

## STANDARD CX CLUTCH

### CX106P, CX107P, CX108P, CX110P

#### QUALITY IS STANDARD

- AVAILABLE IN SIZES 6.5" THRU 11.5"
- BALL TYPE MAIN BEARING
- CREATES SUITABLE APPLICATION TORQUE CAPACITY
- OPTIONAL SINTERED IRON PLATES\*
- BUILT IN HEX NUT
- SUITABLE FOR IN-LINE AND SIDE LOAD APPLICATIONS
- CREATES 25% HIGHER TORQUE CAPACITY\*
- EASES ADJUSTMENT VERIFICATION

\* NOT AVAILABLE ON THE CX106 & CX107



#### SPECIFICATIONS - CX106P & CX107P

Model Number	SAE HSG.	Max. Input Torque Nm (lb-ft)	Maximum Safe Speed	Weight kg (lbs)
CX106P4, CX106P5, CX106P6	4, 5, 6	216 (159)	3500	24 (53)
CX107P4, CX107P5, CX107P6	4, 5, 6	237 (175)	3200	25 (55)

#### SPECIFICATIONS - CX108P & CX110P

Model Number	SAE HSG.	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	
CX108P3, CX108P4, CX108P5	3, 4, 5	312 (230)	387 (285)	3100	3100	3050	3100	33 (72)
CX110P1, CX110P2, CX110P3, CX110P4	1, 2, 3, 4	448 (330)	556 (410)	3100	3930	2650	3500	52 (115)

#### 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:

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

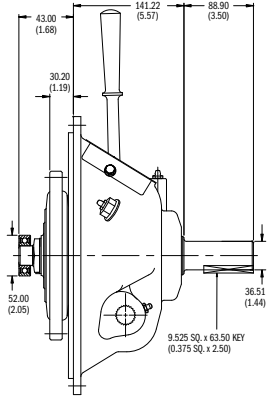
$$\text{Torque} \times \text{Load Factor} = \text{Application Torque}$$

Use load factor from chart at left

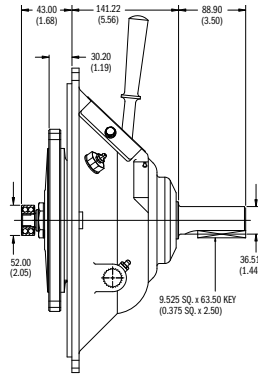
Specifications subject to change without prior notice in the interest of continual product improvement. Contact your local Twin Disc representative for engineering specifications.



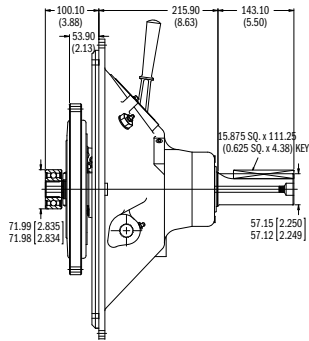
**CX106P**



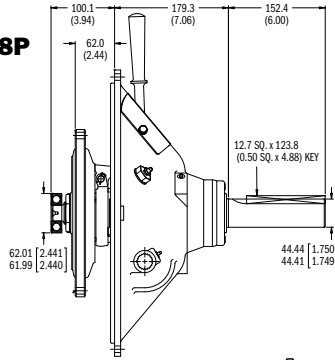
**CX107P**



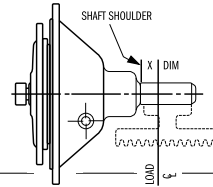
**CX110P**



**CX108P**



Dimensions are in mm (inches)



**CX106P, CX107P, CX108P, CX110P - 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)
CX106P6, CX107P6	1000	379 (835)	283 (625)	215 (475)	N/A	N/A
CX106P5, CX107P5	2000	302 (665)	270 (595)			
CX106P4, CX107P4	3000	265 (585)	238 (525)			
CX108P3, CX108P4, CX108P5	1000, 2000, 3000	678 (1495)	503 (1110)	401 (885)	333 (735)	286 (630)
CX110P1	1000	1243 (2740)	993 (2190)	785 (1730)	648 (1430)	552 (1216)
CX110P2	1500	1098 (2420)	993 (2190)			
CX110P3	2000	1012 (2230)	939 (2070)			
CX110P4	2600	930 (2050)	866 (1910)			

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

- 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.

Twin Disc, Incorporated reminds users of these products that their safe operation depends on use in compliance with engineering information provided in our catalog. Users are also reminded that safe operation depends on proper installation, operation and routine maintenance and inspection under prevailing conditions. It is the responsibility of users (and not Twin Disc, Incorporated) to provide and install guards or safety devices which may be required by recognized safety standards or by the Occupational Safety and Health Act of 1970 and its subsequent provisions.

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