

# Eaton Airflex® Industrial Clutch and Brake Products

## Selection and Programs Guide



**EATON**  
*Powering Business Worldwide*

**KAIZEN SYSTEMS INTERNATIONAL LLC**  
AUTHORIZED DISTRIBUTOR  
[www.airclutch-kaizen.com](http://www.airclutch-kaizen.com)  
Sales and Support:  
[kaizen@kaizen.com.co](mailto:kaizen@kaizen.com.co)

# Your Choice for Industrial Clutches and Brakes

Providing the highest reliability in harsh duty conditions for the lowest total life cycle cost.

Early interest by Thomas L. Fawick in the use of elastomers to solve industrial problems led to the development of the Fawick® Airflex clutch and the founding, in 1938, of the Fawick Company.

The Airflex clutch is a unique drum type design which transfers torque through the sidewalls of a rubber-and-cord air actuating tube. Besides transmitting torque, the tube serves as a flexible

member between the driving and driven shafts.

Simplicity in design and operation are its other outstanding features.

During the early 1940's, after many applications on tugs and tow boats, the U.S. Navy incorporated the clutch on reversing reduction drives for

various types of military vessels. Thus the Airflex clutch was proven in severe Naval service.

During this same period, installations were made on oil field equipment and metal forming machinery. All of these successful applications generated worldwide interest and resulted in rapid company growth during the '50's and '60's.

In 1968, Eaton® Corporation acquired the Fawick Corporation, as it was then known. Continuous refinements in design and construction of the original Fawick clutch resulted in the current line of Airflex clutches and brakes and the establishment of the Airflex® Division of Eaton Corporation.

As a pioneer in the design, development and use of pneumatic clutches and brakes, the Airflex Division is proud that its products are so extensively used on all types of industrial machinery - from equipment to locate and mine raw materials to machines to produce consumer goods.

For over 80 years, the Airflex Division has been dedicated to solving mechanical power transmission problems. We will continue to do so.

**To learn more about how Airflex products can meet your application requirements, visit [www.eaton.com/airflex](http://www.eaton.com/airflex) or call 1-800-Airflex (247-3539).**

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## Eaton Airflex Clutches and Brakes

### Product Categories

#### Eaton Airflex® Clutch and Brakes

Eaton Airflex products are designed for demanding applications that require high torque and horsepower absorption as well as precise controllability.

##### Constricting Clutches & Brakes:

Drum-style products that when pressurized, expand radially inward forcing their friction shoes against an outer cylindrical drum surface. Use CB for power transmission applications, CM for marine and VC for heavy duty equipment. The new High Energy Ventilated Clutch features metallic friction linings to sustain more torque and extend slip times for improved efficiency and extended driveline component life.



HEVC



CM

Type	Torque Range (lb-in)	Speed Range (RPM)*
Type CB	360 - 520,000	2,000 - 670
Type VC	27,000 - 9,300,000	1,800 - 275
Type CM	132,000 - 613,500	1,030 - 900
Type HEVC	697,000 - 10,220,000	1,100 - 275

\*Speed decreases as torque increases due to increasing inertia

##### Water-Cooled Brakes:

There are 4 Water Cooled brake models: WCB, an air-applied brake, WCS, a spring-applied pressure release brake, WCSB, a water-cooled and air cooled friction discs that are pressure and spring applied.



WCB

WCBD/3



Type	Torque Range (lb-in)	Thermal Capacity (HP)	Max Slip Speed (RPM)*	Max Freewheel Speed (RPM)*
Type WCB2	5,700 - 2,744,000	5200	2,150 - 360	3,400 - 600
Type WCBD/3	5,700 - 2,744,000	5200	2,150 - 360	3,400 - 600
Type WCS	5,600 - 1,030,000	2600	2,150 - 475	3,400 - 700
Type WCSB	161,000 - 2,830,000	3900	715 - 360	1,200 - 600

\*Speed decreases as torque increases due to increasing inertia

##### Air-Cooled Disc Clutches & Brakes:

Featuring favorable torque-to-size ratios and low-inertia friction disc assemblies. The DB and FHB brake types are spring-applied, pressure-released multiple disc units. The DC type is a pressure-applied multiple disc unit that can be used as a clutch or brake.



