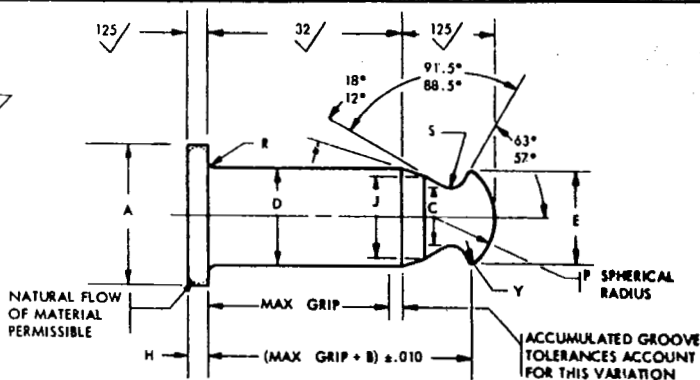
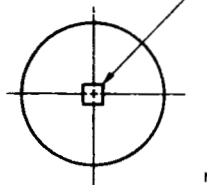


NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N. W., WASHINGTON, D. C. 20036

HEAD MARKING: INDENTED SQUARE.
MFR'S TRADEMARK MAY BE PLACED
INSIDE SQUARE. MAX DEPTH .015

⑤ INACTIVE FOR DESIGN
AFTER MARCH 19, 1980
(NO SUPERSEDING STANDARD)

FIRST DASH NO.	NOM DIA OR SIZE	A DIA	B	C DIA	D DIA		E DIA	J DIA	H	P	R RAD	S RAD	Y RAD MAX
					BEFORE PLATING	AFTER PLATING							
4	1/8	.208 .188	.083	.079 .073	.1240 .1235	.1250 .1239	.120 .116	.117 .113	.039 .029	.086 .078	.020 .005	.023 .019	.0075
5	5/32	.262 .242	.114	.103 .097	.1555 .1550	.1565 .1554	.153 .148	.148 .144	.047 .037	.110 .100	.020 .005	.028 .023	.0075
6	3/16	.315 .295	.125	.119 .114	.1894 .1889	.1904 .1893	.186 .181	.179 .174	.055 .045	.128 .118	.020 .005	.034 .030	.0075
8	1/4	.412 .387	.165	.156 .151	.2492 .2487	.2502 .2491	.244 .239	.235 .230	.069 .059	.167 .155	.025 .005	.044 .040	.0075
10	5/16	.505 .475	.206	.194 .188	.3117 .3112	.3127 .3116	.307 .302	.296 .290	.078 .068	.206 .194	.030 .005	.054 .050	.0075
12	3/8	.600 .565	.248	.232 .226	.3742 .3737	.3752 .3741	.370 .365	.361 .355	.088 .078	.250 .237	.030 .005	.066 .062	.0075
14	7/16	.676 .641	.289	.270 .264	.4367 .4362	.4377 .4366	.431 .425	.426 .419	.105 .093	.295 .280	.030 .005	.077 .073	.0125
16	1/2	.770 .735	.330	.308 .302	.4991 .4986	.5001 .4990	.494 .488	.489 .481	.115 .103	.337 .322	.030 .005	.089 .085	.0125
18	9/16	.864 .829	.371	.346 .340	.5616 .5611	.5626 .5615	.555 .549	.550 .542	.127 .112	.380 .365	.030 .005	.100 .096	.015
20	5/8	.953 .918	.413	.384 .378	.6240 .6234	.6250 .6238	.618 .612	.613 .605	.137 .122	.423 .408	.030 .005	.111 .107	.015

- ENTRANCE CHAMFER SHALL NOT FALL WITHIN THE MAXIMUM GRIP
- NAS529-4 THRU -12 RIVETS TO BE INSTALLED WITH NAS528 COLLARS OF THE SAME DASH NUMBER. CHECK AVAILABILITY OF DRIVING EQUIPMENT BEFORE USING NAS528-14 THRU -20 COLLARS. NAS529-14 THRU -20 MAY BE INSTALLED WITH NAS179 COLLARS
- SEE NAS527 FOR RECOMMENDED INSPECTION PRACTICE REGARDING MAGNETIC INSPECTION
 - DIMENSIONS TO BE MET AFTER PLATING EXCEPT FOR PRE-PLATE D DIAMETER
 - HEAD AND SHANK TO BE CONCENTRIC WITH .010 TOTAL INDICATOR READING
 - C, E AND J SHALL BE CONCENTRIC WITH D DIAMETER WITH .005 TOTAL RUNOUT FOR -4 THRU -12 SIZES. .006 TOTAL RUNOUT FOR -14 THRU -20 SIZES
 - SURFACE ROUGHNESS IN ACCORDANCE WITH MIL-STD-10

