

# 5027-SA | SPRING APPLIED AIR RELEASED CALIPER DISC BRAKE

## KEY BENEFITS

Bronze & stainless steel construction

Rapid brake pad change out

Well matched to Kobelt's standard range of 2" x 4" 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 <sup>1</sup>	PRESSURES	
		RELEASE	HOLD-OFF
5027-SA	19,700 lbs [87.7 kN]	78 psi [5.4 bar]	70 psi [4.8 bar]
5027-SA75	19,050 lbs [84.8 kN]	75 psi [5.1 bar]	67 psi [4.6 bar]
5027-SA70	17,560 lbs [78.2 kN]	66 psi [4.5 bar]	61 psi [4.2 bar]
5027-SA60	15,680 lbs [69.8 kN]	61 psi [4.2 bar]	54 psi [3.7 bar]

Maximum Pressure: 150 psi [10.3 bar]

Port Size: 3/8 NPT

Actuator Volume: 120 in<sup>3</sup> [1970 cc]

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

Disc Thickness: 2 in [51 mm]

Max Running Clearance: .08 in [2.0 mm]

Minimum Disc Diameter: 28 in [711 mm]

Maximum Disc Diameter<sup>2</sup>: 75 in [1905 mm]

Weight: 252 lbs [114 kg]

<sup>1</sup>Torque:

$$T_B = 2F_N\mu \left( \frac{OD-5.40}{24} \right)$$

Where:

T<sub>B</sub> = brake torque (ft-lbf)

F<sub>N</sub> = normal force (lbf)

μ = coefficient of friction

= 0.38 (ferrous)

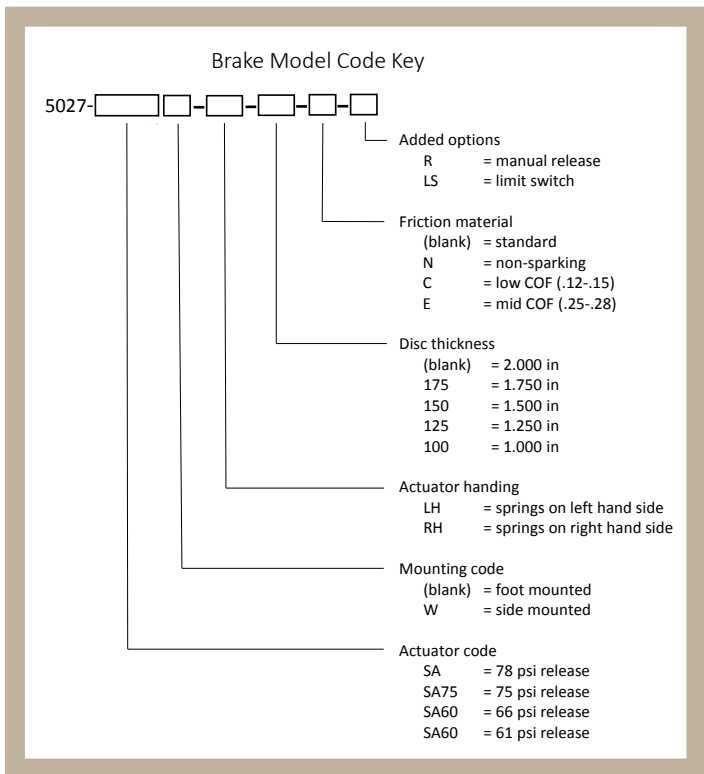
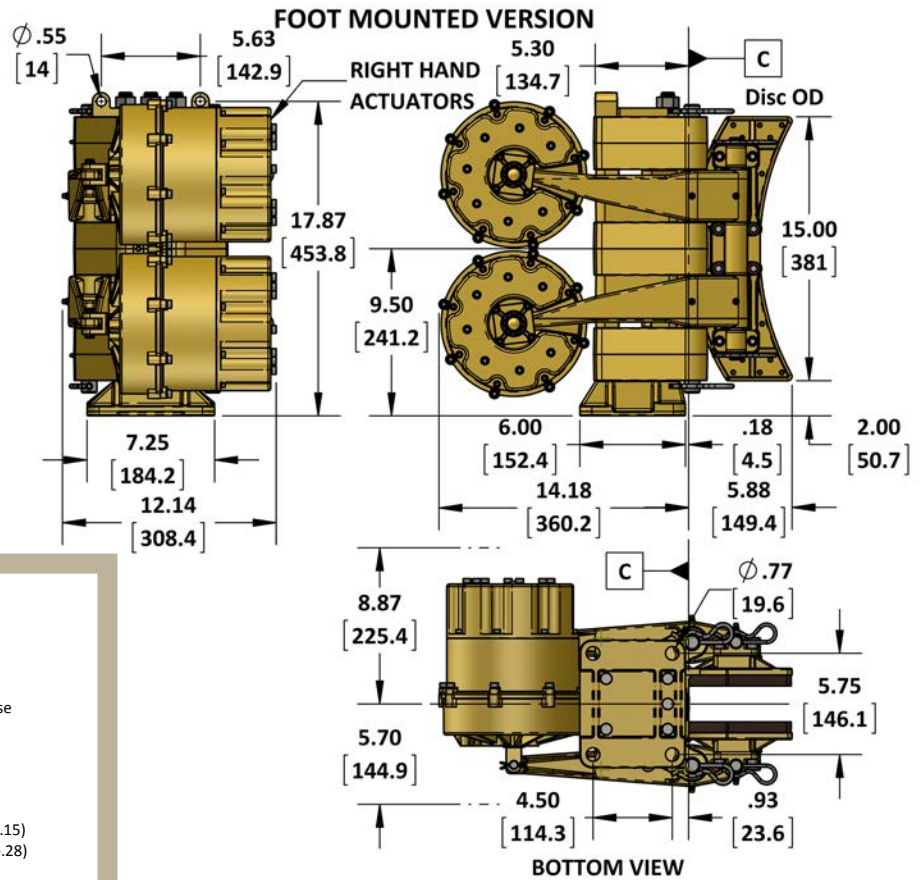
= 0.35 (nonferrous)

