

# AEROSPACE STANDARD

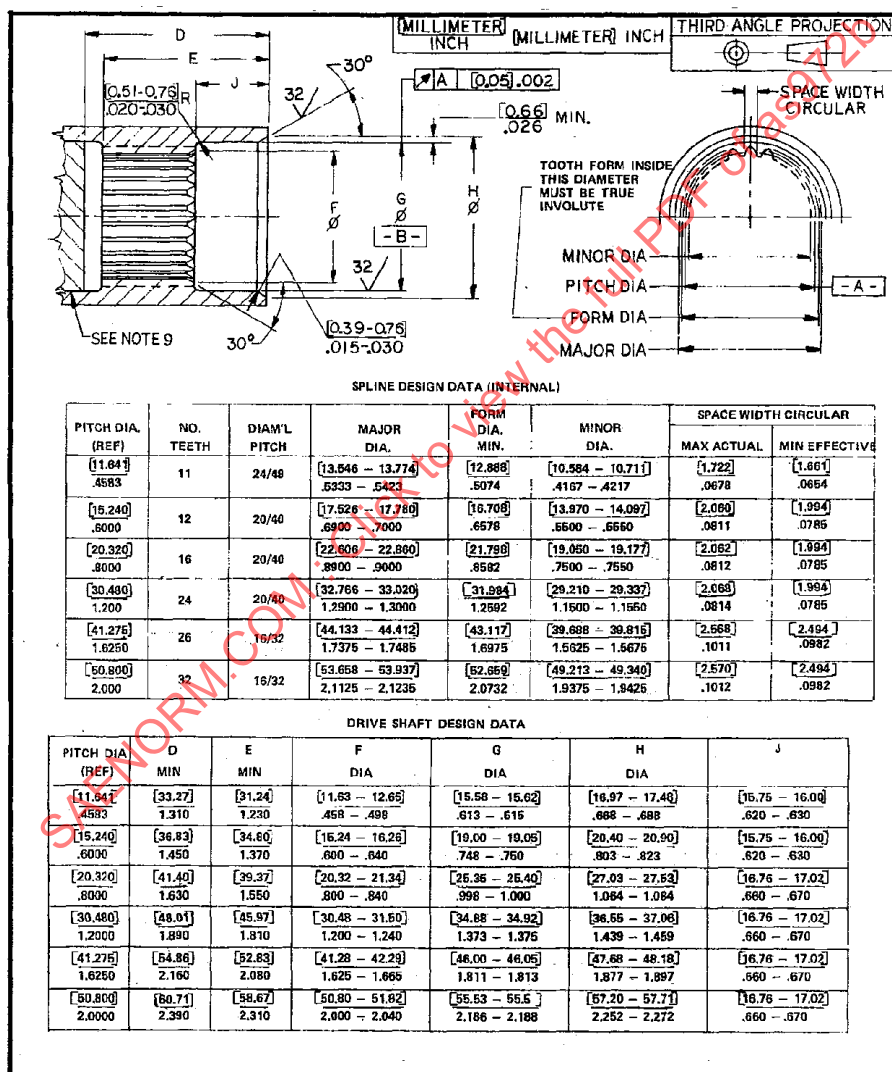
**SAE AS972**

REV.  
B

Issued 1967-10  
Revised 1977-07  
Reaffirmed 2004-03

Superseding AS972A

## Spline Details, Accessory Drives and Flanges



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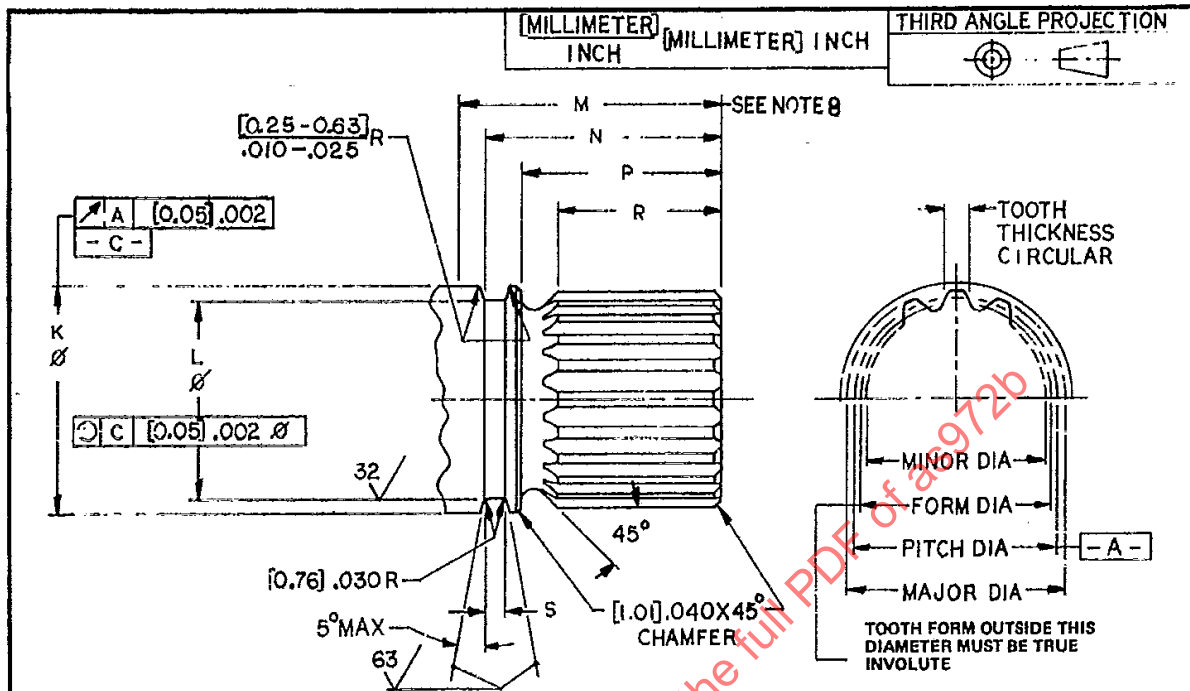
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# SAE AS972 Revision B



