

5022-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 ¹ | PRESSURES | |
|-----------|---------------------------|----------------------|---------------------|
| | | RELEASE | HOLD-OFF |
| 5022-SA | 9240 lbs [41.1 kN] | 102 psi [7.1 bar] | 89 psi [6.2 bar] |
| 5022-SA90 | 8350 lbs [37.1 kN] | 87 psi [6.0 bar] | 79 psi [5.4 bar] |
| 5022-SA75 | 7270 lbs [32.4 kN] | 76 psi [5.2 bar] | 68 psi [4.7 bar] |
| 5022-SA60 | 5850 lbs [26.0 kN] | 62 psi [4.3 bar] | 53 psi [3.7 bar] |

Maximum Pressure: 250 psi [17.2 bar]

Port Size: ¼ NPT

Actuator Volume: 29.2 in³ [480 cc]

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

Disc Thickness: 2 in [51 mm]

Max Running Clearance: .08 in [2 mm]

Minimum Disc Diameter: 20 in [508 mm]

Maximum Disc Diameter²: 60 in [1524 mm]

Weight: 102 lbs [46.3 kg]

¹Torque:

$$T_B = 2F_N\mu \left(\frac{OD-5.25}{24} \right)$$

Where:

T_B = brake torque (ft-lbf)

F_N = normal force (lbf)

μ = coefficient of friction

= 0.35 (nonferrous)

= 0.38 (steel)

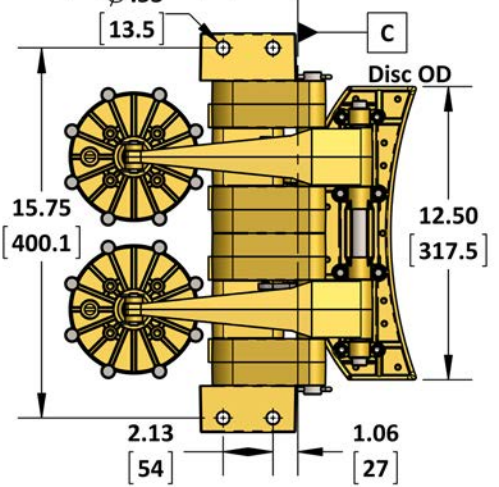
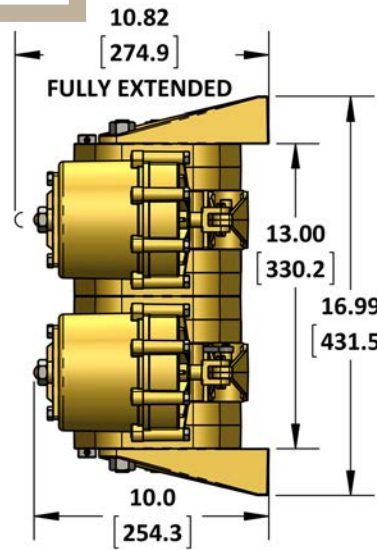
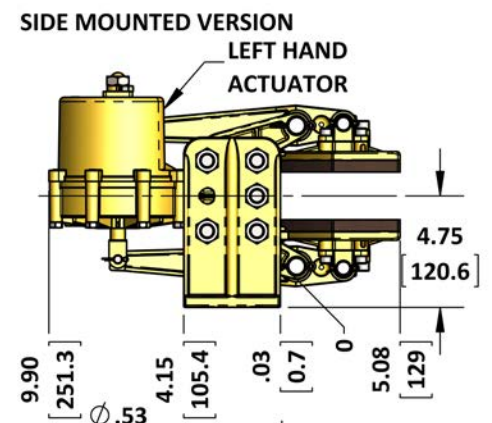
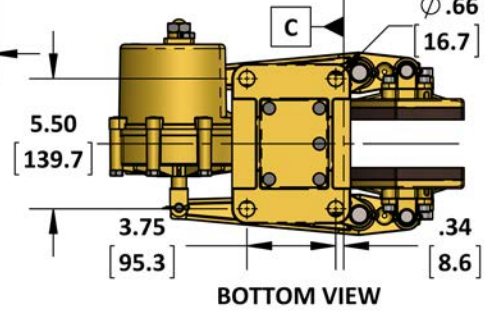
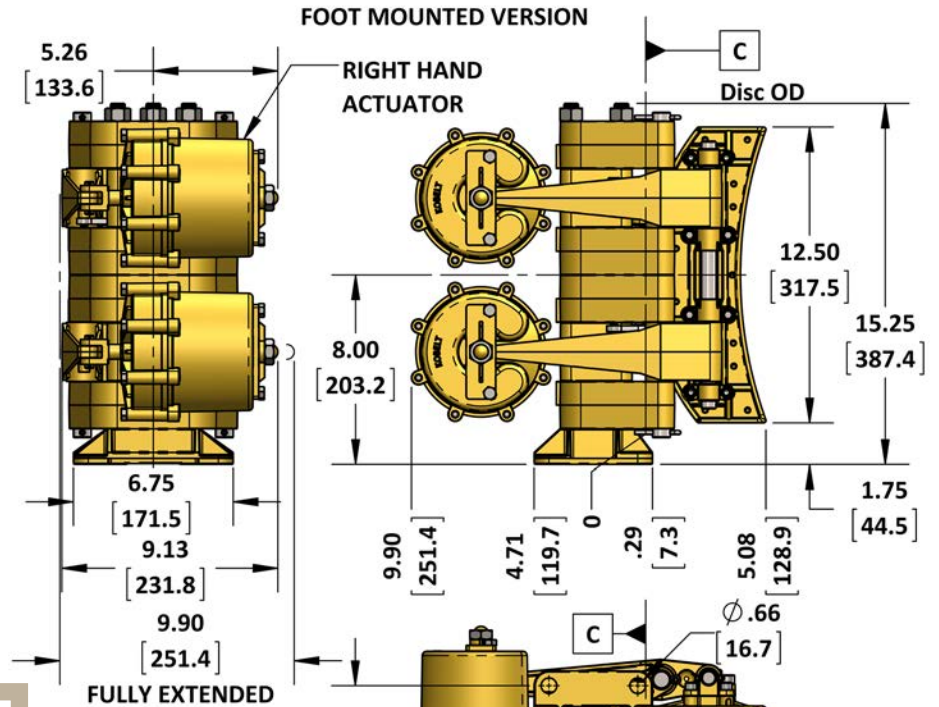
= 0.41 (cast iron)

