



**The Timken Company**

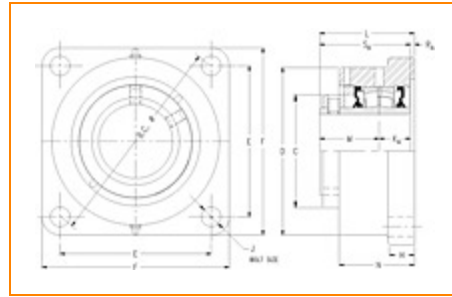
4500 Mt Pleasant St. NW

N. Canton, OH 44720

**Phone:** (234) 262-3000

**E-Mail:** [CustomerCAD@timken.com](mailto:CustomerCAD@timken.com) • **Web site:** [www.timken.com](http://www.timken.com)

## Part Number QAF20A400S, Single Concentric Four Bolt Square Flange Block



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### Specifications

**Engineering Group** Mounted Bearing

**Bearing Number** 22220

**Shaft Size** 4 in

**Shaft Size Type** Imperial

**Full Timken Part Number**

- QAF20A400SB
- QAF20A400SBNG
- QAF20A400SC
- QAF20A400SEB
- QAF20A400SEC
- QAF20A400SEM
- QAF20A400SEN
- QAF20A400SEO
- QAF20A400SET
- QAF20A400SM
- QAF20A400SN



QAF20A400SO  
QAF20A400ST

**Locking Style** Single Concentric

**Housing Construction** Four-Bolt Square Flange

**UPC Code**

0883450039307  
0883450039314  
0883450039338  
0883450039345  
0883450039352  
0883450039369  
0883450039376  
0883450039383  
0883450190770  
0883450190930  
0883450268134  
0883450268295  
0883450952781

## Dimensions

**Dimension BC**

10.96 in  
278.4 mm

**Dimension C**

6 in  
152.4 mm

**Dimension D**

8.5 in  
215.9 mm

**Dimension E**

7 3/4 in  
196.9 mm

**Dimension F**

9.97 in  
253.2 mm

**Dimension H**

1 1/2 in  
38.1 mm

**Dimension J (Bolt Size)**

0.875 in  
24 mm

<b>Dimension KA</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>	2.97 in 75.4 mm
<b>Dimension N</b>	4.06 in 103.1 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>	2.84
<b>Y2 - Geometry Factor</b>	4.23

### 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
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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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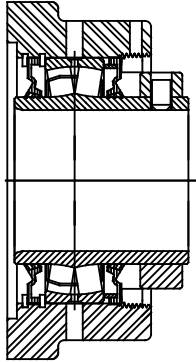
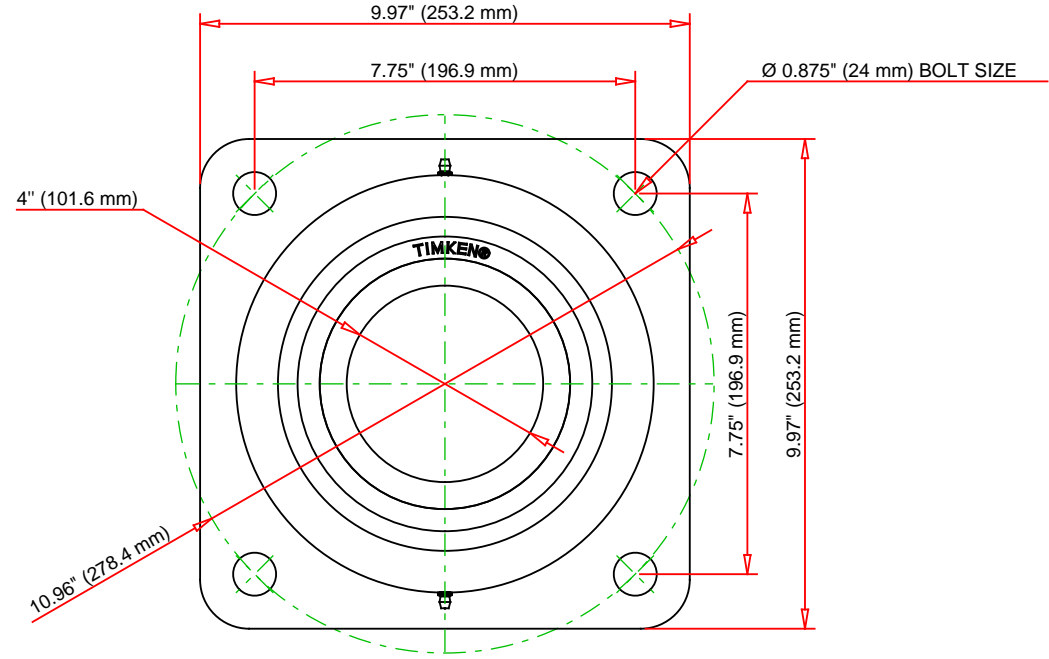
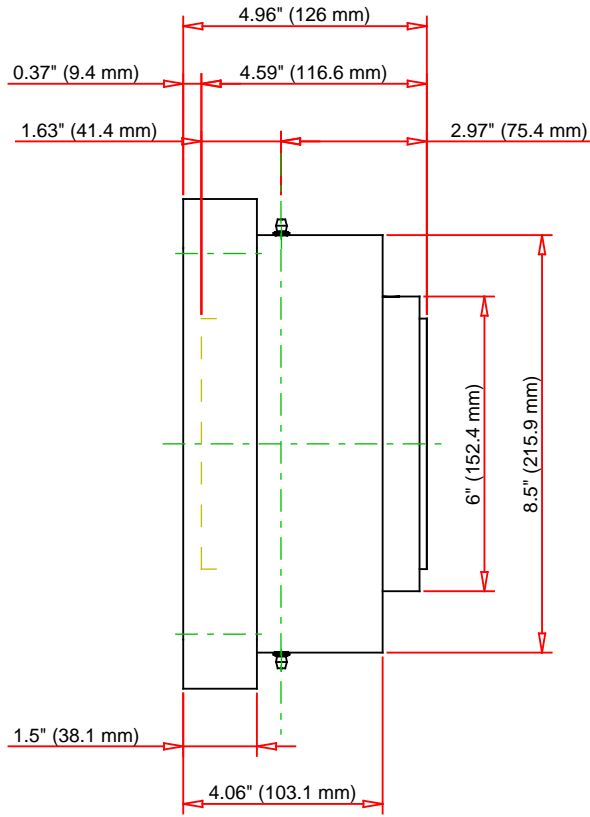
### Engineering Internal Radial Clearance

<b>Eng Internal Radial Clearance - Min</b>	0.003
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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	55	lb	24.9	kg
Max. Speed T-Seals & Grease	1600	rpm		
Rad. Clearance - Max.	0.0047			

**TIMKEN**

THE TIMKEN COMPANY  
NORTH CANTON, OHIO USA

**QAF20A400S**

Single Concentric Four Bolt Square  
Flange Block

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**