aerospatiale TECHNICAL MANAGEMENT STANDARDS DEPT.	«HUCK» BLIND RIVET - ROUND HEAD - STAINLESS STEEL AND MONEL - TYPE MLSP -	GENERAL DESIGN MANUAL ASN-A0031

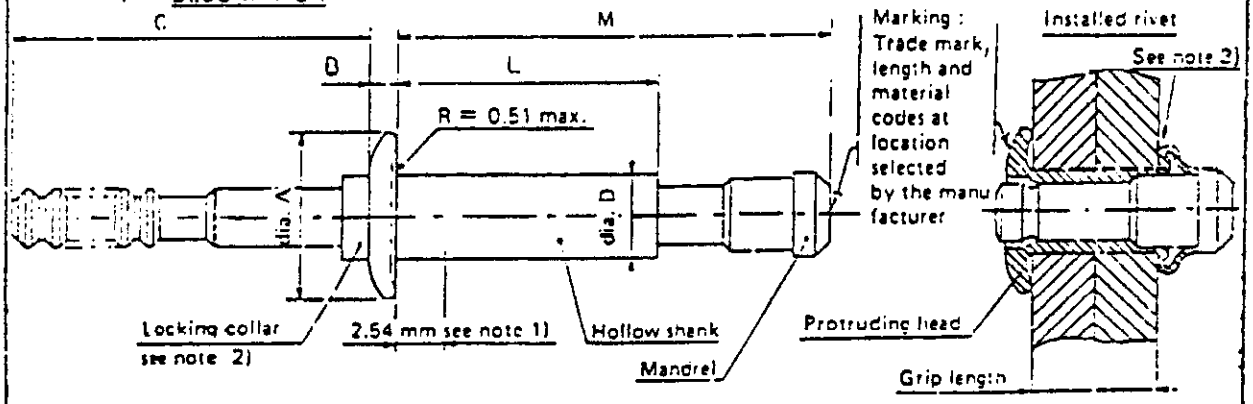
- This document complies with the rules defined in ASN 000.06 and may have been subjected to particular selections.
- Where no particular selection is specified, it is applicable without restriction.

This document is based on HUCK Co. document and standard ASN 542.19 and supersedes the latter

Dimensions in millimetres and inches

SUMMARY

1 – DESCRIPTION

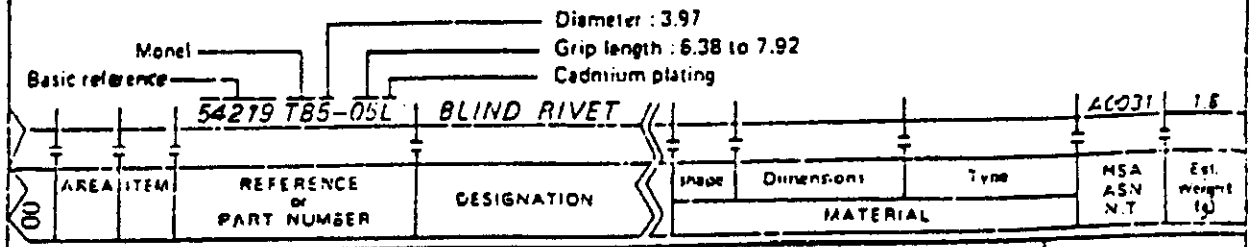


NOTES - 1) *Over this length, the diameter of the hollow shank may exceed the max. «D» dia. by 0.025 mm*
2) *Locking collar to be in one piece or split at manufacturer's discretion.*
3) *These rivets may be installed on non parallel or curved faces. The permissible tolerances are given in ASN-A0025.*

2 – CODED REFERENCE

The coded reference of these rivets consists of the basic reference 54219 *followed by :*
- *the material code of the hollow shank (see table § 4),*
- *the diameter code (see table § 3),*
- *the length code, depending on the grip length (see table § 6),*
- *the hollow shank protective treatment code, if applicable (see table § 4).*

Example of drawing call-out :



Nominal diameter		Diameter code	A		B		C min		D		Installat° hole diameter b)		Min. breaking load a)		
													Shearing (N)		Tensile
in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	Monel	Stainless steel	(N)
1/8	3,18	4	.262 .238	6,65 6,05	.064 .054	1,62 1,37	.788	20,02	.128 .124	3,25 3,15	.132 .129	3,35 3,28	4537	4848	3002
5/32	3,97	5	.328 .296	8,33 7,52	.077 .067	1,96 1,70			.159 .155	4,04 3,94	.164 .160	4,16 4,06	6961	7428	4670
3/16	4,76	6	.394 .356	10,00 9,04	.090 .080	2,29 2,03			.190 .186	4,82 4,73	.196 .192	4,98 4,87	10053	10675	6672

