

5026-A

FLUID APPLIED BRAKE CALIPER



The **5026** 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).

SPECIFICATIONS

Clamping force	32000 lbf	(142.3 kN)
Maximum disc thickness	4 in.	(102 mm.)
Req. disc face	7 in.	(178 mm)
Total lining area	194 sq. in.	(1251 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 – 0.49	at 20° - 260°C
Maximum pressure	100 p.s.i.	(6.9 bar)
Actuator volume	110 cu. in.	(1802 cu. cm)
Weight	178 lbs.	(81 kg)
Materials	Die cast silicon bronze with stainless steel hardware and steel studs	

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.

Ordering number: 5026-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 5026-A caliper set for 3" thick disc, the order number is **5026-A3000**

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

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

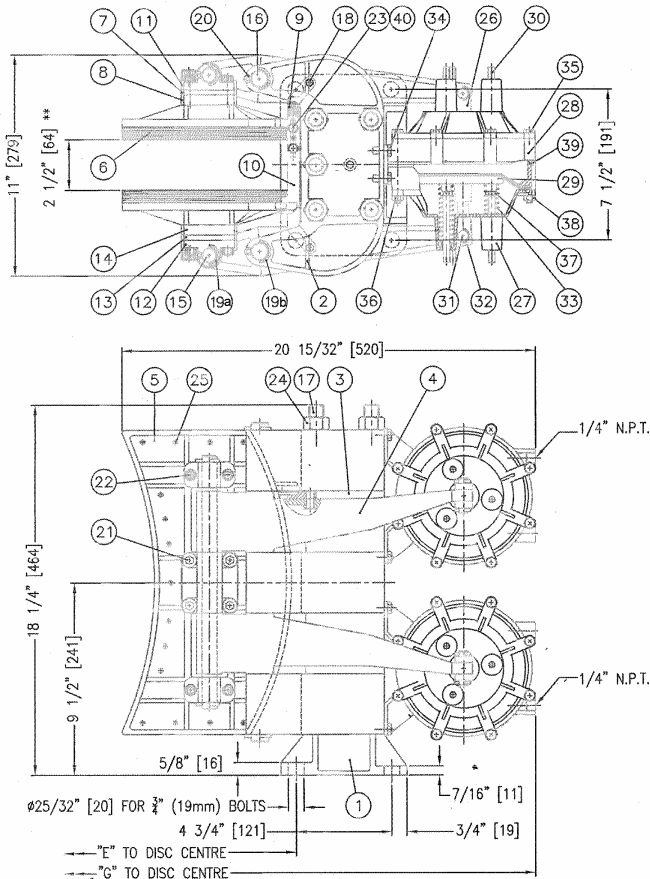
STANDARD VENTILATED KOBELT DISCS: 4 in. (102 mm)

Disc dia.	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	12719	15652	18586	23279
	kg-m	1758	2164	2570	3218
Max. RPM		1800	1500	1300	1100

‡ Brake torques are theoretical values only

Disc thickness	Part Number	Total Shim Size
3.5 in. (89 mm)	5026-3500	0.5 in. (12.7 mm) one shim (1/4") per side
3.0 in. (76 mm)	5026-3000	1.0 in. (25.4 mm) one shim (1/2") per side
2.5 in. (63 mm)	5026-2500	1.5 in. (38.1 mm) two shims (1/4" & 1/2") per side

MODEL 5026-A



All dimensions in inches (mm)

Disc diameter	30	35	40	48
inches	30	35	40	48
mm	762	889	1016	1219
Dimension "E"				
inches	15.14	17.64	20.14	24.14
mm	385	448	512	613
Dimension "G"				
inches	27.14	29.64	32.14	36.14
mm	689	753	816	918

Item	Qty	Part No.	Description
1	1	5025/26-0001	Foot
2	3	5025/26-0002	Saddle
3	2	5025/26-0003	Spacer
4	4	5026-0004	Lever
5	2	5026-0005	Shoe
6	2	5026-0007	Lining
7	*	5026-0008	Shim 1/4" (Centre Hinge)
8	*	5026-0009	Shim 1/2" (Centre Hinge)
9	2	5025/26-0011	Balancing Link No. 1
10	2	5025/26-0012	Balancing Link No. 2
11	2	5026-0013	Centre Hinge Block
12	4	5026-0014	Outer Hinge Block
13	*	5026-0015	Shim 1/4" (Outer Hinge)
14	*	5026-0016	Shim 1/2" (Outer Hinge)
15	2	5026-0027	Shoe Pin
16	2	5026-0028	Pin (Saddle)
17	5	5027-0023	Tie Rod
18	2	5024-0026	Link Pin
19a	4	1039-0352	Hitch Pin, 3/16"
19b	4	1039-0470	Hitch Pin, 1/4"
21	8	1002-1420	Socket Hd. Cap Screw (standard)
21	*	1002-1424	Socket Hd. Cap Screw (-3500 Shim kit)
21	*	1002-1428	Socket Hd. Cap Screw (-3000 Shim kit)
21	*	1002-1432	Socket Hd. Cap Screw (-2500 Shim kit)
22	8	1002-1220	Socket Hd. Cap Screw (standard)
22	*	1002-1224	Socket Hd. Cap Screw (-3500 Shim kit)
22	*	1002-1228	Socket Hd. Cap Screw (-3000 Shim kit)
22	*	1002-1232	Socket Hd. Cap Screw (-2500 Shim kit)
23	4	1002-1010	Socket Hd. Cap Screw
24	5	1022-0117	Hex Nut
25	58	1033-1007	Rivet
40	4	1023-0232	Flat Washer
6120 Fluid Applied Pot			
26	4	6120-0001	Pot Clevis
27	4	6120-0002	End Cap
28	4	6120-0003	Centre Housing
29	4	6120-0004	Diaphragm Washer
30	12	6120-0005	Guide Pin
31	4	6230-0010	Pin
32	8	1026-0312	Cotter Pin
33	12	1201-0185	Spring
34	8	1001-1008	Hex Hd Cap Screw
35	16	1001-1056	Hex Bolt
36	16	1022-0410	Hex Nut - plated
37	12	1022-0211	Hex Jam Nut
38	4	1105-0020	Diaphragm
39	2	1101-2166	"O" Ring 170 mm x 2.5 mm

* Quantity may vary with options