

# PRECISION MANUFACTURED SAFETY BRAKES

**Strong, silent and innovative  
technology with field-proven  
performance**

## Spring-Set Safety Brakes

'Normally On' brakes ensure SAFETY for all applications where rotating machines must be stopped quickly when switched off or during a power failure.

Industrial Electromagnetic Spring-Set Safety and Caliper Brakes are designed to meet a variety of demanding applications, including:

- Brake Motors
- Wind Turbines
- Industrial Cranes & Hoists
- Elevators
- Conveyors
- Rubber & Tire Machinery
- Automation Machinery
- Fork Lift Trucks



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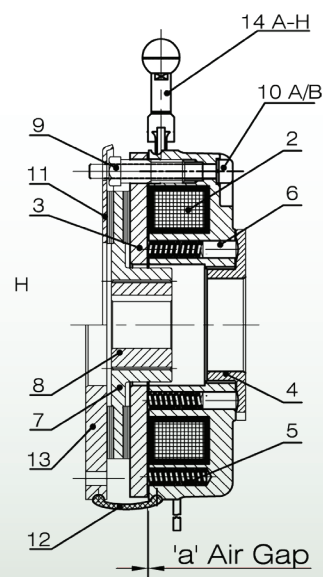
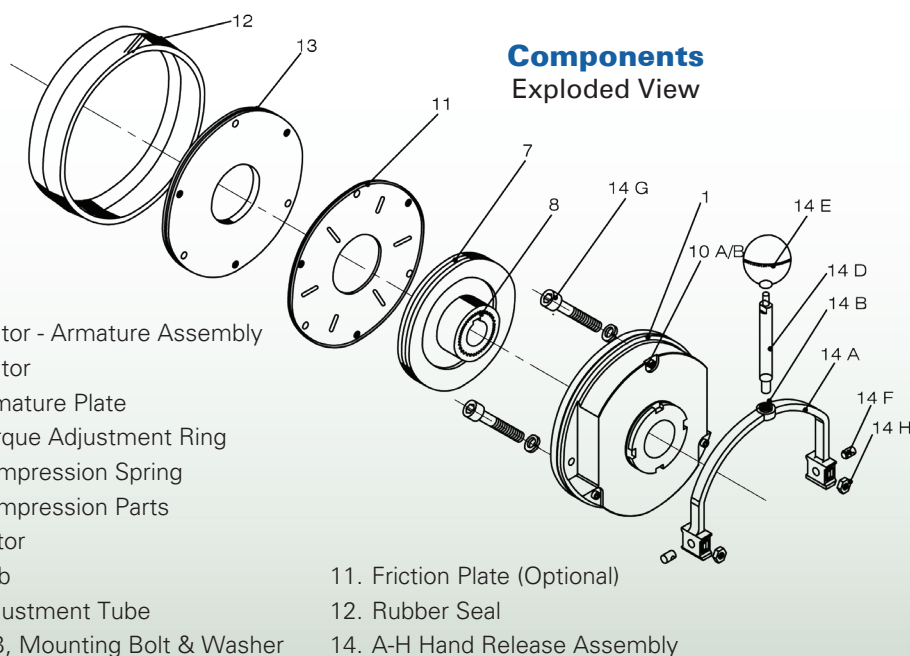
## Type 41.458 'Red' Spring-Set Safety Brakes include:

- 'Normally On' brakes provide safe, quick stopping power, manually or during continuous power failure
- Safe 'DeadmanType' manual release
- Low rotor inertia
- Coil with "F" class insulation#
- Non-asbestos friction lining standard
- Adjustable torque
- Metric and Inch Bores
- Compact size – easy installation
- Encoder mounting provision possible
- Rugged Design
- Rust protection to all metal parts

#Higher coil insulation available.



# Industrial Electromagnetic Spring-Set Safety Brakes



## INDUSTRIAL ELECTROMAGNETIC SPRING-SET SAFETY BRAKE OPERATION

In the "power off" state the compression springs (5) press the armature disc (3) and rotor (7) against attachment surface. Hub (8) is firmly locked on the shaft and rotor slides over the hub.

On applying rated direct current voltage to the stator (2) the magnetic field produced will pull the armature disc (3) over air-gap 'a' towards stator against spring force. This releases the rotor, allowing shaft to rotate.

In the event of continuous power failure, rotor (7) can be freed by pulling the 'deadman type' manual release (14). The hand release goes back automatically to its original position and brake will immediately revert to its safe action.

### Abbreviated Selection Parameters

Size		06	08	10	12	14	16	18	20	25
Torque	M RAT. (Nm)	4	8	16	32	60	80	150	260	400
Max. Speed*	RPM (min-1)	3000	3000	3000	3000	3000	3000	1500	1500	1500
Input Power	P20 [w]	8	10	12	16	20	22	34	40	44
Inertia	J (kg cm2)	0.15	0.61	2.0	4.5	6.3	15	29	73	200

Detailed Selection Parameters are available. Optional higher torque ratings up to 5,000 Nm.

### IMPORTANT :

M rat.: Dynamic Torque at 100 min-1, 1 Nm = 0.102 kgm = 0.737 lb. ft.

### Standard voltages: Type 41.458 (red)

24 V.D.C.; 103 V.D.C.; 205 V.D.C.  
(Other voltages on request.)

\*Maximum Braking Speed    †Values shown for type 458



South Asia



PRECISION • PERFORMANCE • SOLUTIONS

### A DIVISION OF TORQUE TECHNOLOGIES

Spring-Set Brakes • Industrial Electromagnetic Clutches  
Brakes • Clutch-Brake Combinations

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