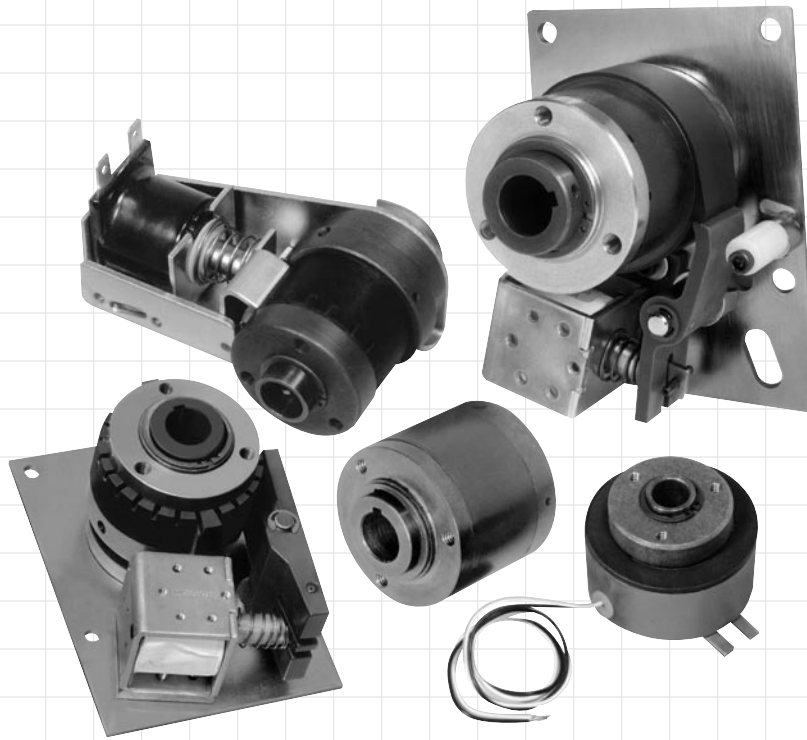


Wrap Spring Clutches



Description

Wrap Spring Clutches and Brakes provide high torque in a compact package. They will drive in only one direction and can be mechanically or electrically actuated. Wrap Spring products are factory assembled and tested.

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	DCB – Metric Metric Clutch Brakes for single-position output	J-20
	SC Spring Clutch, mechanically actuated	J-34

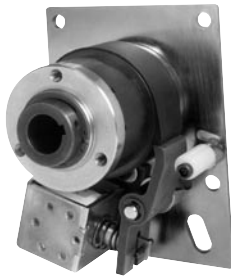
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Wrap Spring Clutches

Product Function	Models
 Overrunning	SC-“OR”
 Start Coast	SC-“SS”
 Single Revolution	SC-“SR”
 Start Stop	DCB or DCB Supers

DCB Series Clutch-Brake Package



Standard Features:

- CW or CCW rotation
- Anti-back and Anti-overrun features
- 115 VAC or 24 VDC operation
- Multi-stop collars: 1, 2 or 4
- Adjustable stop output positioning

Self-Contained

Each DCB series model is completely self-contained. Assembly and testing before shipment assures reliable and trouble-free operation. This series can only be supplied with a hub input.

Electrically Actuated

The DCB series of wrap spring clutch-brake packages is electrically actuated. These packages are designed for applications requiring a continuous rotational input which is converted into starting and stopping a load. Models are available to operate from either an AC or DC power source.

Accurate

Stop positioning can be maintained within $\pm 1/2^\circ$. The stop point is adjustable.

Interchangeability

The DCB series has been designed for the industrial and business/office machine market and is completely interchangeable with other comparable clutch-brake packages.

SC Series Spring Clutch



Non-Electric

SC series wrap spring clutches require no electrical power since they can be mechanically actuated. This design provides you with trouble-free installation.

Higher Torque

The SC series wrap spring clutch delivers more torque than a friction clutch of the same size.

Spring Clutch Family

The SC series is available in 3 styles:
OR Overrunning
SS Start/Coast
SR Single Revolution

Overrunning/one way (OR)—This clutch continually drives the load. The load is allowed to overrun the input, should its speed exceed input speed. In the reverse direction the unit acts as a one-way clutch.

Start/Coast (SS)—The start/coast clutch is engaged until the collar which contains the spring tang is stopped. Once it is stopped, the load is disengaged and coasts to a stop.

Single Revolution (SR)—Attaching one end of the spring to the output hub results in a single revolution clutch. The load is stopped through the spring to the collar. Precise nonaccumulative error single revolution cycling is achieved. Braking torque equals 10% of the max. torque rating.

Interchangeability

The SC family of clutches is designed to replace competitors' clutches. Special bore sizes and hub configurations are available upon request.

Standard Options

- Clutches can be supplied with hub or shaft inputs
- Multiple stop collars

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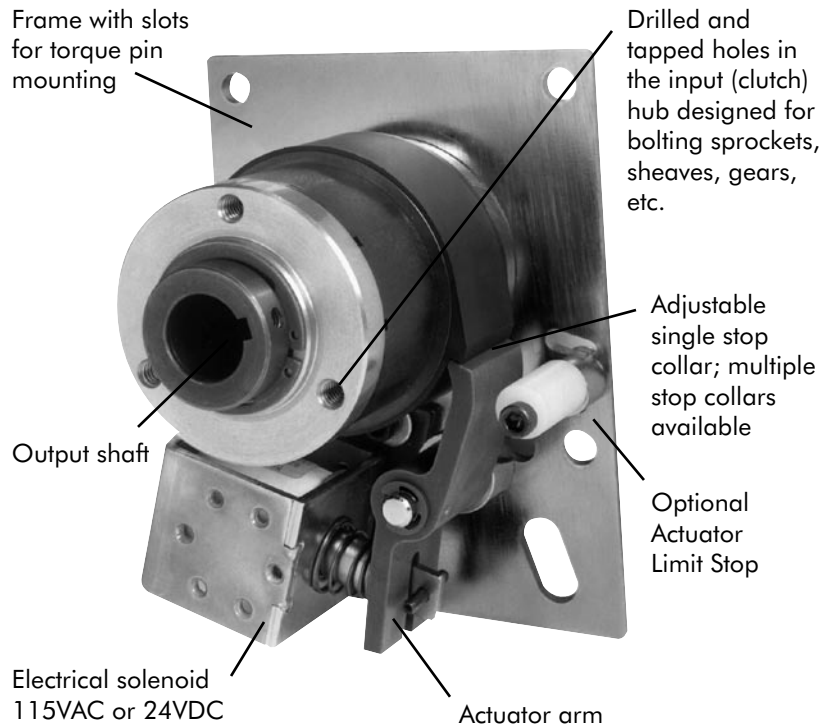


Wrap Spring Clutches

DCB Performance Features

Single Position Output Made Easy With DCB Series Wrap Spring Clutch-Brakes

- Stop Position Accuracy $\pm 1/2^\circ$
- Adjustable Output Stop Positions
- Standard Features
 - CW or CCW Rotation
 - Hub Input - Shaft Output
 - Anti-Overrun
 - Output Does Not Overrun Input
 - Anti-Back
 - Output Does Not Backup
- Stocked with Single Stop 115VAC Solenoid
 - 2 and 4 Stop Available for 180° and 90° Output Increments
- 115VAC and 24VDC Solenoids Standard
 - Other Voltages Available
- Dimensionally Interchangeable With Competitive Units
- 10 Standard Models
 - DCB-2 – DCB-4
 - DCB-5 – DCB-5 SUPER
 - DCB-6 – DCB-6 SUPER
 - DCB-8 – DCB-8 SUPER
 - DCB-10 – DCB-10 SUPER



Unit Shown is CW Rotation, CCW is Available

Operation

To start motion, the solenoid is pulsed, moving an actuator arm away from a control collar. This allows the clutch spring to wrap (wind) down onto the output assembly while the brake spring is unwinding, allowing the output to drive. Motion is stopped when the actuator returns to its rest position and the control collar rotates into it. This forces the clutch spring to unwind, releasing the input from the output and wraps the brake spring down, stopping the output. The anti-back and anti-overrun springs are key items in maintaining position accuracy during operation. Anti-back will not allow the output to rotate backwards at any time; this eliminates bounce back when stopped. The anti-overrun allows rotation of the input in one direction only and also keeps the output from rotating faster than the input. The actual stopping position can be adjusted after installation by moving the splined cam of the control collar assembly.

The input is a hub with drilled and tapped holes to allow mounting of sprockets, gears, sheaves, etc. The output is a hollow quill that mounts onto the customer's driven shaft. The plate must be held in place by a loose-fit pin that does not allow any side or radial loads that can preload the unit's bearings.

Supers vs. Standard

All units have three primary sintered iron hubs that are oil impregnated; input, brake and an internal hub pinned to the output shaft. On standard units the oil lubricates the bearing surfaces of the input and brake hubs which ride on the output shaft, whereas the Supers use needle bearings in the input and brake hubs to increase the radial bearing load capability. All types require the oil in the hubs to lubricate the springs. The Supers feature hardened steel wear rings on the primary hubs at the spring crossover point of the clutch, brake and shaft hubs to increase life. The control collar assemblies are glass-reinforced nylon strengthened by steel or aluminum inserts. The actuators are Sold by Service By: **Electromate** AF on all models.

DCB Product Selection

Basic Selection

- Step 1:** To select the correct DCB Series wrap spring, determine the maximum speed (RPM) at which the unit will operate. Next, determine the load that the output will need to drive and the system inertia. See Page J-29 for inertia calculations.
- Step 2:** Determine the shaft size on which the wrap spring will be mounted. Once this is determined, the appropriate size DCB can be determined.
- Step 3:** Determine clockwise (CW) or counter-clockwise (CCW) rotation, AC or DC solenoid, number of stops required.

DCB Specifications


Model	Static Torque In.-Lbs.	Maximum Input Speed	Minimum* Input Speed	Anti-Back Torque In.-Lbs.	Anti-Overrun Torque In.-Lbs.	Input Hub Maximum Bearing Load Lbs.
DCB-2	25	1800	300	10	10	7.5
DCB-4	125	1200	200	80	25	14
DCB-5	250	750	150	160	45	32
DCB-5 SUPER	250	750	150	125	125	40
DCB-6	500	500	100	300	300	63
DCB-6 SUPER	500	500	100	300	300	65
DCB-8	2500	300	50	600	600	300
DCB-8 SUPER	2500	300	50	600	600	300

* When operating below minimum speeds, system inertias may have to be increased for proper product performance. Consult factory for application assistance.

Model	115VAC Solenoids			24VDC Solenoids	
	Resistance Ohms $\pm 10\%$	Current Amps In-Rush	Current Amps Holding	Resistance Ohms $\pm 10\%$	Current Amps
DCB-2	825	.10	.05	104	.23
DCB-4	280	.22	.10	74.0	.32
DCB-5	280	.22	.10	74.0	.32
DCB-5 SUPER	280	.22	.10	74.0	.32
DCB-6	53	.62	.31	40.0	.60
DCB-6 SUPER	53	.62	.31	40.0	.60
DCB-8	53	.62	.31	40.0	.60
DCB-8 SUPER	53	.62	.31	25.4	.60

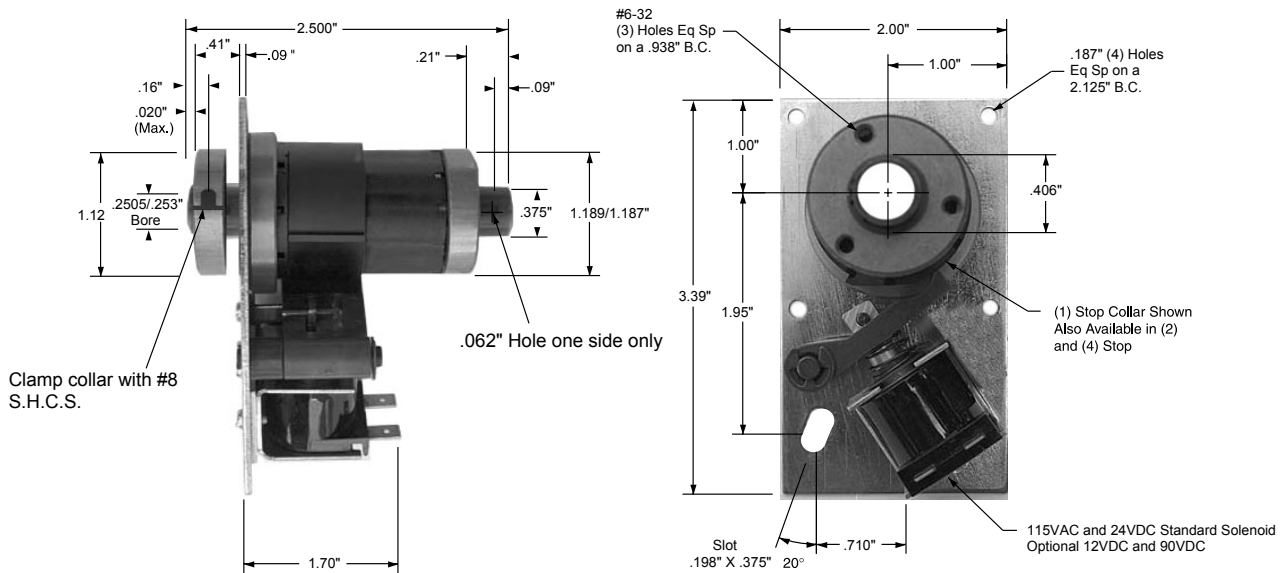
Wrap Spring Clutches

DCB-2 Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	1800 RPM
Static Torque:	25 in.-lb
Max. Anti-override Torque:	10 in.-lb.
Max Anti-back Torque:	10 in.-lb.
Positioning Accuracy:	±1/2°
Weight:	1.25 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-2 Part Numbers

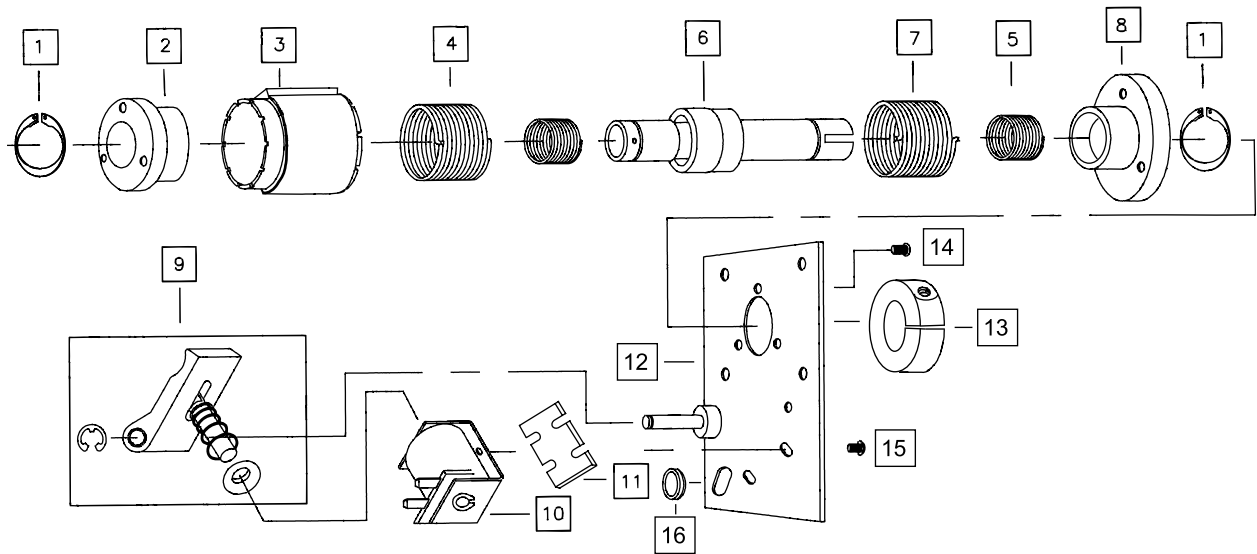
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D302-17-001	D302-27-001	DCB2	1/4"	24VDC	1
D302-17-002	D302-27-011	DCB2	1/4"	24VDC	2
D302-17-003	D302-27-003	DCB2	1/4"	24VDC	4
D302-17-007	D302-27-007	DCB2	1/4"	115VAC	1
D302-17-008	D302-27-008	DCB2	1/4"	115VAC	2
D302-17-009	D302-27-029	DCB2	1/4"	115VAC	4

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Wrap Spring Clutches – Replacement Parts

DCB-2 Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	040-0371		(2) Retaining Ring
2	002-4220		Input Hub
3	002-4312 002-4313 002-4315 002-4301 002-4302 002-4304	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
4	002-2032 002-2033	CW CCW	Drive Spring
5	002-2034 002-2035	CW CCW	(2) Anti-Overrun or Anti-Back Spring
6	002-5401		Output Assembly 1/4 Bore
7	002-2030 002-2031	CW CCW	Brake Spring
8	002-4202		Brake Hub
9	002-2014-1 002-2015-1	CW CCW	Actuator Assembly
10	002-1201 002-1204 002-1202 002-1203	24 VDC 115 VAC 12 VDC 90 VDC	Coil Assembly
11	002-7012		Solenoid Spacer
12	002-7006 002-7007	CW CCW	Plate Assembly
13	002-4327		Clamp Collar
14	040-04271		(3) 6-32 Flat Hd Socket Cap Screw
15	040-04318		(2) 6-32 Sems Machine Screw
16	002-2036		Grommet

