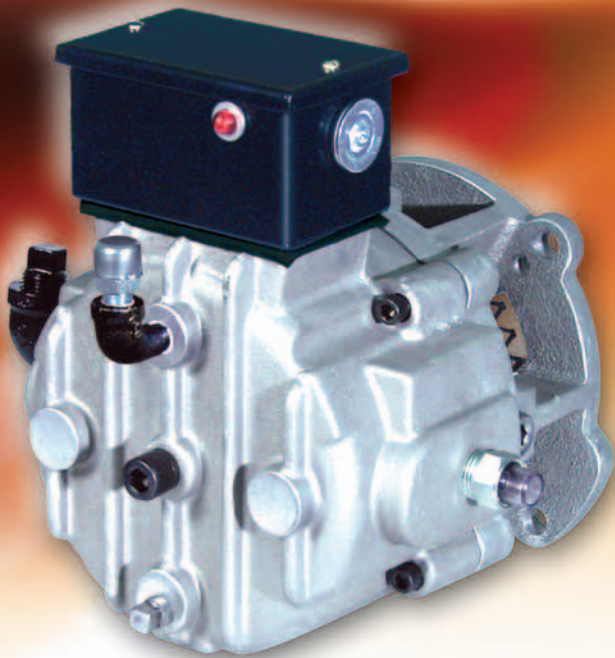
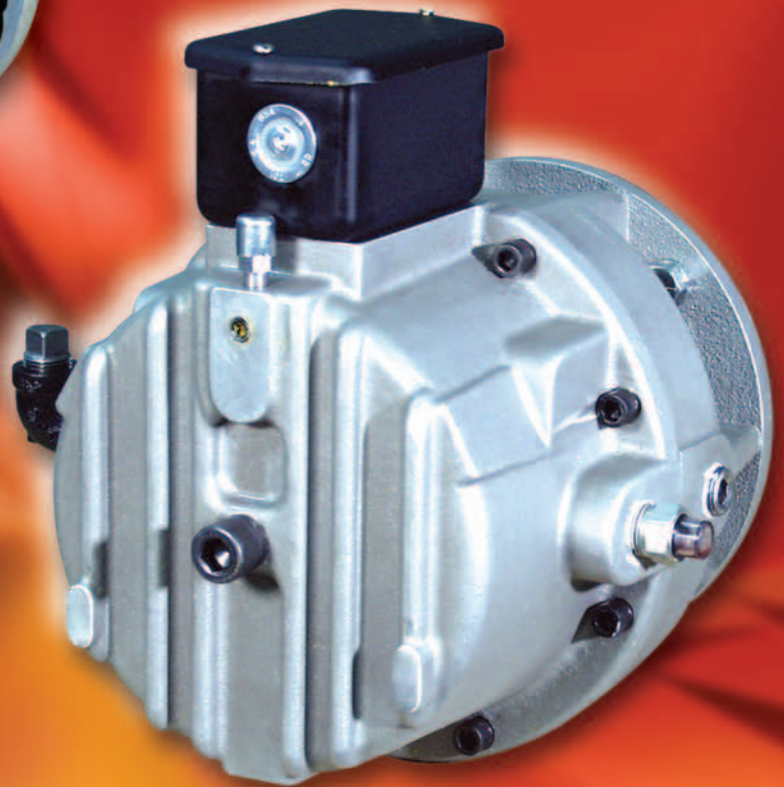


ENGINEERED FOR HIGHEST PERFORMANCE

“Quick Mount”

MagnaShear™
FULLY ELECTRIC

OIL SHEAR MOTOR BRAKE



WE BRAKE WHERE OTHERS BREAK!



