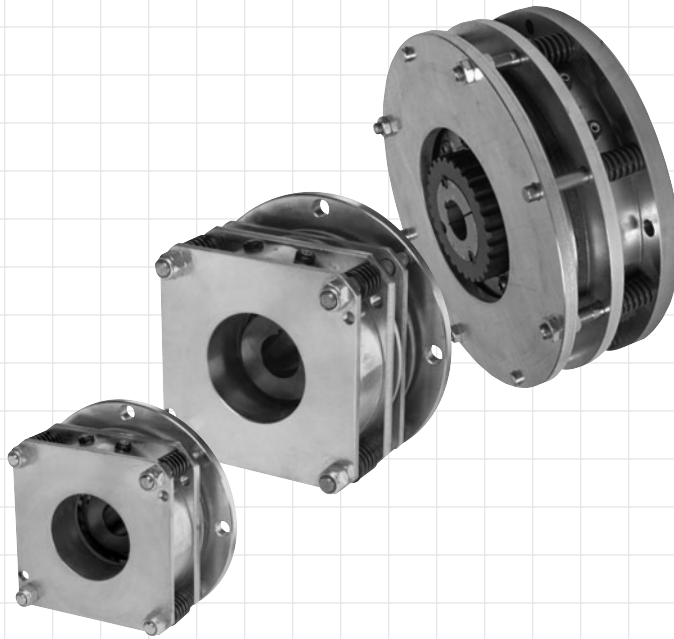


Spring Set Holding Brakes



Description

Spring set or electromagnetic release brakes provide braking action via springs when in the de-energized state. As the brake is energized, the load is released and allowed to rotate. Dynacorp® spring set brakes are of high quality and are ruggedly engineered for holding applications. Typical applications include medical equipment, robotics, packaging machinery, lifts, and motor braking. Use the torque ratings below for sizing/selection.

Section Index

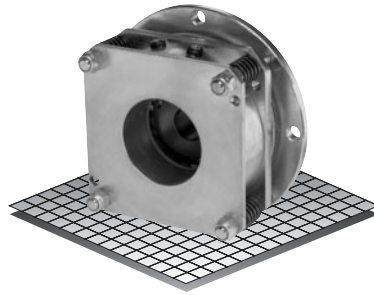
Products Complete information is shown for each product; including specifications, drawings, dimensions, parts list, recommended controls and information for ordering

Model	Nominal Size	Mounting	Static Torque in. lbs.	Page
303	3 inch	Spline Drive	35	F-2
303HQ	3 inch	High TorQ, Spline Drive	60	F-4
304	4 inch	Spline Drive	225	F-6
305	5 inch	Spline Drive	425	F-8
305HQ	5 inch	High TorQ, Spline Drive	800	F-10
308	8 inch	Spline Drive	1200	F-12

