



HOWMET FASTENING SYSTEMS
TUCSON OPERATIONS
3724 EAST COLUMBIA STREET
TUCSON, ARIZONA 85714
PHONE (520) 519-7400
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Ti-Matic®
ADVANCED SERIES
ENGINEERING
STANDARD

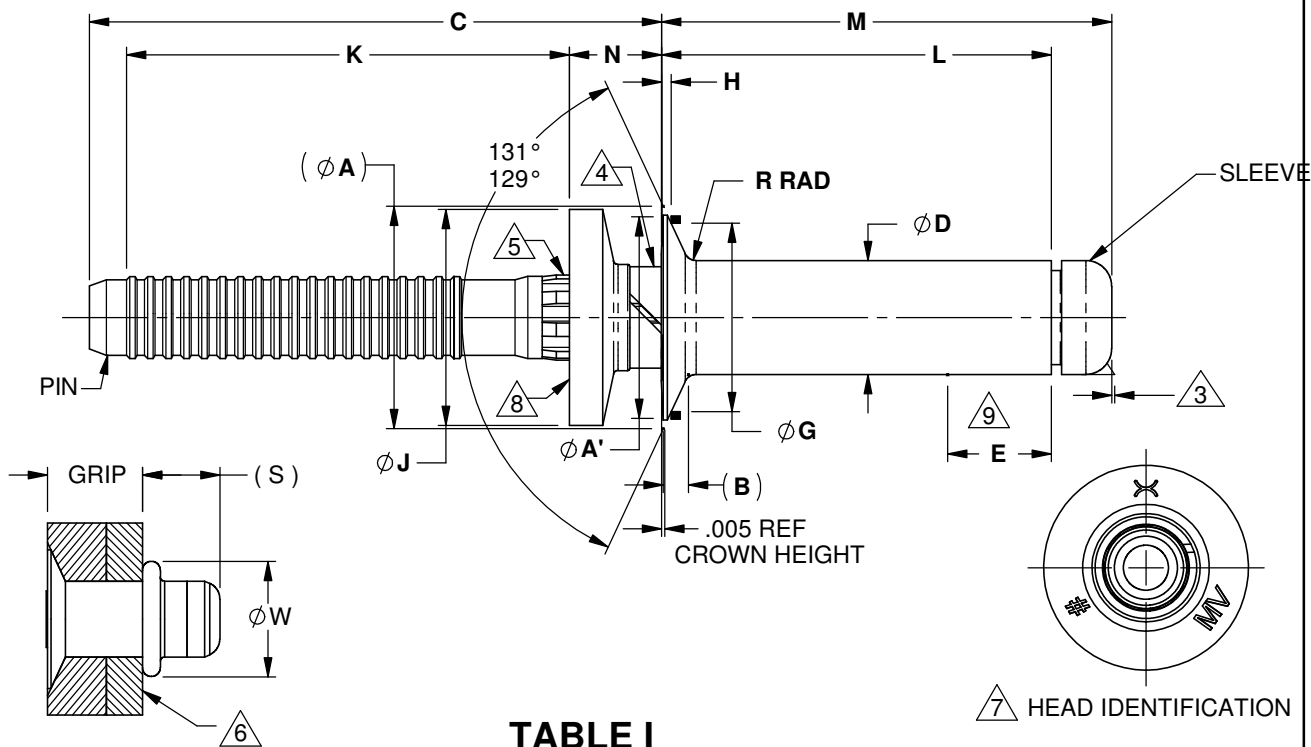


TABLE I

INSTALLED FASTENER

DIA. DASH NO.	Ø A HEAD THEO. INTER. REF	Ø A' MIN.	B HEAD HEIGHT REF	C MIN	Ø D ±.001	E MAX	Ø G GAGE ±.0001	H GAGE HEIGHT	Ø J ±.005 1	K ±.030	N ±.060	R RAD MAX	S MAX DESIGN REF	Ø W MIN.	SINGLE SHEAR STRENGTH LBS 2	TENSILE STRENGTH LBS	SPINDLE RETENTION LBS
-05	.332	.296	.039	.844	.163	.300	.2831	.0188 .0148	.375	.800	.140	.025	.232	.228	1980	810	410
-06	.386	.347	.043	.875	.198	.320	.3271	.0192 .0152		.830	.160	.025	.292	.277	2925	1260	630
-08	.507	.463	.057	1.000	.259	.370	.4319	.0237 .0197		.975	.190	.030	.361	.363	5000	1890	945

