

HYDRAULIC BRAKE

IN WHEEL SERVICE OR DRIVE LINE

1-663-1S

FEATURES:

- Capable of 10,000 lbs. of clamp force.
- Ideal for mount on driveline or in the wheel.
- One piece nodular iron housing.
- Square seal piston retraction for constant running clearance.
- Supplied with mount bolts and sealed and lubricated slider pins.
- Variety of inlet and bleeder options for mounting flexibility.
- Quick change pads with 14.5 sq. in. of pad area.

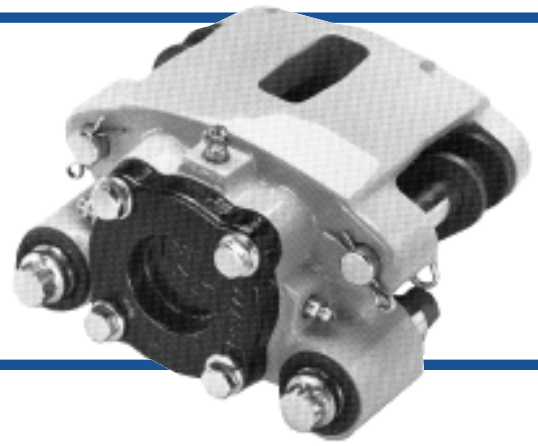
TYPICAL SPECIFICATIONS:

Series	1-663-1S
Rotor Diameter	10 to 20 in.
Rotor Thickness	0.75 to 1.0 in.
Piston Diameter	2.6 in.
Max. Hydraulic Pressure	2000 psi
Fluid Displacement @ 2000 PSI	0.20 cu. in.
Fluid Type	Brake DOT Fluid 3 & 5 or Hydraulic Oil
Fluid Inlet*	3/8-24 thread, w/3/16" inverted flare
Bleeder*	3.00, 9.00, & 12.00
Lining Type	non asbestos organic or sintered
Total Lining Area	14.5 sq. in.
Usable Lining Thickness Per Pad	0.328 in.
Weight	18 lbs.

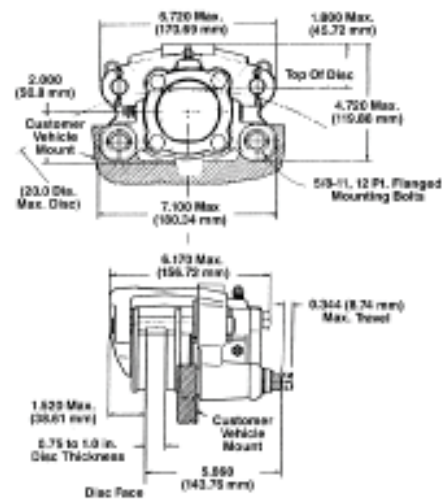
*Bleeder and Inlet locations are interchangeable.

Note: The same seals cannot be used for both Brake and Hydraulic fluid. Either Brake or Hydraulic fluid must be specified.

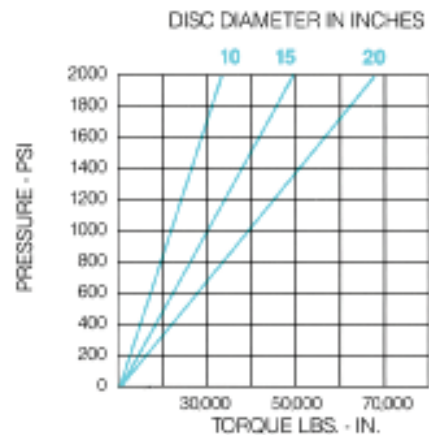
Specifications are guidelines only and subject to change. Consult Hayes for specific model, part number and assembly drawings.



REFERENCE DIMENSIONS:



TORQUE INFORMATION:



$$\text{Formula: } T = 10.6\mu P \left(\frac{\text{DIA}}{2} - .875 \right)$$

T = developed torque in lbs.-in. DIA = diameter of rotor in inches
P = applied line pressure in psi. μ = friction coefficient assume 0.35



Hayes Brake LLC
5800 West Dinges Bay Road
Mequon, Wisconsin 53092
Phone (262) 242-4300
Fax (262) 242-0524
www.hayesbrake.com

HYDRAULIC BRAKE

SERVICE & PARK BRAKE HEAVY DUTY

1-663-1SA

FEATURES:

- Capable of 10,000 lbs. of service clamp force, and 10,000 lbs. of mechanical clamp force.
- Ideal for mount on driveline or in the wheel.
- One piece nodular iron housing.
- Square seal piston retraction for constant running clearance.
- Integral secondary/park brake self adjusts for pad wear.
- Choice of CW or CCW lever actuation.
- Variety of inlet and bleeder options for mounting flexibility.
- Supplied with mount bolts and sealed and lubricated slider pins.
- Quick change pads with 14.5sq. in. of pad area.

