AIRBUS

RIVET – COUNTERSUNK, LOCKBOLT

Issue : I
Date : Sept 14
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SUMMARY

1 - SCOPE AND FIELD OF APPLICATION

This standard specifies the dimensions, tolerances, required characteristics and the masses of a countersunk rivet, lockbolt.

2 - REFERENCES

AMS4967	: Titanium alloy, bars, wire, forgings, and rings 6.0Al-4.0V annealed, heat treated.
ANSI-B46-1	: Surface texture (surface roughness waviness and lay).
ASNA2045	: Bush – For use with ASNA2041 and ASNA2042.
C2022	: Procurement specification.
EN2424	: Aerospace series – Marking of aerospace products.
EN6117	: Aerospace series – Specification for lubrication of fasteners with Cetyl Alcohol.
ISO8080	: Aerospace – Anodic treatment of titanium and titanium alloys-Sulfuric acid process.

3 - TERMINOLOGY

Not applicable.

4 - REQUIRED CHARACTERISTICS

4.1 - Configuration, dimensions, tolerances, mass

4.1.1 - Configuration shall be in accordance with the figures 1 and 2.

4.1.2 - Dimensions shall be in accordance with the figures 1 and 2, and tables 1 to 3.

Definition of grip length code No.: divide grip length by 1,58.
Drill center dimple in top of head 0,889 mm, 0,254 mm max. depth and concentric to “A” within 0,203 mm.
Dimensions B, C, U, Y and Z are measured from the theoretical intersection of crown radius and head angle.
Dimension U’ is measured at top of “J” land.
Dimensions B, C and U’ are for engineering reference only and are not to be used for inspection purposes.

4.1.3 - General tolerances shall be in accordance with the figures 1 and 2, and tables 1 to 3.

Concentricity tolerances of the conical surface of the head with respect to Ø A within the value of 0,127 mm (TIR).
Shank straightness within the values of S (TIR per shank length of 25,4 mm). see tables 1 and 2.

4.1.4 - Mass shall be in accordance with table 4.

4.2 - Materials, finishes and lubrications shall be in accordance with table 5.

4.3 - Mechanical characteristics shall be in accordance with table 6.

4.4 - General characteristics

Surface roughness as per ANSI-B46-1 before coating: Ra 0,8 µm for head conical surface, head to shank fillet radius, shank and transition radius; Ra 3,2 µm for other surfaces.

