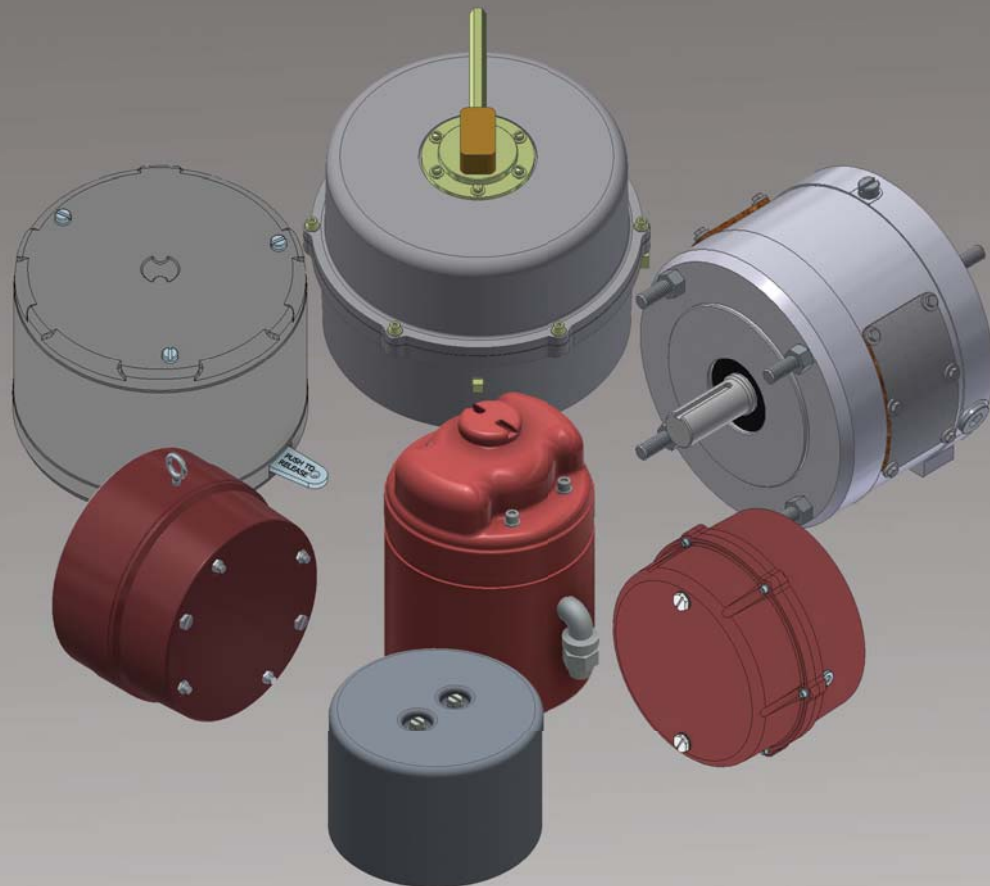


DIRECT - ACTING BRAKES

DIRECT-ACTING  ONE MOVING PART

DIRECT - ACTING BRAKES



COMPLETE BRAKE LINE BROCHURE

The *Dings* Difference Advantages of Our Design

Direct-Acting Design



Operation

Our brakes operate on a very simple principle:

While the motor is running with power engaged, an electromagnet within the brake pulls back the pressure plate, allowing the friction discs and motor shaft to rotate freely.

When power is cut to the motor, the electromagnet releases, instantly stopping the rotating discs and preventing the motor shaft from turning. The direct acting design has only one moving part with no complicated linkages to break or fail.

60 Series brake tested to over 3 million cycles!!!

In our accelerated lift cycle tests, 87% of our 60 Series brakes passed the three million cycles mark. Four different torque ratings were tested on motors and energized and de-energized 60 times per minute.



RoHS Compliant

All 40, 50 and 60 Series standard brakes now comply with the requirements of the Restriction of Hazardous Substance Directive. All other series can be ordered as RoHS compliant.

Factory-Set Air Gap

Brake air gap is pre-set, reducing installation time.

Torque Adjustable

Brakes for motors 56C through 405TC are torque adjustable.

No Disassembly Required for Mounting

All brakes through 80 Series (284TC/286TC frame motors) do not need to be disassembled to mount to the motor. Only 3 steps are required for mounting:



1. Position hub on motor shaft



2. Place brake on hub, no disassembly required



3. Connect wiring and replace cover

Fewer Parts Means Longer Life

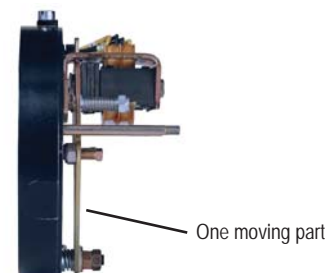
Dings Direct-Acting Brake



Solenoid-Actuated Brakes contains many more wear parts

With power supplied to brake, solenoid is energized, pulling in plunger and allowing free shaft rotation.

When power is cut off, solenoid is de-energized and plunger is released. The plunger is screwed to a linking mechanism which is fastened with a retaining clip to an offset pivoting lever. The offset lever has a cam which pivots about the support plate. This releases the pressure plate which presses against the rotating discs, stopping shaft rotation.