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)

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

SPECIFICATIONS



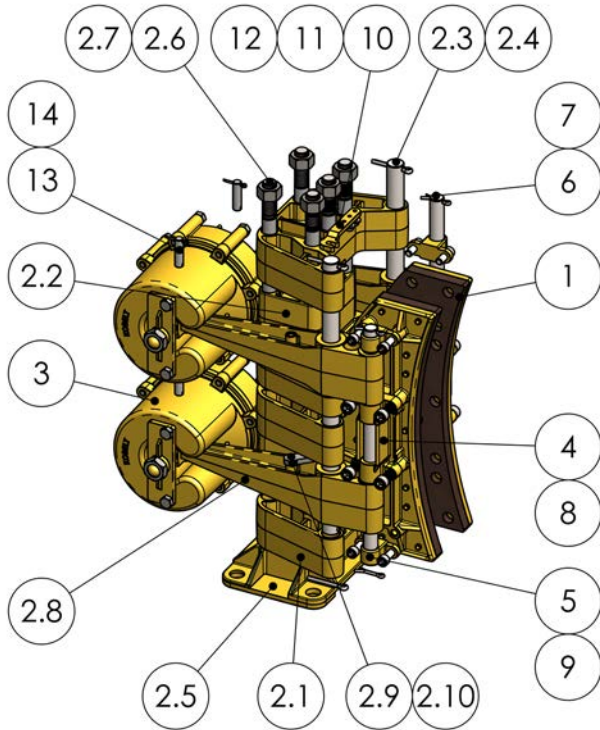
Brake Model Code Key

5022- [] [] [] [] [] []