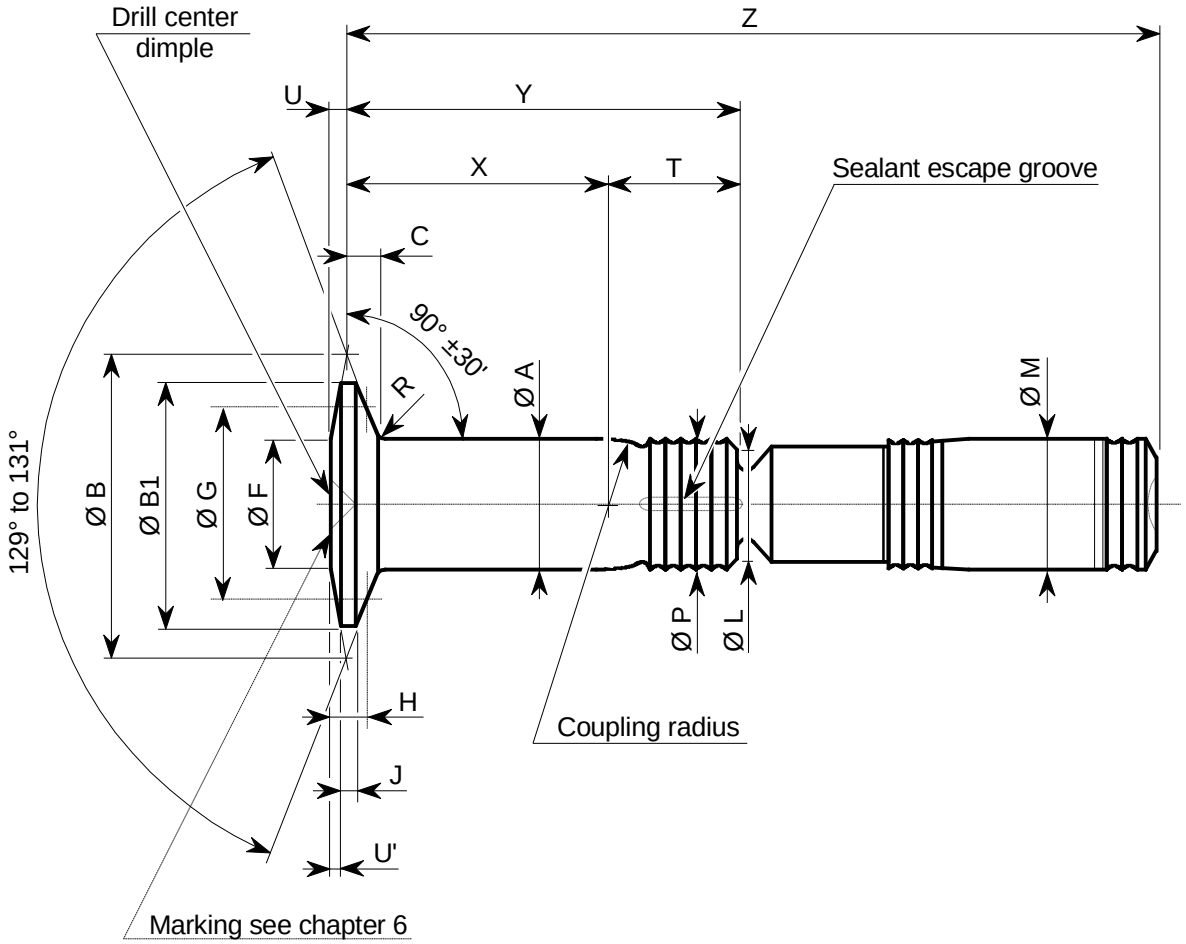


Figure 1 – Configuration, dimensions, tolerances (Style "–")

Table 1 – Dimensions, tolerances (Style "–")

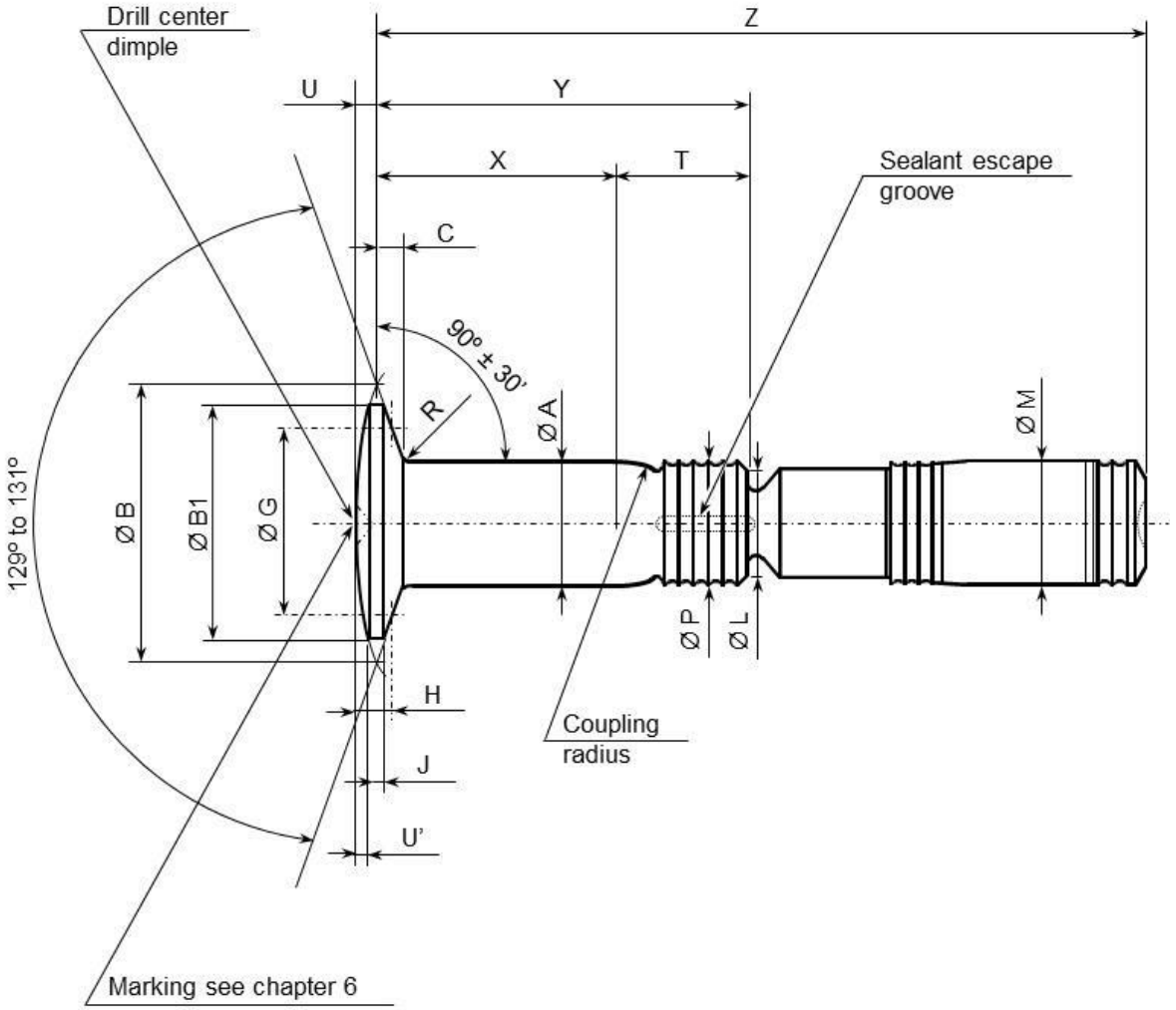
Ø CODE No.	NOMINAL Ø	Ø A +0,013 0	Ø B Ref.	Ø B1		C Ref.	Ø F ±0,254	Ø G ±0,003	H	
				Min.	Max.				Min.	Max.
2	4,165	4,140	8,33	7,53	8,07	0,98	3,175	6,499	0,597	0,668
3[1)]	4,826	4,800	9,69	8,63	9,27	1,14	3,962	7,571	0,571	0,652
3A[1)]	5,555	5,530	11,17	9,84	10,87	1,32	4,369	8,418	0,732	0,821
4[1)]	6,350	6,325	12,72	11,29	12,28	1,49	4,826	10,284	0,668	0,764
5	7,924	7,912	15,04	13,34	14,58	1,66	6,350	12,166	0,782	0,889
6	9,525	9,500	17,70	15,74	17,24	1,91	7,924	15,090	0,744	0,871

