

5028-SA | SPRING APPLIED AIR RELEASED CALIPER DISC BRAKE

KEY BENEFITS

Bronze & stainless steel construction

Easy brake pad replacement

Well matched to Kobelt's standard range of 4" x 10" ventilated discs

Putting you in control.

Constructed entirely of bronze and stainless steel, Kobelt's spring applied disc brakes are built to last in the harshest, most corrosive conditions.

The brake features a shoe design which allows the brake pads to be easily and quickly changed while leaving the caliper in place.

Available with several options, these caliper disc brakes are well suited for parking or emergency braking duty on hoists, winches and more.

SPECIFICATIONS

PART NO.	NORMAL FORCE ¹	PRESSURES	
		RELEASE	HOLD-OFF
5028-SA	19,750 lbs [87.9 kN]	83 psi [5.7 bar]	70 psi [4.9 bar]
5028-SA75	19,140 lbs [85.2 kN]	79 psi [5.4 bar]	68 psi [4.7 bar]
5028-SA70	17,670 lbs [78.6 kN]	70 psi [4.8 bar]	62 psi [4.3 bar]
5028-SA60	15,960 lbs [12.8 kN]	65 psi [4.5 bar]	56 psi [3.9 bar]

Maximum Pressure: 150 psi [10.3 bar]

Port Size: 3/8 NPT

Actuator Volume: 120 in³ [1970 cc]

Temperature Range: -40°F...+131°F
-40°C...+55°C

Disc Thickness: 4 in [102 mm]

Max Running Clearance: .08 in [2.0 mm]

Minimum Disc Diameter: 42 in [1067 mm]

Maximum Disc Diameter: 52 in [1321 mm]

Total Pad Area: 374.4 in² [2415 cm²]

Weight: 458 lbs [208 kg]

$${}^1\text{Torque: } T_B = 2F_N\mu \left(\frac{OD-12.0}{24} \right)$$

Where:

T_B = brake torque (ft-lbf)

F_N = normal force (lbf)

μ = coefficient of friction

= 0.38 (ferrous)

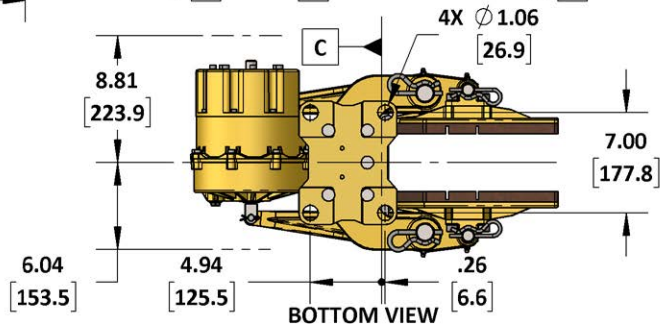
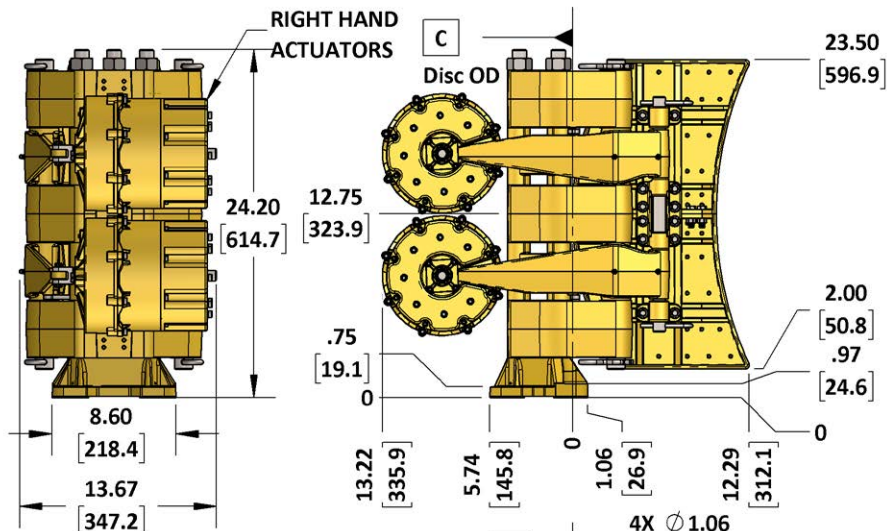
= 0.35 (nonferrous)

Friction values are theoretical and for reference only. They are based on properly bedded and burnished linings acting on a rotor at 20°C, manufactured to required specifications.

