





INDUSTRIAL CLUTCH WICHITA CLUTCH

Spring Set Brakes

FOR HEAVY DUTY APPLICATIONS

REGAL REXNORD™ SPRING SET BRAKES PROVIDE PROVEN PERFORMANCE IN DEMANDING INDUSTRIAL APPLICATIONS...WORLDWIDE

For over 95 years, Wichita Clutch and Industrial Clutch, the industry-leading brands of the Regal Rexnord Heavy-Duty Clutch and Brake Group have been designing and manufacturing innovative clutch and brake solutions to meet the requirements for a broad variety of heavy-duty applications spanning many industries. Highly engineered Regal Rexnord spring set brakes represent the latest in technology, featuring superior design and exceptional quality to ensure long-lasting performance in all types of industrial environments including:



- Metal Forming Equipment/Press Brakes
- Cranes
- Mining Shovels and Draglines
- Drilling Equipment
- Mining Conveyors

Regal Rexnord Heavy-Duty Spring Set Brakes are:

- Built for durability, designed for extreme conditions
- Require minimal or no lubrication
- Designed for easy installation and maintenance

QUALITY COMMITMENT

The companies of the Regal Rexnord Heavy-Duty Clutches and Brakes Group have vast experience operating in international markets; we can manufacture to all global standards. Our refined manufacturing processes and quality supply chain partners enable us to provide cost-effective products that continually meet or exceed the expectations of the market. Many of our manufacturing facilities are ISO 9001 certified and some meet ISO 14001 environmental standards. Many of our products are approved by various ship classification societies.

CUSTOMER SERVICE

Our unrivaled knowledge of applications enables us to assist in the selection of the correct type of clutch/brake design. With sales and technical support teams located worldwide, Regal Rexnord is able to provide an unrivaled level of responsive customer service.

www.WichitaClutch.com | www.IndClutch.com

REGAL REXNORD PROVIDES I FADERSHIP THROUGH INNOVATION

For over a century, the most important breakthroughs in engineered power transmission products have been driven by our family of companies working together to lead the market forward. Developing innovative technologies is the core principal of Regal Rexnord.

With a full complement of mechanical and electrical solutions for every type of application, Regal Rexnord stands alone as the industry's most fully committed supplier of power transmission solutions.

- World-class engineering
- Rapid deployment of prototypes
- Superior customer service and application support... worldwide
- At the core of our success is Regal Rexnord's operational excellence initiative
- Extensive training programs
- Global manufacturing to support local customer needs.

Whether you need individual components or packaged systems, choose the brands known throughout the world for quality, innovation, and service.

TESTING AND RESEARCH

Wichita Clutch and Industrial Clutch are recognized leaders in clutch/brake development with several complete R&D lab facilities located around the world.

Capabilities:

- Proprietary disc brake application software which calculates disc temperature and pad life estimation
- 3D CAD solid modeling
- Finite element analysis
- Disc spring analysis

GENUINE REPLACEMENT PARTS

If quality and safety are important to you, insist on genuine replacement parts for your Industrial Clutch and Wichita Clutch clutches and brakes. With genuine replacement parts, you get better performance, longer life, safer operation, and peace of mind. All genuine replacement parts are manufactured in Regal Rexnord's U.S. and European production facilities and under the company's strict guidance and control.



LKB SERIES

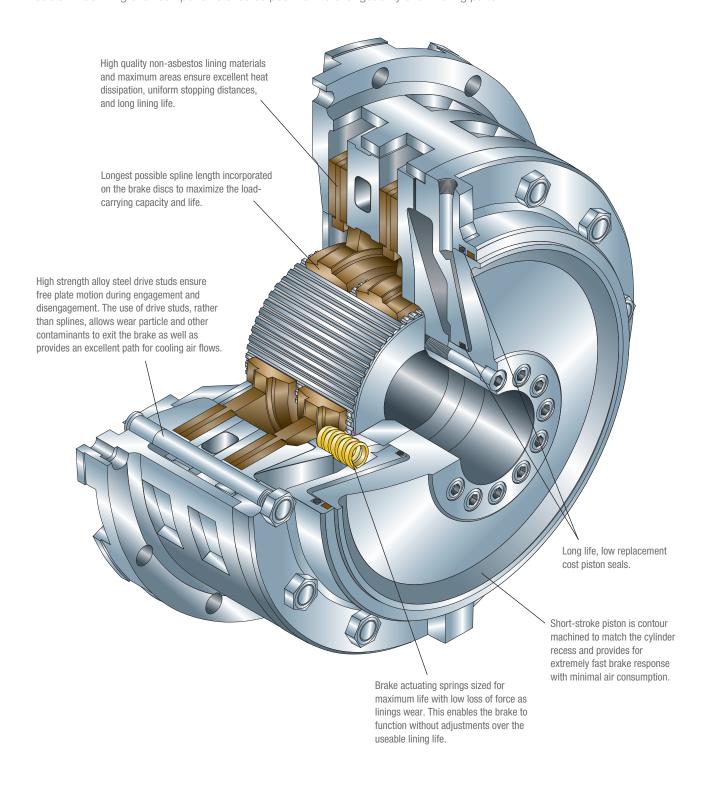
FEATURES

The Model LKB brake is spring-set air or hydraulic released and can be provided with a wide range of torque capacities and release pressures by incorporating springs of different rates and quantity.

Brake designed with total attention given to maximizing ventilation for cool-running operation. Benefits include: longer lining life; stable friction coefficients; and lower maintenance costs.

All materials selected and field proven to provide the best available resistance to wear and thermal distress.

Precision machining of all components ensures positive interchangeability of all mating parts.



