## **Cooper Quick-Change® pedestals** for even easier bearing replacement



# cooper® split-to-the-shaft roller bearings

## Cooper Quick-Change® pedestals now in-stock

New Cooper Quick-Change®
pedestals make it easier than ever to
replace a solid bearing and eliminate much
of the downtime and cost typically required
for installation. The SAFQ series
Quick-Change pedestals are
now in stock and ready to ship,
and are interchangeable with other
Cooper pedestals.

Like other Cooper bearings and pedestals, Cooper Quick-Change pedestals

are split into two halves for easy assembly around a fixed shaft. But thanks to an innovative angled design, the bottom half of these pedestals slides easily under the shaft (even one with low clearance), with no need for a jack or hoist.

Cooper Quick-Change pedestals are ideal solutions for fans and other applications in a wide range of industries, such as mining, marine, steel, and power generation. They typically use standard Cooper 01.01E.02.

or 02E bearings and feature the same superior sealing options available with other Cooper products.

This new angled design — available for years as a custom solution but now a Cooper standard — is the latest innovation from Cooper Bearings, the global leader in split roller bearings for over 100 years.

Anatomy of the Cooper Quick-Change® pedestal

**Cartridge:** Spherical location between the cartridge and housing ensures that whichever type of seal is used, it remains concentric to the shaft.

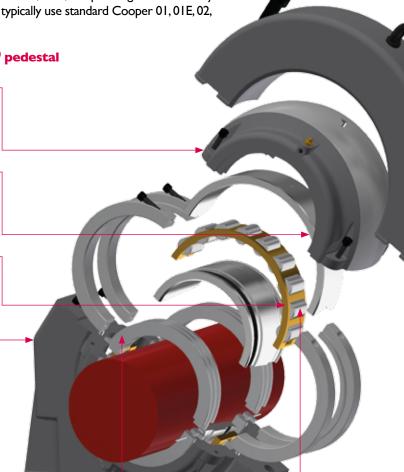
**Outer ring:** Expansion EX and fixed GR standardexecutions, and a variety of different lip configurations, are available for various operating conditions.

Cage: A wide variety of cages is available depending on the application requirements, in materials including brass, steel, and aluminium.

Pedestal housing: Cooper's housings are designed using finite element analysis and are cast and machined in our factory, making Cooper the only manufacturer of split bearings who can claim single-source responsibility for both bearing and housing. Housings are produced in nodular iron as standard. Other materials are available, e.g. stainless steel, aluminium, and steel.

**Seals:** Due to the location in the swivelling cartridge, the Cooper sealing solution is highly effective. A wide range of seals is available including aluminium triple labyrinth, rubber lip seals, felt, and high temperature options.

**Roller elements:** Optimized logarithmic-profiled rollers provide reduced edge stress and longer life.





## Models for many applications, with interchangeability

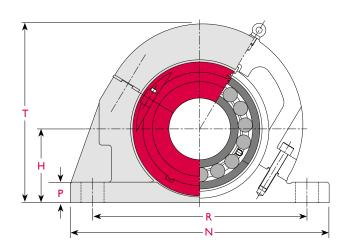
#### **Cooper Quick-Change**® pedestals

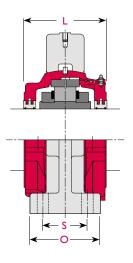
are designed to replace solid bearings mounted on adapter sleeves in industry-standard housings (see table) and are interchangeable with other Cooper pedestals. All have bolt-hole spacings and heights-to-center that correspond to equivalent industry standards for solid

bearings. However, the footprint, pedestal height, and length on shaft may differ and should be checked against the available space.

Most applications use standard Cooper bearings. However, in some cases cartridges and bearings should have a smaller outside diameter to assure adequate thickness of the pedestal base. This does not affect the load ratings, which will match those of standard bearings of the same bore size.