- 1. -05 DIA SIZE ALSO AVAILABLE WITH REDUCED O.D. DRIVE ANVIL OF .312±.005. (SEE SHEET 3)
- 2. APPLIES TO GRIPS 05-04 MAX, 06-05 MAX, 08-06 MAX AND GREATER. IN SHORTER GRIPS, A TRUE COMPOSITE SHEAR TEST CANNOT BE PERFORMED.
- 3. TRIM FLASH NOT TO EXCEED .005" MAXIMUM LENGTH ABOVE HEAD OF PIN.
- 4. SOLID OR SPLIT LOCK COLLAR AT MANUFACTURER'S OPTION. SPLIT NOT TO EXCEED .020 WIDTH.
- 5. KNURLED TO RETAIN FASTENER ASSEMBLY. NOT PART OF INSTALLED FASTENER.
- 6. BLIND SIDE HEAD MAY BE INSTALLED ON 7° MAX SLOPE.
- 7. IDENTIFICATION: HUCK SYMBOL, MV (FOR CP TITANIUM SLEEVE MATERIAL) AND GRIP DASH NUMBER.
- 8. OPTIONAL DRIVE WASHER FOR INSTALLATION WITH BLUNT TOOL. NOT PART OF INSTALLED FASTENER.
- 9. SLEEVE DIAMETER "D" MAY BE .002" UNDERSIZED IN THIS AREA.

DIMENSIONS IN INCHES

U	PER ECN 14450 CHANGED ARCONIC LOGO TO HOWMET LOGO		Current Design Activity CAGE Code OHDW7		PROC. SPEC T0106	DRAWN BY J. SCHLOBOHM	
					CHECKED BY	SIGNATURE ON FILE	
ISSUED	7/12/2001	Unimatic® ADVANCE SERIES BLIND BOLT FASTENER, HIGH STRENGTH, PULL-TYPE POSITIVE MECHANICAL LOCK, 130° FLUSH HEAD, (95 KSI SHEAR) TITANIUM/TITANIUM, SINGLE ACTION INSTALLATION, LARGE FOOTPRINT				UAB130-MV	
REVISED	4/1/2020					SK12742	
PAGE	1 OF 3						

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TABLE II

5 DIAMETER GRIP TABULATION						
GRIP DASH NO.	OVERLAP GRIP MIN	DESIGN GRIP RANGE		OVERLAP GRIP MAX	05	
		MIN.	MAX.		(L)	M MAX
02	NONE	.094	.157	.173	.336	.476
03	.146	.156	.220	.236	.398	.539
04	.209	.219	.282	.298	.460	.602
05	.271	.281	.345	.361	.523	.664
06	.334	.344	.407	.423	.585	.727
07	.396	.406	.470	.486	.648	.789
08	.459	.469	.532	.548	.710	.852
09	.521	.531	.595	.611	.773	.914
10	.584	.594	.657	.673	.835	.977
11	.646	.656	.720	.735	.898	1.039
12	.709	.719	.782	.798	.960	1.102
13	.771	.781	.845	.860	1.023	1.164
14	.834	.844	.907	.923	1.085	1.227
15	.896	.906	.970	.985	1.148	1.289
16	.959	.969	1.032	1.048	1.210	1.352

TABLE III

6 DIAMETER GRIP TABULATION						
GRIP DASH NO.	OVERLAP GRIP MIN	DESIGN GRIP RANGE		OVERLAP GRIP MAX	06	
		MIN.	MAX.		(L)	M MAX
02	NONE	.120	.157	.173	.355	.521
03	.140	.156	.220	.236	.417	.583
04	.203	.219	.282	.298	.480	.646
05	.265	.281	.345	.361	.542	.708
06	.328	.344	.407	.423	.605	.771
07	.390	.406	.470	.486	.667	.833
08	.453	.469	.532	.548	.730	.896
09	.515	.531	.595	.611	.792	.958
10	.578	.594	.657	.673	.855	1.021
11	.640	.656	.720	.736	.917	1.083
12	.703	.719	.782	.798	.980	1.146
13	.765	.781	.845	.861	1.042	1.208
14	.828	.844	.907	.923	1.105	1.271
15	.890	.906	.970	.986	1.167	1.333
16	.953	.969	1.032	1.048	1.230	1.396

TABLE IV

8 DIAMETER GRIP TABULATION						
GRIP DASH NO.	OVERLAP GRIP MIN	DESIGN GRIP RANGE		OVERLAP GRIP MAX	08	
		MIN.	MAX.		(L)	M MAX
03	.140	.156	.220	.236	.479	.645
04	.203	.219	.282	.298	.541	.707
05	.265	.281	.345	.361	.604	.770
06	.328	.344	.407	.423	.666	.832
07	.390	.406	.470	.486	.729	.895
08	.453	.469	.532	.548	.791	.957
09	.515	.531	.595	.611	.854	1.020
10	.578	.594	.657	.673	.916	1.082
11	.640	.656	.720	.736	.979	1.145
12	.703	.719	.782	.798	1.041	1.207
13	.765	.781	.845	.861	1.104	1.270
14	.828	.844	.907	.923	1.166	1.332
15	.890	.906	.970	.986	1.229	1.395
16	.953	.969	1.032	1.048	1.291	1.457
17	1.015	1.031	1.095	1.111	1.354	1.520
18	1.078	1.094	1.157	1.173	1.416	1.582
19	1.140	1.156	1.220	1.236	1.479	1.645
20	1.203	1.219	1.282	1.298	1.541	1.707

