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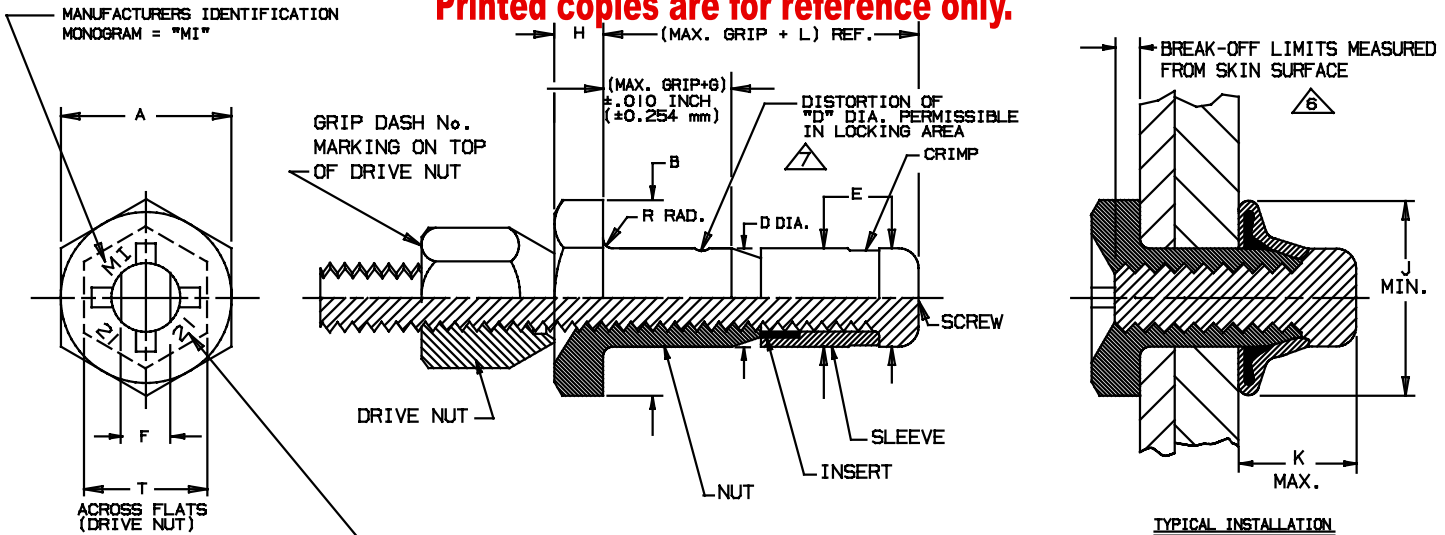


TABLE I

PART NUMBER	A		B MIN.		D DIA.		E DIA. MAX.		F WRENCH FLATS		G REF.		H		L REF.		R RAD. MAX.		T ACROSS HEX. REF.	
	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm	INCH	mm
MBF2121-5-()	.250 .244	6,35 6,20	.272	6,91	.1645 .1625	4,178 4,128	.1640	4,166	.085 .080	2,16 2,03	.017	0,43	.076 .069	1,930 1,753	.51	12,9	.030	0,76	.375	9,52
MBF2121-6-()	.312 .305	7,92 7,75	.340	8,64	.1985 .1965	5,042 4,991	.1985	5,042	.113 .108	2,87 2,74	.027	0,68	.080 .073	2,032 1,845	.57	14,5	.030	0,76	.375	9,52
MBF2121-7-()	.343 .336	8,71 8,53	.375	9,52	.2275 .2255	5,778 5,728	.2275	5,778	.121 .116	3,07 2,95	.035	0,89	.080 .073	2,032 1,845	.63	16,0	.030	0,76	.375	9,52
MBF2121-8-()	.375 .367	9,52 9,32	.409	10,39	.2595 .2575	6,591 6,541	.2595	6,591	.135 .130	3,43 3,30	.055	1,40	.090 .083	2,286 2,108	.70	17,7	.030	0,76	.375	9,52
MBF2121-9-()	.406 .398	10,31 10,11	.444	11,28	.2895 .2875	7,353 7,303	.2895	7,353	.152 .147	3,86 3,73	.065	1,65	.090 .083	2,286 2,108	.81	20,6	.030	0,76	.500	12,70
MBF2121-10-()	.437 .429	11,10 10,90	.479	12,17	.3115 .3095	7,912 7,861	.3110	7,899	.152 .147	3,86 3,73	.070	1,78	.112 .105	2,845 2,667	.89	22,6	.040	1,02	.500	12,70
MBF2121-11-()	.468 .460	11,89 11,68	.513	13,03	.3435 .3415	8,725 8,674	.3433	8,720	.185 .180	4,70 4,57	.075	1,90	.112 .105	2,845 2,667	.94	23,9	.040	1,02	.500	12,70
MBF2121-12-()	.500 .491	12,70 12,47	.548	13,92	.3745 .3725	9,512 9,462	.3740	9,500	.185 .180	4,70 4,57	.080	2,03	.133 .126	3,378 3,200	1.09	27,7	.040	1,02	.500	12,70