FHB



DBBS

Type	Torque Range (lb-in)	Speed Range (RPM)*
Type DBA	29,300 - 339,000	2,300 - 900
Type DBB	7,500 - 1,470,000	3,000 - 950
Type DBBS	80,000 - 5,578,000	2,200 - 600
Type FHB	288,000 - 432,900	960 - 950
Type DC	10,000 - 2,240,000	1,600 - 450

\*Speed decreases as torque increases due to increasing inertia



# Eaton Airflex Clutches and Brakes

## Product Categories

KAIZEN SYSTEMS INTERNATIONAL LLC

AUTHORIZED DISTRIBUTOR

[www.airclutch-kaizen.com](http://www.airclutch-kaizen.com)

Sales and Support:

kaizen@kaizen.com.co

### Combination Clutch/Brake Packages:

The FSPA line features an air-applied clutch and either a drum or disc style brake. The CBC and DCB lines feature an air-actuated disc clutch and a spring-applied disc brake.



CBC



DCB

Type	Torque Range (lb-in)	Speed Range (RPM)*
Type CBC	10,900 - 135,000	1,200 - 700
Type DCB	55,000 - 160,000	1,000 - 750
Type FSPA	2,040 - 172,000	1,700 - 320

\*Speed decreases as torque increases due to increasing inertia

### Caliper Disc Brakes:

Engineered with opposed piston designs and symmetrical split construction – maximize flexibility and help balance braking performance. Type DP and Type DPA can both be air or hydraulically actuated.



DP



DPA

Type	Dynamic Force (lb)	Static Force (lb)	Min. Disc Diameter (in)
Type 225 DP	2,540	3,170	10
Type 200 DPA	5,700	6,300	12

### Torque Limiting Couplings:

Designed to withstand the torque spikes found in the most demanding applications of Variable Frequency Drives. Engaged at 0 RPM at a required air pressure and monitored electronic controls. When a system overload is detected the TLC automatically disengages.



TLC

Type	Torque Range (lb-in)	Static Torque (lb-in)	Speed Range (RPM)*
Type TLC	1,610,000 - 4,650,000	2,515,625 - 7,265,625	550 - 275

\*Speed decreases as torque increases due to increasing inertia

### Expanding Clutches & Brakes:

Drum style products that when pressurized, expand radially outward forcing their friction shoes against an inner cylindrical drum surface.



E



VE

Type	Torque Range (lb-in)	Speed Range (RPM)*
Type E	11,300 - 225,000	1,800 - 525
Type EB	390 - 2,220	1,800 - 1,800
Type ER	440 - 3,550	1,800 - 1,800
Type VE	25,500 - 58,500	1,100 - 775

\*Speed decreases as torque increases due to increasing inertia

### Spring Applied Drum Brakes:

Spring-applied and air released. Their design and construction are ideal for moderate speed, high torque, cyclic applications.



CTE



CS

Type	Dynamic Torque Range (lb-in)		Static Torque Range (lb-in)	
	Forward	Reverse	Forward	Reverse
Type CS	3,000 - 27,000	500 - 4,000	2,000 - 18,000	500 - 4,000
Type CSA	6,000 - 18,000	1,500 - 3,000	4,000 - 12,000	1,500 - 3,000
Type CTE	28,800 - 111,200	28,800 - 100,800	21,000 - 98,500	21,000 - 85,500

### Pneumatic Controls – Quick Release Valves (QRV):

Engineered to automatically close upon pressurization and open when a pressure drop occurs – reducing lag time to exhaust the system. Four valve sizes are available.



QRV

Type	Flow Rate (ft³/m)	
	Inlet to Cylinder	Cylinder to Exhaust
QRV	287	376

### Pneumatic Controls – Rotorseals

Allow passage of pressurized fluids from a stationary inlet to a rotating shaft end. Available with single and dual passages.



