

5025-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 4"x7" 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 draw works, hoists, winches and more.

SPECIFICATIONS

PART NO.	NORMAL FORCE ¹	PRESSURES	
		RELEASE	HOLD-OFF
5025-SA	10,390 lbs [46.2 kN]	83 psi [5.7 bar]	70 psi [4.8 bar]
5025-SA75	10,050 lbs [44.7 kN]	79 psi [5.4 bar]	68 psi [4.7 bar]
5025-SA70	9260 lbs [41.2 kN]	70 psi [4.8 bar]	62 psi [4.3 bar]
5025-SA60	8280 lbs [36.8 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: 60.1 in³ [985 cc]

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

Disc Thickness: 4 in [102 mm]

Max Running Clearance: .06 in [1.5 mm]

Minimum Disc Diameter: 25 in [635 mm]

Maximum Disc Diameter²: 86 in [2184 mm]

Total Pad Area: 132 in² [851 cm²]

Weight: 173 lbs [78.5 kg]

¹Torque:

$$T_B = 2F_N\mu \left(\frac{OD-7.70}{24} \right)$$

Where:

T_B = brake torque (ft-lbf)

F_N = normal force (lbf)

μ = coefficient of friction

= 0.38 (ferrous)

= 0.35 (nonferrous)

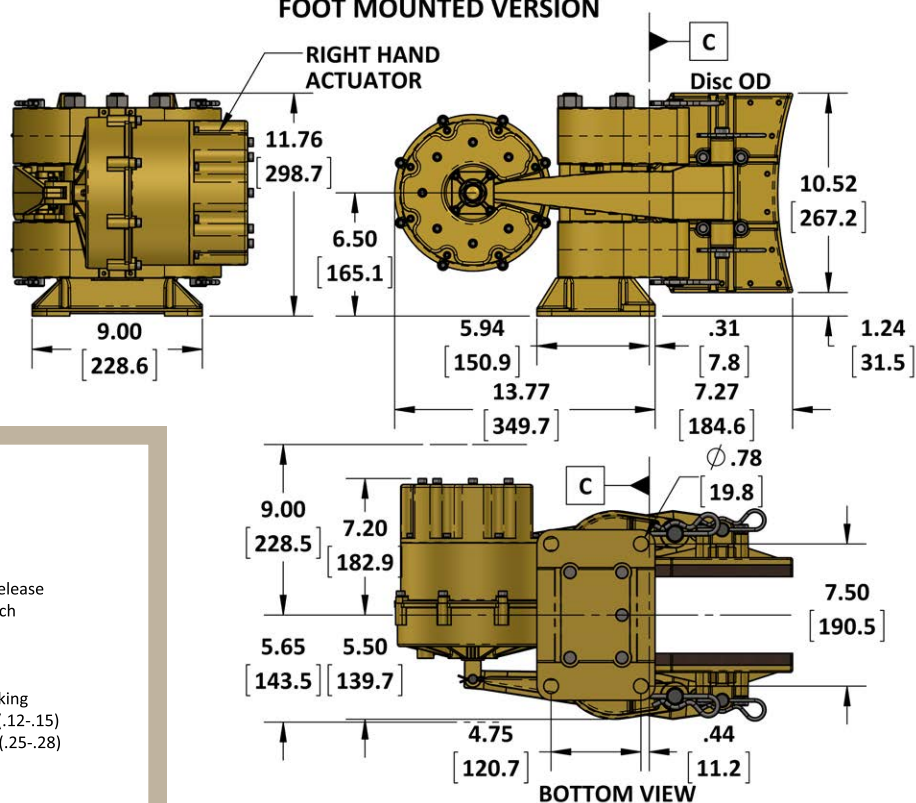
Friction values are theoretical and for reference only. They are based on properly bedded and burnished linings acting on a rotor at 20°C, manufactured to required specifications.

