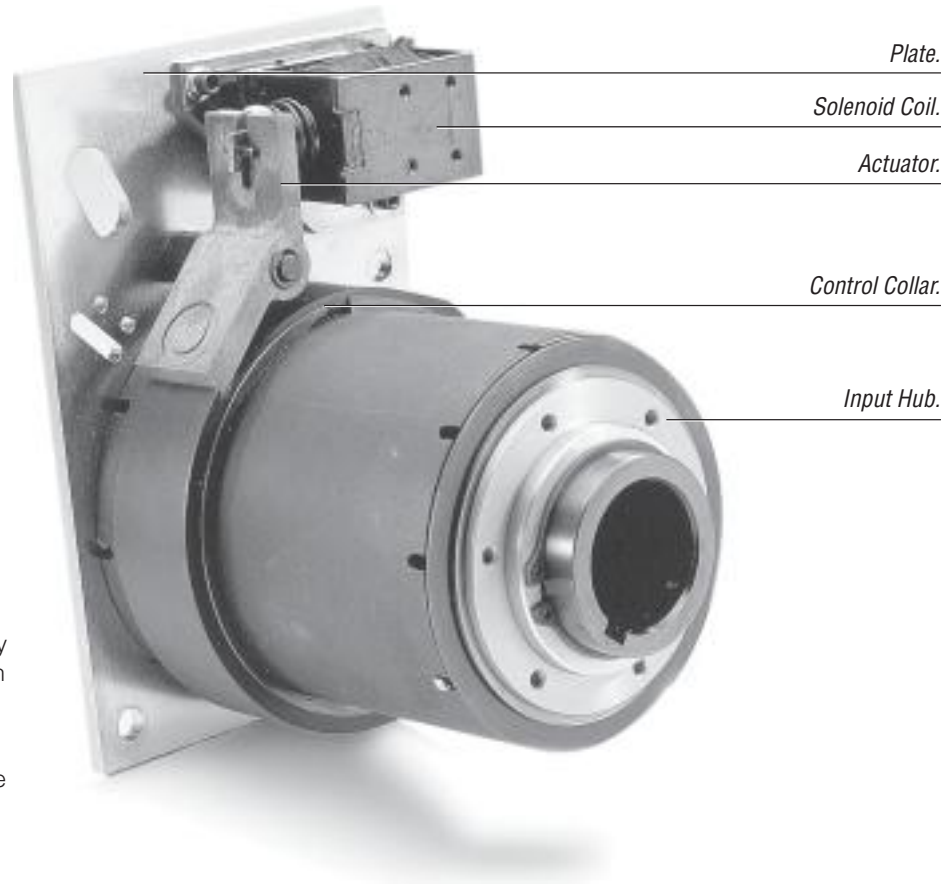


## Standard CB Series Clutch/Brake Packages

### Solenoid Activated Combination Clutch/Brake Units

CB Series combination clutches and brakes accurately start and stop loads driven by a continuously rotating power source. CB units operate from a single AC or DC pulse, stopping the load within  $\pm 1/2^\circ$  noncumulative at speeds up to 1800 RPM depending on size. Each unit is pre-engineered and pre-assembled for easy installation.



#### Features

- Available in 7 sizes
- Adjustable control collars for easy and accurate output stop position setting
- Load over-travel or back-up is eliminated since CB units lock the load in both directions when the solenoid is off
- Cost-effective design
- Split cam design, Models CB-5, CB-6, CB-7, CB-8
- Anti-overflow feature prevents the output from running faster than the input
- Permanently lubricated, never need adjustment for wear
- Bring loads up to speed in 3 milliseconds and stop within 1.5 milliseconds
- Easy interface to PCs and other controls including Deltran PT Photoscanner photoelectrics
- Single, 2 and 4 stop collar standard. Multi-stop collars with up to 24 stops available as specials
- AC or DC operated
- See pages 63 and 64 for controls and power supplies.

#### Typical Applications

- Riveters
- Punch presses
- Packaging equipment
- Conveyor drives
- Heavy duty machinery
- Rapid cycling equipment

