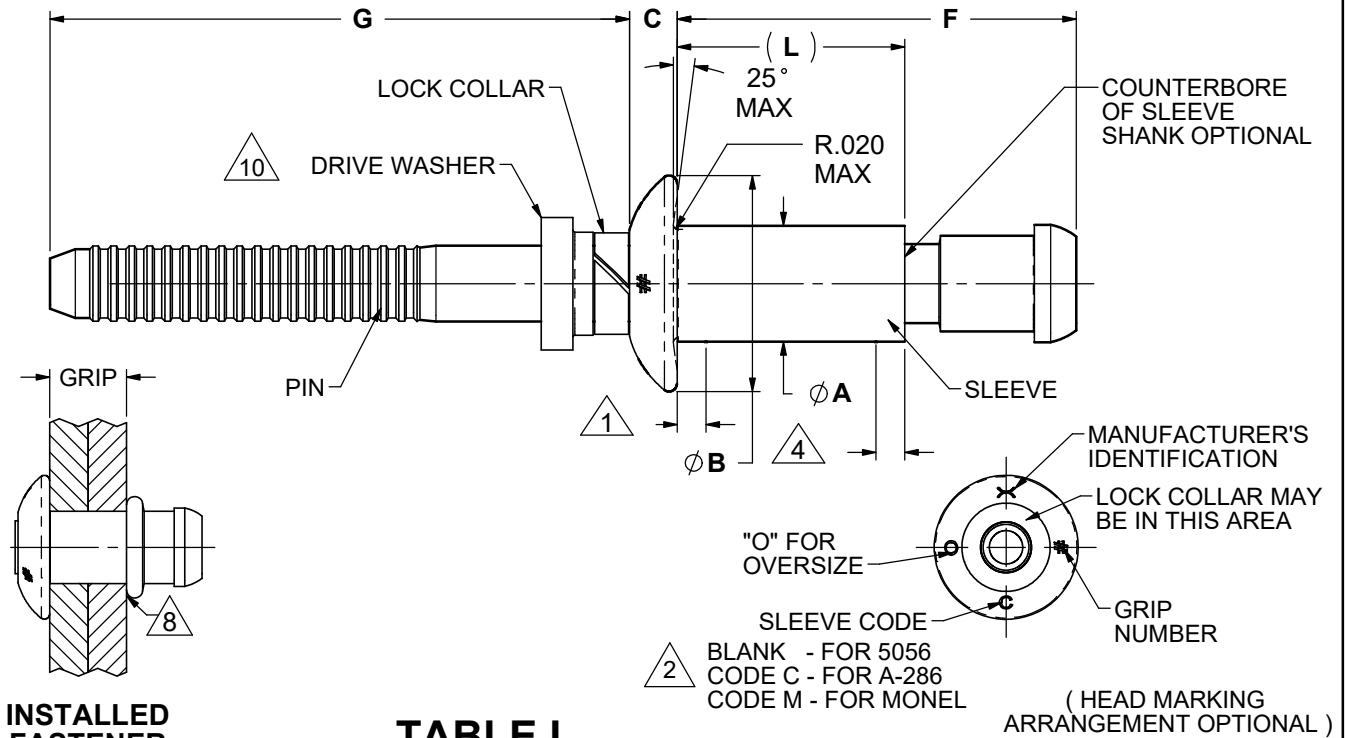




Howmet Fastening Systems
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Unimatic® Blind Rivet ENGINEERING STANDARD



INSTALLED
FASTENER


TABLE I

PART NUMBER	DIA. SIZE	1/64 OVER SIZE NOM.	$\varnothing A$ +.003 -.001 3	$\varnothing B$	C +.010 -.000	G MIN.	SHEAR 6			TENSILE 6		HOLE LIMITS 5
							ALUM.	MONEL	A-286 CRES	ALUM.	MONEL & A-286 CRES	
OSMLSP-()04	04	.140	.140	.250±.012	.054	.788	560	1090	1235	325	675	.146 .143
OSMLSP-()05	05	.173	.173	.312±.016	.067	.788	855	1665	1880	490	1050	.180 .176
OSMLSP-()06	06	.201	.201	.375±.019	.080	.788	1165	2395	2530	715	1500	.209 .205
OSMLSP-()08	08	.266	.266	.500±.025	.107	1.000	2015	4250	4495	1200	2600	.275 .271

NOTES:

- 1 .001 SHANK DIAMETER INCREASE PERMISSIBLE WITHIN .100 FROM BASE OF HEAD.
- 2 MARKING OF ALUMINUM RIVETS MAY BE ON SPINDLE AT MANUFACTURER'S OPTION.
- 3 "A" DIAMETER MAY BE .001 LARGER THAN SHOWN FOR CADMIUM PLATED OR ALUMINUM COATED SLEEVES.
- 4 "A" DIAMETER MAY BE .001 SMALLER BEYOND MINIMUM GRIP LENGTH.
- 5 ADJUST AS REQUIRED, WITHIN THESE LIMITS, TO SUIT MATERIAL AND APPLICATION.
- 6 MINIMUM ULTIMATE SHEAR AND TENSILE STRENGTHS, IN POUNDS, OF INSTALLED BLIND RIVET.

