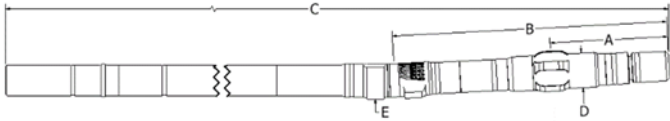


RVEN-65 : 7/8 Lobe 3.5 Stage



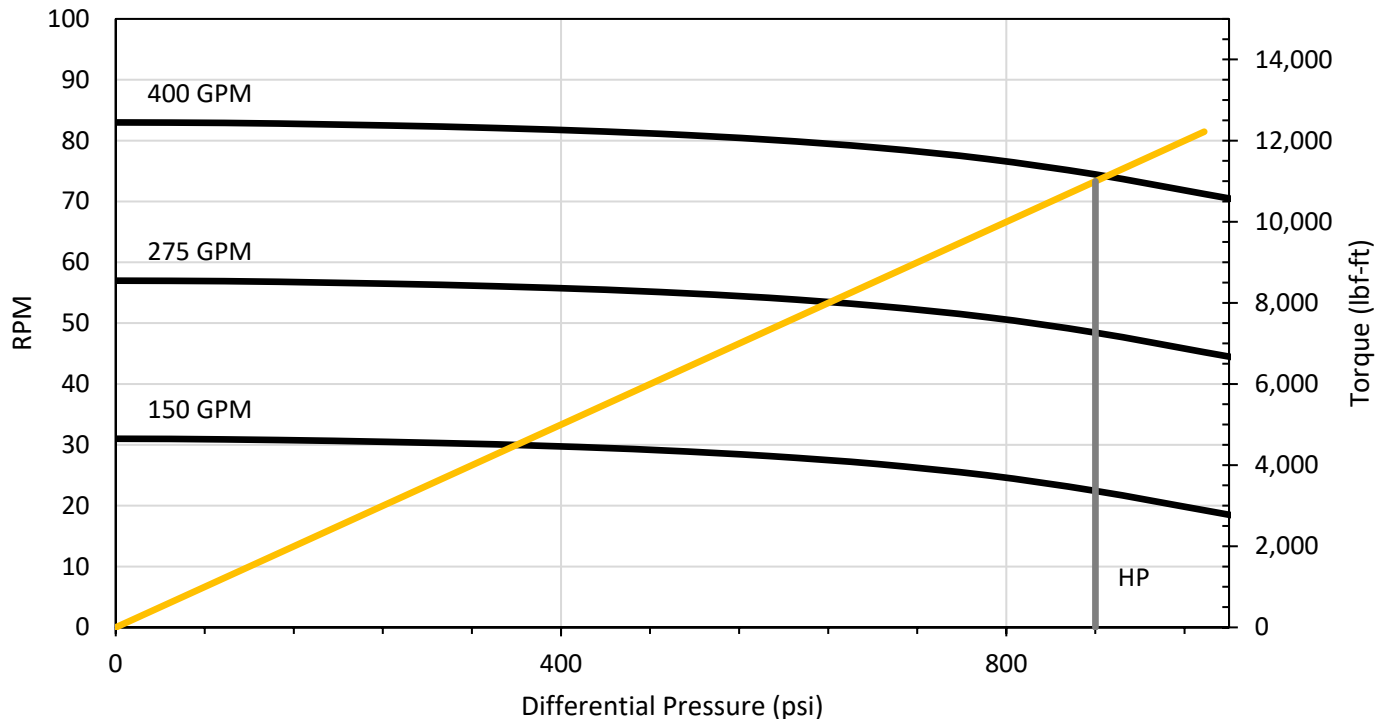
Dimensions

| | | |
|--------------------------|------------------------------|---------|
| Bit to Stabilizer Center | A | 28 in |
| Bit to Bend, Fixed | B | 59.6 in |
| Bit to Top Sub | C | 352 in |
| Body OD, Slick | D | 6.5 in |
| Body OD, Stabilizer | D | 6.5 in |
| Pad Radius, Fixed | E | 3.38 in |
| Bottom Connection | 4-1/2 IF Box 4-1/2 IF Pin | |
| Top Connection | 4-1/2 XH Box | |
| Top Sub Float Bore | 4R | |

Recommended Operating Limits

| | |
|------------------------|-------------|
| Max WOB | 87,000 lbf |
| Max Overpull, Backream | 126,000 lbf |
| Max Overpull, Re-Run | 234,000 lbf |
| Max Overpull, POOH | 898,000 lbf |

Theoretical Performance Curve



Performance curves based on testing at 70°F. Actual field performance may vary with field operation conditions.

Predicted Build Rates (Fixed) – Degrees/100ft

| Bend Setting | Slick Hole Size | | | Stabilized Hole Size | | |
|--------------|-----------------|-------|-------|----------------------|-------|-------|
| | Deg | 7 7/8 | 8 1/2 | 8 3/4 | 7 7/8 | 8 1/2 |
| 0.78 | 2.3 | - | - | 4.8 | 5.2 | 5.3 |
| 1.15 | 4.8 | 3.1 | 2.5 | 7.0 | 7.4 | 7.5 |
| 1.50 | 7.1 | 5.4 | 4.8 | 9.1 | 9.5 | 9.6 |
| 1.75 | 8.7 | 7.1 | 6.4 | 10.6 | 11.0 | 11.1 |
| 1.83 | 9.2 | 7.6 | 6.9 | 11.1 | 11.5 | 11.6 |
| 2.00 | 10.4 | 8.7 | 8.1 | 12.1 | 12.5 | 12.6 |
| 2.12 | 11.2 | 9.5 | 8.9 | 12.8 | 13.2 | 13.3 |
| 2.25* | 12.0 | 10.4 | 9.7 | 13.6 | 14.0 | 14.1 |
| 2.38* | 12.9 | 11.2 | 10.6 | 14.4 | 14.7 | 14.9 |
| 2.50* | 13.7 | 12.0 | 11.3 | 15.1 | 15.4 | 15.6 |

*Bend Setting not recommended for Rotary Drilling

Performance Details

| Performance Details | HP |
|---------------------|---------------|
| Max Diff Pressure | 880 psi |
| Max Torque | 10,940 lbf-ft |
| Stall Torque | 16,410 lbf-ft |
| Rotation | 0.208 rev/gal |
| Flow Range | 150-400 gpm |
| Speed Range | 31-83 rpm |