Cooper Quick-Change pedestals are now in stock and ready to ship; call 757-460-0925 or email Coopersales US@kaydon.com for more information.







| Shaft diameter (in)* | Bearing reference | Pedestal<br>reference | H<br>(in) | Min (in) | R<br>Max (in) | S<br>(in) | Bolts<br>no. | Size | N<br>(in) | O<br>(in) | P<br>(in) | T<br>(in) | L<br>(in) | LI<br>(in) | Complete<br>weight (lb) |
|----------------------|-------------------|-----------------------|-----------|----------|---------------|-----------|--------------|------|-----------|-----------|-----------|-----------|-----------|------------|-------------------------|
| 2-3/16               | 01E B 203         | SAFQ513               | 3         | 8-1/8    | 9-1/2         | -         | 2            | 5/8  | П         | 3-1/8     | ı         | 7         | 4-1/16    | 4-1/16     | 26                      |
| 2-11/16              | 01E B 211         | SAFQ516               | 3-1/2     | 9-5/8    | П             | -         | 2            | 3/4  | 13        | 3-1/2     | 1-3/16    | 7-7/8     | 4-1/2     | 4-1/2      | 39                      |
| 2-15/16              | 02 B 215          | FSAFQ517              | 3-3/4     | 10       | 10-7/8        | 2-3/16    | 4            | 5/8  | 13        | 3-1/2     | 1         | 9-5/16    | 5-1/2     | 5-1/2      | 55                      |
| 3-7/16               | 02 B 307          | FSAFQ520              | 4-1/2     | 11-5/8   | 13-1/8        | 2-3/8     | 4            | 3/4  | 15-1/4    | 4-3/8     | 1-3/4     | 10-3/8    | 6-1/16    | 6-1/16     | 56                      |
| 3-15/16              | 02 B 315          | SAFQ522               | 4-15/16   | 12-5/8   | 1-1/2         | 2-3/4     | 4            | 3/4  | 16-1/2    | 4-3/4     | 1-9/16    | 11-5/8    | 5-3/4     | 5-3/4      | 93                      |
| 4-7/16               | 02 B 407          | SAFQ526               | 6         | 14-7/8   | 16            | 3-1/4     | 4            | 7/8  | 18-3/8    | 5-1/8     | 2-3/8     | 12-15/16  | 6-3/8     | 6-3/8      | 156                     |
| 4-15/16              | 02 B 415**        | SAFQ528**             | 6         | 16       | 17-1/8        | 3-3/8     | 4            | 1    | 20-1/8    | 5-7/8     | 1-3/8     | 13-7/8    | 7-1/4     | 7-1/4      | 188                     |
| 5-7/16               | 02 B 507          | SAFQ532               | 6-11/16   | 17-3/8   | 19-1/4        | 3-3/4     | 4            | I    | 22        | 6-1/4     | 2         | 15-3/4    | 7-3/8     | 7-3/8      | 238                     |
| 5-15/16              | 02 B 515          | SAFQ534               | 7-1/16    | 19 3/8   | 21-5/8        | 4-1/4     | 4            |      | 24-3/4    | 6-3/4     | 2         | 17-1/8    | 8         | 8          | 320                     |

