

# Brakes, Clutches & SINPAC® Solid-State Switches





# **About Us**

# Stearns Brakes Set the Standard for Excellence

#### **Our Value To You**

Stearns is the market leader in providing quality products, outstanding service, engineering expertise and support to our customers. We understand reliability is critical. We offer:

- Over 100 years of proven dependability
- Unmatched on-time delivery
- Shorter lead times
- Pre-sale and post-sale application and service support by brake experts
- On-site Research and Development Lab for rapid prototype production
- Knowledgeable and committed customer care team
- Wide range of brake options for a variety of applications
- Product installation, service, and maintenance training



#### AC Style Motor Brakes -Solenoid Actuated Brake Benefits

- Market leader & primary supplier to all US motor manufacturers
- Broadest range of torque, enclosures, and options to meet customer applications
- Standard AC voltage / DC voltages also available
- · Rapid response times for set and release of brake
- Brakes are easily repairable with readily available replacement parts
- The ONLY brake manfacturer to offer a self-adjusting brake and produce its own friction discs

#### DC Style Motor Brakes -Armature Actuated Brake Benefits

- The only American manufacturer producing a full line of European style brakes
- Standard DC voltage, can be rectified for AC
- Simple construction, less wear parts, longer life with high cycle rates
- Available in IEC or NEMA frame sizes
- Quiet brake features available for sound sensitive environments

# Electric Starting Switches - SINPAC® Switch Benefits

- Our solid-state switch is superior to mechanical switches
- Extends the life and reliability of the motor, especially for high-cycling or "dirty" environments
- Fast and easy to install and replace mechanical switches
- Sealed, spark-free switch for challenging environments
- Our parts work for a variety of motor manufacturers
- Capacitor Start, Capacitor Start & Run, and Instant Reversing
- A few SINPAC switches sizes replace dozens of mechanical switches

# **TENV Modular Clutch Brakes - SuperMod Benefits**

- Cast-aluminum housing that meets IP54 requirements
- Optimized for cool temperature operations
- · Design optimized for reliability and reduced parts count
- Automatic gap adjustment
- Completely gasketed conduit box resists moisture and spray
- · Washdown (IP55) availability in select models

#### **Encoder Brake Benefits**

- Cast-aluminum housing that meets IP54 requirements
- Optimized for cool temperature operations

### **Key Industries:**

- Marine Equipment
- Residential Elevators
- Mining
- Agriculture
- Wind Energy
- Material Handling

#### **Certifications:**

- ISO 9001:2015
- RoHS Compliant
- BISSC Certified
- UL Recognized / UL Listed
- CSA Certified
- ABS Type Approved
- MSHA Certified

### **Manufacturing Facility**

- 150,000 square feet
- Research & Development Lab
- CNC/DNC Machine Shop
- Complete Assembly Capability
- Internal Six Sigma
- Lean manufacturing
- On-Site Quality Assurance Lab

AC Operated, DC Optional

# Close Coupled | For Non-Drive End of Motor | Mounts Directly to Motor



#### 48,100 Series

DETAILS	DATA
NEMA Frame	48C
Torque (lb-ft)	1.5 - 6
Nm	2-8
Enclosure	IP 23
CSA Certified	File LR6254



#### **56,X00 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	1.5 - 25
Nm	2 - 34
Enclosure	IP 23, 54, 55, 56 / BISSC
CSA Certified	File LR6254



### **56,900 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	3 - 25
Nm	4 - 34
Enclosure	IP 56, 57
CSA Certified	File LR6254



#### **87,000 Series**

DETAILS	DATA
NEMA Frame	182TC - 256TC/UC
Torque (lb-ft)	6 - 125
Nm	8 - 169
Enclosure	IP 23, 54, 55, 56 / BISSC
CSA Certified	File LR6254



#### **87,100 Series**

DETAILS	DATA
NEMA Frame	284TC/UC - 286TC/UC
Torque (lb-ft)	50 - 125
Nm	68 - 169
Enclosure	IP 23, 54
CSA Certified	File LR6254



#### **81,000 Series**

DETAILS	DATA
NEMA Frame	324 - 405TC/TSC/UC/USC
Torque (lb-ft)	125 - 230
Nm	169 - 312
Enclosure	IP 23, 54
CSA Certified	File LR6254



#### **82,000 Series**

DETAILS	DATA
NEMA Frame	324 - 405TC/TSC/UC/USC
Torque (lb-ft)	125 - 440
Nm	169 - 597
Enclosure	IP 23, 54
CSA Certified	File LR6254



#### **86,000 Series**

DETAILS	DATA
NEMA Frame	444 - 445TC/TSC/UC/USC
Torque (lb-ft)	500 - 1,000
Nm	678 - 1,356
Enclosure	IP 23, 54
CSA Certified	File LR6254



