


**The Timken Company**

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**Part Number QAC15A215S, Single Concentric Piloted Flange Cartridge**


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**Specifications**

**Engineering Group** Mounted Bearing

**Bearing Number** 22215

**Shaft Size** 2 15/16 in

**Shaft Size Type** Imperial

**Full Timken Part Number**  
 QAC15A215SB  
 QAC15A215SC  
 QAC15A215SEB  
 QAC15A215SEC  
 QAC15A215SEM  
 QAC15A215SEN  
 QAC15A215SEO  
 QAC15A215SET  
 QAC15A215SM  
 QAC15A215SN  
 QAC15A215SO  
 QAC15A215ST



|                      |                   |
|----------------------|-------------------|
| <b>Locking Style</b> | Single Concentric |
|----------------------|-------------------|

|                             |                          |
|-----------------------------|--------------------------|
| <b>Housing Construction</b> | Piloted Flange Cartridge |
|-----------------------------|--------------------------|

|                 |               |
|-----------------|---------------|
| <b>UPC Code</b> | 0883450035507 |
|                 | 0883450035514 |
|                 | 0883450035538 |
|                 | 0883450035545 |
|                 | 0883450035552 |
|                 | 0883450035569 |
|                 | 0883450035576 |
|                 | 0883450035583 |
|                 | 0883450193214 |
|                 | 0883450193375 |
| 0883450270403   |               |
| 0883450270564   |               |

## Dimensions

|                     |                      |
|---------------------|----------------------|
| <b>Dimension BC</b> | 7-1/2 in<br>190.5 mm |
|---------------------|----------------------|

|                        |                   |
|------------------------|-------------------|
| <b>Dimension B Exp</b> | 2.7 in<br>68.6 mm |
|------------------------|-------------------|

|                        |                    |
|------------------------|--------------------|
| <b>Dimension B Fix</b> | 2.61 in<br>66.3 mm |
|------------------------|--------------------|

|                    |                   |
|--------------------|-------------------|
| <b>Dimension C</b> | 4.29 in<br>109 mm |
|--------------------|-------------------|

|                    |                     |
|--------------------|---------------------|
| <b>Dimension D</b> | 6.38 in<br>162.1 mm |
|--------------------|---------------------|

|                    |                    |
|--------------------|--------------------|
| <b>Dimension E</b> | 5.3 in<br>134.6 mm |
|--------------------|--------------------|

|                    |                      |
|--------------------|----------------------|
| <b>Dimension F</b> | 8-3/4 in<br>222.3 mm |
|--------------------|----------------------|

|                    |                      |
|--------------------|----------------------|
| <b>Dimension G</b> | 6.375 in<br>161.9 mm |
|--------------------|----------------------|

|                                |                     |
|--------------------------------|---------------------|
| <b>Dimension H</b>             | 0.81 in<br>20.6 mm  |
| <b>Dimension J (Bolt Size)</b> | 0.625 in<br>16 mm   |
| <b>Dimension KA</b>            | 1.25 in<br>31.8 mm  |
| <b>Dimension L Exp</b>         | 3.95 in<br>100.3 mm |
| <b>Dimension L Fix</b>         | 3.86 in<br>98 mm    |
| <b>Dimension M</b>             | 2.37 in<br>60.2 mm  |
| <b>Dimension N</b>             | 1.25 in<br>31.8 mm  |
| <b>Dimension RA</b>            | 0.24 in<br>6.1 mm   |
| <b>Dimension SA</b>            | 3.62 in<br>91.9 mm  |

## Radial and Thrust Factors

|                                 |                       |
|---------------------------------|-----------------------|
| <b>C0 - Static Load</b>         | 54100 lbf<br>240000 N |
| <b>C - Dynamic Load (Basic)</b> | 49900 lbf<br>222000 N |
| <b>e - Geometry Factor</b>      | 0.22                  |
| <b>Y1 - Geometry Factor</b>     | 3.14                  |
| <b>Y2 - Geometry Factor</b>     | 4.67                  |