PROCUREMENT SPECIFICATION: NAS498 EXCEPT AS NOTED

HEAT TREAT: 160,000 TO 180,000 PSI PER SPECIFICATION MIL-H-6875

FINISH: CADMIUM PLATE PER SPECIFICATION QQ-P-416 Type II, CLASS 2.
PARTS WITH CLASS 3 PLATING MAY BE FURNISHED FROM SUPPLIER'S STOCK
UNTIL 30 NOVEMBER 1975.MATERIAL: MIL-S-6098 STEEL; CHROME-NICKEL-MOLYBDENUM (8735) BAR AND ROD
MIL-S-6049 STEEL; CHROME-NICKEL-MOLYBDENUM (8740) ANS6322 BAR AND ROD
MIL-S-8503 STEEL; CHROME-VANADIUM (6150) BAR AND BILLET
MIL-S-5626 STEEL; CHROME-MOLYBDENUM (4140) BAR AND ROD
MIL-S-5000 STEEL; CHROME-NICKEL-MOLYBDENUM (4340) (AMS6412) BAR AND ROD
MIL-S-8695 STEEL; MOLYBDENUM (4037) BAR AND ROD
MIL-S-6758 STEEL; CHROME-MOLYBDENUM (4130) BAR AND ROD

DIMENSIONS IN INCHES

LIST OF CURRENT SHEETS

NO.	REV.	NO.	REV.
1	5	2	3

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION

NOTED

TITLE

RIVET-FLAT HEAD, HI-SHEAR,
CLOSE TOLERANCE SHANKCLASSIFICATION
STANDARD PARTNAB Documents
SHEET 1 OF 2

Published and distributed by: National Standards Association, Inc.

5161 River Road
Washington, D.C. 20016

Aerospace Industries Association of America, Inc., 1980

Licensee: www.sepana.ir/5991803002, User=sam, albert
Not for Resale, 01/09/2016 03:43:30 MSTCopyright Aerospace Industries Association of America Inc.
Provided by IHS under license with AIA/NAS
No reproduction or networking permitted without license from IHS

Full document details: AIA NAS529 1980

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS
FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER
THAN SIX MONTHS FROM THE LAST DATE OF APPROVAL SHOWN HEREONAIA AND ITS COMMITTEES WILL NOT INVESTIGATE THE APPLICABILITY OF
PATENTS TO THE SUBJECT MATTER OF NAS STANDARDS AND IN RESPECT THEREOF
DO NOT ASSUME ANY LIABILITY TO PATENT OWNERS OR TO PROSPECTIVE USERS.

APPROVAL DATE May 1954 REVISION ① 30 April 1957 ② 31 Oct. 1957 ③ 30 March 1962 ④ 30 Nov. 1973 ⑤ 19 MARCH 1980

NATIONAL AEROSPACE STANDARD

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC., 1725 DE SALES STREET, N. W., WASHINGTON, D. C. 20036