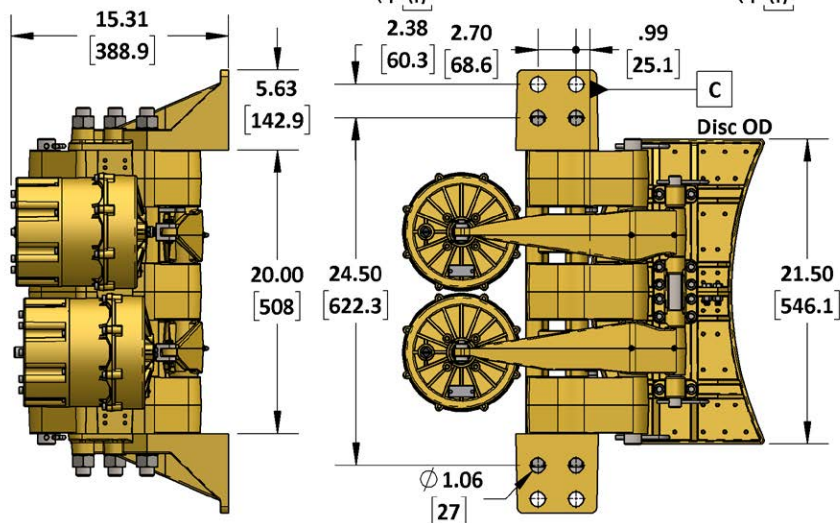
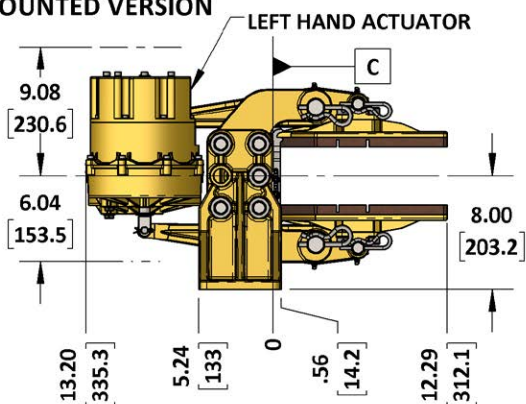
OD = brake disc diameter (in)

SPECIFICATIONS

FOOT MOUNTED VERSION



SIDE MOUNTED VERSION



Brake Model Code Key

5028- [] [] [] [] []

Added options

- R = manual release
- LS = limit switch

Friction material

- (blank) = standard
- N = non-sparking
- C = low COF (.12-.15)
- E = mid COF (.25-.28)

Disc thickness

- (blank) = 4.000 in
- 350 = 3.500 in
- 300 = 3.000 in
- 250 = 2.500 in
- 200 = 2.000 in