OD = brake disc diameter (in)

²Requires a minimum 7.48 in [190 mm] wide face

SPECIFICATIONS

FOOT MOUNTED VERSION



Brake Model Code Key

5025- [] - [] - [] - [] - []

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

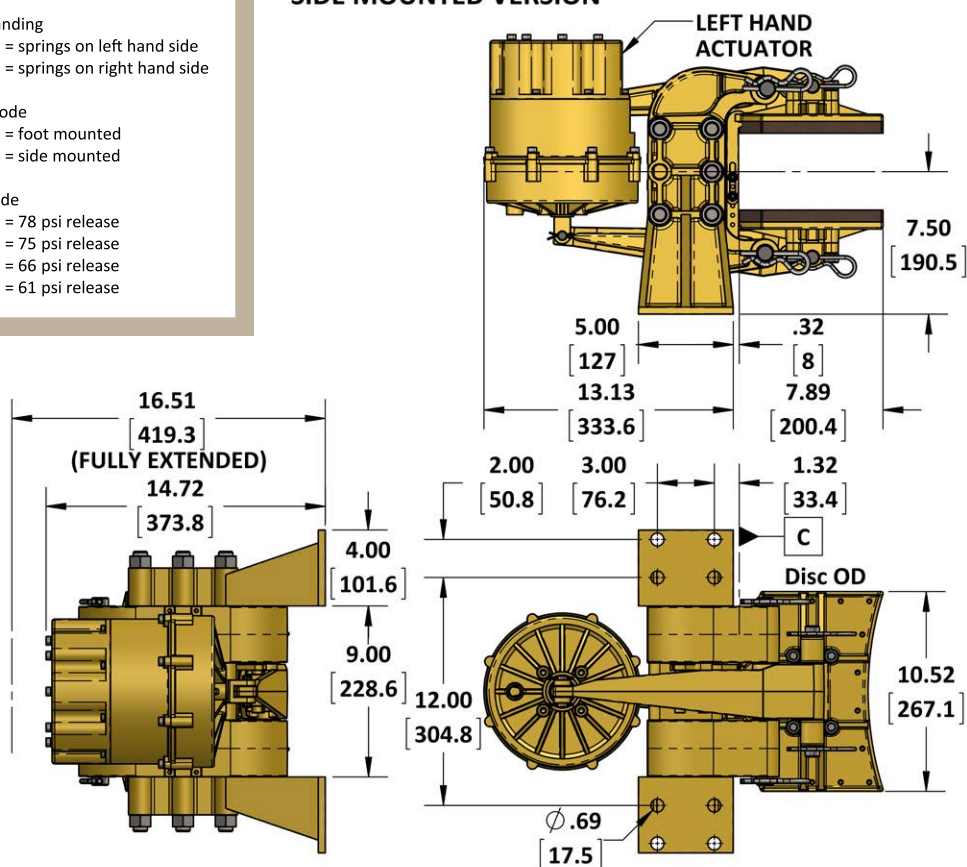
Mounting code

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

Actuator code

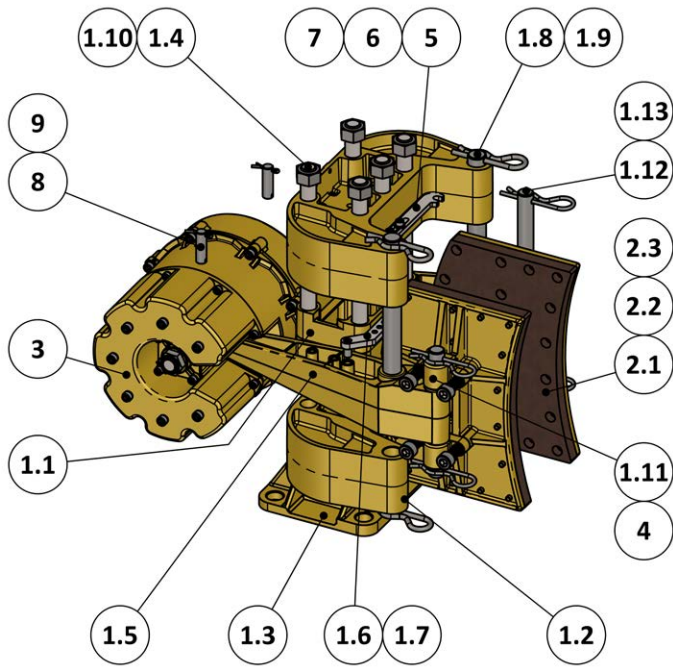
- SA = 78 psi release
- SA75 = 75 psi release
- SA70 = 66 psi release
- SA60 = 61 psi release