SECOND DASH NO.	MAX GRIP	GRIP RANGE		(MAX GRIP + 8) ± .010 FOR NOM DIA SHOWN.										SECOND DASH NO.
		MIN	MAX	1/8	5/32	3/16	1/4	5/16	3/8	7/16	1/2	9/16	5/8	
2	1/8	.062	.125	.208	.239	.250								2
3	3/16	.126	.188	.271	.302	.313	.353	.394						3
4	1/4	.189	.250	.333	.364	.375	.415	.456	.498	.539				4
5	5/16	.251	.312	.395	.426	.437	.477	.518	.560	.601	.642	.683		5
6	3/8	.313	.375	.458	.489	.500	.540	.581	.623	.664	.705	.746	.788	6
7	7/16	.376	.438	.521	.552	.563	.603	.644	.686	.727	.768	.809	.851	7
8	1/2	.439	.500	.583	.614	.625	.665	.706	.748	.789	.830	.871	.913	8
9	9/16	.501	.562	.645	.676	.687	.727	.768	.810	.851	.892	.933	.975	9
10	5/8	.563	.625	.708	.739	.750	.790	.831	.873	.914	.955	.996	1.038	10
11	11/16	.626	.688	.771	.802	.813	.853	.894	.936	.977	1.018	1.059	1.101	11
12	3/4	.689	.750	.833	.864	.875	.915	.956	.998	1.039	1.080	1.121	1.163	12
13	13/16	.751	.812	.895	.926	.937	.977	1.018	1.060	1.101	1.142	1.183	1.225	13
14	7/8	.813	.875	.958	.989	1.000	1.040	1.081	1.123	1.164	1.205	1.246	1.288	14
15	15/16	.876	.938	1.021	1.052	1.063	1.103	1.144	1.186	1.227	1.268	1.309	1.351	15
16	1	.939	1.000	1.083	1.114	1.125	1.165	1.206	1.248	1.289	1.330	1.371	1.413	16
17	1-1/16	1.001	1.062	1.145	1.176	1.187	1.227	1.268	1.310	1.351	1.392	1.433	1.475	17
18	1-1/8	1.063	1.125	1.208	1.239	1.250	1.290	1.331	1.373	1.414	1.455	1.496	1.538	18
19	1-3/16	1.126	1.188	1.271	1.302	1.313	1.353	1.394	1.436	1.477	1.518	1.559	1.601	19
20	1-1/4	1.189	1.250	1.333	1.364	1.375	1.415	1.456	1.498	1.539	1.580	1.621	1.663	20
21	1-5/16	1.251	1.312	1.395	1.426	1.437	1.477	1.518	1.560	1.601	1.642	1.683	1.725	21
22	1-3/8	1.313	1.375	1.458	1.489	1.500	1.540	1.581	1.623	1.664	1.705	1.746	1.788	22
23	1-7/16	1.376	1.438	1.521	1.552	1.563	1.603	1.644	1.686	1.727	1.768	1.809	1.851	23
24	1-1/2	1.439	1.500	1.583	1.614	1.625	1.665	1.706	1.748	1.789	1.830	1.871	1.913	24
25	1-9/16	1.501	1.562	1.645	1.676	1.687	1.727	1.768	1.810	1.851	1.892	1.933	1.975	25
26	1-5/8	1.563	1.625	1.708	1.739	1.750	1.790	1.831	1.873	1.914	1.955	1.996	2.038	26
27	1-11/16	1.626	1.688	1.771	1.802	1.813	1.853	1.894	1.936	1.977	2.018	2.059	2.101	27
28	1-3/4	1.689	1.750	1.833	1.864	1.875	1.915	1.956	1.998	2.039	2.080	2.121	2.163	28
29	1-13/16	1.751	1.812	1.895	1.926	1.937	1.977	2.018	2.060	2.101	2.142	2.183	2.225	29
30	1-7/8	1.813	1.875	1.958	1.989	2.000	2.040	2.081	2.123	2.164	2.205	2.246	2.288	30
31	1-15/16	1.876	1.938	2.021	2.052	2.063	2.103	2.144	2.186	2.227	2.268	2.309	2.351	31
32	2	1.939	2.000	2.083	2.114	2.125	2.165	2.206	2.248	2.289	2.330	2.371	2.413	32
33	2-1/16	2.001	2.062	2.145	2.176	2.187	2.227	2.268	2.310	2.351	2.392	2.433	2.475	33
34	2-1/8	2.063	2.125	2.208	2.239	2.250	2.290	2.331	2.373	2.414	2.455	2.496	2.538	34
35	2-3/16	2.126	2.188	2.271	2.302	2.313	2.353	2.394	2.436	2.477	2.518	2.559	2.601	35
36	2-1/4	2.189	2.250	2.333	2.364	2.375	2.415	2.456	2.498	2.539	2.580	2.621	2.663	36
