STANDARD IB CLUTCH

IB321P

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 – IB321P

Model Number	SAE HSG.	Max. Input Torque Nm (lb-ft)		Maximum Safe Speed				Weight kg (lbs)
				Solid Plates		Split Plates		
		Organic	Sintered	Cast Drive Ring	Nodular Drive Ring	Cast Drive Ring	Nodular Drive Ring	
IB321P	00	9132 (6730)	11398 (8400)	N/A	2200	N/A	N/A	549 (1210)

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.

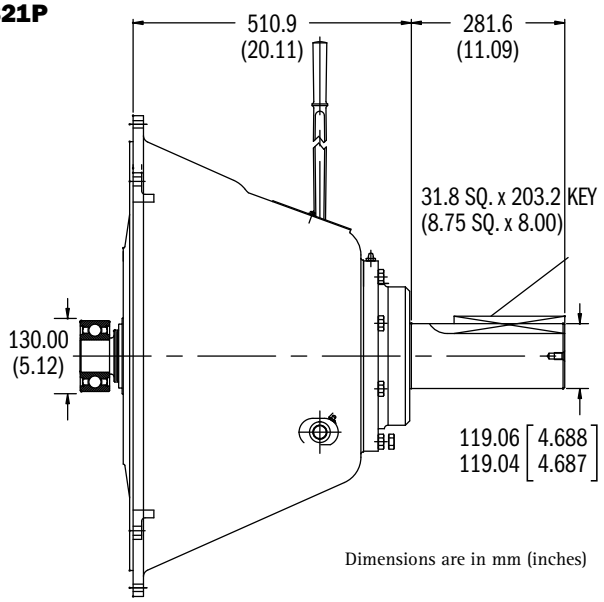
TO CALCULATE APPLICATION TORQUE:

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

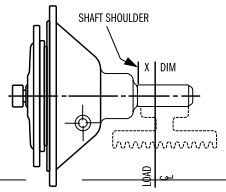
Torque x Load Factor = Application Torque

Use load factor from chart at left

IB321P



Dimensions are in mm (inches)



IB321P – ALLOWABLE SIDE LOAD, KG (LBS)

PTO MODEL	RPM	X DISTANCE, mm (in)						
		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)
IB321P M2156B	1000	7391 (16295)	7108 (15670)	6846 (15092)	6185 (13635)	5397 (11898)	4787 (10554)	4300 (9482)
	1200	6970 (15432)	6731 (14840)	6483 (14292)				
	1800	6199 (13666)	5961 (13142)	5741 (12657)	5536 (12206)	5346 (11786)		
	2000	6007 (13244)	5777 (12737)	5564 (12266)	5366 (11829)	5181 (11423)		
	2200	5835 (12863)	5610 (12369)	5404 (11913)	5211 (11488)	5399 (11903)		

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.

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