1) This diameter of style "–" is superseded by the same diameter of the style D (see table 7). Existing stock of style "–" may be used until exhausted.

Ø CODE No.	NOMINAL Ø	J Max.	Ø L Ref.	Ø M Max.	Ø P Max.	R ± 0,127	S	T Ref.	U ± 0,025	U' Ref.
2	4,165	0,254	3,20	3,962	3,962	0,508	0,114	4,45	0,205	0,17
3[1)]	4,826	0,330	3,81	4,673	4,673	0,635		4,47	0,116	0,09
3A[1)]	5,555	0,381	4,40	5,411	5,411			6,20	0,132	0,10
4[1)]	6,350	0,431	4,75	6,197	6,197				0,147	0,11
5	7,924	0,508	6,20	7,772	7,772	0,889		7,95	0,165	0,13
6	9,525	0,584	7,57	9,398	9,398		0,152	9,50	0,198	0,15

1) This diameter of style "–" is superseded by the same diameter of the style D (see table 7). Existing stock of style "–" may be used until exhausted.

Dimensions in mm.



NOTE : The dome head is fully rounded.

Figure 2 – Configuration, dimensions, tolerances (Style D)

Table 2 – Dimensions, tolerances (Style D)

Ø CODE No.	NOMINAL Ø	Ø A +0,013 0	Ø B Ref.	Ø B1		C Ref.	Ø G ±0,003	H		J Max.
				Min.	Max.			Min.	Max.	
3	4,826	4,800	9,83	9,06	9,32	1,17	7,572	0,635	0,683	0,254
3A	5,555	5,530	11,20	10,20	10,87	1,32	8,418	0,770	0,859	0,381
4	6,350	6,325	12,75	11,65	12,28	1,50	10,284	0,719	0,815	0,432

Ø CODE No.	NOMINAL Ø	Ø L Ref.	Ø M Max.	Ø P Max.	R ± 0,127	S	T Ref.	U ± 0,025	U' Ref.
3	4,826	3,81	4,674	4,674	0,635	0,114	4,47	0,134	0,117
3A	5,555	4,40	5,410	5,410	0,635	0,114	6,20	0,165	0,140
4	6,350	4,75	6,198	6,198				0,193	0,165

Dimensions in mm.

Table 3 – Grip dimensions, tolerances

(diameter code No. continued on page 8)