APPLICATIONS

LOW INFRTIALLKB BRAKES

Model LKB spring-set brakes incorporate all of the design features of the LK style clutch and have been in existence equally as long. They are the perfect companion to the LK clutch if the application requires a clutch and a brake since both units are extremely fast in response, have low air consumption, and contribute the lowest possible inertia to the system that must be started and stopped.

The separate clutch-brake combination has been applied in the metal forming industry on presses, press-brakes, and shears, for over forty years and are long-living, easy to maintain and require no adjustment for wear. The units rugged simplicity and fast-acting repeatable response makes them an ideal choice for such applications.

Ruggedly designed and capable of dissipating large thermal loads, Model LKB brakes are also used frequently as primary working brakes, safety brakes, and holding brakes for a multitude of loads found in many areas of the heavy industrial marketplace. Cranes, shovels, draglines, drilling equipment, oilfield machinery, conveyors, and mining equipment are but a few of such applications.

Model LKB brakes are available with many options. Torque capacities can be changed through the use of springs with different rates and quantities. The unit may be provided with chambers suitable for pneumatic or hydraulic release.







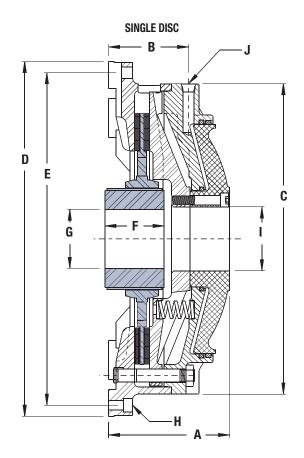
Totally enclosed housings for adverse environments and limit switch monitoring of brake release and wear are available. Units modified to operate vertically may also be provided. The list of modifications that have been applied to Model LKB brakes is long and the above are but a few. Industrial Clutch can assist in providing the most suitable unit for your application.

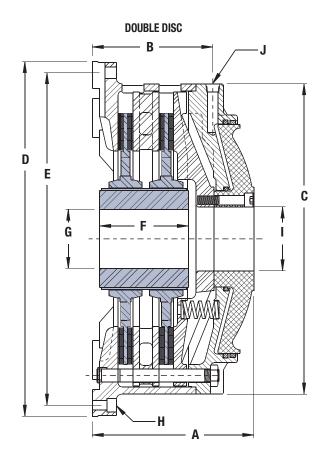
Modifications of the original LKB brakes have expanded this product's usefulness to many areas of industry. The complete range of sizes covers loads and speeds common to metal forming, mining, material handling, oilfields, and the marine marketplaces.

SEVERAL SIZES OF LKB BRAKES ARE USED ON THE HOIST, DRAG, CROWD, SWING AND PROPEL FUNCTIONS IN ELECTRIC MINING SHOVELS AND DRAGLINES.

