

SCB Short Series

Wrap Spring Clutch/Brake Package

The SCB (Short CB) Series features three models of pre-assembled, solenoid actuated, wrap spring clutch/brake packages. SCB units operate identically to CB and Super CB units, but are designed with axial space constraint in mind. SCB units have lower braking torque as compared with CB units.

- Brings loads up to speed in 3 milliseconds
- AC or DC operated
- Permanently lubricated
- Heavy-duty industrial grade coils
- High cycle rate capability
- High torque to size ratio



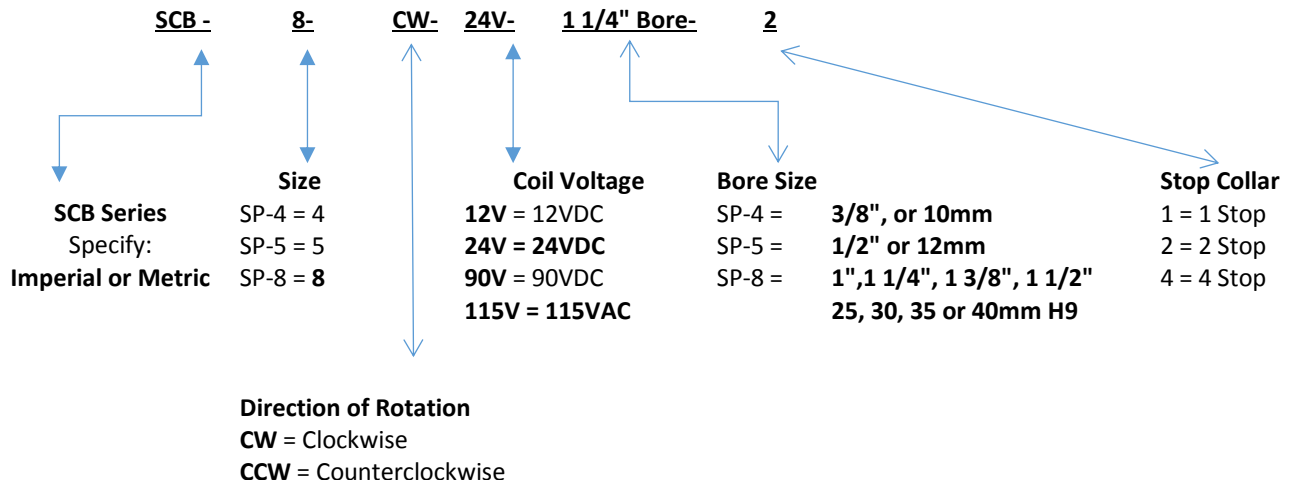
Features:

- Available in 3 sizes, (4, 5, and 8)
- Adjustable control collars for easy and accurate output stop position
- ROHS compliant

Typical Applications:

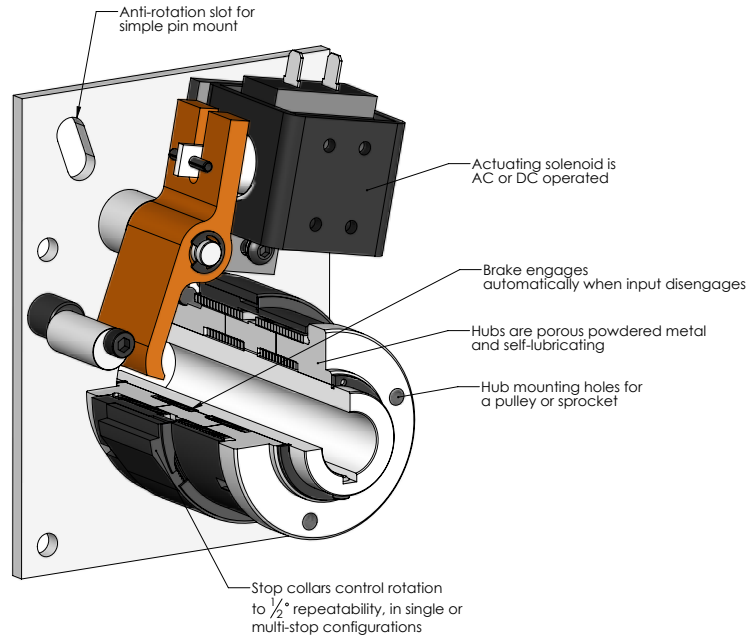
- Riveters
- Punch Presses
- Packaging equipment
- Conveyor Drives
- Heavy Duty machinery

How to order:



SCB Short Series

Solenoid Operated Clutch/Brake Package

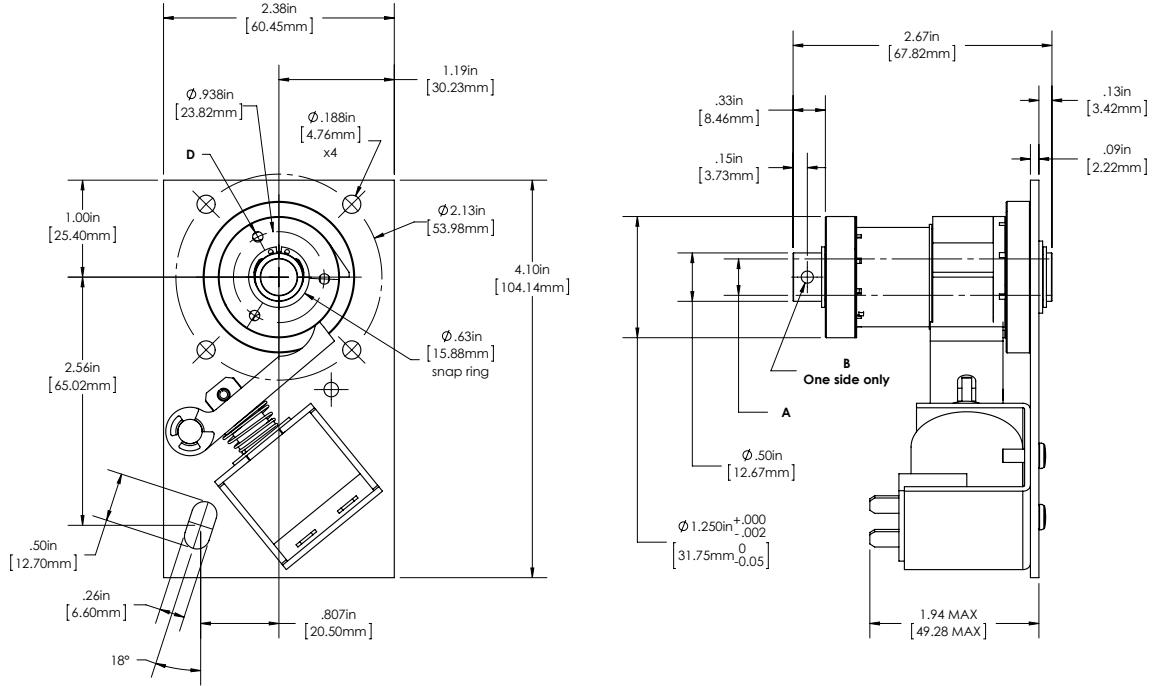


CB SHORT PERFORMANCE			
	Short CB-4	Short CB-5	Short CB-8
Static Torque	120 lb-in (13.56Nm)	250 lb-in (28.25Nm)	1500 lb-in (169.5Nm)
Maxium anti-overrun holding capability	25 lb-in (2.825Nm)	45 lb-in (5.085Nm)	600 lb-in (67.8Nm)
Maxium anti-back holding capability	25 lb-in (2.825Nm)	45 lb-in (5.985Nm)	600 lb-in (67.8Nm)
Inertia, rotating parts	.0636 lb-in ²	0.195 lb-in ²	6.75 lb-in ²
Maxium radial bearing load at maxium speed	14 lbs.	32 lbs.	300 lbs.
Maxium operating speed	1,200 RPM	750 RPM	400 RPM
Response time, voltage on at full speed	24 ms	27 ms	50 ms
Weight	2 lbs.	3 lbs.	12 lbs.

RPM vs. SHAFT BORE			
Size	Max RPM	Shaft Bores, English	Shaft Bores, Metric
Short CB-4	1,200	3/8" (9.525mm)	10mm (.394")
Short CB-5	750	1/2" (12.7mm)	12mm (0.427")
Short CB-8	300	1" (25.4mm) 1 1/4" (31.75mm) 1 3/8 (34.9mm) 1 1/2" (38.1mm)	35mm (1.38") 40mm (1.58")

SCB-4 Clutch/Brake Package

Dimensions and Specifications



PERFORMANCE	
Static Torque	120 lb-in (13.56Nm)
Maxium anti-overrun holding capability	25 lb-in (2.825Nm)
Maxium anti-back holding capability	25 lb-in (2.825Nm)
Inertia, rotating parts	.0636 lb-in ²
Maxium radial bearing load at max speed	14 lbs.
Maxium operating speed	1,200 RPM
Response time, voltage on at full speed	24 ms
Weight	2 lbs.

