


The Timken Company

4500 Mt Pleasant St. NW

N. Canton, OH 44720

Phone: (234) 262-3000

E-Mail: CustomerCAD@timken.com • **Web site:** www.timken.com

Part Number QAAC20A100S, Double Concentric Piloted Flange Cartridge



[Specifications](#) | [Dimensions](#) | [Radial and Thrust Factors](#) | [Engineering Seal Speed](#) | [Engineering Bearing Attributes](#) | [Engineering Internal Radial Clearance](#)

Specifications

Engineering Group Mounted Bearing

Bearing Number 22220

Shaft Size 100 mm

Shaft Size Type Metric

Full Timken Part Number
 QAAC20A100SB
 QAAC20A100SC
 QAAC20A100SEB
 QAAC20A100SEC
 QAAC20A100SEM
 QAAC20A100SEN
 QAAC20A100SEO
 QAAC20A100SET
 QAAC20A100SM
 QAAC20A100SN
 QAAC20A100SO



QAAC20A100ST

Locking Style Double Concentric

Housing Construction Piloted Flange Cartridge

UPC Code

0883450305020
 0883450305037
 0883450305044
 0883450305051
 0883450305068
 0883450305075
 0883450305082
 0883450305099
 0883450305105
 0883450305112
 0883450305129
 0883450305136

Dimensions

Dimension BC

9.38 in
 238.3 mm

Dimension C

6 in
 152.4 mm

Dimension D

8.13 in
 206.5 mm

Dimension E

6.63 in
 168.4 mm

Dimension B Exp

2.93 in
 74.4 mm

Dimension B Fix

2.84 in
 72.1 mm

Dimension F

10.88 in
 276.4 mm

Dimension H

1 in
 25.4 mm

Dimension J (Bolt Size)	0.75 in 20 mm
Dimension M	2.97 in 75.4 mm
Dimension L Exp	5.05 in 128.3 mm
Dimension L Fix	4.97 in 126.2 mm
Dimension RAA	0.97 in 24.6 mm
Dimension SAA	5.94 in 150.9 mm
Dimension G	8.125 in 206.4 mm
Dimension N	2.13 in 54.1 mm

Radial and Thrust Factors

C0 - Static Load	113000 lbf 502000 N
C - Dynamic Load (Basic)	97700 lbf 435000 N
e - Geometry Factor	0.24
Y1 - Geometry Factor	2.85
Y2 - Geometry Factor	4.24

Engineering Seal Speed

Oil Lubrication - M/N Seal	1200 rpm
-----------------------------------	----------

Oil Lubrication - T Seal	2000 rpm
---------------------------------	----------

Oil Lubrication - B/C/O Seal	900 rpm
-------------------------------------	---------

Grease Lubrication - M/N Seal	1200 rpm
--------------------------------------	----------

Grease Lubrication - T Seal	1600 rpm
------------------------------------	----------

Grease Lubrication - B/C/O Seal	900 rpm
--	---------

Engineering Bearing Attributes

Float	0.083 in 2.108 mm
--------------	----------------------

Shaft Tolerance	0.0030 in 0.076 mm
------------------------	-----------------------