LKB SERIES

DIMENSIONS





Dimensions: inches

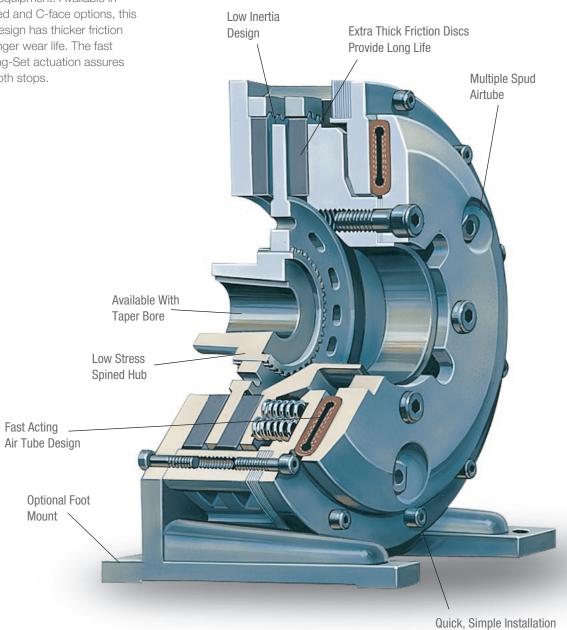
| | 0.0 | | | | | | | | | | | | | | | |
|--------------|---|--|---------------------------|---------------------------|---------------------------|--|-------|-------|-------|-------|-------|------|----------------|--------------|-------|-----|
| LKB Model | Static Torque 60 PSI Release (lbin.) | Dynamic Torque 60 PSI Release (lbin.) | Weight Outer (lbs.) | Weight Inner (lbs.) | Weight Total (lbs.) | WR ² Inner (lbft ²) | A | В | С | D | E | F | G MinMax. | H NoSize | , | J |
| LKB-108 | 5,190 | 4,500 | 42 | 7 | 49 | .20 | 5.06 | 3.19 | 10.50 | 12.25 | 11.25 | 2.00 | 1-1/8 - 2 | 8 - 3/8 | 2.13 | 1/2 |
| LKB-208 | 9,565 | 8,290 | 61 | 13 | 74 | .37 | 6.69 | 4.81 | 10.50 | 12.25 | 11.25 | 4.13 | 1-1/8-2 | 8 - 3/8 | 2.13 | 1/2 |
| LKB-111 | 12,080 | 10,470 | 77 | 13 | 90 | .980 | 5.69 | 4.06 | 14.25 | 16.50 | 15.25 | 2.75 | 1-1/8 - 2-3/4 | 8 - 1/2 | 3.13 | 1/2 |
| LKB-211 | 24,160 | 20,940 | 97 | 28 | 125 | 1.950 | 7.28 | 5.81 | 14.25 | 16.50 | 15.25 | 4.38 | 1-3/4 - 2-3/4 | 8 - 1/2 | 3.13 | 1/2 |
| LKB-113 | 16,865 | 14,615 | 125 | 35 | 160 | 2.06 | 6.63 | 4.56 | 16.63 | 18.88 | 17.63 | 4.00 | 2-1/4 - 3-1/4 | 8 - 5/8 | 4.63 | 1/2 |
| LKB-213 | 35,785 | 31,015 | 168 | 52 | 220 | 3.77 | 8.44 | 6.44 | 16.63 | 18.88 | 17.63 | 4.50 | 2 - 3 - 3/4 | 8 - 5/8 | 4.63 | 1/2 |
| LKB-117 | 37,230 | 32,265 | 272 | 58 | 330 | 9.78 | 8.31 | 5.44 | 21.00 | 24.00 | 22.50 | 4.00 | 2-1/4 - 4-1/2 | 12 - 5/8 | 4.00 | 1/2 |
| LKB-217 | 74,460 | 64,530 | 324 | 111 | 435 | 18.32 | 11.13 | 8.13 | 21.00 | 24.00 | 22.50 | 6.00 | 2-5/16 - 4-1/2 | 12 - 5/8 | 4.00 | 1/2 |
| LKB-121 | 72,860 | 63,145 | 318 | 72 | 390 | 18.55 | 8.56 | 5.31 | 25.00 | 28.25 | 26.75 | 3.63 | 2-3/4 - 4-1/2 | 12 - 3/4 | 6.00 | 3/4 |
| LKB-221 | 145,720 | 126,290 | 436 | 139 | 575 | 36.32 | 11.13 | 8.31 | 25.00 | 28.25 | 26.75 | 6.00 | 2-5/16 - 4-1/2 | 12 - 3/4 | 6.00 | 3/4 |
| LKB-125 | 114,160 | 98,940 | 589 | 131 | 720 | 38.78 | 10.50 | 6.25 | 29.75 | 32.50 | 31.00 | 5.00 | 3-3/4 - 5-3/4 | 12 - 3/4 | 7.25 | 3/4 |
| LKB-225 | 228,323 | 197,880 | 708 | 226 | 934 | 74.91 | 13.75 | 9.50 | 29.75 | 32.50 | 31.00 | 7.25 | 3-3/4 - 5-3/4 | 12 - 3/4 | 7.25 | 3/4 |
| LKB-130 | 210,510 | 182,440 | 1089 | 211 | 1300 | 90.00 | 12.88 | 7.25 | 35.50 | 39.00 | 37.00 | 5.00 | 4-5/8 - 7-1/2 | 12 - 7/8 | 8.25 | 3/4 |
| LKB-230 | 378,460 | 328,000 | 1314 | 356 | 1670 | 172.00 | 16.13 | 10.50 | 35.50 | 39.00 | 37.00 | 7.13 | 4-5/8-7-1/2 | 12 - 7/8 | 8.25 | 3/4 |
| LKB-135 | 274,660 | 238,040 | 1100 | 350 | 1450 | 181.00 | 10.69 | 6.81 | 40.00 | 39.25 | 36.38 | 6.00 | 5-1/8 - 9-5/8 | 24 - 1-1/32 | 17.00 | 3/4 |
| LKB-235 | 519,090 | 449,880 | 1183 | 517 | 1700 | 327.00 | 13.13 | 9.25 | 40.00 | 39.25 | 36.38 | 7.13 | 5-1/8 - 9-5/8 | 24 - 1-1/32 | 17.00 | 3/4 |
| LKB-142 | 482,450 | 418,120 | 3038 | 611 | 3649 | 509.00 | 13.70 | 10.73 | 48.75 | 48.00 | 44.00 | 6.00 | 6-1/2-12 | 24 - 1 - 3/4 | 18.75 | 1 |
| LKB-242 | 906,760 | 785,860 | 3574 | 1015 | 4589 | 954.00 | 17.46 | 14.40 | 48.75 | 48.00 | 44.00 | 8.50 | 6-1/2-12 | 24 - 1 - 3/4 | 18.75 | 1 |
| LKB-148 | 730,380 | 633,000 | 4225 | 894 | 5119 | 923.00 | 14.76 | 11.26 | 54.75 | 54.00 | 50.00 | 7.00 | 8 – 14 | 24 - 1-3/4 | 21.75 | 1 |
| LKB-248 | 1,360,930 | 1,179,470 | 5004 | 1420 | 6424 | 1688.00 | 19.15 | 15.65 | 54.75 | 54.00 | 50.00 | 9.50 | 8 – 14 | 24 - 1 - 3/4 | 21.75 | 1 |

Note: 1) Use certified drawing dimensions only for final layouts. 2) DXF and IGES files available upon request. 3) Dimensions subject to change without notice. 4) The torques shown are at 60 PSI release and may be varied by the use of different springs and spring combinations. For further technical data and recommendations please consult our Engineering Department. 5) Consult factory or refer to application information when selecting units. 6) Hydraulic release also available. Consult factory.

FEATURES

- Failsafe protection spring-set
- Long wear life
- Quick, smooth stopping

Wichita spring-set, air release Motor Brakes are ideal for failsafe protection of process equipment. Available in foot mounted and C-face options, this improved design has thicker friction discs for longer wear life. The fast acting Spring-Set actuation assures quick, smooth stops.



