

## Plainsman PL5 Centralizing Couplings

Plainsman PL5 Centralizing Couplings are a spin-through, non-rotating style of sucker rod and drive rod centralizer designed specifically for reducing operating costs of progressing cavity pump applications. The PL5 protects the well from accelerated rod and tubing wear, reducing work over frequency, lifecycle lifting costs and maintenance costs. They are field replaceable and available for 5/8" to 1-1/8" rod to fit in 2-3/8" to 4-1/2" tubing.

### Features

- Reduces tubing wear in deviated and progressing cavity pumped wells
- Available with abrasion resistant hard coating for severe service conditions
- Available with high strength proprietary steel for increased torque capacity
- Alloy Steel heat-treated, stress-relieved mandrel with rolled threads
- Field replaceable nylon sleeve
- Regular (104°C) and high temperature (218°C) sleeves
- Available with or without attached coupling
- Proprietary blends of sleeve materials provides maximum lubricity and wear life
- Field proven and developed over 10 years of running history

### Material Specification

Mandrel: Standard: 4140 HTSR, Select: Proprietary HTSR Alloy Steel

Sleeve material options:

- Nylon 6 CL200-001 proprietary blend (standard), 104°C
- Zytel PPA blend (higher temperature/abrasion resistant), 218°C
- PAEK slurry resistant blend, 152°C

### Thread Specification

Rolled to API 11B



# PL5 COUPLINGS

PL5 DIMENSION INFORMATION								
Pin Size (in.)	Tubing Size (in.)	Sleeve Diameter, D (in.)	Flow Area, A (sq. in.)		Maximum Torque* [Standard] (lb-ft)	Maximum Torque* [Select] (lb-ft)		Recommended Coupling
			Min <sup>(1)</sup>	Max <sup>(2)</sup>	Regular Coupling <sup>(6)</sup>	High Strength Coupling <sup>(5)</sup>	Regular Coupling <sup>(6)</sup>	
5/8	2-3/8 <sup>(4)</sup>	1.86	0.68	1.22	275	TBD	TBD	5/8" Full Size
3/4	2-3/8 <sup>(4)</sup>	1.86	0.34	0.87	470	TBD	TBD	3/4" Full Size
	2-7/8 <sup>(4)</sup>	2.29	1.08	1.52	470			
	3-1/2 <sup>(4)</sup>	2.82	2.57	3.26	470			
7/8	2-7/8 <sup>(4)</sup>	2.27	0.81	1.25	750	TBD	TBD	7/8" Full Size
	3-1/2 <sup>(4)</sup>	2.82	1.75	2.44	750			
1	2-7/8 <sup>(4)</sup>	2.27	0.58	1.02	1000	1400	1100	1" Slimhole <sup>(3)</sup>
	3-1/2 <sup>(4)</sup>	2.80	1.75	2.99	1000			1" Full Size
	4-1/2	3.21	2.41	6.47	1000			
1-1/8	3-1/2	2.82	1.75	2.99	1200	2000	1570	1-1/8" Full Size
	4-1/2	3.21	2.41	6.47	1200			

\* higher torque ratings available in the ToughTorq™ model, see Plainsman Representative for details.

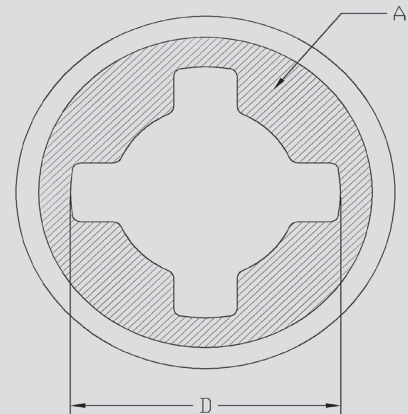
## Dimensional Notes

Make-up Procedure should follow that of Grade D (Type 75) sucker rods as per Section 5 of RP 11BR, "API Recommended Practice for Care and Handling of Sucker Rods." Make-up torque should be at or above highest expected operating torque.

- 1) Based on heaviest allowable tubing as per API 5CT, unless specified otherwise
- 2) Based on lightest tubing as per API 5CT
- 3) For maximum rotor retention area, upgrade to a ToughTorq PL5
- 4) CAUTION: Ensure sleeve diameter (D) does not exceed tubing ID drift diameter for proper installation
- 5) High Strength coupling with 105 ksi minimum yield strength in like new condition
- 6) Regular coupling with 80 ksi minimum yield strength in like new condition

## Ordering Information

- A) Standard or Select material
- B) Pin Size
- C) Tubing Size
- D) Max Temperature of Well
- E) Replacement parts required



MADE IN CANADA

