

TYPICAL INSTALLATION ⁶

TABLE I

PART NUMBER	Ø A		Ø D		Ø E MAX		F WRENCH FLATS		(G)		H		(L)		R. R MAX		(T HEX ACROSS FLATS)		Z MAX	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
MBF3015-5-()	.354 .334	8.99 8.48	.1800 .1780	4.574 4.523	.1796	4.561	.086 .081	2.18 2.06	.058	1.47	.060 .053	1.52 1.35	.625	15.88	.030	0.76	.375	9.52	.030	0.76
MBF3015-6-()	.416 .396	10.57 10.06	.2140 .2120	5.436 5.387	.2141	5.438	.104 .099	2.64 2.52	.058	1.47	.070 .063	1.78 1.60	.675	17.15	.030	0.76	.375	9.52	.030	0.76
MBF3015-7-()	.416 .396	10.57 10.06	.2430 .2410	6.174 6.123	.2431	6.174	.121 .116	3.07 2.95	.058	1.47	.070 .063	1.78 1.60	.862	21.89	.030	0.76	.375	9.52	.030	0.76
MBF3015-8-()	.541 .521	13.74 13.23	.2750 .2730	6.985 6.936	.2751	6.987	.135 .130	3.43 3.30	.058	1.47	.085 .078	2.16 1.98	.900	22.86	.030	0.76	.375	9.52	.040	1.02
MBF3015-9-()	.541 .521	13.74 13.23	.3050 .3030	7.747 7.698	.3051	7.749	.152 .147	3.86 3.73	.068	1.73	.085 .078	2.16 1.98	.930	23.62	.030	0.76	.500	12.70	.040	1.02
MBF3015-10-()	.635 .615	16.13 15.62	.3270 .3250	8.308 8.257	.3266	8.295	.152 .147	3.86 3.73	.073	1.85	.105 .098	2.67 2.49	.912	23.16	.040	1.02	.500	12.70	.045	1.14
MBF3015-11-()	.635 .615	16.13 15.62	.3590 .3570	9.121 9.070	.3589	9.116	.185 .180	4.70 4.57	.078	1.98	.105 .098	2.67 2.49	1.000	25.40	.040	1.02	.500	12.70	.045	1.14
MBF3015-12-()	.760 .740	19.30 18.80	.3900 .3880	9.908 9.857	.3896	9.895	.185 .180	4.70 4.57	.083	2.11	.125 .118	3.18 3.00	1.100	27.94	.040	1.02	.500	12.70	.045	1.14

TABLE I (CONTINUED)

PART NUMBER	MIN AVAILABLE GRIP DASH NO.	INSTALLED DIMENSIONS						MECHANICAL PROPERTIES							
		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	LBS	N	LBS	N	IN-LBS	N-m
MBF3015-5-()	-100	.183 .180	4.65 4.57	.250	6.35	.370	9.40	+.103 -0.00	+2.62 -0.00	900	4000	3150	14010	1.0	0.113
MBF3015-6-()	-100	.217 .214	5.51 5.44	.300	7.62	.420	10.67	+.103 -0.00	+2.62 -0.00	1400	6230	4600	20460	1.5	0.170
MBF3015-7-()	-100	.246 .243	6.25 6.17	.350	8.89	.490	12.45	+.103 -0.00	+2.62 -0.00	1600	7120	6050	26910	2.0	0.226
MBF3015-8-()	-150	.278 .275	7.06 6.98	.400	10.16	.510	12.95	+.103 -0.00	+2.62 -0.00	2100	9340	7900	35140	2.5	0.282
MBF3015-9-()	-150	.308 .305	7.82 7.75	.450	11.43	.535	13.59	+.103 -0.00	+2.62 -0.00	2600	11565	9800	43590	3.0	0.339
MBF3015-10-()	-150	.330 .327	8.38 8.31	.475	12.06	.540	13.72	+.103 -0.00	+2.62 -0.00	3600	16010	11350	50480	3.5	0.400
MBF3015-11-()	-150	.362 .359	9.19 9.12	.525	13.33	.670	17.02	+.103 -0.00	+2.62 -0.00	4400	19570	13850	61600	4.0	0.452
MBF3015-12-()	-150	.393 .390	9.98 9.91	.565	14.35	.675	17.15	+.103 -0.00	+2.62 -0.00	5000	22240	16450	73170	4.0	0.452

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

TITLE:
**FASTENER, BLIND,
LOW PROFILE PROTRUDING HEAD,
FOR ADVANCED COMPOSITE MATERIAL,
GRES (1/64" OVERSIZE)**

DRAWING NO:
MBF3015(-)(-)(X)