MB SERIES

SPECIFICATIONS

| Model Size | Minim | Torque lb.in3 um Air-Tube Pr For Released B | essure | *Do Not Exceed 90% Of Slip Torque Ratings — Maximum Horsepower Per 100 RPM Release Pressure - PSI 60 PSI Duty 75 PSI Duty | | | | | | | | | |
|---------------|---------|---|---------|---|-----|-----|-----|------|------|-----|-----|--|--|
| ATD – | 60 | 75 | 90 | A | В | C | D | A | В | С | D | | |
| 106 MB | 2,225 | 2,900 | 3,700 | 3 | 2.3 | 1.2 | .6 | 4 | 3 | 1.5 | .8 | | |
| 206 MB | 4,300 | 5,600 | 7,200 | 6 | 4.4 | 2.3 | 1.1 | 8 | 5.7 | 3 | 1.5 | | |
| 108 MB | 3,700 | 4,800 | 6,200 | 5.3 | 3.8 | 2 | 1 | 7 | 5 | 2.6 | 1.3 | | |
| 208 MB | 7,100 | 9,100 | 12,000 | 10 | 7.3 | 3.8 | 2 | 13 | 9.3 | 5 | 2.5 | | |
| 111 MB | 8,200 | 10,500 | 11,600 | 11.7 | 8.4 | 4.4 | 2.2 | 15 | 10.7 | 5.7 | 2.8 | | |
| 211 MB | 15,600 | 20,000 | 22,200 | 22 | 16 | 8.4 | 4.2 | 28.6 | 20.5 | 11 | 5.4 | | |
| 114 MB | 14,500 | 18,600 | 24,700 | 20 | 15 | 8 | 4 | 26.6 | 19 | 10 | 5 | | |
| 214 MB | 27,600 | 35,400 | 46,300 | 39 | 28 | 15 | 7.5 | 50 | 36 | 19 | 9.5 | | |
| 118 MB | 31,400 | 40,400 | 51,600 | 45 | 32 | 17 | 8.5 | 58 | 41 | 22 | 11 | | |
| 218 MB | 60,000 | 77,000 | 100,000 | 86 | 61 | 32 | 16 | 110 | 79 | 41 | 21 | | |
| 124H MB | 75,500 | 86,600 | _ | 108 | 77 | 41 | 20 | 158 | 114 | 60 | 30 | | |
| 224H MB | 137,000 | 161,200 | _ | 196 | 140 | 74 | 37 | 308 | 222 | 117 | 58 | | |

^{*} Max. recommended air pressure - 130 PSI

| Model Size – | | 90 PS | SI Duty | | Max. Bore — Rect. Key | Total Wt. | Hub & CP Wt. | Hub & CP WR ² | Effec. WR [†] |
|-----------------|------|-------|---------|------|--------------------------|--------------|-----------------|-----------------------------|---------------------------|
| ATD- | A | В | C | D | Inches | lbs. | lbs. | lb.ft.² | lbs. |
| 106 MB | 5 | 3.8 | 2 | 1 | 2 | 36.5 | 6.40 | .24 | 14.0 |
| 206 MB | 10 | 7.4 | 3.9 | 2 | 2 | 49.5 | 12.17 | .46 | 18.34 |
| 108 MB | 9 | 6.3 | 3.3 | 1.6 | 2-3/8 | 63.23 | 10.0 | .55 | 26.78 |
| 208 MB | 17 | 12.3 | 6.5 | 3.2 | 2-3/8 | 81.5 | 16.0 | .72 | 32.03 |
| 111 MB | 16.6 | 12 | 6.3 | 3.1 | 2-5/8 | 96.96 | 15.0 | 1.35 | 40.75 |
| 211 MB | 37 | 26 | 14 | 7 | 2-5/8 | 136.0 | 30.0 | 2.60 | 59.05 |
| 114 MB | 35 | 25 | 13 | 6.7 | 4-1/8 | 157.6 | 38 | 5.6 | 72.3 |
| 214 MB | 66 | 47 | 25 | 12.5 | 4-1/8 | 209.6 | 65 | 11 | 95.3 |
| 118 MB | 74 | 53 | 28 | 14 | 5-1/4 | 322 | 71 | 14.5 | 168 |
| 218 MB | 143 | 102 | 54 | 27 | 5-1/4 | 444 | 113 | 27.6 | 215 |
| 124H MB | 183 | 131 | 69 | 34 | 7 | 690 | 131 | 50 | 377 |
| 224H MB | 346 | 248 | 131 | 65 | 7 | 874 | 260 | 101 | 482 |

[†] Weight of internal clutch parts for use in calculating clutch engagement time.

C-FACE MOTOR BRAKES

Features

- No lubrication
- Low inertia design
- Rugged, dependable design

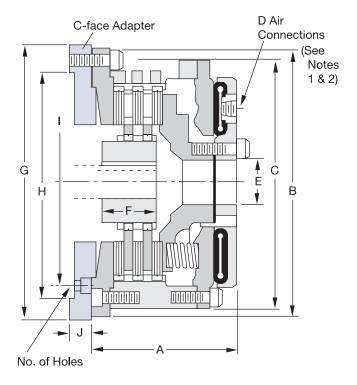
C-face adaptors are available in standard NEMA T and U frame designs. Custom adaptors are available for your specific motor design. Dimensions G, H, I, J and number of holes need to be provided to Wichita Engineering before final design is completed.

When using Wichita C-Face Motor Brakes in a high cycling application, brake thermal capacity and motor thermal capacity need to be carefully matched. The motor information chart lists the specific Wichita part numbers for the proper adapter plate and brake for C-Faced Motors up to 200 HP.

Contact Wichita Application Engineering for assistance.