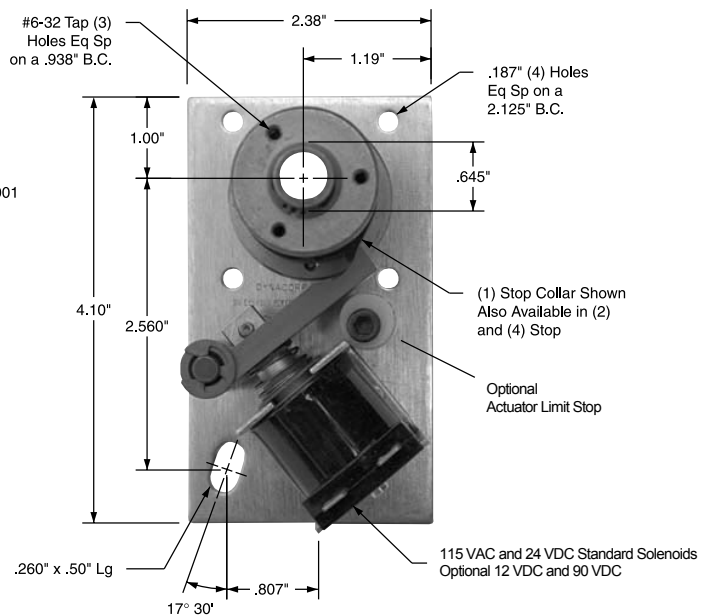
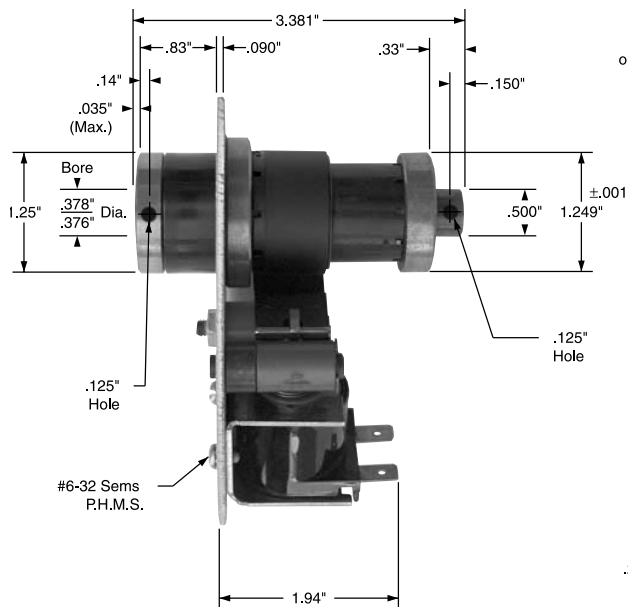
Wrap Spring Clutches

DCB-4 Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	1200 RPM
Static Torque:	120 in.-lb
Max. Anti-override Torque:	25 in.-lb.
Max Anti-back Torque:	80 in.-lb.
Positioning Accuracy:	$\pm 1/2^\circ$
Weight:	1.25 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-4 Part Numbers

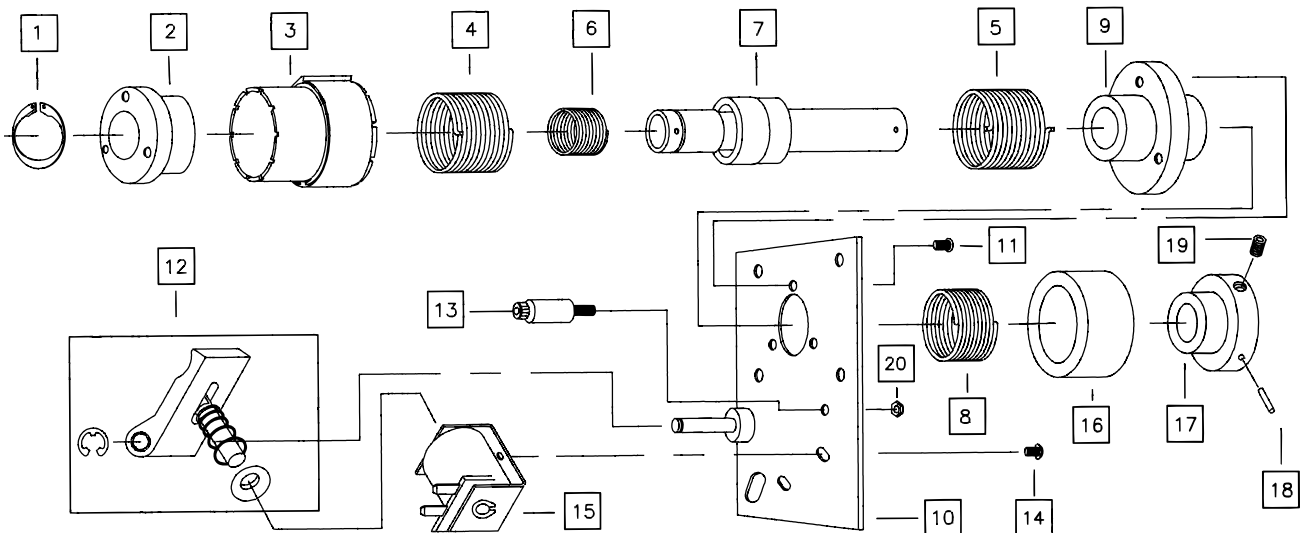
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D304-17-003	D304-27-003	DCB4	3/8"	115VAC	1
D304-17-008	D304-27-015	DCB4	3/8"	115VAC	2
D304-17-018	D304-27-025	DCB4	3/8"	115VAC	4
D304-17-001	D304-27-001	DCB4	3/8"	24VDC	1
D304-17-011	D304-27-007	DCB4	3/8"	24VDC	2
D304-17-007	D304-27-026	DCB4	3/8"	24VDC	4

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Wrap Spring Clutches – Replacement Parts

DCB-4 Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0027		Retaining Ring
2	D540-4-0021		Input Hub/Anti-Overrun
3	D266-4-0051 D266-4-0052 D266-4-0054 D266-4-0081 D266-4-0082 D266-4-0084	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
4	D808-4-0066 D808-4-0059	CW CCW	Drive Spring Drive Spring
5	D808-4-0016 D808-4-0017	CW CCW	Brake Spring Brake Spring
6	D808-4-0022 D808-4-0023	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
7	D824-4-0015		Output Assembly/Anti-Overrun
8	D808-4-0018 D808-4-0019	CW CCW	Anti-Back Spring Anti-Back Spring
9	D540-4-0015		Brake Hub
10	D686-4-0001 D686-4-0002	CW CCW	Plate Assembly Plate Assembly
11	D797-1-0311		FLT HD Socket Cap Screw
12	D102-4-0005		Actuator Assembly
13	D816-1-0003		* Actuator Limit Stop Assembly
14	D797-1-0414		Pan HD Machine SCR Sems
15	D275-1-0162 D275-1-0163 D275-1-0165 D275-1-0166	12VDC 24VDC 90VDC 120VAC	Coil Assembly
16	D287-4-9002		Dust Cover (AB Spring)
17	D540-4-0018		Anti-Back Hub
18	D679-1-0022		Spring Pin
19	D797-1-0152		M-4 Headless SOC HD Screw
20	D661-1-0022		* Hex Nut

* Optional Actuator Limit Stop Feature

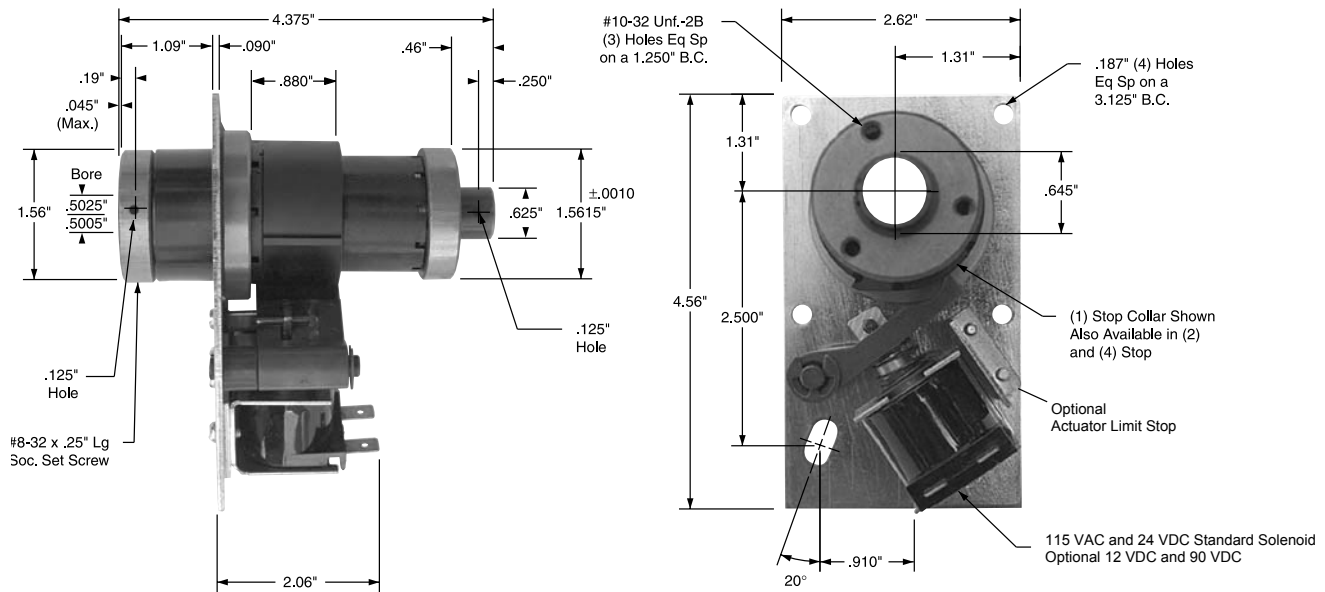
Wrap Spring Clutches

DCB-5 Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed: 750 RPM
 Static Torque: 250 in.-lb
 Max. Anti-overnrun Torque: 45 in.-lb.
 Max Anti-back Torque: 160 in.-lb.
 Positioning Accuracy: $\pm 1/2^\circ$
 Weight: 1.75 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-5 Part Numbers

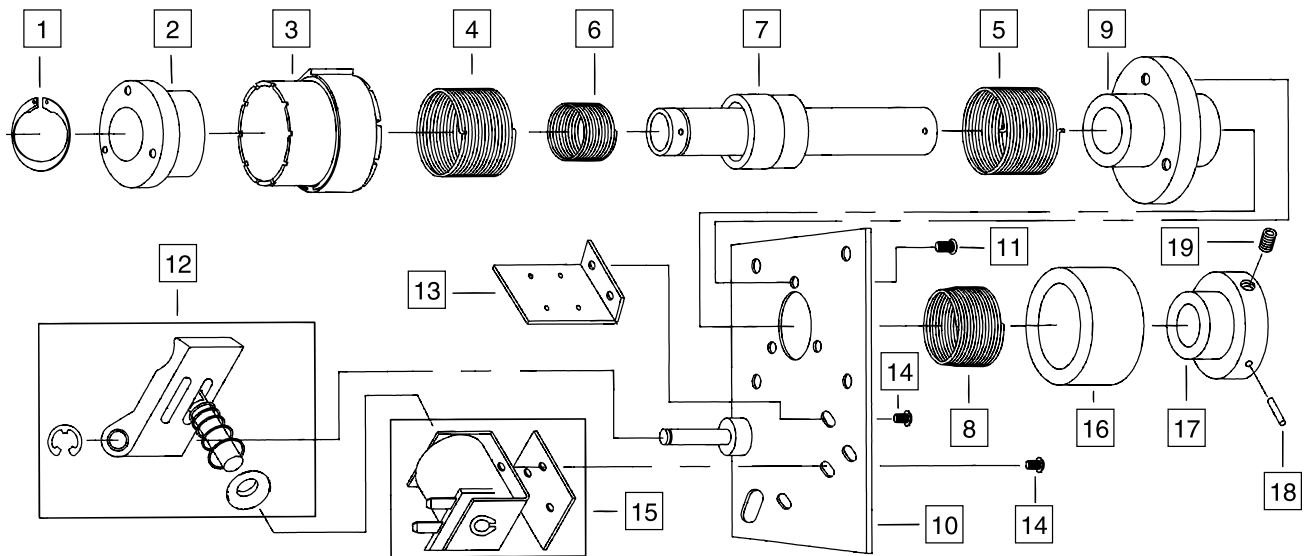
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D305-17-007	D305-27-007	DCB5	1/2"	115VAC	1
D305-17-008	D305-27-008	DCB5	1/2"	115VAC	2
D305-17-009	D305-27-009	DCB5	1/2"	115VAC	4
D305-17-001	D305-27-001	DCB5	1/2"	24VDC	1
D305-17-002	D305-27-002	DCB5	1/2"	24VDC	2
D305-17-003	D305-27-003	DCB5	1/2"	24VDC	4

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Wrap Spring Clutches – Replacement Parts

DCB-5 Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0030		Retaining Ring
2	D540-5-0007		Input Hub/Anti-Overrun
3	D266-5-0101	CW	1 Stop Collar
	D266-5-0102	CW	2 Stop Collar
	D266-5-0104	CW	4 Stop Collar
	D266-5-0201	CCW	1 Stop Collar
	D266-5-0202	CCW	2 Stop Collar
	D266-5-0204	CCW	4 Stop Collar
4	D808-5-0001	CW	Drive Spring
	D808-5-0002	CCW	Drive Spring
5	D808-5-0001	CW	Brake Spring
	D808-5-0002	CCW	Brake Spring
6	D808-5-0003	CW	Anti-Overrun Spring
	D808-5-0004	CCW	Anti-Overrun Spring
7	D824-5-0002		Output Assembly/Anti-Overrun
8	D808-5-0005	CW	Anti-Back Spring
	D808-5-0006	CCW	Anti-Back Spring
9	D540-5-0004		Brake Hub
10	D686-5-0001	CW	Plate Assembly
	D686-5-0002	CCW	Plate Assembly
11	D797-1-0322		FLT HD Socket Cap Screw
12	D101-5-0017	CW	Actuator Assembly
	D101-5-0018	CCW	Actuator Assembly
13	D816-5-0013		* Actuator Limit Stop Assembly
14	D797-1-0413		Pan HD Machine SCR Sems
15	D101-5-0002	12VDC	Coil Assembly
	D101-5-0003	24VDC	
	D101-5-0005	90VDC	
	D101-5-0006	120VAC	
16	D287-5-9002		Dust Cover (AB Spring)
17	D540-5-0006		Anti-Back Hub
18	D679-1-0024		Spring Pin
19	D797-1-0153		Headless SOC Screw

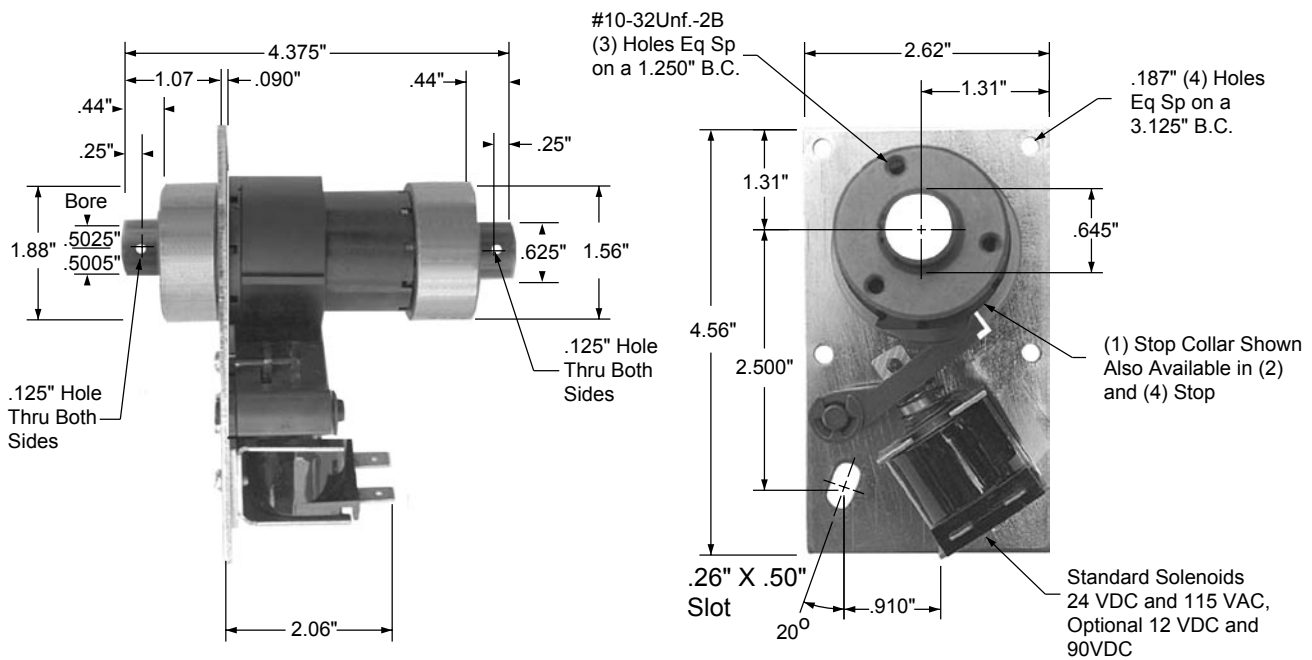
Wrap Spring Clutches

DCB-5 SUPER Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	750 RPM	Needle Bearing Input and Output Hubs with Roller Clutch AB and AOR
Static Torque:	250 in.-lb	Hardened Output Shaft
Max. Anti-overnrun Torque:	125 in.-lb.	Hardened Wear Rings at Cross-Over Points
Max Anti-back Torque:	125 in.-lb.	Stainless Steel Actuator Face
Positioning Accuracy:	$\pm 1/2^\circ$	
Weight:	1.75 lbs.	