TYPICAL SPECIFICATIONS:

Series 1-663-1SA
 Rotor Diameter 10 to 20 in.
 Rotor Thickness 0.75 to 1.0 in.
 Lining Type non-asbestos organic or sintered
 Total Lining Area 14.5 sq. in.
 Usable Lining Thickness Per Pad 0.328 in.
 Weight 21 lbs.

Hydraulic Service Information:

Piston Diameter 2.6 in.
 Max. Hydraulic Pressure 2000 psi
 Fluid Displacement @ 2000 PSI 0.20 cu. in.
 Fluid Type Brake Fluid DOT 3 & 5 or Hydraulic Oil
 Fluid Inlet* 3/8-24 thread with 3/16" inverted flare
 Bleeder* 3.00, 9.00, & 12.00

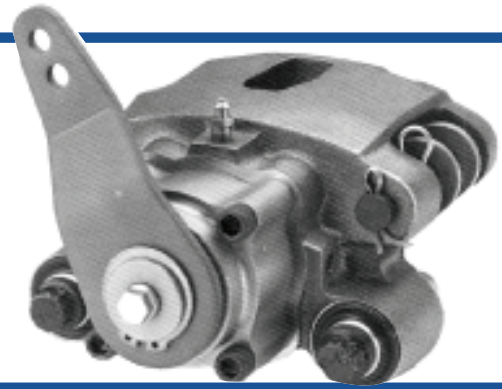
Mechanical Park Brake Information:

Max. Lever Force @ 4.375 in. 450 lbs.
 Lever Stroke for 10,000 lbs. of clamp 27 deg.
 Lever Positions 30 deg. increments

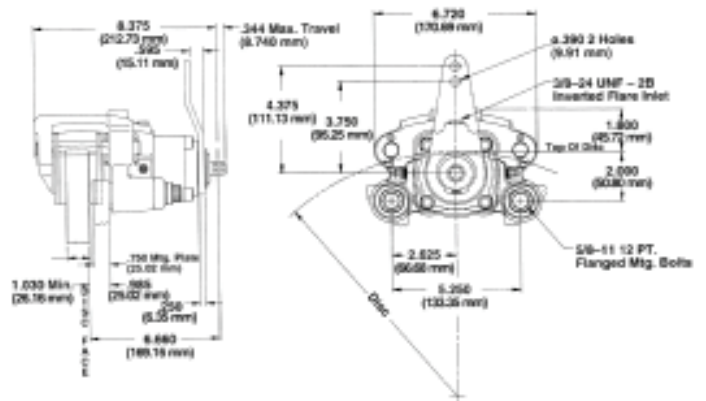
*Bleeder and Inlet locations are interchangeable.

Note: The same seals cannot be used for both Brake and Hydraulic fluid. Either Brake or Hydraulic fluid must be specified.

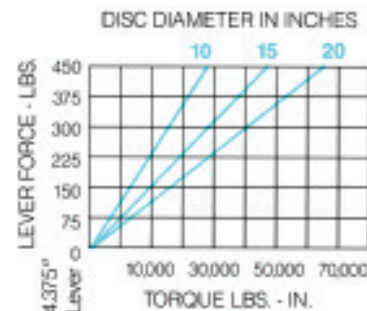
Specifications are guidelines only and subject to change. Consult Hayes for specific model, part number and assembly drawings.



REFERENCE DIMENSIONS:



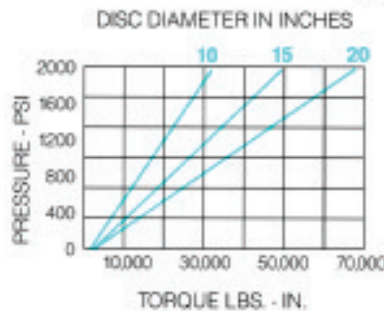
SECONDARY/PARK BRAKE TORQUE INFORMATION:



Formula:

$$T = 44.4 \mu F \left(\frac{DIA}{2} - 0.875 \right)$$
 for 4.375" Lever

HYDRAULIC SERVICE TORQUE INFORMATION:



Formula:

$$T = 10.6 \mu P \left(\frac{DIA}{2} - 0.875 \right)$$

T = developed torque in lbs.-in. DIA = diameter of rotor in inches
 P = applied line pressure in psi μ = friction coefficient, assume 0.35
 F = applied lever force in lbs.



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