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.

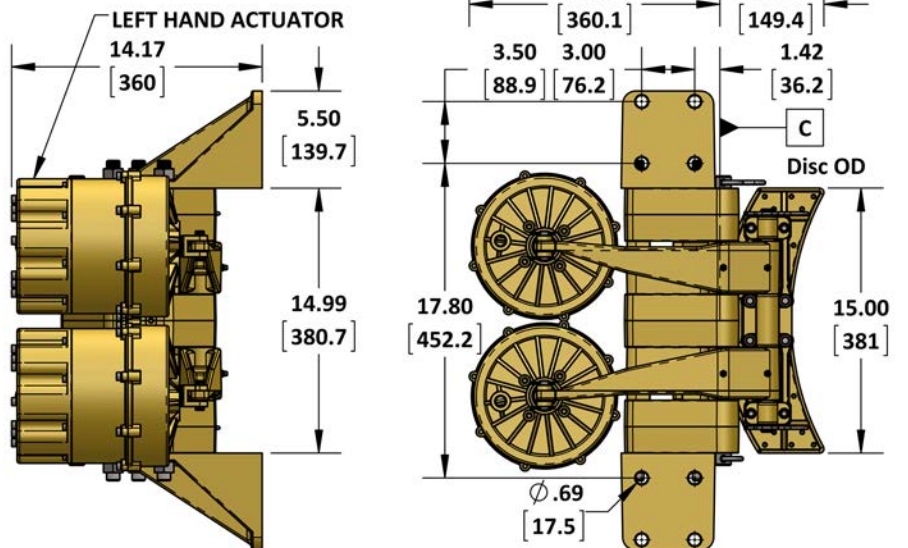
OD = brake disc diameter (in)

<sup>2</sup>Requires a minimum 5.12 in [130 mm] wide face

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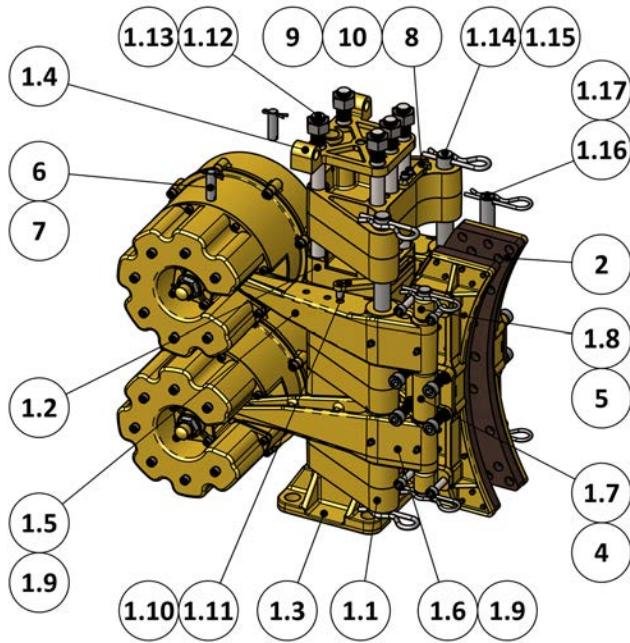