Unit Shown is CW Rotation, CCW is Available

DCB-5 SUPER Part Numbers

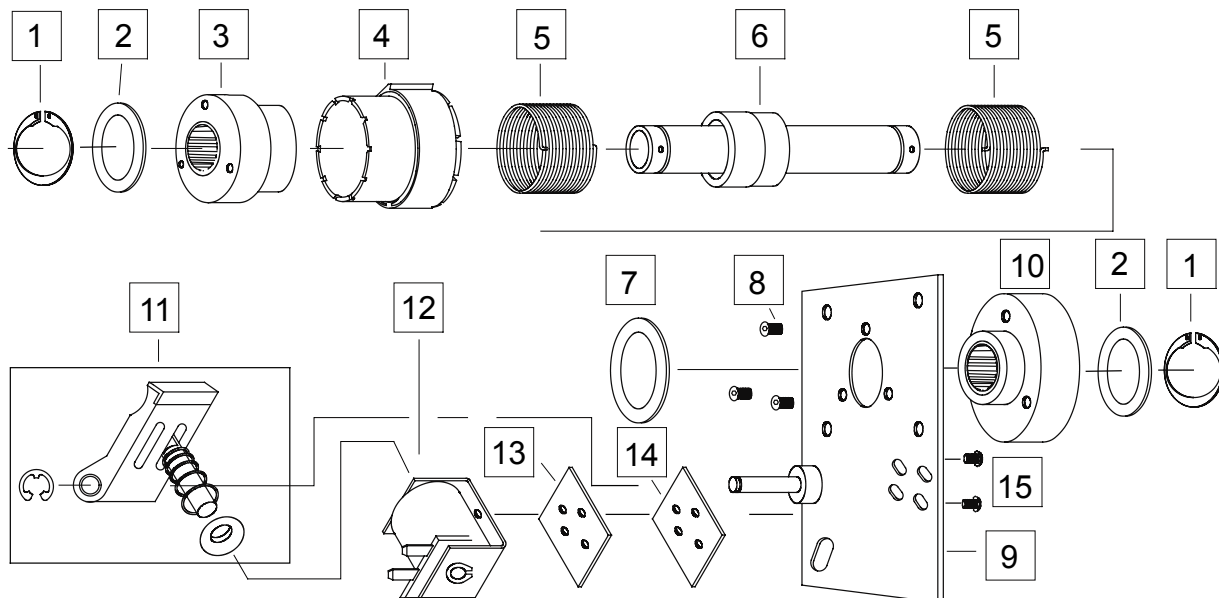
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D325-17-004	D325-27-004	DCB5 SUPER	1/2"	115VAC	1
D325-17-005	D325-27-005	DCB5 SUPER	1/2"	115VAC	2
D325-17-006	D325-27-006	DCB5 SUPER	1/2"	115VAC	4
D325-17-001	D325-27-001	DCB5 SUPER	1/2"	24VDC	1
D325-17-002	D325-27-002	DCB5 SUPER	1/2"	24VDC	2
D325-17-003	D325-27-003	DCB5 SUPER	1/2"	24VDC	4

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Wrap Spring Clutches – Replacement Parts


DCB-5 SUPER Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0030		(2) Retaining Ring
2	104702		(2) Thrust Washer
3	104698 104698-1	CW CCW	Input Hub with Anti-Overrun Bearing
4	D266-5-0101 D266-5-0102 D266-5-0104 D266-5-0201 D266-5-0202 D266-5-0204	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
5	D808-5-0001 D808-5-0002	CW CCW	(2) Drive or Brake Spring
6	104694		Output Assembly 1/2 Bore
7	104701		Thrust Washer
8	D797-1-0322		(3) 8-32 Flat Hd Socket Cap Screw
9	104690 104690-1	CW CCW	Plate Assembly
10	104700-1 104700	CW CCW	Brake Hub with Anti-Back Bearing
11	104935 104935-1	CW CCW	Actuator Assembly w/ Stainless Steel Tip
12	D275-1-0163 D275-1-0166 D275-1-0163 D275-1-0166	24 VDC 115 VAC 12 VDC 90 VDC	Coil Assembly
13	104687		Solenoid Spacer
14	104406		Solenoid Spacer
15	040-04270		(2) 6-32 Sems Machine Screw

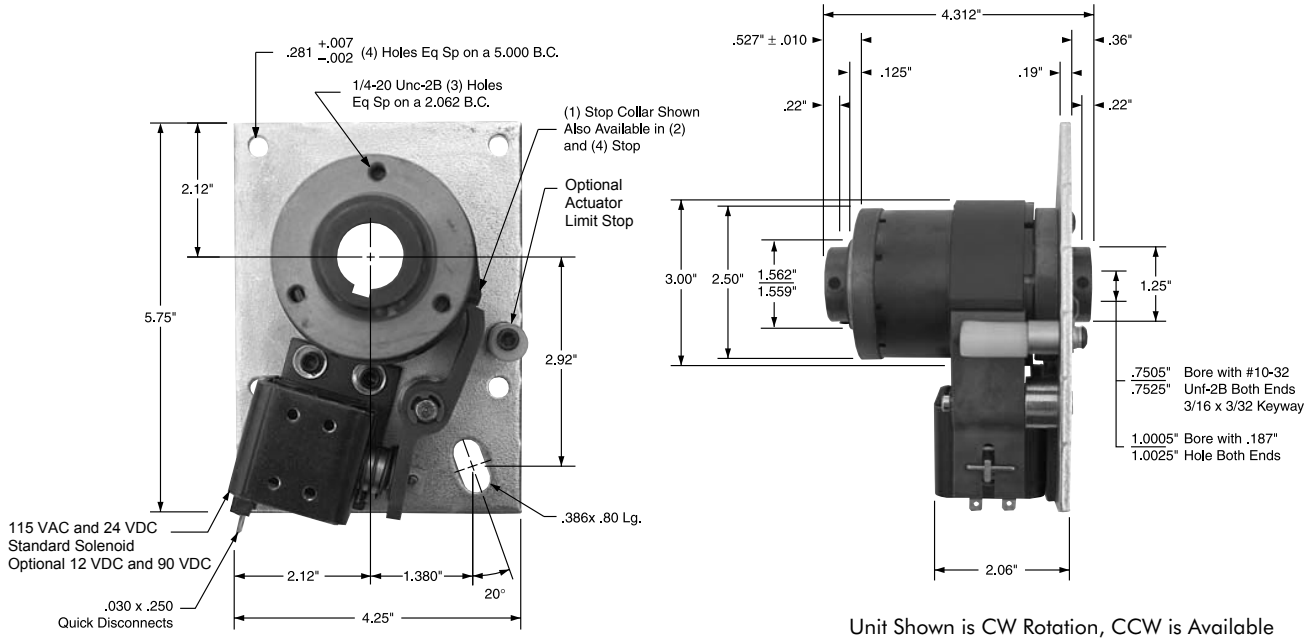
Wrap Spring Clutches

DCB-6 & DCB-6 SUPER Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed: 500 RPM Max. Anti-overnun Torque: 300 in.-lb. Positioning Accuracy: $\pm 1/2^\circ$
 Static Torque: 500 in.-lb Max Anti-back Torque: 300 in.-lb. Weight: 6 lbs.



DCB-6 Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D306-17-053	D306-27-031	DCB6	3/4"	115VAC	1
D306-17-060	D306-27-039	DCB6	3/4"	115VAC	2
D306-17-073	D306-27-045	DCB6	3/4"	115VAC	4
D306-17-051	D306-27-029	DCB6	3/4"	24VDC	1
D306-17-074	D306-27-046	DCB6	3/4"	24VDC	2
D306-17-162	D306-27-134	DCB6	3/4"	24VDC	4
D306-17-059	D306-27-034	DCB6	1"	115VAC	1
D306-17-062	D306-27-044	DCB6	1"	115VAC	2
D306-17-075	D306-27-037	DCB6	1"	115VAC	4
D306-17-057	D306-27-032	DCB6	1"	24VDC	1
D306-17-061	D306-27-147	DCB6	1"	24VDC	2
D306-17-031	D306-27-150	DCB6	1"	24VDC	4

DCB-6 SUPER Part Numbers

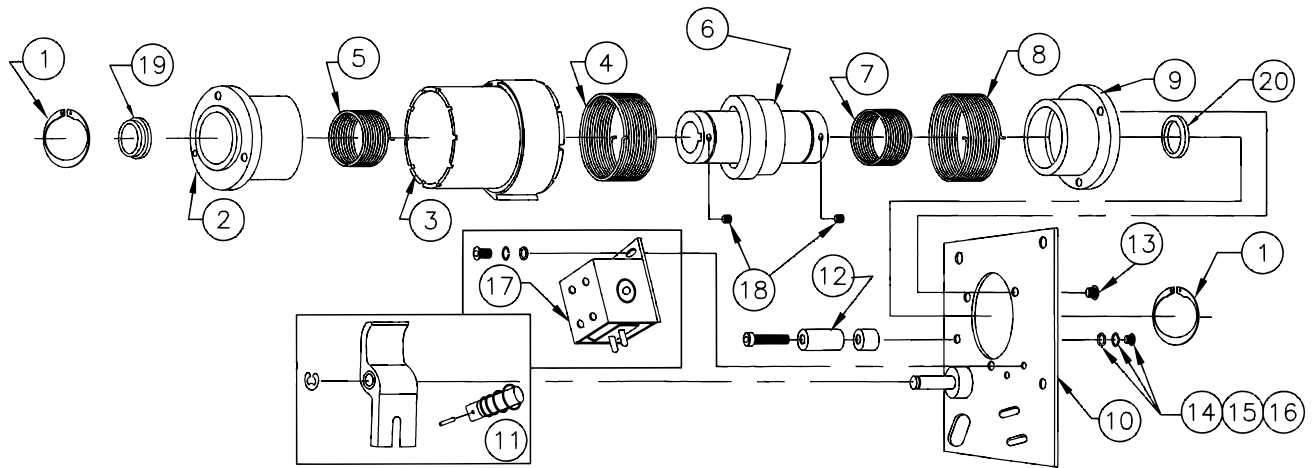
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D326-17-019	D326-27-019	DCB6 SUPER	3/4"	115VAC	1
D326-17-020	D326-27-020	DCB6 SUPER	3/4"	115VAC	2
D326-17-021	D326-27-021	DCB6 SUPER	3/4"	115VAC	4
D326-17-007	D326-27-007	DCB6 SUPER	3/4"	24VDC	1
D326-17-008	D326-27-008	DCB6 SUPER	3/4"	24VDC	2
D326-17-009	D326-27-009	DCB6 SUPER	3/4"	24VDC	4
D326-17-022	D326-27-022	DCB6 SUPER	1"	115VAC	1
D326-17-023	D326-27-023	DCB6 SUPER	1"	115VAC	2
D326-17-024	D326-27-024	DCB6 SUPER	1"	115VAC	4
D326-17-010	D326-27-010	DCB6 SUPER	1"	24VDC	1
D326-17-011	D326-27-011	DCB6 SUPER	1"	24VDC	2
D326-17-012	D326-27-012	DCB6 SUPER	1"	24VDC	4

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Wrap Spring Clutches – Replacement Parts

DCB-6 & DCB-6 SUPER Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0038		Retaining Ring
2	D540-6-0003 D541-6-0035		Input Hub Super Input Hub
3	D266-6-0101 D266-6-0102 D266-6-0104 D266-6-0680 D266-6-0681 D266-6-0683 D266-6-0201 D266-6-0202 D266-6-0204 D266-6-0690 D266-6-0691 D266-6-0693	CW CW CW CW CW CW CCW CCW CCW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar
4	D808-6-0001 D808-6-0002	CW CCW	Clutch Spring Clutch Spring
5	D808-6-0005 D808-6-0006	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
6	D824-6-0002 D824-6-0003 D824-6-0478 D824-6-0481	3/4" 1" 3/4" 1"	Output Shaft Output Shaft Super - Output Shaft Super - Output Shaft
7	D808-6-0003 D808-6-0004	CW CCW	Anti-Back Spring Anti-Back Spring
8	D808-6-0001 D808-6-0002	CW CCW	Brake Spring Brake Spring
9	D540-6-0001 D541-6-0045		Brake Hub Super - Brake Hub
10	D686-6-0076 D686-6-0077	CW CCW	Plate Assembly Plate Assembly
11	D102-1-0004		Actuator Assembly
12	D816-1-0001		* Actuator Limit Stop
13	D797-1-0243		Button Head Screw
14	D950-1-0006		* Flat Washer
15	101263		* Lock Washer
16	D797-1-0233		* Socket Head Screw
17	D101-1-0028 D101-1-0031	24VDC 115VAC	Coil Assembly
18	D797-1-0162	3/4"	Set Screw
19	D950-6-0003		Super - Thrust Washer, Clutch
20	D950-6-0004		Super - Thrust Washer, Brake

* Optional Actuator Limit Stop Feature

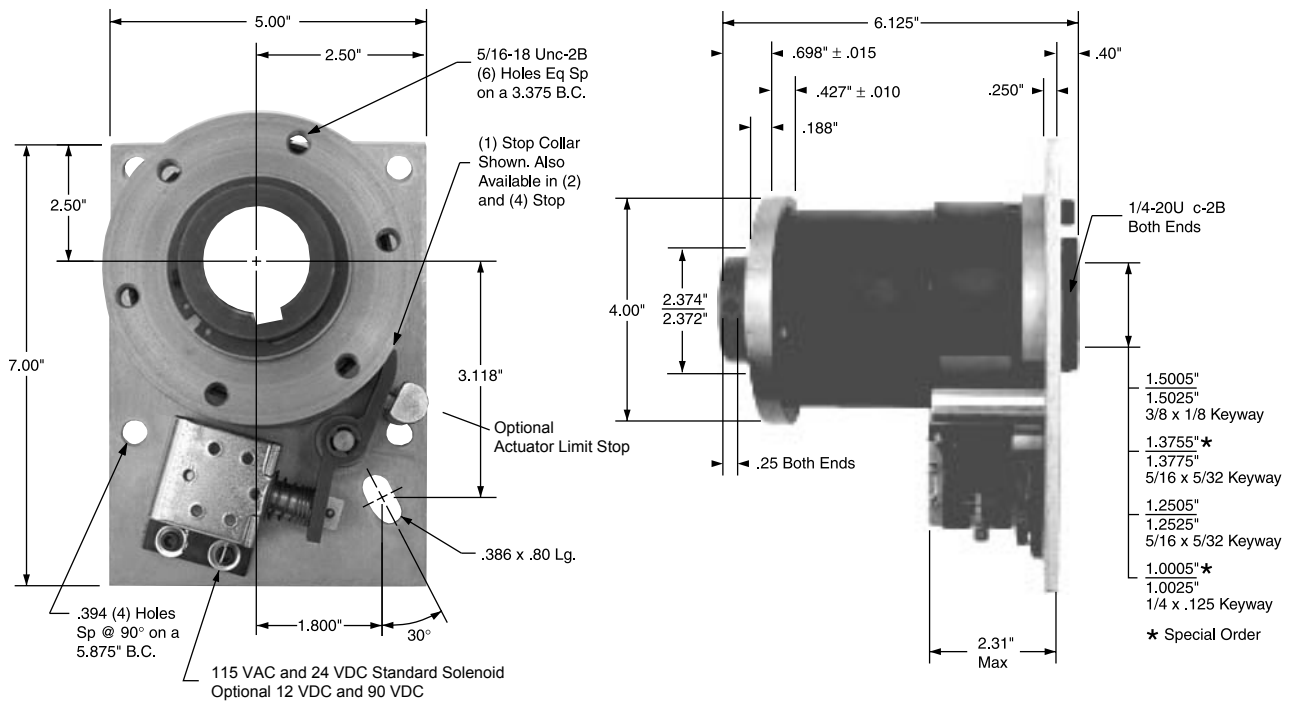
Wrap Spring Clutches

DCB-8 & DCB-8 SUPER Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed: 300 RPM Max. Anti-overnun Torque: 600 in.-lb. Positioning Accuracy: $\pm 1/2^\circ$
 Static Torque: 2500 in.-lb Max Anti-back Torque: 600 in.-lb. Weight: 14.25 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-8 Part Numbers