Specifications [mm]	CB-2	CB-4	CB-5	CB-6	CB-7	CB-8	CB-10
Static Torque	25 lb.in. (2.825 N-m)	120 lb.in. (13.56 N-m)	250 lb.in. (28.25 N-m)	500 lb.in. (56.5 N-m)	1,500 lb.in. (169.5 N-m)	2,500 lb.in. (282.5 N-m)	5,000 lb.in. (565 N-m)
Maximum anti-overrun holding capability	10 lb.in. (1.13 N-m)	25 lb.in. (2.825 N-m)	45 lb.in. (5.085 N-m)	300 lb.in. (33.9 N-m)	600 lb.in. (67.8 N-m)	600 lb.in. (67.8 N-m)	1,200 lb.in. (135.6 N-m)
Maximum anti-back holding capability	18 lb.in. (2.034 N-m)	80 lb.in. (9.04 N-m)	160 lb.in. (18.08 N-m)	300 lb.in. (33.9 N-m)	600 lb.in. (67.8 N-m)	600 lb.in. (67.8 N-m)	1,200 lb.in. (135.6 N-m)
Inertia, rotating parts	.0207 lb.in. <sup>2</sup>	.0636 lb.in. <sup>2</sup>	.1950 lb.in. <sup>2</sup>	1.718 lb.in. <sup>2</sup>	6.75 lb.in. <sup>2</sup>	12.84 lb.in. <sup>2</sup>	48.0 lb.in. <sup>2</sup>
Maximum radial bearing load at maximum speed	7.5 lbs.	14 lbs.	32 lbs.	63 lbs.	300 lbs.	300 lbs.	500 lbs.
Maximum operating speed	1,800 RPM	1,200 RPM	750 RPM	500 RPM	400 RPM	300 RPM	200 RPM
Response time, voltage on at full speed	20 MS	24 MS	27 MS	45 MS	50 MS	50 MS	70 MS
Weight	1 lb.	2 lbs.	3 lbs.	7 lbs.	12 lbs.	15 lbs.	27 lbs.

See page 84 for Minimum Inertia Requirements.  
See page 87 for Mounting Instructions.

### RPM vs. Shaft Diameter

Size	Max. RPM	Shaft Diameter	
		Std. in. (mm)	Special in. (mm)*
CB-2	1,800	¼" (6.35)	—
CB-4	1,200	⅜" (9.525)	—
CB-5	750	½" (12.70)	—
CB-6	500	¾" or 1" (19.05 or 25.40)	—
CB-7	400	1", 1¼" or 1½" (25.4, 31.75, 38.1)	¾" (19.05)
CB-8	300	1¼" or 1½" (31.75 or 38.1)	1" or 1⅜" (25.4, or 34.925)
CB-10	200	1½" (38.1)	1⅝" or 1¾" (41.275 or 44.45)

\* Consult Factory

### Dust Covers (Optional)

Easily installed enclosures protect clutch/brake units from dirt, contaminants and moisture. Helps to assure longer life. See page 60.



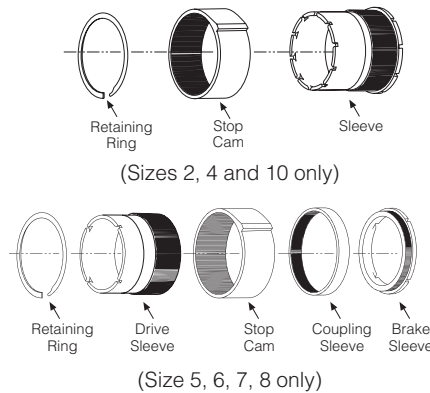
**Plastic**  
(in all model sizes)



**Aluminum**  
(Size 6 only)

Pneumatic Actuation Available  
CB-4, CB-5, CB-6, CB-7, CB-8 and  
CB-10 clutches.

### Control Collars



CB-5, 6, 7 and 8 model clutch/brakes offer unique splined stop collars which can be adjusted radially in fine increments. This feature allows the user to reposition the output to comply with specified shaft and keyway placements. Standard stop collar positioning increments are shown below for all models:

- CB-2 2.8° Adjustable
- CB-4 2.4° Adjustable
- CB-5 1.8° Adjustable
- CB-6 1.8° Adjustable
- CB-7 1.6° Adjustable
- CB-8 1.6° Adjustable
- CB-10 1.5° Adjustable

### How to Order

CB	-6	CW	24DC	¾"	2
1	2	3	4	5	6

Specify:

- Series CB  
Imperial  
Metric
  - Size: CB-2, CB-4, CB-5, CB-6, CB-7, CB-8, CB-10
  - Direction of rotation:  
CW Clockwise  
CCW Counterclockwise
  - Coil voltage:  
115 AC or 24 DC are standard  
12 DC or 90 DC are modifications
  - Bore size:  
CB-2 = ¼"  
CB-4 = ⅜"  
CB-5 = ½"  
CB-6 = ¾" or 1"  
CB-7 = 1", 1¼" or 1½" standard  
¾" special order  
CB-8 = 1¼" or 1½" standard  
1" or 1⅜" special order  
CB-10 = 1½" standard  
1⅝" or 1¾" special order
  - Stop collar:  
1, 2 or 4 stops standard  
Other stop collars are special
- Example:** CB-6, CW, 24DC, ¾" bore, 2 stop collar.

### Optional Multiple Stop Collars



A one, two or four stop collar is standard on CB Series clutch/brakes.

A variety of stop collar configurations, up to 24 stops maximum, are available. Consult factory for complete information.