

REVISION			
LTR	NO.	DATE	APPD
-	PROD.	RELEASE	10-08-10

EXAMPLE OF GODFREY (GUANGZHOU) BEARINGS AND AEROSPACE STANDARD PART NUMBER CALL OUT

GG101BN-08 C P K T

MS14101 -8 C P K T = .500 NOMINAL BORE DIA, PH13-8 Mo BALL MATERIAL, ZINC-NICKEL PLATED, LOW TORQUE, .010 INCH OVERSIZE O.D. (DIMENSION

Ø D).

Ø D), (SEE TABLE 1).

ABSENCE OF THE LETTER "T" AND "U" INDICATE STANDARD OUTER DIAMETER ( Ø D (FOR REPAIR ONLY, SEE TABLE 3).  
 T = .010 OVERSIZE  
 U = .020 OVERSIZE

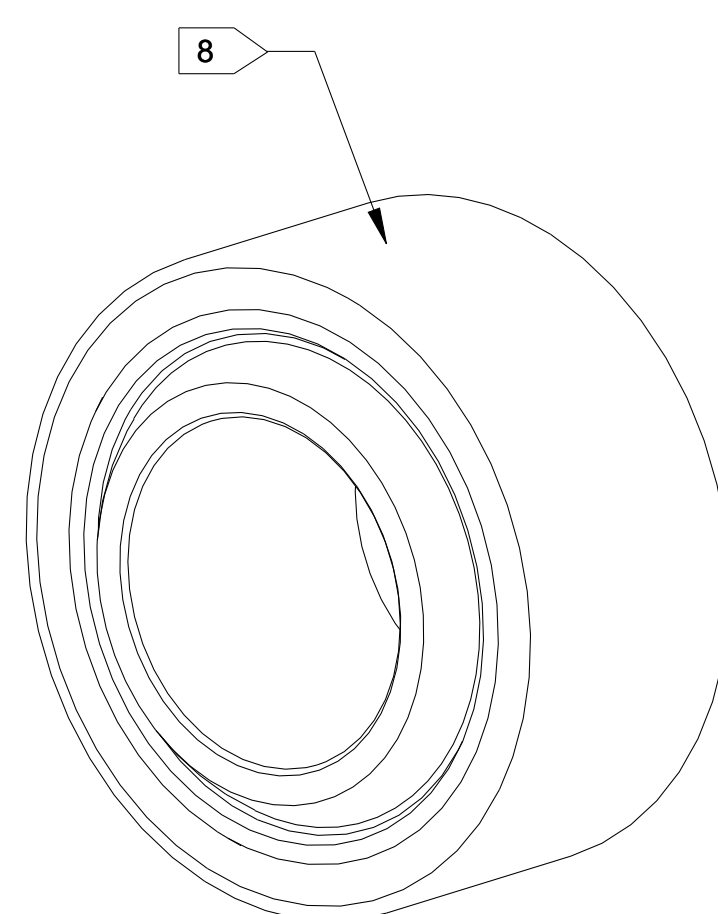
ABSENCE OF THE LETTER "K" INDICATES STANDARD BREAKAWAY TORQUE (SEE TABLE 1).  
 LETTER "K" INDICATES LOW BREAKAWAY TORQUE (SEE TABLE 1 AND ).

ABSENCE OF THE LETTER "P" INDICATES NO PLATING.  
 LETTER "P" INDICATES ZINC-NIKEL OR CADMIUM PLATING (SEE REQUIREMENT ).

ABSENCE OF THE LETTER "C" INDICATES 440C BALL MATERIAL.  
 LETTER "C" INDICATES PH13-8Mo BALL MATERIAL.

SIZE - BORE DIAMETER (DASH NO. FROM TABLE 1).

BASIC PART NUMBER



3D VIEW  
ENGRG. REFERENCE  
SCALE: NONE

8 MARKING: ELCTRO-ETCH WITH GODFREY (GUANGZHOU) BEARINGS PART NUMBER AND MS14101 PART NUMBER AT LOCATION SHOWN.

7 NO LOAD TORQUE: SEE TABLE 1. WHEN THE LETTER "K" IS PRESENT IN THE P/N, LOWER VALUES OF NO LOAD TORQUE ARE SPECIFIED PER TABLE 1. IF THE MEASURED TORQUE OF A "K" TYPE BEARING IS LESS THAN 0.1 INCH-POUND, THE INTERNAL RADIAL PLAY SHALL BE MEASURED AND SHALL NOT EXCEED THE FOLLOWING IN THE TABLE 2. THE INTERNAL AXIAL PLAY SHALL BE MEASURED FOR ALL "K" TYPE BEARINGS.