Motor Information

| Frame | Max. HP at Std. RPM | Full Load Motor Torque in.lb. | Steel Adapter Plate | Model Size ATD– |
|-------|------------------------|-------------------------------------|------------------------|---------------------------|
| C210 | 40 / 2500 | 1,008 | 4-309-075-011-3 | 7-108-100-113-0 108 MB |
| C250 | 60 / 1750 | 2,161 | 4-309-075-005-3 | 7-108-100-113-0 108 MB |
| C280 | 100 / 1750 | 3,601 | 4-281-075-015-3 | 7-111-100-112-0 111 MB |
| C320 | 150 / 1750 | 5,402 | 4-281-075-016-3 | 7-111-100-112-0 111 MB |
| C360 | 200 / 1750 | 7,202 | 4-271-075-007-3 | 7-114-100-113-0 114 MB |



Dimensions: inches (Consult factory for drawing before final layout.)

| Model Size ATD- | A | В | C | D | No. of Spuds | E | F |
|--------------------|-------|-------|-------|----------|-----------------|------|------|
| 106 MB | 5.44 | 8.75 | 8.81 | 1/4" NPT | 2 | 2.00 | 2.00 |
| 206 MB | 6.75 | | | | | | 3.25 |
| 108 MB | 5.82 | 12.12 | 11.13 | 1/2" NPT | 2 | 2.13 | 1.50 |
| 208 MB | 7.00 | 12.12 | 11.13 | I/Z INFI | 2 | 2.13 | 2.87 |
| 111 MB | 6.38 | 16.00 | 14.75 | 1/2" NPT | 2 | 2.00 | 2.00 |
| 211 MB | 7.75 | 10.00 | 14.75 | I/Z INPI | 2 | 3.02 | 3.75 |
| 114 MB | 7.75 | 18.75 | 17.50 | 1/2" NPT | 2 | 3.88 | 2.25 |
| 214 MB | 9.69 | 10.75 | 17.50 | I/Z INPI | 2 | 3.00 | 4.25 |
| 118 MB | 9.01 | 23.25 | 22.00 | 1/2" NPT | 3 | 4.75 | 2.75 |
| 218 MB | 10.69 | 23.23 | 22.00 | I/Z INFI | 3 | 4.75 | 4.75 |
| 124H MB | 9.26 | 30.00 | 29.00 | 1/2" NPT | 3 | 8.25 | 3.13 |
| 224H MB | 11.94 | 30.00 | 29.00 | I/Z INPI | 3 | 0.23 | 5.13 |

Wichita motor brakes typically produce more torque than is usually necessary.

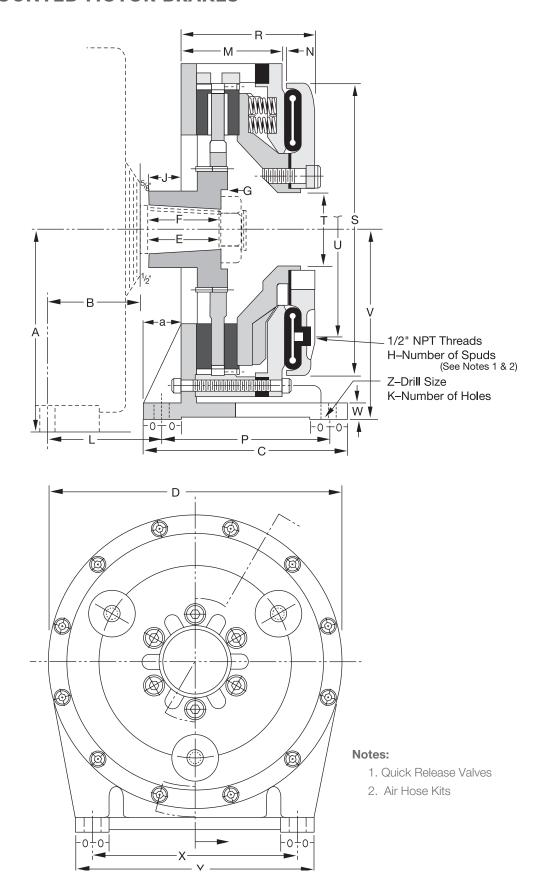
Contact Wichita engineering for help in selecting the number of springs to produce the proper deceleration for your application.

Note: For mounting, use socket head capscrews conforming to the ASTM-574-97a.

Notes:

- 1. Quick Release Valves (see Page 14)
- 2. Air Hose Kits (see Page 13)

FOOT MOUNTED MOTOR BRAKES



MB SERIES

FOOT MOUNTED MOTOR BRAKES

Dimensions: inches (Consult factory for drawing before final layout.)

| Model Frame | Model Size ATD– | A | В | С | D | E | F ± .015 | G | н | J | K | L | М |
|----------------|--------------------|--------|-------|-------|--------|------|-------------|---------------|---|-------|---|--------|----------------|
| 602 | 108 MB 208 MB | 7.625 | 3.75 | 7.50 | 11.125 | 2.75 | 2.875 | .75 1.625 | 2 | 1.75 | 4 | 5.375 | 4.75 .313 |
| 603 | 111 MB 211 MB | 8.50 | 4.50 | 8 | 14.75 | 3.25 | 3.312 | .375 1.375 | 2 | 1.625 | 4 | 6.125 | 4.563 5.563 |
| 604 | 111 MB 211 MB | 9 | 5 | 8 | 14.75 | 3.25 | 3.312 | .375 1.375 | 2 | 1.625 | 4 | 6.625 | 4.563 5.563 |
| 606 | 114 MB 214 MB | 10 | 5 | 11 | 17.50 | 4 | 4.125 | .50 1.875 | 2 | 1.125 | 4 | 6 | 5.438 6.813 |
| 608 | 114 MB 214 MB | 11.25 | 5.125 | 11 | 17.5 | 4.50 | 4.625 | .50 1.875 | 2 | 1.50 | 4 | 6.50 | 5.438 6.813 |
| 610 | 118 MB 218 MB | 12.25 | 5.75 | 13.50 | 22 | 4.50 | 4.625 | .50 2.188 | 3 | 3.125 | 4 | 8.25 | 8.094 9.781 |
| 612 | 118 MB 218 MB | 13.375 | 6.25 | 13.50 | 22 | 4.75 | 4.875 | .50 2.188 | 3 | 3.125 | 4 | 8.75 | 8.094 9.781 |
| 614 | 124H MB 224H MB | 14.75 | 7.25 | 23.25 | 29 | 4.75 | 4.875 | .50 2.25 | 3 | 2.125 | 4 | 10.125 | 7.188 8.75 |
| 616 | 124H MB 224H MB | 16 | 8.50 | 23.25 | 29 | 5.25 | 5.375 | .50 2.25 | 3 | 2.75 | 4 | 11.375 | 7.188 8.75 |
| 618 | 124H MB 224H MB | 17.75 | 8 | 23.25 | 29 | 5.75 | 5.875 | .50 2.25 | 3 | 2.25 | 4 | 10.875 | 7.188 8.75 |