GRIP LENGTH CODE No.	PERMISSIBLE GRIP OVERLAP		GRIP LENGTH		X *	DIAMETER CODE No.					
						2		3		3A	
						Y	Z	Y	Z	Y	Z
	Min.	Max.	Min.	Max.	± 0,127	± 0,25	+ 1,52 0	± 0,25	+ 1,52 0	± 0,25	+ 1,52 0
02	1,19	3,58	1,60	3,18	3,18	7,62	21,00	7,64	22,83	-	-
03	2,76	5,15	3,20	4,78	4,78	9,22	22,61	9,24	24,43	10,97	26,21
04	4,36	6,75	4,80	6,35	6,35	10,79	24,18	10,82	26,01	12,55	27,79
05	5,94	8,33	6,38	7,93	7,93	12,37	25,75	12,39	27,58	14,12	29,36
06	7,54	9,93	7,95	9,53	9,53	13,97	27,35	13,99	29,18	15,72	30,96
07	9,11	11,50	9,55	11,13	11,13	15,57	28,96	15,59	30,78	17,32	32,56
08	10,71	13,10	11,15	12,70	12,70	17,14	30,53	17,17	32,36	18,90	34,14
09	12,29	14,68	12,73	14,28	14,28	18,72	32,10	18,74	33,93	20,47	35,71
10	13,89	16,28	14,30	15,88	15,88	20,32	33,70	20,34	35,53	22,07	37,31
11	15,46	17,85	15,90	17,48	17,48	21,92	35,31	21,94	37,13	23,67	38,91
12	17,06	19,45	17,50	19,05	19,05	23,49	36,88	23,52	38,71	25,25	40,49
13	18,64	21,03	19,08	20,63	20,63	25,07	38,45	25,09	40,28	26,82	42,06
14	20,24	22,63	20,65	22,23	22,23	26,67	40,05	26,69	41,88	28,42	43,66
15	21,81	24,20	22,25	23,83	23,83	28,27	41,66	28,29	43,48	30,02	45,26
16	23,41	25,80	23,85	25,40	25,40	29,84	43,23	29,87	45,06	31,60	46,84
17	24,99	27,38	25,43	26,98	26,98	31,42	44,80	31,44	46,63	33,17	48,41
18	26,59	28,98	27,00	28,58	28,58	33,02	46,40	33,04	48,23	34,77	50,01
19	28,16	30,55	28,60	30,18	30,18	34,62	48,01	34,64	49,83	36,37	51,61
20	29,76	32,15	30,20	31,75	31,75	36,19	49,58	36,22	51,41	37,95	53,19
21	31,34	33,73	31,78	33,33	33,33	37,77	51,15	37,79	52,98	39,52	54,76
22	32,94	35,33	33,35	34,93	34,93	39,37	52,75	39,39	54,58	41,12	56,36
23	34,51	36,90	34,95	36,53	36,53	40,97	54,36	40,99	56,18	42,72	57,96
24	36,11	38,50	36,55	38,10	38,10	42,54	55,93	42,57	57,76	44,30	59,54
25	37,69	40,08	38,13	39,68	39,68	44,12	57,50	44,14	59,33	45,87	61,11
26	39,29	41,68	39,70	41,28	41,28	45,72	59,10	45,74	60,93	47,47	62,71
27	40,86	43,25	41,30	42,88	42,88	47,32	60,71	47,35	62,53	49,07	64,31
28	42,46	44,85	42,90	44,45	44,45	48,89	62,28	48,92	64,11	50,65	65,89
29	44,04	46,43	44,48	46,03	46,03	50,47	63,85	50,49	65,68	52,22	67,46
30	45,64	48,03	46,05	47,63	47,63	52,07	65,45	52,09	67,28	53,82	69,06
31	47,21	49,60	47,65	49,23	49,23	53,67	67,06	53,69	68,88	55,42	70,66
32	48,81	51,20	49,25	50,80	50,80	55,24	68,63	55,27	70,46	57,00	72,24

***** Grip length is measured from the theoretical intersection of the crown radius and head angle to the end of the full cylindrical portion of the shank.

Dimensions in mm.

Table 3 – (diameter code No. continued from page 7) **(end)**

GRIP LENGTH CODE No.	PERMISSIBLE GRIP OVERLAP		GRIP LENGTH		X *	DIAMETER CODE No.					
						4		5		6	
						Y	Z	Y	Z	Y	Z
	Min.	Max.	Min.	Max.	± 0,127	± 0,25	+ 1,52 0	± 0,25	+ 1,52 0	± 0,25	+ 1,52 0
02	1,19	3,58	1,60	3,18	3,18	-	-	-	-	-	-
03	2,76	5,15	3,20	4,78	4,78	10,97	27,56	12,72	30,45	-	-
04	4,36	6,75	4,80	6,35	6,35	12,55	29,13	14,30	32,03	15,85	35,33
05	5,94	8,33	6,38	7,93	7,93	14,12	30,71	15,87	33,60	17,42	36,91
06	7,54	9,93	7,95	9,53	9,53	15,72	32,31	17,47	35,20	19,02	38,51
07	9,11	11,50	9,55	11,13	11,13	17,32	33,91	19,07	36,80	20,62	40,11
08	10,71	13,10	11,15	12,70	12,70	18,90	35,48	20,65	38,38	22,20	41,68
09	12,29	14,68	12,73	14,28	14,28	20,47	37,06	22,22	39,95	23,77	43,26
10	13,89	16,28	14,30	15,88	15,88	22,07	38,66	23,82	41,55	25,37	44,86
11	15,46	17,85	15,90	17,48	17,48	23,67	40,26	25,42	43,15	26,97	46,46
12	17,06	19,45	17,50	19,05	19,05	25,25	41,83	27,00	44,73	28,55	48,03
13	18,64	21,03	19,08	20,63	20,63	26,82	43,41	28,57	46,30	30,12	49,61
14	20,24	22,63	20,65	22,23	22,23	28,42	45,01	30,17	47,90	31,72	51,21
15	21,81	24,20	22,25	23,83	23,83	30,02	46,61	31,77	49,50	33,32	52,81
16	23,41	25,80	23,85	25,40	25,40	31,60	48,18	33,35	51,08	34,90	54,38
17	24,99	27,38	25,43	26,98	26,98	33,17	49,76	34,92	52,65	36,47	55,96
18	26,59	28,98	27,00	28,58	28,58	34,77	51,36	36,52	54,25	38,07	57,56
19	28,16	30,55	28,60	30,18	30,18	36,37	52,96	38,12	55,85	39,67	59,16
20	29,76	32,15	30,20	31,75	31,75	37,95	54,53	39,70	57,43	41,25	60,73
21	31,34	33,73	31,78	33,33	33,33	39,52	56,11	41,27	59,00	42,82	62,31
22	32,94	35,33	33,35	34,93	34,93	41,12	57,71	42,87	60,60	44,42	63,91
23	34,51	36,90	34,95	36,53	36,53	42,72	59,31	44,47	62,20	46,02	65,51
24	36,11	38,50	36,55	38,10	38,10	44,30	60,88	46,05	63,78	47,60	67,08
25	37,69	40,08	38,13	39,68	39,68	45,87	62,46	47,62	65,35	49,17	68,66
26	39,29	41,68	39,70	41,28	41,28	47,47	64,06	49,22	66,95	50,77	70,26
27	40,86	43,25	41,30	42,88	42,88	49,07	65,66	50,82	68,55	52,37	71,86
28	42,46	44,85	42,90	44,45	44,45	50,65	67,23	52,40	70,13	53,95	73,43
29	44,04	46,43	44,48	46,03	46,03	52,22	68,81	53,97	71,70	55,52	75,01
30	45,64	48,03	46,05	47,63	47,63	53,82	70,41	55,57	73,30	57,12	76,61
31	47,21	49,60	47,65	49,23	49,23	55,42	72,01	57,17	74,90	58,72	78,21
32	48,81	51,20	49,25	50,80	50,80	57,00	73,58	58,75	76,48	60,30	79,78

