



MICO®

515 Series Caliper Disc Brake

(spring apply)

Model Numbers

Brake Fluid	Hydraulic Oil
02-515-005	02-515-002
* 02-515-119	02-515-004
	02-515-006
	02-515-008
	* 02-515-012
	* 02-515-020
	** 03-515-014
	** 03-515-016
	** 03-515-018

* Includes a rubber boot

** Includes a rubber boot and no. 4 SAE o-ring boss swivel fitting.

DESCRIPTION

Floating caliper type brake, spring applied, hydraulic release. Spring apply brakes are independent of outside energy sources such as air, hydraulic or mechanical forces. The stored energy is provided by a series of Belleville springs.

Under normal conditions, the brake is installed independent of the service brake system. Ideal for industrial machines and mobile equipment applications.

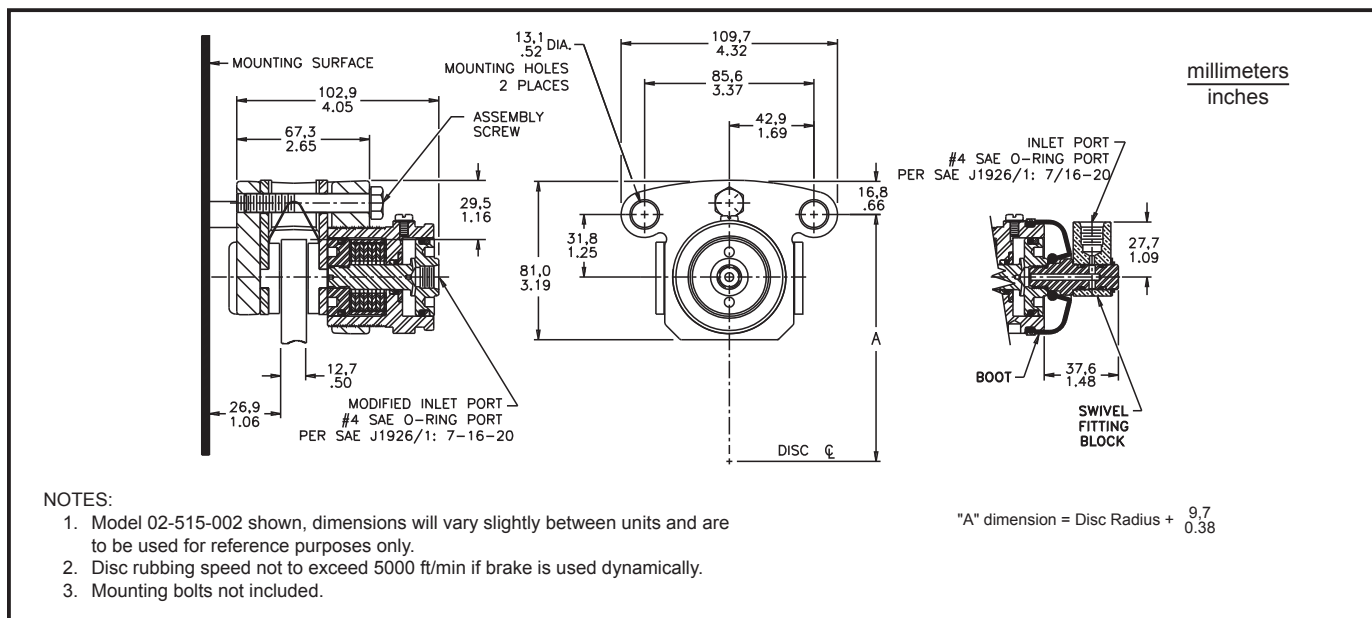
These brakes are designed to operate as parking and/or emergency brakes. If your application requires rapid cycling consult MICO, Inc. for recommendations.

Consult MICO Applications Department for other models.

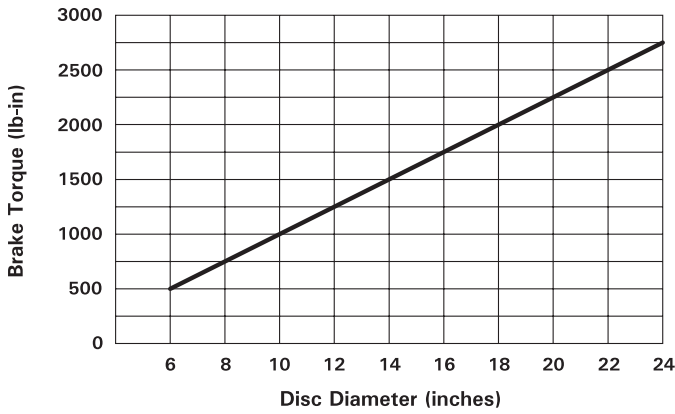
See page 5 for disc diameter-vs-brake torque ratio charts.

