

# 5020-SA | SPRING APPLIED AIR RELEASED CALIPER DISC BRAKE

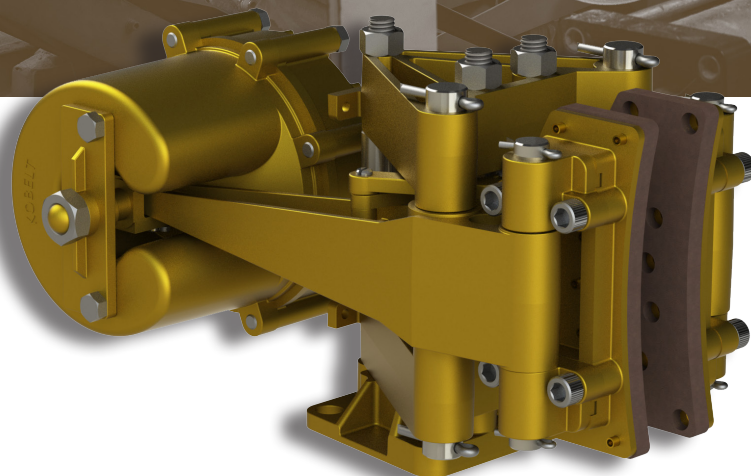


## KEY BENEFITS

Bronze & stainless steel construction

Easily changed brake pads

Well matched to Kobelt's standard range of 1¼" ventilated discs



## Putting you in control.

For over three decades, Kobelt has been manufacturing rugged, durable disc brakes for the oil and gas, mining, material handling and manufacturing industries. Constructed of bronze and stainless steel, Kobelt's disc brakes are built to last in the harshest conditions.

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 <sup>1</sup>	PRESSURES	
		RELEASE	HOLD-OFF
5020-SA	4700 lbs [20.9 kN]	102 psi [7.1 bar]	89 psi [6.2 bar]
5020-SA90	4250 lbs [18.9 kN]	87 psi [6.0 bar]	79 psi [5.4 bar]
5020-SA75	3700 lbs [16.5 kN]	76 psi [5.2 bar]	68 psi [4.7 bar]
5020-SA60	2970 lbs [13.2 kN]	62 psi [4.3 bar]	53 psi [3.7 bar]

Maximum Pressure: 250 psi [17.2 bar]

Port Size: ¼ NPT

Actuator Volume: 16.6 in<sup>3</sup> [273 cc]

Temperature Range: -40°F...+120°F  
-40°C...+49°C

Disc Thickness: 1¼ in [32 mm]

Max Running Clearance: .06 in [1.5 mm]

Minimum Disc Diameter: 12 in [229 mm]

Maximum Disc Diameter: unlimited<sup>2</sup>

Weight: 21 lbs [9.5 kg]

<sup>1</sup>Torque:

$$T_B = 2F_N\mu \left( \frac{OD-2.96}{24} \right)$$

Where:

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

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

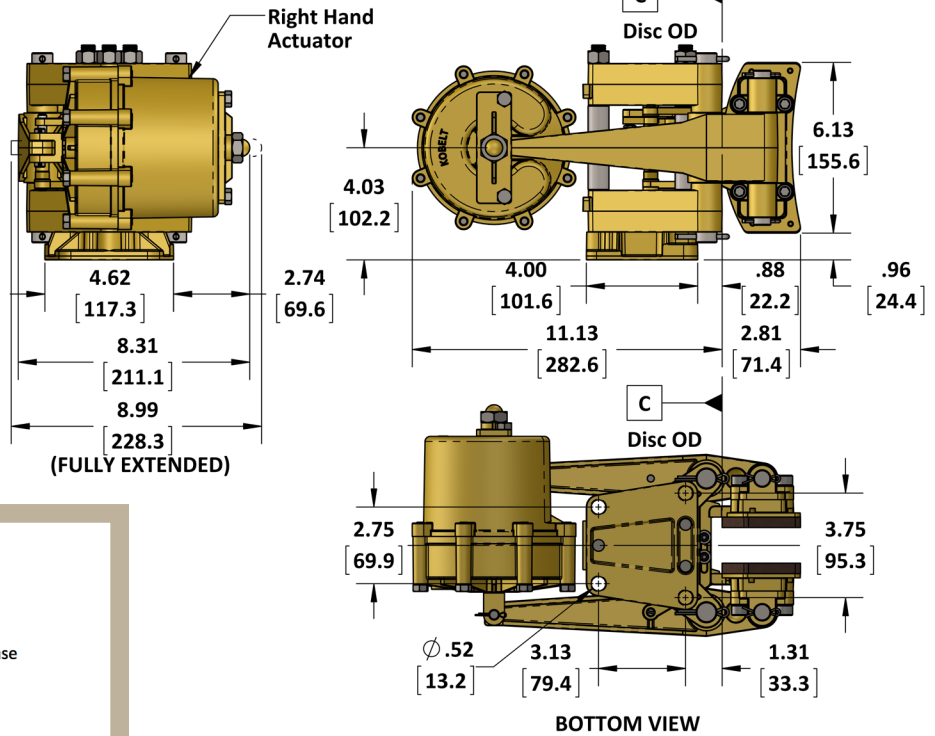
μ = coefficient of friction  
= 0.35 (nonferrous disc)  
= 0.38 (steel disc)  
= 0.41 (cast iron disc)

OD = brake disc diameter (in)

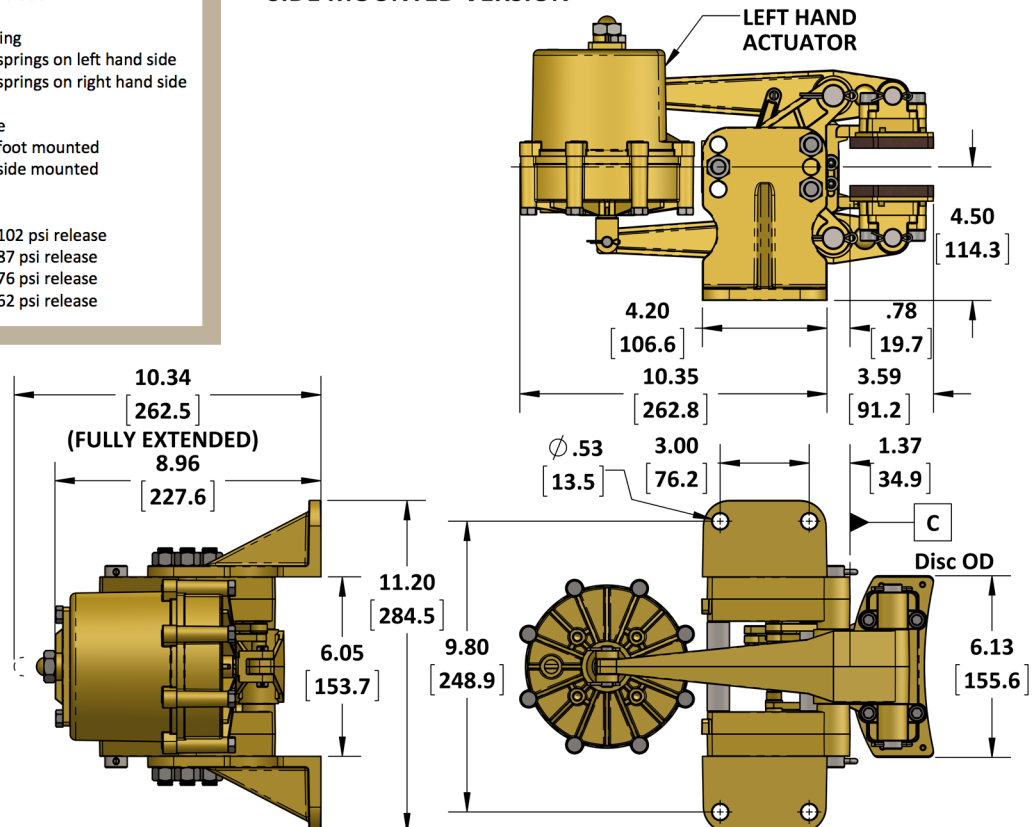
<sup>2</sup>Requires a minimum 2.38 in [60 mm] wide face