#### **86,100 Series**

DETAILS	DATA
NEMA Frame	505TC/TSC/UC/USC
Torque (lb-ft)	500 - 1,000
Nm	678 - 1,345
Enclosure	IP 23, 54
CSA Certified	File LR6254

# **Solenoid Actuated Brakes**

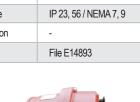
AC Operated

## **Division 1 Hazardous Location**



## **65,300 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	1.5 - 15
Nm	2 - 20
Enclosure	IP 23, 56 / NEMA 7, 9
Certification	-
UL Listed	File E14893



#### **87,300 Series**

DETAILS	DATA
Foot Mounted	-
Torque (lb-ft)	10 - 105
Nm	14 - 142
Enclosure	IP 23 / NEMA 7, 9
CSA Certified	File 156414
UL Listed	File E14893



## 87,300 Series

DETAILS	DATA
NEMA Frame	182TC - 256TC/UC
Torque (lb-ft)	10 - 105
Nm	14 - 142
Enclosure	IP 23, 55 / NEMA 7, 9
CSA Certified	File 156414
UL Listed	File E14893



## 82,300 Series

DETAILS	DATA
NEMA Frame	324 - 405 TC/TSC/UC/USC
Torque (lb-ft)	125 - 330
Nm	169 - 447
Enclosure	IP 56 / NEMA 7, 9
CSA Certified	File 156414
UL Listed	File E14893



#### **82,300 Series**

DETAILS	DATA
Foot Mounted	-
Torque (lb-ft)	125 - 330
Nm	169 - 447
Enclosure	IP 23 / NEMA 7, 9
CSA Certified	File 156414
UL Listed	File E14893

# **Division 2 Hazardous Location**



## **56,800 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	1.5 - 25
Nm	2 - 34
Enclosure	IP 56
Certification	-
UL Listed	File E14893



#### 87,800 Series

DETAILS	DATA
NEMA Frame	182TC - 256TC/UC
Torque (lb-ft)	6 - 105
Nm	8 - 142
Enclosure	IP 56
Certification	-
UL Listed	File E14893

# Double C-Face Coupler Brakes | For Drive End of Motor | Mounts Between Motor & Gearbox



#### **56,700 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	1.5 - 25
Nm	2 - 34
Enclosure	IP 23, 54, 55, 56
CSA Certified	File LR6254



#### **87,700 Series**

DETAILS	DATA
NEMA Frame	182TC - 256TC/UC
Torque (lb-ft)	10 - 105
Nm	14 - 142
Enclosure	IP 23, 54, 55
CSA Certified	File LR6254

# Foot Mounted With Bearing Supported Thru-Shaft



#### **56,703 Series**

DETAILS	DATA
NEMA Frame	56C - 145TC
Torque (lb-ft)	1.5 - 25
Nm	2 - 34
Enclosure	IP 23
CSA Certified	File LR6254



#### 87,200 Series

DETAILS	DATA
NEMA Frame	182TC - 256TC/UC
Torque (lb-ft)	10 - 105
Nm	14 - 142
Enclosure	IP 23, 54
CSA Certified	File LR6254

# **Special Application Brakes**





#### Marine/Maritime/Navy

DETAILS	DATA
NEMA Frame	56C - 505USC
Torque (lb-ft)	3 - 1,000
Nm	4 - 1,356
Enclosure	IP 56
Approved	ABS Type



DETAILS	DATA
NEMA Frame	324TC - 405TC
Torque (lb-ft)	125 - 330
Nm	169 - 447
Enclosure	IP 56
Certification	MSHA



#### **Encoder Brakes**

DETAILS	DATA
NEMA Frame	182TC - 405TC
Torque (lb-ft)	25 - 330
Nm	34 - 447
Enclosure	IP 56
CSA Certified	Models Available
UL Listed	Models Available

## **Armature Actuated Brakes**

Accepted by Motor Manufacturers and UL Recognition Coil Insulation System

#### **Armature Actuated Brakes**



#### 310 | Servo Brake

DETAILS	DATA
Size	1.79 - 5.0
Torque (lb-in)	10 - 350
Nm	1.1 - 39.5
Enclosure	Open



#### 311 | Servo Brake

DETAILS	DATA
Size	3.38 - 5.0
Torque (lb-in)	75 - 400
Nm	8.5 - 45.2
Enclosure	Open
UL Recognized	Insulation System File E125303



#### 320 | Gear Motor Brake

DETAILS	DATA
Size	1.2 - 2.8
Torque (lb-in)	3 - 50
Nm	.34 - 5.6
Enclosure	Open
UL Recognized	Insulation System File E125303



