

# 5021-SA | SPRING APPLIED AIR RELEASED CALIPER DISC BRAKE

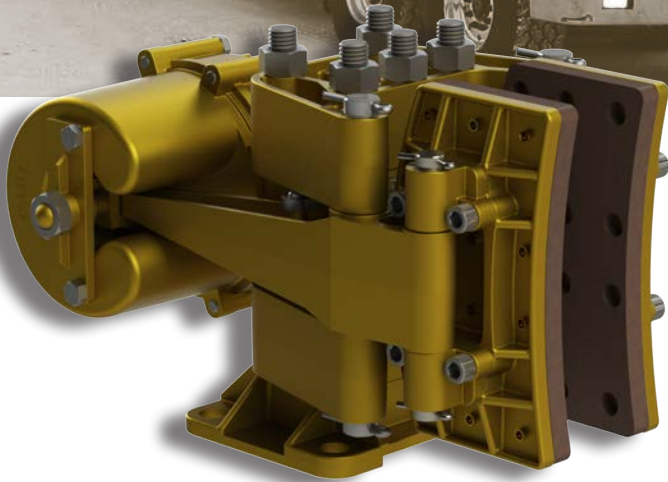


## KEY BENEFITS

Bronze & stainless steel construction

Rapid brake pad change out

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



## Putting you in control.

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
5021-SA	4700 lbs [20.9 kN]	102 psi [7.1 bar]	89 psi [6.2 bar]
5021-SA90	4250 lbs [18.9 kN]	87 psi [6.0 bar]	79 psi [5.4 bar]
5021-SA75	3700 lbs [16.5 kN]	76 psi [5.2 bar]	68 psi [4.7 bar]
5021-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:	2 in	[51 mm]
Max Running Clearance:	.06 in	[1.5 mm]
Minimum Disc Diameter:	20 in	[508 mm]
Maximum Disc Diameter:	unlimited <sup>2</sup>	
Weight:	57 lbs	[25.9 kg]

$${}^1\text{Torque: } T_B = 2F_N\mu \left( \frac{OD-4.50}{24} \right)$$

Where:

$T_B$  = brake torque (ft-lbf)

$F_N$  = normal force (lbf)

$\mu$  = coefficient of friction

= 0.35 (nonferrous)

= 0.38 (steel)

