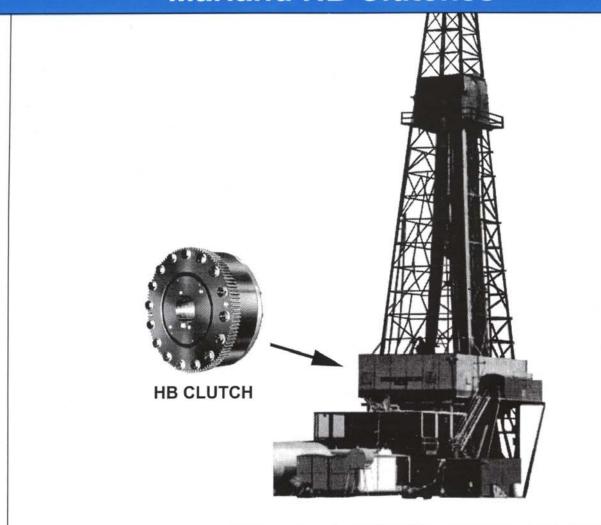


Marland HB Clutches



THE ONLY ONE-WAY CLUTCH FOR YOUR HYDRO-DYNAMIC DRILLING RIGS



650 E. ELM AVE. P.O. BOX 308 LA GRANGE, IL 60525 PH. 708-352-3330 FAX 708-352-1403

Design Features

Full-phased Cam and Rollers

Uniform Load Distribution is assured by full-phased true cylindrical rollers enclosed in a cage to act in unison on flat cam surfaces. The cage forces all the rollers to engage simultaneously, accurately maintaining their relative positions, thereby assuring that each roller will carry an equal share of the load.

Other designs utilize individual springs acting on each roller. This allows different energizing forces to cause one or more of the rollers to engage in the load carrying position prematurely, or to skew. This action will concentrate the full clutch load on one or just a few rollers causing destruction and failure of the rollers and clutch.

No Loose Parts

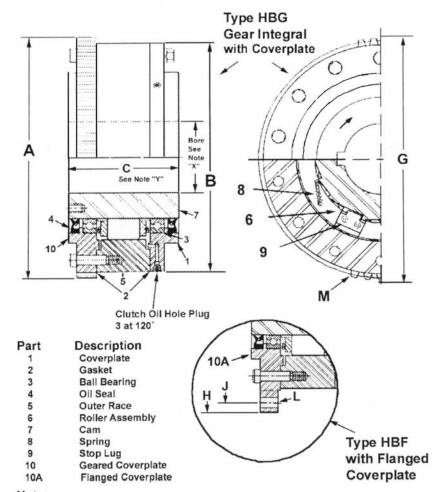
Rollers are contained in a spring-actuated cage. The parts will not spill or drop if field disassembly should be required.

No Backlash

When the string is lowered and the drum shaft rotates the outer race of the clutch, the spring-actuated roller cage uniformly and instantaneously moves all of the rollers into the driving position.

Marland One-Way HB Clutches the only one-way clutch for Hydro-dynamic Brakes on drilling rigs.

DIMENSIONS and DATA



Notes:

- X --- Taper or straight bore furnished as required.
- Y --- Single or double keyway as specified.

Type HBG & HBF Size	Rated Torque Lb. Ft.	Max. Bore & Keyway		Dimensions In Inches						No. Holes &	No. Teeth &	Oil	Shipping Weight In Pounds	
		Straight Bore	Keyway at Max. Bore	Α	В	С	G	н	J	Sizes L	Pitch M	Cap. Pints	HBG	HBF
12 MA	12,000	4.50	1X.375	11.75	11.06	5.86	11.90	14.25	13.25	14 17/32	<u>69</u> 6/8	5/8	130	150
18 MA	18,000	5.438	1.25X.438	13.58	12.94	6.25	13.74	16.25	15	14 21/32	<u>80</u> 6/8	7/8	180	210
†27 MA	27,000	6.50	1.50X.50	13.59	13.03	7	14.30	16.25	15	14 2-1/32	40 3/6	1	265	300
45 MA	45,000	7	1.75X.563	Descent Silvery	16.69	8	17.85	20.25	18.75	14 2-5/32	69 4/5	1 5/8	390	440
±63 MA		8	2X.688	17.92	17.34	8.75	18.62	23	21.25	<u>16</u> 2-9/32	<u>53</u> 3/6	2	515	555
90 MA	90,000	9	2.50X.75	21.90	20.81	9	22.11	26.75	24.75	<u>16</u>	86 4/5	2 3/4	700	840
	135,000		2.50X.875	200 (100 (100 (100 (100 (100 (100 (100 (23.81	10	25.11	32	29.50	18 1-9/32	98 4/5	3 1/4	1100	1300
roserces securios	180,000	10/2 13/355	3X1	27.90	26.96		28.05	34	31.50	<u>20</u> 1-3/32	110 4/5	4 ½	1500	1700

[†] Type HBG-27MA is interchangeable with National Supply Co. "C" Unit.

Form No. 686-ADV, 10/99

[‡] Type HBG-63MA is interchangeable with National Supply Co. "A" Unit.