UNBEATABLE SAVINGS

ON WEAR AND CARE

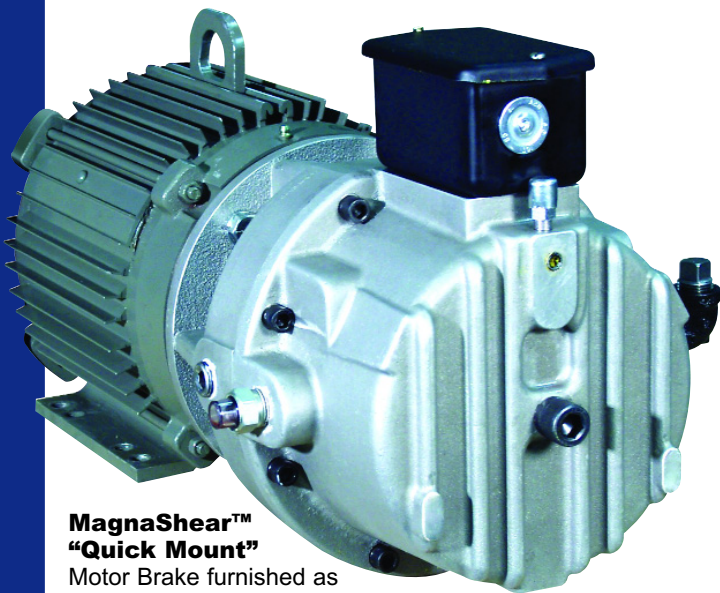
The "Quick Mount" MagnaShear™ fully electric spring set motor brake uses Force Control's unique oil shear technology and mounts directly to NEMA frame motors sizes 56 to 449.

This "Quick Mount" design means just that, quick and easy mounting to your drive motor.

It comes ready to install - no assembly, no adjustments. Also available premounted on a motor to make a truly severe duty brake motor.

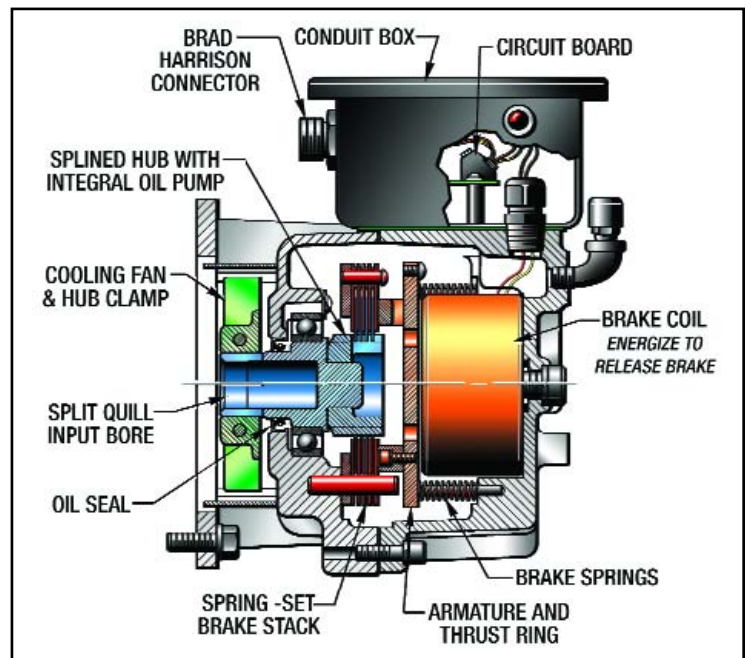
"QUICK MOUNT" MagnaShear™ FULLY ELECTRIC

- NEMA standard motor frames for easy installation
- Spring Set torque ranges from 3 lb.ft. – 1250 lb.ft. for wide variety of applications.
- Multiple friction discs cooled in recirculating transmission fluid provides maximum service life
- Keyless clamp-split-quill stops play and eliminates damage
- Smooth cushion oil-shear technology reduces drive train shock
- Totally enclosed from outside contaminants



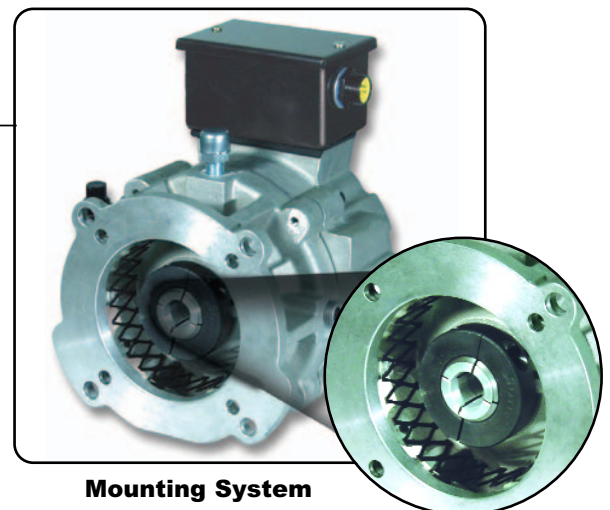
**MagnaShear™
"Quick Mount"**

Motor Brake furnished as an assembled brake motor.



