aerospatiale TECHNICAL MANAGEMENT STANDARDS DEPt.	CHERRYLOCK BLIND RIVETS - BULB TYPE - 100° csk HEAD (Non standard diameters)	GENERAL DESIGN MANUAL ASN - A0063

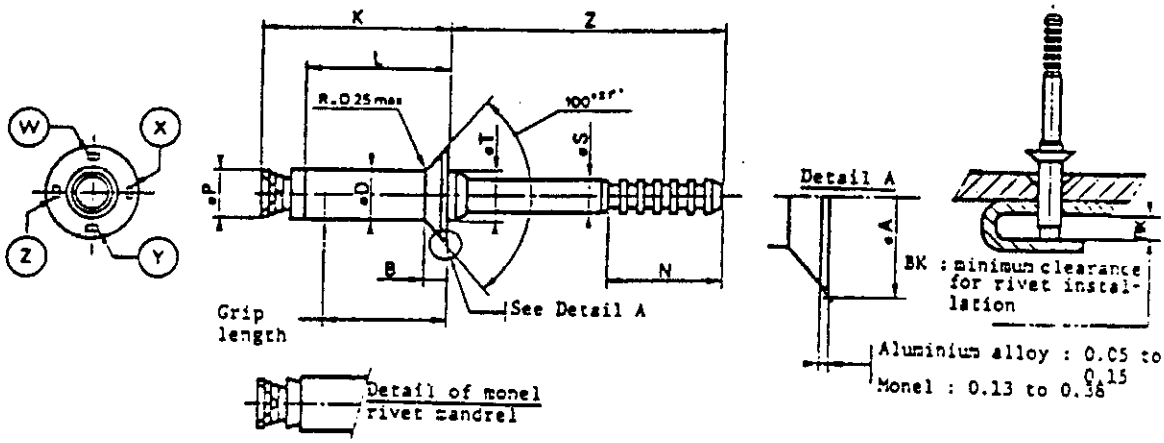
CONTENTS

1 - DESCRIPTIONS

These blind rivets are, according to the manufacturers, made of 3 parts (sleeve, shank and ring) or 2 parts (sleeve integral with ring and shank).

Engagement and installation proceed on the same face of items to be fitted.

2 - CHARACTERISTICS



* For monel and S.S. rivets, this tolerance is ± 1°30'

2.1 - Marking - The markings on the rivet head are as follow :
- at W, a letter specifying the nature of the material :
  letter M : for monel ;
  no marking : for aluminium alloy.
- at X, manufacturer's identification mark : see I.S.C. 04.81.104
- at Y, grip length (see paragraph 2.3)
- at Z, the sign "+" for rivets with inconel 600 shank.

2.2 - Dimensions

Diameter code	Nominal diameter		D		A		B REF.		BK min. Aluminium alloy		BK min. Monel	
	in	mm	+ .003 - .001 in	+ 0,07 - 0,02 mm	± .004 in	± 0,1 mm	in	mm	in	mm	in	mm
4	1/8	3.2	.140	3.556	.225	5,72	.035	0,89	.30	7,62	.33	8 38
5	5/32	4,0	.173	4,394	.286	7.26	.047	1,19	.33	8,38	.37	9,40
6	3/16	4,8	.2015	5,118	.353	8.97	.063	1,60	.37	9,40	.41	10,41

Diameter code	N min.		P max.		S ± .006 - .003	S ± 0,15 - 0,07	T REF.		Z REF.		Drilling hole diameter in		Drilling hole diameter mm		Bit number (gauge)
	in	mm	in	mm	in	mm	in	mm	in	mm	max.	min.	max.	min.	
4	.375	9,52	.143	3,63	.090	2,29	.119	3,02	1.62	41.15	.146	.143	3,71	3,63	# 27
5			.176	4,47	.112	2,84	.148	3,76	1.57	39,88	.180	.176	4,57	4,47	# 16
6			.205	5,21	.132	3,35	.174	4,42	1.59	40,39	.209	.206	5,31	5,23	# 5

2.3 - GRIP LENGTHS AND DIMENSIONS

- Only rivets whose dimensions are in the framed area are covered by the document NAS 1739.