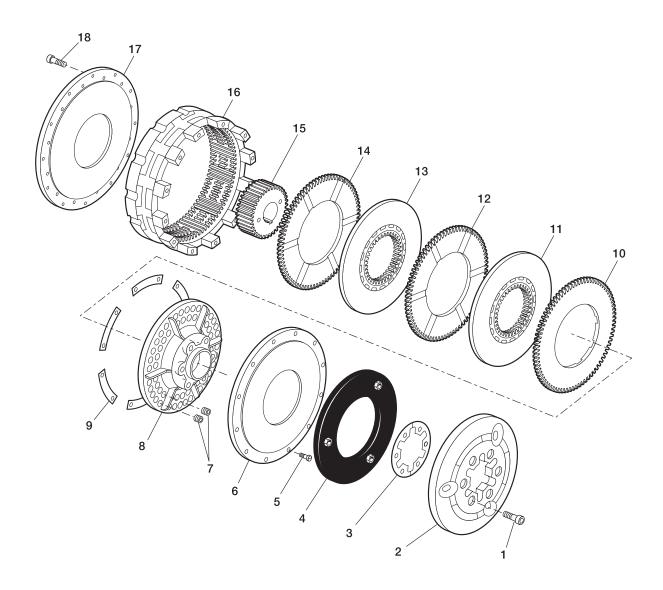
| Model Frame | Model Size ATD– | N | 0 | Р | R | s | Т | U | V | w | Х | Y | Z | a |
|----------------|--------------------|------|-------|------|-----------------|--------|-------|--------|-------|-----|------|-------|-------|-------|
| 602 | 108 MB 208 MB | .313 | .875 | 5.75 | 5.875 6.75 | 9.375 | 1.95 | 6.625 | 7 | .75 | 3.25 | 8.25 | .688 | 1.625 |
| 603 | 111 MB 211 MB | .313 | .875 | 6.25 | 6 7 | 11.938 | 3 | 8.50 | 8.375 | .75 | 4 | 9.75 | .688 | 1.50 |
| 604 | 111 MB 211 MB | .313 | .875 | 6.25 | 6 7 | 11.938 | 3 | 8.50 | 8.375 | .75 | 4 | 9.75 | .688 | 1.50 |
| 606 | 114 MB 214 MB | .563 | 1 | 9 | 7.50 8.875 | 14.375 | 3.88 | 10.75 | 9.875 | 1 | 5.75 | 13.50 | .813 | 1.75 |
| 608 | 114 MB 214 MB | .563 | 1 | 9 | 7.50 8.875 | 14.375 | 3.88 | 10.75 | 9.875 | 1 | 5.75 | 13.50 | .813 | 1.75 |
| 610 | 118 MB 218 MB | .375 | 1.25 | 11 | 10.50 12.188 | 19.375 | 4.875 | 14.188 | 12.50 | 1 | 7.75 | 18 | .938 | 2.50 |
| 612 | 118 MB 218 MB | .375 | 1.25 | 11 | 10.50 12.188 | 19.375 | 4.875 | 14.188 | 12.50 | 1 | 7.75 | 18 | .938 | 2.50 |
| 614 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 11.125 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |
| 616 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 11.125 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |
| 618 | 124H MB 224H MB | .375 | 1.625 | 19 | 9.438 2.25 | 27 | 8.25 | 21 | 20.75 | 2 | 15 | 33.25 | 1.563 | 2.625 |

Wichita motor brakes typically produce more torque than is usually necessary.

Contact Wichita Engineering for help in selecting the number of springs to produce the proper deceleration for your application.

Note: For mounting, use socket head capscrews conforming to the ASTM-574-97a.

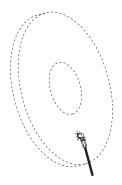
COMPONENT PARTS



- 1. Socket Head Capscrews
- 2. Air Tube Holding Plate
- 3. I.D. Shims
- 4. Airtube
- 5. Socket Head Capscrews
- 6. Airtube Spring Plate
- 7. Springs
- 8. Spring Release Plate
- 9. O. D. Shims
- 10. Grooved Friction Disc (grooved on one side)
- 11. Center Plate

- 12. Grooved Friction Disc (grooved on both sides)
- 13. Center Plate
- 14. Grooved Friction Disc (grooved on one side)
- 15. Hub
- 16. Ring
- 17. Backplate
- 18. Socket Head Capscrewsa

AIR HOSE KITS



| Model | Part Number |
|-------|---------------------|
| 8" | 8-908-912-100-5 |
| | 8-908-924-100-5 QRV |