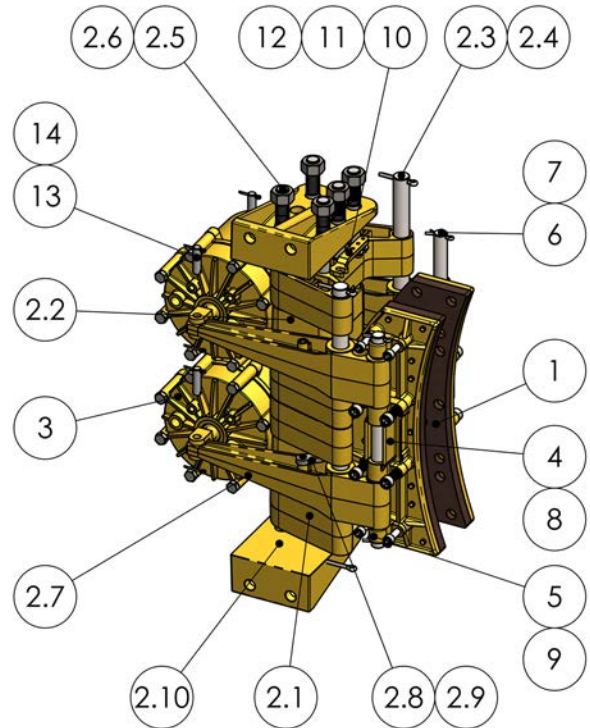
- Added options
 - R = manual release
 - LS = limit switch
- Friction material
 - (blank) = standard
 - N = non-sparking
 - C = low COF (.12-.15)
 - E = mid COF (.25-.28)
- Disc thickness
 - (blank) = 2.000 in
 - 175 = 1.750 in
 - 150 = 1.500 in
 - 125 = 1.250 in
 - 100 = 1.000 in
- Actuator handing
 - LH = springs on left hand side
 - RH = springs on right hand side
- Mounting code
 - (blank) = foot mounted
 - W = side mounted
- Actuator code
 - SA = 102 psi release
 - SA90 = 87 psi release
 - SA75 = 76 psi release
 - SA60 = 62 psi release

