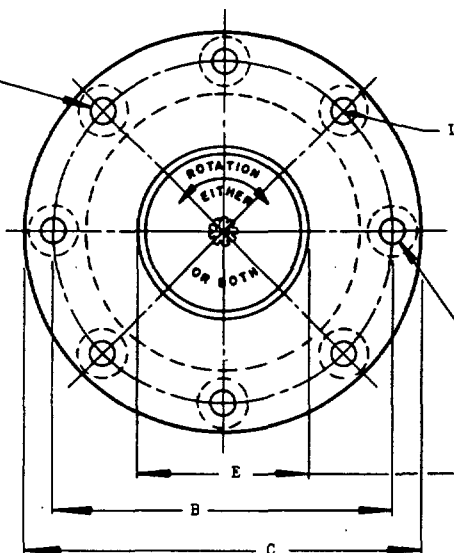


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F DIA, D HOLES, SHALL FIT A MATING PART HAVING A PILOT DIAMETER W AND D STUDS EACH WITHIN AN AREA HAVING X DIAMETER CENTRALLY LOCATED ON ITS BASIC POSITION

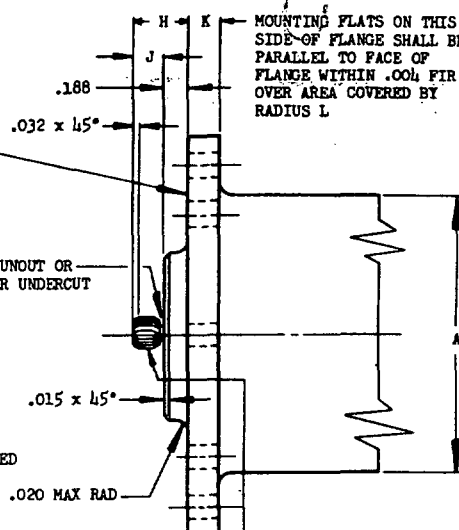


SPLINE - PINION DATA
N = NUMBER OF TEETH
P = DIAMETRAL PITCH
20° PRESSURE ANGLE

ROCKWELL C OR EQUIVALENT HARDNESS:
SURFACE 45 MINIMUM 55 MAXIMUM
CORE 55 MAXIMUM

SURFACE SHALL BE FLAT AND SQUARE WITH AXIS OF ROTATION WITHIN .002 FIR PER INCH OF DIAMETER FLANGE AND SHAFT RELATIVELY ROTATING

FED. SUP CLASS.
1500



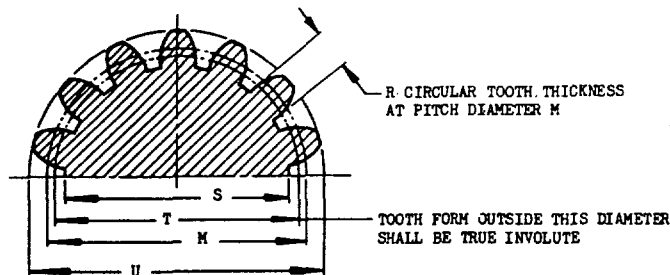
MOUNTING FLATS ON THIS SIDE OF FLANGE SHALL BE PARALLEL TO FACE OF FLANGE WITHIN .004 FIR OVER AREA COVERED BY RADIUS L

HOB RUNOUT OR SHAPER UNDERCUT

D HOLES EQUALLY SPACED

PILOT E DIAMETER TO BE CONCENTRIC WITH AXIS OF ROTATION WITHIN .003 FIR FLANGE AND SHAFT RELATIVELY ROTATING

COMPOSITE ERROR: TOOTH TO TOOTH TYPES V-VI .0007
TYPES VII-IX .0010
TOTAL: TYPES V-VI .0020
TYPES VII-IX .0025
WITH REFERENCE TO AXIS OF ROTATION, FLANGE AND SHAFT RELATIVELY ROTATING



SPLINE-PINION DETAIL

- A IS GREATEST DIAMETER OR DIMENSION OF ACCESSORY EXCLUSIVE OF ATTACHED DEVICES.
- OUTSIDE DIAMETERS OF SMALL PINIONS ARE ENLARGED TO AVOID UNDERCUT, TO MAINTAIN STANDARD CENTER DISTANCE, THE GEAR DIAMETERS MUST BE DECREASED BY THE AMOUNT OF THE PINION ENLARGEMENT GIVEN AT Q. IF MATING GEARS ARE MADE WITH STANDARD TOOTH PROPORTIONS, THE CENTER DISTANCES MUST BE INCREASED APPROXIMATELY BY 1/2 Q.
- OTHER MASTER GEARS MAY BE USED IF CENTER DISTANCE IS PROPERLY RECALCULATED.
- R MAXIMUM HAS BEEN REDUCED FROM THEORETICAL BY TOTAL COMPOSITE ERROR OF PINION ONLY, RANGE RESULTS FROM SIZE VAR ONLY.
- RANGE OF CENTER DISTANCE IS THAT RESULTING FROM RMS SUMMATION OF ALL VARIABLES IN THIS STRUCTURE.