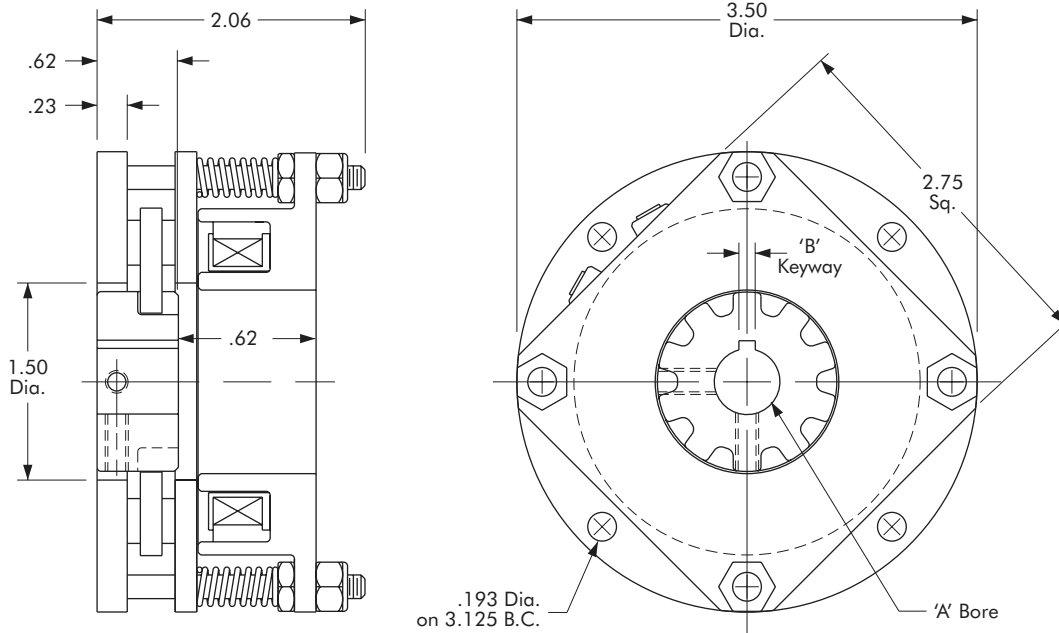
Spring Set Holding Brake

Model

● 303



- ▶ Factory Assembled and Tested
- ▶ Spline Drive



"A" Bore	"B" Keyway
3/8"	None
1/2"	.125 x .062
5/8"	.188 x .093
3/4"	.188 x .093

Technical Data

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
303	1.8	35	90	.157

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

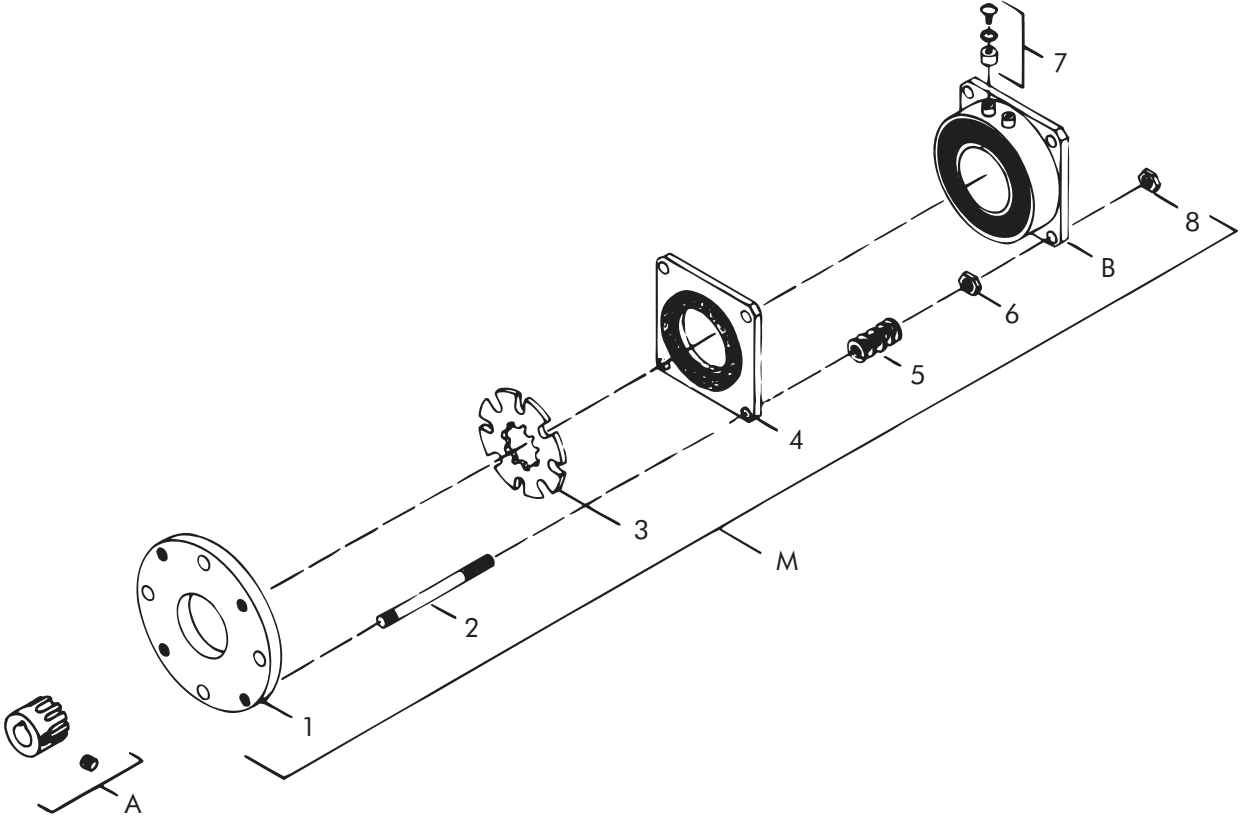
Order Parts for Assembly No. FC303069

Item	Qty.	Description	Model No.
			303
A	1	Rotor Hub Assembly	
		3/8" Plain Bore	303453-PB
		1/2" Bore	303451-3
		5/8" Bore	303451-5
		3/4" Bore	303453-8
M	1	Spring Set Holding Brake	
		24 Volts	303070-3
		90 Volts	303070-4

To order, specify: 1, Spring Set Holding Brake of required voltage
1, Rotor Hub Assembly of required bore size.

For controls, see Section K.

Spring Set Holding Brake – Replacement Parts



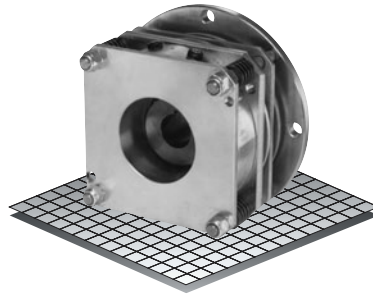
Replacement Parts

Item	Qty.	Description	Model No.
B	1	Coil Assembly 24 Volts 90 Volts	303333-1 303334-1
1	1	Back Plate	303810
2	4	Stud	326606
3	1	Rotor (10 Teeth)	303811
4	1	Flapper	303812-1
5	4	Springs	RY-20023
6	4	Nuts	DY-10403
7	1	Accessory Kit	326147
8	4	Nuts	RY-20139

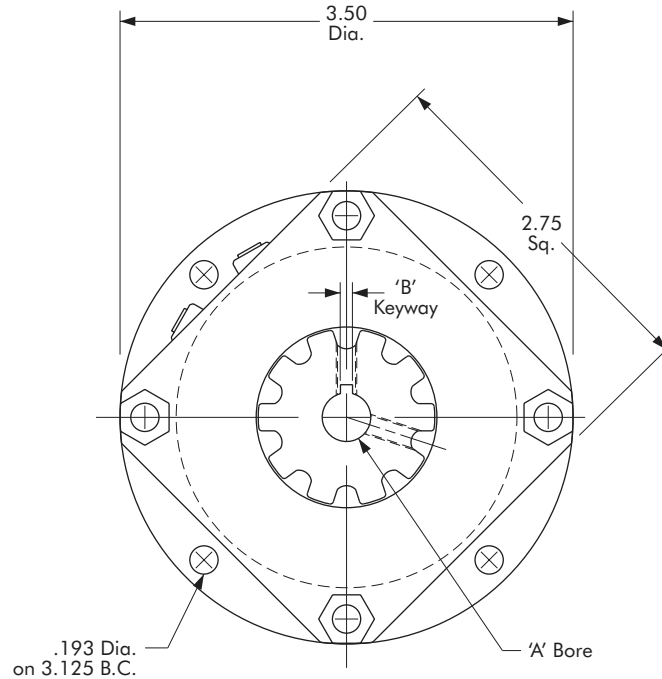
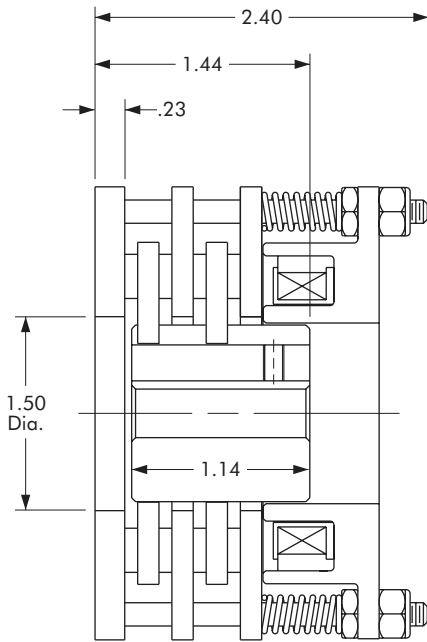
Spring Set Holding Brake

