STANDARD SP CLUTCH

SP114P

QUALITY IS STANDARD

- TAPERED ROLLER MAIN BEARINGS
- AVAILABLE IN SIZES 11.5" THRU 21.0"
- OPTIONAL BEARING THORW OUT
- OPTIONAL SINTERED IRON PLATES
- BUILT IN HEX NUT
- CREATES SUITABLE APPLICATION TORQUE CAPACITY
- MORE SUITABLE FOR SIDE LOAD APPLICATIONS
- ALLOWS FOR MORE FREQUENT ENGAGEMENTS
- CREATES 25% HIGHER TORQUE CAPACITY
- EASES ADJUSTMENT VERIFICATION

SPECIFICATIONS – SP114P

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	
SP114P1	1	1099 (810)	1370 (1010)	2400	3000	1950	2750	118 (260)
SP114PO	0							

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.

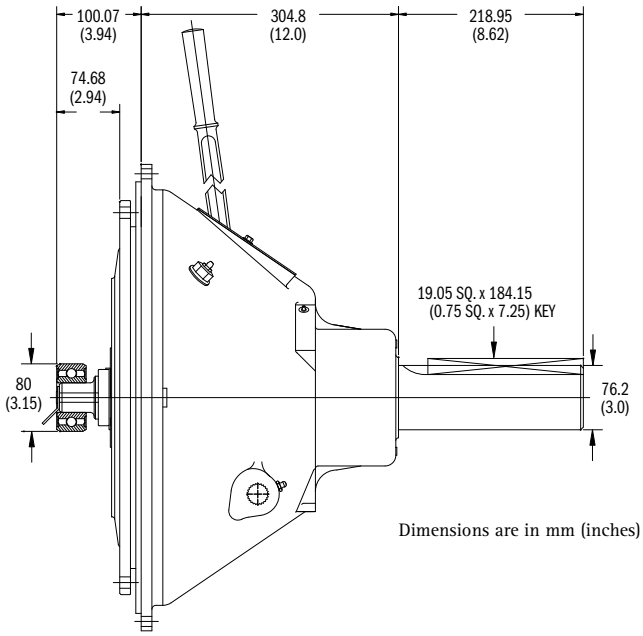
TO CALCULATE APPLICATION TORQUE:

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

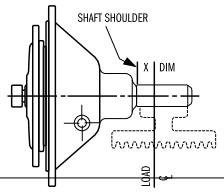
Torque x Load Factor = Application Torque

Use load factor from chart at left

SP114P



Dimensions are in mm (inches)



SP114P – 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)	203.2 (8.0)
SP114P0 SP114P1	1000	1538 (3390)	1179 (2600)	962 (2120)	807 (1780)	696 (1535)	612 (1350)	549 (1210)	494 (1090)
	1500								
	2000								
	2200								

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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