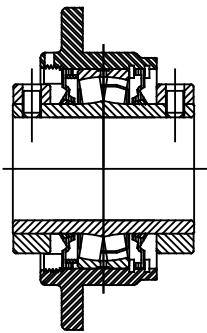
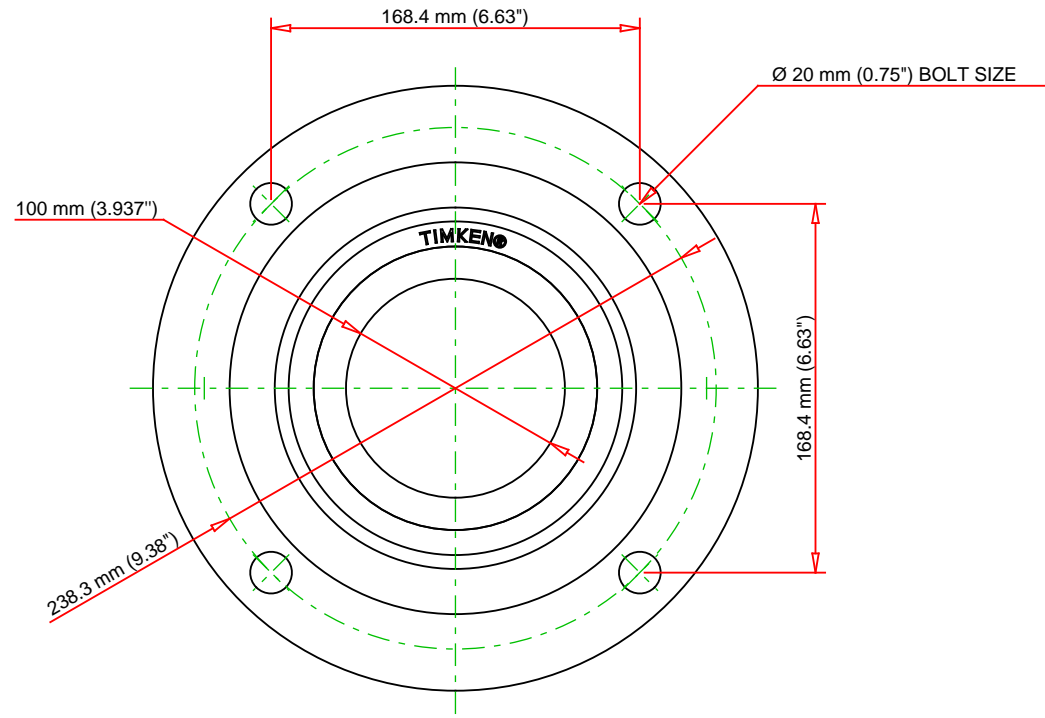
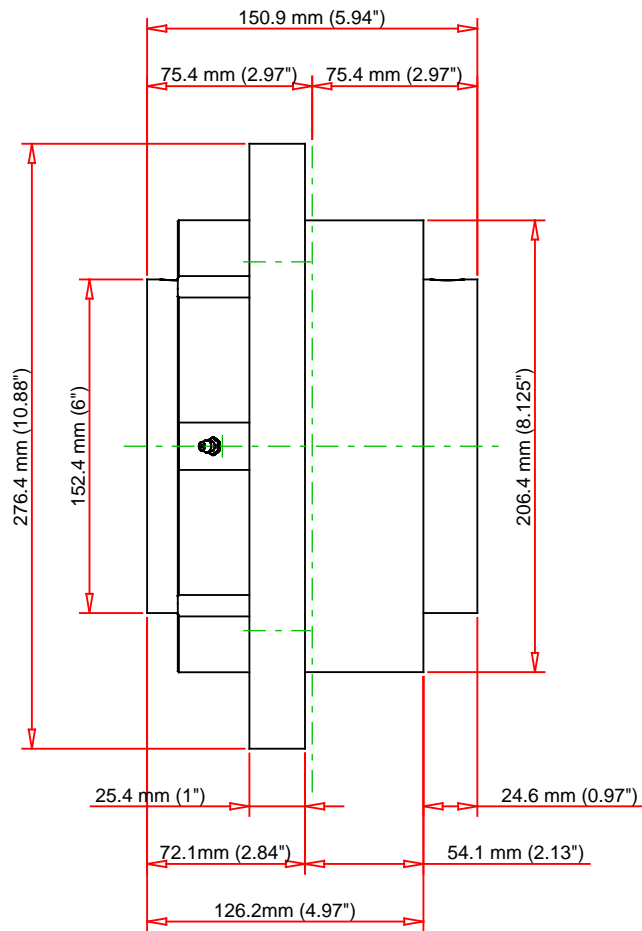
Engineering Internal Radial Clearance

Eng Internal Radial Clearance - Min	0.0030
--	--------

Eng Internal Radial Clearance - Max	0.0047
--	--------

Pre Install Clearance Min	0.075 in 0.0030 mm
----------------------------------	-----------------------

Pre Install Clearance Max	0.120 in 0.0047 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

QAAC20A100S
Double 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