Electrical Data		
Voltage	Current (Amps)	Resistance (Ohms)
115 AC 60Hz	0.103*	280.0
24 DC	0.325	74.0
12 DC	0.732	16.4
90 DC	0.096	936.0

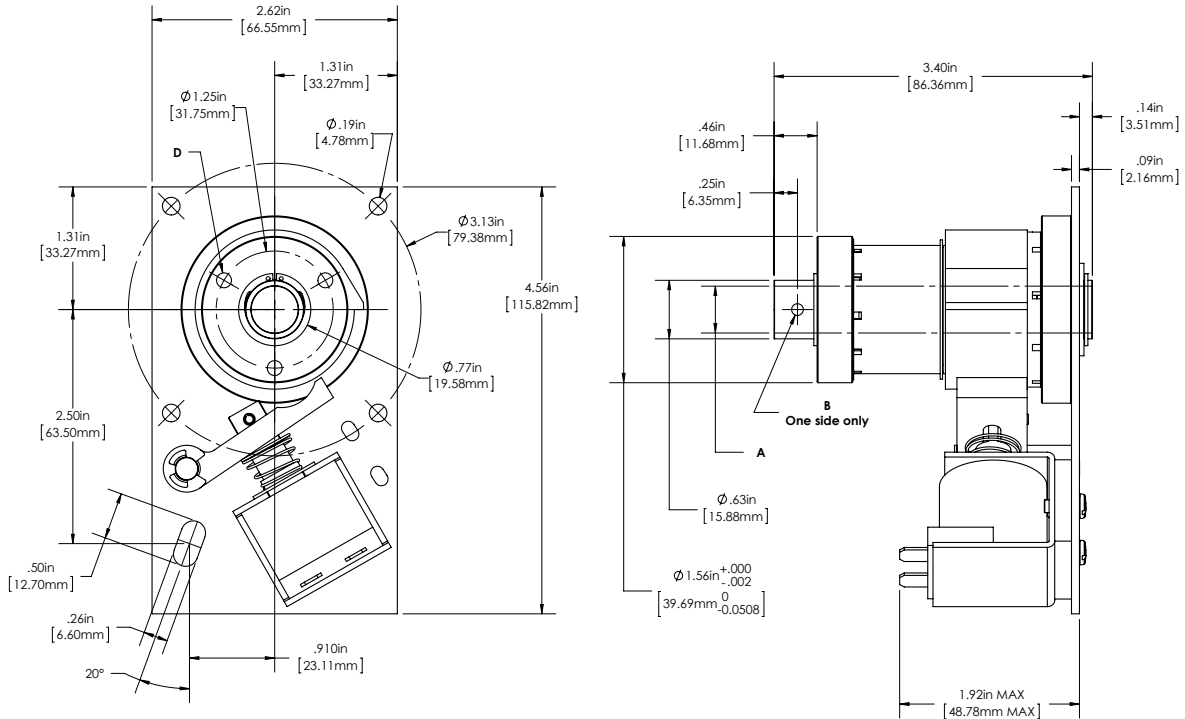
(Coils are rated for continuous duty)

*115AC - In rush current .232 amps/Holding current .098 amps

Bore & Keyway Data		
Bore A	Pin Hole B	Mounting Holes D
0.376-0.378 (9.55-9.61)	0.124-0.129 (3.14-3.28)	3 x #6-32 UNC-2B on 0.938 b.c.
Metric Bores		
10.0 H9 (0.3937-0.3951)	2.97-3.08 (0.117-0.121)	3x M4 x 0.7 on 23.83 bc

SCB-5 Clutch/Brake Package

Dimensions and Specifications



PERFORMANCE	
Static Torque	250 lb-in (28.25Nm)
Maxium anti-overrun holding capability	45 lb-in (5.085Nm)
Maxium anti-back holding capability	45 lb-in (5.085Nm)
Inertia, rotating parts	0.195 lb-in ²
Maxium radial bearing load at max speed	32 lbs.
Maxium operating speed	750 RPM
Response time, voltage on at full speed	27 ms
Weight	3 lbs.