| Shaft diameter | Bearing    | Pedestal  | Н    |          | R        | S    | Bolts | Size | N    | 0    | P    | T    | L    | LI   | Complete    |
|----------------|------------|-----------|------|----------|----------|------|-------|------|------|------|------|------|------|------|-------------|
| (mm)*          | reference  | reference | (mm) | Min (mm) | Max (mm) | (mm) | no.   |      | (mm) | (mm) | (mm) | (mm) | (mm) | (mm) | weight (kg) |
| 50             | 01E B 50M  | SNQ511    | 70   | 203      | 219      | -    | 2     | MI6  | 255  | 60   | 25   | 158  | 98   | 98   | 8           |
| 75             | 01E B 75M  | SNQ517    | 95   | 254      | 280      | -    | 2     | M20  | 315  | 90   | 38   | 208  | 114  | 114  | 18          |
| 90             | 01E B 90M  | SNQ520    | 112  | 312      | 328      | -    | 2     | M24  | 380  | 90   | 44   | 253  | 136  | 136  | 28          |
| 100            | 01E B 100M | SNQ522    | 125  | 342      | 366      | -    | 2     | M24  | 420  | 102  | 52   | 274  | 134  | 134  | 36          |
| 110            | 01 B 110M  | SNQ524    | 140  | 344      | 356      | -    | 2     | M24  | 410  | 120  | 45   | 310  | 142  | 142  | 46          |
| 115            | 01 B 115M  | SNQ526    | 150  | 372      | 388      | -    | 2     | M24  | 450  | 130  | 50   | 320  | 142  | 142  | 54          |
| 125            | 01 B 125M  | SNQ528    | 150  | 414      | 426      | -    | 2     | M30  | 500  | 150  | 38   | 358  | 156  | 156  | 73          |
| 135            | 01 B 135M  | SNQ530    | 160  | 444      | 456      | -    | 2     | M30  | 530  | 160  | 45   | 380  | 168  | 168  | 84          |
| 140            | 01 B 140M  | SNQ532    | 170  | 462      | 478      | -    | 2     | M30  | 558  | 178  | 41   | 390  | 168  | 168  | 92          |
| 150            | 01 B 150M  | SDQ3134   | 170  | 424      | 436      | 100  | 4     | M24  | 510  | 178  | 38   | 399  | 174  | 174  | 96          |
| 160            | 01E B 160M | SDQ3136   | 180  | 438      | 462      | 110  | 4     | M24  | 530  | 190  | 40   | 393  | 172  | 192  | 109         |
| 180            | 01E B 180M | SDQ3140   | 210  | 503      | 517      | 130  | 4     | M30  | 600  | 210  | 40   | 442  | 172  | 200  | 132         |
| 200            | 01E B 200M | SDQ3144   | 220  | 533      | 547      | 140  | 4     | M30  | 640  | 240  | 45   | 463  | 172  | 200  | 167         |
| 220            | 01E B 220M | SDQ3148   | 240  | 593      | 607      | 150  | 4     | M30  | 700  | 250  | 45   | 507  | 178  | 216  | 191         |

<sup>\*</sup>Shaft diameters shown are the most common; alternative sizes in the same group are available

- $\hbox{\tt ***Special bearing and cartridge required for this pedestal:}$
- Fixed-type bearing: 02 B 415 GR 16
- Fixed-type cartridge (for TL seals): 02 C 10 GR 21
- Expansion-type bearing: 02 B 415 EX 16
- Expansion-type cartridge (for TL seals): 02 C 10 EX 21

## **COOPER**split-to-the-shaft

roller bearings

## Why a split roller bearing?

Cooper split-to-the-shaft roller bearings greatly simplify disassembly, significantly reducing the time needed for installation, changeover and inspection. This makes them ideal for countless applications, even in the most challenging environments. Easier disassembly, however, is not the only reason to use Cooper split roller bearings.

#### There are 5 key advantages.

### Advantage I: Save time and money

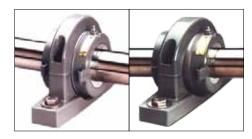
Since all the components split, they can be mounted and dismounted (or visually inspected) without disturbing other components on the shaft. This reduces downtime and gets equipment back into production sooner.

#### **Advantage 2: Superior seals**

Cooper's exclusive Aluminum Triple Labyrinth (ATL) seal stays concentric on the shaft and rotates with it, keeping out contamination (even underwater). With no oil to spill, the workplace stays clean, further minimizing downtime.

### Advantage 3: Compensate for misalignment

The spherical design of the cartridge and pedestal allows compensation of up to 2.5 degrees from center, and takes initial misalignment externally.



#### **Advantage 4: Shaft protection**

The inner race clamps to the shaft and moves axially with it to absorb wear. There are no set screws to damage the shaft.



#### **Advantage 5: Axial expansion**

Polished outer race and rollers assure dynamic (not static) axial expansion, minimizing resistance and stress on other components.





Axial freedom

Expansion capability

#### The Cooper Split Roller Bearing Corp.

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