SPECIFICATIONS

- **Disc diameter:** 6 inch to unlimited
- **Disc thickness:** 0.50 inch - for other disc thicknesses contact MICO, Inc.
- **Total lining contact area:** 6.36 in²
- **Continuous duty pressure:** 2000 PSI
- **Intermittent duty pressure:** 2500 PSI
- **Full retraction volume:** 0.20 in³ maximum
- **Caliper material:** ductile iron
- **Caliper finish:** zinc chromate yellow
- **Lining thickness:** 0.22 inch
- **Usable lining thickness:** 0.22 inch
- **Lining material:** non-asbestos, lead free
- **Porting:** No. 4 SAE o-ring port per SAE J1926/1: 7/16-20
- **Approximate weight:** 4.2 lb



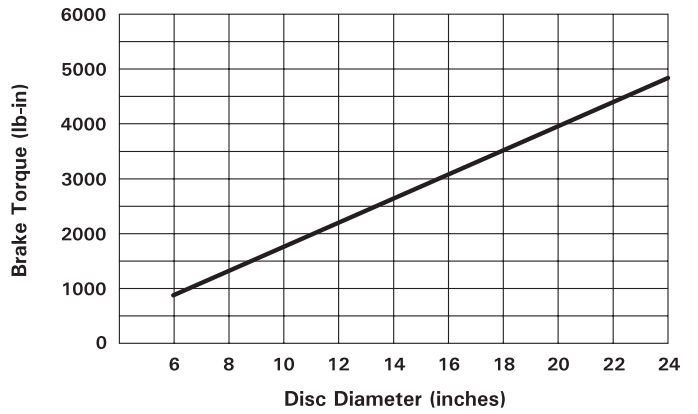
Model: 02-515-002



TORQUE FORMULA (Bt = Brake Torque)

Bt = 250 x (Disc Radius – 1.00)
 Complete Retraction Pressure: 300 PSI

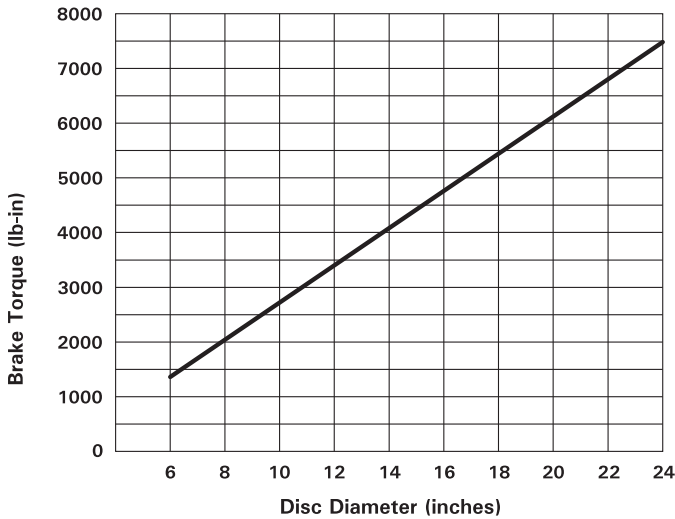
Models: 02-515-004, 03-515-014



TORQUE FORMULA (Bt = Brake Torque)

Bt = 440 x (Disc Radius – 1.00)
 Complete Retraction Pressure: 600 PSI

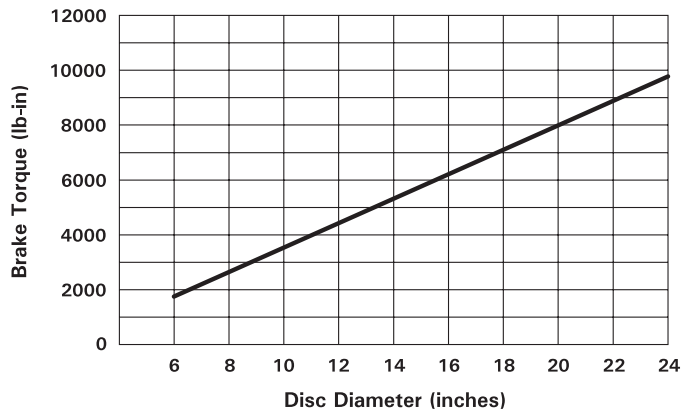
Models: 02-515-012, 02-515-119



TORQUE FORMULA (Bt = Brake Torque)