Part Number		Description				
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops	
D308-17-107	D308-27-107	DCB8	1-1/4"	115VAC	1	
D308-17-108	D308-27-108	DCB8	1-1/4"	115VAC	2	
D308-17-109	D308-27-109	DCB8	1-1/4"	115VAC	4	
D308-17-101	D308-27-101	DCB8	1-1/4"	24VDC	1	
D308-17-102	D308-27-102	DCB8	1-1/4"	24VDC	2	
D308-17-103	D308-27-103	DCB8	1-1/4"	24VDC	4	
D308-17-125	D308-27-125	DCB8	1-1/2"	115VAC	1	
D308-17-126	D308-27-126	DCB8	1-1/2"	115VAC	2	
D308-17-127	D308-27-127	DCB8	1-1/2"	115VAC	4	
D308-17-119	D308-27-119	DCB8	1-1/2"	24VDC	1	
D308-17-120	D308-27-120	DCB8	1-1/2"	24VDC	2	
D308-17-121	D308-27-121	DCB8	1-1/2"	24VDC	4	

DCB-8 SUPER Part Numbers

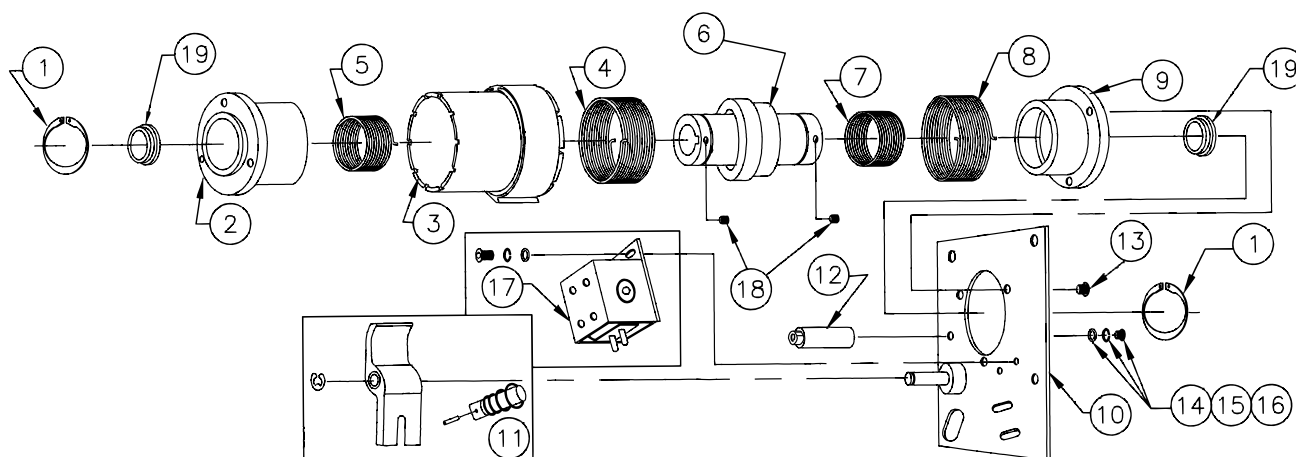
Part Number		Description				
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops	
D328-17-043	D328-27-043	DCB8 SUPER	1-1/4"	115VAC	1	
D328-17-044	D328-27-044	DCB8 SUPER	1-1/4"	115VAC	2	
D328-17-045	D328-27-045	DCB8 SUPER	1-1/4"	115VAC	4	
D328-17-019	D328-27-019	DCB8 SUPER	1-1/4"	24VDC	1	
D328-17-020	D328-27-020	DCB8 SUPER	1-1/4"	24VDC	2	
D328-17-021	D328-27-021	DCB8 SUPER	1-1/4"	24VDC	4	
D328-17-037	D328-27-037	DCB8 SUPER	1-1/2"	115VAC	1	
D328-17-038	D328-27-038	DCB8 SUPER	1-1/2"	115VAC	2	
D328-17-039	D328-27-039	DCB8 SUPER	1-1/2"	115VAC	4	
D328-17-013	D328-27-013	DCB8 SUPER	1-1/2"	24VDC	1	
D328-17-014	D328-27-014	DCB8 SUPER	1-1/2"	24VDC	2	
D328-17-015	D328-27-015	DCB8 SUPER	1-1/2"	24VDC	4	

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Wrap Spring Clutches – Replacement Parts

DCB-8 & DCB-8 SUPER Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0039		Retaining Ring
2	D540-8-0014 D541-8-0009		Input Hub Super - Input Hub
3	D266-8-0001 D266-8-0002 D266-8-0004 D266-8-0153 D266-8-0154 D266-8-0156 D266-8-0031 D266-8-0032 D266-8-0034 D266-8-0157 D266-8-0158 D266-8-0160	CW CW CW CW CW CW CCW CCW CCW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar
4	D808-8-0003 D808-8-0004	CW CCW	Clutch Spring Clutch Spring
5	D808-8-0025 D808-8-0026	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
6	D824-8-0328 D824-8-0326 D824-8-0578 D824-8-0576	1-1/4" 1-1/2" 1-1/4" 1-1/2"	Output Shaft Output Shaft Super - Output Shaft Super - Output Shaft
7	D808-8-0025 D808-8-0026	CW CCW	Anti-Back Spring Anti-Back Spring
8	D808-8-0003 D808-8-0004	CW CCW	Brake Spring Brake Spring
9	D540-8-0016 D541-8-0010		Brake Hub Super - Brake Hub
10	D686-8-0051 D686-8-0052	CW CCW	Plate Assembly Plate Assembly
11	D102-1-0004 D102-1-0021		Actuator Assembly D6 Coil Actuator Assembly D7 Coil
12	D816-1-0005		* Actuator Limit Stop
13	DY-10714		Socket Head Screw
14	D950-1-0052		* Flat Washer
15	D950-1-0019		* Lock Washer
16	D797-1-0035		* Socket Head Screw
17	D101-1-0028 D101-1-0031 D101-1-0053	24VDC 115VAC 24VDC	DCB-8 Coil Assembly D6 DCB-8 and Super Coil Assembly D6 Super - Coil Assembly D7
18	D797-1-0174		Set Screw
19	D950-8-0001		Super - Thrust Washer

* Optional Actuator Limit Stop Feature

Wrap Spring Clutch-Brakes

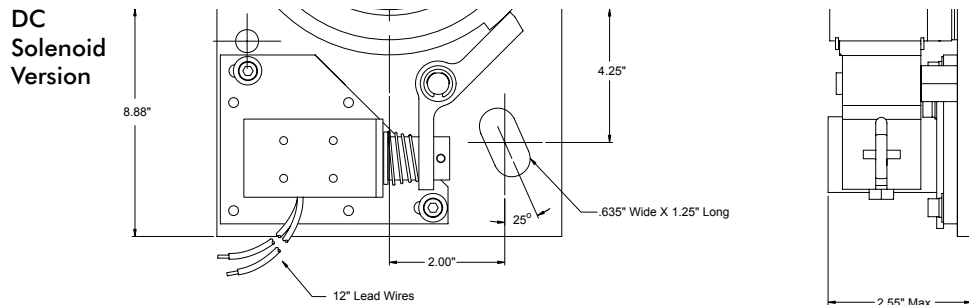
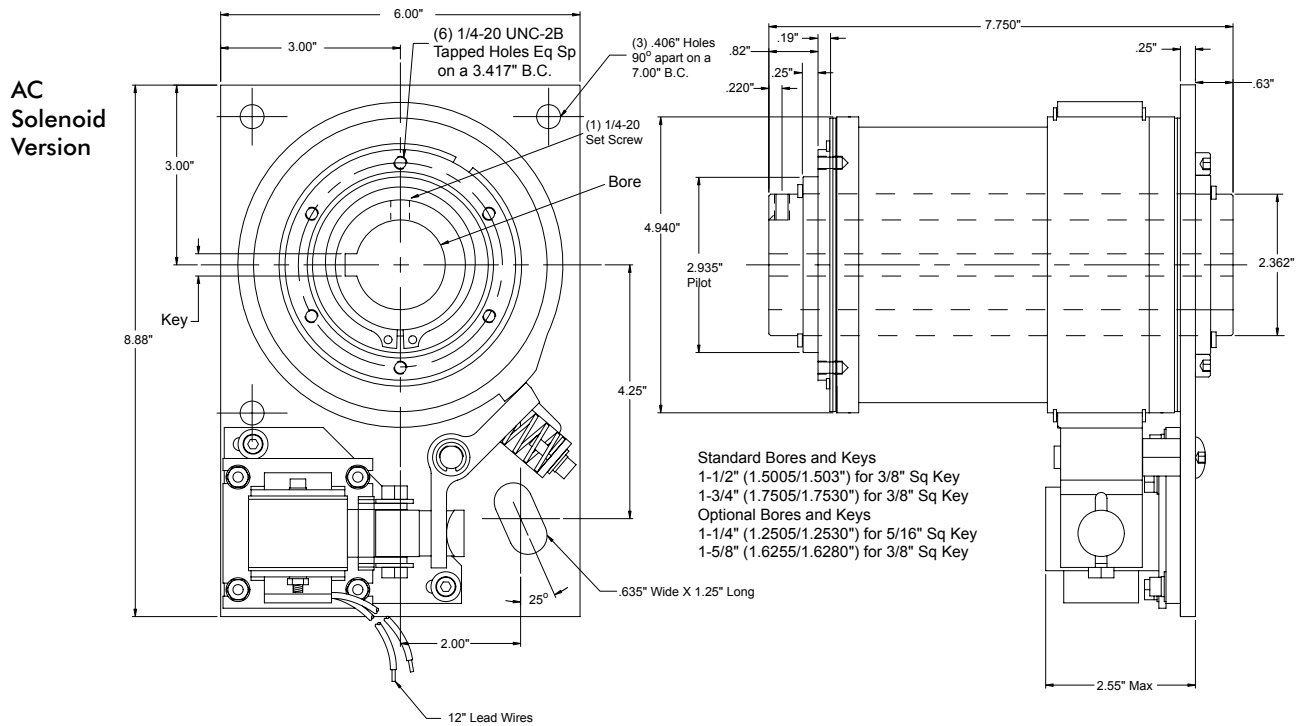
DCB-10 & DCB-10 SUPER Dimensions

Product Function: Start-Stop



Specifications

Maximum Speed:	200 RPM	Max. Anti-overrun Torque:	1200 in.-lb.	Positioning Accuracy:	± 1/2°
Static Torque:	5000 in.-lb	Max. Anti-back Torque:	1200 in.-lb.	Weight:	28 lbs.



DCB-10 Part Numbers

CLOCKWISE ROTATION SHOWN

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D300-12-033	D300-22-033	DCB10	1-1/2"	115VAC	1
D300-12-051	D300-22-047	DCB10	1-1/2"	115VAC	2
D300-12-044	D300-22-041	DCB10	1-1/2"	115VAC	4
D300-17-051	D300-27-030	DCB10	1-1/2"	24VDC	1
D300-17-052	D300-27-051	DCB10	1-1/2"	24VDC	2
D300-17-053	D300-27-052	DCB10	1-1/2"	24VDC	4

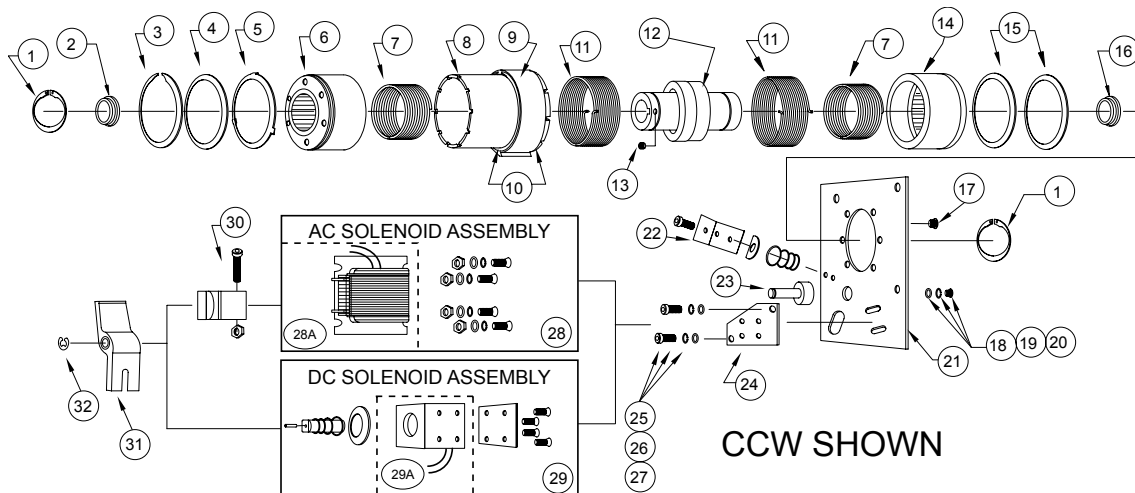
DCB-10 SUPER Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D320-12-001	D320-22-001	DCB10 SUPER	1-1/2"	115VAC	1
D320-12-002	D320-22-002	DCB10 SUPER	1-1/2"	115VAC	2
D320-12-003	D320-22-003	DCB10 SUPER	1-1/2"	115VAC	4
D320-17-010	D320-27-010	DCB10 SUPER	1-1/2"	24VDC	1
D320-17-011	D320-27-011	DCB10 SUPER	1-1/2"	24VDC	2
D320-17-012	D320-27-012	DCB10 SUPER	1-1/2"	24VDC	4

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Wrap Spring Clutch-Brakes – Replacement Parts

DCB-10 & DCB-10 SUPER Replacement Parts



Item	Part No.	Rotation - Bore or Voltage	Description
1	040-03123		(2) Retaining Ring (5100-237)
2	D950-10-0002		Input Thrust Washer
3	040-03126		Retaining Ring (US-381)
4	D807-10-0001		Collar Spacer
5	D807-10-0002		Tabbed Input Collar Spacer
6	D541-10-0003		Input Hub
	D541-10-0001		Super - Input Hub with Wear Ring
7	D808-0-0001	CW	(2) Anti-Overrun / Anti-Back Spring
	D808-0-0002	CCW	
8	D803-10-0001	CW or CCW	Collar Sleeve
9	D245-0-0101	CW or CCW	1 Stop Cam
	D245-0-0102	CW or CCW	2 Stop Cam
	D245-0-0104	CW or CCW	4 Stop Cam
10	040-03121		(2) Retaining Ring (US-500)
11	D808-0-0009	CW	(2) Clutch / Brake Spring
	D808-0-0010	CCW	
12	D824-10-0009	1-1/2"	Output Shaft
	D824-10-0011	1-3/4"	
	D824-10-0002	1-1/2"	Super - Output Shaft with Wear Rings
	D824-10-0004	1-3/4"	
13	040-04492		Set Screw Cup Point (1/4-20 x 3/8 Long)
14	D541-10-0006		Brake Hub
	D541-10-0005		Super - Brake Hub with Wear Ring
15	D807-10-0003		(A/R) Brake Collar Spacer
16	D950-10-0001		Brake Thrust Washer
17	040-04227		(6) Cap Screws (1/4-20 x 5/8 Long)
18	040-06118		Flat Washer (3/8)
19	040-0694		Lock Washer (3/8)
20	040-04493		Button Head Cap Screw (3/8-24 x 3/4 Long)
21	D686-10-0001	CW or CCW	Plate
22	D102-10-0003	AC Only	Actuator Return Spring Assembly
23	D679-10-0001		Actuator Post
24	D686-10-0002		Solenoid Plate
25	040-04487		(2) Cap Screws (10-32 x 5/8 Long)
26	040-0688		(2) Lock Washer (#10)
27	040-06159		(2) Flat Washer (#10)
28	D101-10-0001	CW - 115VAC	AC Coil Assembly - Incl. Coil & Hardware
	D101-10-0002	CCW - 115VAC	
28A	D275-1-0579	CW - 115VAC	AC Coil Only
	D275-1-0580	CCW - 115VAC	
29	D101-10-0005	CW or CCW - 24VDC	DC Coil Assembly - Incl. Coil & Hardware
29A	D275-1-0073	24VDC	DC Coil Only
30	D102-10-0002	AC Only	Actuator Link Assembly
31	D102-10-0001		Actuator
32	040-03125		Retaining Ring (5133-37)

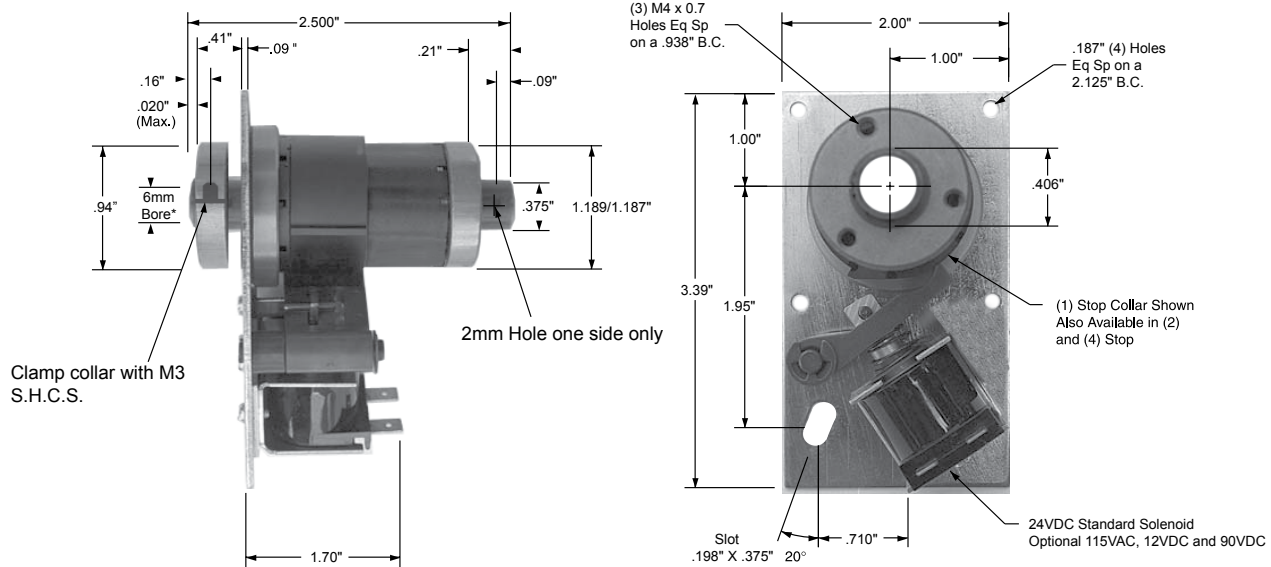
Wrap Spring Clutches

DCB-2 Metric Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	1800 RPM
Static Torque:	25 in.-lb
Max. Anti-override Torque:	10 in.-lb.
Max Anti-back Torque:	10 in.-lb.
Positioning Accuracy:	$\pm 1/2^\circ$
Weight:	1.25 lbs.