Actuator handing

- LH = springs on left hand side
- RH = springs on right hand side

Mounting code

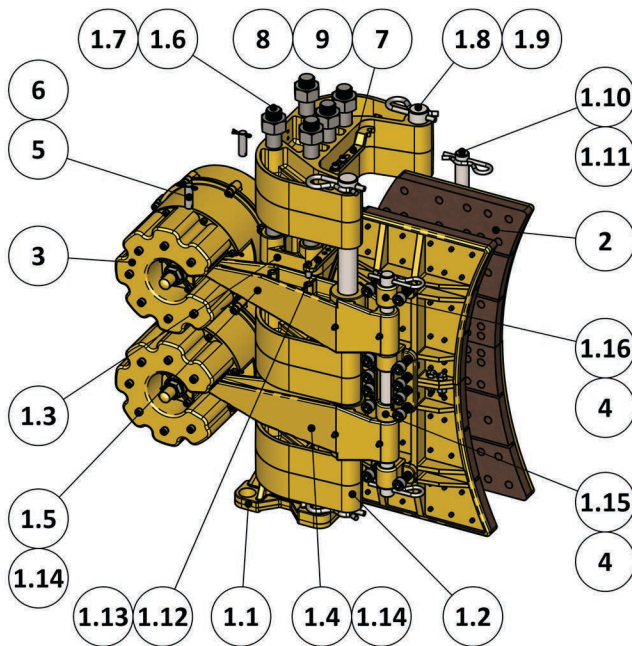
- (blank) = foot mounted
- W = side mounted

Actuator code

- SA = 83 psi release
- SA75 = 79 psi release
- SA70 = 70 psi release
- SA60 = 65 psi release

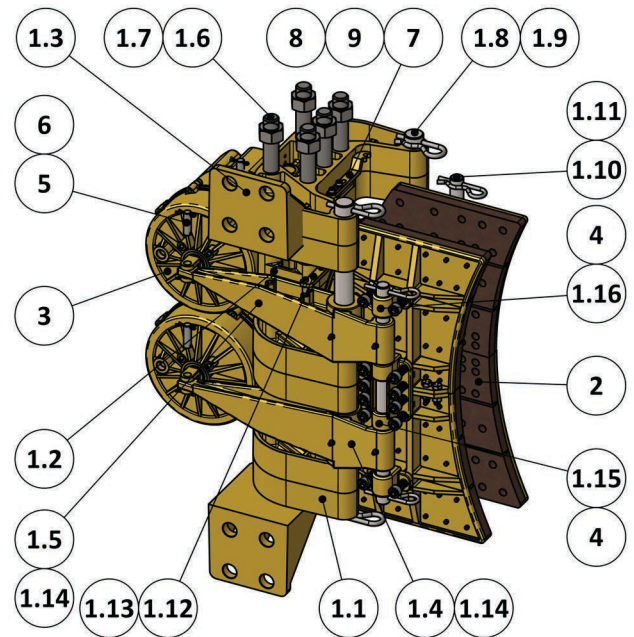
PARTS LISTING

5028-SA Caliper Brake



ITEM	QTY.	PART NUMBER	5028-SA DESCRIPTION
1	1	5028-SUB	SUB-ASSEMBLY, 5028 CALIPER
1.1	1	5028-0001	FOOT, 5028 CALIPER
1.2	3	5028-0002	SADDLE, 5028 CALIPER
1.3	2	5028-0003	SPACER, 5028 CALIPER
1.4	2	5028-0004L	LEVER ARM, 5028 CALIPER, LEFT
1.5	2	5028-0004R	LEVER ARM, 5028 CALIPER, RIGHT
1.6	5	5028-0023	TIE ROD, 5028 CALIPER
1.7	5	1022-0123	NUT, HEX, 1-8 UNC, ASTM F594D
1.8	2	5028-0022	MAIN PIN, 5028 CALIPER
1.9	4	1039-0553	HITCH PIN, 5/16 X 4, STEEL
1.10	2	5026-0028	PIVOT PIN, 5026/28 CALIPERS
1.11	4	1039-0470	HITCH PIN, 1/4 X 4-1/4, STEEL
1.12	2	5028-0011	BALANCING LINK NO. 2, 5028 CALIPER
1.13	2	5028-0025	BALANCING LINK PIN, 5028 CALIPER
1.14	8	1501-0301	GREASE NIPPLE, 1/4-28
1.15	2	5028-0013	PIVOT BLOCK, INNER, 5028 CALIPER
1.16	4	5028-0014	PIVOT BLOCK, OUTER, 5028 CALIPER
2	2	5028-LS	SHOE ASSEMBLY, 5028 CALIPER
3	2	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	24	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	4	6230-0010	CLEVIS PIN, 1/2" DIA
6	8	1026-0516	COTTER PIN, 1/8" X 1", SS
7	2	5028-0012	BALANCING LINK NO. 1, 5028 CALIPER
8	4	1023-0216	FLAT WASHER, 1/4, TYPE B, NARROW
9	4	1002-1010	SHCS, 1/4-20 UNC X 5/8 LG, 18-8 SS

