# Z4A1R-STH

Combination Air Engaged Friction Clutch, Air Engaged Friction Brake, Stop & Start the Shaft



# Minimum Sprocket Sizes

|  | Chain Size    | 35 | 40 | 50 | 60 |
|--|---------------|----|----|----|----|
|  | Minimum Teeth | 40 | 30 | 25 | 21 |

## Clutch Engagement/Brake Engagement

Air/Air

## Facing Type (Clutch & Brake)

High Coefficient

## Clutch Torque @ 80 PSI (max) - Dynamic

611 Pound Inches

## Brake Torque @ 80 PSI (max) - Dynamic

611 Pound Inches

#### **Maximum RPM**

1,750

# **Bore Range with Standard Keyway**

0.750 (19) to 1.250 (31) Inches (mm)

#### Air Volume New (Clutch & Brake)

0.31 Cubic Inches

#### Air Volume Worn (Clutch & Brake)

1.60 Cubic Inches

#### Finish

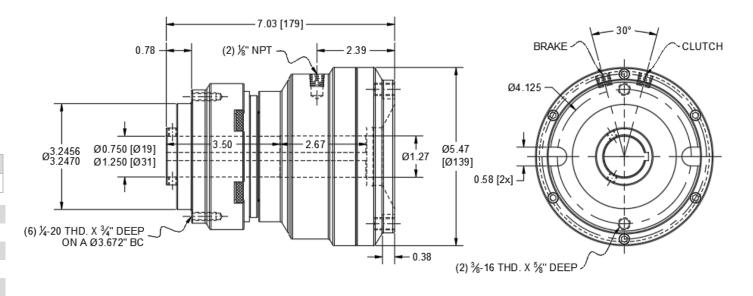
Aluminum

# **Open or Enclosed Construction**

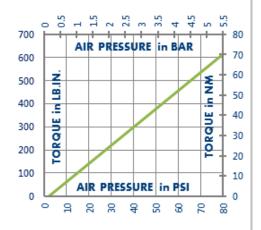
Open

# **Shipping Weight**

8 Pounds



# **TORQUE vs. AIR 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.

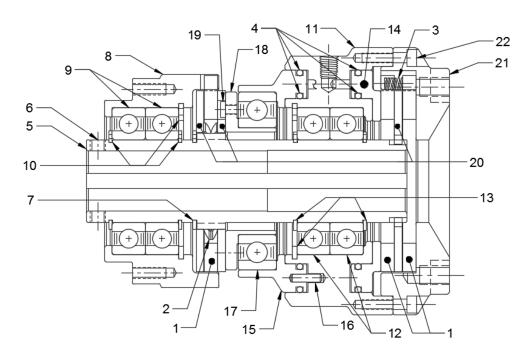


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# Z4A1R-STH

# Parts Diagram



| REF# | DESCRIPTION & PARTS INCLUDED | QUANTITY | KIT NUMBER                      |
|------|------------------------------|----------|---------------------------------|
|      | REPAIR KIT Z4A1R-STH-RPRI    |          |                                 |
| 1    | Friction Disc                | 3        |                                 |
| 2    | Wave Spring - Clutch         | 1        |                                 |
| 3    | Coil Spring - Brake          | 3        |                                 |
| 4    | O-Ring                       | 4        |                                 |
|      | DRIVE HUB KIT                |          | Z4A1R-STH-HUBK                  |
| 5    | Drive Hub                    | 1        | Specify Bore Size When Ordering |
| 6    | Set Screw                    | 2        |                                 |
| 7    | Retainer Ring                | 1        |                                 |
|      | SLEEVE KIT                   |          | Z4A1R-STH-SLVK                  |
| 8    | Sleeve                       | 1        |                                 |
| 9    | Bearing                      | 2        |                                 |
| 10   | Retainer Ring                | 3        |                                 |
|      | CYLINDER KIT                 |          | Z4A1R-STH-CYLK                  |
| 11   | Cylinder                     | 1        |                                 |
| 12   | Bearing                      | 2        |                                 |
| 13   | Retainer Ring                | 3        |                                 |
| 14   | PISTON - BRAKE               | 1        | Z4A1R-STH-P0B4                  |
|      | PISTON KIT - CLUTCH          |          | Z4A1R-STH-PSTK                  |
| 15   | Piston                       | 1        |                                 |
| 16   | Pin                          | 2        |                                 |
| 17   | Bearing                      | 1        |                                 |
| 18   | Cone                         | 1        |                                 |
| 19   | Screw                        | 1        |                                 |
|      | DRIVE DISC KIT               |          | Z4A1R-STH-DRDK                  |
| 20   | Drive Disc                   | 3        |                                 |
|      | ADAPTER KIT                  |          | Z4A1R-STH-ADPK                  |
| 21   | Brake Adapter                | 1        |                                 |
| 22   | Screw                        | 6        |                                 |

# **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

# 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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