Electrical Data		
Voltage	Current (Amps)	Resistance (Ohms)
115 AC 60Hz	0.103*	280.0
24 DC	0.325	74.0
12 DC	0.732	16.4
90 DC	0.096	936.0

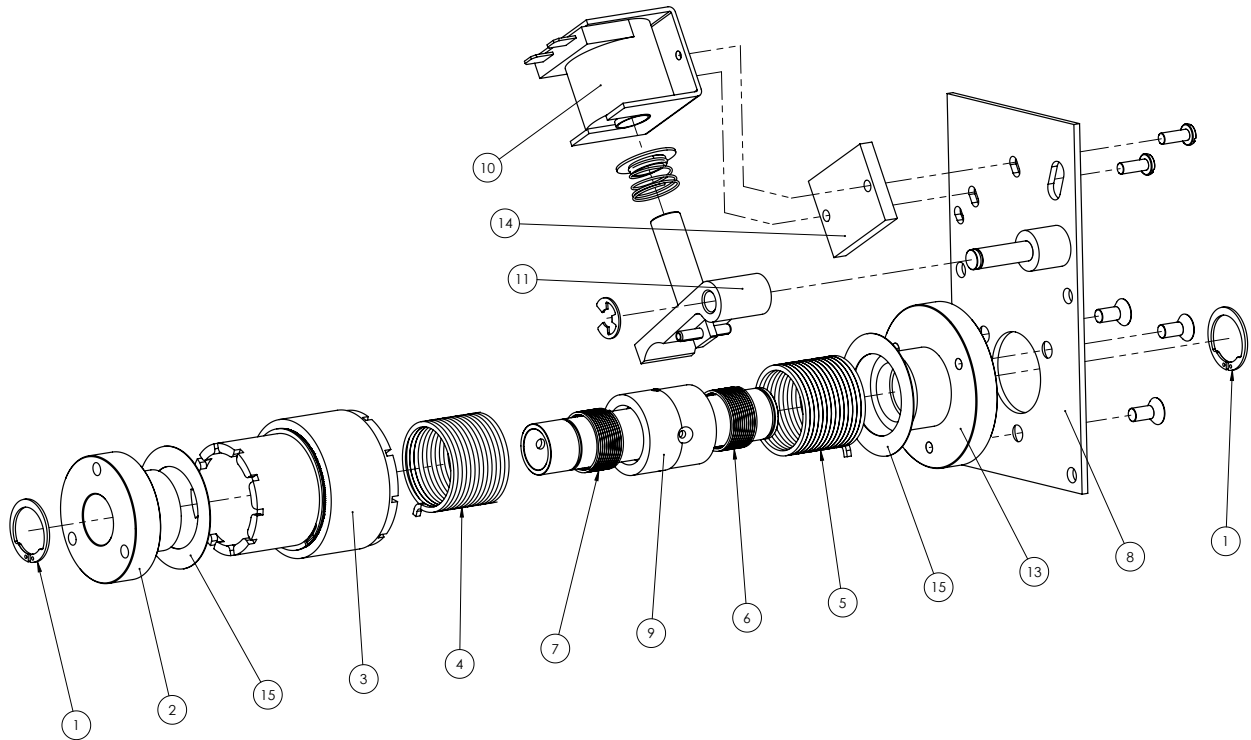
(Coils are rated for continuous duty)

*115AC - In rush current .232 amps/Holding current .098 amps

Bore & Keyway Data		
Bore A	Pin Hole B	Mounting Hole D
0.5005-0.5025 (12.712-12.764)	0.124-0.129 (3.14-3.28)	3 x #10-32 UNF-2B on 1.25 b.c.
Metric Bores		
12.0 H9 (0.4724-0.4741)	2.97-3.08 (0.117-0.121)	3x M5 x 0.8 on 31.75 bc