## Engineering Seal Speed

|                                   |          |
|-----------------------------------|----------|
| <b>Oil Lubrication - M/N Seal</b> | 1600 rpm |
|-----------------------------------|----------|

|                                 |          |
|---------------------------------|----------|
| <b>Oil Lubrication - T Seal</b> | 2900 rpm |
|---------------------------------|----------|

|                                     |          |
|-------------------------------------|----------|
| <b>Oil Lubrication - B/C/O Seal</b> | 1300 rpm |
|-------------------------------------|----------|

|                                      |          |
|--------------------------------------|----------|
| <b>Grease Lubrication - M/N Seal</b> | 1600 rpm |
|--------------------------------------|----------|

|                                    |          |
|------------------------------------|----------|
| <b>Grease Lubrication - T Seal</b> | 2400 rpm |
|------------------------------------|----------|

|  |          |
|--|----------|
| <b>Grease Lubrication - B/C/O Seal</b> | 1300 rpm |
|--|----------|

## Engineering Bearing Attributes

|              |                      |
|--------------|----------------------|
| <b>Float</b> | 0.083 in<br>2.108 mm |
|--------------|----------------------|

|                        |                       |
|------------------------|-----------------------|
| <b>Shaft Tolerance</b> | 0.0020 in<br>0.051 mm |
|------------------------|-----------------------|