***** Grip length is measured from the theoretical intersection of the crown radius and head angle to the end of the full cylindrical portion of the shank.

Dimensions in mm.

Table 4 – Mass

GRIP LENGTH CODE No.	MASS (g) DIAMETER CODE No.					
	2	3	3A	4	5	6
02	0,47	0,67	-	-	-	-
03	0,57	0,79	1,32	1,78	3,11	-
04	0,66	0,92	1,49	2,00	3,46	5,42
05	0,76	1,05	1,66	2,22	3,80	5,92
06	0,85	1,18	1,83	2,44	4,15	6,41
07	0,95	1,30	2,00	2,66	4,49	6,91
08	1,04	1,43	2,17	2,88	4,84	7,41
09	1,14	1,56	2,33	3,10	5,18	7,91
10	1,23	1,69	2,50	3,32	5,53	8,41
11	1,33	1,81	2,67	3,54	5,88	8,89
12	1,42	1,94	2,84	3,76	6,22	9,38
13	1,52	2,07	3,01	3,98	6,57	9,88
14	1,61	2,20	3,18	4,21	6,91	10,38
15	1,71	2,32	3,35	4,43	7,26	10,90
16	1,80	2,45	3,52	4,65	7,60	11,40
17	1,90	2,58	3,68	4,87	7,95	11,90
18	1,99	2,71	3,85	5,09	8,29	12,40
19	2,09	2,83	4,02	5,31	8,64	12,89
20	2,18	2,96	4,19	5,53	8,99	13,39
21	2,28	3,09	4,36	5,75	9,33	13,89
22	2,38	3,22	4,53	5,97	9,68	14,39
23	2,47	3,34	4,70	6,19	10,02	14,89
24	2,56	3,47	4,87	6,41	10,37	15,39
25	2,65	3,60	5,04	6,64	10,71	15,88
26	2,75	3,73	5,20	6,86	11,06	16,38
27	2,84	3,85	5,37	7,08	11,40	16,88
28	2,94	3,98	5,54	7,30	11,75	17,38
29	3,03	4,11	5,71	7,52	12,10	17,88
30	3,13	4,24	5,88	7,74	12,44	18,38
31	3,22	4,36	6,05	7,96	12,80	18,88
32	3,32	4,49	6,22	8,18	13,13	19,37

Table 5 – Materials, finishes, lubrications

MATERIAL	FINISH	LUBRICATION
Titanium alloy TA 6V as per AMS4967 Shear strength : 655 MPa	Sulfuric-acid-anodizing as per ISO8080	Cetyl alcohol as per EN6117