Model

● 303HQ



- ▶ Factory Assembled and Tested
- ▶ Spline Drive
- ▶ Double Disc



"A" Bore	"B" Keyway
1/2"	None
5/8"	.188 x .093
3/4"	.188 x .093

Technical Data and Torque (In. Lbs)

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
303HQ	2.12	60	90	.157

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

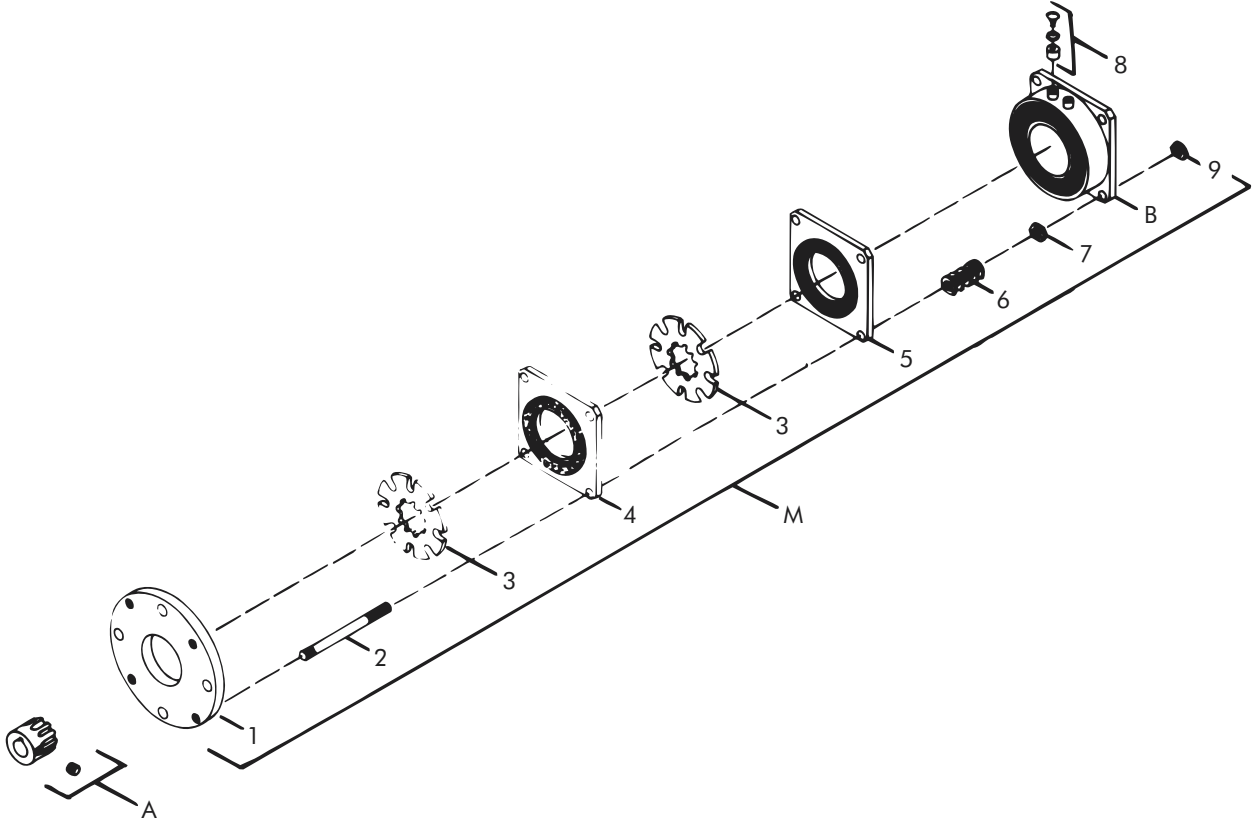
Order Parts for Assembly No. FC303071

Item	Qty.	Description	Model No. 303HQ
A	1	Rotor Hub Assembly 1/2" Plain Bore 5/8" Bore 3/4" Bore	303466-DPB 303465-3 303465-4
M	1	Spring Set Holding Brake Double Disc 24 Volts 90 Volts	303072-3 303072-4

To order, specify: 1, Spring Set Holding Brake of required voltage
1, Rotor Hub Assembly of required bore size.

For controls, see Section K.

Spring Set Holding Brake – Replacement Parts



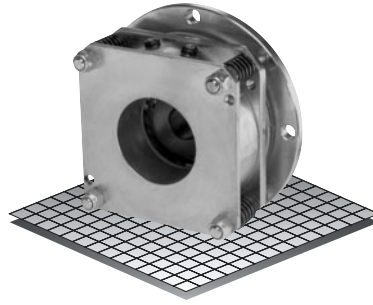
Replacement Parts

Item	Qty.	Description	Model No. 303HQ
B	1	Coil Assembly 24 Volts 90 Volts	303333-1 303334-1
1	1	Back Plate	303810
2	4	Studs	326669
3	2	Rotor (10 Teeth)	303811
4	1	Float Plate	303812-5
5	1	Flapper	303812-1
6	4	Springs	RY-20023
7	4	Nuts	DY-10403
8	1	Accessory Kit	326147
9	4	Nuts	RY-20139