TABLE I (CONT)

PART NUMBER	MINIMUM AVAILABLE GRIP DASH NO.	INSTALLED DIMENSIONS						MECHANICAL PROPERTIES							
		RECOMMENDED HOLE SIZE		J DIA. MIN.	K MAX.	BREAK-OFF LIMITS \triangle		TENSILE STRUCTURAL FAILURE (MIN.)		DOUBLE SHEAR MIN.		LOCKING TORQUE MIN.			
		INCH	mm			INCH	mm	INCH	mm	LBS.	N	LBS.	N	IN-LBS	Nm
MBF2121-5-()	-100	.188 .185	4,27 4,19	.250	6,35	.300	7,62	+.103 -.000	+2,62 -0,00	900	4000	3150	14010	1.0	0,113
MBF2121-6-()	-100	.202 .199	5,13 5,05	.300	7,62	.350	8,89	+.103 -.000	+2,62 -0,00	1400	6230	4600	20460	1.5	0,170
MBF2121-7-()	-100	.231 .228	5,88 5,79	.350	8,89	.400	10,16	+.103 -.000	+2,62 -0,00	1600	7120	6050	26910	2.0	0,226
MBF2121-8-()	-150	.263 .260	6,68 6,60	.400	10,16	.450	11,43	+.103 -.000	+2,62 -0,00	2100	9340	7900	35140	2.5	0,282
MBF2121-9-()	-150	.293 .290	7,44 7,37	.450	11,43	.500	12,70	+.103 -.000	+2,62 -0,00	2600	11565	9800	43590	3.0	0,339
MBF2121-10-()	-150	.315 .312	8,00 7,92	.475	12,06	.550	13,97	+.103 -.000	+2,62 -0,00	3600	16010	11350	50480	3.5	0,400
MBF2121-11-()	-150	.347 .344	8,81 8,74	.525	13,33	.575	14,60	+.103 -.000	+2,62 -0,00	4400	19570	13850	61600	4.0	0,452
MBF2121-12-()	-150	.378 .375	9,60 9,52	.575	14,60	.625	15,87	+.103 -.000	+2,62 -0,00	5000	22240	16450	73170	4.0	0,452

U.S. PATENT NO. 4747202, 4772167 AND 4967463
 EUROPEAN PATENT NO. 0152531 & 0244783

MONOGRAM
 CODE IDENT. NO.
 98524

APPROVED DATE 03-25-85 ECN #4070	NOTICE: THIS DRAWING IS PART OF THE PROPRIETARY ARTICLE HEREIN DISCLOSED. OWNED BY MONOGRAM AEROSPACE FASTENERS, ANY PARTY BY ACCEPTING THIS DOCUMENT ASSUMES CUSTODY THEREOF AND AGREES: A. THE INFORMATION SET FORTH HEREIN IS GIVEN IN CONFIDENCE AND THIS DOCUMENT WILL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART, NOR ITS CONTENTS REVEALED IN ANY MANNER TO ANY PERSON EXCEPT TO MEET THE PURPOSE FOR WHICH IT WAS DELIVERED. B. WITHOUT THE WRITTEN CONSENT OF MONOGRAM AEROSPACE FASTENERS, THIS DOCUMENT AND THE INFORMATION CONTAINED HEREIN UNDER NO CIRCUMSTANCES WILL BE USED IN THE MANUFACTURE OR REPRODUCTION OF THE ARTICLE DISCLOSED, AND DELIVERY OF THIS DOCUMENT SHALL NOT CONSTITUTE ANY RIGHT OR LICENSE TO DO SO.	TITLE BLIND FASTENER REDUCED PROTRUDING HEX. HEAD FOR ADVANCED COMPOSITE MATERIALS A-286 CRES	STANDARD MBF 2121 SHEET 1 OF 2
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MONOGRAM AEROSPACE FASTENERS
3423 SOUTH GARFIELD AVENUE
LOS ANGELES, CALIFORNIA 90040