Grip length code	Grip length min.	Grip length max.	4 Aluminium alloy L ±.010 ± 0.25	4 Aluminium alloy K max.	4 Monel L ±.010 ± 0.25	4 Monel K max.	5 Aluminium alloy L ±.010 ± 0.25	5 Aluminium alloy K max.	5 Monel L ±.010 ± 0.25	5 Monel K max.	6 Aluminium alloy L ±.010 ± 0.25	6 Aluminium alloy K max.	6 Monel L ±.010 ± 0.25	6 Monel K max.
01	.045 1.14	.062 1.57	.220 5.59	.36 9.14	.203 5.16	.34 8.64								
02	.063 1.60*	.125 3.17	.242 6.15	.38 9.65	.265 6.73	.40 10.16	.265 6.73	.41 11.41	.208 7.57	.45 11.43	.293 7.44	.45 11.43	.326 8.28	.49 12.45
03	.126 3.20	.187 4.75	.306 7.77	.45 11.43	.328 8.33	.47 11.94	.329 8.36	.47 11.94	.360 9.14	.51 12.95	.357 9.07	.52 13.21	.389 9.88	.55 13.97
04	.188 4.78	.250 6.35	.370 9.40	.51 12.95	.390 9.91	.53 13.46	.393 9.98	.54 13.72	.423 10.74	.58 14.73	.421 10.69	.58 14.73	.452 11.48	.61 15.49
05	.251 6.38	.312 7.92	.434 11.02	.58 14.73	.453 11.51	.59 14.99	.457 11.61	.60 15.24	.485 12.32	.64 16.26	.485 12.32	.65 16.51	.514 13.06	.68 17.27
06	.313 7.95	.375 9.52	.498 12.65	.64 16.25	.515 13.08	.65 16.51	.521 13.23	.67 17.02	.548 13.92	.70 17.78	.549 13.94	.71 18.03	.577 14.66	.74 18.80
07	.376 9.55	.437 11.10	.562 14.27	.71 18.03	.578 14.68	.72 18.29	.585 14.86	.73 18.54	.610 15.49	.76 19.30	.613 15.57	.78 19.81	.639 16.23	.80 20.32
08	.438 11.13	.500 12.70	.626 15.90	.77 19.56	.640 16.26	.78 19.81	.649 16.48	.80 20.32	.673 17.09	.83 21.08	.677 17.20	.84 21.34	.702 17.83	.86 21.84
09	.501 12.73	.562 14.27	.690 17.53	.84 21.34	.703 17.85	.84 21.34	.713 18.11	.86 21.84	.735 18.67	.89 22.61	.741 18.82	.91 23.11	.764 19.41	.93 23.67
10	.563 14.30	.625 15.88					.777 19.74	.93 23.62	.798 20.27	.95 24.13	.805 20.45	.97 24.64	.827 21.0	.99 25.15
11	.626 15.90	.687 17.45					.841 21.36	.99 25.15	.860 21.84	1.01 25.65	.869 22.07	1.04 26.42	.889 22.56	1.05 26.67
12	.688 17.48	.750 19.05									.933 23.70	1.10 27.94	.952 24.18	1.11 28.19

* *Minimum grip length for rivets items 602 : 1.85 mm(.073 in)*

2.4 - Tensile and shear strength

Material surface treatment code	4 Tensile (N)	4 Shear (N)	5 Tensile (N)	5 Shear (N)	6 Tensile (N)	6 Shear (N)
11 12	1530	2750	2360	4160	3160	5600
20 21	2180	3980	3290	6020	4450	8110

3 - MATERIALS AND SURFACE TREATMENTS

CODE	MATERIAL			PROTECTIVE TREATMENT			Maximum working temperature
	Sleeve	Shank	Ring	Sleeve	Shank	Ring	
11	Aluminium alloy 5056-F	Inconel 600 QQ-W-390	Monel QQ-N-281 or Aluminium alloy 2017-T4 QQ-A-430	Aluminite Anodizing MIL-A-8625 or MIL-A 5541	None	None	120°C
12	2017-T4 QQ-A-430	8740AMS6322			Cadmium Plating QQ-P-416 Type II		
20	Monel QQ-N-281	Inconel 600 QQ-W-390 or Monel QQ-N-281	Monel QQ-N-281	None	None	None	480°C
21				Cadmium plating QQ-P-416 Type II			

1) Sleeve and ring can, according to manufacturer, be made integral ; the shank will, in this case, be made of aluminium alloy 7075-T6 for code 11 & 12.

4 - DESIGNATION

Each blind rivet is to be designated solely by its name and identification block as in the example below :

a) NEW REFERENCE

Name	Identification block	
	Manufacturer code	Reference
BLIND RIVET	F5442 1)	ASNA0063 - 4 03 21

Basic reference
Diameter code (see § 2.2)
Grip length code (see § 2.3)
Material & surface treatment code (see § 3)

b) FORMER REFERENCE

Name	Identification block	
	Manufacturer code	Reference
BLIND RIVET	F5442	54223 - 4 03 21

Basic reference
Diameter code (see § 2.2)
Grip length code (see § 2.3)
Material & surface treatment code (see § 3)

5 - SPECIFICATIONS

Supply specification : NAS 1740

6 - MANUFACTURERS

See PQ 007.05.

1) F5442 : Manufacturer code attributed to Aerospatiale General Standardization for standard parts fully defined by their reference in the General Design Manual

CMS Radix 5548 . . . .

AMENDMENT LIST

Issue	Paragraph amended	Synthesis of amendment	Reason
A 03.76		New standard	Supersedes NSA 542.23.
B 02.83		Update	New manufactured added
C 12.83		Update	New manufacturer added
D 05.86	6	- New description added. - Equivalences between ASN and manufacturer reference deleted. - Photocomposition.	Basic reference matched with standard No.