* Bore 6mm H9

Unit Shown is CW Rotation, CCW is Available

DCB-2 Metric Part Numbers

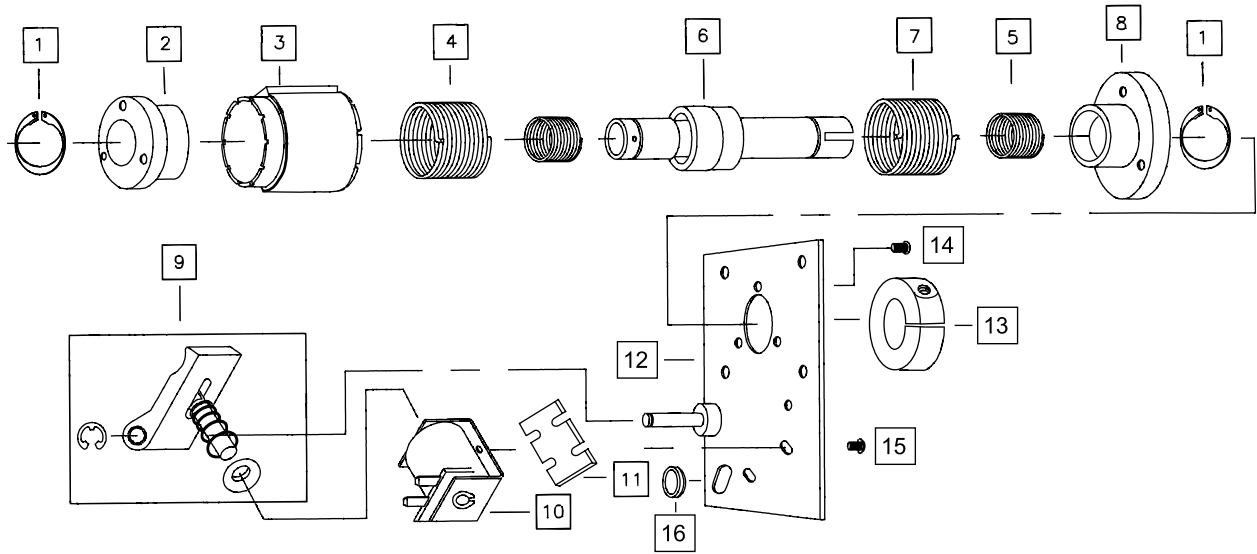
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D312-17-001	D312-27-001	DCB2	6mm	24VDC	1
D312-17-002	D312-27-002	DCB2	6mm	24VDC	2
D312-17-003	D312-27-003	DCB2	6mm	24VDC	2

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Wrap Spring Clutches – Replacement Parts


DCB-2 Metric Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	040-0371		(2) Retaining Ring
2	002-4222		Metric Input Hub
3	002-4312 002-4313 002-4315 002-4301 002-4302 002-4304	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
4	002-2032 002-2033	CW CCW	Drive Spring
5	002-2034 002-2035	CW CCW	(2) Anti-Overrun or Anti-Back Spring
6	002-5413		Output Assembly 6mm Bore
7	002-2030 002-2031	CW CCW	Brake Spring
8	002-4202		Brake Hub
9	002-2014-1 002-2015-1	CW CCW	Actuator Assembly
10	002-1201 002-1204 002-1202 002-1203	24 VDC 115 VAC 12 VDC 90 VDC	Coil Assembly
11	002-7012		Solenoid Spacer
12	002-7006 002-7007	CW CCW	Plate Assembly
13	002-4328		Metric Clamp Collar
14	040-04271		(3) 6-32 Flat Hd Socket Cap Screw
15	040-04318		(2) 6-32 Sems Machine Screw
16	002-2036		Grommet

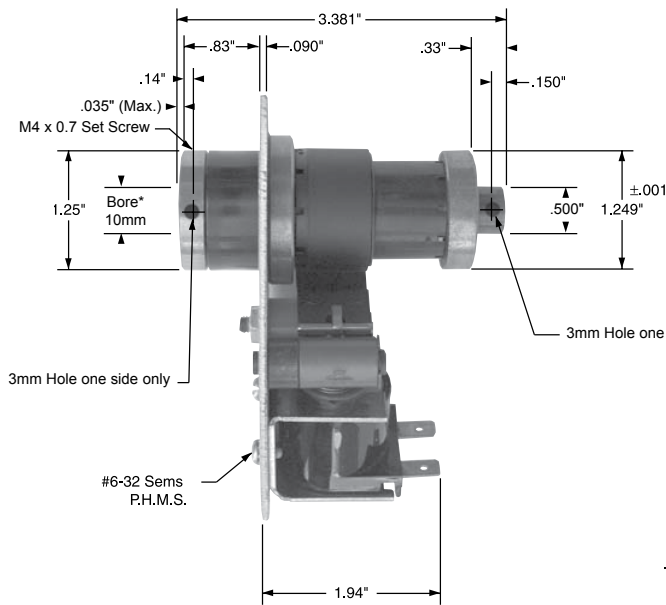
Wrap Spring Clutches

DCB-4 Metric Dimensions

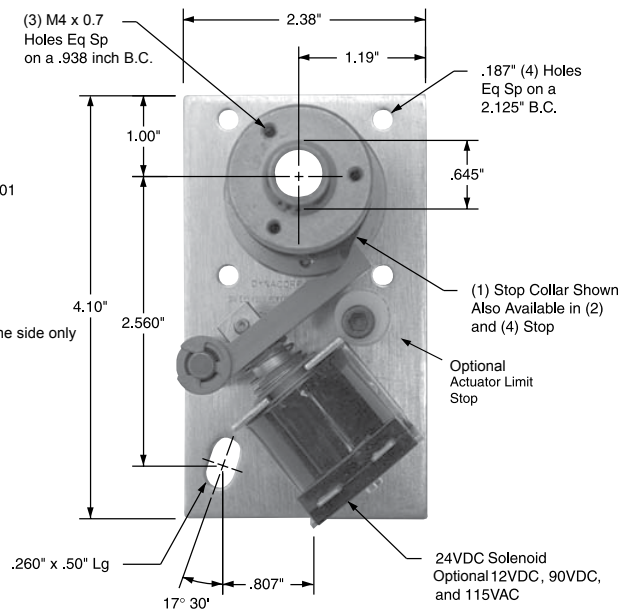
Product Function: Start-Stop 

Specifications

Maximum Speed:	1200 RPM
Static Torque:	120 in.-lb
Max. Anti-override Torque:	25 in.-lb.
Max Anti-back Torque:	80 in.-lb.
Positioning Accuracy:	$\pm 1/2^\circ$
Weight:	1.25 lbs.



* Bore 10mm H9



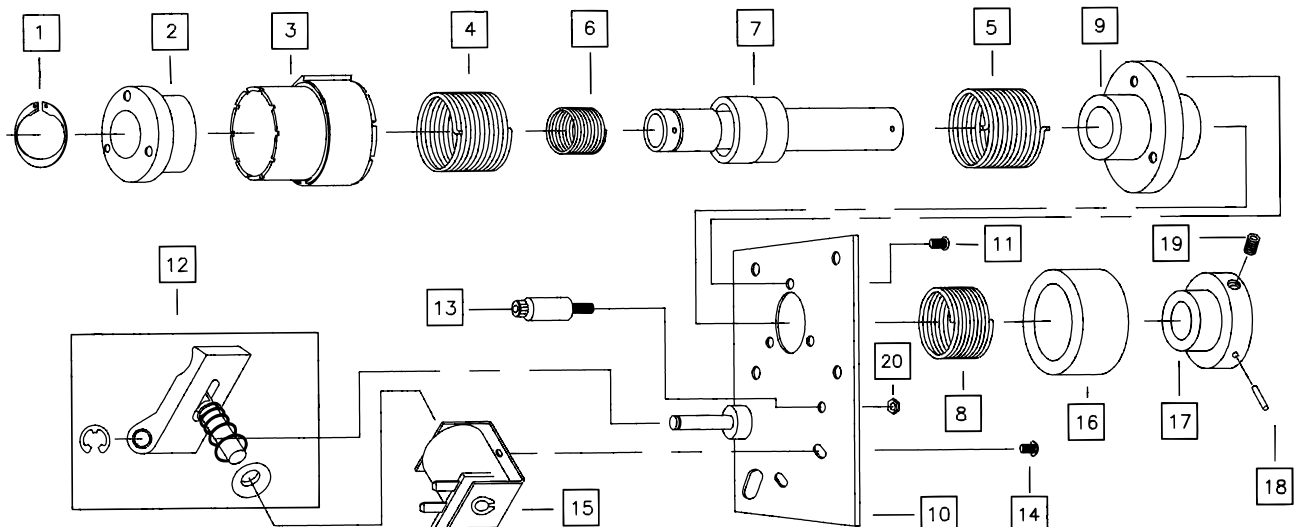
Unit Shown is CW Rotation, CCW is Available

DCB-4 Metric Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D314-17-001	D314-27-001	DCB4	10mm	24VDC	1
D314-17-002	D314-27-002	DCB4	10mm	24VDC	2
D314-17-013	D314-27-003	DCB4	10mm	24VDC	4

Wrap Spring Clutches – Replacement Parts

DCB-4 Metric Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0027		Retaining Ring
2	D540-4-0077		Metric Input Hub/Anti-Overrun
3	D266-4-0051	CW	1 Stop Collar
	D266-4-0052	CW	2 Stop Collar
	D266-4-0054	CW	4 Stop Collar
	D266-4-0081	CCW	1 Stop Collar
	D266-4-0082	CCW	2 Stop Collar
	D266-4-0084	CCW	4 Stop Collar
4	D808-4-0066	CW	Drive Spring
	D808-4-0059	CCW	Drive Spring
5	D808-4-0016	CW	Brake Spring
	D808-4-0017	CCW	Brake Spring
6	D808-4-0022	CW	Anti-Overrun Spring
	D808-4-0023	CCW	Anti-Overrun Spring
7	D824-4-0300		Output Assembly/Anti-Overrun 10mm
8	D808-4-0018	CW	Anti-Back Spring
	D808-4-0019	CCW	Anti-Back Spring
9	D540-4-0015		Brake Hub
10	D686-4-0001	CW	Plate Assembly
	D686-4-0002	CCW	Plate Assembly
11	D797-1-0311		FLT HD Socket Cap Screw
12	D102-4-0005		Actuator Assembly
13	D816-1-0003		* Actuator Limit Stop Assembly
14	D797-1-0414		Pan HD Machine SCR Sems
15	D275-1-0163	24VDC	Coil Assembly
16	D287-4-9002		Dust Cover (AB Spring)
17	D540-4-0078		Metric Anti-Back Hub
18	D679-1-0022		Spring Pin
19	040-04991		M-4 Headless SOC HD Screw
20	D661-1-0022		* Hex Nut

* Optional Actuator Limit Stop Feature

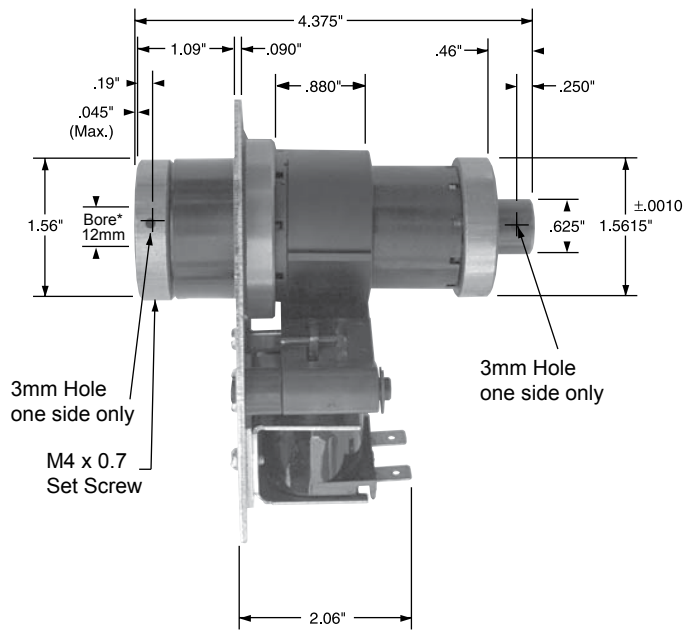
Wrap Spring Clutches

DCB-5 Metric Dimensions

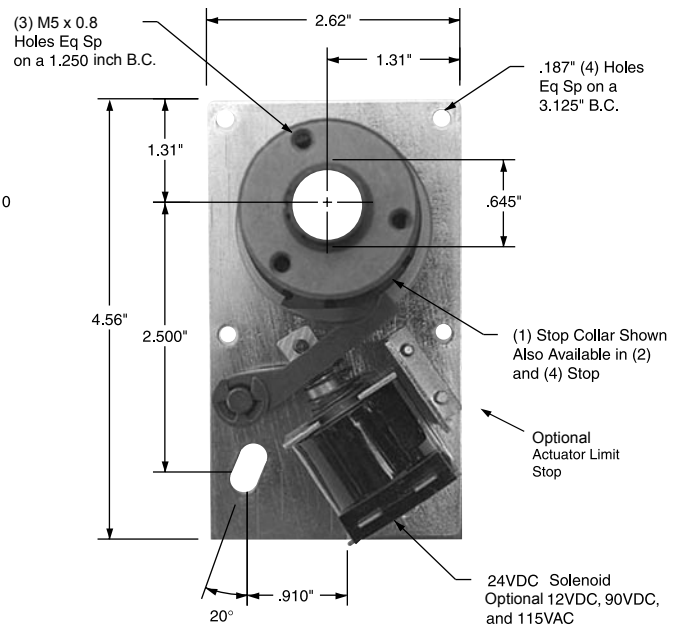
Product Function: Start-Stop 

Specifications

Maximum Speed:	750 RPM
Static Torque:	250 in.-lb
Max. Anti-overnrun Torque:	45 in.-lb.
Max Anti-back Torque:	160 in.-lb.
Positioning Accuracy:	$\pm 1/2^\circ$
Weight:	1.75 lbs.