TABLE V

UAB130-MV INSTALLED WEIGHT LBS (1000 PCS.)							
GRIP	5 DIA	6 DIA	8 DIA	GRIP	5 DIA	6 DIA	8 DIA
-02	1.39	2.25		-12	3.58	5.39	10.06
-03	1.59	2.48	5.10	-13	3.80	5.71	10.61
-04	1.82	2.81	5.65	-14	4.02	6.03	11.16
-05	2.04	3.13	6.20	-15	4.24	6.36	11.71
-06	2.26	3.45	6.75	-16	4.46	6.68	12.26
-07	2.48	3.78	7.30	-17	-	-	12.81
-08	2.70	4.10	7.85	-18	-	-	13.36
-09	2.92	4.42	8.41	-19	-	-	13.91
-10	3.14	4.75	8.96	-20	-	-	14.46
-11	3.36	5.07	9.51				

DIMENSIONS IN INCHES

U	PER ECN 14450 CHANGED ARCONIC LOGO TO HOWMET LOGO			Current Design Activity CAGE Code 0HDW7		PROC. SPEC T0106	DRAWN BY J. SCHLOBOHM	
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	REVISID	4/1/2020					UAB130-MV	
PAGE	2 OF 3					SK12742		

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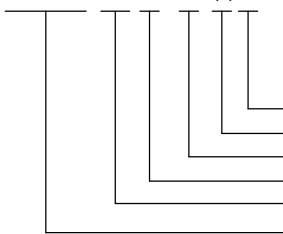
TABLE VI

FINISH CODE	MATERIAL			FINISH			LUBE
	SLEEVE	PIN	LOCK COLLAR	SLEEVE	PIN	LOCK COLLAR	
NONE	CP TITANIUM PER ASTM-B348	38-6-44 TITANIUM PER AMS 4957	A-286 CRES PER AMS 5737	NONE	NONE	PASSIVATE PER AMS2700	△10
AC	CP TITANIUM PER ASTM-B348	38-6-44 TITANIUM PER AMS 4957	A-286 CRES PER AMS 5737	HI-KOTE 1 ALUMINUM COAT PER NAS4006 AND BMS 10-85	NONE	PASSIVATE PER AMS2700	△10
AT	CP TITANIUM PER ASTM-B348	38-6-44 TITANIUM PER AMS 4957	A-286 CRES PER AMS 5737	BLUE ANODIZE PER ISO 8080	NONE	PASSIVATE PER AMS2700	△10

△10 LUBRICATION:
 SERRATED PIN: NONE OR CETYL ALCOHOL (CHLORINE FREE) PER AS87132 TYPE 1
 OR DRY FILM LUBE PER AS5272 AT MANUFACTURE'S OPTION.
 MECHANICAL LOCK: NONE OR LOX COMPATIBLE DRY FILM LUBE AT MANUFACTURER'S OPTION.
 SLEEVE : NO SUFFIX AND AC SUFFIX: NONE OR CETYL ALCOHOL (CHLORINE FREE) PER AS87132
 TYPE 1 OR DRY FILM LUBE PER AS5272 AT MANUFACTURER'S OPTION.

△11 LUBE AND LOCK COLLAR MATERIAL AT MANUFACTURER'S OPTION.

PART NUMBER
 UAB130-MV06 -06 (*) R



CODE "R" FOR REDUCED DRIVE ANVIL DIAMETER ON -05 DIA SIZE ONLY
 FINISH CODE - SEE TABLE VI
 GRIP NUMBER IN 1/16"
 NOMINAL SHANK DIAMETER IN 32nd INCHES.
 MATERIAL DESIGNATOR - TITANIUM/TITANIUM.
 Unimatic® ADVANCE SERIES BLIND BOLT FASTENER, HIGH STRENGTH,
 PULL-TYPE, POSITIVE MECHANICAL LOCK, 130° FLUSH HEAD,
 LARGE FOOTPRINT, DRIVE WASHER INCLUDED.

DIMENSIONS IN INCHES

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REVISED	4/1/2020					
PAGE	3 OF 3				SK12742	

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