



**The Timken Company**

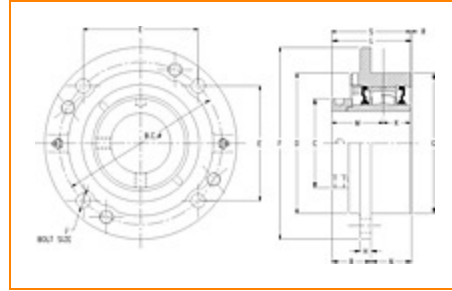
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## Part Number QMC20J311S, Eccentric Piloted Flange Cartridge



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### Specifications

**Engineering Group** Mounted Bearing

**Bearing Number** 22220

**Shaft Size** 3 11/16 in

**Shaft Size Type** Imperial

**Full Timken Part Number**

- QMC20J311SB
- QMC20J311SC
- QMC20J311SEB
- QMC20J311SEC
- QMC20J311SEM
- QMC20J311SEN
- QMC20J311SEO
- QMC20J311SET
- QMC20J311SM
- QMC20J311SN
- QMC20J311SO
- QMC20J311ST



<b>Locking Style</b>	Eccentric
<b>Housing Construction</b>	Piloted Flange Cartridge
<b>UPC Code</b>	0883450060721 0883450060738 0883450060752 0883450060769 0883450060776 0883450060783 0883450060790 0883450060806 0883450165792 0883450166218 0883450258050 0883450258432

## Dimensions

<b>Dimension BC</b>	9.38 in 238.3 mm
<b>Dimension B Exp</b>	2.92 in 74.2 mm
<b>Dimension B Fix</b>	2.84 in 72.1 mm
<b>Dimension C</b>	6 in 152.4 mm
<b>Dimension D</b>	8.13 in 206.5 mm
<b>Dimension E</b>	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 K</b>	1.63 in 41.4 mm
<b>Dimension L Exp</b>	5.04 in 128 mm
<b>Dimension L Fix</b>	4.96 in 126 mm
<b>Dimension M</b>	2.96 in 75.2 mm
<b>Dimension N</b>	2.13 in 54.1 mm
<b>Dimension R</b>	0.37 in 9.4 mm
<b>Dimension S</b>	4.56 in 115.8 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

## 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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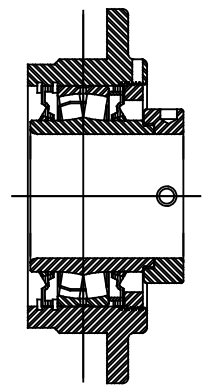
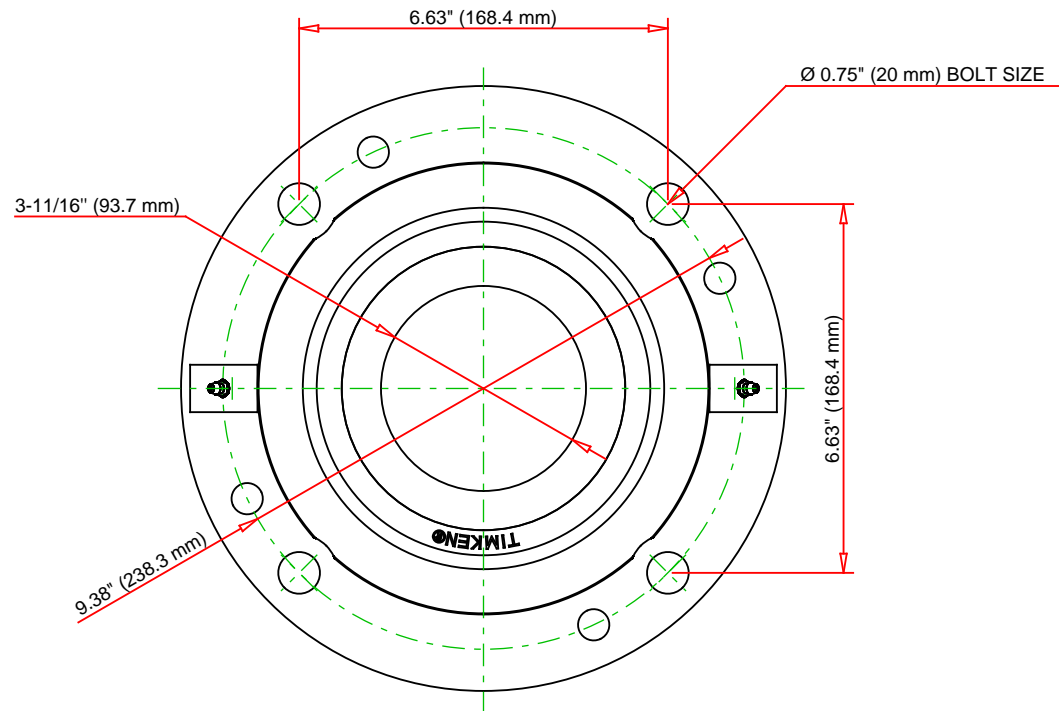
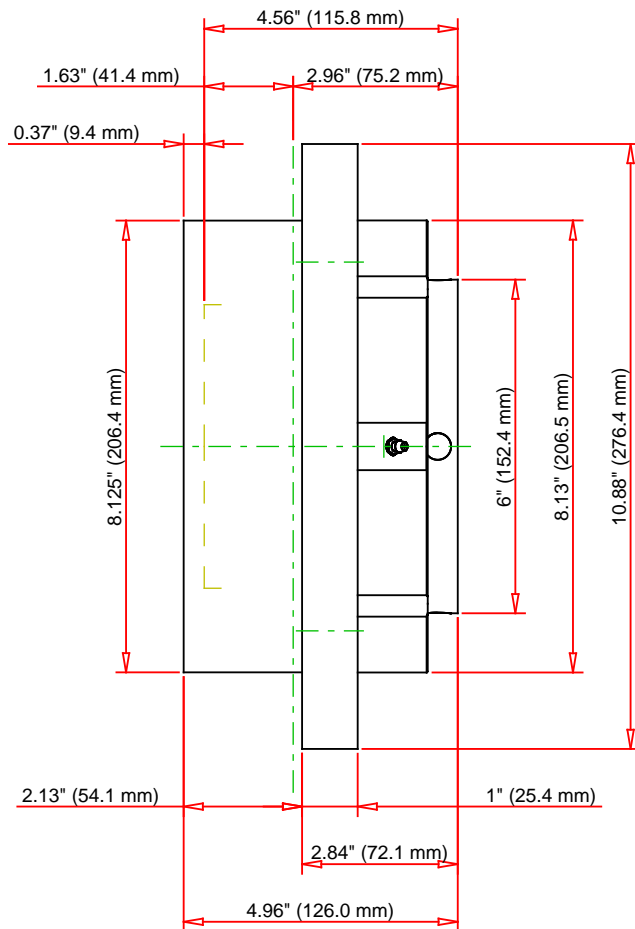
## Engineering Internal Radial Clearance

<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

**QMC20J311S**  
Eccentric Piloted Flange Cartridge

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**FOR DISCUSSION ONLY**