

5023-SA | SPRING APPLIED AIR RELEASED CALIPER DISC BRAKE

KEY BENEFITS

Bronze & stainless steel construction

Rapid brake pad change out

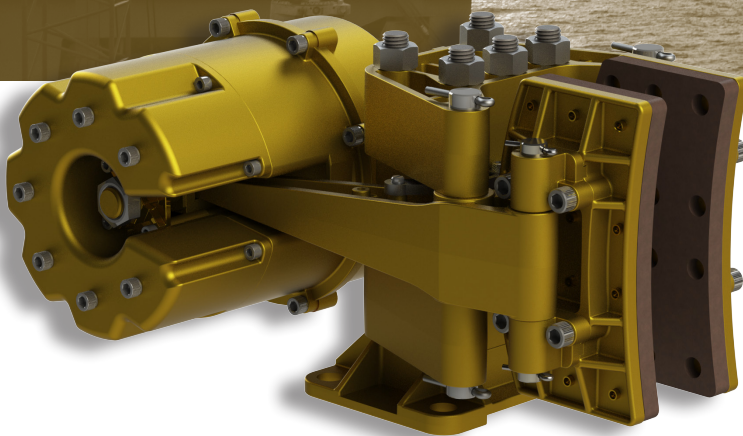
Well matched to Kobelt's standard range of 2" ventilated discs

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
5023-SA	8260 lbs [36.8 kN]	87 psi [6.0 bar]	84 psi [5.8 bar]
5023-SA75	7110 lbs [31.6 kN]	74 psi [5.1 bar]	68 psi [4.7 bar]
5022-SA70	6400 lbs [28.5 kN]	66 psi [4.6 bar]	61 psi [4.2 bar]
5022-SA60	5300 lbs [23.6 kN]	55 psi [3.8 bar]	49 psi [3.4 bar]

Maximum Pressure: 150 psi [10.3 bar]

Port Size: 3/8 NPT

Actuator Volume: 46.2 in³ [757 cc]

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

Disc Thickness: 2 in [51 mm]

Max Running Clearance: .06 in [1.5 mm]

Minimum Disc Diameter: 20 in [508 mm]

Maximum Disc Diameter²: unlimited

Weight: 77 lbs [35 kg]

¹Torque:

$$T_B = 2F_N\mu \left(\frac{OD-4.50}{24} \right)$$

Where:

T_B = brake torque (ft-lbf)

F_N = normal force (lbf)

μ = coefficient of friction

= 0.35 (nonferrous disc)

= 0.38 (steel disc)

= 0.41 (cast iron disc)

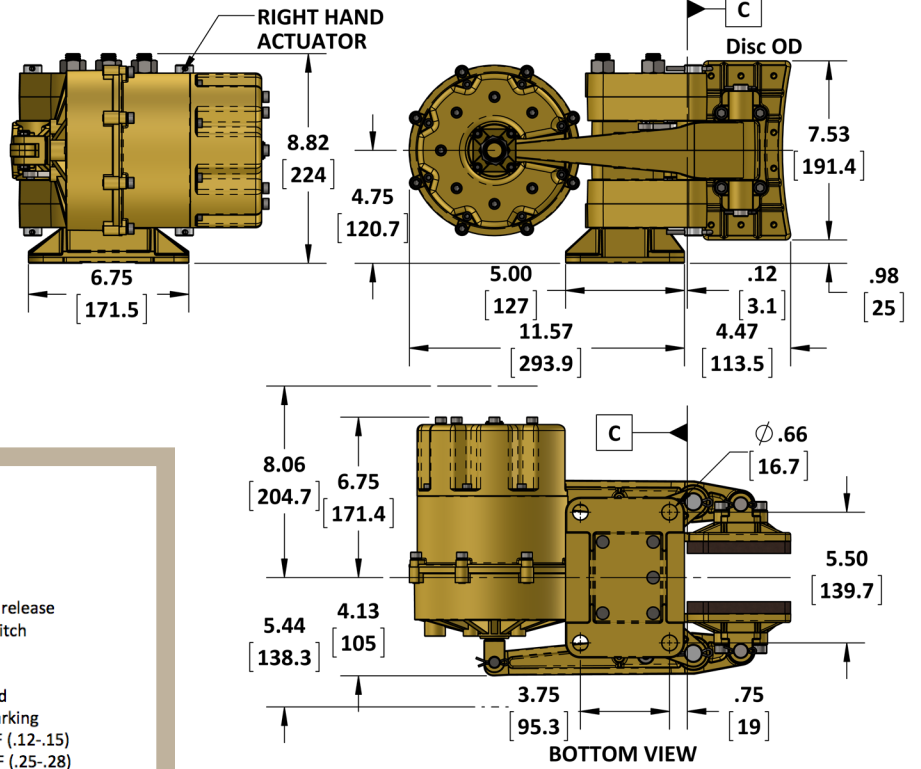
OD = brake disc diameter (in)

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.