* Bore 12mm H9



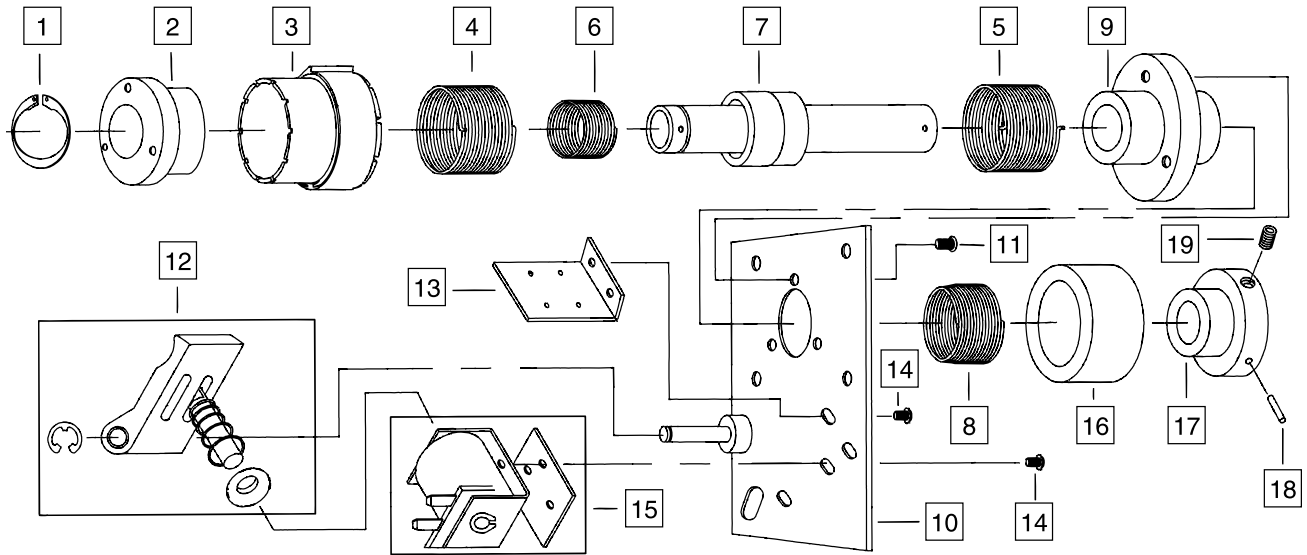
Unit Shown is CW Rotation, CCW is Available

DCB-5 Metric Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D315-17-001	D315-27-001	DCB5	12mm	24VDC	1
D315-17-002	D315-27-002	DCB5	12mm	24VDC	2
D315-17-003	D315-27-003	DCB5	12mm	24VDC	4

Wrap Spring Clutches – Replacement Parts

DCB-5 Metric Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0030		Retaining Ring
2	D540-5-0008		Metric Input Hub/Anti-Overrun
3	D266-5-0101 D266-5-0102 D266-5-0104 D266-5-0201 D266-5-0202 D266-5-0204	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
4	D808-5-0001 D808-5-0002	CW CCW	Drive Spring Drive Spring
5	D808-5-0001 D808-5-0002	CW CCW	Brake Spring Brake Spring
6	D808-5-0003 D808-5-0004	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
7	D824-5-0003		Output Assembly/Anti-Overrun 12mm
8	D808-5-0005 D808-5-0006	CW CCW	Anti-Back Spring Anti-Back Spring
9	D540-5-0004		Brake Hub
10	D686-5-0001 D686-5-0002	CW CCW	Plate Assembly Plate Assembly
11	D797-1-0322		FLT HD Socket Cap Screw
12	D101-5-0017 D101-5-0018	CW CCW	Actuator Assembly Actuator Assembly
13	D816-5-0013		* Actuator Limit Stop Assembly
14	D797-1-0413		Pan HD Machine SCR Sems
15	D101-5-0003	24VDC	Coil Assembly
16	D287-5-9002		Dust Cover (AB Spring)
17	D540-5-0009		Metric Anti-Back Hub
18	D679-1-0024		Spring Pin
19	040-04991		M-4 Headless SOC

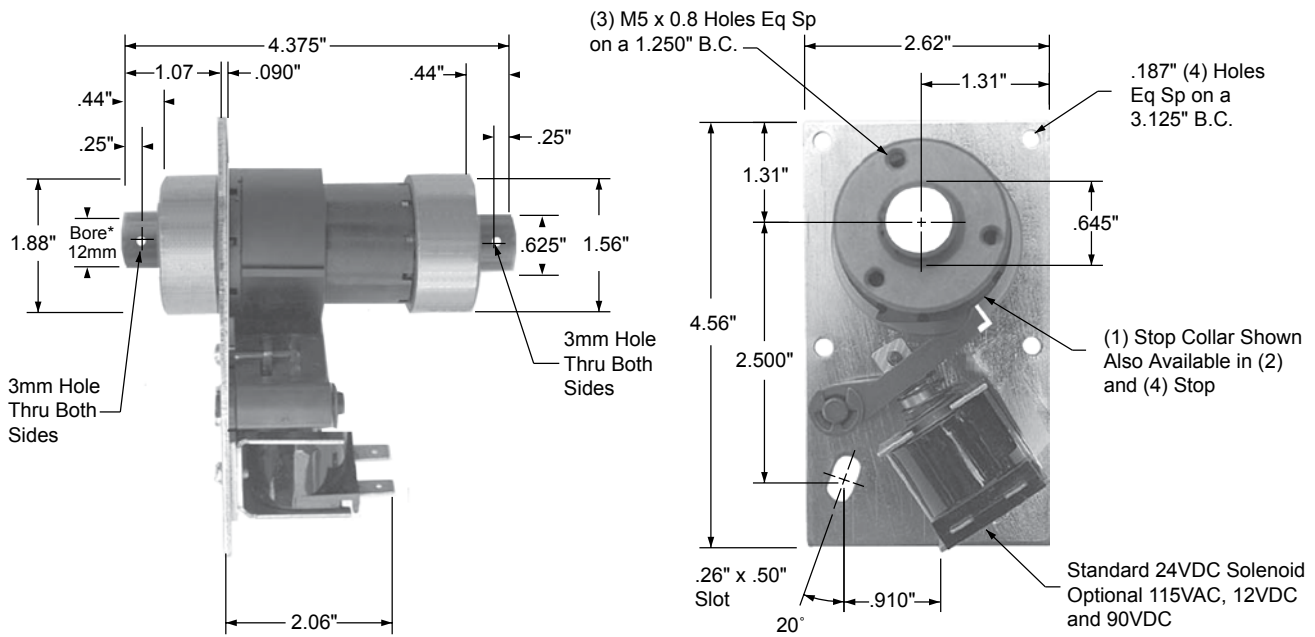
Wrap Spring Clutches

DCB-5 SUPER Metric Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	750 RPM	Needle Bearing Input and Output Hubs with Roller Clutch AB and AOR
Static Torque:	250 in.-lb	Hardened Output Shaft
Max. Anti-overnrun Torque:	125 in.-lb.	Hardened Wear Rings at Cross-Over Points
Max Anti-back Torque:	125 in.-lb.	Stainless Steel Actuator Face
Positioning Accuracy:	$\pm 1/2^\circ$	
Weight:	1.75 lbs.	



* Bore 12mm H9

Unit Shown is CW Rotation, CCW is Available

DCB-5 SUPER Metric Part Numbers

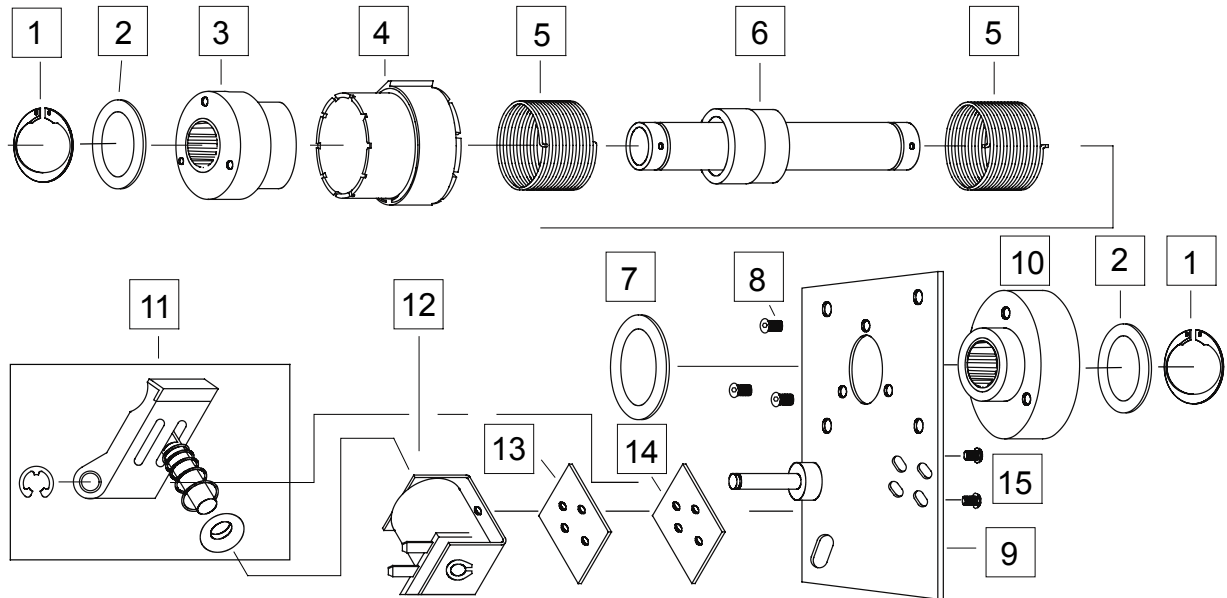
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D335-17-001	D335-27-001	DCB5 SUPER	12mm	24VDC	1
D335-17-002	D335-27-002	DCB5 SUPER	12mm	24VDC	2
D335-17-003	D335-27-003	DCB5 SUPER	12mm	24VDC	4

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Wrap Spring Clutches – Replacement Parts

DCB-5 SUPER Metric Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0030		(2) Retaining Ring
2	104702		(2) Thrust Washer
3	104698-3 104698-2	CW CCW	Metric Input Hub with Anti-Overrun Bearing
4	D266-5-0101 D266-5-0102 D266-5-0104 D266-5-0201 D266-5-0202 D266-5-0204	CW CW CW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar
5	D808-5-0001 D808-5-0002	CW CCW	(2) Drive or Brake Spring
6	104694-1		Output Assembly 12mm Bore
7	104701		Thrust Washer
8	D797-1-0322		(3) 8-32 Flat Hd Socket Cap Screw
9	104690 104690-1	CW CCW	Plate Assembly
10	104700-1 104700	CW CCW	Brake Hub with Anti-Back Bearing
11	104935 104935-1	CW CCW	Actuator Assembly w/ Stainless Steel Tip
12	D275-1-0163 D275-1-0166 D275-1-0163 D275-1-0166	24 VDC 115 VAC 12 VDC 90 VDC	Coil Assembly
13	104687		Solenoid Spacer
14	104406		Solenoid Spacer
15	040-04270		(2) 6-32 Sems Machine Screw

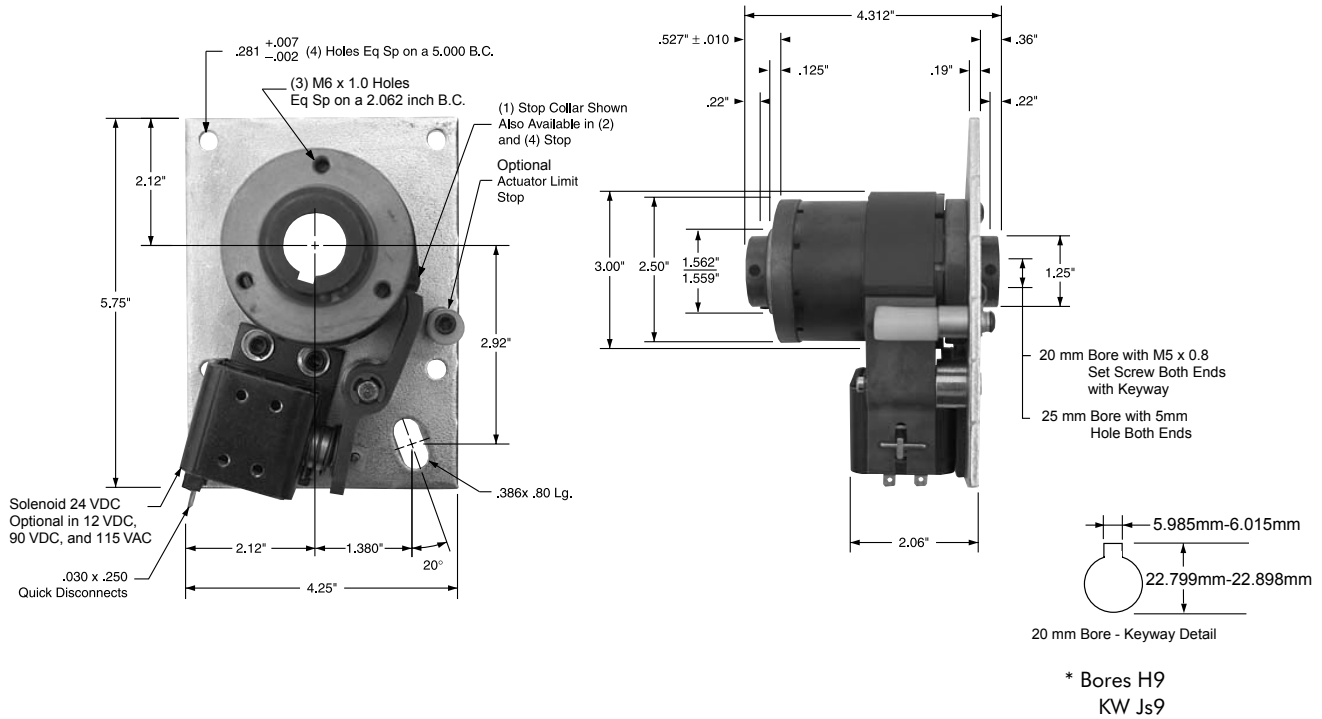
Wrap Spring Clutches

DCB-6 & DCB-6 SUPER Metric Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed: 500 RPM Max. Anti-overnun Torque: 300 in.-lb. Positioning Accuracy: $\pm 1/2^\circ$
 Static Torque: 500 in.-lb Max Anti-back Torque: 300 in.-lb. Weight: 6 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-6 Metric Part Numbers

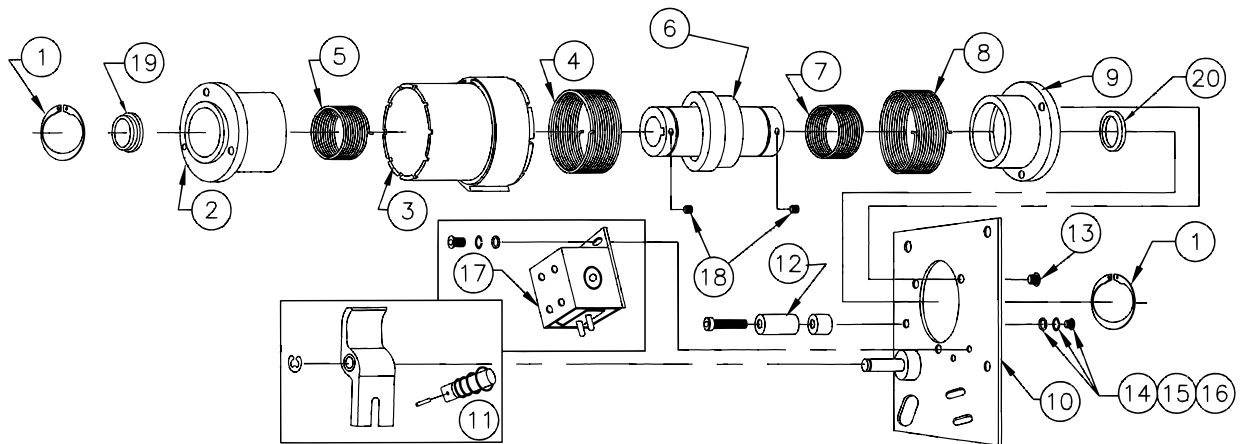
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D316-17-001	D316-27-001	DCB6	20mm	24VDC	1
D316-17-003	D316-27-003	DCB6	20mm	24VDC	2
D316-17-005	D316-27-005	DCB6	20mm	24VDC	4
D316-17-002	D316-27-002	DCB6	25mm	24VDC	1
D316-17-004	D316-27-004	DCB6	25mm	24VDC	2
D316-17-106	D316-27-006	DCB6	25mm	24VDC	4

DCB-6 SUPER Metric Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D336-17-013	D336-27-013	DCB6 SUPER	20mm	24VDC	1
D336-17-014	D336-27-014	DCB6 SUPER	20mm	24VDC	2
D336-17-015	D336-27-015	DCB6 SUPER	20mm	24VDC	4
D336-17-016	D336-27-016	DCB6 SUPER	25mm	24VDC	1
D336-17-017	D336-27-017	DCB6 SUPER	25mm	24VDC	2
D336-17-018	D336-27-018	DCB6 SUPER	25mm	24VDC	4

Wrap Spring Clutches – Replacement Parts


DCB-6 & DCB-6 SUPER Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0038		Retaining Ring
2	D540-6-0059 D541-6-0036		Metric Input Hub Super - Metric Input Hub
3	D266-6-0101 D266-6-0102 D266-6-0104 D266-6-0680 D266-6-0681 D266-6-0683 D266-6-0201 D266-6-0202 D266-6-0204 D266-6-0690 D266-6-0691 D266-6-0693	CW CW CW CW CW CW CCW CCW CCW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar
4	D808-6-0001 D808-6-0002	CW CCW	Clutch Spring Clutch Spring
5	D808-6-0005 D808-6-0006	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
6	D824-6-0348 D824-6-0349 D824-6-0482 D824-6-0483	20mm 25mm 20mm 25mm	Output Shaft Output Shaft Super - Output Shaft Super - Output Shaft
7	D808-6-0003 D808-6-0004	CW CCW	Anti-Back Spring Anti-Back Spring
8	D808-6-0001 D808-6-0002	CW CCW	Brake Spring Brake Spring
9	D540-6-0001 D541-6-0045		Brake Hub Super - Brake Hub
10	D686-6-0076 D686-6-0077	CW CCW	Plate Assembly Plate Assembly
11	D102-1-0004		Actuator Assembly
12	D816-1-0001		* Actuator Limit Stop
13	D797-1-0243		Button Head Screw
14	D950-1-0006		* Flat Washer
15	101263		* Lock Washer
16	D797-1-0233		* Socket Head Screw
17	D101-1-0028	24VDC	Coil Assembly
18	040-04276	20mm	M-5 Set Screw
19	D950-6-0003		Super - Thrust Washer, Clutch
20	D950-6-0004		Super - Thrust Washer, Brake