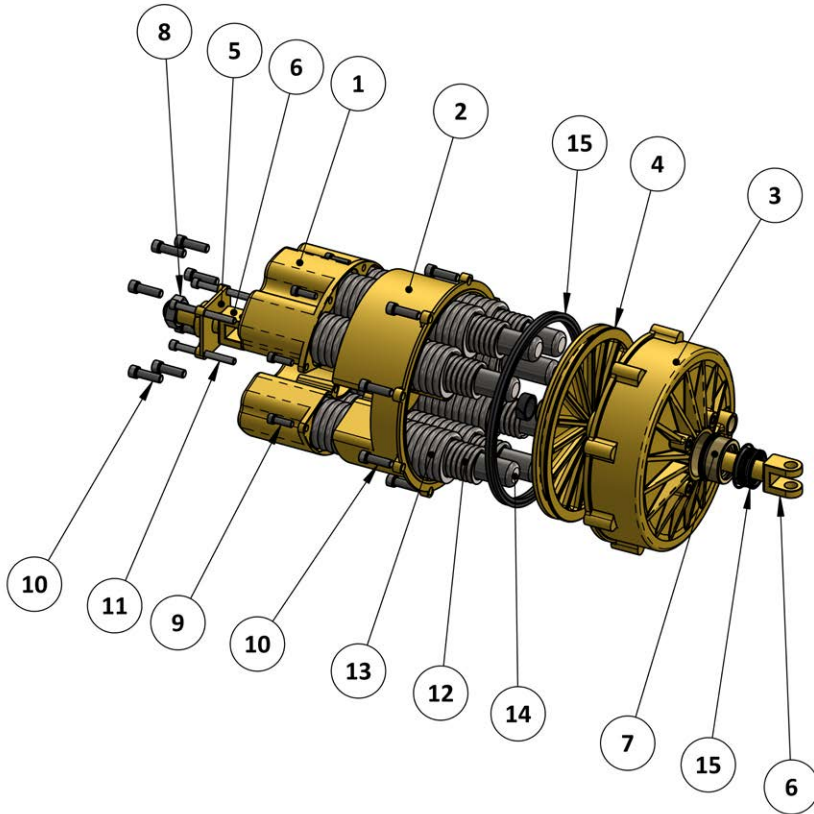
5028-SAW Caliper Brake



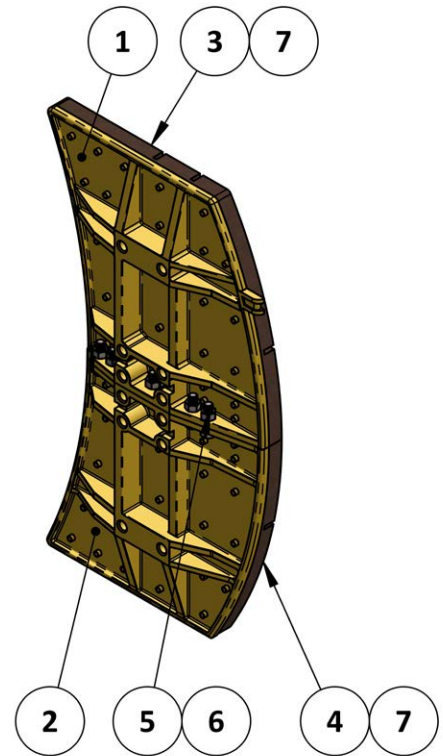
ITEM	QTY.	PART NUMBER	5028-SAW DESCRIPTION
1	1	5028-SUB-SW	SUB-ASSEMBLY, 5028 CALIPER
1.1	3	5028-0002	SADDLE, 5028 CALIPER
1.2	2	5028-0003	SPACER, 5028 CALIPER
1.3	2	5028-0060	SIDE WALL MOUNT, 5028 CALIPER
1.4	2	5028-0004L	LEVER ARM, 5028 CALIPER, LEFT
1.5	2	5028-0004R	LEVER ARM, 5028 CALIPER, RIGHT
1.6	5	5028-0024	TIE ROD, 5028 CALIPER
1.7	10	1022-0123	NUT, HEX, 1-8 UNC, ASTM F594D
1.8	2	5028-0022	MAIN PIN, 5028 CALIPER
1.9	4	1039-0553	HITCH PIN, 5/16 X 4, STEEL
1.10	2	5026-0028	PIVOT PIN, 5026/28 CALIPERS
1.11	4	1039-0470	HITCH PIN, 1/4 X 4-1/4, STEEL
1.12	2	5028-0011	BALANCING LINK NO. 2, 5028 CALIPER
1.13	2	5028-0025	BALANCING LINK PIN, 5028 CALIPER
1.14	8	1501-0301	GREASE NIPPLE, 1/4-28
1.15	2	5028-0013	PIVOT BLOCK, INNER, 5028 CALIPER
1.16	4	5028-0014	PIVOT BLOCK, OUTER, 5028 CALIPER
2	2	5028-LS	SHOE ASSEMBLY, 5028 CALIPER
3	2	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	24	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	4	6230-0010	CLEVIS PIN, 1/2" DIA
6	8	1026-0516	COTTER PIN, 1/8" X 1", SS
7	2	5028-0012	BALANCING LINK NO. 1, 5028 CALIPER
8	4	1023-0216	FLAT WASHER, 1/4, TYPE B, NARROW