²Requires a minimum 4.34 in [110 mm] wide face

SPECIFICATIONS

FOOT MOUNTED VERSION



Brake Model Code Key

5023- [] - [] - [] - [] - []

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) = 2.000 in
- 175 = 1.750 in
- 150 = 1.500 in
- 125 = 1.250 in
- 100 = 1.000 in

Actuator handing

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

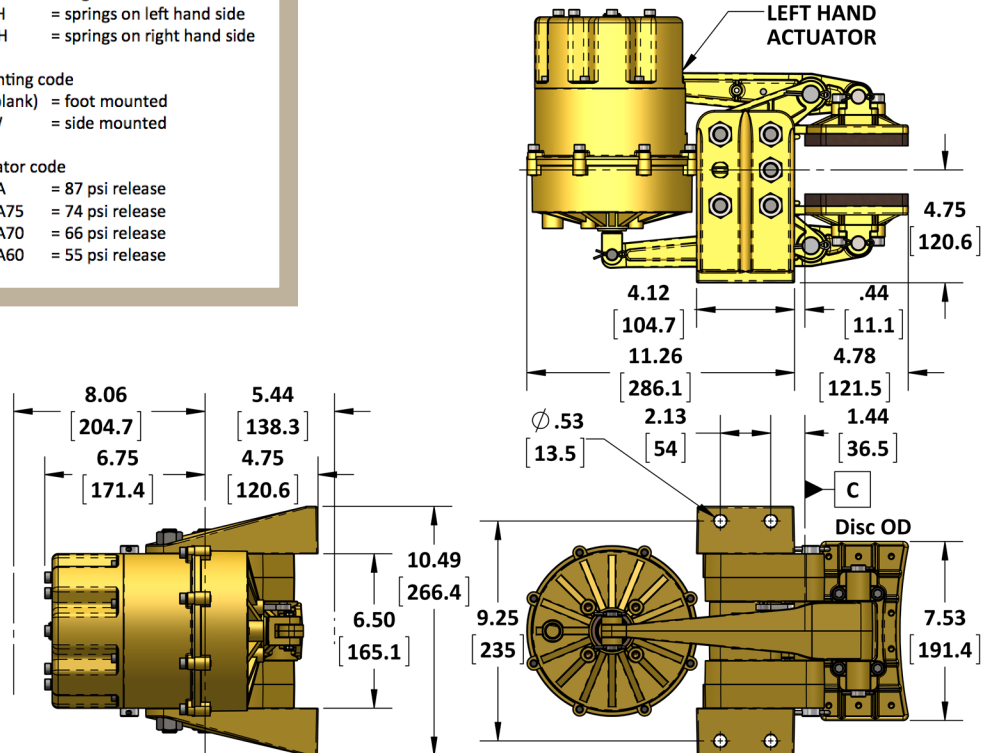
Mounting code

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

Actuator code

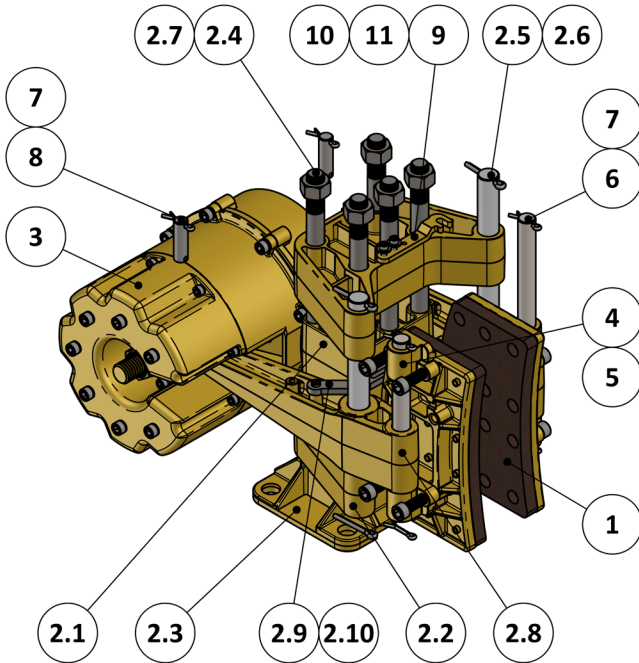
- SA = 87 psi release
- SA75 = 74 psi release
- SA70 = 66 psi release
- SA60 = 55 psi release