RH

Type	Max Pressure (PSI)	Max Speed (RPM)*
<b>Single</b>		
Type AA2	1,000	1000
Type B3	1,000	600
Type C2	1,000	400
<b>Dual</b>		
Type AD	150	1200
Type ADP	150	1200
Type BD	150	1200
Type FDA	150	1000

\*Speed at Maximum Torque



Single



Dual

### Electronic Controls – Slip Detection Controls:

Aborts the start if excessive slip is detected. It also detects slippage during operation.



# Eaton Airflex Clutches and Brakes

## Engineering Resources, Replacement Parts Program, Warranty, Literature and Reference Material

### Airflex Direct Support Informations

For price, delivery, product specification and application questions, please call or email Eaton's Airflex Customer Service Team:

**Email:** *(best and preferred method)*  
airflexcustomerservice@eaton.com

**Phone:** (800) 247-3539, press 2

**Website for product support:**  
www.eaton.com/Airflex

### Airflex Replacement Parts Program

When you purchase an Eaton product, you expect a quality solution that will keep your application running at peak performance under the harshest operating conditions. Eaton continuously strives to produce the highest quality product available because that is what customers require.

There are various choices in the market for friction material and other replacement parts, but why risk performance. Genuine Airflex® replacement parts are an exact fit and will ensure your clutch or brake will continue to perform to original specifications for its entire operating life.

To find out more about genuine Airflex® replacement parts, contact your Eaton Airflex representative or an Airflex authorized distributor.

### Airflex Application Engineering Resources

Eaton Airflex product line is used in a wide variety of applications found in almost every industry. To reach the application engineering team, please contact:

**Email:** *(best and preferred method)*  
AirflexAE@Eaton.com

**Phone:** (800) Airflex

**Product information website:**  
www.eaton.com/Airflex

### Two Year Warranty

Eaton Airflex products proudly carry a two year warranty on all components. This leading warranty is a testament to the high quality of Airflex Industrial Clutches and Brakes. Eaton Airflex quality has been proven with over 70 years of field experience, across multiple markets and countless applications.

This warranty serves to provide even further confidence and value in the Airflex brand.

### Literature and Reference Material

#### For more information:

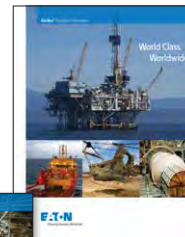
- Go to PowerSource, [www.eatonpowersource.com](http://www.eatonpowersource.com), Products, Clutches and Brakes
- Online at [www.eaton.com/airflex](http://www.eaton.com/airflex)
- Eaton Literature Library:  
[www.eaton.com/Eaton/ProductsServices/ProductsbyName/Airflex/LiteratureLibrary/index.htm](http://www.eaton.com/Eaton/ProductsServices/ProductsbyName/Airflex/LiteratureLibrary/index.htm)
  - Catalog
  - Application Selection Charts
  - Application Selection Data Forms
  - Maintenance Manuals
  - Technical Information
- For the catalog of the complete line of products: Airflex® Clutches and Brakes, Doc #10M1297GP



Airflex clutches and brakes



Product specific documents



Airflex products overview



Installation, operation and maintenance guides

# Eaton Airflex Clutches and Brakes

## Product Nomenclature

Eaton's Airflex® clutches embody the principles of classic design: superior performance, long life and high quality. For over 80 years, we've been providing superior drivetrain products by continuously adapting and innovating our products to meet industry requirements. With global operations—including manufacturing,

sales and distribution—spanning multiple continents worldwide, our dedicated team can help you select or develop customized solutions for your individual needs.

### Product Sizing Interpretation

#### Constricting

**Type CB, Type CM, Type VC**

These elements are identified by the drum diameter in inches on which they constrict and the width in inches of their friction lining. For instance, a size 26CM475 is designed to constrict on a 26 inch diameter drum and has a friction lining width of 4.75 inches.



#### Expanding

**Type E, Type EB, Type ER, Type VE**

These elements are identified by the inside drum diameter in inches to which they expand and the width in inches of their friction lining. For instance, a size 16E475 is designed to expand to a 16 inch diameter drum and has a friction lining width of 4.75 inches.



