

FED. SUPPLY CLASS
3020

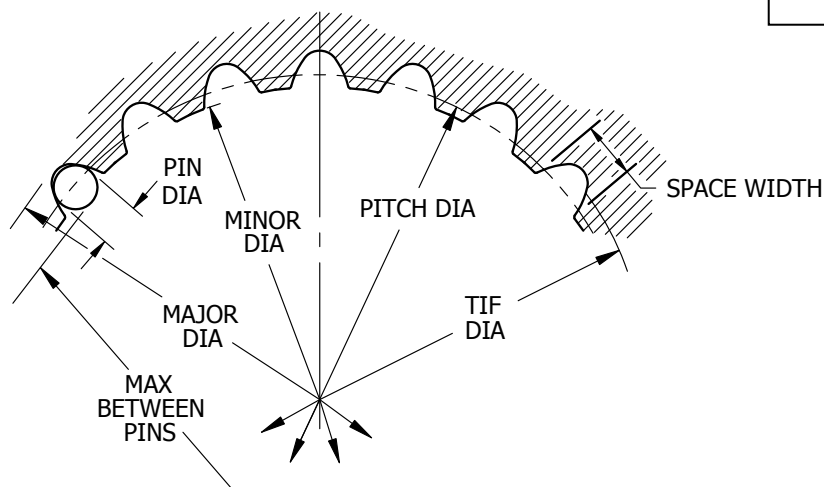


FIGURE 1 - FILLET ROOT HOLE SPLINE

TABLE I - 8/16 DIAMETRAL PITCH HOLE SPLINE /a/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT SIDE FIT				MEASUREMENT BETWEEN PINS		SPACE WIDTH		MEAS. PIN DIA
			TIF DIA MIN	MINOR DIA +.0035 -0.0000	MAJOR DIA +.0175 -0.0000	FILLET RAD MIN	MAX	MIN	DIMENSIONAL MAX	MIN EFFECTIVE	
1	2	3	4	5	6	7	8	9	10	11	12
8-11	1.3750	1.1908	1.5000	1.2500	1.6000	.027	1.1664	1.1637	.1994	.1963	.1800
8-13	1.6250	1.4073	1.7500	1.5000	1.8500	.028	1.4185	1.4158	.1994	.1963	.1800
8-15	1.8750	1.6238	2.0000	1.7500	2.1000	.030	1.6701	1.6674	.1994	.1963	.1800
8-17	2.1250	1.8403	2.2500	2.0000	2.3500	.031	1.9213	1.9186	.1994	.1963	.1800
8-19	2.3750	2.0568	2.5000	2.2500	2.6000	.031	2.1723	2.1696	.1994	.1963	.1800
8-21	2.6250	2.2733	2.7500	2.5000	2.8500	.032	2.4233	2.4206	.1995	.1963	.1800
8-23	2.8750	2.4898	3.0000	2.7500	3.1000	.032	2.6739	2.6712	.1995	.1963	.1800
8-25	3.1250	2.7063	3.2500	3.0000	3.3500	.033	2.9244	2.9217	.1995	.1963	.1800
8-27	3.3750	2.9228	3.5000	3.2500	3.6000	.033	3.1748	3.1722	.1995	.1963	.1800
8-29	3.6250	3.1393	3.7500	3.5000	3.8500	.033	3.4252	3.4226	.1995	.1963	.1800
8-31	3.8750	3.3559	4.0000	3.7500	4.1000	.033	3.6756	3.6730	.1995	.1963	.1800
8-33	4.1250	3.5724	4.2500	4.0000	4.3500	.034	3.9260	3.9234	.1995	.1963	.1800
8-35	4.3750	3.7889	4.5000	4.2500	4.6000	.034	4.1764	4.1738	.1996	.1963	.1800
8-37	4.6250	4.0054	4.7500	4.5000	4.8500	.034	4.4266	4.4240	.1996	.1963	.1800
8-39	4.8750	4.2219	5.0000	4.7500	5.1000	.034	4.6768	4.6742	.1996	.1963	.1800
8-41	5.1250	4.4384	5.2500	5.0000	5.3500	.034	4.9270	4.9244	.1996	.1963	.1800
8-43	5.3750	4.6549	5.5000	5.2500	5.6000	.034	5.1772	5.1746	.1996	.1963	.1800
8-45	5.6250	4.8714	5.7500	5.5000	5.8500	.034	5.4274	5.4248	.1996	.1963	.1800
8-47	5.8750	5.0879	6.0000	5.7500	6.1000	.034	5.6775	5.6749	.1996	.1963	.1800

/a/ PRESSURE ANGLE = 30°, ADDENDUM (BASIC) = .0625, DEDENDUM = .0770, CIRCULAR PITCH = .3927

② COMPLETELY REVISED

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

FORM 09-01

REVISION DATE: JANUARY 31, 2013

ISSUE DATE: SEPTEMBER 15, 1953

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NONE	TITLE INVOLUTE SPLINE, HOLE, 30° FULL FILLET	CLASSIFICATION DESIGN STANDARD NAS580
		SHEET 1 OF 4

AEROSPACE INDUSTRIES ASSOCIATION OF AMERICA, INC.
1000 WILSON BLVD.
ARLINGTON, VA 22209

THIS DRAWING SUPERSEDES ALL ANTECEDENT STANDARD DRAWINGS FOR THE SAME PRODUCT AND SHALL BECOME EFFECTIVE NO LATER THAN SIX MONTHS FROM THE LAST REVISION DATE.

