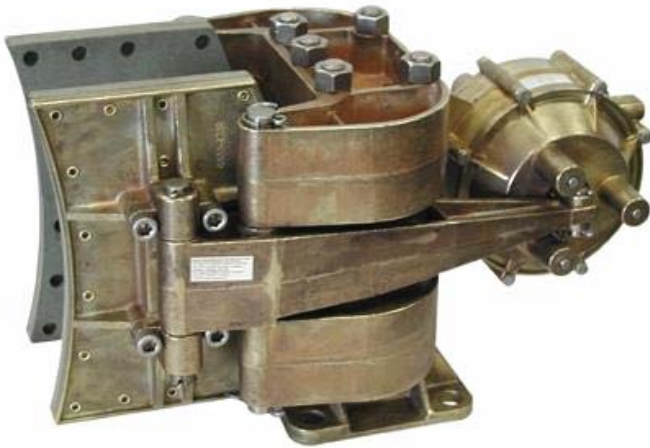


## 5025-A

### FLUID APPLIED BRAKE CALIPER



The **5025** Brake Caliper is designed for high energy input applications with medium torque requirements. It is designed to fit the 4 x 7 disc series which is 4" thick and has a 7" wide rubbing face. This disc offers excellent thermal capabilities and is ideally suited for marine and industrial applications that require high energy input for extended periods such as tensioning brakes for winches, small draw works, anchor handling equipment, etc. Because of its large brake lining area, the caliper offers many hours of operation before lining replacement is needed.

The diaphragm actuator is extremely responsive to varying fluid pressure and precise control can be exercised over the braking application. Maximum supply pressure to the actuator should not exceed 100 psi (6.9 bar).

The actuator clevises can be adjusted to compensate for lining wear. The clearance between disc and brake shoe can therefore be maintained at an absolute minimum. In cycling applications, shorter stroke of the actuator can save the requirement of a tremendous amount of compressed air.

#### SPECIFICATIONS

Clamping force	17160 lbf	(76.3 kN)
Maximum disc thickness	4 in.	(102 mm.)
Req. disc face	7 in.	(178 mm)
Total lining area	120 sq. in.	(773 sq. cm)
Lining thickness	0.625 in.	(15.8 mm)
Max allowable lining wear	0.42 in.	(10.6 mm)
Average wear rate	0.005 cu.in/HP-hr	(0.082 cu.cm/HP-hr)
Coefficient of friction	0.45 – 0.5	at 20° - 260°C
Maximum pressure	100 p.s.i.	(6.9 bar)
Actuator volume	55 cu. in.	(901 cu. cm)
Weight	104 lbs.	(47 kg)
Materials	Die cast silicon bronze with stainless steel hardware	

\*\* Important: Use only hydraulic fluid or air. Standard seals are not compatible with brake fluid.

#### Ordering Information: 5025-A

When ordering brake calipers for discs smaller than the standard thickness, shim kits are to be used. Add the last four digits of the appropriate shim kit to the part number. Example 5025-A caliper set for 1" thick disc, the order number is **5025-A1000**

For the use of shim kits on discs thinner than standard of 4", refer to the table below:

Max disc thickness	Part Number	Total Shim Size
3.50 in. (88.9 mm)	5025-3500	0.50 in. (12.7 mm) one ¼" shim per side
3.00 in. (76.2 mm)	5025-3000	1.00 in. (25.4 mm) one ½" shim per side
2.50 in. (63.5 mm)	5025-2500	1.50 in. (38.1 mm) one ¼" and one ½" shim per side