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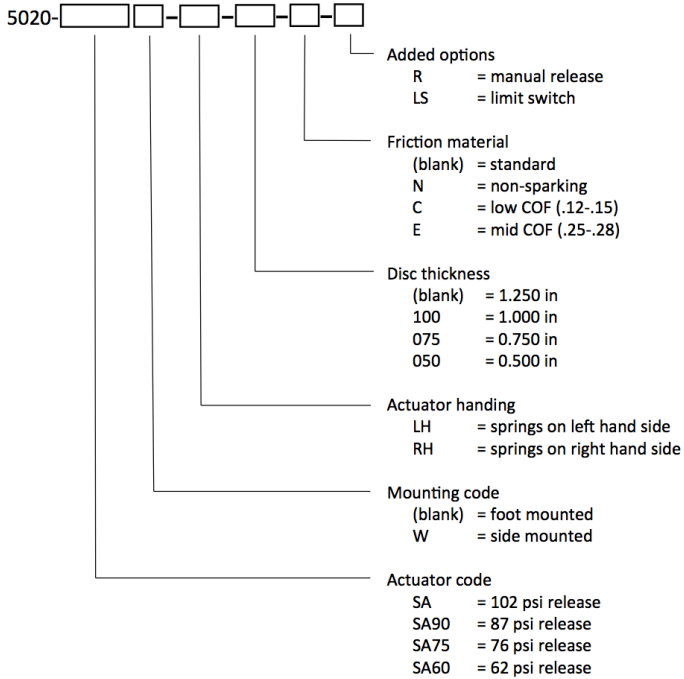
## FOOT MOUNTED VERSION