### SIDE MOUNTED VERSION

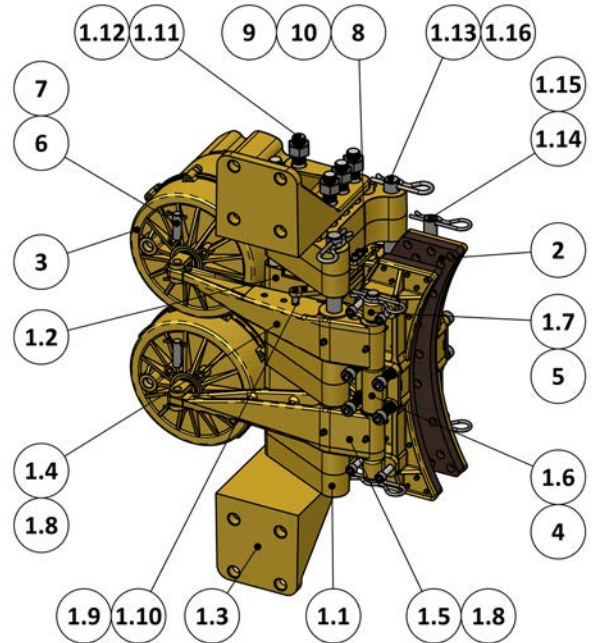


# PARTS LISTING

## 5027-SA Caliper Brake



## 5027-SAW Caliper Brake

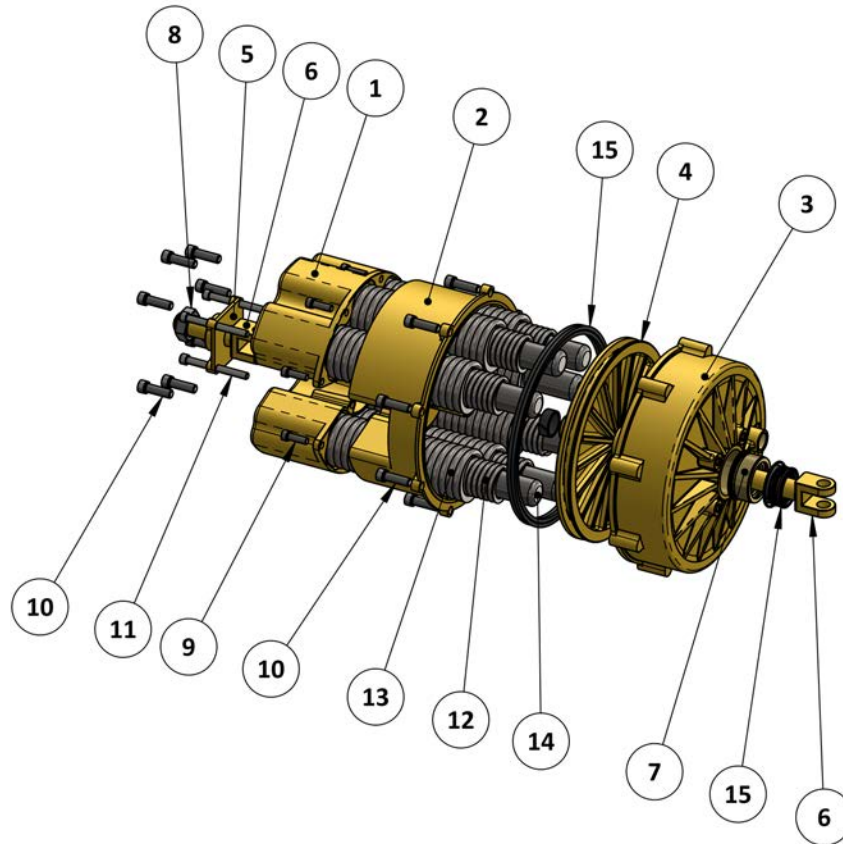


ITEM	QTY.	PART NUMBER	5027-SA DESCRIPTION
1	1	5027-SUB	SUB-ASSEMBLY, 5027 CALIPER
1.1	3	5024-0002	SADDLE, 5024 CALIPER
1.2	2	5024-0003	SPACER, 5024 CALIPER
1.3	1	5024-0001	FOOT, 5024 CALIPER
1.4	1	5027-0100	TOP SUPPORT, 5027 CALIPER
1.5	2	5026-0004-L	LEVER ARM, LEFT, 5026 CALIPER
1.6	2	5026-0004-R	LEVER, RIGHT, 5026 CALIPER
1.7	2	5026-0013	PIVOT BLOCK, CENTER, 5026 CALIPER
1.8	4	5026-0014	PIVOT BLOCK, OUTER, 5026 CALIPER
1.9	10	1501-0301	GREASE NIPPLE, 1/4-28
1.10	2	5024-0026	LINK PIN, 5024 - 5026 CALIPERS
1.11	2	5024-0011	BALANCING LINK NO. 1, 5024 CALIPER
1.12	5	5027-0023	TIE ROD, 5026 & 5027 CALIPER
1.13	5	1022-0117	NUT, HEX, 3/4-10 UNC, Gr 18-8
1.14	2	5027-0022	SADDLE PIN, 5027 CALIPER
1.15	4	1039-0470	HITCH PIN, 1/4 X 4-1/4, STEEL
1.16	2	5027-0021	SHOE PIN, 5027 CALIPER
1.17	4	1039-0352	HITCH PIN, 5/16 X4, STEEL
2	2	5027-LS	SHOE ASSEMBLY, 5/8" K5, 5027 CALIPER
3	2	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	8	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	8	1002-1220	SCREW, SKT HD, 3/8-16 UNC X 1-1/4, SS
6	4	6230-0010	CLEVIS PIN, 1/2" DIA
7	8	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	5024-0012	BALANCE LINK NO. 2, 5024 CALIPER
9	4	1023-0232	WASHER, FLAT, TYPE B NARROW, 1/4 in
10	4	1002-1010	SHCS, 1/4-20 UNC X 5/8 LG, 18-8 SS