DIMENSIONS IN INCHES

M	PER ECN 15101: CHROMATE ALUMINUM COAT INACTIVE FOR NEW DESIGN AND PROCUREMENT.		CURRENT DESIGN ACTIVITY CAGE CODE 0HDW7			PROCUREMENT SPEC NAS1900	DRAWN BY J. SCHLOBOHM	
						CHECKED BY	SIGNATURE ON FILE	
	ISSUED	6/29/1977	Unimatic® BLIND RIVET, GENERAL PURPOSE, PROTRUDING HEAD, BULBED, MECHANICAL-LOCK-SPINDLE, 1/64" OVERSIZE, 5056 ALUMINUM, MONEL & A-286 CRES RIVET SLEEVES			OSMLSP-()		
	REVISED	07/21/2022						
	PAGE	1 OF 3				BLR123		

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7. GRIP SYMBOL FOR -00 SHALL BE GREEK LETTER THETA "Θ".
8. BLIND SIDE HEAD MAY BE INSTALLED ON 5° MAXIMUM SLOPE.
9. THE RIVETS COVERED IN THIS STANDARD ARE INTENDED FOR USE AS A REPAIR/REPLACEMENT FOR NAS1919 OR FOR NEW DESIGN APPLICATIONS.
10. OPTIONAL DRIVE WASHER FACILITATES INSTALLATION WITH BLUNT NOSE TOOL. DRIVE WASHER NOT PART OF INSTALLED FASTENER.
11. COMPLETE COVERAGE OF SLEEVE INTERNAL FEATURES IS NOT REQUIRED. OVER SPRAY ONTO THE INTERNAL FEATURES IS ACCEPTABLE.
12. THIS RIVET IS INTENDED FOR GENERAL PURPOSE USE IN BOTH THICK SHEET STACKUP AND IN THIN SHEET APPLICATIONS.
13. RIVETS FOR SINGLE ACTION (NON-SHIFTING) TOOLING SHALL BE IDENTIFIED WITH A DEPRESSED "S" ON SPINDLE HEAD OR COLORED YELLOW ON SPINDLE (LOCATION OPTIONAL).
14. CHROMATE ALUMINUM COAT INACTIVE FOR NEW DESIGN AND PROCUREMENT. USE UNTIL DEPLETION. SUPERSEDED BY NON-CHROMATE ALUMINUM COAT.


TABLE I I

GRIP DASH NO.	OSMLSP-()04 (.125 DIA. NOM)				OSMLSP-()05 (.156 DIA. NOM)				OSMLSP-()06 (.190 DIA. NOM)				OSMLSP-()08 (.250 DIA. NOM)			
	GRIP RANGE		L REF	F MAX	GRIP RANGE		L REF	F MAX	GRIP RANGE		L REF	F MAX	GRIP RANGE		L REF	F MAX
	MIN.	MAX.			MIN.	MAX.			MIN.	MAX.			MIN.	MAX.		
01	.025	.062	.198	.338	.031	.062	.227	.378	.037	.062	.251	.431				
02	.063	.125	.260	.443	.063	.125	.273	.478	.063	.125	.287	.526	.063	.125	.335	.606
03	.126	.187	.323	.568	.126	.187	.336	.602	.126	.187	.350	.651	.126	.187	.397	.731
04	.188	.250	.385	.693	.188	.250	.398	.727	.188	.250	.412	.776	.188	.250	.460	.856
05	.251	.312	.448	.818	.251	.312	.461	.852	.251	.312	.475	.901	.251	.312	.522	.981
06	.313	.375	.510	.943	.313	.375	.523	.977	.313	.375	.537	1.026	.313	.375	.585	1.106
07					.376	.437	.586	1.102	.376	.437	.600	1.151	.376	.437	.647	1.231
08					.438	.500	.648	1.227	.438	.500	.662	1.276	.438	.500	.710	1.356
09					.501	.562	.711	1.352	.501	.562	.725	1.401	.501	.562	.772	1.481
10					.563	.625	.773	1.477	.563	.625	.787	1.526	.563	.625	.835	1.606
11									.626	.687	.850	1.651	.626	.687	.897	1.731
12									.688	.750	.912	1.776	.688	.750	.960	1.856
13													.751	.812	1.022	1.981
14													.813	.875	1.085	2.106

EXAMPLES OF PART NUMBERS:

