


**The Timken Company**

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## Part Number QAC20A315S, Single Concentric Piloted Flange Cartridge



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## Specifications

<b>Engineering Group</b>	Mounted Bearing
<b>Bearing Number</b>	22220
<b>Shaft Size</b>	3 15/16 in
<b>Shaft Size Type</b>	Imperial
<b>Full Timken Part Number</b>	QAC20A315SB QAC20A315SC QAC20A315SEB QAC20A315SEC QAC20A315SEM QAC20A315SEN QAC20A315SEO QAC20A315SET QAC20A315SM QAC20A315SMNP QAC20A315SMT QAC20A315SN QAC20A315SO



QAC20A315ST  
QAC20A315STHT

**Locking Style** Single Concentric

**Housing Construction** Piloted Flange Cartridge

**UPC Code**

0883450036009  
0883450036016  
0883450036030  
0883450036047  
0883450036054  
0883450036061  
0883450036078  
0883450036085  
0883450193276  
0883450193436  
0883450270465  
0883450270625  
0883450434928  
0883450456951  
0883450952798

## Dimensions

**Dimension BC** 9.38 in  
238.3 mm

**Dimension B Exp** 2.93 in  
74.4 mm

**Dimension B Fix** 2.84 in  
72.1 mm

**Dimension C** 6 in  
152.4 mm

**Dimension D** 8.13 in  
206.5 mm

**Dimension E** 6.63 in  
168.4 mm

<b>Dimension F</b>	10.88 in 276.4 mm
<b>Dimension G</b>	8.125 in 206.4 mm
<b>Dimension H</b>	1 in 25.4 mm
<b>Dimension J (Bolt Size)</b>	0.75 in 20 mm
<b>Dimension KA</b>	1.63 in 41.4 mm
<b>Dimension L Exp</b>	5.05 in 128.3 mm
<b>Dimension L Fix</b>	4.97 in 126.2 mm
<b>Dimension M</b>	2.97 in 75.4 mm
<b>Dimension N</b>	2.13 in 54.1 mm
<b>Dimension RA</b>	0.37 in 9.4 mm
<b>Dimension SA</b>	4.59 in 116.6 mm

## Radial and Thrust Factors

<b>C0 - Static Load</b>	113000 lbf 502000 N
<b>C - Dynamic Load (Basic)</b>	97700 lbf 435000 N
<b>e - Geometry Factor</b>	0.24
<b>Y1 - Geometry Factor</b>	2.85

<b>Y2 - Geometry Factor</b>	4.24
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### Engineering Seal Speed