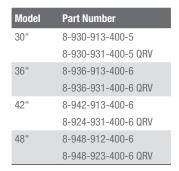


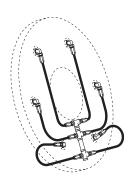
| Model | Part Number |
|-------|---------------------|
| 6" | 8-906-912-200-4 |
| | 8-906-931-201-5 QRV |
| 8" | 8-908-913-200-5 |
| | 8-908-931-200-5 |
| 11" | 8-911-913-200-5 |
| | 8-911-931-200-5 QRV |
| 14" | 8-914-913-200-5 |
| | 8-914-921-200-5 QRV |
| 16" | 8-916-913-200-5 |
| | 8-916-921-200-5 QRV |



| Model | Part Number |
|-------|---------------------|
| 18" | 8-918-912-200-5 |
| | 8-918-931-200-5 QRV |
| 21" | 8-921-913-200-5 |
| | 8-921-931-200-5 QRV |
| 24" | 8-924-913-200-5 |
| | 8-924-931-200-5 QRV |
| 27" | 8-927-913-200-5 |
| | 8-927-921-200-5 QRV |







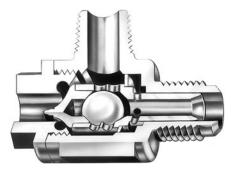
| Model | Part Number |
|-------|---------------------|
| 60" | 8-960-912-500-5 |
| | 8-960-923-400-6 QRV |

Air hose kits contain all necessary parts (fittings, hoses and extensions) to completely plumb the brake air system.

Optional Quick Release Valves can replace elbows on most units. (see Page 14)

MB SERIES

QUICK RELEASE VALVE



8-263-610-011-1 8-263-610-021-1 7/8" - 14 Thread 1/2" NPT

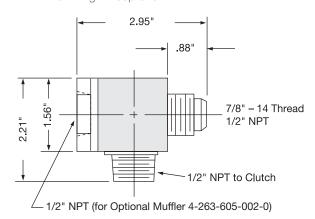
The Wichita Springless Quick Release Valve discharges twice as fast as any other valve tested in our laboratory and is four to five times faster than some common makes of valves.

This valve will close and seal with less than 20 lbs. pressure. Most others require 25 to 30 lbs. to definitely seal. In actual tests, the Wichita Valve made many hundreds of thousands of engagements and disengagements before the slightest leak occurred, or any parts needed replacement. Other valves which were tested required major replacement in fewer than 20,000 cycles.

Quality Material

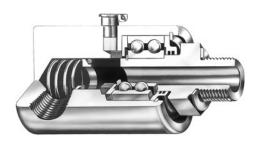
Body and Cap: High strength aluminum alloy

Stem: Molded nylon Check Valve: Nylon ball "O" Ring: Neoprene



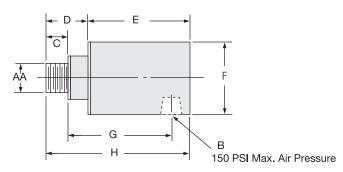
Standard thread arrangement of 1/2" size. 1/2" pipe thread on the tube connection and choice of 1/2" pipe thread, or standard 7/8-14NF thread for flared fitting thread on inlet connection. (Fits standard No. 10 high-pressure hose fitting.)

ROTO-COUPLINGS



The Wichita Roto-coupling is a device to connect, or couple, a non-rotating air, gas, or fluid line to a rotating shaft.

- Long life, no maintenance.
- Felt seal eliminates bearing contamination.
- Fast, easy installation.



Dimensions: inches (mm)

| | (| • | | | | | | | |
|------------------|--------------|------------|------|-------|-------|-------|------|--------|----------|
| Wichita Part No. | AA | В | С | D | E | F | G | н | Max. RPM |
| 8-240-701-003-1 | 5/8-18NF | 1/4" NPT | .40 | 1.046 | 2.250 | 1.500 | 2.13 | 3.297 | 3500 |
| 8-240-705-001-1 | 1"-14 NF | 1/2" NPT | .75 | 1.250 | 3.188 | 2.500 | 3.00 | 4.438 | 3500 |
| 8-240-708-001-1 | 1"-14 NF | 3/4" NPT | .75 | 1.313 | 4.688 | 2.875 | 3.69 | 5.440 | 3500 |
| 8-240-710-002-1 | 1-1/2"-12 NF | 1" NPT | 1.13 | 1.937 | 4.875 | 3.250 | 3.44 | 6.812 | 2500 |
| 8-240-712-001-1 | 2"-12 NF | 1-1/2" NPT | 1.13 | 2.813 | 5.250 | 4.250 | 5.38 | 8.062 | 2500 |
| 8-240-714-001-3 | 2" NPT | 2" NPT | 1.50 | 3.000 | 7.062 | 4.625 | 7.00 | 10.062 | 1000 |
| 8-240-716-000-3 | 2-1/2" NPT | 2-1/2" NPT | 1.88 | 3.250 | 9.375 | 7.000 | 7.75 | 12.625 | 750 |

AIR COOLED, LOW INERTIA SPRING-SET BRAKES

Wichita AirMaKKs LiSSB

The Wichita AirMaKKs LiSSB is designed to provide braking assistance in applications including conveyors, cranes and drawworks where they serve as a main brake that provides both parking and E-stop functions.

The AirMaKKs offers superior features for application usage, product performance, installation and serviceability, and interchangeability. These brakes offer significantly more torque (both static and dynamic) capacity over competing spring set plate brakes.

The stationary torque plates float axially on the frame and allow for lower rotating brake inertias, greater heat soak area, and accommodate electronic temperature sensing. With the rotating Friction Disc members being a splined interface with the hub, extremely low rotating inertias are present. Competing plate brakes that utilize rotating rotors are commonly subjected to rotor/disc seizing to the hub that are a result of heat loading from 'brake drag' and excessive 'E-stops'. The AirMaKKs design minimizes this common issue.