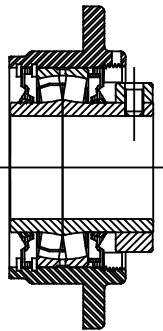
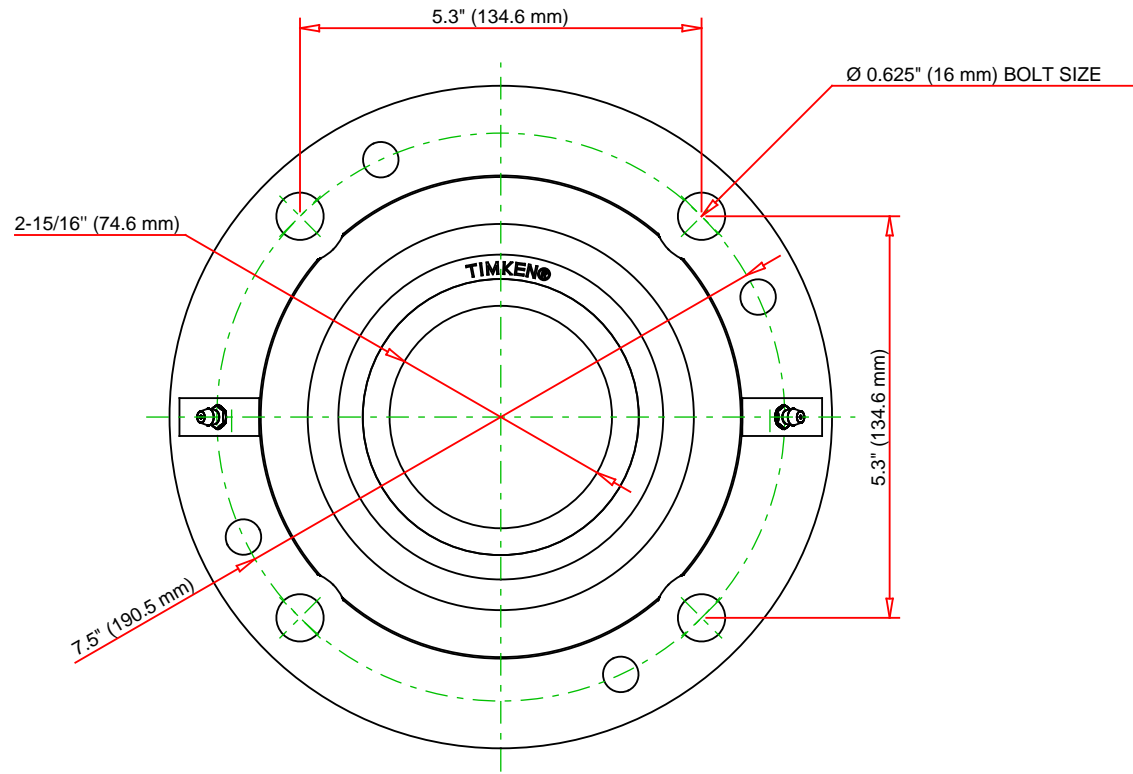
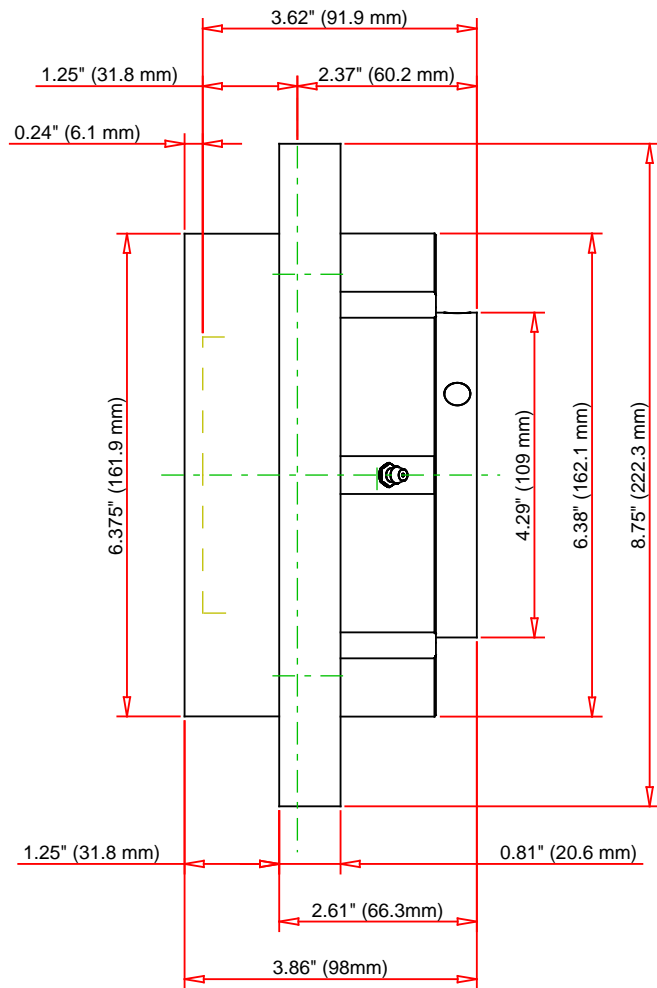
## Engineering Internal Radial Clearance

|  |        |
|--|--------|
| <b>Eng Internal Radial Clearance - Min</b> | 0.0020 |
|--|--------|

|  |        |
|--|--------|
| <b>Eng Internal Radial Clearance - Max</b> | 0.0031 |
|--|--------|

|                                  |                       |
|----------------------------------|-----------------------|
| <b>Pre Install Clearance Min</b> | 0.0020 in<br>0.050 mm |
|----------------------------------|-----------------------|

|                                  |                       |
|----------------------------------|-----------------------|
| <b>Pre Install Clearance Max</b> | 0.0031 in<br>0.080 mm |
|----------------------------------|-----------------------|



Note: Section View not to Scale

|                             |        |     |        |    |
|-----------------------------|--------|-----|--------|----|
| C - Dynamic Load            | 49900  | lbf | 222000 | N  |
| C0 - Static Load            | 54100  | lbf | 240000 | N  |
| Weight                      | 22     | lb  | 10     | kg |
| Max. Speed T-Seals & Grease | 2400   | rpm |        |    |
| Rad. Clearance - Max.       | 0.0031 |     |        |    |

**TIMKEN**

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NORTH CANTON, OHIO USA

**QAC15A215S**

Single Concentric Piloted Flange  
Cartridge

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**FOR DISCUSSION ONLY**