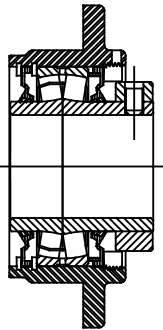
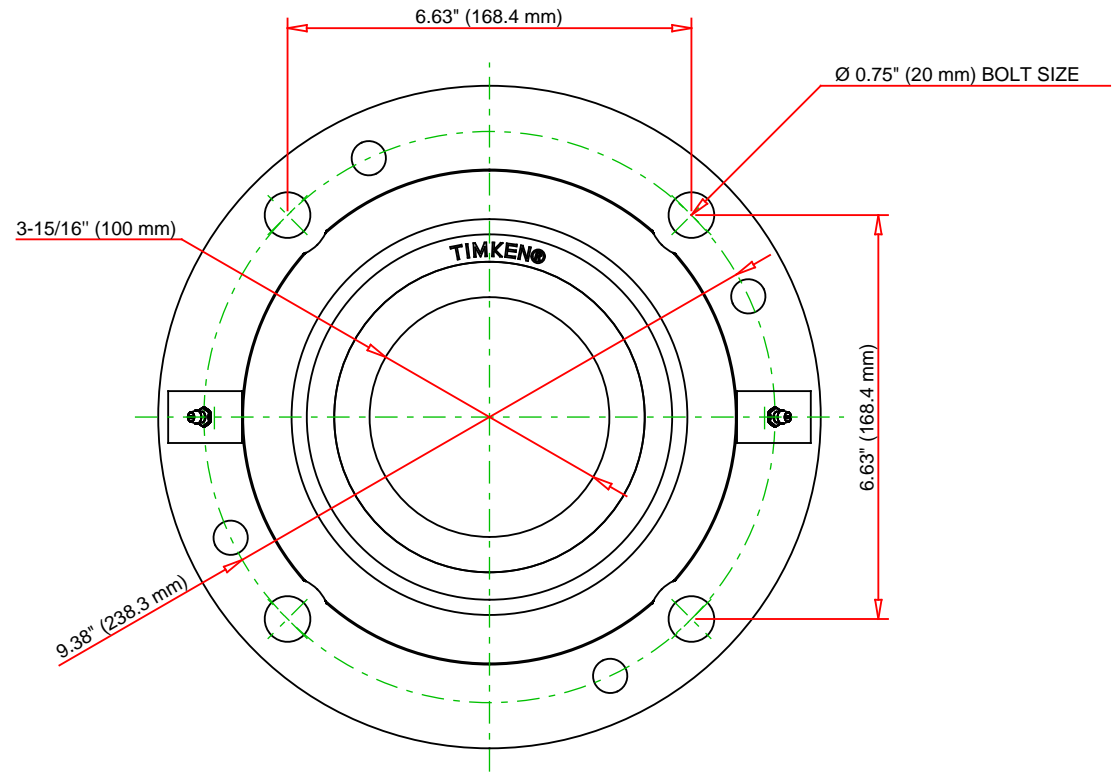
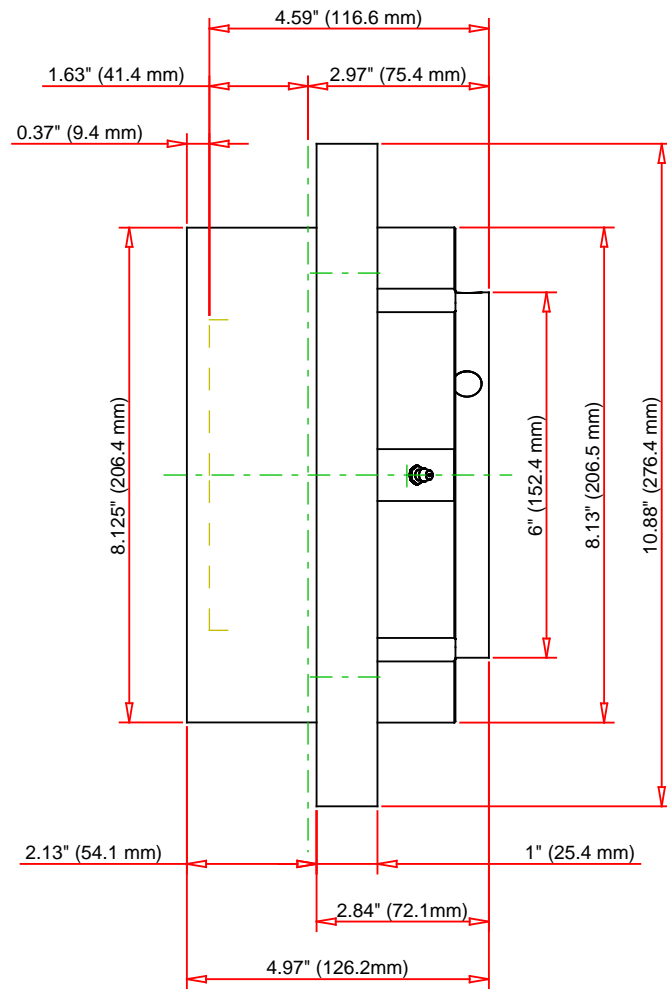
<b>Oil Lubrication - M/N Seal</b>	1200 rpm
<b>Oil Lubrication - T Seal</b>	2000 rpm
<b>Oil Lubrication - B/C/O Seal</b>	900 rpm
<b>Grease Lubrication - M/N Seal</b>	1200 rpm
<b>Grease Lubrication - T Seal</b>	1600 rpm
<b>Grease Lubrication - B/C/O Seal</b>	900 rpm

### Engineering Bearing Attributes

<b>Float</b>	0.083 in 2.108 mm
<b>Shaft Tolerance</b>	0.0030 in 0.076 mm

### Engineering Internal Radial Clearance

<b>Eng Internal Radial Clearance - Min</b>	0.0030
<b>Eng Internal Radial Clearance - Max</b>	0.0047
<b>Pre Install Clearance Min</b>	0.0030 in 0.075 mm
<b>Pre Install Clearance Max</b>	0.0047 in 0.120 mm



Note: Section View not to Scale

C - Dynamic Load	97700	lbf	435000	N
C0 - Static Load	113000	lbf	502000	N
Weight	43	lb	19.5	kg
Max. Speed T-Seals & Grease	1600	rpm		
Rad. Clearance - Max.	0.0047			

**TIMKEN**

THE TIMKEN COMPANY  
NORTH CANTON, OHIO USA

**QAC20A315S**

Single Concentric Piloted Flange  
Cartridge

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**FOR DISCUSSION ONLY**