PARTS LISTING

5022-SA Caliper Brake



5022-SAW Caliper Brake

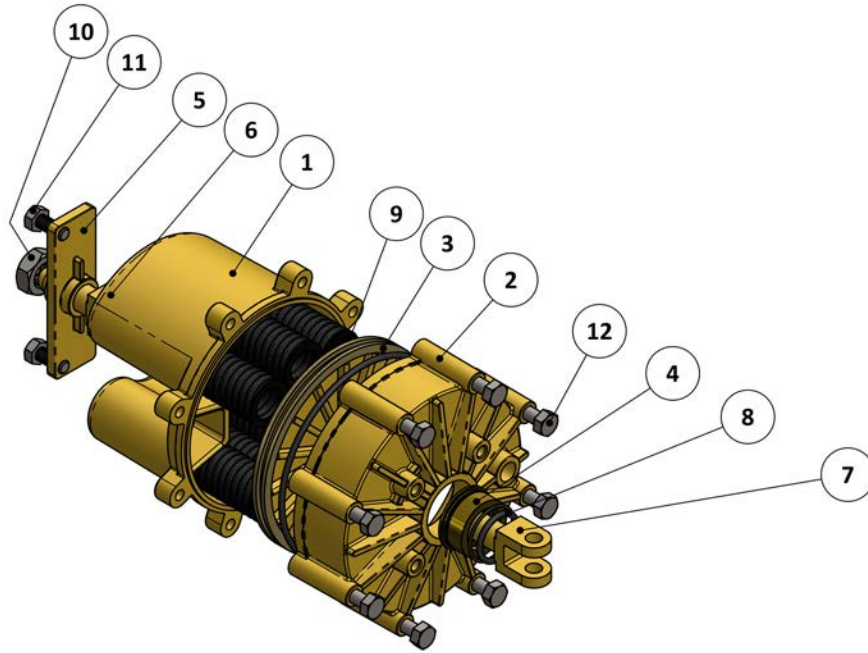


| ITEM | QTY. | PART NUMBER | 5022-SA DESCRIPTION |
|------|------|-------------|---|
| 1 | 2 | 5022-LS | SHOE ASSEMBLY, 5022 CALIPER, 1/2" K5 |
| 2 | 1 | 5022-SUB | SUB-ASSEMBLY, 5022 CALIPER |
| 2.1 | 4 | 5021-0002 | SADDLE, 5021 CALIPER |
| 2.2 | 2 | 5021-0003 | SPACER, 5021 CALIPER |
| 2.3 | 2 | 5022-0022 | SADDLE PIN, 5022 CALIPER |
| 2.4 | 4 | 1026-0824 | COTTER PIN, 3/16 X 1 1/2 |
| 2.5 | 1 | 5021-0001 | FOOT, 5021 CALIPER |
| 2.6 | 5 | 5022-0023 | TIE ROD, 5022 CALIPER |
| 2.7 | 5 | 1022-0116 | REG HEX NUT 5/8-11 NC, GR 18-8 |
| 2.8 | 4 | 5021-0004 | LEVER, 5021 CALIPER |
| 2.9 | 2 | 5021-0011 | BALANCING LINK, PART 1, 5021 CALIPER |
| 2.10 | 2 | 5021-0226 | LINK PIN, 5/16NC X 7/8 LG |
| 3 | 2 | 6212 | SPRING APPLIED ACTUATOR, 6212 |
| 4 | 2 | 5022-0013 | PIVOT BLOCK, CENTER, 5022 CALIPER |
| 5 | 4 | 5022-0014 | PIVOT BLOCK, OUTER, 5022 CALIPER |
| 6 | 2 | 5022-0021 | SHOE PIN, 5022 CALIPER |
| 7 | 4 | 1026-0516 | COTTER PIN, 1/8" X 1", SS |
| 8 | 8 | 1002-1216 | SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS |
| 9 | 8 | 1002-1112 | SCREW, SKT HD CAP, 5/16-18 UNC X 3/4 LG, 18-8 |
| 10 | 2 | 5021-0012 | BALANCE LINK NO. 2, 5021 CALIPER |
| 11 | 4 | 1002-0808 | SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS |
| 12 | 4 | 1023-0108 | WASHER, FLAT, #10, TYPE A, SS |
| 13 | 4 | 6112-0010L | PIN, LONG, 6112 ACTUATOR |
| 14 | 8 | 1026-0312 | COTTER PIN, 3/32" X 3/4", SS |

| ITEM | QTY. | PART NUMBER | 5022-SAW DESCRIPTION |
|------|------|-------------|---|
| 1 | 2 | 5022-LS | SHOE ASSEMBLY, 5022 CALIPER, 1/2" K5 |
| 2 | 1 | 5022-SUB-W | SUB-ASSEMBLY, 5022 CALIPER |
| 2.1 | 4 | 5021-0002 | SADDLE, 5021 CALIPER |
| 2.2 | 2 | 5021-0003 | SPACER, 5021 CALIPER |
| 2.3 | 2 | 5022-0022 | SADDLE PIN, 5022 CALIPER |
| 2.4 | 4 | 1026-0824 | COTTER PIN, 3/16 X 1 1/2 |
| 2.5 | 5 | 5022-0023 | TIE ROD, 5022 CALIPER |
| 2.6 | 10 | 1022-0116 | REG HEX NUT 5/8-11 NC, GR 18-8 |
| 2.7 | 4 | 5021-0004 | LEVER, 5021 CALIPER |
| 2.8 | 2 | 5021-0011 | BALANCING LINK, PART 1, 5021 CALIPER |
| 2.9 | 2 | 5021-0226 | LINK PIN, 5/16NC X 7/8 LG |
| 2.10 | 2 | 5021-0101 | SIDE MOUNT BRACKET, 5021 CALIPER |
| 3 | 2 | 6212 | SPRING APPLIED ACTUATOR, 6212 |
| 4 | 2 | 5022-0013 | PIVOT BLOCK, CENTER, 5022 CALIPER |
| 5 | 4 | 5022-0014 | PIVOT BLOCK, OUTER, 5022 CALIPER |
| 6 | 2 | 5022-0021 | SHOE PIN, 5022 CALIPER |
| 7 | 4 | 1026-0516 | COTTER PIN, 1/8" X 1", SS |
| 8 | 8 | 1002-1216 | SCREW, SKT HD CAP, 3/8-16 UNC X 1, SS |
| 9 | 8 | 1002-1112 | SCREW, SKT HD CAP, 5/16-18 UNC X 3/4 LG, 18-8 |
| 10 | 2 | 5021-0012 | BALANCE LINK NO. 2, 5021 CALIPER |
| 11 | 4 | 1002-0808 | SCREW, SKT HD CAP, #10-24 UNC x 1/2 LG, SS |
| 12 | 4 | 1023-0108 | WASHER, FLAT, #10, TYPE A, SS |
| 13 | 4 | 6112-0010L | PIN, LONG, 6112 ACTUATOR |
| 14 | 8 | 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.