


**The Timken Company**

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**Part Number QACW20A315S, Single Concentric Piloted Flange Cartridge**


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**Specifications**

**Engineering Group** Mounted Bearing

**Bearing Number** 22220

**Shaft Size** 3 15/16 in

**Shaft Size Type** Imperial

**Full Timken Part Number**

- QACW20A315SB
- QACW20A315SC
- QACW20A315SEB
- QACW20A315SEC
- QACW20A315SEM
- QACW20A315SEN
- QACW20A315SEO
- QACW20A315SET
- QACW20A315SETHT
- QACW20A315SM
- QACW20A315SMT
- QACW20A315SN
- QACW20A315SO



QACW20A315ST  
QACW20A315STHT

**Locking Style** Single Concentric

**Housing Construction** Piloted Flange Cartridge

**UPC Code**

0883450037600  
0883450037617  
0883450037631  
0883450037648  
0883450037655  
0883450037662  
0883450037679  
0883450037686  
0883450193955  
0883450194112  
0883450271127  
0883450271288  
0883450494458  
0883450494465  
0883450959452

## Dimensions

**Dimension BC** 9.38 in  
238.3 mm

**Dimension B Exp** 2.58 in  
65.5 mm

**Dimension B Fix** 2.5 in  
63.5 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>	4.83 in 122.7 mm
<b>Dimension L Fix</b>	4.75 in 120.7 mm
<b>Dimension M</b>	2.97 in 75.4 mm
<b>Dimension N</b>	2.25 in 57.2 mm
<b>Dimension RA</b>	0.16 in 4.1 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
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<b>Oil Lubrication - T Seal</b>	2000 rpm
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<b>Oil Lubrication - B/C/O Seal</b>	900 rpm
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<b>Grease Lubrication - M/N Seal</b>	1200 rpm
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<b>Grease Lubrication - T Seal</b>	1600 rpm
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<b>Grease Lubrication - B/C/O Seal</b>	900 rpm
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### Engineering Bearing Attributes

<b>Float</b>	0.083 in 2.108 mm
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<b>Shaft Tolerance</b>	0.0030 in 0.076 mm
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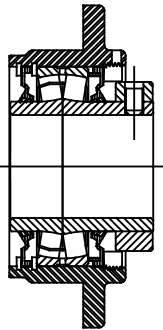
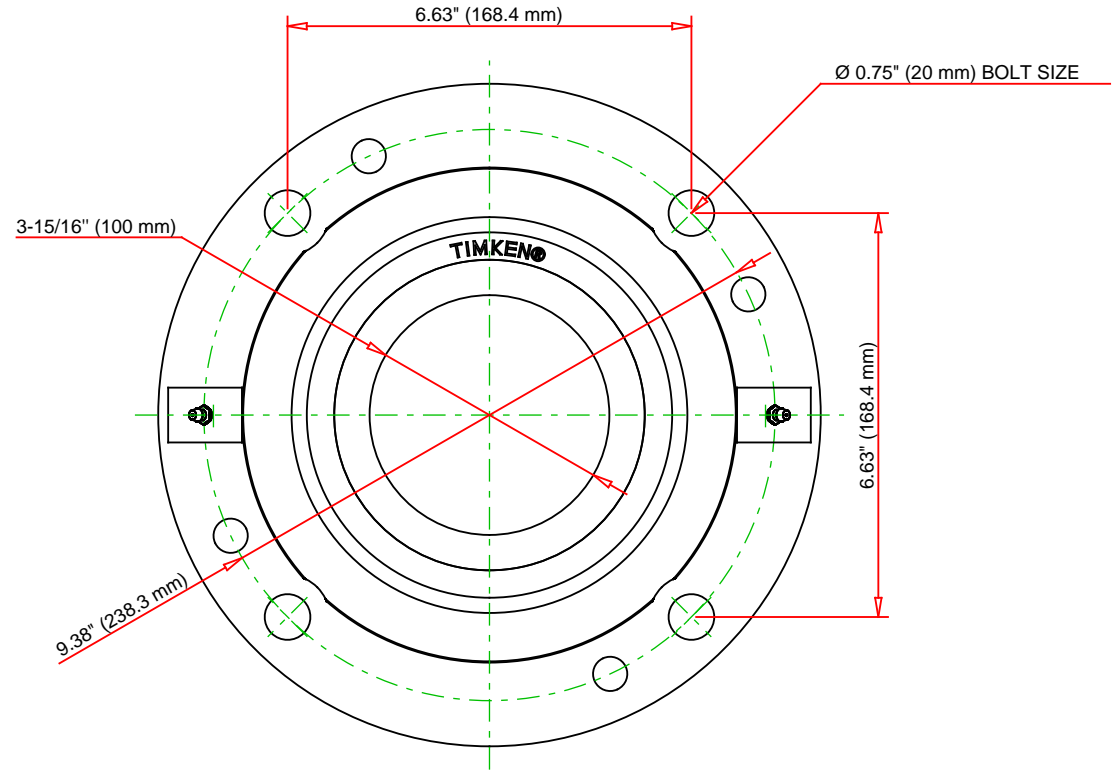
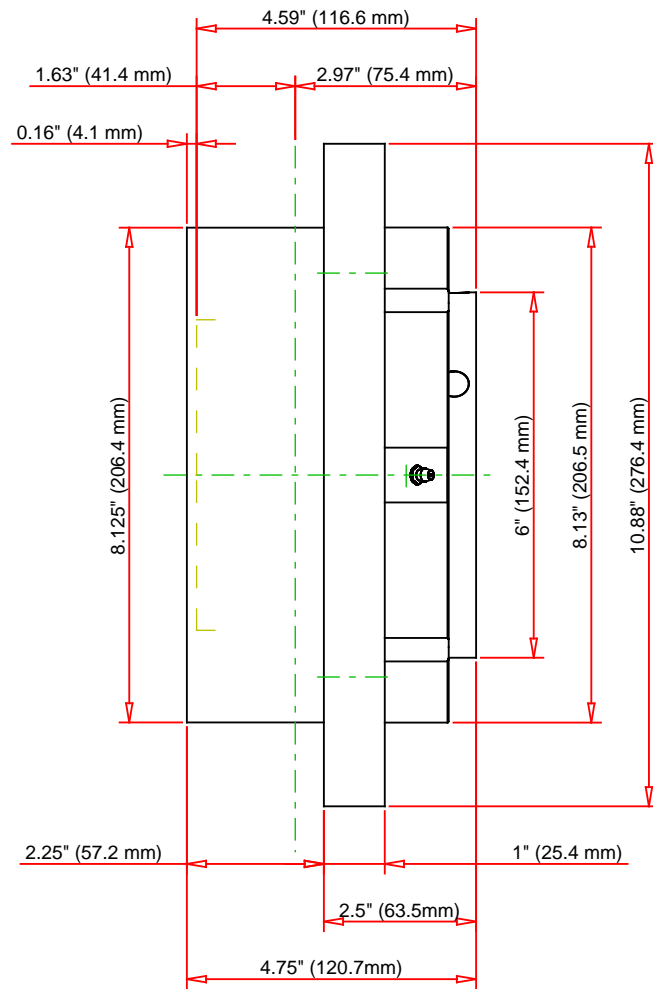
### Engineering Internal Radial Clearance

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

**QACW20A315S**

Single Concentric Piloted Flange  
Cartridge

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

**FOR DISCUSSION ONLY**