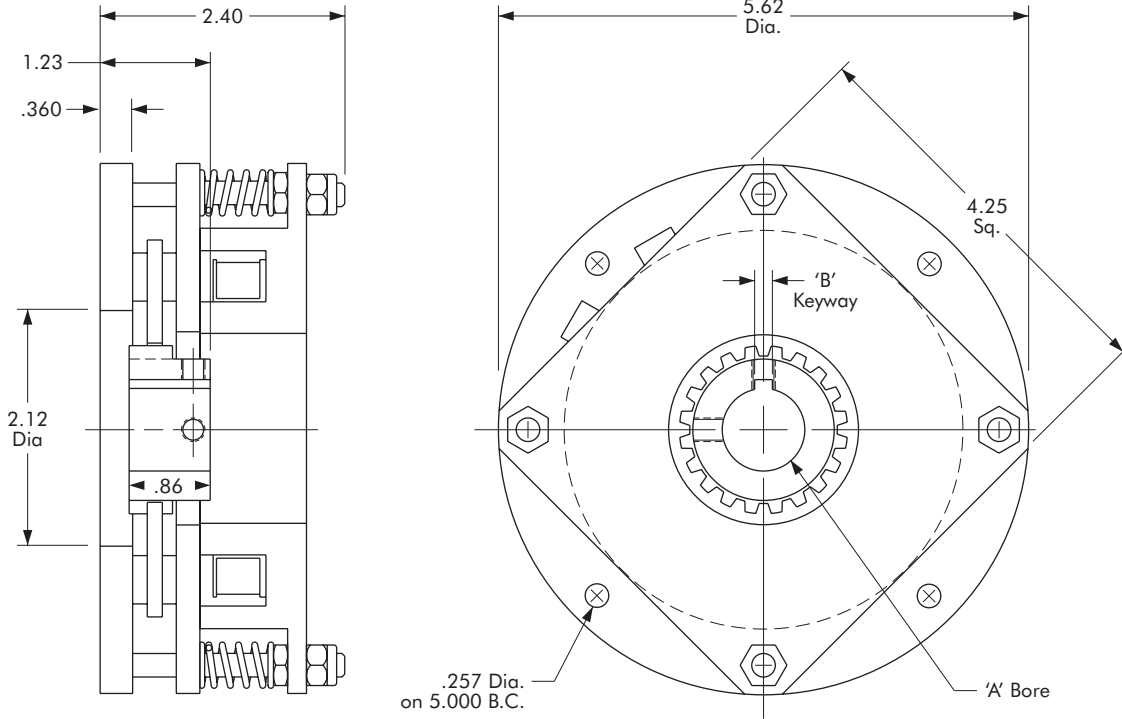
Spring Set Holding Brake

Model

● 304



- ▶ Factory Assembled and Tested
- ▶ Spline Drive



Bore "A"	"B" Keyway
1/2"	None
5/8"	.187 x .094
3/4"	.187 x .094
7/8"	.187 x .094
1"	.250 x .125

Technical Data

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
304	6.12	225	90	.17

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

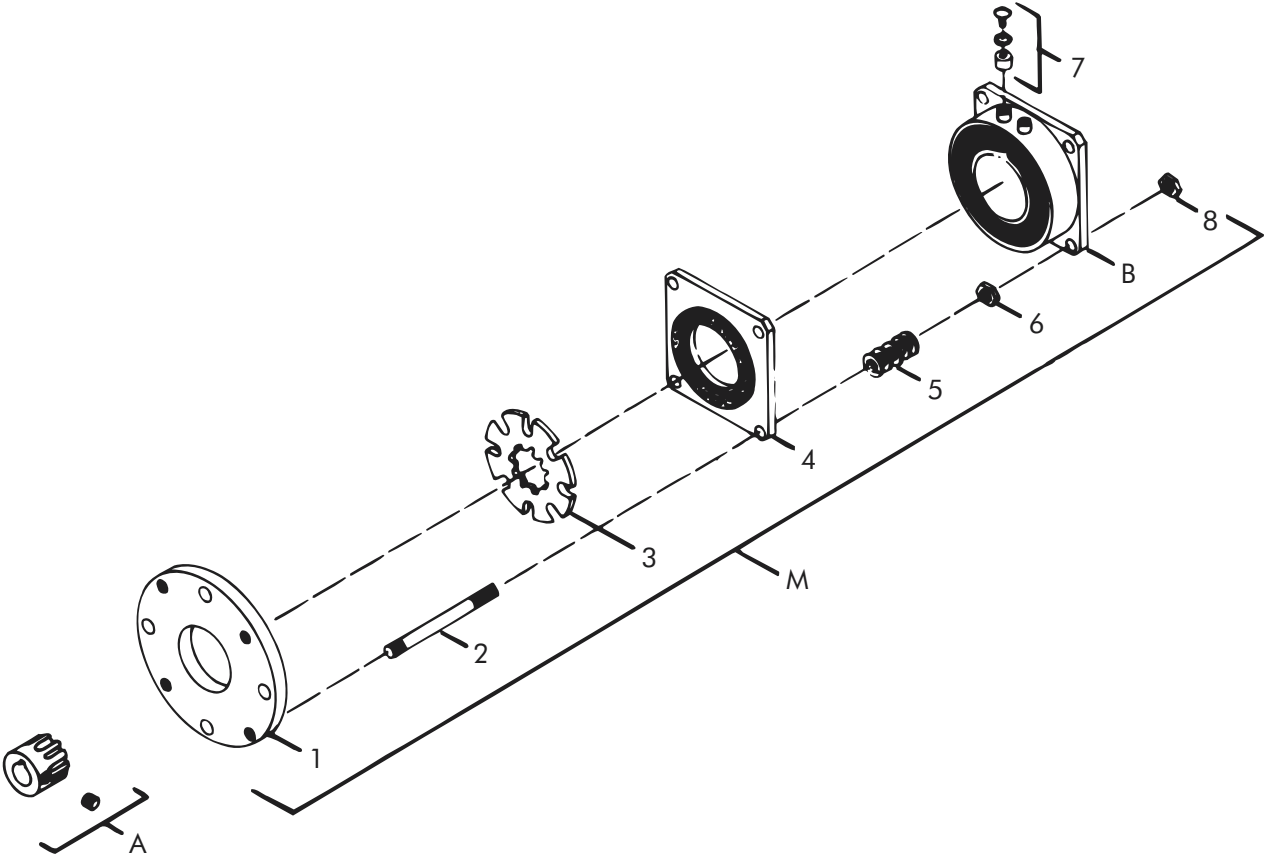
Order Parts for Assembly No. FC304069

Item	Qty.	Description	Model No. 304
A	1	Rotor Hub Assembly 1/2" Plain Bore 3/4" Bore 7/8" Bore 1" Bore	304466-PB 304465-9 304465-10 304465-11
M	1	Spring Set Holding Brake 12 Volts 24 Volts 90 Volts	304070-2 304070-3 304070-4

To order, specify: 1, Spring Set Holding Brake of required voltage
1, Rotor Hub Assembly of required bore size.

For controls, see Section K.

