Model IB314P Series

STANDARD IB CLUTCH

IB314P0 • IB314P1

QUALITY IS STANDARD

- TAPERED ROLLER MAIN BEARINGS
- SEALED FOR LIFE PILOT BEARING
- VENTILATED CENTER PLATES AND DRIVE RING
- OPTIONAL SINTERED IRON PLATES
- BUILT IN HEX NUT
- MORE SUITABLE FOR SIDE LOAD APPLICATIONS
- LESS MAINTENANCE
- IMPROVED HEAT DISSIPATION
- CREATES 25% HIGHER TORQUE CAPACITY
- EASES ADJUSTMENT VERIFICATION

SPECIFICATIONS – IB314P0, IB314P1

Model Number	SAE HSG.	Dimension "A" mm (in)	Max. Input Torque Nm (lb-ft)		Maximum Safe Speed				Weight kg (lbs)
			Organic	Sintered	Solid Plates		Split Plates		
					Cast Drive Ring	Nodular Drive Ring	Cast Drive Ring	Nodular Drive Ring	
IB314P0	0	100 (3.9370)	3297 (2430)	4125 (3040)	N/A	2800	N/A	N/A	270 (595)
IB314P1	1	80 (3.1496)							

LOAD CLASSIFICATIONS BASED UPON AGMA LOAD CHARACTERISTICS

PRIME MOVER	DURATION OF SERVICE	DRIVEN MACHINE LOAD CLASSIFICATIONS		
		UNIFORM	MODERATE SHOCK	HEAVY SHOCK
Electric motor	Up to 3 hours per day	1.00	1.25	1.50
	3-10 hours per day	1.00	1.25	1.75
	Over 10 hours per day	1.25	1.50	2.00
Multi-cylinder internal combustion engine	Up to 3 hours per day	1.00	1.25	1.75
	3-10 hours per day	1.25	1.50	2.00
	Over 10 hours per day	1.50	1.75	2.25
Multi-cylinder internal combustion engine with high torque rise	Up to 3 hours per day	1.50	1.75	2.25
	3-10 hours per day	1.75	2.00	2.50
	Over 10 hours per day	2.00	2.25	2.75
Single cylinder internal combustion engine	Up to 3 hours per day	1.25	1.50	2.00
	3-10 hours per day	1.50	1.75	2.25
	Over 10 hours per day	1.75	2.00	2.50

All clutch engagements to be with prime mover below 1000 RPM. High inertia loads may require use of larger clutch. Contact Twin Disc application engineering department for assistance.

TO CALCULATE APPLICATION TORQUE:

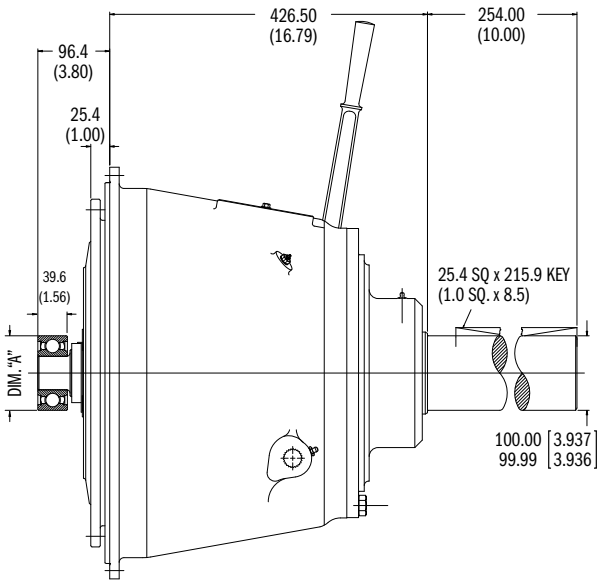
$$\frac{5252 \times HP}{\text{Engine RPM}} = \text{Torque}$$

Torque x Load Factor = Application Torque

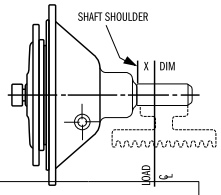
Use load factor from chart at left

Specifications subject to change without prior notice in the interest of continual product improvement.
Contact your local Twin Disc representative for engineering specifications.

IB314P



Dimensions are in mm (inches)



IB314P0 & IB314P1 – ALLOWABLE SIDE LOAD, KG (LBS)

PTO MODEL	RPM	X DISTANCE, mm (in) – see sketch						
		25.4 (1.0)	50.8 (2.0)	76.2 (3.0)	101.6 (4.0)	127.0 (5.0)	152.4 (6.0)	177.8 (7.0)
IB314P0 M2731	1000	4068 (8969)	3881 (8557)	3711 (8182)	3555 (7838)	3120 (6878)	2758 (6080)	2471 (5448)
	1200	3853 (8494)	3676 (8104)	3514 (7748)	3367 (7423)			
	1800	3412 (7522)	3255 (7176)	3112 (6862)	2982 (6574)	2862 (6309)		
	2400	3131 (6903)	2987 (6586)	2856 (6296)	2737 (6033)	2626 (5790)	2525 (5566)	2430 (5358)
IB314P1 M2529	1000	4072 (8978)	3650 (8048)	3000 (6616)	2547 (5616)	2213 (4879)	1956 (4313)	1753 (3865)
	1200	3857 (8503)						
	1800	3415 (7530)	3260 (7186)					
	2400	3153 (6911)	2991 (6595)	2860 (6307)				

The following general formula should be used for determining the actual applied load: $L = \frac{126{,}000 \times HP}{N \times D} \times F \times LF$

WHERE
- L = Actual Applied Load (lbs)
- N = Shaft Speed (RPM)
- D = Pitch Diameter (in) of Sheave, etc.
- F = Load Factor
  1.0 for Chain or Gear Drive, 1.5 for Timing Belts, 2.5 for All V Belts, 3.5 for Flat Belts
- LF = 2.1 for Reciprocating Compressors and other Severe Shock Drives and 1.8 for Large Inertia Type Drives (i.e. crushers, chippers, planers, etc.)

Compound Drives and Power Engaged Power Take-Off applications must have written factory review.

United States of America • Australia • Belgium • France • Italy • Singapore • Switzerland

For nearly a century, we've been putting horsepower to work by designing, engineering and manufacturing rugged-duty industrial products. Our products and our reputation are bolted to the most renowned engine manufacturers and equipment OEMs in the world. Our mission is to make your machines and vehicles more productive, more durable, more operator-friendly, more cost-effective. From design and installation consultation through after-sale support, Twin Disc and its distributors are committed to your business. No one knows more about managing horsepower in more ways than Twin Disc.

TRANSMISSIONS • CLUTCHES • PTOS
PUMP DRIVES • TORQUE CONVERTERS
GEARBOXES • HYDRAULIC PTO PRODUCTS

Twin Disc, Incorporated
Racine, Wisconsin 53403 USA
Phone +1-262-638-4000
Fax +1-262-638-4482
www.twindisc.com

TD-Bulletin-IB314P

Printed in the USA - 04/2007