OSMLSP-B05-04 • 5056 ALUMINUM RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250
OSMLSP-B05-04EL • 5056 ALUMINUM RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, DICHRONITE DL-5 DRY FILMLUBRICANT (PIN ONLY).
OSMLSP-B05-04U • 5056 ALUMINUM RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, OPTIONAL DRIVE WASHER
OSMLSP-EU05-04 • A-286 CRES RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, PASSIVATE FINISH.
OSMLSP-EU05-04C • A-286 CRES RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, CADMIUM PLATED SLEEVE.
OSMLSP-M05-04 • MONEL RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, UNPLATED SLEEVE.
OSMLSP-M05-04A • MONEL RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, ALUMINUM COATED SLEEVE
OSMLSP-M05-04C • MONEL RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, CADMIUM PLATED SLEEVE.
OSMLSP-M05-04EL • MONEL RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, DICHRONITE DL-5 DRY FILM LUBRICANT (PIN ONLY).
OSMLSP-M05-04P • MONEL RIVET, .173 DIAMETER, GRIP RANGE .188 TO .250, LUBRICATED AS REQUIRED.

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	REVISED	07/21/2022								
	PAGE	2 OF 3								BLR123

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TABLE III

RIVET COMPONENTS	COMPOSITION B	COMPOSITION EU	COMPOSITION M
COMPONENTS			
SLEEVE	5056 ALUMINUM PER QQ-A-430	A-286 CRES PER CHEMICAL RQMT OF AMS5737	MONEL PER QQ-N-281
SPINDLE	2024 ALUMINUM PER QQ-A-430	A-286 CRES PER CHEMICAL RQMT OF AMS5737	A-286 CRES PER CHEMICAL RQMT OF AMS5737
LOCK RING	5056 ALUMINUM PER QQ-A-430	A-286 CRES PER CHEMICAL RQMT OF AMS5737 OR 316 CRES (UNS S31600) PER CHEMICAL RQMT OF AMS5690	A-286 CRES PER CHEMICAL RQMT OF AMS5737, MONEL PER QQ-N-281, OR 316 CRES (UNS S31600) PER CHEMICAL RQMT OF AMS5690
FINISHES			
SLEEVE	• NONE • AVAILABLE WITH SPECIAL COATINGS. SEE CODES BELOW	• PASSIVATE PER AMS2700 AND AMS-QQ-P-35 • CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3 • ALUMINUM COAT PER NAS4006	• NONE • CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3 • ALUMINUM COAT PER NAS4006
SPINDLE	CHEMICALLY SURFACE TREAT PER MIL-DTL-5541, CL 1A	PASSIVATE PER AMS2700 AND AMS-QQ-P-35	PASSIVATE PER AMS2700 AND AMS-QQ-P-35
LOCK RING	• NONE • CHEMICALLY SURFACE TREAT PER MIL-DTL-5541, CL 1A	PASSIVATE PER AMS2700 AND AMS-QQ-P-35	PASSIVATE PER AMS2700 AND AMS-QQ-P-35, FOR A-286 & 316 CRES ONLY

FIRST SERIES OF TWO DIGIT NUMBERS FOLLOWING MATERIAL DESIGNATOR IS DIAMETER IN .0312 INCREMENTS.

SECOND SERIES OF TWO DIGIT NUMBERS FOLLOWING MATERIAL DESIGNATOR IS MAXIMUM GRIP IN .0625 INCREMENTS.

ADD "A" AFTER SECOND SERIES OF TWO DIGIT NUMBERS FOR ALUMINUM COATING PER NAS 4006 $\triangle 14$

ADD "B" AFTER BASIC NUMBER FOR COMPOSITION B ALUMINUM RIVET.

ADD "C" AFTER SECOND SERIES OF TWO DIGIT NUMBERS FOR CADMIUM PLATED RIVET SLEEVE.

ADD "EL" AFTER SECOND SERIES OF TWO DIGIT NUMBERS FOR DICHRONITE DL-5 DRY FILM LUBRICANT (PIN ONLY).

ADD "EU" AFTER BASIC NUMBER FOR COMPOSITION EU A-286 CRES RIVET.

ADD "FC" AFTER SECOND SERIES OF TWO DIGIT NUMBERS OF COMPOSITION B RIVETS FOR CHEMICAL FILM PER MIL-DTL-5541, CL 1A.

ADD "M" AFTER BASIC NUMBER FOR COMPOSITION M MONEL RIVET.

ADD "P" AFTER SECOND SERIES OF TWO DIGIT NUMBERS FOR DRY FILM LUBRICATION OR NONE AS REQUIRED TO DESIGNATE RIVET MAY BE SLOSH CLEANED WITH A-A-59281 CLEANER BEFORE INSTALLATION.

ADD "U" AFTER SECOND SERIES OF TWO DIGIT NUMBERS FOR DRIVE WASHER FOR BLUNT NOSED TOOL INSTALLATION.

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PAGE	3 OF 3				

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