Diameter code	Weight of installed rivets (g)				HUCK reference N° *	
	Shortest rivet		Supplement per length increment			
	Monel	Stainless steel	Monel	Stainless steel	Monel	Stainless steel
4	0,59	0,58	0,11	0,11	MLSP-M4	MLSP-EU4
5	1,10	1,07	0,17	0,16	MLSP-M5	MLSP-EU5
6	1,95	1,74	0,25	0,23	MLSP-M6	MLSP-EU6

NOTES : a) *The strength values are equal to or greater than those specified in documents AFS 40911 or NAS 1400. They correspond to installed rivets.*

b) *The dimensions of the installation hole are in compliance with those specified in documents MS 33522 (type II) and NAS 1500.*

c) *The dimensions given for the cadmium plated hollow shank are those before protective treatment, they can be 0.025 mm larger after treatment.*

Recommended limit temperatures : *+ 427° C for monel and + 650° C for stainless steel, to be justified by tests carried out under operating conditions.*

4 – MATERIALS – PROTECTIVE TREATMENTS

Component	MATERIAL	Code	PROTECTIVE TREATMENT	Code
Hollow shank	*Monel 400*	TB	*Cadmium plating QQ-P-416, type II – Class 3*	L
			None	None
	Stainless steel A 286 (AISI 660)	CC	*Passivated QQ-P-35*	None
Mandrel and collar	*Stainless steel A 286 (AISI 660)*		*Passivated QQ-P-35*	

5 – PROVISIONING SPECIFICATION : *NAS 1900.*

* To be followed by length code and if required by letter C for cadmium plated hollow shank.

6 – RIVET LENGTH CODE VERSUS GRIP LENGTH AND DIAMETERS

Length code	Grip length		Diameter code																	
			4						5						6					
			L max		M max		Stock		L max		M max		Stock		L max		M max		Stock	
	in	mm	in	mm	in	mm	Monel	Stainless st	in	mm	in	mm	Monel	Stainless st	in	mm	in	mm	Monel	Stainless st
01	e) .062	e) 1.57	.198	5.03	.338	8.58	+	+	.227	5.76	.378	9.60			.251	6.37	.431	10.94	+	+
02	.063 .125	1.60 3.17	.260	6.60	.443	11.25	–	+	.263	6.68	.478	12.14	+	+	.287	7.29	.525	13.26	–	–
03	.126 .187	3.20 4.75	.323	8.20	.568	14.42	+	+	.326	8.28	.602	15.29	+	+	.350	8.89	.651	16.53	+	+
04	.188 .250	4.78 6.35	.385	9.78	.693	17.60	+	+	.388	9.85	.727	18.46	+	+	.412	10.46	.778	19.71	–	–
05	.251 .312	6.38 7.92	.448	11.38	.818	20.77	+	f	.451	11.45	.852	21.64	+	+	.475	12.06	.901	22.89	+	+
06	.313 .375	7.95 9.52	.510	12.95	.943	23.95	f	f	.513	13.03	.977	24.81	f	f	.537	13.64	1.026	26.06	+	–
07	.376 .437	9.55 11.10							.576	14.63	1.102	27.99	f		.600	15.24	1.151	29.23	f	f
08	.438 .500	11.22 12.70							.638	16.20	1.227	31.16	f		.662	16.81	1.276	32.41	f	f
09	.501 .562	12.73 14.27													.725	18.41	1.401	35.58	f	

NOTES :

e) *For code 4-01 rivets, the minimum grip length is : 0.025 in., 0.64 mm*
For code 5-01 rivets, the minimum grip length is : 0.031 in., 0.79 mm
For code 6-01 rivets, the minimum grip length is : 0.037 in., 0.94 mm

f) *Rivets shown in the hatched areas are not immediately available but can be manufactured on request.*

g) *Longer rivets can be available if required.*

APPLICABLE INFORMATION :

Company reference number (CMS)

The radix of CMS for these rivets is : 5 5 2 1 . . . . . .

Manufacturer : *(non exhaustive list)*

NAME	REFERENCE
HUCK (AEROTECHNIC)	*See table § 3 **

* *The reference N° is similar to that used by AEROSPATIALE except that :*
– Radix 54219TB or 54219CC is replaced by serial number MLSP-M (monel) or MLSP-EU (stainless steel).

Example : AEROSPATIALE 54219 TB5-05
HUCK MLSP-M5-05

Applicable documents

– *These rivets are in compliance with Standard NAS 1919 for corresponding length and diameter codes.*
– *Precautions to be taken for correct installation and proper use of HUCK blind rivets : IFM n° 291.*
– *HUCK blind rivets. General and installation : ASN-A0025.*

Equivalent documents

Standard ASN-A0031 supersedes Standard ASN 542.19, issue D.
The rivets defined in these 2 documents, as well as their coded reference, are identical.