SIDE MOUNTED VERSION

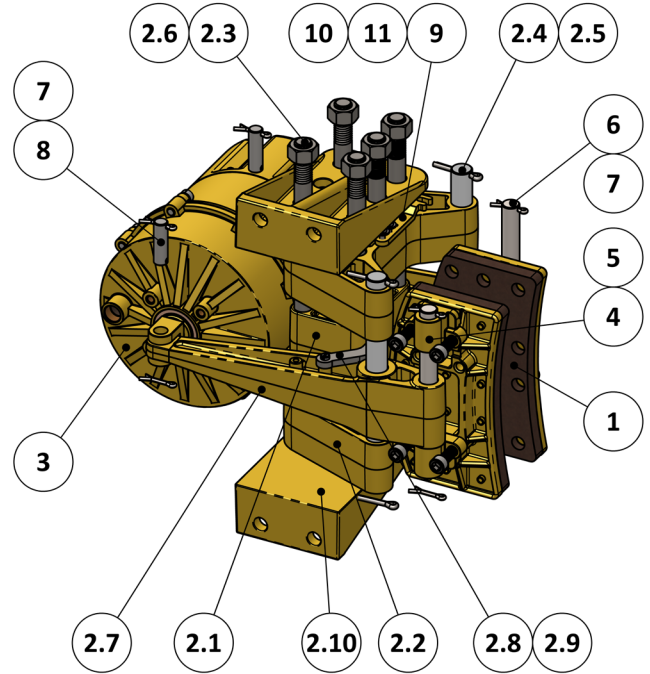


PARTS LISTING

5023-SA Caliper Brake



5023-SAW Caliper Brake

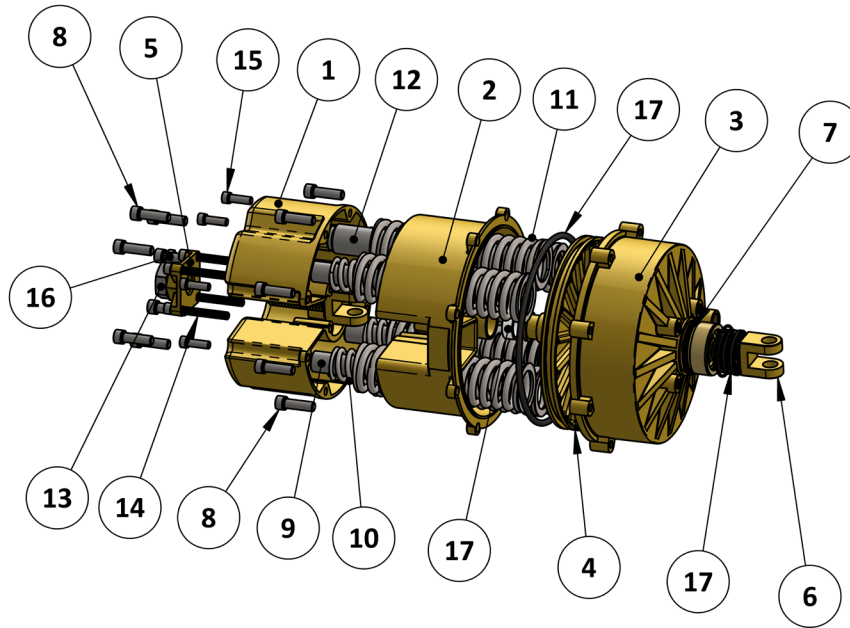


ITEM	QTY.	PART NUMBER	5023-SA DESCRIPTION
1	2	5021-LS	SHOE ASSEMBLY, 5021 CALIPER, 1/2" K5
2	1	5023-SUB	SUB-ASSEMBLY, 5023 CALIPER
2.1	1	5021-0003	SPACER, 5021 CALIPER
2.2	2	5023-0002	SADDLE, 5023 CALIPER
2.3	1	5021-0001	FOOT, 5021 CALIPER
2.4	5	5021-0023	TIE ROD, 5023 CALIPER
2.5	2	5021-0022	SADDLE PIN, 5021 CALIPER
2.6	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
2.7	5	1022-0116	REG HEX NUT 5/8-11 UNC, GR 18-8
2.8	2	5023-0004	LEVER, 5023 CALIPER
2.9	2	5021-0011	BALANCING LINK, PART 1, 5021 CALIPER
2.10	2	5021-0226	LINK PIN, 5/16 UNC X 7/8 LG
3	1	6230-80	ACTUATOR, SPRING APPLIED / AIR RELEASED, 80 PSI
4	4	5021-0006	PIVOT BLOCK, 5021 CALIPER
5	8	1002-1216	SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS
6	2	5021-0021	SHOE PIN, 5021 CALIPER
7	8	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	6230-0010	CLEVIS PIN, 1/2" DIA
9	2	5021-0012	BALANCE LINK NO. 2, 5021 CALIPER
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS

ITEM	QTY.	PART NUMBER	5023-SAW DESCRIPTION
1	2	5021-LS	SHOE ASSEMBLY, 5021 CALIPER, 1/2" K5
2	1	5023-SUB-W	SIDE MOUNT SUB-ASSEMBLY, 5023 CALIPER
2.1	1	5021-0003	SPACER, 5021 CALIPER
2.2	2	5023-0002	SADDLE, 5023 CALIPER
2.3	5	5021-0023	TIE ROD, 5023 CALIPER
2.4	2	5021-0022	SADDLE PIN, 5021 CALIPER
2.5	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