TABLE II – 16/32 DIAMETRAL PITCH HOLE SPLINE /b/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT SIDE FIT				MEASUREMENT BETWEEN PINS		SPACE WIDTH		MEAS. PIN DIA
			TIF DIA MIN	MINOR DIA +.0025 -0.0000	MAJOR DIA +.0112 -0.0000	FILLET RAD MIN	MAX	MIN	DIMEN-SIONAL MAX	MIN EFFECTIVE	
			4	5	6	7					
1	2	3	4	5	6	7	8	9	10	11	12
16-11	.6875	.5954	.7500	.6250	.8000	.012	.5849	.5831	.1007	.0982	.0900
16-13	.8125	.7036	.8750	.7500	.9250	.013	.7110	.7092	.1007	.0982	.0900
16-15	.9375	.8119	1.0000	.8750	1.0500	.014	.8368	.8350	.1007	.0982	.0900
16-17	1.0625	.9202	1.1250	1.0000	1.1750	.014	.9623	.9605	.1007	.0982	.0900
16-19	1.1875	1.0284	1.2500	1.1250	1.3000	.014	1.0878	1.0860	.1007	.0982	.0900
16-21	1.3125	1.1367	1.3750	1.2500	1.4250	.015	1.2134	1.2116	.1008	.0982	.0900
16-23	1.4375	1.2449	1.5000	1.3750	1.5500	.015	1.3387	1.3369	.1008	.0982	.0900
16-25	1.5625	1.3532	1.6250	1.5000	1.6750	.015	1.4640	1.4622	.1008	.0982	.0900
16-27	1.6875	1.4614	1.7500	1.6250	1.8000	.015	1.5892	1.5874	.1008	.0982	.0900
16-29	1.8125	1.5697	1.8750	1.7500	1.9250	.015	1.7144	1.7126	.1008	.0982	.0900
16-31	1.9375	1.6779	2.0000	1.8750	2.0500	.016	1.8396	1.8378	.1008	.0982	.0900
16-35	2.1875	1.8944	2.2500	2.1250	2.3000	.016	2.0900	2.0882	.1009	.0982	.0900
16-39	2.4375	2.1109	2.5000	2.3750	2.5500	.016	2.3402	2.3384	.1009	.0982	.0900
16-43	2.6875	2.3274	2.7500	2.6250	2.8000	.016	2.5904	2.5886	.1009	.0982	.0900
16-47	2.9375	2.5440	3.0000	2.8750	3.0500	.016	2.8385	2.8367	.1009	.0982	.0900

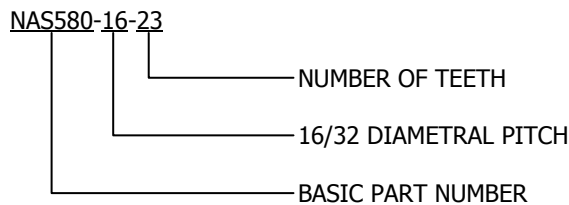
/b/ PRESSURE ANGLE = 30°, ADDENDUM (BASIC) = .0313, DEDENDUM = .0395, CIRCULAR PITCH = .1963

TABLE III – 32/64 DIAMETRAL PITCH HOLE SPLINE /c/

2ND DASH NO. OR NO. OF TEETH	PITCH DIA (REF)	BASE CIRCLE DIA (REF)	FILLET-ROOT SIDE FIT				MEASUREMENT BETWEEN PINS		SPACE WIDTH		MEAS. PIN DIA
			TIF DIA MIN	MINOR DIA +.0035 -0.0000	MAJOR DIA +.0175 -0.0000	FILLET RAD MIN	MAX	MIN	DIMEN-SIONAL MAX	MIN EFFECTIVE	
			4	5	6	7					
1	2	3	4	5	6	7	8	9	10	11	12
32-11	.3438	.2977	.3750	.3125	.4000	.004	.2947	.2929	.0516	.0491	.0450
32-13	.4063	.3518	.4375	.3750	.4625	.005	.3578	.3560	.0516	.0491	.0450
32-15	.4688	.4059	.5000	.4375	.5250	.005	.4206	.4188	.0516	.0491	.0450
32-17	.5313	.4601	.5625	.5000	.5875	.005	.4834	.4816	.0516	.0491	.0450
32-19	.5938	.5142	.6250	.5625	.6500	.006	.5461	.5443	.0516	.0491	.0450
32-21	.6563	.5683	.6875	.6250	.7125	.006	.6090	.6072	.0517	.0491	.0450
32-23	.7188	.6225	.7500	.6875	.7750	.006	.6717	.6699	.0517	.0491	.0450
32-25	.7813	.6766	.8125	.7500	.8375	.006	.7343	.7325	.0517	.0491	.0450
32-27	.8438	.7307	.8750	.8125	.9000	.006	.7969	.7951	.0517	.0491	.0450
32-29	.9063	.7848	.9375	.8750	.9625	.006	.8595	.8577	.0517	.0491	.0450
32-31	.9688	.8390	1.0000	.9375	1.0250	.007	.9221	.9203	.0517	.0491	.0450
32-35	1.0938	.9472	1.1250	1.0625	1.1500	.007	1.0473	1.0455	.0518	.0491	.0450
32-39	1.2188	1.0555	1.2500	1.1875	1.2750	.007	1.1724	1.1706	.0518	.0491	.0450
32-43	1.3438	1.1637	1.3750	1.3125	1.4000	.007	1.2975	1.2957	.0518	.0491	.0450
32-47	1.4688	1.2720	1.5000	1.4375	1.5250	.007	1.4226	1.4208	.0518	.0491	.0450

/c/ PRESSURE ANGLE = 30°, ADDENDUM, (BASIC) = .0156, DEDENDUM = .0190, CIRCULAR PITCH = .0982

EXAMPLE OF CALL-OUT:



REVISION

2

NAS580

SHEET 2

② COMPLETELY REVISED