



CMS 250 Clutch/Brake



 **Warner**[®]
Electric

An Altra Industrial Motion Company

CMS 250

Clutch/Brake

The CMS 250 Series Commercial MagStop clutch/brakes are designed for heavy duty mowers with up to 96" decks and engines up to 37 HP. Rugged design for continuous duty and long life

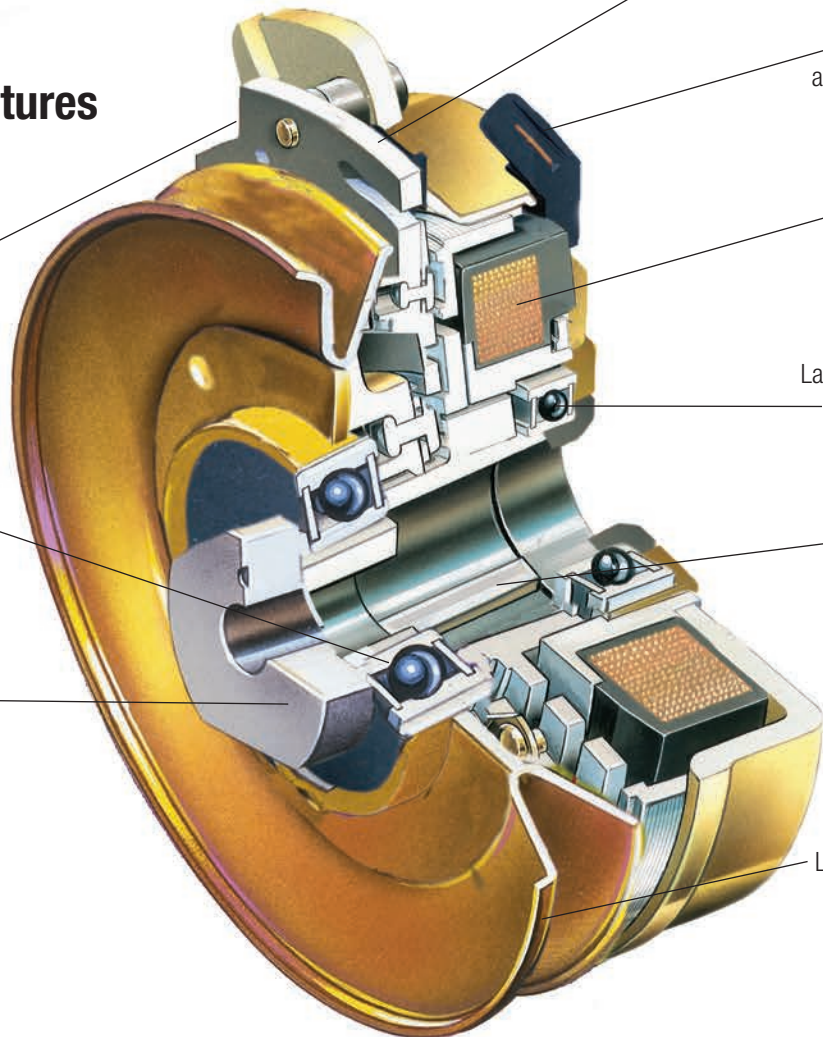
CMS Design Features

Patented, modular, permanent magnet brakes provide more consistent torque over the life of the clutch.
5-10-15 lb.ft. brake options available

Large 6208 armature bearing pressed into machined bearing cup

Patented D-drive mounting adapter locks crank shaft to aid in securing and removing mounting bolt

Made in the USA



Easy, no hassle re-gap option which doubles clutch life and is less prone to adjustment error than mechanical spring set brakes

Low profile integral connector helps prevent lead wire fatigue and protects the clutch by making the cable assembly the serviceable component

Completely encapsulated coils, over-molded in high temperature engineered plastic

Large, 6008 field bearing with high temperature polyacrylic seal and high temperature krytox grease

Integral key for ease of installation and reduced part inventory

Larger pulley sizes extend belt life

Custom pulley sizes available



Very simple, no hassle re-gap option is a standard feature which doubles clutch life.



Brake shim can quickly be removed from clutch while mounted and the airgap can be checked easily.

