

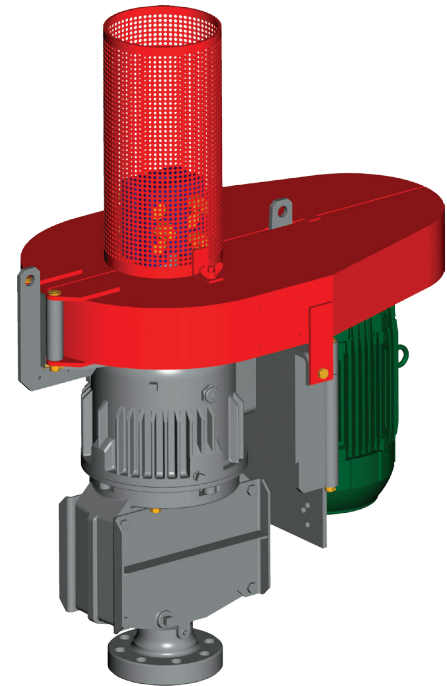


# *NanoG Direct-Drive Drivehead (4-Ton)*

Weatherford's NanoG direct-drive (4-ton) drivehead serves as a reliable, economic solution for a number of PCP applications including heavy-to-light oil, coalbed methane, and water source wells. The NanoG drivehead supports various types of stuffing boxes and wellhead connections across an operational range of 5 to 15 HP. The NanoG drivehead is built with a unique centrifugal wet brake system that provides the ultimate in backspin protection.

This braking system uses the centrifugal force created during backspin, in conjunction with cams and springs, to engage braking shoes against a stationary housing. The result is an aggressive brake that engages only when the backspin speed surpasses the brake's engagement threshold. When speeds are below the brake's engagement threshold, the brake shoes remain retracted for a quick, controlled, and complete fluid dump.

The NanoG brake is totally enclosed and immersed in synthetic oil to control fluctuating temperatures while lubricating all moving parts, ensuring a long service life.



## *Applications*

- Electrical or hydraulic motors within the torque and axial load capacity of the drive
- Shallow and medium-depth wells

## *Features, Advantages and Benefits*

- The small, compact footprint is ideal for height-restricted work areas and for aesthetically sensitive environments.
- The stable two-point lifting system enables easy transportation and installation.
- The hinged belt guards facilitate servicing of belts and sheaves.
- The centrifugal braking system provides a braking torque proportional to speed, enabling a quick and safe release of backspin energy.
- The braking shoes retract for a quick, controlled, and complete fluid dump, enabling quick resumption of production.



## ***NanoG Direct-Drive Drivehead (4-Ton)***

### ***Options***

- Integral, booth- and yoke-mounted stuffing boxes\*
- Conventional, I-PAK®, and DuraSeal™ stuffing box types\*
- Polished rod-speed indicator
- Polished rod-ejection clamp
- ATEX certification
- Support arms

\* Some conditions may apply

### ***Related Products***

*DuraSeal* rotating stuffing box

### ***Specifications***

Drive ratio	1:1	
Maximum polished rod speed (rpm)	600	
Maximum input polished rod torque (ft/lb, N•m)	375 508	
Driven sheave maximum diameter (in./mm)	18.10 460.0	
Driver sheave	Maximum dependent upon motor size and door position	
Minimum center distance (in./mm)	13.86 352.0	
Prime mover	Electric or hydraulic	
Maximum motor frame <sup>a</sup>	160M-IEC or 254T-NEMA	
Drive weight <sup>b,c</sup> (lb/kg)	441 200	
Well connection type (in./mm)	3.13 <sup>d</sup> 79.4 <sup>d</sup>	
	2.88 <sup>e</sup> 73.0 <sup>e</sup>	
Polished rod size (in./mm)	1.25 31.8	
Drive belt type	Maximum three each type 5V or synchronous belts	
Thrust-bearing rating (Ca90/ISO) (lb/kN)	12,190 54	47,000 209
Oil	Mobil SHC 629 or approved equivalent	
Braking mechanism	Centrifugal braking system	

<sup>a</sup> Contact an authorized Weatherford representative if a different electric motor is required.

<sup>b</sup> Excluding electric motor and sheaves

<sup>c</sup> With booth and stuffing box

<sup>d</sup> 2,000/3,000-psi flange with rotating or conventional stuffing box

<sup>e</sup> Pin with conventional stuffing box