Table 6 – Mechanical characteristics

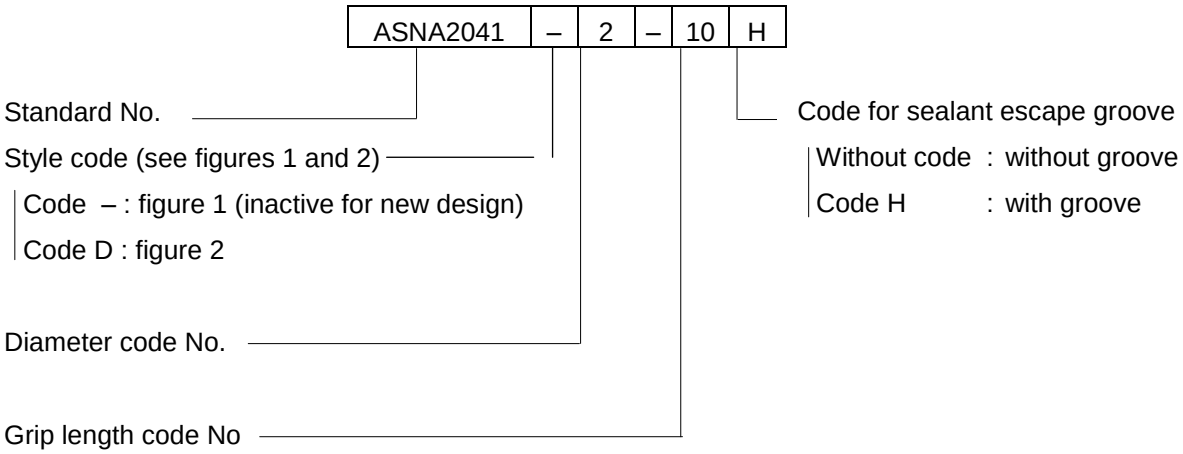
DIAMETER CODE No.	NOMINAL Ø	DOUBLE SHEAR STRENGTH Min. (daN)	TENSILE STRENGTH WITH BUSH ASNA2045 Min. (daN)
2	4,165	1 780	666
3	4,826	2 388	843
3A	5,555	3 195	999
4	6,350	4 120	1 531
5	7,925	6 482	2 664
6	9,525	9 324	3 552

5 - DESIGNATION

Example of part number identification to be used on drawing schedules:

ASNA2041-2-10H , Rivet

Example of part number construction:



Interchangeability:

ASNA2041 rivet of style "–" for diameter code No. 3, 3A and 4 are inactive for new design. Existing stock may be used until exhausted. Substitution shall be in accordance with table 7.

Table 7 – Interchangeability (continued)

INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER	INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER
ASNA2041-3-02H	ASNA2041D3-02H	ASNA2041-3-17	ASNA2041D3-17
ASNA2041-3-03	ASNA2041D3-03	ASNA2041-3-17H	ASNA2041D3-17H
ASNA2041-3-03H	ASNA2041D3-03H	ASNA2041-3-18	ASNA2041D3-18
ASNA2041-3-04	ASNA2041D3-04	ASNA2041-3-18H	ASNA2041D3-18H
ASNA2041-3-04H	ASNA2041D3-04H	ASNA2041-3-19	ASNA2041D3-19
ASNA2041-3-05	ASNA2041D3-05	ASNA2041-3-19H	ASNA2041D3-19H
ASNA2041-3-05H	ASNA2041D3-05H	ASNA2041-3-20	ASNA2041D3-20
ASNA2041-3-06	ASNA2041D3-06	ASNA2041-3-20H	ASNA2041D3-20H
ASNA2041-3-06H	ASNA2041D3-06H	ASNA2041-3-21	ASNA2041D3-21
ASNA2041-3-07	ASNA2041D3-07	ASNA2041-3-21H	ASNA2041D3-21H
ASNA2041-3-07H	ASNA2041D3-07H	ASNA2041-3-22	ASNA2041D3-22
ASNA2041-3-08	ASNA2041D3-08	ASNA2041-3-22H	ASNA2041D3-22H
ASNA2041-3-08H	ASNA2041D3-08H	ASNA2041-3-23	ASNA2041D3-23
ASNA2041-3-09	ASNA2041D3-09	ASNA2041-3-23H	ASNA2041D3-23H
ASNA2041-3-09H	ASNA2041D3-09H	ASNA2041-3-24	ASNA2041D3-24
ASNA2041-3-10	ASNA2041D3-10	ASNA2041-3-24H	ASNA2041D3-24H
ASNA2041-3-10H	ASNA2041D3-10H	ASNA2041-3-25	ASNA2041D3-25
ASNA2041-3-11	ASNA2041D3-11	ASNA2041-3-25H	ASNA2041D3-25H
ASNA2041-3-11H	ASNA2041D3-11H	ASNA2041-3-26H	ASNA2041D3-26H
ASNA2041-3-12	ASNA2041D3-12	ASNA2041-3-27H	ASNA2041D3-27H
ASNA2041-3-12H	ASNA2041D3-12H	ASNA2041-3-28	ASNA2041D3-28
ASNA2041-3-13	ASNA2041D3-13	ASNA2041-3-28H	ASNA2041D3-28H
ASNA2041-3-13H	ASNA2041D3-13H	ASNA2041-3-29H	ASNA2041D3-29H
ASNA2041-3-14	ASNA2041D3-14	ASNA2041-3-30H	ASNA2041D3-30H
ASNA2041-3-14H	ASNA2041D3-14H	ASNA2041-3-31H	ASNA2041D3-31H
ASNA2041-3-15	ASNA2041D3-15	ASNA2041-3-32H	ASNA2041D3-32H
ASNA2041-3-15H	ASNA2041D3-15H		
ASNA2041-3-16	ASNA2041D3-16		
ASNA2041-3-16H	ASNA2041D3-16H		