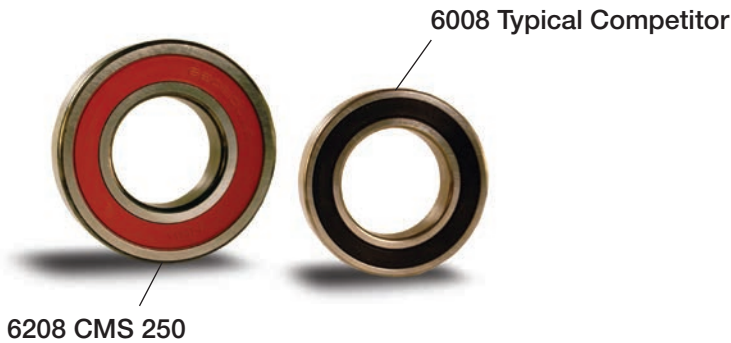


Low profile connector allows for easy replacement of cable assembly.

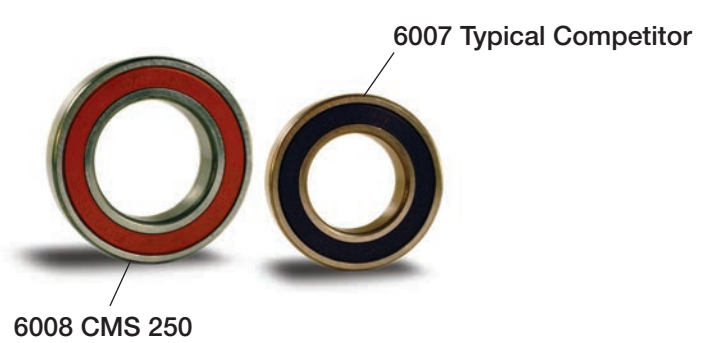
Bearings

Larger, more robust 6008 and 6208 series bearings have been implemented on the CMS 250. The field bearing by design is thermally isolated from the coil and utilizes high temperature fluorinated grease and high temperature seals.

Pulley Bearings

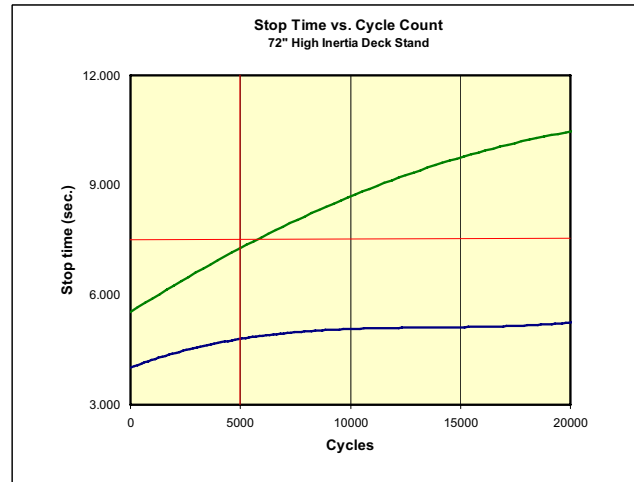


Field Bearings



CMS 250 Performance Specifications

| | |
|----------------------------------|--|
| LIFE | <ul style="list-style-type: none"> B₁₀ life of 25,000 cycles at 2000 hours |
| APPLICATION SIZE | <ul style="list-style-type: none"> Up to 37 HP |
| ENGINE | |
| DECK | <ul style="list-style-type: none"> Commercial applications up to 96" decks |
| ENVIRONMENT | <ul style="list-style-type: none"> Ambient - 40° to +200°F Bearing operating temperatures - 40°F to +350°F |
| OPERATING SPEED | <ul style="list-style-type: none"> Input speeds up to 3600 RPM |
| ELECTRICAL SPECIFICATIONS | <ul style="list-style-type: none"> System voltage of 12.0 to 14.0 volts with a steady state current between 6 to 7 amps |



ANSI Standard B71.4-1990 requires a stop time no greater than 7 seconds out of box for commercial applications. New brake designed to extend this standard through the life of the clutch. The consumer endurance point is 5K cycles.

Full Line Overview

| SERIES NUMBER | SERIES NAME | AVAILABLE TORQUE | CURRENT DRAW RANGE | AVAILABLE BORES* | PULLEY GROOVE AVAILABILITY | EXISTING PULLEY DIAMETERS** | ELECTRICAL CONNECTION | MOUNTING |
|---------------|-------------|------------------|--------------------|-----------------------------|------------------------------------|-----------------------------|-----------------------|--------------------|
| 5217-XX | RMS | 60 & 80 ft.lb. | 1.6 to 3.97 amps | 1" | A, A/B, B | 5.2 to 7.48" | Integral | Standard & Reverse |
| 5219-XX | TG | 105 & 125 ft.lb. | 3.25 to 4.23 amps | 1", 1-1/8" | A, A/B, B, 3V, 5L, 5V, HA | 2.893 to 7.3" | Integral & Lead Wire | Standard & Reverse |
| 5218-XX | CMS | 175 & 200 ft.lb. | 4.85 to 5.53 amps | 1", 1-1/8" | A, A/B, B, 3V, 5L, 5V, HA, 8M, GT2 | 3.35 to 7.345" | Integral & Lead Wire | Standard & Reverse |
| 5228-XX | CMS 250 | 225 & 250 ft.lb. | 6.65 to 6.86 amps | 1", 1-1/8", 1-1/4", 1-7/16" | A, A/B, B, C | 6.121 to 7.153" | Integral & Lead Wire | Standard & Reverse |
| 5227-XX | GT 300 | 300 ft.lb. | 6.0 to 7.0 amps | 1", 1-1/8", 1-1/4", 1-7/16" | A, B, C Flange | 4.75 to 9.34" | Screw Terminal | Standard & Reverse |