Spring Set Holding Brake – Replacement Parts



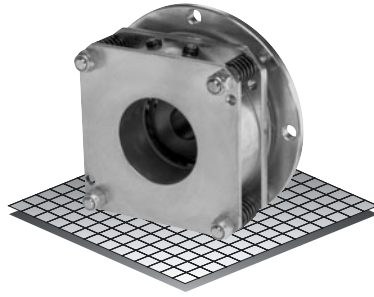
Replacement Parts

Item	Qty.	Description	Model No. 304
B	1	Field Magnet Assembly 12 Volts 24 Volts 90 Volts	304332-7 304333-7 304334-7
1	1	Back Plate	304810
2	4	Studs	326605
3	2	Rotor (20 Teeth)	304811
4	1	Flapper	304812-1
5	4	Springs	RY-20153
6	4	Nuts	DY-10830
7	1	Accessory Kit	326146-2
8	4	Nuts	RY-20137

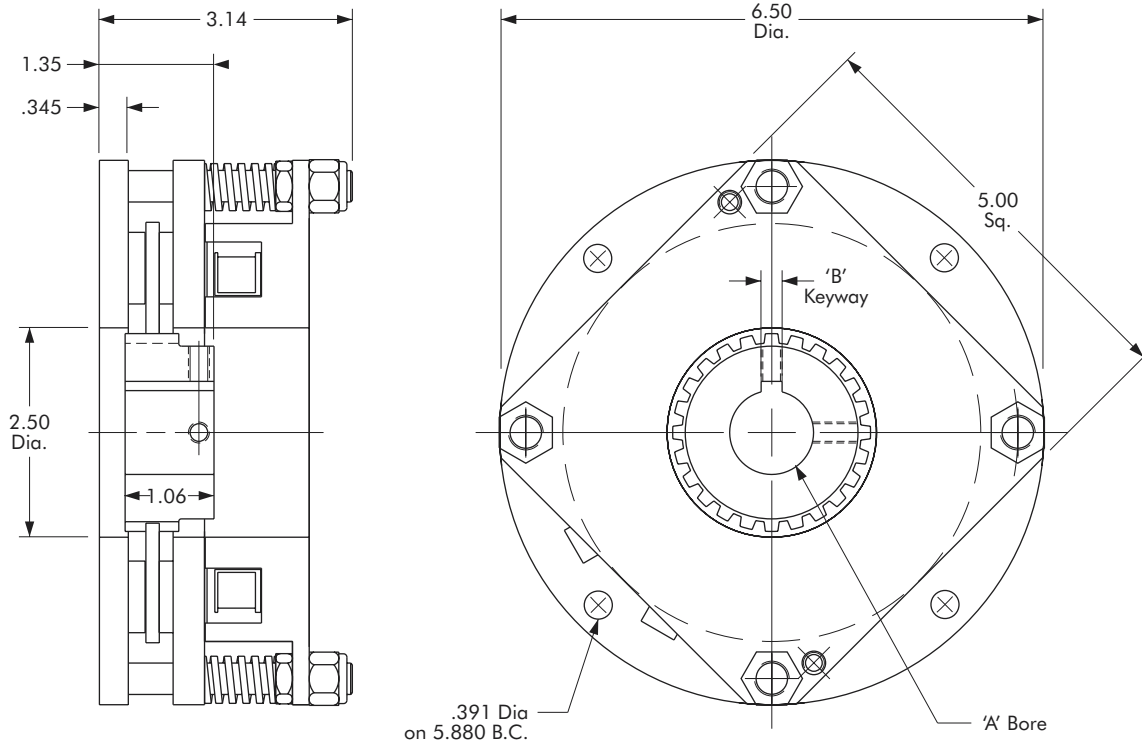
Spring Set Holding Brake

Model

● 305



- ▶ Factory Assembled and Tested
- ▶ Spline Drive



Bore "A"	"B" Keyway
3/4"	.187 x .094
7/8"	.187 x .094
1"	.250 x .125
1-1/8"	.250 x .125
1-1/4"	.250 x .125