SCB-5 Clutch/Brake Package

Component Parts

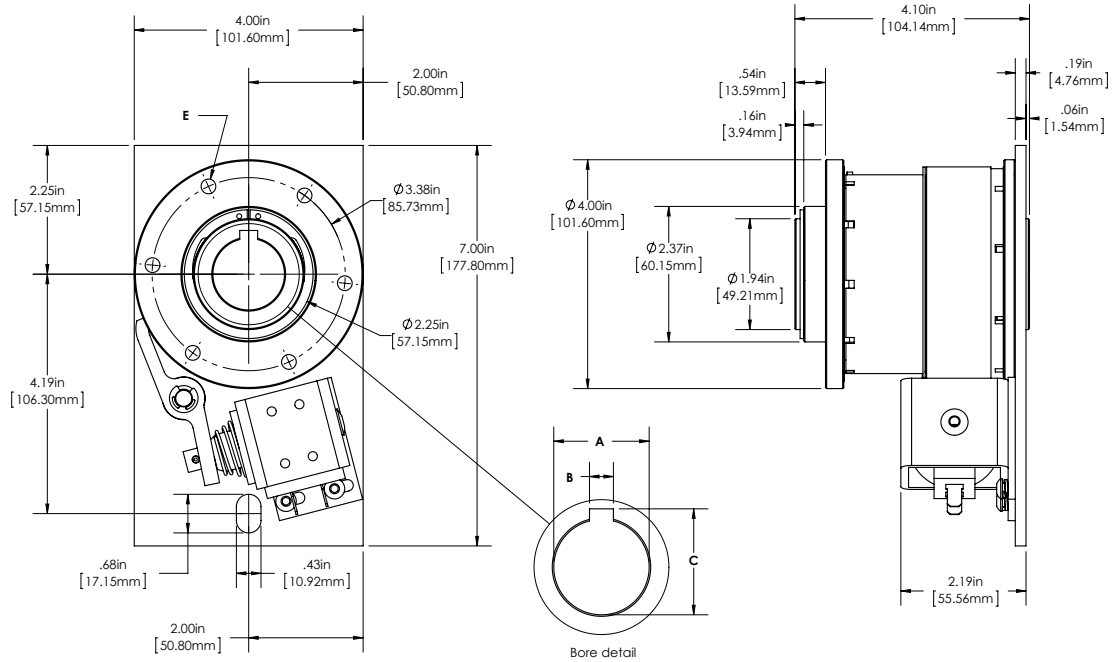


SCB-5 Short Component Parts			
Item	Description	Rotation	Part Number
1	Retaining Ring		03050-65000
2	Input Hub		03050-21000
	Input Hub Metric		13050-21000
3	Control Collar Assy 1-stop (specify stops last digit)	CW	03051-06061
		CCW	03052-06061
4	Drive Spring	CW	03051-31000
		CCW	03052-31000
5	Brake spring	CW	03051-32000
		CCW	03052-32000
6	Anti-back Spring	CW	03051-33000
		CCW	03052-33000
7	Anti-override Spring	CW	03051-34000
		CCW	03052-34000
8	Mounting Plate Assy	CW	03051-03000
		CCW	03052-03000
9	Output Shaft Assy 1/2" bore 12.0 H9 bore		06050-04205
			26050-04242

SCB-5 Short Component Parts			
Item	Description	Rotation	Part Number
10	Coil only		
	115V AC cont		03050-94121
	24V DC cont		03050-94122
	12V DC cont		03050-94123
	24V DC pulse		03050-94126
11	Actuator Lever w/ plunger		03050-12000
13	Brake Hub		06050-22000
14	Coil mount plate		03050-97000
15	Sleeve shim set (2)		03050-66000

SCB-8 Clutch/Brake Package

Dimensions and Specifications



PERFORMANCE	
Static Torque	1500 lb-in (169.5Nm)
Maxium anti-overnun holding capability	600 lb-in (67.8Nm)
Maxium anti-back holding capability	600 lb-in (67.8Nm)
Inertia, rotating parts	6.75 lb-in ²
Maxium radial bearing load at max speed	300 lbs.
Maxium operating speed	400 RPM
Response time, voltage on at full speed	50 ms
Weight	12 lbs.

Electrical Data		
Voltage	Current (Amps)	Resistance (Ohms)
115 AC 60Hz	0.334*	57.5
24 DC	0.586	41.0
12 DC	1.15	10.4
90 DC	0.151	598.0

(Coils are rated for continuous duty)

*115AC - In rush current 1.1 amps/Holding current 0.2 amps

Bore & Keyway Data				
Bore A	Keyway Width B	Keyway Depth C		Mounting Holes E
1.005-1.0025 (25.412-25.464)	0.251-0.253 (6.37-6.43)	1.114-1.124 (28.29-28.55)		6x #5/16-18 UNC-2B on 3.375 b.c.
1.2505-1.2525 (31.762-31.814)	0.3135-0.3155 (7.962-8.014)	1.389-1.399 (35.28-35.54)		6x #5/16-18 UNC-2B on 3.375 b.c.
1.3755-1.3775 (34.937-34.989)	0.3135-0.3155 (7.962-8.014)	1.518-1.528 (38.55-38.82)		6x #5/16-18 UNC-2B on 3.375 b.c.
1.5005-1.50025 (38.112-38.164)	0.376-0.378 (9.55-9.61)	1.605-1.615 (40.76-41.02)		6x #5/16-18 UNC-2B on 3.375 b.c.
Metric Bores				
25.0 H9 (0.9843-0.9863)	7.983-8.017 (0.3143-0.3156)	28.300-28.552 (1.1142-1.1241)		6x M8 x 1.25 on 85.73 b.c.
30.0 H9 (1.1811-1.1831)	7.983-8.017 (0.3143-0.3156)	33.299-33.551 (1.3110-1.3209)		6x M8 x 1.25 on 85.73 b.c.
35.0 H9 (1.3780-1.3804)	9.982-10.018 (0.3930-0.3944)	38.300-38.563 (1.5079-1.5182)		6x M8 x 1.25 on 85.73 b.c.