6 DIMENSION " Ø D" TO BE MET AFTER PLATING. DIMENSION "H" TO BE MET BEFORE PLATING WHEN APPLICABLE.

5 SURFACE FINISH:

RACE: PLATING, WHEN SPECIFIED, SHALL BE ZINC-NICKEL PLATING PER AMS 2417, TYPE 2, OR CADMIUM PLATING PER AMS-QQ-P-416, TYPE II, CLASS 2, (.0003 TO .0006 INCHES).PLATE ON THE OUTSIDE DIAMETER SURFACE AND ON THE FLAT BETWEEN THE OUTSIDE DIAMETER AND THE GROOVE. PLATING RUNOUT MAY OCCURE EITHER IN THE GROOVE OR IN THE AREA BETWEEN THE GROOVE AND THE BALL.

BALL: 440C, PASSIVATE PER AMS 2700 OR ASTM A 967 (OPTIONAL).  
13-8 PH Mo, PASSIVATE PER AMS 2700 OR ASTM A 967.

4 BALL MATERIAL SHALL BE 440C (AMS 5630, AMS 5880 OR AMS 5618) UNLESS "C" CALLOUT IS PRESENT IN P/N. "C" INDICATES PH13-8 Mo (AMS 5629) COND. H1000 PER AMS-H-6875.

3 APPLY LINER ON INDICATED SURFACE. DIMENSIONS APPLY AFTER THE APPLICATION OF LINER.

2 LINER IS QUALIFIED TO SAE AS81820.

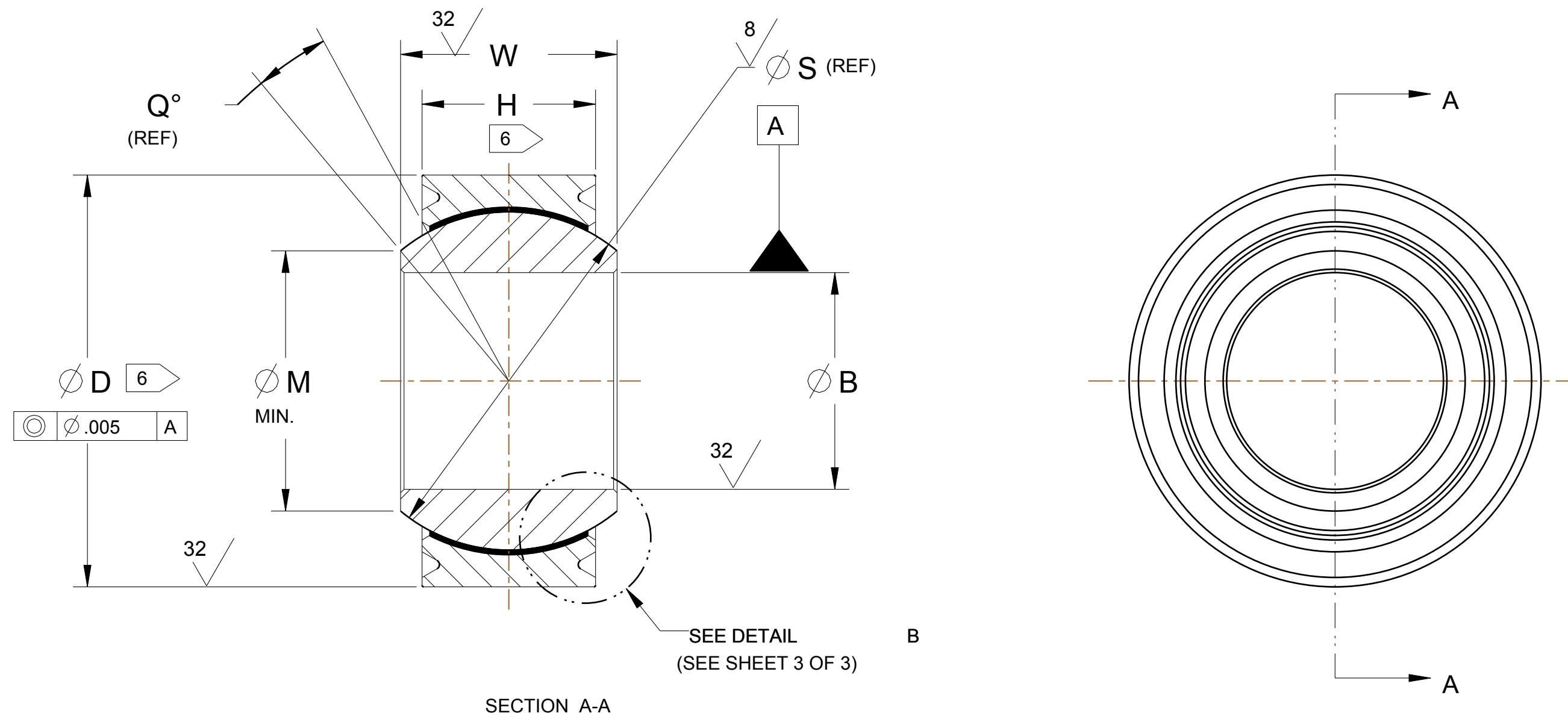
1 DIMENSIONING AND TOLERANCING PER ASME Y14.5M-1994.

