

MG-750-GRA Electric Gear-Reduction Drive

Provides a reliable, economical solution for a variety of PCP applications, including heavy to light oil, coalbed methane, and water source wells

Applications

- PCP applications driven by electric motors, hydraulic motors or internal combustion engines

Features and Benefits

- The centrifugal braking system provides a resistive torque that is proportional to speed, for a safe release of the backspin energy. The brake shoes automatically engage and retract based on speed, which results in a quick, complete, and controlled fluid dump, enabling production to resume quickly.
- A specially designed motor shaft cover enables exchanging the electric motor without removing the driver sheave, which saves time and increases operational efficiency.

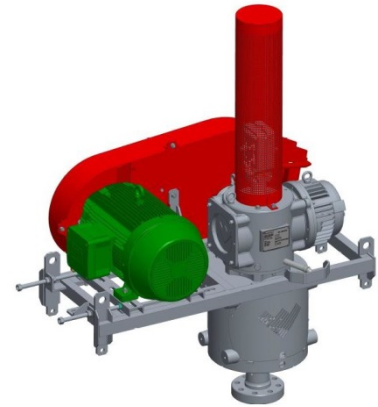
Tool Description

The Weatherford MG-750-GRA drive is a belt-driven, gear-reduction drive with a torque capacity of 750 lbf-ft. It is compatible with Weatherford stuffing boxes and various wellhead connections. The drive features an internal 3:1 gear reduction and up to a total combined speed reduction ratio of 15:1.

Specifications

Drive head type	Belt and gear-reduction drive
Prime mover type	Electric or hydraulic (with optional adapter) or gas engine
Braking mechanism	Centrifugal braking system
Dynamic bearing capacity	150,622 lbf (670,000 N)
Bearing Ca90 capacity	39,049 lbf (17,712 kgf)
Torsional rating	750 lbf-ft (1,017 N•m)
Maximum polished rod speed	400 rpm
Polished rod size	1-1/4 in.
Gear-reduction ratio	3:1
Maximum sheave ratio ¹	5:1

¹ May vary by motor frame size



The MG-375 drive head is built with a unique centrifugal wet-braking system that provides reliable, controlled backspin protection to enhance operational safety.

Options

- Integral, booth- and yoke-mounted stuffing boxes*
- Conventional, I-PAK®, and DuraSeal® stuffing box types
- CE/ATEX-certified model available*
- ISO 15163-2 model available
- Polished-rod speed indicator
- Polished-rod lock-out tool
- Support arms

* Some conditions may apply



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Specifications

Maximum axial load	9.0 tonne		
PR drive clamp type	6 bolt		
Available stuffing box (SB) mounting	33.6T standard booth bolt-on SB		Integral
Available stuffing box type	Conventional	I-PAK®	DuraSeal®
Available stuffing box wellhead connection API compatible	2-7/8 EUE pin		
	3-1/8 2M and 3M flange		3-1/8 3M flange
	4-1/16 2M or 3M flange		
	5-1/8 2M or 3M flange		
Height: top of PR guard	76 in. (1,946 mm)		59 in. (1,489 mm)
Height: top of PR clamp	52 in. (1,320 mm)		35 in. (888 mm)
Width	30 in. (767 mm)		
Length	62 in. (1,566 mm)		
Approximate weight ¹	1,292 lb (586 kg)		
Main shaft type	Hollow		
Maximum motor frame size	326T (IEC 200L)		
Maximum motor weight ²	725 lb (329 kg)		
Maximum mountable motor	50 hp 1800 rpm		
	40 hp 1200 rpm		
Input shaft diameter/orientation	1.875 in. (48 mm)/horizontal		
Maximum driven sheave diameter	25 in. (635 mm)		
Maximum driver sheave diameter	4.5 in. (114 mm)		
Maximum number of belts	4 ea. Type C, 6 ea. Type 5V, 1 ea. synchronous		
Minimum center distance ³	19.4 in. +D (493 mm +D)		
Maximum slant angle from vertical	30° (0° for ATEX)		
Ambient operating temperature range	-40 to 122°F (-40 to 50°C) -4 to 104°F (-20 to 40°C) for CE/ATEX		
Minimum start-up temperature	-4°F (-20°C)		
Operating temperature range	-4 to 248°F (-20 to 120°C)		
Noise level at 1-m distance ⁴	78 dB		

¹ Not including motor, belts, sheaves, and bushings

² Including motor, belts, sheaves, and bushings

³ D = distance from the base of selected motor to its centerline

⁴ Varies by motor, belt type, and operating conditions



* I-PAK is a registered trademark of Weatherford in the US and Canada. DuraSeal is a registered trademark of Weatherford in the US.