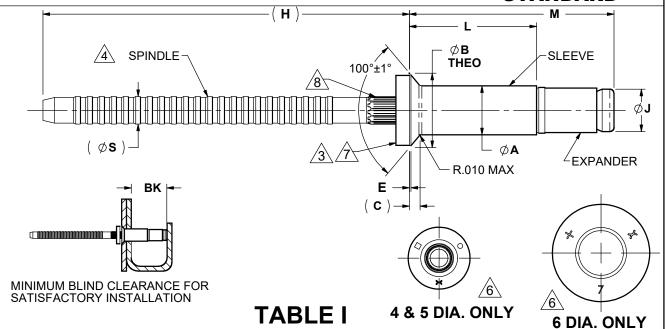


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NOMINAL PART NUMBER	NOM. DIA. NO.	Ø A +.003 001	Ø B THEO DIA. ±.004	BK MIN.	(C)	E	(H)	Ø J MAX	(ØS)	SINGLE SHEAR	TENSILE 1	INSTALLED SPINDLE RETENTION	HOLE LIMITS
HR3224-4-()	-4	.126	.192	.355	.028	.010 .002	.870	.129	.081		250	125	.132 .129
HR3224-5-()	-5	.157	.243	.370	.037	.012 .002	.940	.160	.100	SEE SHEET THREE	390	200	.164 .160
HR3224-6-()	-6	.189	.299	.415	.046	.012 .002	.940	.192	.117		560	290	.196 .192

NOTES:

1. MINIMUM ULTIMATE SHEAR AND TENSILE STRENGTH, IN POUNDS, OF INSTALLED RIVET.

2. LUBRICATION: LUBRICATE PER NAS 1686

3. GOLD COLOR DRIVING ANVIL IDENTIFIES NOMINAL DIAMETER RIVET.

 $\stackrel{\frown}{4.}$ SPINDLE CONFIGURATION - PULLING SERRATION DIMENSIONS SHALL BE PER NAS 9315.

5. APPLIES TO GRIPS 4-03 MAX, 5-03 MAX, 6-04 MAX AND UP.

6. IDENTIFICATION: HUCK SYMBOL, "+" SIGN AND GRIP NUMBER (ϕ 6 HEAD STYLE), OR HUCK SYMBOL, A "DOT" (ALUM/CRES MATERIAL) AND A "SQUARE" (ϕ 4 & ϕ 5 HEAD STYLE). LOCATION AND DIRECTION OPTIONAL.

 $\stackrel{\frown}{1}$ WASHER ANVIL MAY BE LOCATED IN THIS AREA AND IS NOT PART OF THE INSTALLED FASTENER.

② OPTIONAL SPLINE CONFIGURATION. KNURLED TO RETAIN FASTENER ASSEMBLY. NOT PART OF INSTALLED FASTENER.

9. STYLE A, CLASS 3, CODE E PER NAS 1686.

	STILL	A, CLASS S, CODE E PER NAS 1000.			DIMENSI	ONS IN INCHES
М	M PER ECN 15111: CORRECTED MINIMUM GRIP FOR -5-02.		UM GRIP CURRENT DESIGN ACTIVITY		DRAWN BY	C. MARTINEZ
141			CAGE CODE 0HDW7	SPEC NAS1686	CHECKED BY	SIGNATURE ON FILE
ISSUE	D 10/8/1993	Huckl	HR3224-()-()			
REVIS	D 07/27/2022		100° FLUSH SHEAR HEAD,			<i>)</i> -(<i>)</i>
PAG	E 1 OF 3	5056 ALUMINUM SLEE	BLR139			



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TABLE II

	HR	3224-4	(.126 D	IA.)	HR3224-5 (.157 DIA.)				HR3224-6 (.189 DIA.)			
GRIP DASH NO.	GF	SIGN RIP NGE	L +.000	M MAX	GF	SIGN RIP NGE	L +.000	+.000 M MAX	GF	SIGN RIP NGE	L +.000	M MAX
	MIN.	MAX.	030	IVIAX	MIN.	MAX.	030	WAX	MIN.	MAX.	030	IVIAX
02	.045*	.125	.224	.45	.065	.125	.230	.47	.080	.125	.262	.51
03	.126	.187	.287	.51	.126	.187	.293	.53	.126	.187	.325	.57
04	.188	.250	.349	.57	.188	.250	.355	.59	.188	.250	.387	.64
05	.251	.312	.412	.63	.251	.312	.418	.65	.251	.312	.450	.70
06	.313	.375	.474	.70	.313	.375	.480	.72	.313	.375	.512	.76
07	.376	.437	.537	.76	.376	.437	.543	.77	.376	.437	.575	.82
08	.438	.500	.599	.82	.438	.500	.605	.84	.438	.500	.637	.88
09	.501	.562	.662	.88	.501	.562	.668	.90	.501	.562	.700	.95
10					.563	.625	.730	.96	.563	.625	.762	1.01
11 12					.626	.687	.793	1.02	.626 .688	.687 .750	.825 .887	1.07 1.13
12									.000	.750	.007	1.13