* Other clutch bores may be available depending on application and yearly volume
 ** Other pulley or flange configurations available depending on application and yearly volume

Electromagnetic Clutches and Brakes

Warner Electric

Electromagnetic Clutches and Brakes

New Hartford, CT - USA
1-800-825-6544

For application assistance:
1-800-825-9050

St Barthelemy d'Anjou, France
+33 (0) 2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Brakes

Columbia City, IN - USA
1-260-244-6183

Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland
+44 (0) 1356 602000

New Hartford, CT - USA
1-800-825-6544

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes

New Hartford, CT - USA
1-800-800-6445

Linear Products

Warner Linear

Linear Actuators

Belvidere, IL - USA
1-800-825-6544

For application assistance:
1-800-825-9050

St Barthelemy d'Anjou, France
+33 (0) 2 41 21 24 24

Couplings

Ameridrives Couplings

Mill Spindles, Ameriflex, Ameridisc

Erie, PA - USA
1-814-480-5000

Gear Couplings

San Marcos, TX - USA
1-800-458-0887

Bibby Turboflex

Disc, Gear, Grid Couplings, Overload Clutches

Dewsbury, England
+44 (0) 1924 460801

Boksburg, South Africa
+27 11 918 4270

TB Wood's

Elastomeric Couplings

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

General Purpose Disc Couplings

San Marcos, TX - USA
1-888-449-9439

Ameridrives Power Transmission

Universal Joints, Drive Shafts, Mill Gear Couplings

Green Bay, WI - USA
1-920-593-2444

Huco Dynatork

Precision Couplings and Air Motors

Hertford, England
+44 (0) 1992 501900

Chambersburg, PA - USA
1-888-829-6637

Lamiflex Couplings

Flexible Couplings, Bearing Isolators, and Coupling Guards

São Paulo, SP - Brasil
+55-11-5679-6533

Heavy Duty Clutches and Brakes

Wichita Clutch

Pneumatic Clutches and Brakes

Wichita Falls, TX - USA
1-800-964-3262

Bedford, England
+44 (0) 1234 350311

Twiflex Limited

Caliper Brakes and Thrusters

Twickenham, England
+44 (0) 20 8894 1161

Industrial Clutch

Pneumatic and Oil Immersed Clutches and Brakes

Waukesha, WI - USA
1-262-547-3357

Svendborg Brakes

Industrial Brakes and Brake Systems

Vejstrup, Denmark
+45 63 255 255

Gearing

Boston Gear

Enclosed and Open Gearing, Electrical and Mechanical P.T. Components

Charlotte, NC - USA
1-800-825-6544

For application assistance:
1-800-816-5608

Bauer Gear Motor

Geared Motors

Esslingen, Germany
+49 (711) 3518 0

Somerset, NJ - USA
1-732-469-8770

Nuttall Gear and Delroyd Worm Gear

Worm Gear and Helical Speed Reducers

Niagara Falls, NY - USA
1-716-298-4100

Overrunning Clutches

Formsprag Clutch

Overrunning Clutches and Holdbacks

Warren, MI - USA
1-800-348-0881 – Press #1

For application assistance:
1-800-348-0881 – Press #2

Marland Clutch

Roller Ramp and Sprag Type Overrunning Clutches and Backstops

South Beloit, IL - USA
1-800-216-3515

Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany
+49 (0) 6221 30 47 0

Belted Drives and Sheaves

TB Wood's

Belted Drives

Chambersburg, PA - USA
1-888-829-6637 – Press #5

For application assistance:
1-888-829-6637 – Press #7

Engineered Bearing Assemblies

Kilian Manufacturing

Engineered Bearing Assemblies

Syracuse, NY - USA
1-315-432-0700

For information concerning our sales offices in Asia Pacific check our website www.altramotion.com.cn



An Altra Industrial Motion Company

www.warnerelectric.com

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