

# D3C3R-005

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

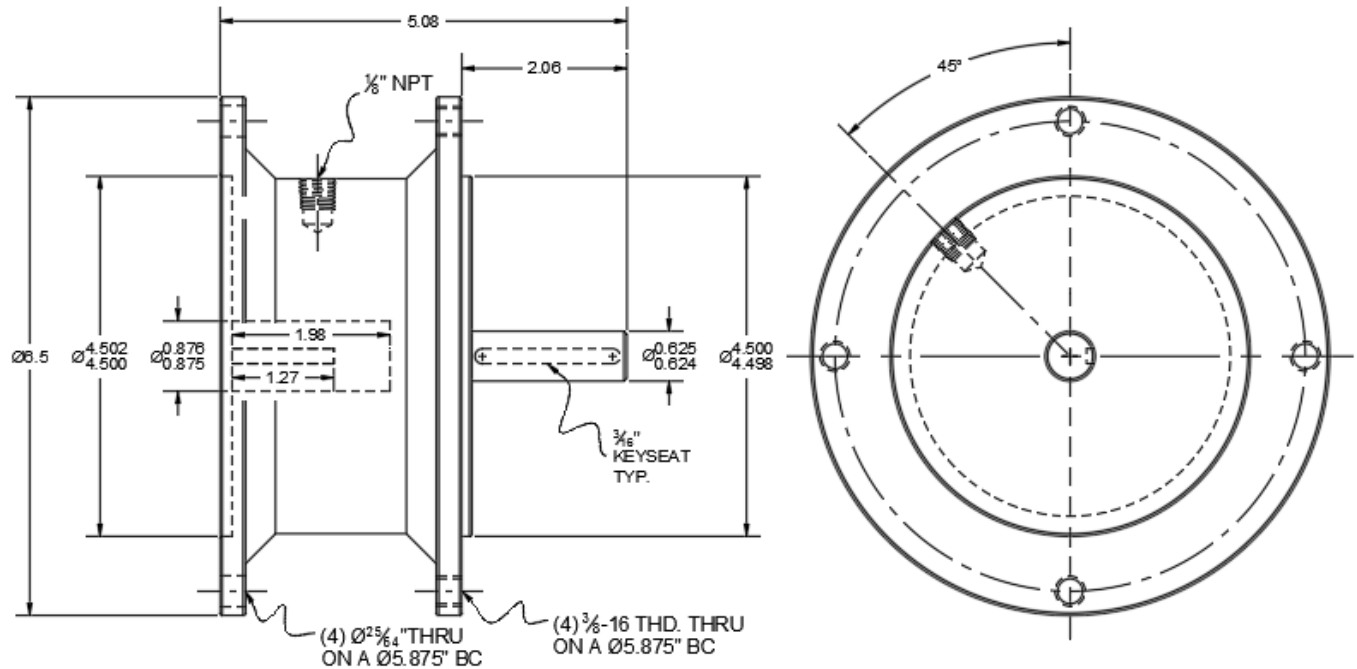
Aluminum

### Open or Enclosed Construction

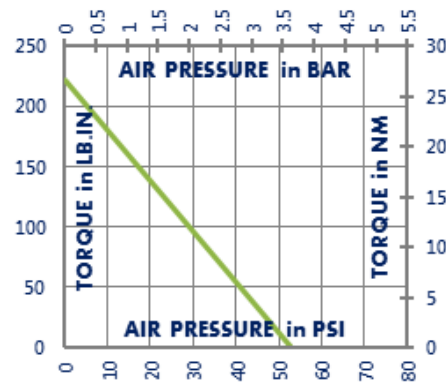
Enclosed

### Shipping Weight

7 Pounds



### TORQUE vs. SPRING PRESSURE



### NEW vs. BURNISHED TORQUE

The torque output of a new friction brake or clutch can be up to 40% less than the published torque rating. To achieve full design torque, a unit must be cycled under load to burnish the friction surfaces. The exact number of cycles varies by application.

When calculating required torque always use a safety 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. Ensure that you will have the right product for the job by contacting our engineering department for application review and selection assistance.



101 Cummings Drive  
Walton, KY 41094 USA

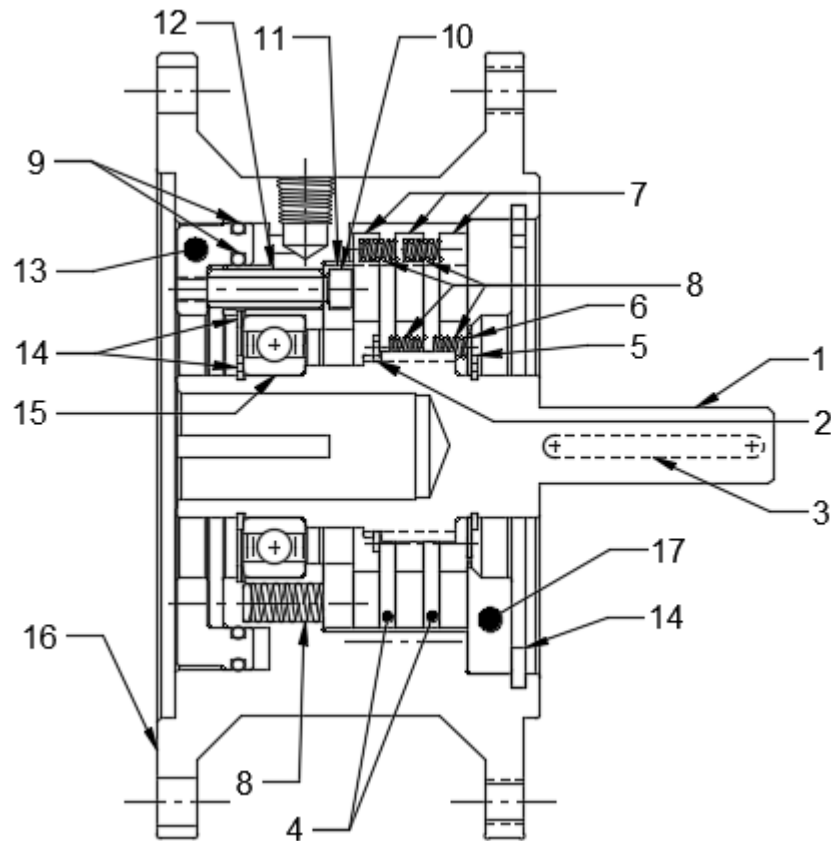
859-291-0849

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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

For illustrated guides showing how Mach III products work, selection guidelines, product manuals, and installation and use recommendations:

<https://machiii.com/resources/how-our-products-work>

For information about how to order, return policy and warranty information:

<https://machiii.com/resources/how-to-order>



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