SIMPLIFIED C-FACE MOUNTING SYSTEM

The "Quick Mount" MagnaShear™ C-Face mount adds a new level of convenience. An innovative keyless Clamp-Split-Quill absolutely stops play that could deform and damage motor shafts in high-torque, rapid cycle applications. The new clamp design splits the input quill four ways at 90° intervals. A clamp collar fits over the quill to give 360° clamping effect when tightened down.

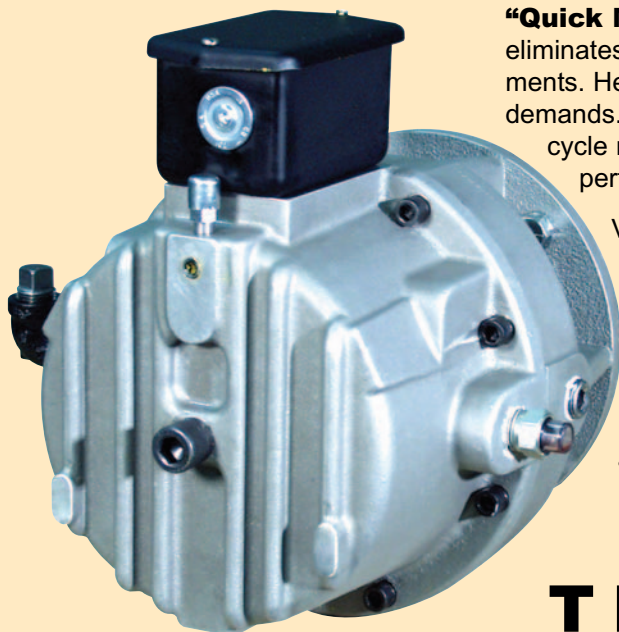


Mounting System

“QUICK MOUNT” MagnaShear™

FULLY ELECTRIC

OIL SHEAR MOTOR BRAKE



“Quick Mount” MagnaShear™ Fully Electric Oil Shear Motor Brake eliminates the typical line stops, the frequent brake repairs and replacements. Here’s the reliability you need for today’s 24/7 manufacturing demands. Here’s speed and precision that can let you run at higher cycle rates and quality levels, or design new machines for higher performance.

Value engineering gives you X times the performance possible from conventional dry brakes:

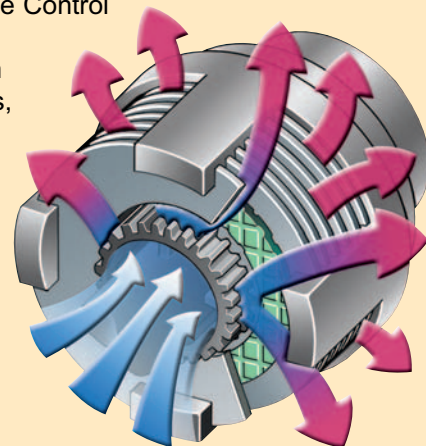
- 10X longer design life
- Clamped-Split-Quill reduces motor shaft damage in aggressive applications (only available on MSB 2, MSB 4 and MSB 6)
- Up to 50% lower cost per index than disposable brakes
- Up to 88% lower internal inertia delivers ultra-quick acceleration and reduction of power