ITEM	QTY.	PART NUMBER	5027-SAW DESCRIPTION
1	1	5027-SUB-SW	SUB-ASSEMBLY, 5027 CALIPER
1.1	3	5024-0002	SADDLE, 5024 CALIPER
1.2	2	5024-0003	SPACER, 5024 CALIPER
1.3	2	5027-0200	SIDE MOUNT FOOT, 5027 CALIPER
1.4	2	5026-0004-L	LEVER ARM, LEFT, 5026 CALIPER
1.5	2	5026-0004-R	LEVER, RIGHT, 5026 CALIPER
1.6	2	5026-0013	PIVOT BLOCK, CENTER, 5026 CALIPER
1.7	4	5026-0014	PIVOT BLOCK, OUTER, 5026 CALIPER
1.8	8	1501-0301	GREASE NIPPLE, 1/4-28
1.9	2	5024-0026	LINK PIN, 5024 - 5026 CALIPERS
1.10	2	5024-0011	BALANCING LINK NO. 1, 5024 CALIPER
1.11	5	5027-0023	TIE ROD, 5026 & 5027 CALIPER
1.12	10	1022-0117	NUT, HEX, 3/4-10 UNC, Gr 18-8
1.13	2	5027-0022	SADDLE PIN, 5027 CALIPER
1.14	2	5027-0021	SHOE PIN, 5027 CALIPER
1.15	4	1039-0352	HITCH PIN, 5/16 X4, STEEL
1.16	2	1039-0470	HITCH PIN, 1/4 X 4-1/4, STEEL
2	2	5027-LS	SHOE ASSEMBLY, 5/8" K5, 5027 CALIPER
3	2	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	8	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	8	1002-1220	SCREW, SKT HD, 3/8-16 UNC X 1-1/4, SS
6	4	6230-0010	CLEVIS PIN, 1/2" DIA
7	8	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	5024-0012	BALANCE LINK NO. 2, 5024 CALIPER
9	4	1023-0232	WASHER, FLAT, TYPE B NARROW, 1/4 in
10	4	1002-1010	SHCS, 1/4-20 UNC X 5/8 LG, 18-8 SS

# PARTS LISTING

## 6233 Actuator



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	1002-1040	SCREW, SKT HD, 1/4-20 UNC X 2-1/2, S/S
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

Note: Parts lists are applicable to standard models only.