Bt = 680 x (Disc Radius – 1.00)
 Complete Retraction Pressure: 700 PSI

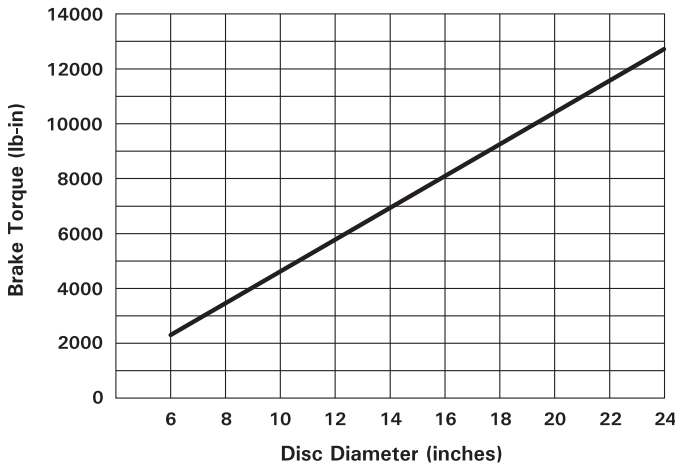
Models: 02-515-008, 03-515-020, 03-515-018



TORQUE FORMULA (Bt = Brake Torque)

Bt = 900 x (Disc Radius – 1.00)
 Complete Retraction Pressure: 1200 PSI

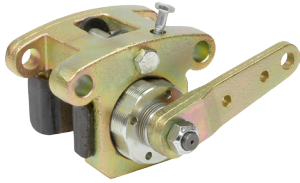
Models: 02-515-005, 02-515-006, 03-515-016



TORQUE FORMULA (Bt = Brake Torque)

Bt = 1150 x (Disc Radius – 1.00)
 Complete Retraction Pressure: 1700 PSI

NOTE: Maximum torque achieved only after brake has been properly adjusted and burnished, see Technical Notice (Form No. 81-950-016).



MICO®

515 Series Caliper Disc Brake

(mechanical apply)

Model Numbers

02-515-148
02-515-150

SPECIFICATIONS

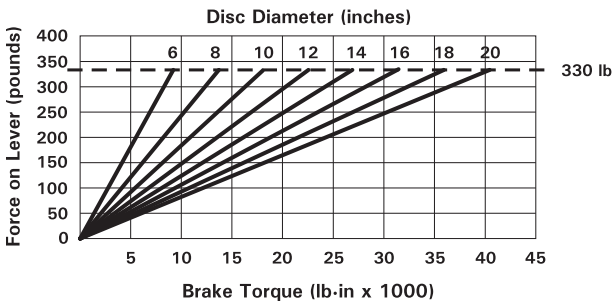
- **Disc diameter:** 6 inch to unlimited
- **Disc thickness:** 0.50 inch - for other disc thicknesses contact MICO, Inc.
- **Total lining contact area:** 6.36 inch²
- **Caliper material:** ductile iron
- **Caliper finish:** zinc chromate yellow
- **Lining thickness:** 0.22 inch
- **Usable lining thickness:** 0.22 inch
- **Lining material:** non-asbestos, lead free
- **Lever movement:** 40° either direction
- **Lever pull:** limited to 330 lb at hole $\nabla 2$
limited to 420 lb at hole $\nabla 1$
- **Approximate weight:** 4.7 lb

DESCRIPTION

Floating caliper type brake, mechanically applied. One piece carrier. Once brake is adjusted, the lever can be mounted in any position. Ideal for secondary, emergency, and industrial applications.

Consult MICO Applications Department for other models.