#### Air Cooled

**Type DBA, Type DBB, Type DBBS, Type DC**

These elements' brake sizes are indicated by the number of brake/friction discs and the disc diameter in inches. For instance, a size 229DBA has two discs 29 inches in diameter.



#### Spring Applied

**Type CS, Type CSA, Type CTE**

For these elements, sizes are identified by the outside drum diameter in inches on which the brake works and the width in inches of their friction lining. For instance, a size 9CSA200 is designed to operate on a 9 inch diameter drum and has a friction lining width of 2 inches.



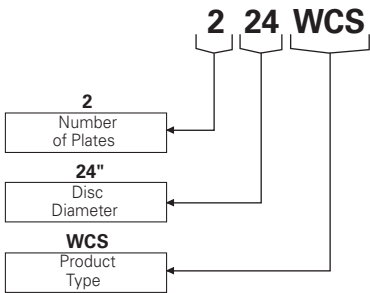
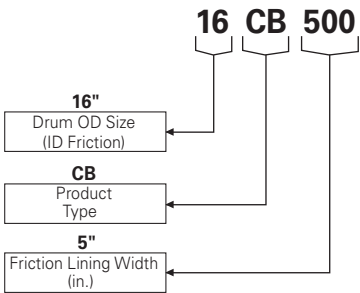
#### Water Cooled

**Type WCB2/WCBD, Type WCS, Type WCSB**

For these elements, sizes are indicated by the number of friction discs and the disc diameter in inches. For instance, size 224WCB has two friction discs 24 inches in diameter.



### Product Nomenclature



# Market Application

		Drum Product										Caliper
		Constricting			Expanding				Coupling	Spring Applied		
Market	Application	CB	VC	CM	E	EB	ER	VE	TLC	CS	CTE	DP
Oil/Gas/Water Drilling Systems	Cat Head	•										
	Compound	•	•									
	Drawworks	•	•									•
	Offshore Pipe Laying				•			•				
	Mooring Systems		•									
	Power Take Off	•	•									
	Pumps	•	•									
	Rotary Table	•	•		•							•
	Sand Reel	•	•									
	Top Drive		•									•
Mining & Cement	Conveyors	•	•									
	Crushers	•	•									
	Dragline	•	•									
	Grinding Mills		•						•			
	Shovels	•	•									
Marine	Anchor Winch / Windlass											
	Bow Thruster	•	•	•								
	Dredges	•	•						•			
	Generator	•	•	•								
	Main Propulsion	•	•	•					•			
	Pipe Laying Equipment	•			•			•				
	Power Take Off	•	•	•								
	Propeller Shaft Brake		•									
	Pumps	•	•									
Can Making	Bodymaker	•	•							•	•	
	Copper	•	•							•	•	
Pulp & Paper	Calendar	•	•									
	Converters											•
	Conveyors	•	•									•
	Couch	•					•					
	Dryer	•	•									
	Presses	•	•									
	Pulpers	•	•									
	Reel	•	•									
	Rewind Stand				•			•				
	Slitters	•										
	Unwind Stand				•			•				•
	Yankee Dryer	•	•									
Metalworking	Alligator Shears	•	•							•		
	Car Shredders	•	•	•								
	Coining Press	•								•	•	
	Draw Benches		•									
	Expanders	•	•								•	
	Flywheel Brakes											•
	Forging Presses	•	•							•	•	
	Headers/Upsetters	•	•							•	•	
	Machine Tools	•	•									
	Multi-Slide	•								•		
	Powder Metal Presses	•								•	•	
	Press Brakes	•	•							•	•	
	Rebar Shear	•								•	•	
	Rewind Stands				•	•	•	•				
	Roll Forming	•	•									
	Roller Leveler	•								•	•	
	Shears	•	•							•	•	
	Slitters	•	•									
	Spring Coiling											
	Stamping, Punching, Forming	•	•							•	•	
	Unwind Stands				•	•		•				•
	Wire Cage	•										
Dynamometer	Absorber											•
	Holding Brake	•	•									•
Engines	Generator Set	•	•									
	Power Take Off	•	•									
Logging	Skidders											•
	Yarders				•			•				