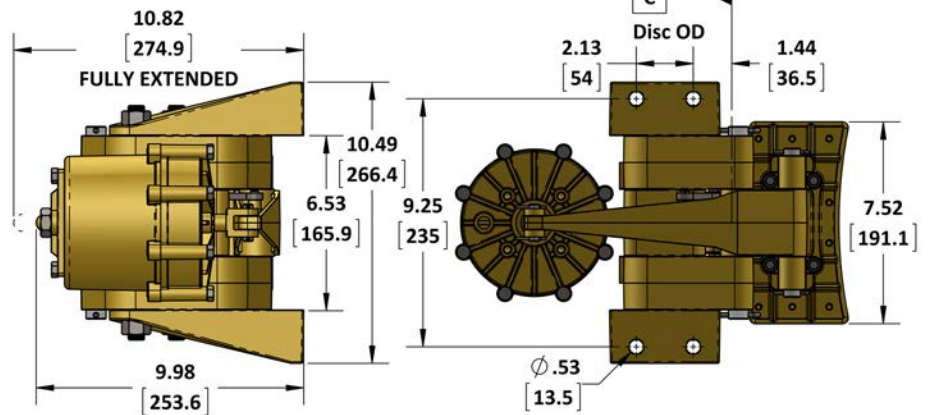
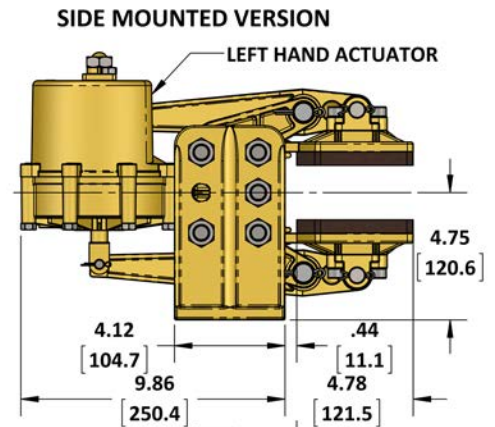
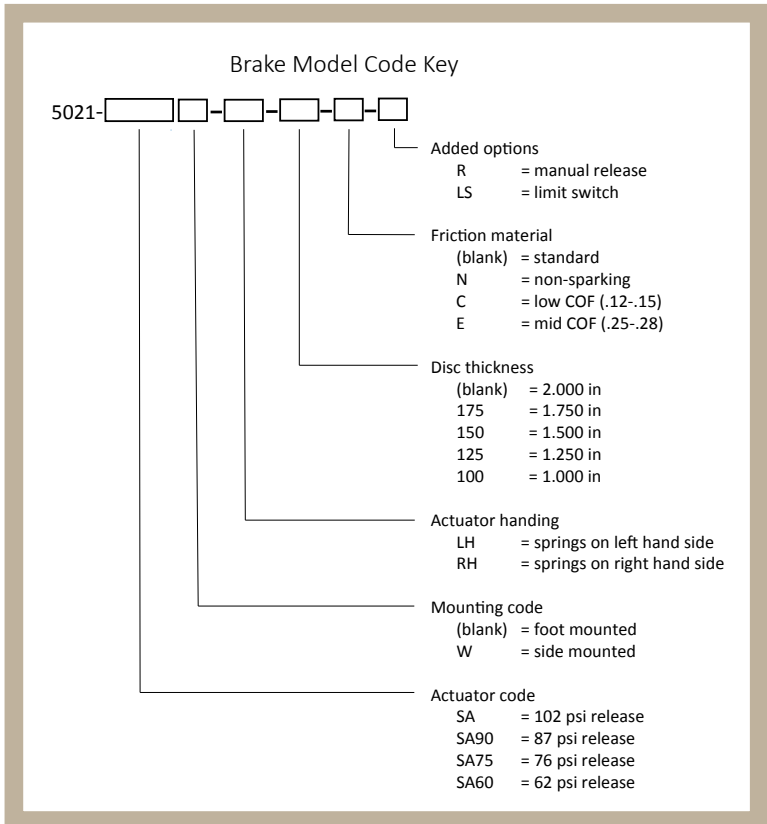
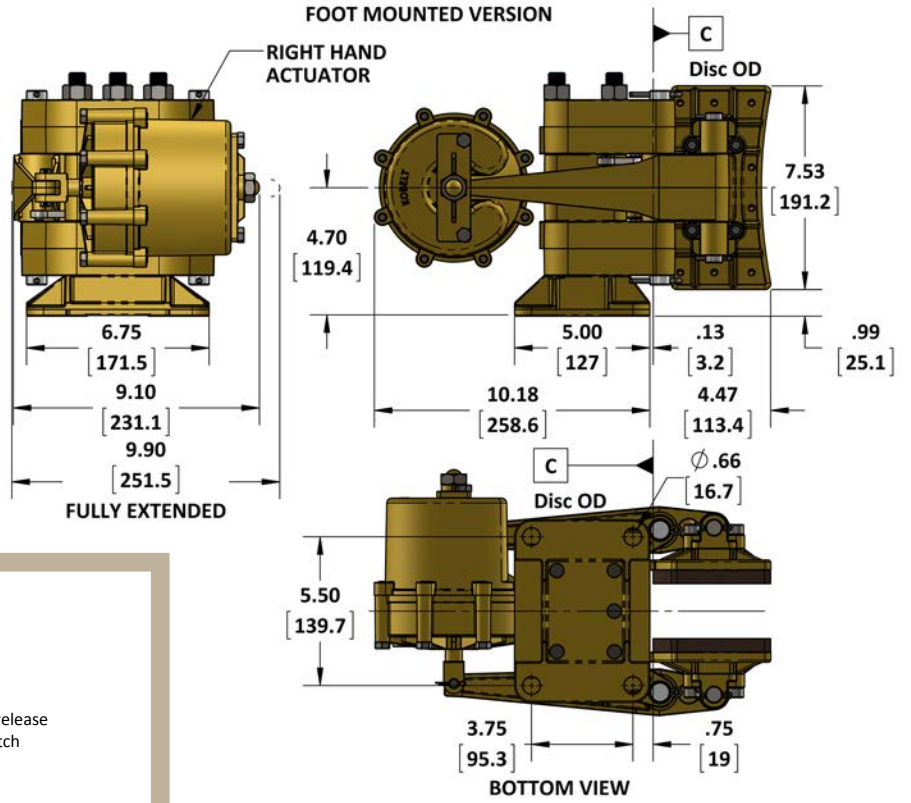
= 0.41 (cast iron)

