



## D3C3R-005

143/145TC Input - 56C Output  
NEMA Frame Spring Engaged Brake

NOT suitable for pulley output

### Engagement/Disengagement

Spring/Air

### Facing Type

High Coefficient

### Torque – Dynamic

222 Pound Inches

### Minimum Disengagement Pressure

53 PSI

### Maximum Operating Pressure

80 PSI

### Maximum RPM

1,750

### Input Bore/Output Shaft

0.875 / 0.625 Inches

### Air Volume New

0.07 Cubic Inches

### Air Volume Worn

0.22 Cubic Inches

### Finish

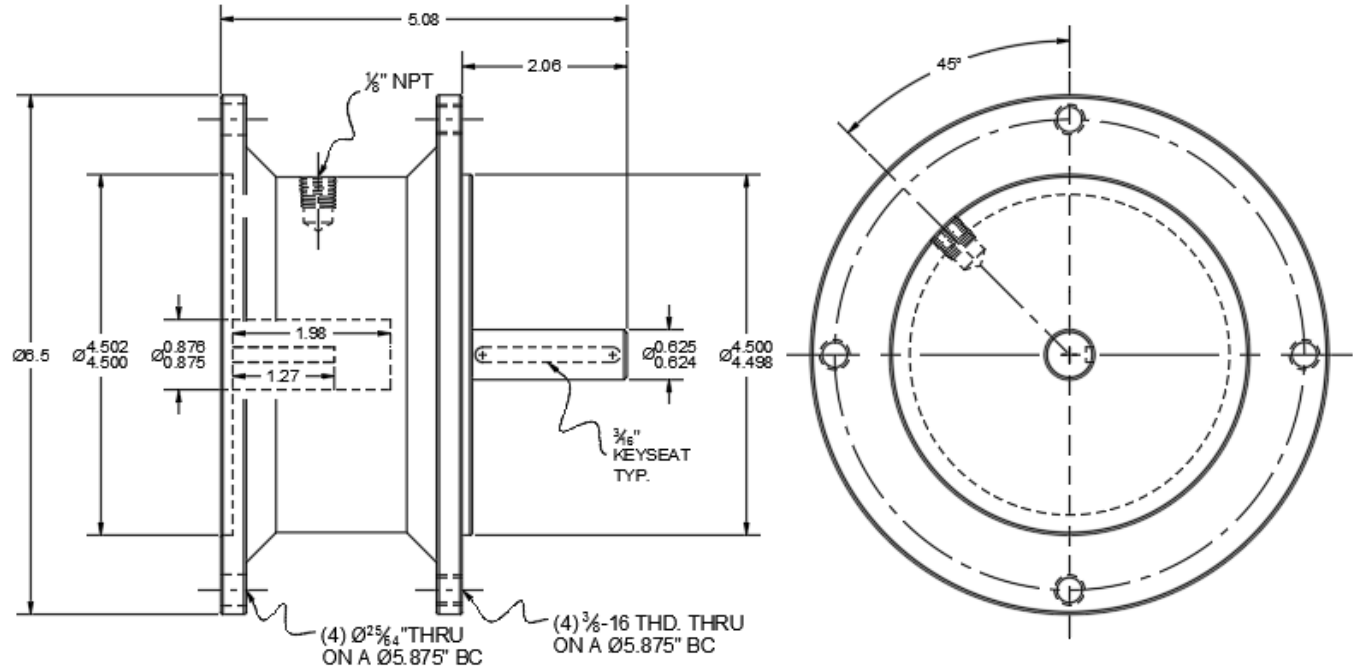
Aluminum

### Open or Enclosed Construction

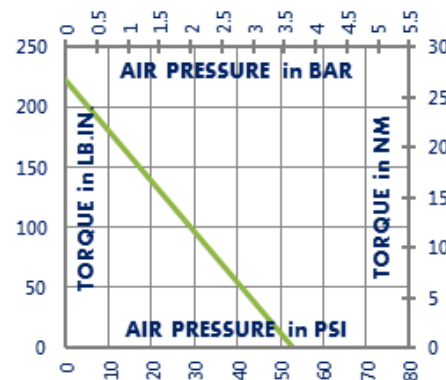
Enclosed

### Shipping Weight

7 Pounds



### TORQUE vs. SPRING PRESSURE



### NEW vs. BURNISHED TORQUE

New clutch or brake torque is approximately 40% less than rated design torque until the friction and drive discs are worn in (lapped, burnished). The length of time for wear-in to occur varies by application.