Market	Application	Disc Product						Combination Product			Controls		
		Water-Cooled			Air-Cooled								
		WCB	WCS	WCSB	DB	DC	FHB	CBC	DCB	FSPA	R/S	QRV	Panel
Oil/Gas/Water Drilling Systems	Cat Head										•	•	
	Compound										•	•	
	Drawworks	•	•	•							•	•	
	Offshore Pipe Laying	•	•	•							•	•	
	Mooring Systems	•	•	•	•						•	•	
	Power Take Off										•	•	
	Pumps										•	•	
	Rotary Table										•	•	
	Sand Reel	•	•	•							•	•	
	Top Drive										•	•	
Mining & Cement	Conveyors	•	•	•	•	•					•	•	
	Crushers										•	•	
	Dragline				•		•				•	•	
	Grinding Mills										•	•	•
	Shovels				•						•	•	
Marine	Anchor Winch / Windlass	•	•	•	•								
	Bow Thruster										•	•	
	Dredges	•	•	•							•	•	
	Generator										•	•	
	Main Propulsion										•	•	
	Pipe Laying Equipment	•	•	•							•	•	
	Power Take Off										•	•	
	Propeller Shaft Brake										•	•	
	Pumps										•	•	
Can Making	Bodymaker				•			•	•	•	•	•	
	Copper				•			•	•	•	•	•	
Pulp & Paper	Calendar										•	•	
	Converters	•	•	•									
	Conveyors	•	•	•	•	•					•	•	
	Couch										•	•	
	Dryer										•	•	
	Presses										•	•	
	Pulpers										•	•	
	Reel										•	•	
	Rewind Stand	•	•	•									
	Slitters										•	•	
	Unwind Stand	•	•	•	•								
	Yankee Dryer										•	•	
Metalworking	Alligator Shears				•	•		•		•	•	•	
	Car Shredders										•	•	
	Coining Press								•	•	•	•	
	Draw Benches				•								
	Expanders									•	•	•	
	Flywheel Brakes												
	Forging Presses				•	•		•	•	•	•	•	
	Headers/Upsetters				•	•		•	•	•	•	•	
	Machine Tools										•	•	
	Multi-Slide							•		•	•	•	
	Powder Metal Presses							•		•	•	•	
	Press Brakes				•	•		•	•	•	•	•	
	Rebar Shear				•	•		•		•	•	•	
	Rewind Stands	•	•	•									
	Roll Forming										•	•	
	Roller Leveler	•	•	•							•	•	
	Shears				•	•	•	•	•	•	•	•	
	Slitters	•	•	•							•	•	
	Spring Coiling							•		•			
	Stamping, Punching, Forming				•	•		•	•	•	•	•	
	Unwind Stands	•	•	•									
	Wire Cage										•	•	
Dynamometer	Absorber	•	•	•									
	Holding Brake										•		
Engines	Generator Set												
	Power Take Off												
Logging	Skidders				•								
	Yarders	•	•	•									



# Eaton Airflex Clutches and Brakes

## Market Application

### GAS, OIL, WATER & WELL DRILLING

#### Markets

Drawworks  
Offshore Pipe Laying  
Mooring Systems  
Power Take Off  
Rotary Table  
Sand Reel  
Top Drive  
Winch Systems

#### Airflex Product

Constricting Drum: CB, VC  
Air Cooled, Disc: DB  
Water Cooled, Disc: WC  
Expanding Drum: E, VE  
Caliper: DP



#### CB VC



**Drawworks:** Designed and built to provide dependable clutch or brake service in the most severe industrial applications. The CB is best suited to high speed, cyclic operations, as well as for coupling and general power transmission. The VC is best suited for applications where large inertia loads and sustained slippage would normally result in loss of torque and reduced operating life.