## SIDE MOUNTED VERSION

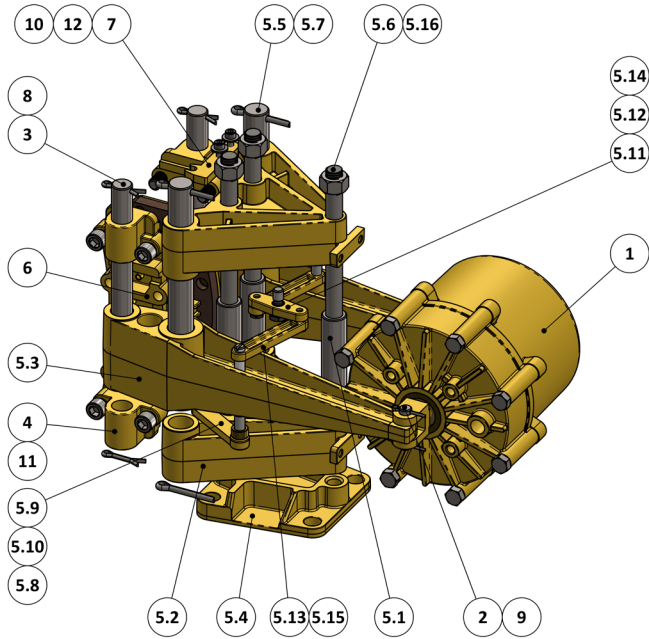


### Brake Model Code Key

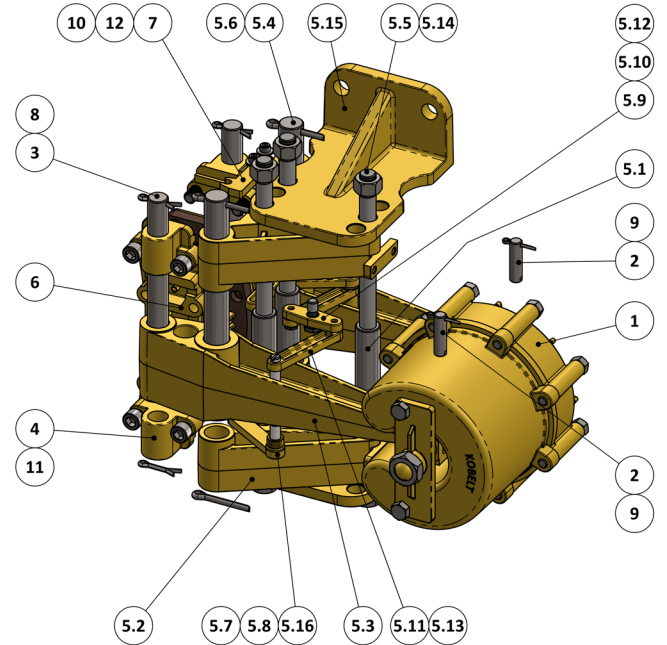


# PARTS LISTING

## 5020-SA Caliper Brake



## 5020-SAW Caliper Brake

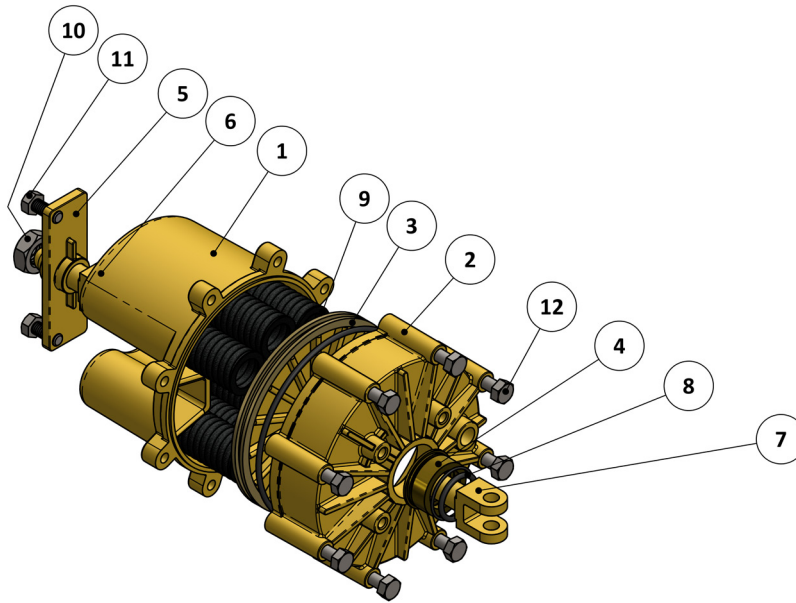


ITEM	QTY.	PART NUMBER	5020-SA DESCRIPTION
1	1	6212	SPRING APPLIED ACTUATOR, 6212
2	2	6112-0010L	PIN, LONG, 6112 ACTUATOR
3	2	5021-0021	SHOE PIN, 5021 CALIPER
4	4	5021-0006	PIVOT BLOCK, 5021 CALIPER
5	1	5020-SUB-S	SUB ASSEMBLY, 5020 SPRING BRAKE
5.1	3	5020-0003	SPACER, 5020 CALIPER
5.2	2	5020-0002	SADDLE, 5020 CALIPER
5.3	2	5021-0004	LEVER, 5021 CALIPER
5.4	1	5020-0001	BASE, 5020 CALIPER
5.5	2	5020-0022	SADDLE PINS, 5020 CALIPER
5.6	3	5020-0023	TIE ROD, 5020 CALIPER
5.7	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
5.8	2	5021-0126	LINK PIN, LONG, 5020 CALIPER
5.9	2	5020-0011	BALANCING LINK NO.1, 5020 CALIPER
5.10	1	5020-0027	SPACER, 5020 CALIPER
5.11	1	5020-0019	CENTRE PIVOT LINK, 5020 CALIPER
5.12	1	5020-0024	SHOULDER BOLT, 5020 CALIPER
5.13	2	5020-0010	CONNECTING LINK, 5020 CALIPER
5.14	2	5020-0025	SHOULDER BOLT, 5020 CALIPER
5.15	1	5021-0026	LINK PIN, SHORT, 5020 CALIPER
5.16	3	1022-0114	HEX NUT, 1/2 UNC, GR 18-8
6	2	5020-LS	SHOE ASSEMBLY, 3/8" K5
7	2	5020-0012	BALANCING LINK NO. 2, 5020 CALIPER
8	4	1026-0516	COTTER PIN, 1/8" X 1", SS
9	4	1026-0312	COTTER PIN, 3/32" X 3/4", SS
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	8	1002-1216	SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS
12	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS

ITEM	QTY.	PART NUMBER	5020-SAW DESCRIPTION
1	1	6212	SPRING APPLIED ACTUATOR, 6212
2	2	6112-0010L	PIN, LONG, 6112 ACTUATOR
3	2	5021-0021	SHOE PIN, 5021 CALIPER
4	4	5021-0006	PIVOT BLOCK, 5021 CALIPER
5	1	5020-SUB-SW	SUB ASSEMBLY, 5020 SIDE MOUNT SPRING BRAKE
5.1	3	5020-0003	SPACER, 5020 CALIPER
5.2	2	5020-0002	SADDLE, 5020 CALIPER
5.3	2	5021-0004	LEVER, 5021 CALIPER
5.4	2	5020-0022	SADDLE PINS, 5020 CALIPER
5.5	3	5020-0023-W	TIE ROD, 5020 SIDE MOUNT CALIPER
5.6	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
5.7	2	5021-0126	LINK PIN, LONG, 5020 CALIPER
5.8	1	5020-0027	SPACER, 5020 CALIPER
5.9	1	5020-0019	CENTRE PIVOT LINK, 5020 CALIPER
5.10	1	5020-0024	SHOULDER BOLT, 5020 CALIPER
5.11	2	5020-0010	CONNECTING LINK, 5020 CALIPER
5.12	2	5020-0025	SHOULDER BOLT, 5020 CALIPER
5.13	1	5021-0026	LINK PIN, SHORT, 5020 CALIPER
5.14	6	1022-0114	HEX NUT, 1/2 UNC, GR 18-8
5.15	2	5020-0028	BRACKET, SIDE MOUNT, 5020 CALIPER
5.16	2	5020-0011	BALANCING LINK NO.1, 5020 CALIPER
6	2	5020-LS	SHOE ASSEMBLY, 3/8" K5
7	2	5020-0012	BALANCING LINK NO. 2, 5020 CALIPER
8	4	1026-0516	COTTER PIN, 1/8" X 1", SS
9	4	1026-0312	COTTER PIN, 3/32" X 3/4", SS
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	8	1002-1216	SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS
12	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS

# PARTS LISTING

## 6212 Actuator



ITEM	QTY.	PART NUMBER	6212 DESCRIPTION
1	1	6212-0001	SPRING HOUSING, 6212 ACTUATOR
2	1	6212-0002	PISTON HOUSING, 6212 ACTUATOR
3	1	6212-0003-K	PISTON, CHROMED, 6212 ACTUATOR
4	1	6212-PHB	BUSHING, 6212 ACTUATOR
5	1	6212-0004	BRACKET, 6212 ACTUATOR
6	1	6212-0005L	CLEVIS, 6212 ACTUATOR, LONG
7	1	6212-0005S	CLEVIS, 6212 ACTUATOR, SHORT
8	1	6212-RK	SEAL KIT, 6212 ACTUATOR
9	8	1201-0035	SPRING, COMPRESSION, 1.125 OD X .177 WIRE X 5.875L
10	1	1022-0216	NUT, JAM, 5/8-11, SS
11	2	1001-1112	BOLT, HX HD, 5/16-18 X 0.75, SS
12	8	1001-1136	BOLT, HX HD, 5/16-18 X 2.25, SS

Note: Parts lists are applicable to standard models only.