2.6	10	1022-0116	REG HEX NUT 5/8-11 UNC, GR 18-8
2.7	2	5023-0004	LEVER, 5023 CALIPER
2.8	2	5021-0011	BALANCING LINK, PART 1, 5021 CALIPER
2.9	2	5021-0226	LINK PIN, 5/16 UNC X 7/8 LG
2.10	2	5021-0101	SIDE MOUNT BRACKET, 5021 CALIPER
3	1	6230-80	ACTUATOR, SPRING APPLIED / AIR RELEASED, 80 PSI
4	4	5021-0006	PIVOT BLOCK, 5021 CALIPER
5	8	1002-1216	SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS
6	2	5021-0021	SHOE PIN, 5021 CALIPER
7	8	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	6230-0010	CLEVIS PIN, 1/2" DIA
9	2	5021-0012	BALANCE LINK NO. 2, 5021 CALIPER
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS

PARTS LISTING

6230 Actuator



ITEM	QTY.	PART NUMBER	6230 DESCRIPTION
1	1	6230-0001	SPRING HOUSING, COVER
2	1	6230-0101	SPRING HOUSING, CENTRE
3	1	6230-0002	ACTUATOR HEAD, 6233 ACTUATOR
4	1	6230-0003-K	PISTON, SPRING/AIR ACTUATOR, CHROMED
5	1	6230-0004	CLEVIS BRACKET, 6230 & 6232 ACTUATOR
6	2	6230-0005	CLEVIS, 3/4 UNC X 0.50 DIA
7	1	6230-PHB	SEAL CARRIER, 6230 ACTUATOR
8	15	1002-1116	SCREW, SCKT HD, 5/16-18 UNC X 1, SS
9	4	6230-0012	SPRING GUIDE - 3/4"
10	4	1201-0159	SPRING, COMPRESSION, 1.15 OD X .177 WIRE X 9.5L
11	6	1201-0158	SPRING, COMPRESSION, 1.68 OD X .250 WIRE X 9.5L
12	2	6230-0011	SPRING GUIDE, 1"
13	1	1022-0217	NUT, JAM, 3/4-10 UNC, SS
14	4	1002-1032	SCREW, SCKT HD, 1/4-20 UNC X 2, SS
15	8	1002-1012	SCREW, SCKT HD, 1/4-20 UNC X 3/4, SS
16	1	1022-0110	NUT, HEX, 1/4-20 UNC, SS
17	1	6230-RK	SEAL KIT, 6230 ACTUATOR

Note: Parts lists are applicable to standard models only.