#### DBB/DBBS



**Drawworks / Winch Systems:** Spring applied, pressure released, disc style brakes designed with high torque and thermal capacities allowing the brakes to be used in the most demanding applications. These brakes provide high braking capability with low inertia with variable torque ratings based on the numbers of springs used in the assembly. Typically used as a "fail safe" braking (parking & e-stop).

#### WCSB



**Drawworks:** Designed for direct mounting and to used as the sole brake (only mechanical brake). The water cooled portion of the brake offers energy absorption (HP) capacity, while the spring set function accommodates "fail safe" braking (for parking & estop).

#### E VE



**Winch Systems:** Designed to be rigid and rugged, making these elements ideal for moderate to heavy duty clutch and brake service. Best suited for medium speed cyclic applications which are subject to large thermal loads. When used with an air agitating ventilated drum, these elements can provide excellent slip clutch and tension brake service.

### MINING & CEMENT

#### Markets

Conveyors  
Crushers  
Dragline  
Grinding Mills  
Shovels

#### Airflex Product

Constricting Drum: CB, VC  
Air Cooled, Disc: DB  
Water Cooled, Disc: WCB  
Coupling: TLC



#### CB VC



**Crushers:** Designed and built to provide dependable clutch or brake service in the most severe industrial applications. The CB is best suited to high speed, cyclic operations, as well as for coupling and general power transmission. The VC is best suited for applications where large inertia loads and sustained slippage would normally result in loss of torque and reduced operating life.

#### DBB/DBBS



**Shovels:** Spring applied, pressure released, disc style brakes designed with high torque and thermal capacities allowing the brakes to be used in the most demanding applications. These brakes provide high braking capability with low inertia with variable torque ratings based on the numbers of springs used in the assembly. Typically used as a "fail safe" braking (parking & estop).

#### TLC



**Grinding Mill:** Engages at startup, and monitors the system using slip detection control. When a system overload is detected, the TLC disengages automatically, avoiding damage to driveline components. Resetting the system is instantaneous by simply reapplying the required air pressure to the system. This simple design delivers long-term durability and can be used as a mechanical disconnect between the motor and pinion.

#### FHB



**Dragline:** The FHB is an air-cooled spring applied brake with exceptional friction life and the capability to quickly make friction changes. It is supplied with long wearing, organic friction material and a rugged solid cast, rotating disc that provides lower inertia than typical caliper brakes.



# Eaton Airflex Clutches and Brakes

## Market Application

### MARINE

#### Markets

Anchor Winch  
Bow Thruster  
Dredges  
Generator  
Main Propulsion  
Pipe Laying Equipment  
Propeller Shaft Brake

#### Airflex Product

Constricting Drum: CB, VC, CM  
Air Cooled, Disc: DB  
Water Cooled, Disc: WC  
Expanding Drum: E, VE  
Coupling: TLC



#### CB VC



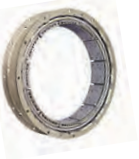
**Rudder Propeller:** Used to improve vessel maneuverability by stopping the propeller shaft as fast as possible, to prevent engine stalling during hard reversing maneuvers and to reduce the thermal load on the reversing clutch.

#### DBB/DBBS



**Pipe Laying Equipment:** Spring applied, pressure released, disc style brakes designed with high torque and thermal capacities allowing the brakes to be used in the most demanding applications. These brakes provide high braking capability with low inertia with variable torque ratings based on the numbers of springs used in the assembly. Typically used as a "fail safe" braking (parking & e-stop).

#### CM



**Main Propulsion:** Specifically engineered for the marine industry on diesel-driven, reverse-reduction gears. They feature ventilated friction shoes to permit clutch slippage at low-energy rates during vessel maneuvering, as well as at high-energy rates for cycling engagements.

#### WCB WCS



**Anchor Winch / Windlass:** WCB elements are disc type, externally cooled units designed to absorb and dissipate the thermal loads associated with the most severe clutch and brake applications. The WCB friction couple was developed specifically for continuous slip service and has a dynamic coefficient of friction that is greater than its static coefficient of friction.