Continued on page 12

Table 7 – Interchangeability (continued)

Continued from page 11

INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER	INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER
ASNA2041-3A03	ASNA2041D3A03	ASNA2041-3A18	ASNA2041D3A18
ASNA2041-3A03H	ASNA2041D3A03H	ASNA2041-3A18H	ASNA2041D3A18H
ASNA2041-3A04	ASNA2041D3A04	ASNA2041-3A19	ASNA2041D3A19
ASNA2041-3A04H	ASNA2041D3A04H	ASNA2041-3A19H	ASNA2041D3A19H
ASNA2041-3A05	ASNA2041D3A05	ASNA2041-3A20	ASNA2041D3A20
ASNA2041-3A05H	ASNA2041D3A05H	ASNA2041-3A20H	ASNA2041D3A20H
ASNA2041-3A06	ASNA2041D3A06	ASNA2041-3A21	ASNA2041D3A21
ASNA2041-3A06H	ASNA2041D3A06H	ASNA2041-3A21H	ASNA2041D3A21H
ASNA2041-3A07	ASNA2041D3A07	ASNA2041-3A22	ASNA2041D3A22
ASNA2041-3A07H	ASNA2041D3A07H	ASNA2041-3A22H	ASNA2041D3A22H
ASNA2041-3A08	ASNA2041D3A08	ASNA2041-3A23	ASNA2041D3A23
ASNA2041-3A08H	ASNA2041D3A08H	ASNA2041-3A23H	ASNA2041D3A23H
ASNA2041-3A09	ASNA2041D3A09	ASNA2041-3A24	ASNA2041D3A24
ASNA2041-3A09H	ASNA2041D3A09H	ASNA2041-3A24H	ASNA2041D3A24H
ASNA2041-3A10	ASNA2041D3A10	ASNA2041-3A25	ASNA2041D3A25
ASNA2041-3A10H	ASNA2041D3A10H	ASNA2041-3A25H	ASNA2041D3A25H
ASNA2041-3A11	ASNA2041D3A11	ASNA2041-3A26	ASNA2041D3A26
ASNA2041-3A11H	ASNA2041D3A11H	ASNA2041-3A26H	ASNA2041D3A26H
ASNA2041-3A12	ASNA2041D3A12	ASNA2041-3A27	ASNA2041D3A27
ASNA2041-3A12H	ASNA2041D3A12H	ASNA2041-3A27H	ASNA2041D3A27H
ASNA2041-3A13	ASNA2041D3A13	ASNA2041-3A28	ASNA2041D3A28
ASNA2041-3A13H	ASNA2041D3A13H	ASNA2041-3A28H	ASNA2041D3A28H
ASNA2041-3A14	ASNA2041D3A14	ASNA2041-3A29	ASNA2041D3A29
ASNA2041-3A14H	ASNA2041D3A14H	ASNA2041-3A29H	ASNA2041D3A29H
ASNA2041-3A15	ASNA2041D3A15	ASNA2041-3A30	ASNA2041D3A30
ASNA2041-3A15H	ASNA2041D3A15H	ASNA2041-3A30H	ASNA2041D3A30H
ASNA2041-3A16	ASNA2041D3A16	ASNA2041-3A31	ASNA2041D3A31
ASNA2041-3A16H	ASNA2041D3A16H	ASNA2041-3A31H	ASNA2041D3A31H
ASNA2041-3A17	ASNA2041D3A17	ASNA2041-3A32	ASNA2041D3A32
ASNA2041-3A17H	ASNA2041D3A17H	ASNA2041-3A32H	ASNA2041D3A32H

Continued on page 13

Table 7 – Interchangeability (concluded)

