aerospatiale TECHNICAL MANAGEMENT STANDARDS DEPt.	«HUCK» BLIND RIVET 100° CSK HEAD STAINLESS STEEL and MONEL TYPE MLS 100	GENERAL DESIGN MANUAL ASN-A0030

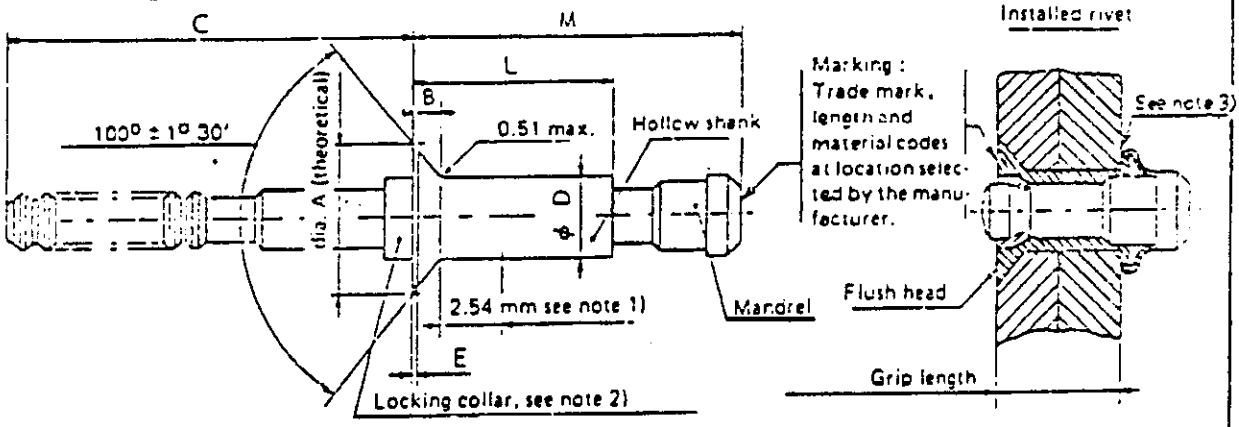
- This document complies with the rules defined in ASN 000 06 and may have been subjected to particular selections.
- Where no particular selection is specified, it is applicable without restriction.

This document is based on HUCK Co, document and Stanoard ASN 542-18 and supersedes the latter.

Dimensions in millimetres and inches

SUMMARY

1 – DESCRIPTION

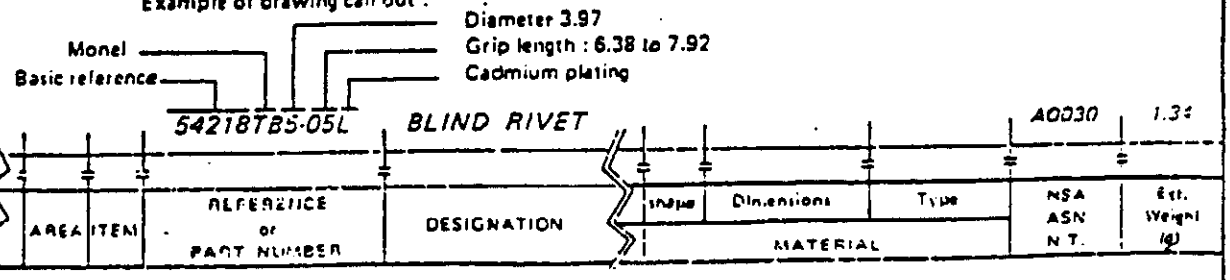


NOTES : 1) *Over this length, the diameter of the hollow shank may exceed the max. «D» diameter by 0.025 mm*
2) *Locking collar to be in one piece or split at manufacturer's discretion.*
3) *These rivets may be installed on non parallel or curved faces. The permissible tolerances are given in ASN-A0025.*

2 – CODED REFERENCE

The coded reference of these rivets consists of the basic reference **54218** *followed by :*
- *the material code of the hollow shank (see table paragraph 4),*
- *the diameter code (see table paragraph 3),*
- *the length code, depending on the grip length (see table paragraph 6),*
- *the hollow shank protective treatment code, if applicable (see table paragraph 4).*