THE OIL-SHEAR

DIFFERENCE

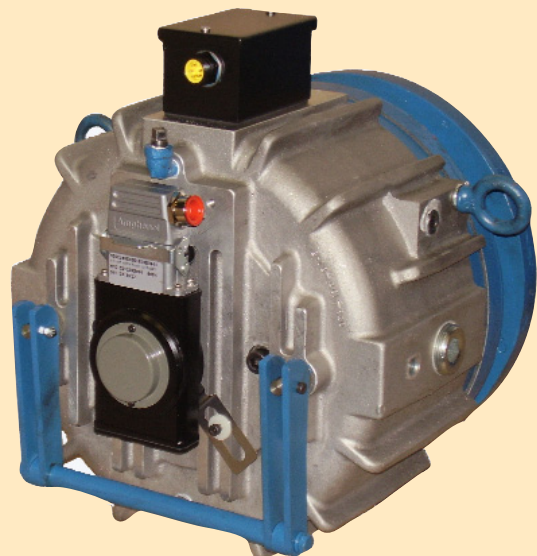
No ordinary electric brakes, MagnaShear™ units use proprietary oil-shear technology perfected over 30 years by Force Control Industries. MagnaShear™ brake units have proven themselves in the toughest production environments, including indexing tables, lifts, transfers, conveyors, tap heads, and other stop/start applications – where there is absolutely no time for downtime.

With the MagnaShear™ brakes, Force Control transforms oil-shear technology into affordable, off-the-shelf designs.



MagnaShear™ brakes transmit torque by shearing automatic transmission fluid between multiple friction discs.

The fluid absorbs the heat of engagement and dissipates it through the housing. The recirculating fluid minimizes wear, resulting in exceptional service life, up to 10 times longer than conventional dry brakes.



SELECTION

The correct MagnaShear™ brakes can be selected using motor frame size and required brake torque. The table on the back page indicates the proper brake based on motor frame sizes.

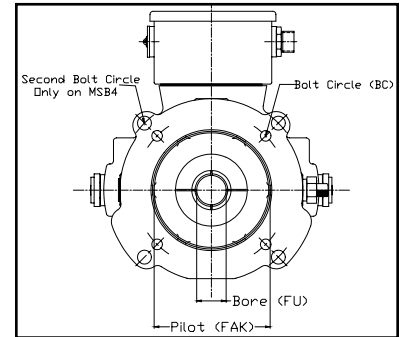
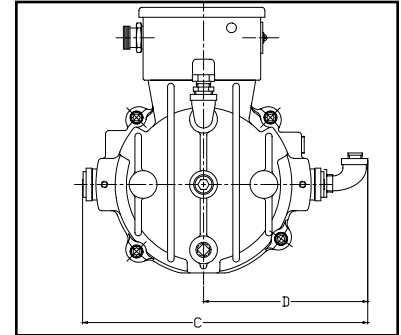
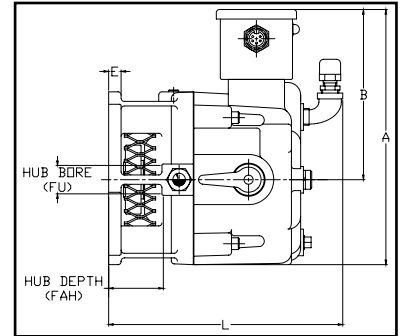
Torque can be determined for moderate inertial loads using the formula:

$$\text{Torque Ft/Lbs} = \frac{\text{Motor HP} \times 5250}{\text{RPM at Brake}} \times 1.5$$

Select a brake with a rating equal to or greater than the torque calculated. Several torque ratings are available in each brake size.

SPECIFICATIONS

BRAKE SIZE	BOLT CIRCLE BC (Inches)	HUB BORE FU (Inches)	HUB DEPTH FAH (Min/Max)	OVERALL DIMENSIONS (Inches)			STATIC TORQUE (Lb. Ft.)	DYNAMIC TORQUE (Lb. Ft.)	MAX. KE per ENGMT. (Ft. Lbs.)	INERTIA (Lb. Ft. ²)	OIL* CAP. (Fl. Oz.)	NEMA Frame Size
				A	C	L						
MSB2	5.875	.625 .875	1.00/2.19	9.07	8.84	7.96	6	5	7,975	0.011	28	056 143 145
							8	7				
							12	10				
MSB4	5.875 7.250	.875 1.125	1.37/2.89	10.25	10.75	9.18	14	12	22,000	0.024	40	182 184 213 215
							21	18				
							33	28				
MSB6	7.250	.875 1.125 1.375 1.625	1.62/4.25	12.58	12.72	11.08	38	32	26,500	0.058	50	213 215 254 256
							62	53				
							86	73				
							100	85				



