



5024-A FLUID APPLIED BRAKE CALIPER

The model 5024 is a very compact and high torque brake caliper. All the components on this caliper are shared with the Model 5027 except for the lever and shoe arrangement. This caliper lends itself ideally for many industrial and marine applications. Kobelt's latest design and manufacturing innovations are incorporated in this caliper, thus years of trouble-free service can be expected. 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	25740 lbs	(11673 kg)
Maximum disc thickness	2 in.	(51 mm.)
Req. disc face	4 in.	(102 mm)
Total lining area	75 sq. in.	(483 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 at 68°F	(20°C)
Coefficient of friction	0.55 at 500°F	(260°C)
Maximum pressure	100 psi	(6.9 bar)
Actuator volume	90 cu. in.	(1475 cu. cm)
Weight	97 lbs.	(44 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.

The actuator clevises can be adjusted to compensate for lining wear. The clearance between disc and brake shoe can therefore be maintained at the optimum. In cycling applications, a tremendous amount of compressed air can be saved by the shorter stroke of the actuator piston.

Ordering number: 5024-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 5024-A caliper set for 1" thick disc, the order number is **5024-A1000**

STANDARD VENTILATED KOBELT DISCS: 2.0 in. (51 mm)

Disc diam.	18	20	25	30	35	40	45	50
inches.	18	20	25	30	35	40	45	50
mm.	457	508	635	762	889	1016	1143	1270
Acting rad.								
feet	.583	.666	.875	1.083	1.292	1.500	1.708	1.917
meters	.178	.203	.267	.330	.394	.457	.521	.584
Torque								
ft-lb	7507	8580	11261	13942	16624	19305	21986	24668
kg-m	1038	1187	1557	1928	2299	2670	30414	3412
Max. RPM	3070	2750	2200	1800	1550	1350	1200	1070

For the use of shim kits on discs thinner than standard of 2 in., refer to the table below:

Disc thickness	Part Number	Total Shim Size
1.50 in. (38.1 mm)	5024-1500	0.50 in. (12.7 mm) one shim (1/4") per side
1.00 in. (25.4 mm)	5024-1000	1.00 in. (25.4 mm) one shim (1/2") per side
0.50 in. (12.7 mm)	5024-0500	1.50 in. (38.1 mm) two shims (1/2" & 1/4") per side

5024-A

Disc Diameter								
inches	18	20	25	30	35	40	45	50
mm	457	508	635	762	889	1016	1143	1270
Dimension "E"								
inches	10.12	11.12	13.62	16.12	18.62	21.12	23.62	26.12
mm	257	283	346	410	473	537	600	664
Dimension "G"								
inches	24.12	25.12	27.62	30.12	32.62	35.12	37.62	40.12
mm	613	638	702	765	829	892	956	1019

Item	Qty	Part No.	Description
1	1	5024-0001	Foot
2	2	5024-0002	Saddle
3	1	5024-0003	Spacer
4	2	5024-0004	Lever
5	2	5024-0005	Shoe
6	4	5024-0006	Bearing
7	2	5024-0007	Lining
8	*	5024-0008	1/4" Shim
9	*	5024-0009	1/2" Shim
10	2	5024-0011	Balancing Link No. 1
11	2	5024-0012	Balancing Link No. 2
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
18	4	1002-1010	Socket Hd. Cap Screw
19	8*	1002-1420	Socket Hd. Cap Screw
19	*	1002-1424	Socket Hd. Cap Screw (shim kit)
19	*	1002-1432	Socket Hd. Cap Screw (shim kit)
20	5	1022-0117	Nut
21	40	1033-1007	Rivet
37	4	1023-0232	Flat Washer

6130 Fluid Applied Pot

22	2	6130-0001	End Cap
23	2	6130-0002	Centre Housing
24	2	6130-0003	Diaphragm Washer
25	2	6130-0005	Clevis
26	6	6130-0007	Guide Pin
27	4	6130-0008	Spacer
28	6	1201-0162	Spring
29	6	1022-0211	Hex Jam Nut
30	4	1001-1020	Hex. Hd Screw
31	12	1001-1064	Hex. Hd Screw
32	12	1022-0410	Hex Nut (plated)
33	2	6230-0010	Pin
34	4	1026-0516	Cotter Pin
35	2	1105-0030	Diaphragm
36	1	1101-1265	"O" Ring

* Quantity may vary with options

