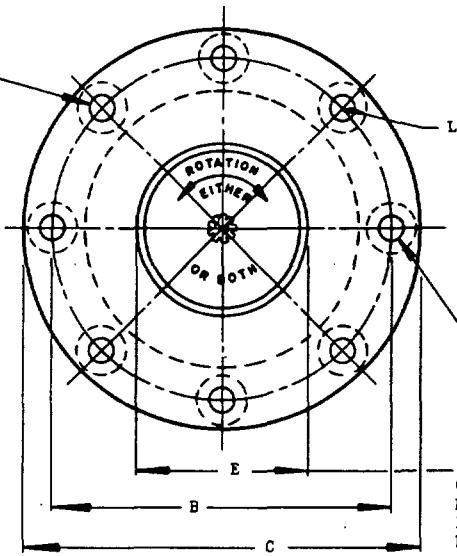


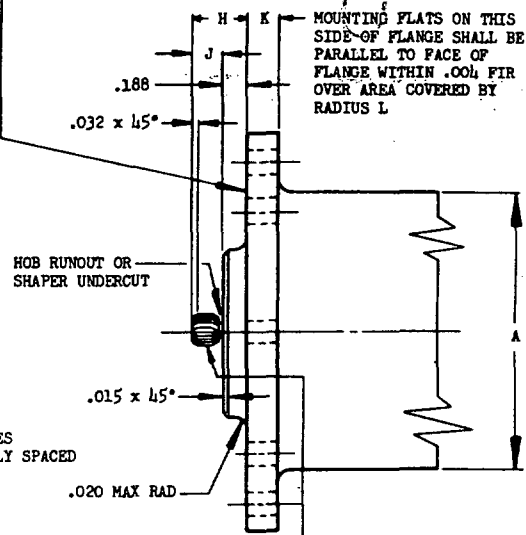
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F DIA, D HOLES, SHALL FIT A MATING PART HAVING A PILOT DIAMETER W AND D STUDS EACH WITHIN AN AREA HAVING X DIAMETER CENTRALLY LOCATED ON ITS BASIC POSITION

FED. SUP CLASS. 1500



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



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

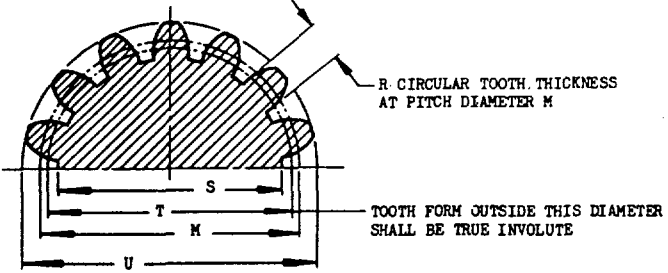
D HOLES EQUALLY SPACED

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

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



SPLINE-PINION DETAIL

- (a) A IS GREATEST DIAMETER OR DIMENSION OF ACCESSORY EXCLUSIVE OF ATTACHED DEVICES.
- (b) 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.
- (c) OTHER MASTER GEARS MAY BE USED IF CENTER DISTANCE IS PROPERLY RECALCULATED.
- (d) R MAXIMUM HAS BEEN REDUCED FROM THEORETICAL BY TOTAL COMPOSITE ERROR OF PINION ONLY, RANGE RESULTS FROM SIZE VAR ONLY.
- (e) 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 ±.010, ANGLES ±2°.

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

APPROVED 30 Nov 55 REVISED A 28 NOV 1976

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TYPE	(a) A		B	C	D	E	F	H	J	K		L	M	N	P	(b) Q		(d) R	
	MAX	DIA								MAX	MIN					MIN	THEO	MAX	MIN
V	4.688	5.750	6.750	6	4.748	4.719	.106	.814	.500	.138	.121	.3889	14	36	.0100	.0167	.0164		
VI	5.563	6.500	7.500	8	5.198	.969	.625	.814	.500	.138	.121	.5000	15	30	.0082	.0518	.0514		
VII	6.563	8.000	9.000	12	6.998	1.219	.781	.969	.625	.138	.121	.5711	16	28	.0046	.0568	.0562		
VIII	8.125	9.000	10.000	12	7.998	1.219	.781	1.219	.781	.138	.121	.6667	24	20	.0054	.0664	.0658		
IX	9.125	10.000	11.000	12	8.998	1.106	.969	1.106	.969	.138	.121	.8500	17	20	.0006	.0777	.0772		

TYPE	S	T	U		W	X	MEASUREMENT		(c) MASTER GEAR		(e) CENTER DISTANCE	
			MAX	DIA			OVER 2 WIRES	NUMBER	TOOTH	WITH	MAX	MIN
V	.3283	.3664	.4514	.4506	4.7490	.05333	.1774	.1767	72	.0436	1.1994	1.1997
VI	.4242	.4708	.5717	.5710	5.4990	.0610	.6010	.6005	60	.0524	1.2510	1.2514
VII	.4866	.5378	.6460	.6418	6.9990	.06857	.6796	.6786	84	.0561	1.7880	1.7873
VIII	.5680	.6275	.7540	.7497	7.9990	.0800	.7932	.7922	72	.0654	1.8360	1.8363
IX	.7266	.7998	.9492	.9449	8.9990	.0960	.9916	.9935	60	.0785	1.9253	1.9265

(A) SEE SHEET 1 FOR CHANGES

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APPROVED 30 Nov 55 REVISED (A) 26 NOV 59/6

CUSTODIANS
Navy - AS
Air Force 99

OTHER INT.
A -
M -
AF -

MILITARY STANDARD
DRIVE, ROUND MOUNTING FLANGE WITH INVOLUTE SPLINE-PINION

MS3356C
(ASG)

PROCUREMENT SPECIFICATION NONE

SUPERSEDES: ANDIOL55

SHEET 2 OF 2