SPLINE DESIGN DATA (EXTERNAL)

| PITCH DIA<br>(REF) | NO.<br>TEETH | DIAM'L<br>PITCH | MAJOR<br>DIA                         | FORM<br>DIA.<br>MAX. | MINOR<br>DIA.                        | TOOTH THICKNESS CIRCULAR |                  |
|--------------------|--------------|-----------------|--------------------------------------|----------------------|--------------------------------------|--------------------------|------------------|
|                    |              |                 |                                      |                      |                                      | MIN ACTUAL               | MAX EFFECTIVE    |
| [11.041]<br>.4583  | 11           | 24/48           | [12.573 - 12.700]<br>.4950 - .5000   | [10.398]<br>.4093    | [9.141 - 9.370]<br>.3699 - .3689     | [1.473]<br>.0580         | [1.534]<br>.0604 |
| [15.240]<br>.6000  | 12           | 20/40           | [16.383 - 16.510]<br>.6450 - .6500   | [13.772]<br>.5422    | [12.273 - 12.527]<br>.4832 - .4932   | [1.791]<br>.0705         | [1.857]<br>.0731 |
| [20.320]<br>.8000  | 16           | 20/40           | [21.483 - 21.590]<br>.8450 - .8500   | [18.842]<br>.7418    | [17.338 - 17.592]<br>.6826 - .6926   | [1.778]<br>.0700         | [1.847]<br>.0727 |
| [30.480]<br>1.2000 | 24           | 20/40           | [31.623 - 31.750]<br>1.2450 - 1.2500 | [28.976]<br>1.1408   | [27.462 - 27.716]<br>1.0812 - 1.0912 | [1.753]<br>.0690         | [1.826]<br>.0719 |
| [41.275]<br>1.6250 | 28           | 16/32           | [42.738 - 42.863]<br>1.6825 - 1.6875 | [39.434]<br>1.5525   | [37.562 - 37.841]<br>1.4788 - 1.4898 | [2.233]<br>.0879         | [2.308]<br>.0908 |
| [50.800]<br>2.0000 | 32           | 16/32           | [52.261 - 52.388]<br>2.0575 - 2.0625 | [48.941]<br>1.9268   | [47.056 - 47.335]<br>1.8526 - 1.8636 | [2.212]<br>.0871         | [2.289]<br>.0901 |

ACCESSORY SHAFT DESIGN DATA

| PITCH DIA<br>(REF) | K<br>DIA                         | L<br>DIA                         | M<br>MIN         | N                                | P                                | R<br>MIN         | S                            | "O" RING<br>SEE NOTE 7 |
|--------------------|----------------------------------|----------------------------------|------------------|----------------------------------|----------------------------------|------------------|------------------------------|------------------------|
| [11.641]<br>.4583  | [15.06 - 15.11]<br>.593 - .595   | [11.38 - 11.43]<br>.448 - .450   | [32.77]<br>1.290 | [23.47 - 23.67]<br>.924 - .932   | [17.15 - 17.40]<br>.675 - .685   | [12.19]<br>.480  | [3.68 - 3.94]<br>.145 - .155 | 111                    |
| [15.240]<br>.6000  | [18.49 - 18.54]<br>.728 - .730   | [14.81 - 14.85]<br>.583 - .585   | [36.32]<br>1.430 | [27.16 - 27.26]<br>1.069 - 1.073 | [20.70 - 20.96]<br>.815 - .825   | [15.37]<br>.605  | [3.68 - 3.94]<br>.145 - .155 | 113                    |
| [20.320]<br>.8000  | [24.84 - 24.89]<br>.978 - .980   | [19.56 - 19.60]<br>.770 - .772   | [40.89]<br>1.610 | [31.70 - 31.80]<br>1.248 - 1.252 | [24.26 - 24.51]<br>.955 - .965   | [18.92]<br>.745  | [4.65 - 4.90]<br>.183 - .193 | 210                    |
| [30.480]<br>1.2000 | [34.37 - 34.42]<br>1.353 - 1.355 | [29.06 - 29.13]<br>1.145 - 1.147 | [47.50]<br>1.870 | [38.30 - 38.40]<br>1.506 - 1.512 | [30.86 - 31.12]<br>1.215 - 1.225 | [25.53]<br>1.006 | [4.65 - 4.90]<br>.183 - .193 | 216                    |
| [41.275]<br>1.6250 | [45.49 - 45.54]<br>1.791 - 1.793 | [40.21 - 40.25]<br>1.583 - 1.585 | [54.36]<br>2.140 | [45.16 - 45.26]<br>1.778 - 1.782 | [37.72 - 37.97]<br>1.485 - 1.495 | [31.86]<br>1.255 | [4.65 - 4.90]<br>.183 - .193 | 222                    |
| [50.800]<br>2.0000 | [55.02 - 55.07]<br>2.166 - 2.168 | [49.74 - 49.78]<br>1.958 - 1.960 | [60.20]<br>2.370 | [51.00 - 51.10]<br>2.008 - 2.012 | [43.56 - 43.82]<br>1.715 - 1.725 | [37.72]<br>1.485 | [4.65 - 4.90]<br>.183 - .193 | 225                    |