When calculating required torque always use a service factor of 1.5 to 2. It is not recommended to select a product for use at its maximum rated torque for continuous duty.

### PRODUCT SELECTION

Torque capacity is only one factor to consider when making a product selection. Insure that you will have right product for the job by contacting our engineering department for application review and selection assistance.



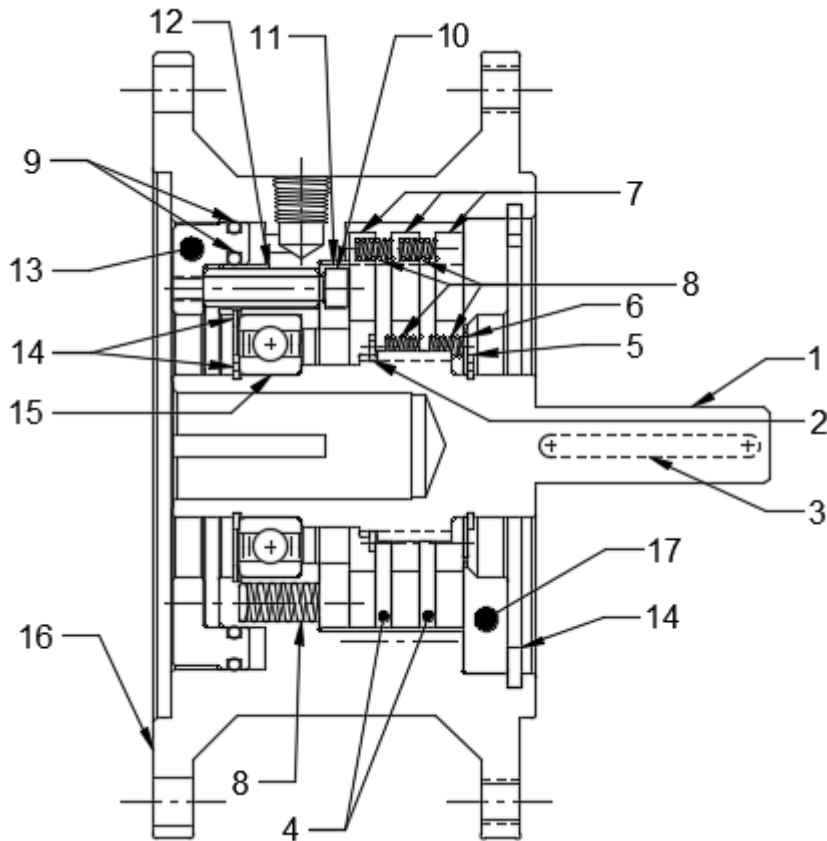
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# D3C3R-005

## Parts Diagram



REF#	DESCRIPTION & PARTS INCLUDED	QUANTITY	KIT NUMBER
<b>DRIVE HUB KIT</b>			<b>D3C3R-005-HUBK</b>
1	Drive Hub	1	
2	Retainer Ring	1	
3	Key Stock	1	
<b>DRIVE DISC KIT</b>			<b>D3C3R-14H-DRDK</b>
4	Drive Disc	2	
5	Retainer Ring	1	
6	Race	1	
<b>REPAIR KIT</b>			<b>D3C3R-005-RPRK</b>
7	Friction Disc	3	
8	Coil Spring	27	
9	O-Ring	2	
<b>PISTON KIT</b>			<b>D3F3H-STH-PSTK</b>
10	Screw	3	
11	Pressure Plate	1	
12	Spacer	3	
13	Piston	1	
<b>CYLINDER KIT</b>			<b>D3C3H-STH-CYLK</b>
14	Retainer Ring	3	
15	Bearing	1	
16	Cylinder	1	
17	Top Plate	1	

### PARTS KITS

The *Repair Kit* contains common wear items for this product. Users are encouraged to stock one or more repair kits considering the number of units installed and the potential downtime if machinery on which the unit is installed is critical equipment. To obtain current pricing and lead time for parts kits, contact customer service.

[orders@machiii.com](mailto:orders@machiii.com)

### ADDITIONAL PRODUCT INFORMATION

Click on the links below or copy and paste into your web browser.

To view the Installation & Maintenance Manual for this product:  
<http://www.machiii.com/PDF/Product-Manuals/BRAKES NEMA SPRING MANUAL.pdf>

For information about the application and use of this and other Mach III products:  
<http://machiii.com/Application/Default.asp>



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