9	4	1002-1010	SHCS, 1/4-20 UNC X 5/8 LG, 18-8 SS

PARTS LISTING

6233 Actuator



5028-LS



ITEM	QTY.	PART NUMBER	6233 DESCRIPTION
1	1	6233-0001	SPRING HOUSING, COVER
2	1	6233-0101	SPRING HOUSING, CENTRE
3	1	6233-0002	ACTUATOR HEAD, 6233 ACTUATOR
4	1	6233-0003	PISTON, AIR, 6233 ACTUATOR
5	1	6233-0004	BRACKET, 6233 ACTUATOR
6	2	6233-0005	CLEVIS, 6233 ACTUATOR
7	1	6230-PHB	SEAL CARRIER, 6230 ACTUATOR
8	1	1022-0217	NUT, JAM, 3/4-10 UNC, SS
9	8	1002-1012	SCREW, SCKT HD, 1/4-20 UNC X 3/4, SS
10	15	1002-1116	SCREW, SCKT HD, 5/16-18 UNC X 1, SS
11	4	1002-1036	CAP SCREW – SKT HD; ¼ UNC X 2-1/4 LG, 18-8
12	7	1201-0229	SPRING, COMPRESSION, 1.45 OD X .177 WIRE X 12.31 LG
13	7	1201-0230	SPRING, COMPRESSION, 2.00 OD X .250 WIRE X 13.0 LG
14	7	6230-0011	SPRING GUIDE, 1"
15	1	6233-RK	SEAL KIT, 6233 ACTUATOR

ITEM	QTY.	PART NUMBER	5028-LS DESCRIPTION
1	1	5028-1005L	SHOE, LEFT, 5028 CALIPER
2	1	5028-1005R	SHOE, RIGHT, 5028 CALIPER
3	1	5028-0007L	LINING, LEFT, 5028, .725" K5
4	1	5028-0007R	LINING, RIGHT, 5028, 23/32" K5
5	5	1001-1220	HEX BOLT, 3/8-16 UNC X 1-1/4 GR, 18-8
6	5	1022-0112	NUT, HEX, 3/8-16, 18-8 SS
7	62	1033-1007	RIVET, 1/4 X 7/16 (10-7), BRASS

Note: Parts lists are applicable to standard models only.