

TABLE I

PART NUMBER	Ø A		Ø A' MIN		Ø D		Ø E MAX		F WRENCH FLATS		(G)		(H)		(L)		R RAD MAX		S MAX		T HEX ACROSS FLATS	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
MBF2313-05-()	.332 .325	8.43 8.25	.296	7.52	.1645 .1625	4.178 4.128	.1640	4.166	.086 .081	2.18 2.06	.058	1.47	.039	0.99	.625	15.875	.030	0.76	.009	0.229	.375	9.52
MBF2313-06-()	.385 .378	9.78 9.60	.342	8.69	.1985 .1965	5.042 4.991	.1985	5.042	.104 .099	2.64 2.52	.058	1.47	.043	1.09	.675	17.145	.030	0.76	.011	0.279	.375	9.52
MBF2313-07-()	.416 .409	10.57 10.39	.373	9.47	.2275 .2255	5.778 5.728	.2275	5.778	.121 .116	3.07 2.95	.058	1.47	.043	1.09	.862	21.894	.030	0.76	.011	0.279	.375	9.52
MBF2313-08-()	.507 .499	12.88 12.67	.463	11.76	.2595 .2575	6.591 6.541	.2595	6.591	.135 .130	3.43 3.30	.058	1.47	.057	1.45	.900	22.860	.030	0.76	.011	0.279	.375	9.52

TABLE I (CONTINUED)

PART NUMBER	MIN AVAILABLE GRIP LENGTH	MAX AVAILABLE GRIP LENGTH	INSTALLED DIMENSIONS								MECHANICAL PROPERTIES						V (GAGE PROTRUSION)		Ø W (GAGE)	
			RECOM. HOLE SIZE		Ø J MIN		K MAX		BREAK-OFF LIMITS		TENSILE STRUCTURAL FAILURE MIN		DOUBLE SHEAR MIN		LOCKING TORQUE MIN					
			INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	LBS	N	LBS	N	IN-LBS	N-m	INCH	mm
MBF2313-05-()	-100	-1000	.168 .165	4.27 4.19	.250	6.35	.370	9.40	+0.00 -0.030	+0.000 -0.762	900	4000	3150	14010	1.0	0.113	.0115 .0095	0.292 0.241	.2832 .2830	7.193 7.188
MBF2313-06-()	-100	-1150	.202 .199	5.13 5.05	.300	7.62	.420	10.67	+0.00 -0.030	+0.000 -0.762	1400	6230	4600	20460	1.5	0.170	.0140 .0114	0.356 0.289	.3272 .3270	8.311 8.306
MBF2313-07-()	-100	-1150	.231 .228	5.88 5.79	.350	8.89	.490	12.45	+0.00 -0.030	+0.000 -0.762	1600	7120	6050	26910	2.0	0.226	.0202 .0176	0.513 0.447	.3315 .3313	8.420 8.415
MBF2313-08-()	-150	-1150	.263 .260	6.68 6.60	.400	10.16	.510	12.95	+0.00 -0.030	+0.000 -0.762	2100	9340	7900	35140	2.5	0.282	.0180 .0151	0.457 0.384	.4320 .4318	10.973 10.968

MONOGRAM AEROSPACE FASTENERS
a TriMas company
3423 SOUTH GARFIELD AVENUE
COMMERCE, CALIFORNIA 90040
(323) 722-4760 FAX (323) 727-1029

TITLE:
**COMPOSI-LOK® 3 BLIND FASTENER FLUSH BREAK
130° FLUSH SHEAR HEAD
FOR ADVANCED COMPOSITE MATERIAL &
METALLIC STRUCTURES, TITANIUM**

DRAWING NO:
MBF2313(-)(-)(-)

DRAWN BY:
M. DOMINGUEZ

APPROVED BY:
J. [Signature]

ECN NO:
17-0228

CAGE CODE:
98524

ECN DATE:
09/08/17

DRAWN DATE:
08/14/13

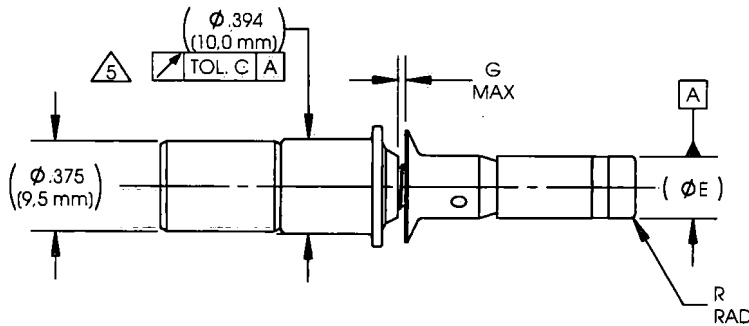
CHECKED DATE:
11/23/17

REV:
R

SHEET 1 OF 2

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APPLICABLE SPECIFICATIONS:
PROCUREMENT SPECIFICATION: MBF2300
INSTALLATION AND INSPECTION SPECIFICATION: MBF2301
SPECIAL LUBE AND FINISH: MBF2002