Technical Data

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
305	9.75	425	90	.427

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

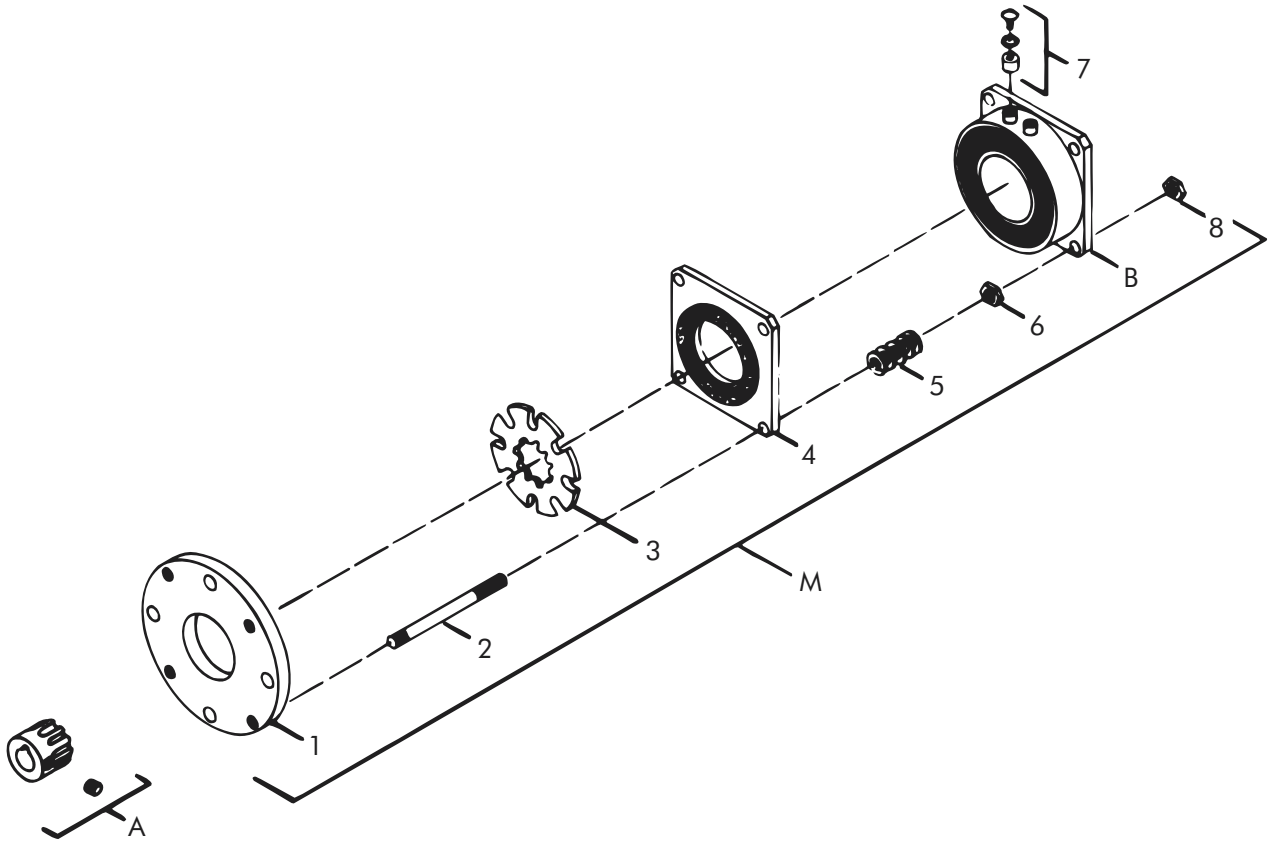
Order Parts for Assembly No. FC305069

Item	Qty.	Description	Model No. 305
A	1	Rotor Hub Assembly 3/4" Plain Bore 3/4" Bore 7/8" Bore 1" Bore 1-1/8" Bore 1-1/4" Bore	305454-PB 305453-11 305453-12 305453-13 305453-14 305453-15
M	1	Spring Set Holding Brake 24 Volts 90 Volts 36 Volts	305070-3 305070-4 305070-5

To order, specify: 1, Spring Set Holding Brake of required voltage
1, Rotor Hub Assembly of required bore size.

For controls, see Section K.

Spring Set Holding Brake – Replacement Parts



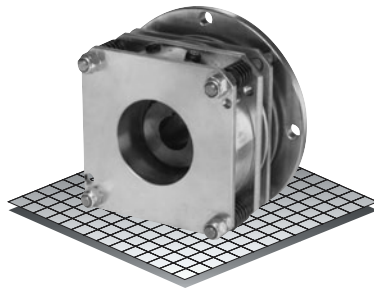
Replacement Parts

Item	Qty.	Description	Model No.
B	1	Field Magnet Assembly 24 Volts 90 Volts 36 Volts	305333-2 305334-2 305335-2
1	1	Back Plate	305810
2	4	Studs	326602
3	1	Rotor (24 Teeth)	305811
4	1	Flapper	305812
5	4	Springs	326795
6	4	Nuts	DY-358
7	1	Accessory Kit	326146-1
8	4	Nuts	RY-20135

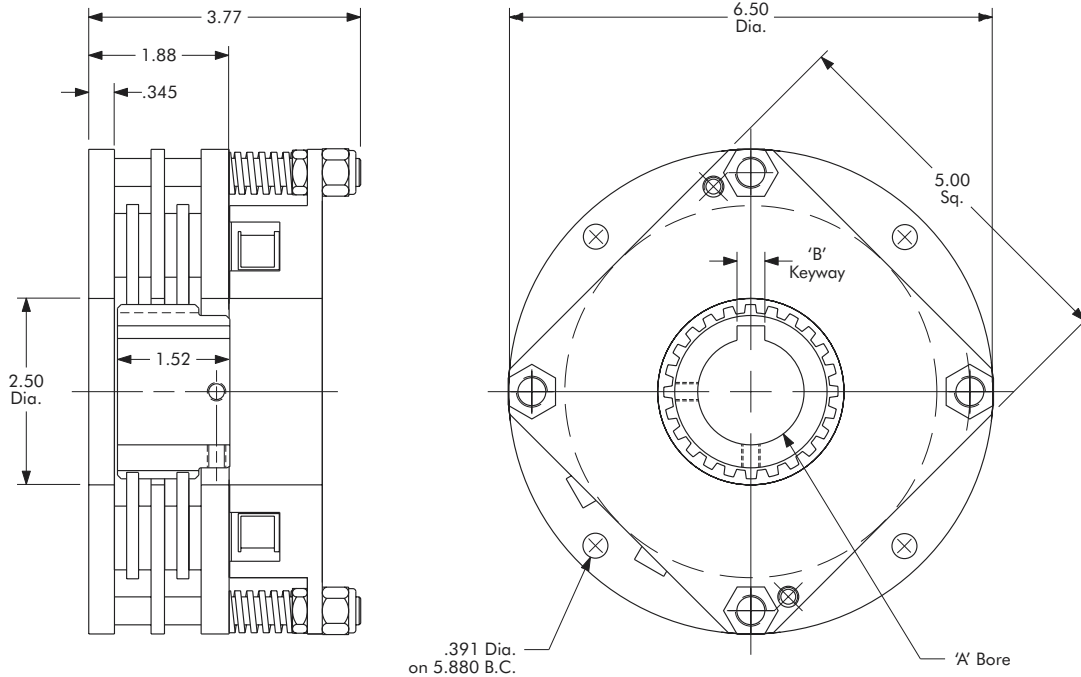
Spring Set Holding Brake

Model

● 305HQ



- ▶ Factory Assembled and Tested
- ▶ Spline Drive
- ▶ Double Disc



Bore "A"	"B" Keyway
3/4"	None
1"	.250 x .125
1-1/4"	.250 x .125
1-1/2"	.375 x .187

Technical Data

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
305HQ	11.5	800	90	.427

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .006.
2. Perpendicularity between mounting surface and shaft within .006.