BRAKE SIZE	PILOT DIA. FAK (Inches)	BORE DIA. FU (Inches)	BORE DEPTH FAH (Min/Max)	OVERALL DIMENSIONS (Inches)			STATIC TORQUE (Lb. Ft.)	DYNAMIC TORQUE (Lb. Ft.)	MAX. KE per ENGMT. (Ft. Lbs.)	INERTIA (Lb. Ft. ²)	OIL* CAP. (Fl. Oz.)	NEMA Frame Size
				A	C	L						
MSB7	8.50 10.50	1.375 1.625	3.00/4.38	13.32	11.00	12.93	95	83	26,500	CF	CF	254 256 284 286
							135	115				
							170	148				
MSB8	8.50 10.50	1.375 1.625 1.875	3.00/4.38	15.12	14.46	14.82	100	86	41,500	0.267	180	254 256 284 286
							150	129				
							200	172				
							250	215				
MSB9	10.50 12.50	1.625 1.875 2.000 2.125 2.250 2.375	2.75/4.62	17.70	16.84	15.51	250	215	48,000	0.962	192	284 286 324 326 364 365 404 405
							300	258				
							350	301				
							450	387				
							500	430				
MSB10	10.50 12.50	1.875 2.000 2.125 2.250 2.375	2.75/4.62	17.70	16.84	15.51	600	516	69,000	1.244	192	444 445 447 449
							650	559				
							750	645				
							900	774				
MSB12	16.00	2.125(min) ----- 3.625(max)	3.00/5.12	23.40	20.10	22.97	625	538	158,000	2.068	384	444 445 447 449
							950	817				
							1250	1075				

HOW TO ORDER

CF = Consult Factory



SIZE

2 = MSB2	8 = MSB8
4 = MSB4	9 = MSB9
6 = MSB6	A = MSB10
7 = MSB7	C = MSB12

BOLT CIRCLE or PILOT

4 = 5.875" BC (MSB2)
5 = 5.875" & 7.250" BC (MSB4)
8 = 7.250" BC (MSB6)
Q = 8.50" Pilot (MSB7 or 8)
R = 10.50" Pilot (MSB7, 8, 9 or 10)
S = 12.50" Pilot (MSB9 or 10)
T = 16.00" Pilot (MSB12)

STATIC TORQUE

006 = 6 Lb.Ft.	250 = 250 Lb.Ft.
008 = 8 Lb.Ft.	300 = 300 Lb.Ft.
012 = 12 Lb.Ft.	350 = 350 Lb.Ft.
014 = 14 Lb.Ft.	450 = 450 Lb.Ft.
021 = 21 Lb.Ft.	500 = 500 Lb.Ft.
033 = 33 Lb.Ft.	625 = 625 Lb.Ft.
038 = 38 Lb.Ft.	650 = 650 Lb.Ft.
062 = 62 Lb.Ft.	750 = 750 Lb.Ft.
086 = 86 Lb.Ft.	900 = 900 Lb.Ft.
100 = 100 Lb.Ft.	950 = 950 Lb.Ft.
150 = 150 Lb.Ft.	125 = 1250 Lb.Ft.
200 = 200 Lb.Ft.	

VOLTAGE

1 = 115 VAC
2 = 230 VAC

SHAFT DIA.

A = 0.625
0 = 0.875
1 = 1.125
2 = 1.250
3 = 1.375
5 = 1.625
7 = 1.875
C = 2.125
E = 2.375
G = 2.625
J = 2.875
K = 3.000
N = 3.125
P = 3.375
Q = 3.500
R = 3.625

MOUNTING POSITION

H = Horizontal
U = Brake Up
D = Brake Down
J = Horiz, High Oil
P = Horiz, Marine Duty
F = Horiz, Washdown Duty

RELEASE

S = No Release
R = Manual Release*
B = Manual Release with Stub for Encoder**

*Not avail on MSB2
** Not avail on MSB2 & 4

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