NOTES: UNLESS OTHERWISE SPECIFIED

	XXXXX	RACE ASSY	17-4PH CRES AMS 5643	R/C 28-37 AMS 2759/3	3	TAG	-
	XXXXX	BALL	440C PER AMS 5630, AMS 5880 OR AMS 5618	R/C 55-62 AMS-H-6875	///	TAG	1
SEE TAB	SEE TAB	BEARING ASSY	///	///	5 7	8	-

CUST. PART NO.	PART NO.	DESCRIPTION	MATERIAL	HEAT TREAT	PROCESS	PT.MK.	QTY.		
THIS DOCUMENT REMAINS THE PROPERTY OF GODFREY (GUANGZHOU) BEARINGS, AND IS PROVIDED TO THE RECIPIENT ON THE EXPRESS CONDITION THAT IT, OR ANY INFORMATION CONTAINED IN IT, IS NOT TO BE DISCLOSED OR REPRODUCED IN WHOLE OR IN PART, OR USED FOR MANUFACTURE BY THE RECIPIENT WITHOUT A WRITTEN CONSENT OR PURCHASE ORDER FROM GODFREY (GUANGZHOU) BEARINGS.		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XX = ± .030 .XXX = ± .010 ANGLES = ± 1/2 °	DRAWN NICHOLAS.NGUYEN CHK	DATE 10-08-10	GODFREY (GUANGZHOU) BEARINGS				
		BREAK ALL SHARP EDGES .005 TO .015 MACHINE FILLETS .05 TO .030 R.	ENGRG NICHOLAS.NGUYEN MFG ENGRG	DATE 10-08-10	BEARINGS, PLAIN, SELF-LUBRICATING, SELF-ALIGNING, NARROW, GROOVED RACE, -65° F TO +325° F				
			CONFIG. CNTL	DATE					
			IN LIEU OF						
APPLICATION	A/C	SERIES OR ENGINE	QTY. S/S	MACHINED SURFACE FINISHES	AS14101	SIZE C	CAGE NO. XXXXX	DWG.NO. GG101BN-XXXXXX	REV. -
						SCALE: 3/16	ENGTEDF	1	3

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**MS14101-5 INACTIVE FOR NEW DESIGN**

