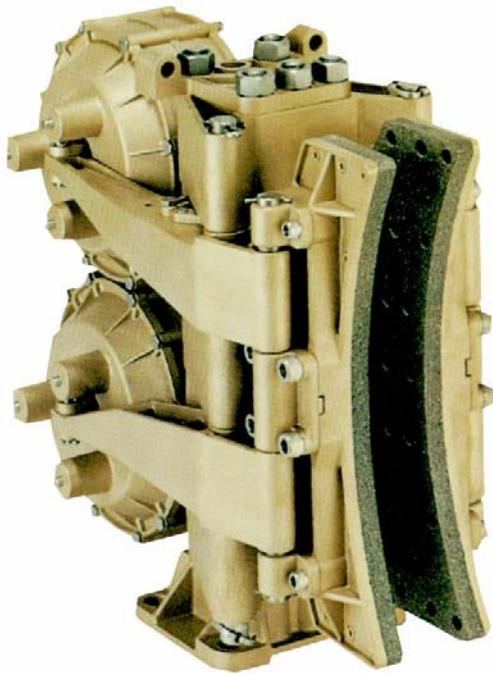


5027-A

FLUID APPLIED BRAKE CALIPER



The **5027** Brake Caliper is the flag ship of the Kobelt die-cast brake caliper series. It combines all the latest technology in design and manufacture. Like all the foregoing calipers, it has patented features such as balancing links, adjustment shims to fit between the shoe and the shoe bearing and patented actuators. Again, its compact design makes it a very powerful brake caliper for its size.

This brake caliper shares all its components parts, except for shoe and lever, with our Model 5024. As before, the air applied actuators have two supply ports per actuator. In most cases only one of these ports is needed to be connected to the control line. The diaphragm actuator is virtually friction free and is therefore extremely quick in response. In fact, even a 1/10 psi change in air pressure will make a noticeable difference to the braking torque. The maximum supply pressure to the caliper should not exceed 100 psi (6.9 bar). Our standard 2 x 4 series brake disc from 30 to 50 inches range can be used with this caliper.

SPECIFICATIONS

Clamping force	48000 lbf	(213.5 kN)
Maximum disc thickness	2 in.	(51 mm.)
Req. disc face	4 in.	(102 mm)
Total lining area	114 sq. in.	(735 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	0.48 – 0.49	at 20° - 260°C
Maximum pressure	100 psi	(6.9 bar)
Actuator volume	180 cu. in.	(2950 cu. cm)
Weight	172 lbs.	(78 kg)
Materials	Die cast silicon bronze with stainless steel hardware and alloy steel studs	

Ordering number: 5027-A
option: **5027-AW** for side mount

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 5027-A caliper set for 1” thick disc, the order number is

5027-A1000

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 thickness of 2”, refer to the table below:

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

Disc diam. inches. mm.	30 762	35 889	40 1016	45 1143	50 1270
Acting rad. feet meters	1.08 0.33	1.29 0.39	1.50 0.46	1.71 0.52	1.92 0.58
Torque ‡ ft-lb kg-m	20874 2886	25274 3494	29674 4103	34074 4711	38474 5319
Max. RPM	1800	1550	1350	1200	1070

‡ Brake torques are theoretical values only

Max disc thickness	Shim kit Part Number	Total Shim Size
1.5 in. (38.1 mm)	5027-1500	0.5 in. (12.7 mm) one (¼”) shim per side
1.0 in. (25.4 mm)	5027-1000	1.0 in. (25.4 mm) one (½”) shim per side
0.5 in. (12.7 mm)	5027-0500	1.5 in. (38.1 mm) two (½”&¼”) shims per side