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)

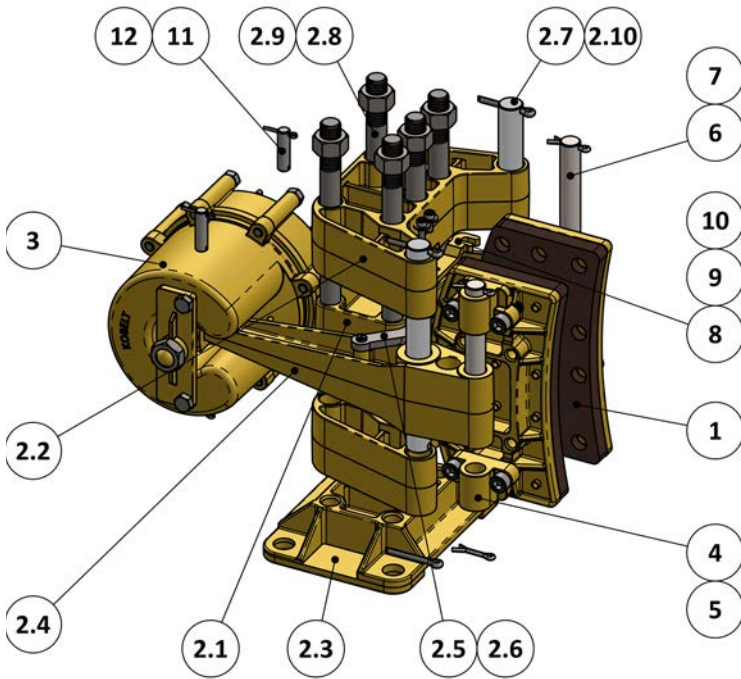
<sup>2</sup>Requires a minimum 4.34 in [110 mm] wide face