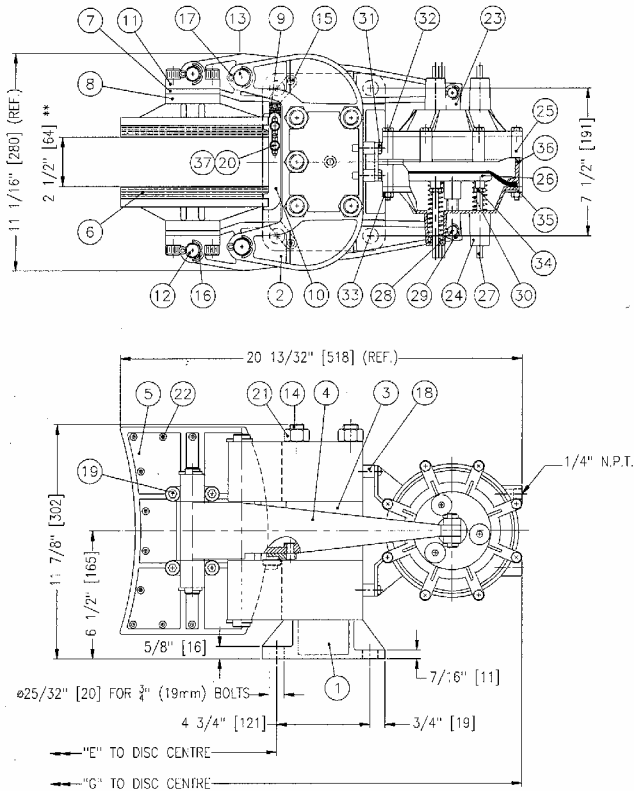
#### STANDARD VENTILATED KOBELT DISCS: 4 in. (102 mm)

Disc diam.	inches.	30	35	40	48
	mm.	762	889	1016	1219
Acting rad.	feet	0.96	1.17	1.37	1.71
	meters	.292	.356	.417	.521
Torque ‡	ft-lb	6997	8570	10143	12660
	kg-m	967	1185	1402	1750
Max. RPM		1800	1500	1300	1100

‡ Brake torques are theoretical values only

# DIMENSIONS AND PARTS LIST

## MODEL 5025-A



All dimensions in inches (mm)

Disc diameter				
inches	30	35	40	48
mm	762	889	1016	1219
Dimension "E"				
inches	15.42	17.92	20.42	24.42
mm	392	455	519	620
Dimension "G"				
inches	27.92	30.42	32.92	36.92
mm	709	773	836	938

Item	Qty	Part No.	Description
1	1	5025/26-0001	Foot
2	2	5025/26-0002	Saddle
3	2	5025/26-0003	Spacer
4	2	5024-0004	Lever
5	2	5025-0005	Shoe
6	2	5025-0007	Lining
7	*	5024-0008	Shim 1/4" (Centre Hinge)
8	*	5024-0009	Shim 1/2" (Centre Hinge)
9	2	5025/26-0011	Balancing Link No. 1
10	2	5025/26-0012	Balancing Link No. 2
11	4	5024-0006	Hinge Block
12	2	5024-0021	Shoe Pin
13	2	5024-0022	Saddle Pin
14	5	5024-0023	Tie Rod
15	2	5024-0026	Link Pin
16	4	1026-0824	Cotter Pin
17	4	1026-1028	Cotter Pin
19	8 *	1002-1420	Hex Socket Hd. Cap Screw
19	*	1002-1424	Hex Socket Hd. Cap Screw
19	*	1002-1432	Hex Socket Hd. Cap Screw
20	4	1002-1010	Hex Socket Hd. Cap Screw
21	5	1022-0117	Hex Nut
22	44	1033-1007	Rivet
37	4	1023-0232	Flat Washer
<b>6120 Fluid Applied Pot</b>			
23	2	6120-0001	Pot Clevis
24	2	6120-0002	End Cap
25	2	6120-0003	Centre Housing
26	2	6120-0004	Diaphragm Washer
27	6	6120-0005	Guide Pin
28	2	6230-0010	Pin
29	4	1026-0312	Cotter Pin
30	6	1201-0185	Spring
31	4	1001-1020	Hex Hd Cap Screw
32	8	1001-1056	Hex Bolt
33	8	1022-0410	Hex Nut – plated
34	6	1022-0211	Hex Jam Nut
35	2	1105-0020	Diaphragm Washer
36	1	1101-2166	"O" Ring 170 mm x 2.5 mm
18	4	6130-0008	Spacer

\* Quantity may vary with options