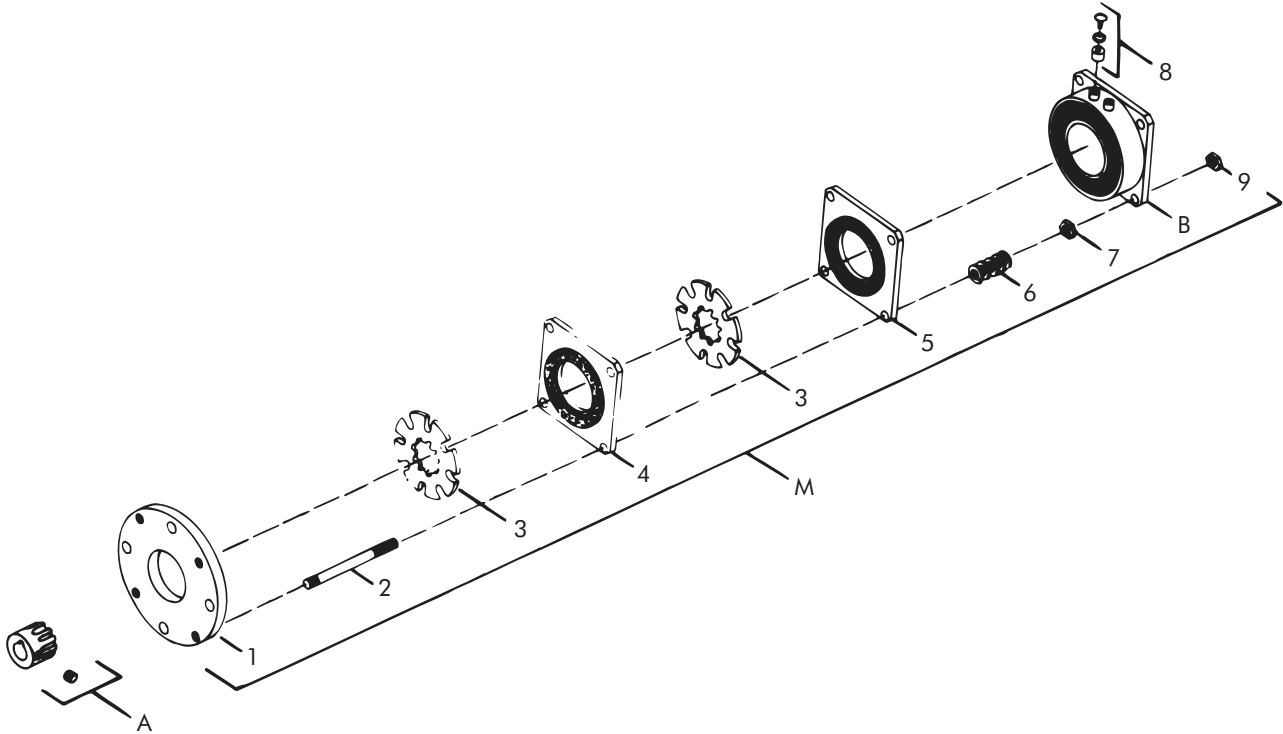
Order Parts for Assembly No. FC305071

Item	Qty.	Description	Model No. 305HQ
A	1	Rotor Hub Assembly 3/4" Plain Bore 1" Bore 1-1/4" Bore 1-1/2" Bore	305466-DPB 305453-20 305453-22 305453-17
M	1	Spring Set Holding Brake Double Disc 24 Volts 90 Volts	305072-3 305072-4

To order, specify: 1, Spring Set Holding Brake of required voltage
1, Rotor Hub Assembly of required bore size.

For recommended 90V control (D2400) see Section K.

Spring Set Holding Brake – Replacement Parts



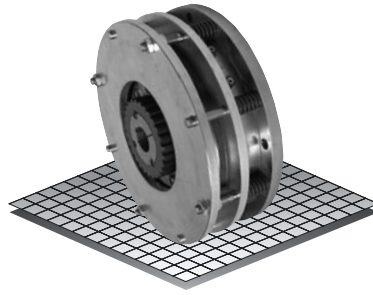
Replacement Parts

Item	Qty.	Description	Model No. 305HQ
B	1	Coil Assembly 24 Volts 90 Volts	305333-2 305334-2
1	1	Back Plate	305810
2	4	Studs	326631
3	2	Rotor (24 Teeth)	305811
4	1	Float Plate	305812-2
5	1	Flapper	305812
6	4	Springs	326795
7	4	Nuts	DY-358
8	1	Accessory Kit	326146-1
9	4	Nuts	RY-20135