# SPECIFICATIONS

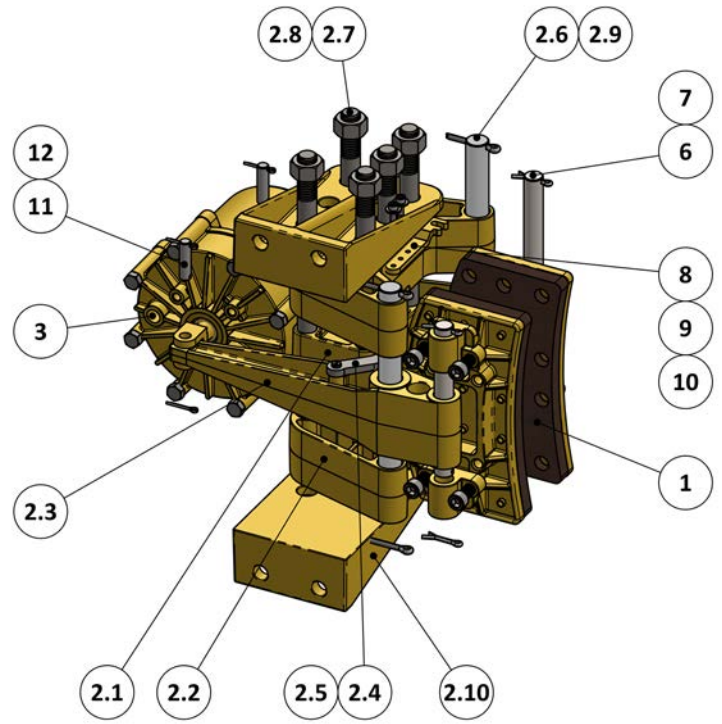


# PARTS LISTING

## 5021-SA Caliper Brake



## 5021-SAW Caliper Brake

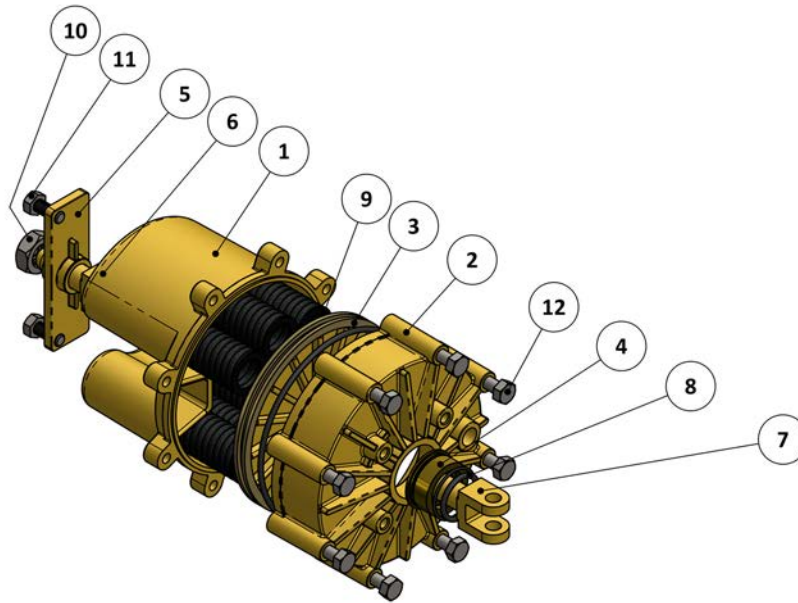


ITEM	QTY.	PART NUMBER	5021-SA DESCRIPTION
1	2	5021-LS	SHOE ASSEMBLY, 5021 CALIPER, 1/2" K5
2	1	5021-SUB	SUB-ASSEMBLY, 5021 CALIPER
2.1	1	5021-0003	SPACER, 5021 CALIPER
2.2	2	5021-0002	SADDLE, 5021 CALIPER
2.3	1	5021-0001	FOOT, 5021 CALIPER
2.4	2	5021-0004	LEVER, 5021 CALIPER
2.5	2	5021-0011	BALANCING LINK, PART 1, 5021 CALIPER
2.6	2	5021-0226	LINK PIN, 5/16NC X 7/8 LG
2.7	2	5021-0022	SADDLE PIN, 5021 CALIPER
2.8	5	5021-0023	TIE ROD, 5/8-11NC
2.9	5	1022-0116	REG HEX NUT 5/8-11 NC, GR 18-8
2.10	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
3	1	6212	SPRING APPLIED ACTUATOR, 6212
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	4	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	5021-0012	BALANCE LINK NO. 2, 5021 CALIPER
9	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	2	6112-0010L	PIN, LONG, 6112 ACTUATOR
12	4	1026-0312	COTTER PIN, 3/32" X 3/4", SS

ITEM	QTY.	PART NUMBER	5021-SAW DESCRIPTION
1	2	5021-LS	SHOE ASSEMBLY, 5021 CALIPER, 1/2" K5
2	1	5021-SUB-W	SIDE MOUNT SUB-ASSEMBLY, 5021 CALIPER
2.1	1	5021-0003	SPACER, 5021 CALIPER
2.2	2	5021-0002	SADDLE, 5021 CALIPER
2.3	2	5021-0004	LEVER, 5021 CALIPER
2.4	2	5021-0011	BALANCING LINK, PART 1, 5021 CALIPER
2.5	2	5021-0226	LINK PIN, 5/16NC X 7/8 LG
2.6	2	5021-0022	SADDLE PIN, 5021 CALIPER
2.7	5	5021-0023	TIE ROD, 5/8-11NC
2.8	10	1022-0116	REG HEX NUT 5/8-11 NC, GR 18-8
2.9	4	1026-0824	COTTER PIN, 3/16 X 1 1/2
2.10	2	5021-0101	SIDE MOUNT BRACKET, 5021 CALIPER
3	1	6212	SPRING APPLIED ACTUATOR, 6212
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	4	1026-0516	COTTER PIN, 1/8" X 1", SS
8	2	5021-0012	BALANCE LINK NO. 2, 5021 CALIPER
9	4	1002-0808	SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS
10	4	1023-0108	WASHER, FLAT, #10, TYPE A, SS
11	2	6112-0010L	PIN, LONG, 6112 ACTUATOR
12	4	1026-0312	COTTER PIN, 3/32" X 3/4", 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.