

STANDARD IB CLUTCH**IB214P****QUALITY IS STANDARD**

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

**SPECIFICATIONS - IB214P0, IB214P1**

| Model Number | SAE HSG. | Dimension "A" mm (in) | 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 | |
| IB214P0 | 0 | 100 (3.937) | 2198 (1620) | 2748 (2025) | 2500 | 3000 | 1950 | 2750 | 150 (328) |
| IB214P1 | 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:

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

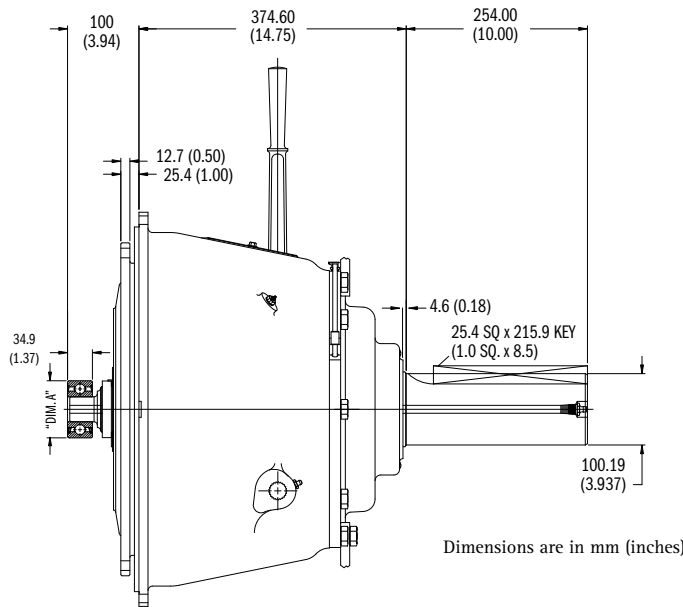
$$\text{Torque} \times \text{Load Factor} = \text{Application Torque}$$

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.



IB214P0



Dimensions are in mm (inches)

IB214P0 & IB214P1 - 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) |
| IB214P0 | 1000 | 3629 (8000) | 3425 (7550) | 3175 (7000) | 2665 (5875) | 2279 (5025) | 1826 (4025) | 1826 (4025) |
| | 1200 | 3425 (7550) | 3243 (7150) | 3084 (6800) | | | | |
| M2137 | 1800 | 3039 (6700) | 2869 (6325) | 2722 (6000) | 2381 (5250) | 2279 (5025) | 1826 (4025) | 1826 (4025) |
| | 2400 | 2790 (6150) | 2631 (5800) | 2495 (5500) | | | | |
| IB214P1 M1985 | 1000 | 2989 (6590) | 2340 (5160) | 1928 (4250) | 1633 (3600) | 1420 (3130) | 1252 (2760) | 1120 (2470) |
| | 1200 | | | | | | | |
| | 1800 | 2790 (6150) | 2340 (5160) | 1928 (4250) | 1633 (3600) | 1420 (3130) | 1252 (2760) | 1120 (2470) |
| | 2400 | | | | | | | |

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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