SIDE MOUNTED VERSION

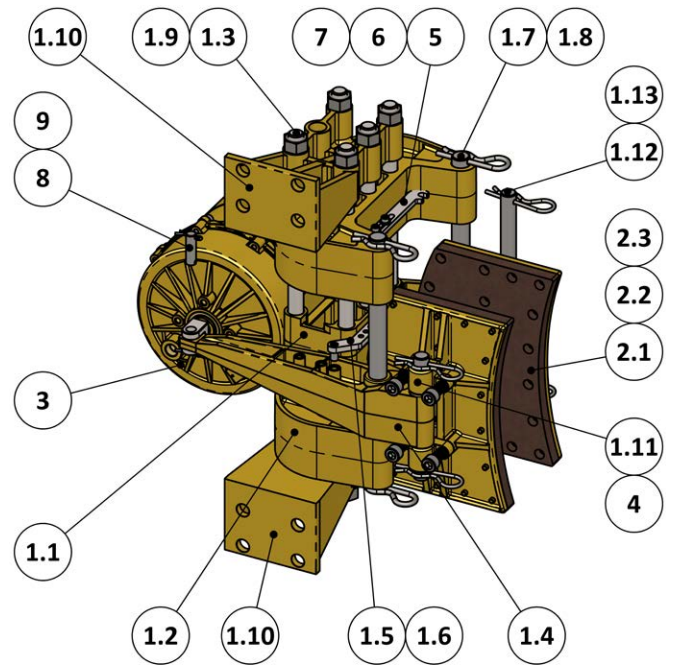


PARTS LISTING

5025-SA Caliper Brake



5025-SAW Caliper Brake

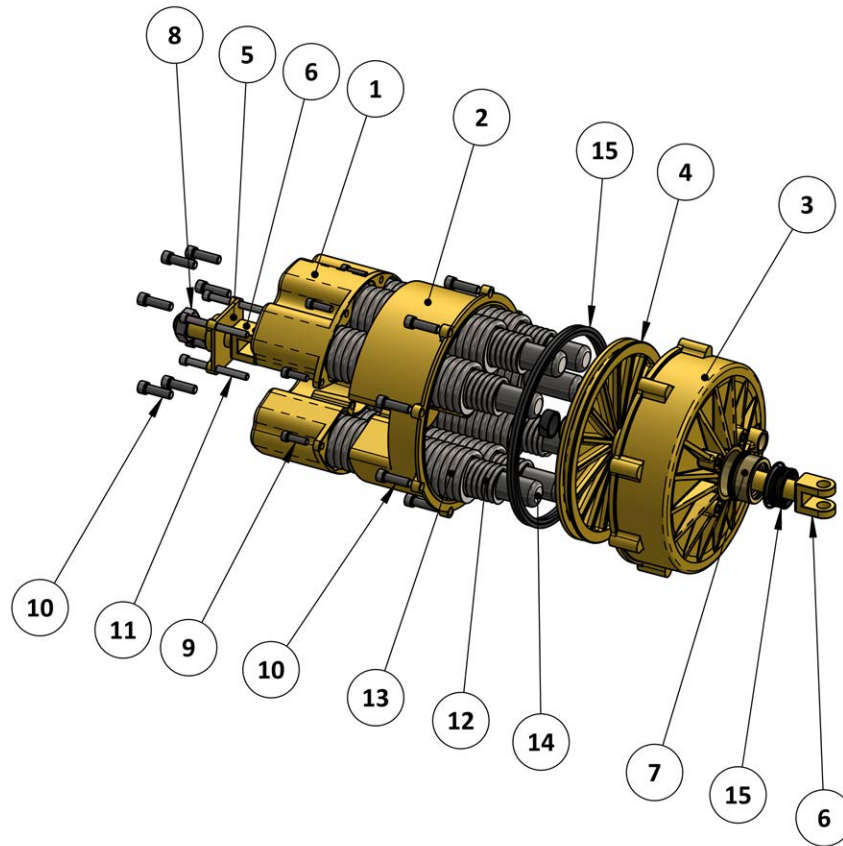


ITEM	QTY.	PART NUMBER	5025-SA DESCRIPTION
1	1	5025-SUB	SUB-ASSEMBLY, 5025 CALIPER
1.1	1	5026-0003	SPACER, 5026 CALIPER
1.2	2	5025-0002	SADDLE, 5025 CALIPER
1.3	1	5025-0001	BRAKE FOOT, 5025 CALIPER
1.4	5	5024-0023	TIE ROD, 5024/25 CALIPERS
1.5	2	5024-0004	LEVER, 5024 CALIPER
1.6	2	5025-0011	BALANCING LINK, PIVOT END
1.7	2	5024-0026	LINK PIN, 5024 - 5026 CALIPERS
1.8	2	5024-0022	SADDLE PIN, 5024/25 CALIPERS
1.9	4	1039-0470	PIN, HAIRPIN COTTER, 1/4 X 4-1/4, STEEL
1.10	5	1022-0117	NUT, HEX, 3/4-10 UNC, Gr 18-8
1.11	4	5024-0006	PIVOT BLOCK, 5024 CALIPER
1.12	2	5024-0021	SHOE PIN, 5024/25 CALIPERS
1.13	4	1039-0352	HITCH PIN, 5/16 X4, STEEL
2	2	5025-LS	SHOE ASSEMBLY, 5025 CALIPER
2.1	1	5025-0007	LINING, 5025 CALIPER, 5/8" K5
2.2	1	5025-0005	SHOE, 5025 CALIPER
2.3	22	1033-1007	RIVET, 1/4 X 7/16 (10-7), BRASS
3	1	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	8	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	2	5025-0012	BALANCING LINK, FORK END, 5025 CALIPER
6	4	1002-1010	SCREW, SKT HD, 1/4 UNC X 5/8 LG, 18-8 SS
7	4	1023-0216	FLAT WASHER, 1/4, TYPE B, NARROW
8	2	6230-0010	CLEVIS PIN, 1/2" DIA
9	4	1026-0516	COTTER PIN, 1/8" X 1", SS