### CAN MAKING

#### Markets

Bodymaker  
Copper

#### Airflex Product

Combination: DCB  
Constricting Drum: CB



#### DCB



**Body Maker / Copper:** Specifically designed for the can making industry to withstand the cyclic impact loads associated with high speed can extruding machinery. It's ideally suited for high speed continuously running machinery. A patented quick release air manifold provides fast clutch/ brake response; stopping the ram to prevent die damage due to material misfeed.

#### CB



**Body Maker / Copper:** Designed and built to provide dependable clutch or brake service in the most severe industrial applications. The CB is best suited to high speed, cyclic operations, as well as for coupling and general power transmission.

# Eaton Airflex Clutches and Brakes

## Market Application

### PULP & PAPER

#### Markets

Calendar  
Converters  
Couch  
Dryer  
Presses  
Pulpers  
Rewind Stand  
Slitters

#### Airflex Product

Constricting Drum: CB, VC  
Caliper: DP  
Air Cooled, Disc: DB  
Water Cooled, Disc: WC  
Expanding Drum: E, ER, VE, PCB



#### CB VC



**Calendar:** Designed and built to provide dependable clutch or brake service in the most severe industrial applications. The CB is best suited to high speed, cyclic operations, as well as for coupling and general power transmission. The VC is best suited for applications where large inertia loads and sustained slippage would normally result in loss of torque and reduced operating life.

#### DBB/DBBS



**Conveyors:** Spring applied, pressure released, disc style brakes designed with high torque and thermal capacities allowing the brakes to be used in the most demanding applications. These brakes provide high braking capability with low inertia with variable torque ratings based on the numbers of springs used in the assembly. Typically used as a "fail safe" braking (parking & e-stop).

#### WC WCB



**Rewind, Unwind Stand:** To maintain a constant tension or pull on the material. Improper tensioning during winding results in roll dishing or telescoping. Improper tensioning during unwinding can cause flutter, affecting the reprocessing operation. Material tension can be controlled electrically, hydraulically or mechanically.

#### VE



**Couch:** For heavy-duty clutch and brake service, large thermal load capacity is key. Eaton Airflex VE expanding-type elements not only offer all of the same characteristics as other Type E units, but also feature a special heat-dissipating design that excels in medium-speed cyclic applications like construction equipment, marine winches, metalworking and more.

### METALWORKING

#### Markets

Alligator Shear  
Car Shredders  
Flywheel Brakes  
Forging Presses  
Machine Tools  
Roll Forming  
Spring Coiling  
Stamping, Punching

#### Airflex Product

Caliper: DP  
Combination: CBC, CTE, FSPA  
Spring Applied: CS, CTE  
Air Cooled, Disc: DB, DC  
Constricting Drum: CB, CM, VC  
Expanding Drum: E, EB, ER, PCB, VE  
Water Cooled, Disc: WC



#### CBC



**Flywheel Brake:** CBC brakes provide the perfect combination of performance and flexibility to meet the requirements of a variety of high-speed, high-cyclic applications. Featuring an air-actuated disc clutch and spring-applied disc brake, these units are readily adapted for automatic punching machines, press brakes, printing machines, shears, stamping and forming presses, woodworking machines and much more.

#### CS CTE



**Stamping and Punching:** CS and CTE brakes automatically engage in the event of an air or electrical power loss making it suitable for conveyors, draglines, hoists, power shovels and stamping presses. CS brakes are unidirectional that develop less torque in the reverse direction of the drum rotation. CTE delivers greater torque than the CS brake and is bidirectional providing the same torque in either direction.

#### CB



**Forging Press:** Designed and built to provide dependable clutch or brake service in the most severe industrial applications. The CB is best suited to high speed, cyclic operations, as well as for coupling and general power transmission.

#### EB ER



**Rewind, Unwind Stand:** EB elements are suited to slow speed applications having moderate starting and stopping loads. They are used as slip clutches and tension brakes for lighter torque and horsepower applications. ER elements are used as shaft couplings or holding brakes where engagement occurs at zero speed differential between element and drum. Ideal for applications in which a disconnect is required without stopping the prime mover.





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