The torque columns prevent brake torque wrap while also eliminating the need for outboard brake support requirements. Wear adjustment shims are in the outboard position, so precise wear adjustments may be easily made to prevent dramatic 'worn condition' torque drops. Axial wear indication is also easily measured and may be done with an optional electronic sensor.

Features

AirMaKKs LiSSB models utilize the basic, easy-to-maintain, pin-style, modular design of the AquaMaKKs including the brake jacket housing with torque plates installed instead of water jackets.

- Air cooled, spring-set air tube release high torque brake
- HiCo frictions offer extremely high torque characteristic, long friction life, and are proven
- Marine version with optional stainless steel torque plates designed to withstand the highly corrosive environment of an offshore deck area where sea spray and direct seawater splash is prevalent
- Three-part epoxy marine grade paint and engineered corrosion resistant coatings for added protection on offshore rig applications
- Pneumatic Airtube, Hydraulic or Dual Actuated
- Available in 19, 25, 36, & 48 inch sizes
- Additional sizes available upon request
- Select units interchangeable with competing pin style brakes

Available Options:

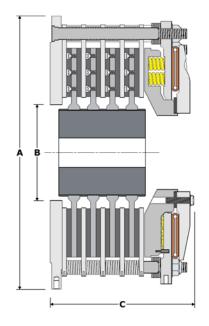
Optional for direct sea spray applications are the use of Stainless Steel Torque Plates and unique friction material to provide a corrosion free braking system. This combination reduces static torque only slightly from the normal ductile iron configuration.

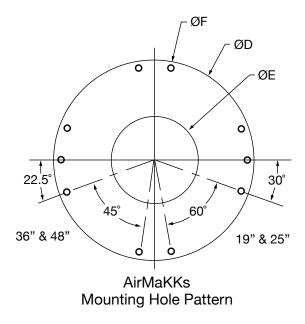
Optional Dual Actuator available. This version provides for fail-safe braking in a unique actuation circuit and a separate tensioning braking circuit that can be used when the Spring Set actuator is fully released.

Other options available to meet the customers need. Please contact a Wichita Engineer for additional information.

AIRMAKKS LISSB

DIMENSIONS





Dimensions

| Model Size - ATD | (A) Diameter* | | (B) Diameter* | | (C) Length* | | Torque** | | | |
|------------------|---------------|-------|---------------|------|-------------|------|-----------|---------|---------|--|
| | in. | (mm) | in. | (mm) | in. | (mm) | lbf-in | lbf-ft | Nm | |
| 119 | | | | | 13.14 | 334 | 148,800 | 12,400 | 16,812 | |
| 219 | 2830 | 719 | 11 | 279 | 18.15 | 461 | 298,800 | 24,900 | 33,760 | |
| 319 | | | | | 19.96 | 507 | 448,800 | 27,400 | 50,708 | |
| 125 | 34.12 | 867 | 16.7 | 424 | 14.67 | 373 | 290,400 | 24,200 | 32,811 | |
| 225 | | | | | 21.31 | 541 | 582,000 | 48,500 | 65,757 | |
| 325 | | | | | 21.31 | 541 | 873,600 | 72,800 | 98,704 | |
| 425 | | | | | 25.24 | 641 | 1,165,200 | 97,100 | 131,650 | |
| 236 | | | | | 19.19 | 487 | 1,646,400 | 137,200 | 186,018 | |
| 336 | 45.25 | 1,149 | 23.63 | 600 | 23.11 | 587 | 2,469,600 | 205,800 | 279,027 | |
| 436 | | | | | 28.36 | 720 | 3,292,800 | 274,400 | 372,036 | |
| 248 | | | | | 24.74 | 628 | 3,643,200 | 303,600 | 411,626 | |
| 348 | 58.00 | 1,473 | 26 | 660 | 30.82 | 783 | 5,464,800 | 455,400 | 617,439 | |
| 448 | | | | | 36.21 | 920 | 7,286,400 | 607,200 | 823,252 | |

Dimensions subject to change, contact a Wichita Clutch™ Engineer or Representative for validation.

Torque values based on Iron Torque plates, 95 psi balance pressure, and Hico linings. 120-130 psi full release pressure required. Optional Stainless Steel Torque plates will have slightly less torque. Please contact a Wichita Clutch Engineer for other available options.

| Model Size | Ø D | | Ø E | | ØF | | Hole Circle | | ID Pilot | | OD Pilot | | # Holes | PLT THK | |
|------------|-------|------|------|------|-------|------|-------------|------|----------|------|----------|------|---------|---------|------|
| - ATD | in. | (mm) | in. | (mm) | in. | (mm) | in | (mm) | in. | (mm) | in. | (mm) | Qty | in. | (mm) |
| 19" | 28.3 | 719 | 11 | 279 | 0.656 | 17 | 22.00 | 559 | 18.25 | 464 | 23.25 | 591 | 10 | 1.63 | 41 |
| 25" | 24.12 | 867 | 16.7 | 424 | 0.656 | 17 | 28.75 | 730 | 24.38 | 619 | 30.00 | 762 | 10 | 1.63 | 41 |
| 36" | 44.5 | 1130 | 23.6 | 599 | 1.062 | 27 | 42.00 | 1067 | 36.38 | 924 | 44.50 | 1130 | 10 | 1.614 | 41 |
| 48" | 58 | 1473 | 26 | 660 | 1.438 | 37 | 54.00 | 1372 | 26.00 | 660 | 56.50 | 1435 | 16 | 1.75 | 44 |

| NOTES |
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NOTES

RegalRexnord

We create a **better tomorrow** with sustainable solutions that power, transmit, and control motion.





INDUSTRIAL CLUTCH

WICHITA CLUTCH

Regal Rexnord

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