DRAWN BY: **A PEREZ** DRAWN DATE: **05/06/2014**

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

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MONOGRAM CAGE CODE: **98524** ECN NO: **17-0244** ECN DATE: **09/11/17** REV: **E** SHEET 1 OF 2

APPLICABLE SPECIFICATIONS:
 PROCUREMENT SPECIFICATION: MBF2008
 SPECIAL LUBE AND FINISH: MBF2002
 INSTALLATION AND INSPECTION SPECIFICATION: MBF2009

MATERIAL AND HEAT TREAT:

NUT: CRES A286 PER AMS5731, AMS5732 OR AMS5737. HEAT TREATED AS REQUIRED FOR PERFORMANCE.
 SCREW: CRES A286 PER AMS5731, AMS5732 OR AMS5737. HEAT TREATED AS REQUIRED FOR PERFORMANCE.
 SLEEVE: CRES 304 PER AMS5639. FULLY ANNEALED.
 INSERT: ACETAL PER ASTM-D6778.
 DRIVE NUT: MILD STEEL

FINISH:

NUT: PASSIVATE PER AMS2700, CONVERSION COATING OPTIONAL.
 SLEEVE AND SCREW: PASSIVATE PER AMS2700, CONVERSION COATING OPTIONAL.
 INSERT: NONE
 DRIVE NUT: COLOR BROWN.

LUBRICANT:

THE FOLLOWING LUBRICANTS MAY BE APPLIED TO ANY OR ALL COMPONENTS IN ANY COMBINATION AS REQUIRED FOR PERFORMANCE: SOLID FILM LUBRICANT PER AS5272 TYPE I OR TYPE III, CARBO-WAX, PARAFFIN WAX AND/OR CETYL ALCOHOL PER AS87132.

GENERAL NOTES:

1. EXAMPLE PART NUMBER:

MBF3015 () - 6 - 200

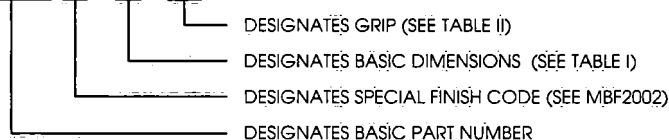


TABLE II

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	28.19
1150	1.100	28.19	1.150	29.21

- 2. LOCKING FEATURE CONSISTS OF THREE (3) INDENTATIONS LOCATED 120° APART ON THE PERIPHERY OF THE NUT COMPONENT AND APPROXIMATELY .040" ABOVE THE INTERSECTION OF THE NUT NOSE ANGLE AND O.D.
- 3. SEE MBF2009 FOR INSTALLATION AND REMOVAL INFORMATION.
- 4. COMPOSI-LOK FASTENERS WITH SELECTED COMBINATIONS OF THE ABOVE LUBRICANTS AND FINISHES ARE SPECIALLY CODED AND MAY BE SUBSTITUTED FOR EQUIVALENT NON-CODED PARTS AT MANUFACTURER'S OPTION. SEE INTERCHANGEABILITY SPECIFICATION MBF2007.
- 5. DISTORTION OF "ØD" PERMISSIBLE IN LOCKING AREA. 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.
- 6. SPECIAL TOOLING REQUIREMENTS FOR: MBF3015-5-() : NOSE ADAPTER: MPP-8 ; WRENCH ADAPTER: MP-5
 MBF3015-6-() : NOSE ADAPTER: MPP-8 ; WRENCH ADAPTER: MP-6
- 7. HEAD MARKINGS ON NUT DEPRESSED .010 INCH (0.254 mm) MAXIMUM. POSITION OPTIONAL.
- 8. DRIVE NUT NOT SHOWN FOR CLARITY OF HEAD MARKINGS.
- 9. GRIP DASH NUMBER MARKING LOCATED ON TOP OR SIDE OF DRIVE NUT.

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TITLE:
**FASTENER, BLIND,
 LOW PROFILE PROTRUDING HEAD,
 FOR ADVANCED COMPOSITE MATERIAL,
 CRES (1/64" OVERSIZE)**

DRAWING NO: MBF3015(-)(-)(-)(-)		
DRAWN BY: A PEREZ	DRAWN DATE: 05/06/2014	
APPROVED BY: <i>J. Suarez</i>	CHECKED DATE: 11/22/17	
MONOGRAM CAGE CODE: 98524	ECN NO: 17-0244	REV: E
ECN DATE: 09/11/17		SHEET 2 OF 2

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