



5028-CM Air/Spring Applied Combination Brake Caliper

Material Die cast silicon bronze with stainless steel hardware and alloy steel studs
Weight 345 lb (156.5 kg)

The 5028-CM brake caliper is operated by a heavy duty industrial type dual-function brake actuator which can provide reliability and precision in the braking operation. These actuators are supplied by a prominent industrial actuator manufacturer.

In the upper chamber of the actuator pot, air pressure is required to overcome the spring pressure to put the brake into a released position. In the absence of air pressure, the spring will provide the necessary force for emergency braking. The upper spring can only provide slightly more than half of the brake force.

In the lower portion, modulated air pressure is applied to the diaphragm against a light spring for the normal braking action. The combination of these actions results in a sensitive and precise braking operation on varying control air pressures.

The wedge mechanism consists of a wedge and rollers that force the levers apart thus applying pressure to the brake disc and give a very accurate control over the brake torque.

Total clamping force	48000 lbf (213.5 kN)
Total lining area	420 in ² (2710 cm ²)
Allowable lining wear	0.5 in. (12.7 mm)
Max. air pressure	100 psi (690 kPa)
Disc max. thickness	4 in. (102 mm)
Required disc face	10 in. (254 mm)

KOBELT Disc – 4” (102 mm)

Disc Dia. in. mm	42.5 (1080)	48.5 (1232)	54.5 (1384)	60.5 (1537)	72.0 (1829)	84.0 (2134)
Acting Rad. in. mm	16.0 (405)	19.0 (482)	22.0 (558)	25.0 (634)	30.5 (774)	36.5 (927)
‡Torque ft-lb kg-m	28800 3980	34200 4730	39600 5470	45000 6220	54900 7590	65700 9080
Max. RPM	1300	1100	1000	900	700	600

Dimensions are in inches (mm). Specifications in metric units are shown in parentheses.

‡ Brake torques are theoretical values based on ideal operating conditions only

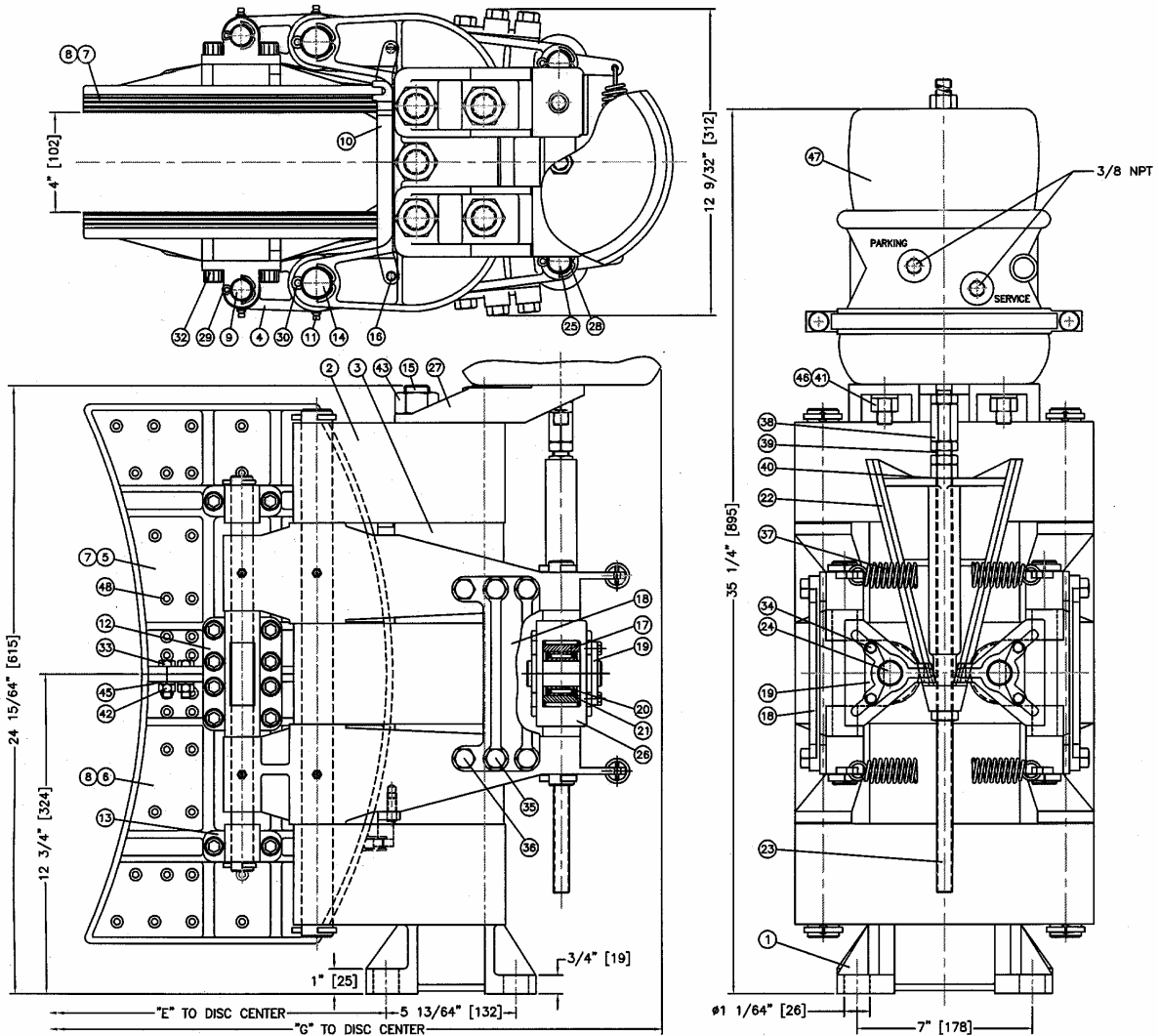
Refer to drawing on the back page.