Product Line Overview

40 Series



Small AC and DC Motors
Torque Ratings: 3/8 and 3/4 lb-ft
Enclosure Type: NEMA2, IP40

50 Series



Motor Frame 48C
Torque Ratings: 1.5, 3, 6 lb-ft
Enclosure Type: NEMA 2, IP40
Manual Release: Non-maintained

60 Series End Mount



Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft
Enclosure Type: NEMA 2, IP40
NEMA 4, IP56
NEMA 4X, IP56 Washdown
Hazardous Location Brake Available
Manual Release: Maintained/auto reset

60 Series Double C Face Coupler



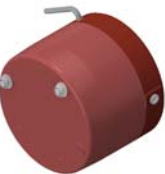
Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 20 lb-ft
Enclosure Type:
NEMA 2, IP40
NEMA 4, IP56
NEMA 4X, IP56
Washdown
Manual Release:
Maintained/auto reset

1-70 Series End Mount



Motor Frame 182TC/184TC,
213TC/215TC, 254TC/256TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft
Enclosure Type: NEMA 2, IP40
Manual Release: Maintained/auto reset

70 Series End Mount 8700 Style



Motor Frame 182TC/184TC,
213TC/215TC, 254TC/256TC
Torque Ratings: 10 lb-ft through 75 lb-ft
Enclosure Type: NEMA 2, IP40
NEMA 4, IP56
NEMA 4X, IP56 Washdown
Hazardous Location Brake Available
Manual Release: Maintained/auto reset

70 Series Double C Face Coupler 8700 Style



Motor Frame 182TC/184TC, 213TC/215TC,
254TC/256TC
Torque Ratings: 10 lb-ft through 175 lb-ft
Enclosure Type: NEMA 2, IP40
NEMA 4, IP56
Manual Release: Maintained with auto reset

80 Series End Mount



Motor Frame 284TC/286TC,
Torque Ratings: 25 lb-ft through 175 lb-ft
Enclosure Type: NEMA 2, IP40
NEMA 4, IP56
Manual Release: Maintained with auto reset

90 Series End Mount



Motor Frame 324TC/326TC, 364TC/365TC,
404TC/405TC
Torque Ratings: 180 lb-ft through 450 lb-ft
Enclosure Type: NEMA 2, IP40
NEMA 4, IP56
Manual Release: Maintained with auto reset

Marine/Maritime Duty

Enclosure Type: NEMA 4, IP56
Manual Release: Maintained with auto reset

60 Series



Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft

70 Series



Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft

80 Series



Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft

90 Series



Motor Frame 56C, 143TC/145TC
Torque Ratings: 1.5 lb-ft through 25 lb-ft

Navy

Motor Frame 182TC through 286TC
Torque Ratings: 3 lb-ft through 180 lb-ft

70 Series



Motor Frame 182TC through 286TC
Torque Ratings: 3 lb-ft through 75 lb-ft

80 Series



Motor Frame 284TC/286TC
Torque Ratings: 25 lb-ft through 180 lb-ft

Special Applications - Brake Options

Options can be added to the standard brakes to meet your application requirements. The most common options are listed below; other options are available. It is recommended that special or demanding applications be discussed with a Dings representative to ensure that all aspects of the application are considered.

Application Requirements	Suggested Options	Description
Special mounting	Motor frame adaptor	Adapting to larger or smaller motor frame
	Foot mounting bracket	Floor mounting bracket if no c face available
	Vertical mounting above or below motor	Motor shaft is vertical, brake mounts above or below motor
Internal corrosion resistance	Aluminum bronze stationary discs	Provides extra corrosion resistance
	Internal space heater	Helps dissipate moisture due to cold or humid conditions
	Stainless steel stationary disc	Provides extra corrosion resistance
	External breather	Prevents ingress of moisture in humid conditions
Sea/salt water dockside and ship applications	Marine finish and plating	Military paint and special plating for protection against severe weather conditions
	Harsh environment	Special paint and plating for severe weather conditions; intended for non-military offshore applications
Heavy duty high cycle/shock applications	Ductile iron stationary discs	Ductile iron provides greater strength for high cycle applications
	Heavy duty friction discs and hardened hub	Metal disc center provides extra tooth support
	High tensile studs	Studs are made from high strength steel
High humidity	Fungal protection	Anti-fungal coating on electrical coils
	Internal space heater	Special resistor helps dissipate moisture in brakes
	External breather	Prevents ingress of moisture in humid conditions
High temperature	Class "H" insulation	High temperature coil wire insulation for extra thermal protection
Tach/encoder mounting	Tach machining	Machined face on brake cover allows mounting of tachometer
	Through shaft	Hole in brake cover allows motor shaft to continue through the brake enclosure
	"Smart" brake	Internally mounted encoder provides feedback on motor positioning and speed
Brake monitoring	Manual release indicator switch	Indicates if brake is manually released
	Electrical release indicator switch	Indicates if brake is electrically released
	Wear indicator	Indicates when brake requires air gap adjustment
High inertia loads	Heavy duty friction discs and hardened hub	Metal disc center provides extra tooth support