ROBOTIC PART NUMBER	R RAD		G MAX (GAP)		TOL. C° (A)			
					GRIP < 500		GRIPS 500 - 1000	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm
MBF2313()-05-()A	.030 .010	0.762 0.254	.042 .005	1.067 0.127	.030	0.762	.030	0.762
MBF2313()-06-()A	.035 .015	0.889 0.381	.050 .006	1.270 0.152	.027	0.686	.030	0.762
MBF2313()-07-()A	.035 .015	0.889 0.381	.055 .006	1.397 0.152	.025	0.635	.030	0.762
MBF2313()-08-()A	.040 .020	1.016 0.508	.062 .008	1.575 0.203	.022	0.559	.030	0.762

MATERIAL AND HEAT TREAT:

- NUT: 6Al-4V TITANIUM ALLOY PER AMS-T-9047 STA OR AMS4928 OR AMS4967 HEAT TREATED PER AMS-H-81200 TO 95 KSI SHEAR STRENGTH MINIMUM. MAXIMUM HYDROGEN CONTENT 125 PPM.
- SCREW: A286 CRES PER AMS5731, AMS5732 OR AMS5737 HEAT TREATED TO 175 KSI TENSILE MINIMUM.
- SLEEVE: 304 STAINLESS STEEL PER AMS5639, FULLY ANNEALED.
- INSERT: ACETAL PER ASTM-D6778
- DRIVE NUT: MILD STEEL

FINISH:

- (-) NUT: CONVERSION COATING OR PHOSPHATE FLUORIDE PER MONOGRAM SPECIFICATION PS741, MAY BE USED AT MANUFACTURER'S OPTION.
- SLEEVE AND SCREW: PASSIVATE PER AMS2700, CONVERSION COATING OPTIONAL.
- INSERT: NONE
- DRIVE NUT: COLOR GRAY

LUBRICANT:

DRY FILM LUBE PER THE REQUIREMENTS OF AS5272 TYPE I OR EVERLUBE # 812 PER MIL-PRF-81329, PARAFFIN WAX, OR CETYL ALCOHOL PER AS87132 AS REQUIRED FOR PERFORMANCE.

TABLE IV

2ND DASH NO. (GRIP)	GRIP RANGE			
	MIN GRIP		MAX GRIP	
	INCH	mm	INCH	mm
100	.050	1.27	.100	2.54
150	.100	2.54	.150	3.81
200	.150	3.81	.200	5.08
250	.200	5.08	.250	6.35
300	.250	6.35	.300	7.62
350	.300	7.62	.350	8.89
400	.350	8.89	.400	10.16
450	.400	10.16	.450	11.43
500	.450	11.43	.500	12.70
550	.500	12.70	.550	13.97
600	.550	13.97	.600	15.24
650	.600	15.24	.650	16.51
700	.650	16.51	.700	17.78
750	.700	17.78	.750	19.05
800	.750	19.05	.800	20.32
850	.800	20.32	.850	21.59
900	.850	21.59	.900	22.86
950	.900	22.86	.950	24.13
1000	.950	24.13	1.000	25.40
1050	1.000	25.40	1.050	26.67
1100	1.050	26.67	1.100	27.94
1150	1.100	27.94	1.150	29.21

GENERAL NOTES:

1. EXAMPLE OF PART NUMBER:

MBF2313 () - 06 - 100 ()



2. LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT AND APPROXIMATELY .040" ABOVE INTERSECTION OF THE NUT NOSE ANGLE AND O.D.

3. HEAD MARKINGS: MANUFACTURER'S IDENTIFICATION: MONOGRAM = "M"
FASTENER IDENTIFICATION = "2313"
POSITION OPTIONAL

4. DISTORTION SHALL NOT PREVENT INSERTION OF THE FASTENER INTO A RING GAUGE OF LENGTH EQUAL TO ONE DIAMETER AND HOLE DIAMETER EQUAL TO A MINIMUM RECOMMENDED HOLE. FORCE FOR INSERTION SHALL NOT EXCEED 5.0 POUNDS.

5. MAXIMUM RUNOUT FROM DRIVE NUT TO SCREW HEAD WHEN DRIVE NUT IS FULLY SEATED (G=0) FOR GRIPS UNDER/EQUAL -1000. FOR GRIPS LONGER THAN -1000 "TOL C" TBD.

6. ALL OTHER DIMENSIONS ARE THE SAME AS IN TABLE I.

7. INSTALLATION AND REMOVAL INFORMATION T.B.A.



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130° FLUSH SHEAR HEAD
FOR ADVANCED COMPOSITE MATERIAL &
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DRAWING NO:
MBF2313()-()-()

DRAWN BY: M. DOMINGUEZ
DRAWN DATE: 08/14/13

APPROVED BY: *J. Brown*
CHECKED DATE: 11/22/17

MONOGRAM CAGE CODE: 98524
ECN NO: 17-0228
ECN DATE: 09/08/17

REV: R
SHEET 2 OF 2

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