Example of drawing call out :



3 – DIMENSIONS AND CHARACTERISTICS

Nominal diameter		Diameter code	A		B REF		C min		D		E +0.13 0 +0.33 0		Installation hole diameter b)		Min. breaking load (daN)		
															Shearing (N)		Tensile (N)
in	mm		in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	Monel	Stainless steel	
1/8	3,18	4	.229 .221	5,81 5,61	.042	1,07	.788	20,02	.128 .124	3,25 3,15	.002	0,05	.132 .129	3,35 3,28	* 4 537	4 848	3 002
5/32	3,97	5	.290 .282	7,36 7,16	.055	1,40			.159 .155	4,04 3,94			.164 .160	4,16 4,05	6 961	7 428	4 570
3/16	4,76	6	.357 .349	9,06 8,86	.070	1,78			.190 .186	4,82 4,73			.196 .192	4,98 4,87	10 053	10 675	6 672

Diameter code	Length code	Weight of installed rivets (g)				Huck reference N° *	
		Monel		Stainless steel			
		Related to length code	Supplement per length increment	Related to length code	Supplement per length increment	Monel	Stainless steel
4	02	0,49	–	0,47	–	MLS100-M4	MLS100-EU4
	03	0,61	0,11	0,58	0,11		
5	02	0,82	–	0,80	–	MLS100-M5	MLS100-EU5
	03	1,00	0,17	0,97	0,17		
6	03	1,59	0,25	1,52	0,24	MLS100-M6	MLS100-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 1900.*

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 A286 (AISI 660)	CC	*Passivated QQ-P-35*	None
Mandrel and collar	*Stainless steel A286 (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						Diameter code 5						Diameter code 6					
			L max		M max		Stock		L max		M max		Stock		L max		M max		Stock	
							Monel	Stainless st.					Monel	Stainless st.					Monel	Stainless st.
	in	mm	in	mm	in	mm			in	mm	in	mm			in	mm	in	mm		
02	f) .125	f) 3,17	.260	6,60	.391	9,93	+	+	.263	6,68	.446	11,33	+	+						
03	.126 .187	3,20 4,75	.323	8,20	.516	13,10	+	+	.326	8,28	.541	13,74	+	+	.350	8,89	.571	14,50	+	+
04	.188 .250	4,78 6,35	.395	9,78	.641	16,28	+	+	.398	9,85	.666	16,91	+	+	.412	10,46	.696	17,65	+	+
05	.251 .312	6,38 7,92	.446	11,38	.766	19,45	+	/	.451	11,45	.791	20,09	+	+	.475	12,06	.821	20,85	+	+
06	.313 .375	7,95 9,52	.510	12,95	.891	22,63	/	/	.513	13,03	.916	23,26	+	/	.527	13,64	.946	24,03	+	–
07	.376 .437	9,55 11,10							.576	14,63	1.041	26,44	/	/	.600	15,24	1.071	27,20	/	/
08	.438 .500	11,12 12,70							.638	16,20	1.166	29,61	/		.662	16,81	1.196	30,36	/	/
09	.501 .562	12,72 14,27													.725	18,41	1.321	33,55	/	

NOTES :

e) *Codes 4-01, 5-01 and 6-02 rivets are no longer manufactured.*

f) *For code 4-02 rivets the minimum grip length is* 0.062 in., 1.58 mm.
For code 5-02 rivets the minimum grip length is 0.080 in., 2.03 mm.

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

h) *Longer rivets can be manufactured on request.*

APPLICABLE INFORMATION :

Company reference number (CMS)

The radix of CMS for these rivets is :

5	5	4	8	.	.	.	.	.	.

Manufacturer : *(non exhaustive list)*

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

* *The reference N° is similar to that used by AEROSPATIALE except that :*
– Radix 54218 TB or 54218 CC is replaced by serial number MLS100M (monel) or MLS100EU (stainless steel).

Example : AEROSPATIALE 54218TB5-05
HUCK MLS100-M5-05

Applicable documents :
– These rivets are in compliance with Standard NAS 1921 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-A0030 supersedes Standard ASN 542.18, issue D.

The rivets defined in these 2 documents, as well as their coded references are identical.