^{*} FOR FASTENERS MANUFACTURED PRIOR TO 1-1-04, MIN GRIP WAS .063

TABLE III

INSTALLED WEIGHT-LBS/1000 PCS								
HR3	224-4	HR3	224-5	HR3224-6				
02	.73	02	1.14	02	1.75			
03	.88	03	1.36	03	2.07			
04	1.01	04	1.58	04	2.40			
05	1.15	05	1.80	05	2.73			
06	1.28	06	2.02	06	3.06			
07	1.42	07	2.24	07	3.39			
80	1.55	08	2.46	08	3.72			
09	1.69	09	2.68	09	4.05			
		10	2.90	10	4.38			
		11	3.12	11	4.71			
	•		_	12	5.04			

DIMENSIONS IN INCHES

M	PER ECI FOR -5-0	N 15111: CORRECTED MINIMUM GRIP 02.	CURRENT DESIGN ACTIVITY CAGE CODE 0HDW7	PROCUREMENT SPEC NAS1686	DRAWN BY CHECKED BY	C. MARTINEZ SIGNATURE ON FILE
ISSUED	10/8/1993	Huck	MAX®, NOMINAL	HR	3224-()-()
REVISED	07/27/2022		100° FLUSH SHEAR HEAD,			<i>/</i> -(<i>)</i>
PAGE	2 OF 3	5056 ALUMINUM SLEE	EVE/A-286 STAINLESS STEEL PIN		BLR13	9



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ENGINEERING STANDARD

TABLE I V

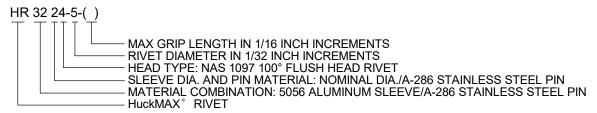
SINGLE S	HEAR S	TRENGTH	SINGLE SHEAR STRENGTH			SINGLE SHEAR STRENGTH			
NOMINAL DIAMETER	GRIP DASH NO.	MINIMUM SINGLE SHEAR STRENGTH (LBS)	NOMINAL DIAMETER	GRIP DASH NO.	MINIMUM SINGLE SHEAR STRENGTH (LBS)	NOMINAL DIAMETER	GRIP DASH NO.	MINIMUM SINGLE SHEAR STRENGTH (LBS)	
	-02	411		-02	B		-02	B	
.126	-03	531	.157	-03	714	.189	-03	918	
0	-04	651		-04	862		-04	1095	
	-05	664		-05	1010		-05	1310	
				-06	1030		-06	1455	
		·					-07	1480	

A FOR RIVET GRIPS GREATER THAN LISTED, USE HIGHEST VALUE SHOWN FOR THE DIAMETER
B PARTS TOO SHORT TO BE TESTED.

TABLE V

RIVET COMPONENTS	MATERIAL	FINISH
SLEEVE	5056 ALUMINUM PER QQ-A-430	CLEAR CHROMATE PER MIL-DTL-5541, TYPE 1, CLASS 1A
SPINDLE	A-286 STAINLESS STEEL AMS 5737	PASSIVATE PER AMS-QQ-P-35 AND AMS2700 METHOD 1, TYPE 2 OR 8, CLASS 1
EXPANDER	A-286 STAINLESS STEEL AMS 5737	PASSIVATE PER AMS-QQ-P-35 AND AMS2700 METHOD 1, TYPE 2 OR 8, CLASS 1
WASHER	ALLOY STEEL	GOLD CHROMATE
LOCK RING	A-286 STAINLESS STEEL AMS 5731	PASSIVATE PER AMS-QQ-P-35 AND AMS2700 METHOD 1, TYPE 2 OR 8, CLASS 1

PART NUMBER EXAMPLE:



					DIMENSI	ONS IN INCHES
М	M PER ECN 15111: CORRECTED MINIMUM GRIP		CURRENT DESIGN ACTIVITY	PROCUREMENT SPEC	DRAWN BY	C. MARTINEZ
141	FOR -5-0	02.	CAGE CODE 0HDW7		CHECKED BY	SIGNATURE ON FILE
ISSUED	10/8/1993	Huckl	MAX®, NOMINAL	HR	3224-()-()
REVISED	07/27/2022	100° FLUSH SHEAR HEAD,			322 4 -()-()
PAGE	3 OF 3	5056 ALUMINUM SLEE	BLR139			

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