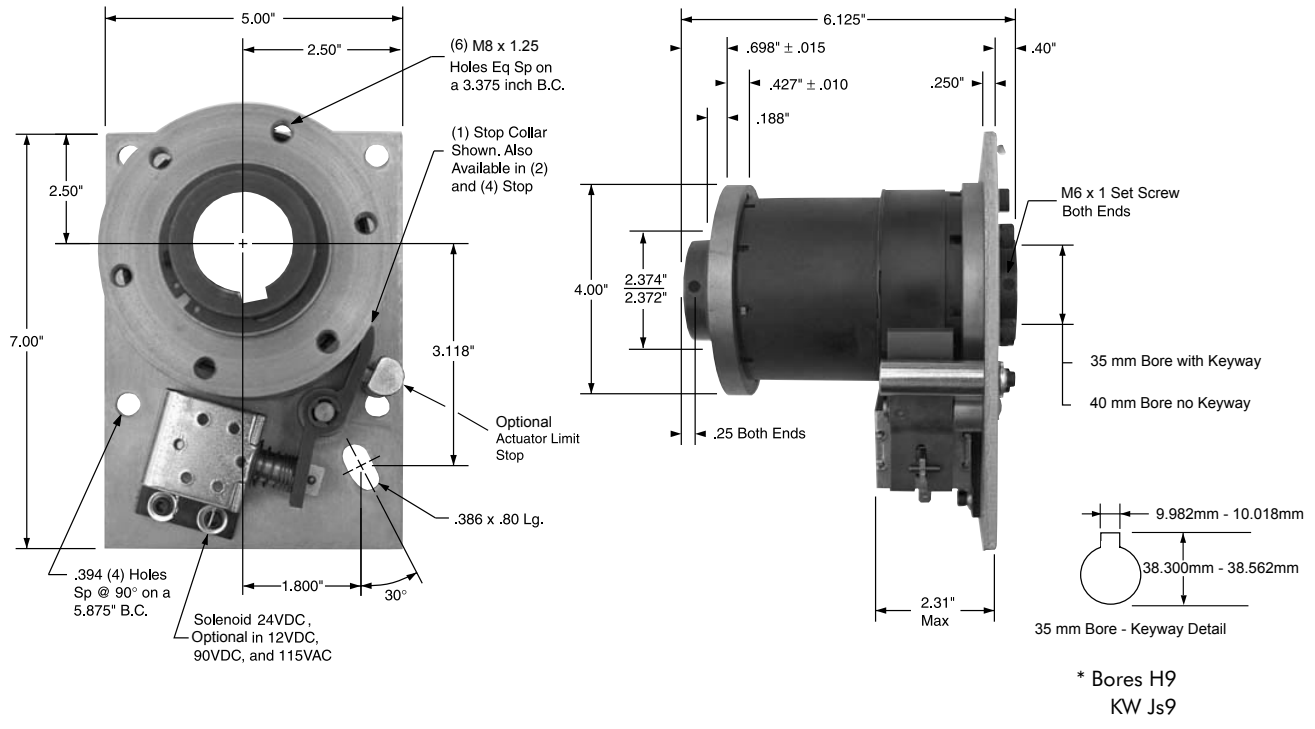
Wrap Spring Clutches

DCB-8 & DCB-8 SUPER Metric Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed: 300 RPM Max. Anti-overnun Torque: 600 in.-lb. Positioning Accuracy: $\pm 1/2^\circ$
 Static Torque: 2500 in.-lb Max Anti-back Torque: 600 in.-lb. Weight: 14.25 lbs.



Unit Shown is CW Rotation, CCW is Available

DCB-8 Metric Part Numbers

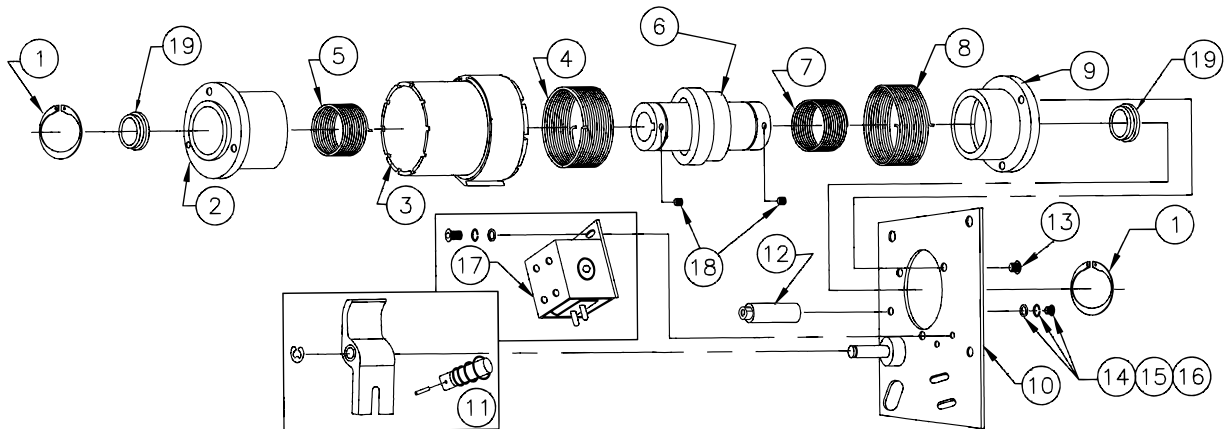
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D318-17-001	D318-27-001	DCB8	35mm	24VDC	1
D318-17-003	D318-27-003	DCB8	35mm	24VDC	2
D318-17-005	D318-27-005	DCB8	35mm	24VDC	4
D318-17-002	D318-27-002	DCB8	40mm	24VDC	1
D318-17-004	D318-27-004	DCB8	40mm	24VDC	2
D318-17-006	D318-27-006	DCB8	40mm	24VDC	4

DCB-8 SUPER Metric Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D338-17-013	D338-27-013	DCB8 SUPER	35mm	24VDC	1
D338-17-014	D338-27-014	DCB8 SUPER	35mm	24VDC	2
D338-17-015	D338-27-015	DCB8 SUPER	35mm	24VDC	4
D338-17-016	D338-27-016	DCB8 SUPER	40mm	24VDC	1
D338-17-017	D338-27-017	DCB8 SUPER	40mm	24VDC	2
D338-17-018	D338-27-018	DCB8 SUPER	40mm	24VDC	4

Wrap Spring Clutches – Replacement Parts


DCB-8 & DCB-8 SUPER Metric Replacement Parts



Item	Part No.	Rotation or Voltage	Description
1	D748-1-0039		Retaining Ring
2	D540-8-0041 D541-8-0012		Metric Input Hub Super - Metric Input Hub
3	D266-8-0001 D266-8-0002 D266-8-0004 D266-8-0153 D266-8-0154 D266-8-0156 D266-8-0031 D266-8-0032 D266-8-0034 D266-8-0157 D266-8-0158 D266-8-0160	CW CW CW CW CW CW CCW CCW CCW CCW CCW CCW	1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar 1 Stop Collar 2 Stop Collar 4 Stop Collar Super - 1 Stop Collar Super - 2 Stop Collar Super - 4 Stop Collar
4	D808-8-0003 D808-8-0004	CW CCW	Clutch Spring Clutch Spring
5	D808-8-0025 D808-8-0026	CW CCW	Anti-Overrun Spring Anti-Overrun Spring
6	D824-8-0420 D824-8-0410 D824-8-0589 104745	35mm 40mm 35mm 40mm	Output Shaft Output Shaft Super - Output Shaft Super - Output Shaft
7	D808-8-0025 D808-8-0026	CW CCW	Anti-Back Spring Anti-Back Spring
8	D808-8-0003 D808-8-0004	CW CCW	Brake Spring Brake Spring
9	D540-8-0016 D541-8-0010		Brake Hub Super - Brake Hub
10	D686-8-0051 D686-8-0052	CW CCW	Plate Assembly Plate Assembly
11	D102-1-0004 D102-1-0021		Actuator Assembly D6 Coil Actuator Assembly D7 Coil
12	D816-1-0005		* Actuator Limit Stop
13	DY-10714		Socket Head Screw
14	D950-1-0052		* Flat Washer
15	D950-1-0019		* Lock Washer
16	D797-1-0035		* Socket Head Screw
17	D101-1-0028 D101-1-0053	24VDC 24VDC	Coil Assembly D6 Super - Coil Assembly D7
18	D797-1-0174		M-6 Set Screw
19	D950-8-0001		Super - Thrust Washer

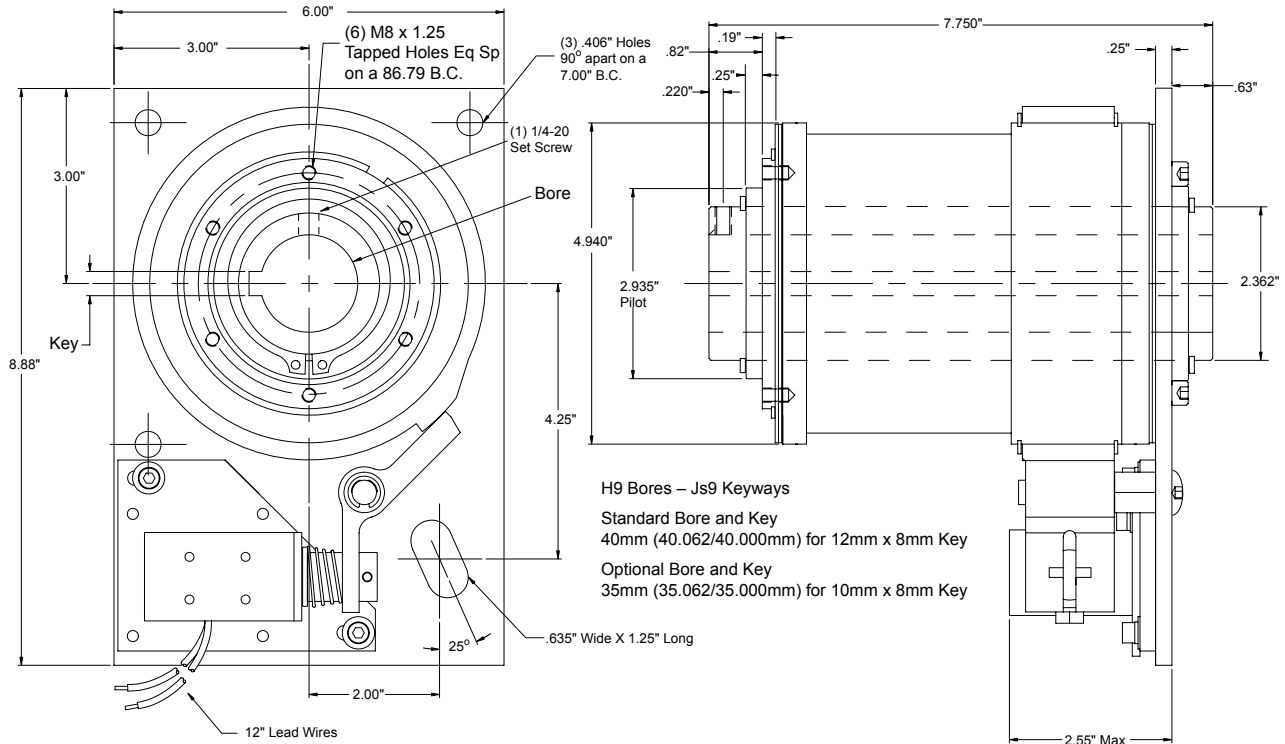
Wrap Spring Clutch-Brakes


DCB-10 & DCB-10 SUPER Metric Dimensions

Product Function: Start-Stop 

Specifications

Maximum Speed:	200 RPM	Max. Anti-overnun Torque:	1200 in.-lb.	Positioning Accuracy:	$\pm 1/2^\circ$
Static Torque:	5000 in.-lb	Max. Anti-back Torque:	1200 in.-lb.	Weight:	28 lbs.



 CLOCKWISE ROTATION SHOWN WITH DC SOLENOID
Other voltages available: 12VDC, 90VDC and 115VAC

DCB-10 Metric Part Numbers

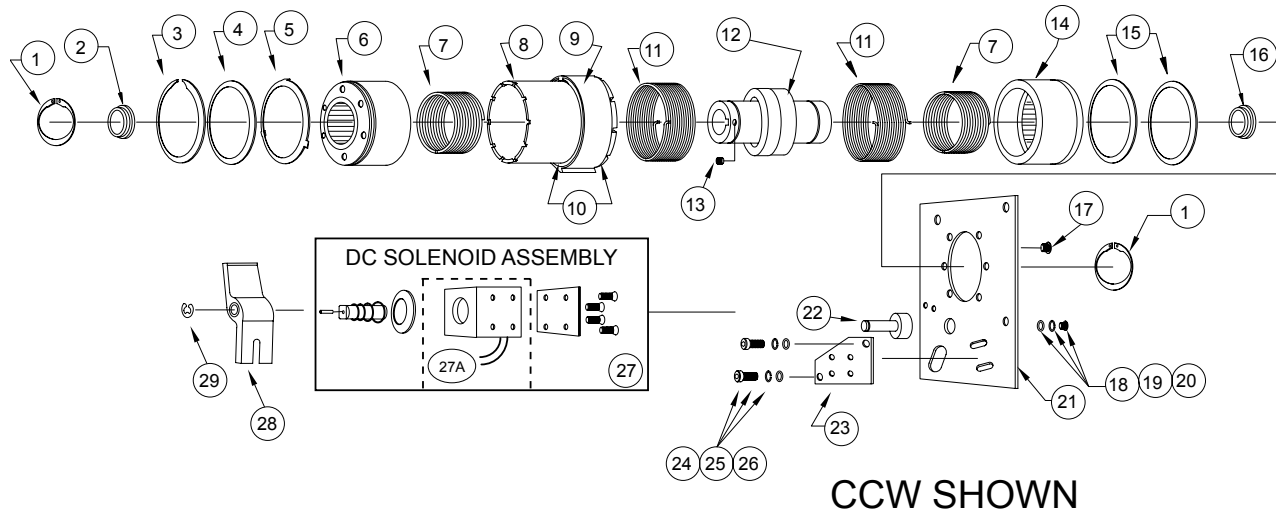
Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D310-17-001	D310-27-001	DCB10	40mm	24VDC	1
D310-17-002	D310-27-002	DCB10	40mm	24VDC	2
D310-17-003	D310-27-003	DCB10	40mm	24VDC	4

DCB-10 SUPER Metric Part Numbers

Part Number		Description			
CW Rotation	CCW Rotation	Model	Bore	Voltage	Stops
D330-17-001	D330-27-001	DCB10 SUPER	40mm	24VDC	1
D330-17-003	D330-27-003	DCB10 SUPER	40mm	24VDC	2
D330-17-005	D330-27-005	DCB10 SUPER	40mm	24VDC	4

Wrap Spring Clutch-Brakes – Replacement Parts

DCB-10 & DCB-10 SUPER Metric Replacement Parts



Item	Part No.	Rotation - Bore or Voltage	Description
1	040-03123		(2) Retaining Ring (5100-237)
2	D950-10-0002		Input Thrust Washer
3	040-03126		Retaining Ring (US-381)
4	D807-10-0001		Collar Spacer
5	D807-10-0002		Tabbed Input Collar Spacer
6	D541-10-0004		Metric Input Hub
	D541-10-0002		Super - Metric Input Hub with Wear Ring
7	D808-0-0001	CW	(2) Anti-Overrun / Anti-Back Spring
	D808-0-0002	CCW	
8	D803-10-0001	CW or CCW	Collar Sleeve
9	D245-0-0101	CW or CCW	1 Stop Cam
	D245-0-0102	CW or CCW	2 Stop Cam
	D245-0-0104	CW or CCW	4 Stop Cam
10	040-03121		(2) Retaining Ring (US-500)
11	D808-0-0009	CW	(2) Clutch / Brake Spring
	D808-0-0010	CCW	
12	D824-10-0012	35mm	Metric Output Shaft
	D824-10-0013	40mm	
	D824-10-0005	35mm	Super - Metric Output Shaft with Wear Rings
	D824-10-0006	40mm	
13	040-04451		Set Screw Cup Point (M6 x 1.0 x 10mm Long)
14	D541-10-0006		Brake Hub
	D541-10-0005		Super - Brake Hub with Wear Ring
15	D807-10-0003		(A/R) Brake Collar Spacer
16	D950-10-0001		Brake Thrust Washer
17	040-04227		(6) Cap Screws (1/4-20 x 5/8 Long)
18	040-06118		Flat Washer (3/8)
19	040-0694		Lock Washer (3/8)
20	040-04493		Button Head Cap Screw (3/8-24 x 3/4 Long)
21	D686-10-0001		Plate
22	D679-10-0001		Actuator Post
23	D686-10-0002		Solenoid Plate
24	040-04487		(2) Cap Screws (10-32 x 5/8 Long)
25	040-0688		(2) Lock Washer (#10)
26	040-06159		(2) Flat Washer (#10)
27	D101-10-0005	CW or CCW - 24VDC	DC Coil Assembly - Incl. Coil & Hardware
27A	D275-1-0073	24VDC	DC Coil Only
28	D102-10-0001		Actuator
29	040-03125		Retaining Ring (5133-37)