ITEM	QTY.	PART NUMBER	5025-SAW DESCRIPTION
1	1	5025-SUB-W	SUB-ASSEMBLY, SIDE MOUNT
1.1	1	5026-0003	SPACER, 5026 CALIPER
1.2	2	5025-0002	SADDLE, 5025 CALIPER
1.3	5	5025-0023-W	TIE ROD, SIDEWALL MOUNT, 5025 CALIPER
1.4	2	5024-0004	LEVER, 5024 CALIPER
1.5	2	5025-0011	BALANCING LINK, PIVOT END
1.6	2	5024-0026	LINK PIN, 5024 - 5026 CALIPERS
1.7	2	5024-0022	SADDLE PIN, 5024/25 CALIPERS
1.8	4	1039-0470	PIN, HAIRPIN COTTER, 1/4 X 4-1/4, STEEL
1.9	10	1022-0117	NUT, HEX, 3/4-10 UNC, Gr 18-8
1.10	2	5026-0060	BRACKET, SIDEWALL MOUNT, 5025/5026
1.11	4	5024-0006	PIVOT BLOCK, 5024 CALIPER
1.12	2	5024-0021	SHOE PIN, 5024/25 CALIPERS
1.13	4	1039-0352	HITCH PIN, 5/16 X4, STEEL
2	2	5025-LS	SHOE ASSEMBLY, 5025 CALIPER
2.1	1	5025-0007	LINING, 5025 CALIPER, 5/8" K5
2.2	1	5025-0005	SHOE, 5025 CALIPER
2.3	22	1033-1007	RIVET, 1/4 X 7/16 (10-7), BRASS
3	1	6233	SPRING APPLIED / AIR RELEASED ACTUATOR
4	8	1002-1420	SCREW, SKT HD, 1/2-13 UNC X 1-1/4, SS
5	2	5025-0012	BALANCING LINK, FORK END, 5025 CALIPER
6	4	1002-1010	SCREW, SKT HD, 1/4 UNC X 5/8 LG, 18-8 SS
7	4	1023-0216	FLAT WASHER, 1/4, TYPE B, NARROW
8	2	6230-0010	CLEVIS PIN, 1/2" DIA
9	4	1026-0516	COTTER PIN, 1/8" X 1", 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	1002-1036	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

Note: Parts lists are applicable to standard models only.