**TABLE 1-DIMENSIONS AND STRENGTHS**

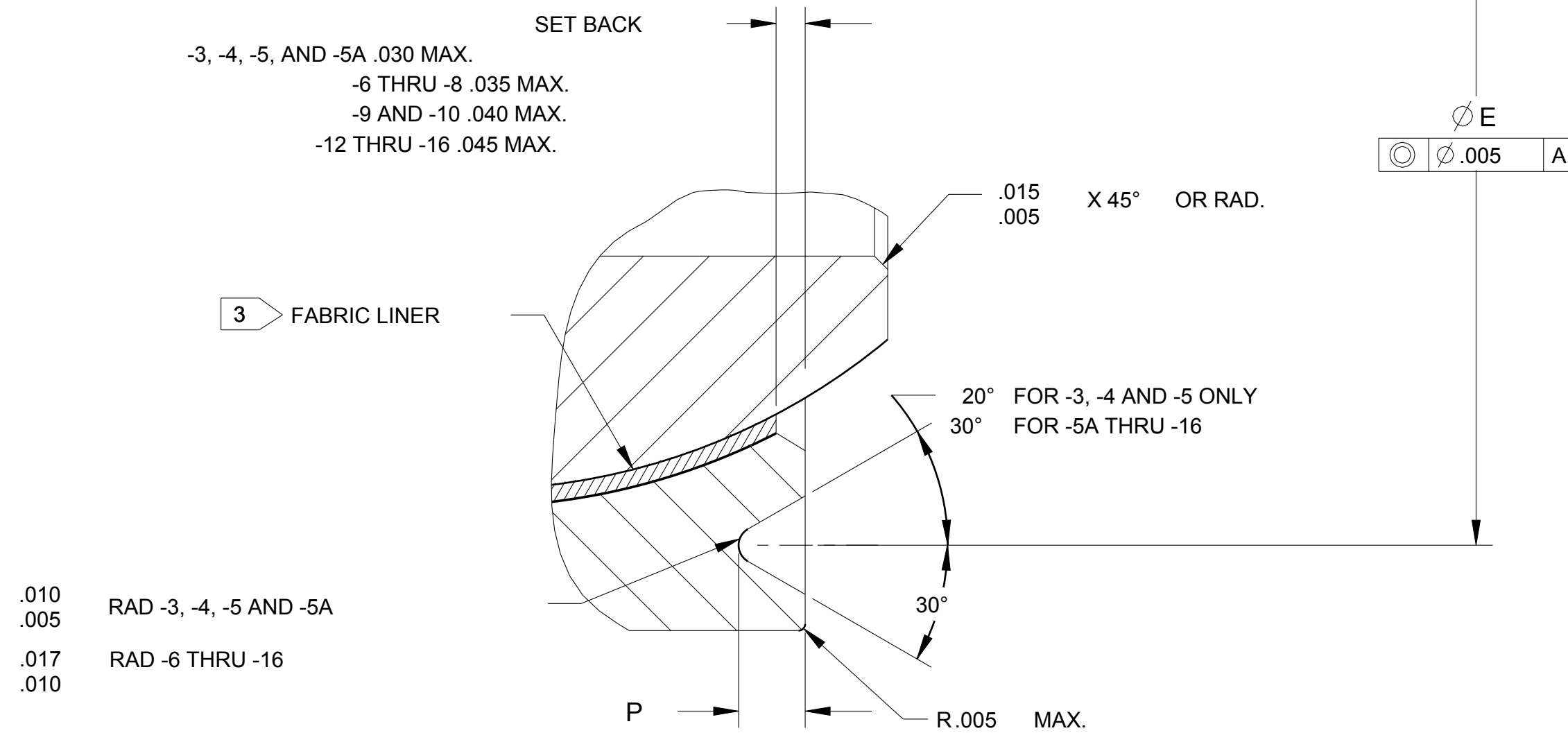
GODFREY (GUANGZHOU) BEARINGS PART NUMBER	AS14101 PART NUMBER	$\phi$ B +.0000 -.0005	$\phi$ D +.0000 -.0005	H ± .005	$\phi$ M MIN.	P +.000 -.010	Q° (REF)	W +.000 -.002	$\phi$ E +.000 -.008	$\phi$ S (REF)	STATIC LIMIT LOAD		OSCIL- LATING LOAD LB	NO-LOAD ROTATIONAL BREAKAWAY TORQUE IN-LB		WT LB MAX. (REF)
											RADIAL LB	AXIAL LB		STANDARD	"K" TYPE	
GG101BN-03XXXX	MS14101-3XXXX	.1900	.5625	.218	.293	.025	10°	.281	.500		3975	150	1500	0.25-5.0	0-0.5	.020
GG101BN-04XXXX	MS14101-4XXXX	.2500	.6562	.250	.364	.025	10°	.343	.594		6040	430	3320	0.25-5.0	0-0.5	.020
GG101BN-05XXXX	MS14101-5XXXX	.3125	.7500	.281	.419	.035	10°	.375	.650		8750	700	5460	0.25-8.0	0-1.0	.030
GG101BN-05AXXXX	MS14101-5AXXXX	.3125	.7500	.281	.419	.035	10°	.375	.660	.567	8750	700	5460	0.25-8.0	0-1.0	.030
GG101BN-06XXXX	MS14101-6XXXX	.3750	.8125	.312	.475	.035	9°	.406	.712	.656	10540	1100	6600	0.25-8.0	0-1.0	.040
GG101BN-07XXXX	MS14101-7XXXX	.4375	.9062	.343	.530	.035	8°	.437	.806		13200	1400	8050	0.25-8.0	0-1.0	.050
GG101BN-08XXXX	MS14101-8XXXX	.5000	1.0000	.390	.600	.055	8°	.500	.876	.813	17900	2100	10400	0.25-8.0	0-1.0	.070
GG101BN-09XXXX	MS14101-9XXXX	.5625	1.0937	.437	.670	.055	8°	.562	.970		23200	3680	13000	0.25-8.0	0-1.0	.090
GG101BN-10XXXX	MS14101-10XXXX	.6250	1.1875	.500	.739	.055	8°	.625	1.063		30500	4720	16450	0.25-8.0	0-1.0	.120
GG101BN-12XXXX	MS14101-12XXXX	.7500	1.4375	.593	.920	.055	8°	.750	1.313	1.187	46400	6750	23600	0.25-8.0	0-1.0	.210
GG101BN-14XXXX	MS14101-14XXXX	.8750	1.5625	.703	.980	.055	8°	.875	1.438		62200	9350	30250	0.25-12.0	0-2.0	.270
GG101BN-16XXXX	MS14101-16XXXX	1.0000	1.7500	.797	1.118	.055	9°	1.000	1.626		82200	12160	38000	0.25-12.0	0-2.0	.390