SIZE DETERMINATION OF MATING GEAR MUST RECOGNIZE FURTHER VARIATIONS IN ITS SUPPORTING STRUCTURE.

SPLINE-PINION DIMENSIONS ARE BASIC MAXIMUM.

PINION DIMENSIONS ARE ADEQUATE FOR TYPE SHOWN BUT ALL PINIONS SHALL BE CHECKED FOR APPLICATION.

REMOVE ALL BURRS AND SHARP EDGES.

DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS $\pm .010$, ANGLES $\pm 2^\circ$.

NOMINAL USE OF THIS DRIVE FOR AC OR DC ELECTRICAL MOTORS.

(A) INACTIVE 1 JAN 1977 FOR NEW DESIGN SEE SAE STANDARDS AS959 THRU AS972, AS976 AND AS977. (CONTINUED APPLICATION OF THIS STANDARD ON CONTRACTS IN EFFECT PRIOR TO 1 JAN 1977 IS PERMISSIBLE).

THIS DOCUMENT HAS BEEN PROMULGATED BY THE DEPARTMENT OF DEFENSE AS THE MILITARY STANDARD TO LIMIT THE SELECTION OF THE ITEM, PRODUCT, OR DESIGN COVERED HEREIN IN ENGINEERING, DESIGN, AND PROCUREMENT. THIS STANDARD SHALL BECOME EFFECTIVE NOT LATER THAN 90 DAYS AFTER THE LATEST DATE OF APPROVAL SHOWN.

THIS IS A DESIGN STANDARD, NOT USED AS A PART NUMBER.

CUSTODIANS Navy - AS Air Force 99	OTHER INT. A - N - AF -	MILITARY STANDARD	MS33569 (ASG)
		DRIVE, ROUND MOUNTING FLANGE WITH INVOLUTE SPLINE-PINION	
PROCUREMENT SPECIFICATION NONE	SUPERSEDES: AND10455	SHEET 1 OF 2	

FED. SUP CLASS.
1500

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TYPE	(a) A MAX DIA	B BASIC DIA	C + .000 - .062 DIA	D	E + .000 - .002 DIA	F + .015 - .005 DIA	H + .030 - .005 DIA	J MIN	K		L MIN RAD	M PD THRO	N	P	(b) Q THRO	(d) R	
									MAX	MIN						MAX	MIN
V	4.688	5.750	6.750	6	4.748		.719	.106				.3889	14	36	.0100	.0167	.0164
VI	5.563	6.500	7.500	8	5.198		.844	.500				.5000	15	30	.0082	.0518	.0514
VII	6.563	8.000	9.000		6.998	.406	.969	.625		.138	.121	.5711	16	28	.0046	.0568	.0562
VIII	8.125	9.000	10.000	12	7.998		1.219	.781				.6667	24	24	.0054	.0664	.0658
IX	9.125	10.000	11.000		8.998		1.106	.969				.8500	17	20	.0006	.0777	.0772

TYPE	S DIA THRO	T MAX DIA	U		W + .0001 - .0001 DIA	X + .0001 - .0001 DIA	MEASURE WIRE DIA	MEASUREMENT OVER 2 WIRES		(c) MASTER GEAR		(e) CENTER DISTANCE WITH MASTER			
			MAX	MIN				NUMBER TEETH	TOOTH THICKNESS	THRO	MAX	MIN			
V	.3283	.3664	.4514	.4506	L. 71.90		.05333	.4774	.4767	72	.0436	1.1994	1.1997	1.1905	
VI	.4242	.4708	.5717	.5710	5.4990		.0610	.6010	.6005	60	.0521	1.2510	1.2518	1.2444	
VII	.4866	.5378	.6460	.6418	6.9990	.3936	.06857	.6796	.6786	84	.0561	1.7880	1.7873	1.7785	
VIII	.5680	.6275	.7540	.7497	7.9990		.0800	.7932	.7922	72	.0654	1.8360	1.8363	1.8216	
IX	.7266	.7998	.9492	.9449	8.9990		.0960	.9916	.9935	60	.0785	1.9253	1.9265	1.9121	

(A) SEE SHEET 1 FOR CHANGES

CUSTODIANS
Navy - AS
Air Force 99OTHER INT.
A -
N -
AF -

MILITARY STANDARD

DRIVE, ROUND MOUNTING FLANGE WITH INVOLUTE SPLINE-PINION

PROCUREMENT SPECIFICATION
NONE

SUPERSEDES: AND10455

MS3356C
(ASG)

SHEET 2 OF 2

DD FORM 672-1
1 OCT 52

APPROVED 30 Nov 55 REVISED (A) 26 NOV 56

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