Chart is based on using hole $\nabla 2$



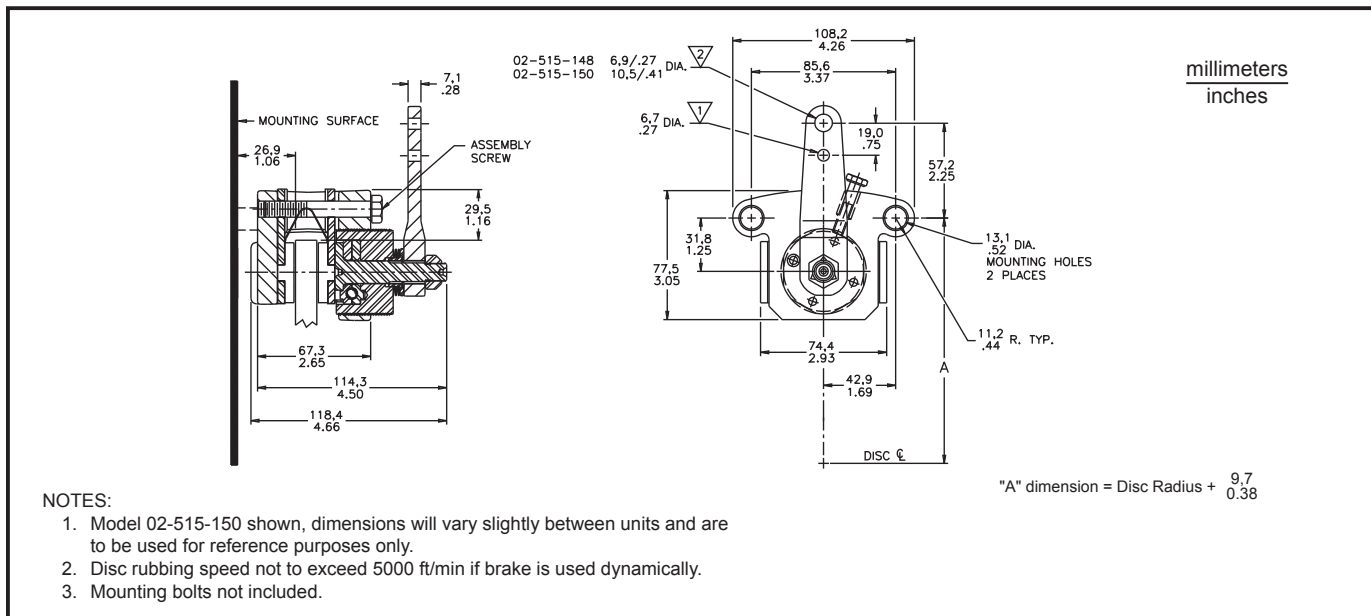
TORQUE FORMULA (Bt = Brake Torque)

Bt = 10.69 x Lever Pull x (Disc Radius - 1.00) for hole $\nabla 1$

Bt = 13.61 x Lever Pull x (Disc Radius - 1.00) for hole $\nabla 2$

NOTE: Maximum torque achieved only after brake has

been properly adjusted and burnished, see Technical Notice (Form No. 81-950-016).



NOTES:

1. Model 02-515-150 shown, dimensions will vary slightly between units and are to be used for reference purposes only.
2. Disc rubbing speed not to exceed 5000 ft/min if brake is used dynamically.
3. Mounting bolts not included.



MICO[®]

515 Series Caliper Disc Brake

(hydraulic apply)

Model Numbers

Brake Fluid
02-515-025

Hydraulic Oil
02-515-030

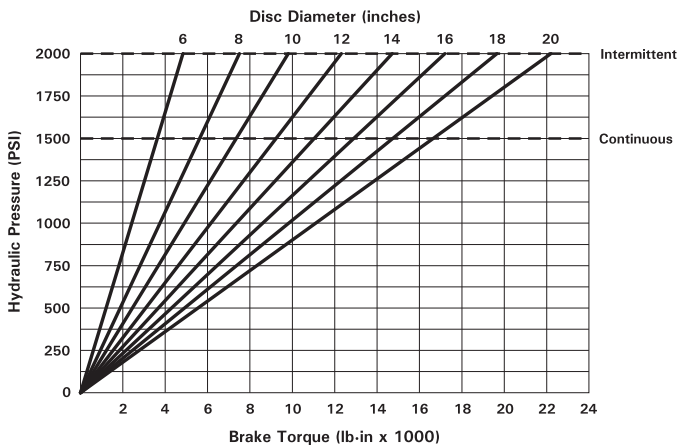
SPECIFICATIONS

- **Disc diameter:** 6 inch to unlimited
- **Disc thickness:** 0.50 inch - for other disc thicknesses contact MICO, Inc.
- **Total lining contact area:** 6.36 inch²
- **Continuous duty pressure:** 1500 PSI
- **Intermittent duty pressure:** 2000 PSI
- **Actuating volume:** 0.05 inch³ nominal
- **Caliper material:** ductile iron
- **Caliper finish:** zinc chromate yellow
- **Lining thickness:** 0.22 inch
- **Usable lining thickness:** 0.22 inch
- **Lining material:** non-asbestos, lead free
- **Piston diameter:** 1.50 inch
- **Approximate weight:** 3.8 lb
- **Porting:** 1/8-27NPTF

DESCRIPTION

Floating caliper, hydraulic apply type. Designed to provide braking for applications in the agricultural, construction, mining, and logging industries. High strength aluminum piston and module assembly.

Consult MICO Applications Department for other models.



TORQUE FORMULA (Bt = Brake Torque)

$$Bt = \text{PSI} \times 1.23 \times (\text{Disc Radius} - 1.00)$$

NOTE: Maximum torque achieved only after brake has been properly adjusted and burnished, see Technical Notice (Form No. 81-950-016).