APPLICABLE SPECIFICATIONS:

PROCUREMENT SPECIFICATION: MBF 2000.
SPECIAL LUBE AND FINISH CODES: MBF 2002.
INSTALLATION & INSPECTION SPECIFICATION: MBF 2003.
PART NUMBER ASSIGNMENT: MBF 2005.

MATERIAL AND HEAT TREAT: NUT: A-286 STAINLESS STEEL PER CHEMICAL REQUIREMENTS OF AMS 5731, AMS 5732, AMS 5734 AND AMS 5737. HEAT TREATED AS REQUIRED FOR PERFORMANCE.
SCREW: A-286 PER THE CHEMICAL REQUIREMENTS OF AMS 5731, AMS 5732, AMS 5734 AND AMS 5737. HEAT TREATED AS REQUIRED FOR PERFORMANCE.
SLEEVE: 304 STAINLESS STEEL PER AMS 5639, HEAT TREATED AS REQUIRED FOR PERFORMANCE.
INSERT: ACETAL PER ASTM D4181.
DRIVE NUT: MILD STEEL.

FINISH: NUT, SLEEVE & SCREW : PASSIVATE PER QQ-P-35. KAL-GARD ANN-RO #1013, CONVERSION COATING OPTIONAL.
INSERT: NONE.

DRIVE NUT: CORROSION RESISTANT COATING COLOR BLACK.

LUBRICANTS: DRY FILM LUBE PER MIL-L-46010 TYPE I OR EVERLUBE #812 PER MIL-L-81329, PARAFFIN WAX, OR CETYL ALCOHOL PER MIL-L-87132.

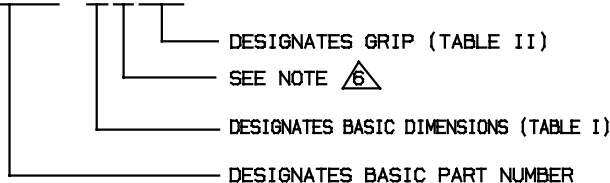
TABLE II

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	27,94
1150	1.100	27,94	1.150	29,21
1200	1.150	29,21	1.200	30,48
1250	1.200	30,48	1.250	31,75
1300	1.250	31,75	1.300	33,02
1350	1.300	33,02	1.350	34,29
1400	1.350	34,29	1.400	35,56
1450	1.400	35,56	1.450	36,83
1500	1.450	36,83	1.500	38,10
1550	1.500	38,10	1.550	39,37
1600	1.550	39,37	1.600	40,64
1650	1.600	40,64	1.650	41,91
1700	1.650	41,91	1.700	43,18

GENERAL NOTES:

1.) EXAMPLE OF PART NUMBER:

MBF 2121 - 6 - 100



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.) HIGH BREAK PARTS DENOTED BY AN "H" IN THE PART NUMBER AS FOLLOWS :

MBF 2121-06-H800

└ DENOTES BREAK-OFF LIMITS RAISED .050" ABOVE VALUES IN TABLE I

4. ALTERNATE HEAD MARKINGS: "MI" AND "O".

5.) COMPOSI-LOK FASTENERS WITH SELECTED COMBINATIONS OF THE ABOVE LUBRICANTS ARE SPECIALLY CODED AND MAY BE SUBSTITUTED FOR EQUIVALENT NON-CODED PARTS AT MANUFACTURER'S OPTION. SEE INTERCHANGEABILITY SPECIFICATION MBF 2007.

6. AN "L" IN PLACE OF THE DASH (-) BETWEEN THE DIAMETER DASH NUMBER AND THE GRIP DASH NUMBER DESIGNATES MODIFIED BREAK-OFF LIMITS OF +.053/-.050. (e.g. MBF 2121(L)-6L200).

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

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REV. LETTER & DATE ECN # 1167 "R" 11-14-01			