**TABLE 2**

DASH NO.	MAXIMUM RADIAL PLAY	MAXIMUM AXIAL PLAY
-3K THRU -12K	0.0007 INCH	0.0028 INCH
-14K THRU -16K	0.0010 INCH	0.0040 INCH

GODFREY (GUANGZHOU) BEARINGS			
SIZE	CAGE NO.	DWG. NO.	REV.
C	XXXX	GG101BN-XXXXXX	-
SCALE: 3/16" = 1" UNLESS NOTED OTHERWISE			

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DETAIL B  
SCALE 10/1  
TYPICAL-ON BOTH SIDES

TABLE 3\*

CODE (T)				CODE (U)			
GODFREY (GUANGZHOU) BEARINGS PART NUMBER	AS14101 PART NUMBER	$\phi$ B +.0000 -.0005	$\phi$ D +.0000 -.0005 .010 1st OVERSIZE	GODFREY (GUANGZHOU) BEARINGS PART NUMBER	AS14101 PART NUMBER	$\phi$ B +.0000 -.0005	$\phi$ D +.0000 -.0005 .020 2nd OVERSIZE
GG101BN-03XXXT	MS14101-3XXXT	.1900	.5725	GG101BN-03XXXU	MS14101-3XXXU	.1900	.5825
GG101BN-04XXXT	MS14101-4XXXT	.2500	.6662	GG101BN-04XXXU	MS14101-4XXXU	.2500	.6762
GG101BN-05AXXXT	MS14101-5AXXXT	.3125	.7600	GG101BN-05AXXXU	MS14101-5AXXXU	.3125	.7700
GG101BN-06XXXT	MS14101-6XXXT	.3750	.8225	GG101BN-06XXXU	MS14101-6XXXU	.3750	.8325
GG101BN-07XXXT	MS14101-7XXXT	.4375	.9162	GG101BN-07XXXU	MS14101-7XXXU	.4375	.9262
GG101BN-08XXXT	MS14101-8XXXT	.5000	1.0100	GG101BN-08XXXU	MS14101-8XXXU	.5000	1.0200
GG101BN-09XXXT	MS14101-9XXXT	.5625	1.1037	GG101BN-09XXXU	MS14101-9XXXU	.5625	1.1137
GG101BN-10XXXT	MS14101-10XXXT	.6250	1.1975	GG101BN-10XXXU	MS14101-10XXXU	.6250	1.2075
GG101BN-12XXXT	MS14101-12XXXT	.7500	1.4475	GG101BN-12XXXU	MS14101-12XXXU	.7500	1.4575
GG101BN-14XXXT	MS14101-14XXXT	.8750	1.5725	GG101BN-14XXXU	MS14101-14XXXU	.8750	1.5825
GG101BN-16XXXT	MS14101-16XXXT	1.0000	1.7600	GG101BN-16XXXU	MS14101-16XXXU	1.0000	1.7700

\* TABLE 3-OVERSIZE BEARING DIMENSIONS RESTRICTED USAGE FOR REPAIR WORK ONLY.  
.010 AND .020 INCH OVERSIZE OUTSIDE DIAMETER FOR REPLACEMENT OF BEARINGS  
SHOWN ON TABLE 1.

GODFREY (GUANGZHOU) BEARINGS			
SIZE	CAGE NO.	DWG.NO.	REV.
C	XXXX	GG101BN-XXXXX	-
SCALE: 10/1 UNLESS NOTED 3 3			