Disc Diameter	42.5” (1080 mm)	48.5” (1232 mm)	54.5” (1384 mm)	60.5” (1537 mm)
DIM “E”	21.0” (532 mm)	24.0” (608 mm)	27.0” (685 mm)	30.0” (761 mm)
DIM “G”	34.5” (876 mm)	37.5” (954 mm)	40.5” (1031 mm)	43.5” (1107 mm)

US Patent 7,857,109 B2

Performance data are for information only and subject to change without notice.
For updated information, please call our Sales and Technical Support department.

Model 5028-CM



All Dimensions in inches (mm)

Item	Qty	Part Number	Description	Item	Qty	Part Number	Description
1	1	5028-0001	Foot	25	2	5028-0050	Roller Guide Pin
2	3	5028-0002	Saddle	26	2	5028-0151	Roller Box
3	2	5028-0003	Spacer	27	1	5028-0152	Mounting Bracket
4	2	5028-1004L	Lever (left)	28	4	1026-1024	Cotter Pin
4	2	5028-1004R	Lever (right)	29	4	1039-0470	Hitch Pin
5	2	5028-1005L	Shoe (left)	30	4	1039-0553	Hitch Pin
6	2	5028-1005R	Shoe (right)	31	4	1002-1010	Socket Hd. Cap Screw
7	2	5028-0007L	Lining (left)	32	24	1002-1420	Socket Hd. Cap Screw
8	2	5028-0007R	Lining (right)	33	10	1001-1220	Hex Head Cap Screw
9	2	5026-0028	Pin (Shoe)	34	4	1001-1010	Hex Head Cap Screw
10	2	5028-0030	Balancing Link	35	8	1001-1424	Hex Head Cap Screw
11	8	1501-0301	Grease Nipple	36	4	1001-1416	Hex Head Cap Screw
12	2	5028-0013	Centre Hinge Block	37	2	1202-1010	Return Spring
13	4	5028-0014	Outer Hinge Block	38	1	5026-0025	Extension Nut
14	2	5028-0022	Saddle Pin	39	4	1022-0266	Jam Nut
15	5	5028-0023	Tie Rod	40	1	1022-0166	Hex Nut
16	2	5028-0025	Link Pin	41	2	1022-0116	Hex Nut
17	2	5028-0031	Roller	42	10	1022-0112	Hex Nut
18	2	5028-0043	Lever Bracket	43	5	1022-0123	Hex Nut
19	2	5028-0044	Locking Plate	44	4	1023-0232	Flat Washer
20	2	5028-0045	Inner Bushing, IR-162020	45	10	1023-0312	Lock Washer
21	2	5028-0046	Outer Bearing HU-202820-2RS	46	2	1023-0316	Lock Washer
22	1	5028-1047	Wedge	47	1	3636	Actuator Pot
23	1	5028-0048	Extension Push Rod	48	124	1033-1007	Rivet
24	2	5028-0049	Roller Shaft				