#### **321 / 322 | Gear Motor Brake**

DETAILS	DATA
Size	1.2 - 2.8
Torque (lb-in)	3-72
Nm	.34 - 8.1
Enclosure	IP 42, 54
UL Recognized	Insulation System File E125303



#### 321 / 322 | C-Face Mount

DETAILS	DATA
NEMA Frame	48C - 56C
Torque (lb-ft)	1.5 - 25
Nm	2 - 34
Enclosure	IP 42, 54
UL Recognized	Insulation System File E125303



#### 330 / 331 / 333 | Metric Frame

DETAILS	DATA
Size	72 - 278
Torque (lb-ft)	3 - 300
Nm	4 - 400
Enclosure	Open
UL Recognized	Insulation System File E125303



#### 330 / 331 / 333 | C-Face Frame

DETAILS	DATA
Size	48C, 56C, 182 - 184TC, 284 - 286TC/324TC - 405TSC
Torque (lb-ft)	3 - 300
Nm	4 - 400
Enclosure	Open or IP 43, 54
UL Recognized	Insulation System File E125303



#### 350 | Enclosed C-Face

DETAILS	DATA
Size	182 - 184IC/284 - 286TC/324TC - 405TSC
Torque (lb-ft)	75 - 300
Nm	102 - 400
Enclosure	IP 56
UL Recognized	Insulation System File E125303



## 360 | Enclosed C-Face

DETAILS	DATA
Size	182 - 184IC/284 - 286TC/324TC - 405TSC
Torque (lb-ft)	35 - 300
Nm	47 - 400
Enclosure	IP 56
UL Recognized	Insulation System File E125303

# **Special Application Brakes**



# Thin Profile Brake

DETAILS	DATA
Mounting	Special Specific
Torque (lb-ft)	42, 84
Nm	57, 114
Enclosure	IP 56
UL Recognized	File E71115 Insulation System File E125303



#### **Quiet Brake**

DETAILS	DATA
NEMA Frame	56C, 182TC - 405TC
Torque (lb-ft)	25 - 300
Nm	34 - 447
Enclosure	IP 43, 56
UL Recognized	Insulation System File E125303



#### **Caliper Brake**

DETAILS	DATA
Mounting	Special Post Mounted
Torque (lb-ft)	Customer Motor Diameter Dependent
Nm	-
Enclosure	Open
UL Recognized	Insulation System File E125303

# SINPAC® Switches - Electric Starting Switches for Single Phase









#### **IR Series / Instant Reverse**

DETAILS	DATA
Motor Type	Capacitor Start & Run
Max Motor HP	1/2 - 2
Switch Rating	25 - 40 Amps
Start Circuit	115 Volts
UL Recognized	File E71115

#### CV / 2CV Series

DETAILS	DATA
Motor Type	Capacitor Start
Max Motor HP	1/2 - 5
Switch Rating	16 - 50 Amps
Start Circuit	115 or 230 Volts
UL Recognized	File E71115

#### **VR / 2VR Series**

DETAILS	DATA
Motor Type	Capacitor Start & Run
Max Motor HP	1/2 - 5
Switch Rating	16 - 50 Amps
Start Circuit	115 or 230 Volts
UL Recognized	File E71115

# Super-Mod Clutches and Brakes | Power-On Modules



**Clutch-Brake Modules** 



#### **Clutch Only Modules**

DETAILS	DATA
NEMA Frame	56C - 210TC
Static Torque (lb-ft)	16 - 145
Horse Power	1/8 - 10
Enclosure	IP 54, 55
UL Recognized	Models Available

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DETAILS	DATA
NEMA Frame	56C - 210TC
Static Torque (lb-ft)	16 - 145
Horse Power	1/8 - 10
Enclosure	IP 54, 55
UL Recognized	Models Available



### **Brake Only Modules**

DETAILS	DATA
NEMA Frame	56C - 210TC
Static Torque (lb-ft)	16 - 145
Horse Power	1/8 - 10
Enclosure	IP 54, 55
UL Recognized	Models Available

#### Why Choose Stearns?

Stearns offers a comprehensive line of standard and special AC and DC industrial brakes and clutches. With over 100 years of design and manufacturing experience, Stearns has built a solid reputation for quality, commitment to customer satisfaction and superior reliability.

#### Valuable Expertise

An extensive product offering is accompanied by global sales specialists, customer service and maintenance support teams, available anytime.

#### Solutions to Enhance Ease of Doing Business

Commitment to operational excellence ensures the right products at the right place at the right time. Stearns continues to exceed customer expectations by having an on-time delivery rate of 95% or better.

#### Demonstrated Dedication to Quality

Stearns products are manufactured in the U.S. at our 150,000 sq. ft, ISO 9001:2015 certified facility. Our onsite engineering team and robust testing ensure a quality product every time.

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