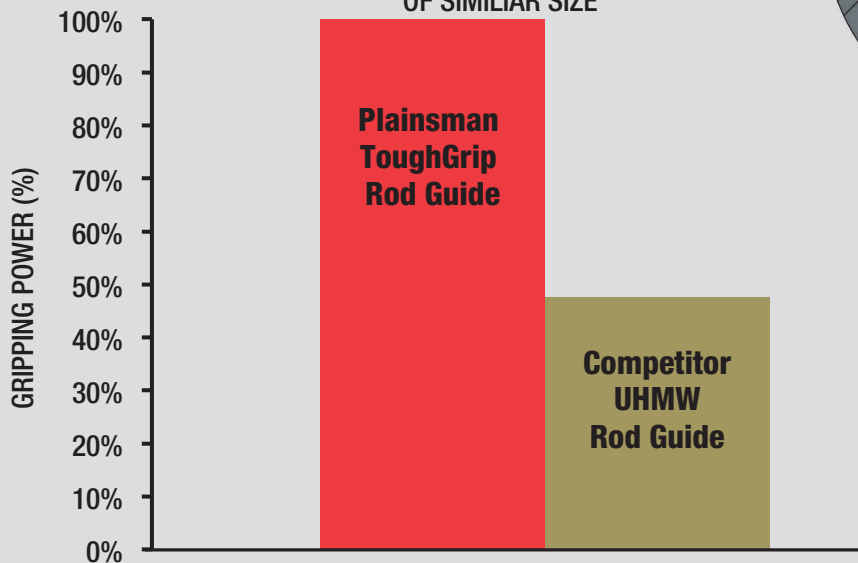


ROD SIZE (IN.)	TUBING SIZE (IN.) <sup>1</sup>	INSTALLED DIAMETER, D (IN.)	ROD GUIDE COLOUR	BLOCKED AREA, A (IN. <sup>2</sup> )	
				PLAINSMAN	COMPETITOR
3/4	2-3/8	1.85	LIGHT BROWN	1.96	2.44
	2-7/8	2.11	BROWN	2.38	3.18
7/8	2-3/8	1.85	GREEN	1.94	2.40
	2-7/8	2.15		2.50	3.25
	3-1/2	2.66		3.66	4.83
1	2-7/8	2.20	BLUE	2.69	3.21
	3-1/2	2.65		3.57	4.91
	4-1/2	3.12		4.72	6.77
1-1/8	3-1/2	2.74	GREY	3.98	4.85
	4-1/2	3.12		4.71	6.69

\*Other sizes will be considered if requested.



COMPARISON OF GRIPPING POWER WITH ROD GUIDES OF SIMILAR SIZE



Notes:

- 1) Please contact Plainsman for details or technical questions.
- 2) Plainsman recommends rod guides are heated to 0 °C (32° F) or higher prior to installation.
- 3) GrIPPING power based on actual test data.

MADE IN CANADA