37	2-5/16	2.251	2.312	2.395	2.426	2.437	2.477	2.518	2.560	2.601	2.642	2.683	2.725	37
38	2-3/8	2.313	2.375	2.458	2.489	2.500	2.540	2.581	2.623	2.664	2.705	2.746	2.788	38
39	2-7/16	2.376	2.438	2.521	2.552	2.563	2.603	2.644	2.686	2.727	2.768	2.809	2.851	39
40	2-1/2	2.439	2.500	2.583	2.614	2.625	2.665	2.706	2.748	2.789	2.830	2.871	2.913	40
41	2-9/16	2.501	2.562	2.645	2.676	2.687	2.727	2.768	2.810	2.851	2.892	2.933	2.975	41
42	2-5/8	2.563	2.625	2.708	2.739	2.750	2.790	2.831	2.873	2.914	2.955	2.996	3.038	42
43	2-11/16	2.626	2.688	2.771	2.802	2.813	2.853	2.894	2.936	2.977	3.018	3.059	3.101	43
44	2-3/4	2.689	2.750	2.833	2.864	2.875	2.915	2.956	2.998	3.039	3.080	3.121	3.163	44
45	2-13/16	2.751	2.812	2.895	2.926	2.937	2.977	3.018	3.060	3.101	3.142	3.183	3.225	45
46	2-7/8	2.813	2.875	2.958	2.989	3.000	3.040	3.081	3.123	3.164	3.205	3.246	3.288	46
47	2-15/16	2.876	2.938	3.021	3.052	3.063	3.103	3.144	3.186	3.227	3.268	3.309	3.351	47
48	3	2.939	3.000	3.083	3.114	3.125	3.165	3.206	3.248	3.289	3.330	3.371	3.413	48
49	3-1/16	3.001	3.062	3.145	3.176	3.187	3.227	3.268	3.310	3.351	3.392	3.433	3.475	49
50	3-1/8	3.063	3.125	3.208	3.239	3.250	3.290	3.331	3.373	3.414	3.455	3.496	3.538	50
51	3-3/16	3.126	3.188	3.271	3.302	3.313	3.353	3.394	3.436	3.477	3.518	3.559	3.601	51
52	3-1/4	3.189	3.250	3.333	3.364	3.375	3.415	3.456	3.498	3.539	3.580	3.621	3.663	52
53	3-5/16	3.251	3.312	3.395	3.426	3.437	3.477	3.518	3.560	3.601	3.642	3.683	3.725	53
54	3-3/8	3.313	3.375	3.458	3.489	3.500	3.540	3.581	3.623	3.664	3.705	3.746	3.788	54
55	3-7/16	3.376	3.438	3.521	3.552	3.563	3.603	3.644	3.686	3.727	3.768	3.809	3.851	55
56	3-1/2	3.439	3.500	3.583	3.614	3.625	3.665	3.706	3.748	3.789	3.830	3.871	3.913	56
57	3-9/16	3.501	3.562	3.645	3.676	3.687	3.727	3.768	3.810	3.851	3.892	3.933	3.975	57
58	3-5/8	3.563	3.625	3.708	3.739	3.750	3.790	3.831	3.873	3.914	3.955	3.996	4.038	58
59	3-11/16	3.626	3.688	3.771	3.802	3.813	3.853	3.894	3.936	3.977	4.018	4.059	4.101	59
60	3-3/4	3.689	3.750	3.833	3.864	3.875	3.915	3.956	3.998	4.039	4.080	4.121	4.163	60
61	3-13/16	3.751	3.812	3.895	3.926	3.937	3.977	4.018	4.060	4.101	4.142	4.183	4.225	61
62	3-7/8	3.813	3.875	3.958	3.989	4.000	4.040	4.081	4.123	4.164	4.205	4.246	4.288	62
63	3-15/16	3.876	3.938	4.021	4.052	4.063	4.103	4.144	4.186	4.227	4.268	4.309	4.351	63
64	4	3.939	4.000	4.083	4.114	4.125	4.165	4.206	4.248	4.289	4.330	4.371	4.413	64

CODE: FIRST DASH NUMBER INDICATES NOMINAL DIAMETER IN THIRTY SECONDS.
SECOND DASH NUMBER INDICATES MAXIMUM GRIP IN SIXTEENTHS.

EXAMPLE: NAS529-8-8 = FLAT HEAD RIVET CLOSE TOLERANCE SHANK, 1/4 (8/32) DIAMETER WITH
1/2 (8/16) MAXIMUM GRIP.

③ INACTIVE FOR DESIGN
AFTER MARCH 19, 1980
(NO SUPERSEDING STANDARD)

CUSTODIAN: NATIONAL AEROSPACE STANDARDS COMMITTEE

PROCUREMENT
SPECIFICATION

NOTED

TITLE

RIVET-FLAT HEAD, HI-SHEAR,
CLOSE TOLERANCE SHANKCLASSIFICATION
STANDARD PART

Documents
NAS 529
Document Sharing Hub