Continued from page 12

INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER	INACTIVE PART NUMBER	SUBSTITUTE PART NUMBER
ASNA2041-4-03	ASNA2041D4-03	ASNA2041-4-18	ASNA2041D4-18
ASNA2041-4-03H	ASNA2041D4-03H	ASNA2041-4-18H	ASNA2041D4-18H
ASNA2041-4-04	ASNA2041D4-04	ASNA2041-4-19	ASNA2041D4-19
ASNA2041-4-04H	ASNA2041D4-04H	ASNA2041-4-19H	ASNA2041D4-19H
ASNA2041-4-05	ASNA2041D4-05	ASNA2041-4-20	ASNA2041D4-20
ASNA2041-4-05H	ASNA2041D4-05H	ASNA2041-4-20H	ASNA2041D4-20H
ASNA2041-4-06	ASNA2041D4-06	ASNA2041-4-21	ASNA2041D4-21
ASNA2041-4-06H	ASNA2041D4-06H	ASNA2041-4-21H	ASNA2041D4-21H
ASNA2041-4-07	ASNA2041D4-07	ASNA2041-4-22	ASNA2041D4-22
ASNA2041-4-07H	ASNA2041D4-07H	ASNA2041-4-22H	ASNA2041D4-22H
ASNA2041-4-08	ASNA2041D4-08	ASNA2041-4-23	ASNA2041D4-23
ASNA2041-4-08H	ASNA2041D4-08H	ASNA2041-4-23H	ASNA2041D4-23H
ASNA2041-4-09	ASNA2041D4-09	ASNA2041-4-24	ASNA2041D4-24
ASNA2041-4-09H	ASNA2041D4-09H	ASNA2041-4-24H	ASNA2041D4-24H
ASNA2041-4-10	ASNA2041D4-10	ASNA2041-4-25	ASNA2041D4-25
ASNA2041-4-10H	ASNA2041D4-10H	ASNA2041-4-25H	ASNA2041D4-25H
ASNA2041-4-11	ASNA2041D4-11	ASNA2041-4-26	ASNA2041D4-26
ASNA2041-4-11H	ASNA2041D4-11H	ASNA2041-4-26H	ASNA2041D4-26H
ASNA2041-4-12	ASNA2041D4-12	ASNA2041-4-27	ASNA2041D4-27
ASNA2041-4-12H	ASNA2041D4-12H	ASNA2041-4-27H	ASNA2041D4-27H
ASNA2041-4-13	ASNA2041D4-13	ASNA2041-4-28	ASNA2041D4-28
ASNA2041-4-13H	ASNA2041D4-13H	ASNA2041-4-28H	ASNA2041D4-28H
ASNA2041-4-14	ASNA2041D4-14	ASNA2041-4-29	ASNA2041D4-29
ASNA2041-4-14H	ASNA2041D4-14H	ASNA2041-4-29H	ASNA2041D4-29H
ASNA2041-4-15	ASNA2041D4-15	ASNA2041-4-30	ASNA2041D4-30
ASNA2041-4-15H	ASNA2041D4-15H	ASNA2041-4-30H	ASNA2041D4-30H
ASNA2041-4-16	ASNA2041D4-16	ASNA2041-4-31	ASNA2041D4-31
ASNA2041-4-16H	ASNA2041D4-16H	ASNA2041-4-31H	ASNA2041D4-31H
ASNA2041-4-17	ASNA2041D4-17	ASNA2041-4-32	ASNA2041D4-32
ASNA2041-4-17H	ASNA2041D4-17H	ASNA2041-4-32H	ASNA2041D4-32H

Concluded

6 - MARKING

Parts shall be marked as per EN2424, category G.

Manufacturer's reference marking on head recessed of 0,153 mm max. (Figures 1 and 2).

7 - TECHNICAL SPECIFICATION

As per manufacturer’s specification C2022.

8 - MANUFACTURERS

Refer to the list of qualified manufacturers and products.

AMENDMENT RECORD SHEET

Issue	Modified paragraph	Modification summary	Justification
A.05.84		New standard.	
B.03.85			
C.04.85		Amended standard.	
D.06.96		Standard fully amended. Optional groove added. Technical specification modified : I.C.T. 65 changed to C2022. In table 1, dimensions “C” and “H” modified for diameter code No. 2 : 0,990 mm changed to 1,016 mm, 0,591 mm changed to 0,597 mm.	Following letter Daimler-Benz Aerospace Airbus Ref. EIA – WG1-F30/96
E.09.07		“Grip length” is called “X”. In table 1, values of dimensions “Ø A”, “Ø B”, “C”, “Ø G”, “R” and “U” modified. Dimensions “Ø F” and “U’” added. In figure, drill center added. Dimensions “Ø B1” added in table 1. Unit “µm” added for surface roughness in § 4.4. A/DET0013 changed to EN6117 in chapter 2 and table 4. Dimensions “Ø B1” for dia. code No. 2 modified in table 1. ”Admissible tightening torque” changed to “Admissible tightening length” in table 2. ISO8080 added for finish in § 2 and table 4. Diameter code No.3A added.	In accordance with manufacturer documentation
F.04.08		Tolerance of Ø A modified in table 1: ± 0,0127 mm changed to $^{+0,0127}_{0}$ mm. Masses deleted for unavailable length codes	

Note : Modification to the last standard issue are indicated by a vertical line in the margin.

AMENDMENT RECORD SHEET

Issue	Modified paragraph	Modification summary	Justification
G 01.12		Dimension B1 for diameter 3A added Dimensions “Ø B1” for dia. code No. 2 modified in table 1	
H 04.14		Dimension “Ø B1” Min. for dia. code No. 3A changed from 10,03 mm to 9,84 mm in table 1 and note 1 added. Style code “D” and its associated data for diameter code No. 3A and 4 added. Dimensions and tolerances for Z dimension modified in table 3. Designation updated in chapter 6. Replacement of specific diameters of style code “–”. No. of tables and pages updated.	
I 09.14	Page 4 Page 6 Page 12	Table 1: Footnote for column 3 included. Table 2: Diameter 3 included. Table 7: ASNA2041-3… included.	

Note : Modification to the last standard issue are indicated by a vertical line in the margin.