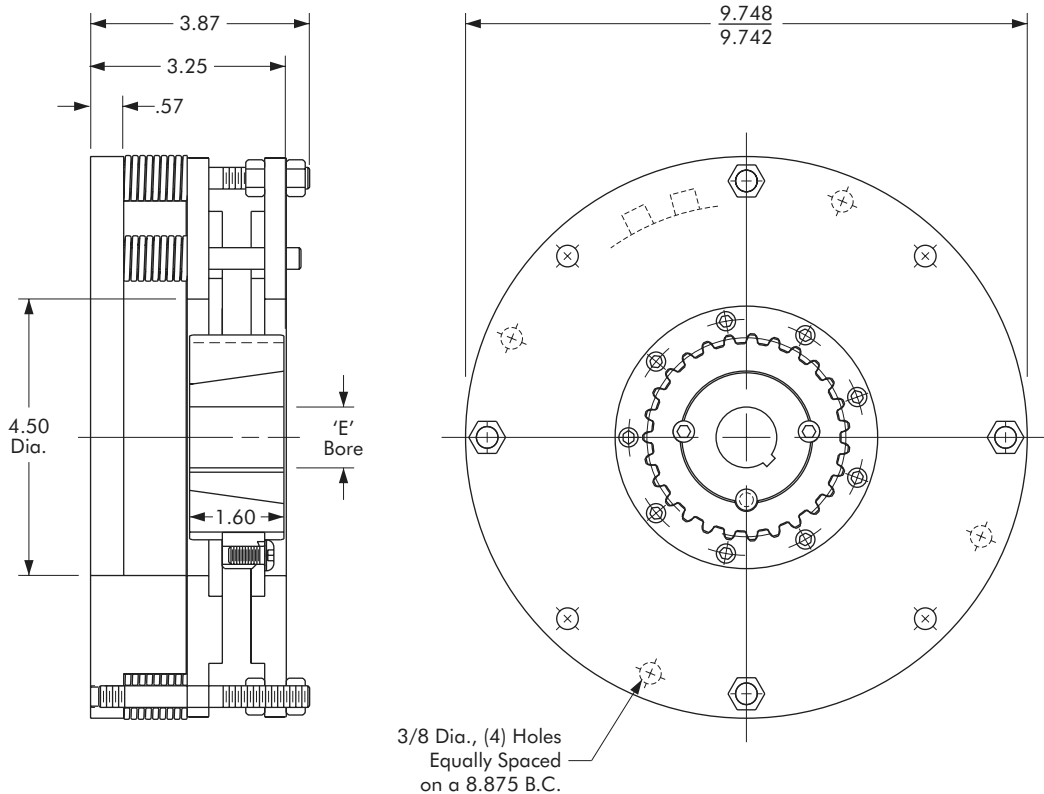
Spring Set Holding Brake

Model

● 308



- ▶ Factory Assembled and Tested
- ▶ Spline Drive



Technical Data

Model No.	Wt. Lbs.	Static Torque in. lb.	Coil Voltage vdc	* Rated Current amps
308	21	1200	90	.59

* Rated Current for 90v.

Customer must maintain:

1. Concentricity between mounting flange and shaft within .010.
2. Perpendicularity between mounting surface and shaft within .010.

Order Parts for Assembly No. FC308069

Item	Qty.	Description	Model No. 308
1	1	Armature Hub	308680
M	1	Spring Set Holding Brake 24 Volts 90 Volts	308070-3 308070-4
E	1	Taper Bushing (1615)	326015-XX

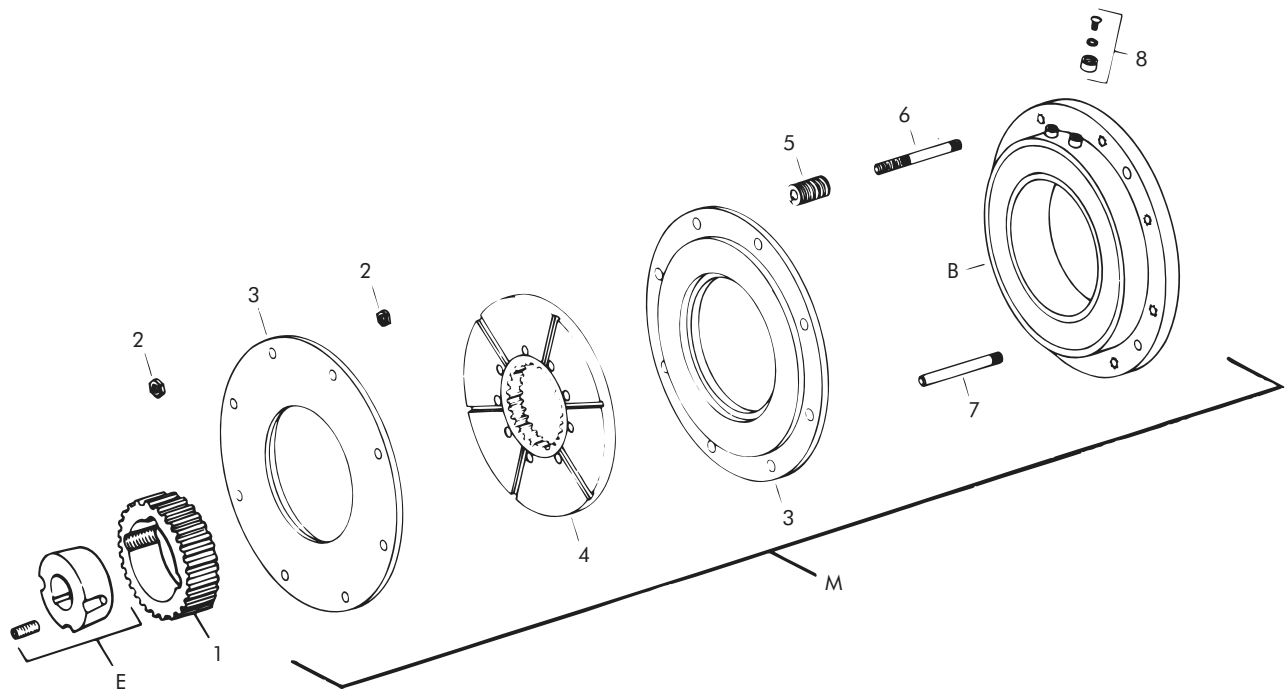
To order, specify: 1, Armature Hub
1, Spring Set Holding Brake of required voltage
1, Bushing plus bore size.

For controls, see Section K.

Bushing 1615

Bore 'E'		Keyway	Part No.
1/2"	.500	.125 x .062	326015 - 1
9/16"	.562	.125 x .062	326015 - 2
5/8"	.625	.187 x .093	326015 - 3
11/16"	.687	.187 x .093	326015 - 4
3/4"	.750	.187 x .093	326015 - 5
13/16"	.812	.187 x .093	326015 - 6
7/8"	.875	.187 x .093	326015 - 7
15/16"	.937	.250 x .125	326015 - 8
1"	1.000	.250 x .125	326015 - 9
1-1/16"	1.062	.250 x .125	326015 - 10
1-1/8"	1.125	.250 x .125	326015 - 11
1-3/16"	1.187	.250 x .125	326015 - 12
1-1/4"	1.250	.250 x .125	326015 - 13
1-5/16"	1.312	.312 x .156	326015 - 14
1-3/8"	1.375	.312 x .156	326015 - 15
1-7/16"	1.437	.375 x .187	326015 - 16
1-1/2"	1.500	.375 x .187	326015 - 17
1-9/16"	1.562	.375 x .187	326015 - 18
1-5/8"	1.625	.375 x .187	326015 - 19
*1-3/8"	1.375	.375 x .125	326015 - 20
*1-5/8"	1.625	.375 x .125	326015 - 21

Spring Set Holding Brake – Replacement Parts



Replacement Parts

Item	Qty.	Description	Model No. 308
B	1	Field Magnet Assembly 24 Volts 90 Volts	308333 308334
2	8	Nut	DY-358
3	2	Flapper Plate	308812
4	1	Rotor (27 Teeth)	308811-1
5	8	Spring	RY-20096
6	4	Stud	326682
7	4	Guide Stud	326681
8	1	Magnet Accessories	326146-1