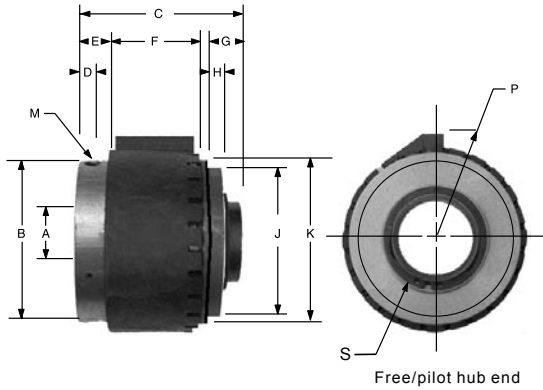
Wrap Spring Clutches

Spring Clutch

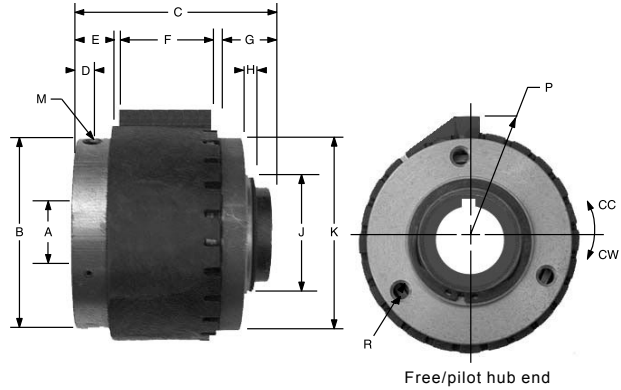
Product Functions: Overrunning  - Start-Coast  - Single Revolution 

Models

- SC-2
- SC-4
- SC-5
- SC-6
- SC-8



SC-2, SC-4 and SC-5



SC-6 and SC-8

Standard Mounting Dimensions (inches)

Model	A ¹	Keyway	B	C	D	E	F	G	H	J	K	M ²	P	R			S ⁴	Torque in. lbs.	Max. RPM
														Dia.	No. of Holes	Bolt Circle			
SC-2	.250	None	.94	1.25	.16	.34	.49	.41	.24	.8775/.8765	.94	8-32	.57	—	—	—	.59	25	1800
SC-4	.375	None	1.25	1.38	.14	.28	.67	.35	.25	1.1275/1.1265	1.25	.125	.72	—	—	—	.65	125	1200
SC-5	.500	None	1.56	1.88	.14	.38	1.00	.35	.25	1.503/1.502	1.56	.188	.85	—	—	—	.80	250	750
SC-6	.750	3/16x3/32	2.44	2.31	.28	.50	.866	.41	.125	1.562/1.559	2.437	1/4-20	1.50	1/4-20	3	2.062	—	500	500
	1.000	None	2.44	2.31	.28	.50	.866	.41	.125	1.562/1.559	2.437	1/4-20	1.50	1/4-20	3	2.062	—	500	500
SC-8	1.000	1/4x1/8	4.00	3.50	.30	.60	1.98	.88	.18	2.374/2.372	4.025	3/16-16	2.00	5/16-18	6	3.375	—	2500	300
	1.250 ³	5/16x5/32	4.00	3.50	.30	.60	1.98	.88	.18	2.374/2.372	4.025	3/16-16	2.00	5/16-18	6	3.375	—	2500	300
	1.375	5/16x5/32	4.00	3.50	.30	.60	1.98	.88	.18	2.374/2.372	4.025	3/16-16	2.00	5/16-18	6	3.375	—	2500	300
	1.500 ³	3/8x1/8	4.00	3.50	.30	.60	1.98	.88	.18	2.374/2.372	4.025	3/16-16	2.00	5/16-18	6	3.375	—	2500	300

NOTE: Rotation is determined by looking at the free/pilot hub end.

¹ Tolerance is +.0005 / +.0030

² Pin diameter shown on sizes SC-4 and SC-5.

³ SC-8 Standard bores.

⁴ Retaining ring clearance diameter.

How to Order:



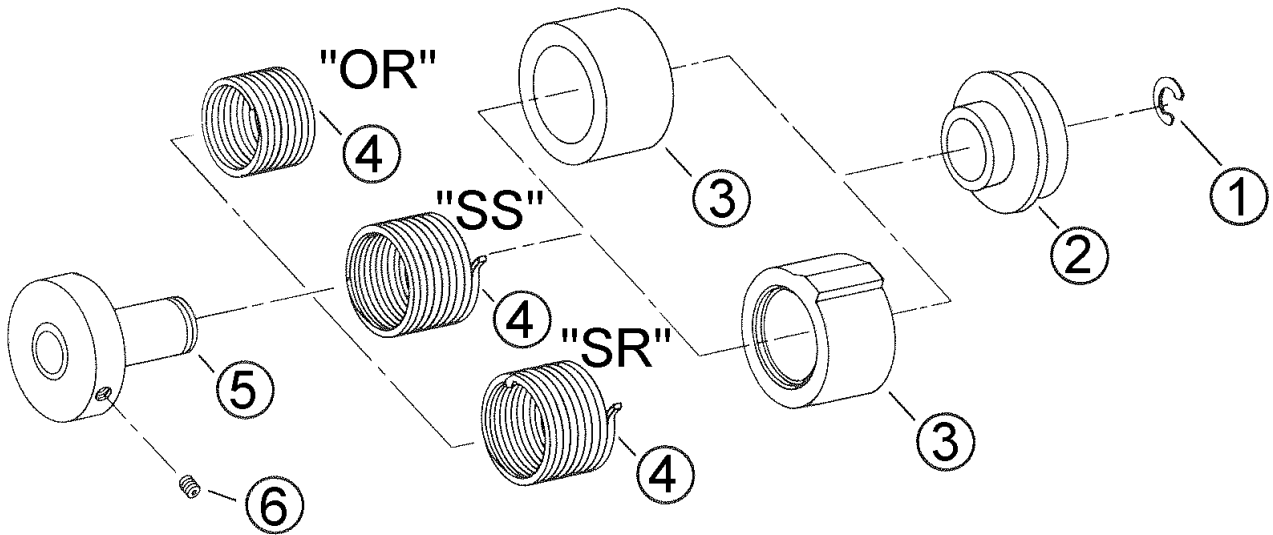
SR units (Brake Torque is 10% of Maximum Torque).

Example

SC-6 clutch, hub input, 3/4" bore, 2 stops, clockwise single revolution. Part No. 3106-0602-10-00.

Wrap Spring Clutches – Replacement Parts

SC Spring Clutch Replacement Parts



Item	Model SC-2 Part No.	Model SC-4 Part No.	Model SC-5 Part No.	Model SC-6 Part No.	Model SC-8 Part No.	Description	
1	040-0310	101316	D748-1-0030	D748-1-0038	D748-1-0039	Retaining Ring	
2	002-4218	102335-1	102347	D540-6-0009	D540-8-0014	Free / Pilot Hub	
3	002-4236	103398	103393	D287-6-0001	100999	Overrunning Collar	
				CW CCW			
	002-4317	102336-5	103392-5	D266-6-0301	D266-6-0401	100784-5	1 Stop Collar
	002-4319	102336-6	103392-6	D266-6-0302	D266-6-0402	100784-6	2 Stop Collar
	002-4320	102336-8	103392-8	D266-6-0304	D266-6-0404	100784-8	4 Stop Collar
4	002-2028	D808-4-0066	D808-5-0001	D808-6-0001	D808-8-0003	SR Drive Spring LH ¹	
	002-2029	D808-4-0059	D808-5-0002	D808-6-0002	D808-8-0004	SR Drive Spring RH ²	
	002-2024	D808-4-0066-1	D808-5-0001-1	D808-6-0007	D808-8-0003-1	SS Drive Spring LH ¹	
	002-2025	D808-4-0059-1	D808-5-0002-1	D808-6-0008	D808-8-0004-1	SS Drive Spring RH ²	
	002-2026	D808-4-0066-2	D808-5-0001-2	D808-6-0009	D808-8-0003-2	OR Drive Spring LH ¹	
	002-2027	D808-4-0059-2	D808-5-0002-2	D808-6-0010	D808-8-0004-2	OR Drive Spring RH ²	
5	002-5409	103131	102494	-	-	Shaft Hub Assembly	
	-	-	-	D824-6-0052	-	3/4 Bore Shaft Hub Assembly	
	-	-	-	D824-6-0056	100996-4	1 Bore Shaft Hub Assembly	
	-	-	-	-	100996-5	1-1/4 Bore Shaft Hub Ass'y	
	-	-	-	-	100996-6	1-3/8 Bore Shaft Hub Ass'y	
	-	-	-	-	100996-1	1-1/2 Bore Shaft Hub Ass'y	
6	040-0432	-	-	100987	101001	Set Screw	

¹ CW Hub Input / CCW Shaft Input

² CCW Hub Input / CW Shaft Input

Wrap Spring Clutches

Wrap Spring Product Selection

Step 1—Determine function and series

Function: Overrunning

Series: SC-“OR”

An overrunning/one way wrap spring clutch generates torque in one direction. The output hub freewheels or overruns after the input hub stops.

Function: Start/Coast

Series: SC-“SS”

The start/coast wrap spring clutch is used to engage and disengage torque on a random basis. Once disengaged, the output coasts to a stop.

Function: Single revolution and start/stop

Series: SC-“SR”, DCB, or DCB Super

Single revolution and start/stop wrap spring clutches give precise nonaccumulating error single revolution cycling. Multiple stops can also be achieved through special design. The output hub does not override.

Step 2—Calculate system WK²

Reflect WK² to the Clutch or Clutch/Brake

Step 3—Select model by torque capacity

Choose from “Operating Parameters Chart.” Torque capacity must exceed calculated requirements and RPM.

Torque Formulas

Wrap Spring Products engage almost instantly; Clutches .003 seconds and Brakes .0015 seconds. The greater the load, the tighter the spring grips the hubs. Unlike friction products, wrap spring units are not forgiving. System Inertia must be calculated for proper selection.

Clutches and Clutch-Brakes use different formulas to calculate required torque because of response times and torque capabilities. Use the formula that applies to your application.

Overrunning, One Way, and Start/Coast

Series SC-“OR” and SC-“SS”

System drag torque must be added to the calculated torque for unit selection. Drag torque is the force required to initiate motion that is measured with a torque wrench.

Where: Torque (in lbs) = $\frac{WK^2 \cdot N}{11.1} + T_d$

WK² = System inertia reflected to clutch (lb.in.)

N = Speed of shaft where clutch is located (RPM)

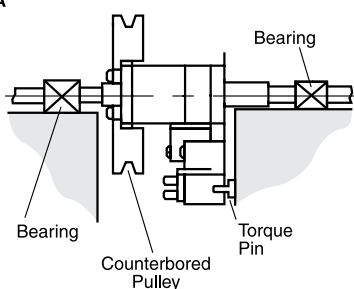
T_d = System drag torque (in-lbs)

Example

A small conveyor requires a random positioning clutch and has a reflected system WK² of 36 Lb-In² at 95 RPM. The measured drag torque is 5 in-lbs. The conveyor is on an incline. A backstop device is necessary.

Torque = [(36 x 95) ÷ 11.1] + 5 = 313 in-lbs

Figure A



The SC-6 “SS” clutch is chosen from the “Operating Parameters Chart.” It exceeds the torque requirements (500 vs. 313) and is operating within its speed range. Start-Coast (SS) is where the output is allowed to coast to a stop.

Single Revolution and Start/Stop

Series DCB, DCB Super and SC-“SR”

System drag torque must be subtracted from the calculated torque for unit selection. Drag torque is the force required to initiate motion that is measured with a torque wrench. It is important that the DCB and DCB Super operate within their speed range. They require a minimum amount of rotational force to ensure that the clutch and brake springs unwind and or wind on their hubs.

Where: Torque (in lbs) = $\frac{WK^2 \cdot N}{S_f} - T_d$

WK² = System inertia reflected to clutch or clutch/brake (lb.in.)

N = Speed of shaft where clutch is located (RPM)

S_f = Stopping factor (listed below)

5.55 for DCB and DCB Super

1.11 for SC-“SR”

T_d = System drag torque (in-lbs)

Example

A machine requires a single position clutch-brake for placing one shipping label on a box as it passes by. The labeling head has a reflected system WK² of 80.5 Lb-In² at 140 RPM. The measured drag torque is 3 in-lbs.

Torque = [(80.5 x 140) ÷ 5.55] - 3 = 2028 in-lbs

The DCB-8 Clutch-Brake is chosen from the “Operating Parameters Chart.” It exceeds the torque requirements (2500 vs. 2028) and is operating within its speed range.

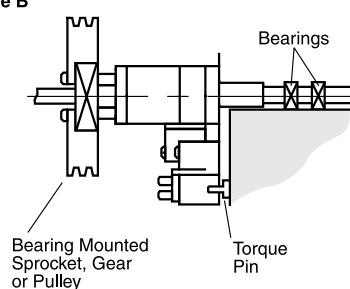
Mounting

Dynacorp® wrap spring clutches and brakes are factory assembled and tested before you receive them. All wrap spring products are to be mounted where they are fully supported by a shaft going completely through the unit, normally parallel shaft applications. They are secured to the shaft by pinning or by the use of keys. The shaft must be properly supported (Figures A & B).

When assembling sprockets, gears, or pulleys to the unit’s hub, the radial bearing load capabilities must not be exceeded. Counterboring or bearing mounting of the sprocket, gear, or pulley may be required (figures A & B).

The side plate on the DCB and DCB Super series are not to be rigidly bolted to anything. It must be restrained from movement by a torque pin or arm through one of the mounting holes. This precaution will eliminate internal bearing damage.

Figure B



Wrap Spring Clutches

Operating Parameters Chart

Model	Static Torque In.-Lbs.	Maximum Input Speed	Minimum* Input Speed	Anti-Back Torque In.-Lbs.	Anti-Overrun Torque In.-Lbs.	Input Hub Maximum Bearing Load Lbs.
DCB-2	25	1800	300	10	10	7.5
DCB-4	125	1200	200	80	25	14
DCB-5	250	750	150	160	45	32
DCB-5 SUPER	250	750	150	125	125	40
DCB-6	500	500	100	300	300	63
DCB-6 SUPER	500	500	100	300	300	65
DCB-8	2500	300	50	600	600	300
DCB-8 SUPER	2500	300	50	600	600	300
DCB-10	5000	200	40	1200	1200	500
DCB-10 SUPER	5000	200	40	1200	1200	500
SC-2	25	1800	None	—	—	8
SC-4	125	1200	None	—	—	14
SC-5	250	750	None	—	—	32
SC-6	500	500	None	—	—	63
SC-8	2500	300	None	—	—	300

* When operating below minimum speeds, system inertias may have to be increased for proper performance. Consult factory for application assistance.

Inertia Conversion Chart

In order to determine the inertia of a rotating member (shaft, disc, etc.) of a material other than steel, multiply the inertia of the appropriate steel diameter from the chart at right by:

Material	Multiplier
Bronze	1.05
Steel	1.00
Iron	0.92
Powdered Metal Bronze	0.79
Powdered Metal Iron	0.88
Aluminum	0.35
Nylon	0.17

Inertia of Steel Shafting (per inch of length or thickness)

Dia. (Inches)	WK ² (Lb.-In. ²)	Dia. (Inches)	WK ² (Lb.-In. ²)	Dia. (Inches)	WK ² (Lb.-In. ²)
1/4	0.00011	7	66.816	13	803.52
3/8	0.00055	7-1/4	77.04	13-1/4	858.24
1/2	0.00173	7-1/2	87.984	13-1/2	924.48
3/4	0.00864	7-3/4	100.656	13-3/4	995.04
1	0.0288	8	113.904	14	1068.48
1-1/4	0.072	8-1/4	128.88	14-1/4	1147.68
1-1/2	0.144	8-1/2	144	14-1/2	1229.75
1-3/4	0.288	8-3/4	162.72	14-3/4	1317.6
2	0.432	9	182.88	15	1404
2-1/4	0.72	9-1/4	203.04	16	1815.84
2-1/2	1.152	9-1/2	223.2	17	2314.08
2-3/4	1.584	9-3/4	252	18	2910.24
3	2.304	10	277.92	19	3611.52
3-1/2	4.176	10-1/4	306.72	20	4433.76
3-3/4	5.472	10-1/2	338.4	21	5389.92
4	7.056	10-3/4	371.52	22	6492.96
4-1/4	9.072	11	407.52	23	7757.28
4-1/2	11.376	11-1/4	444.96	24	9195.84
5	17.28	11-1/2	486.72	25	10827.36
5-1/2	25.488	11-3/4	529.92	26	12666.24
6	36	12	576	27	14731.2
6-1/4	42.624	12-1/4	626.4	28	17036.64
6-1/2	49.68	12-1/2	679.68	29	19604.16
6-3/4	57.888	12-3/4	735.84	30	22452.48