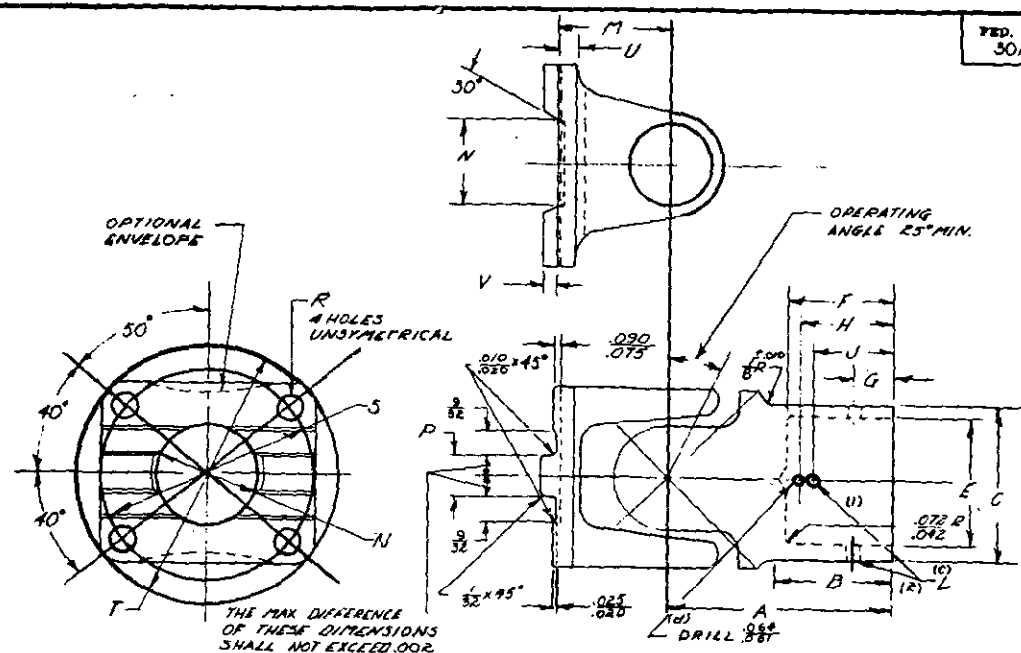


FED. SUP. CLASS.
3010



DIMENSIONS-ROUND HUB											
MS PART NO.	(D) FIN.	NOM SIZE	A	B	C DIA +0.000 -0.002	E DIA +0.004 -0.001	F	G	H	J	L PILOT HOLE DRILL
MS24313-12		$\frac{3}{8}$	1.313	$\frac{1}{16}$	.745	.625	$\frac{1}{16}$	.215	.755	.531	$\frac{1}{16}$
MS24313-16		1	1.750	$\frac{1}{16}$	.955	.812	1	.281	.945	.656	$\frac{1}{16}$
MS24313-20		$1\frac{1}{4}$	1.938	$\frac{1}{16}$	1.245	1.062	$\frac{1}{16}$	.312	1.065	.688	$\frac{1}{16}$
MS24313-24		$1\frac{1}{2}$	2.312	$\frac{1}{16}$	1.495	1.250	$\frac{1}{16}$	.344	1.130	.781	$\frac{1}{16}$
MS24313-28		$1\frac{3}{4}$	2.563	$\frac{1}{16}$	1.745	1.375	$\frac{1}{16}$	.531	1.455	.969	$\frac{1}{16}$
MS24313-32		2	2.613	$\frac{1}{16}$	1.995	1.625	$\frac{1}{16}$	.656	1.495	1.094	$\frac{1}{16}$

DIMENSIONS-FLANGE YOKE										STATIC TORQUE MAXIMUM LB. IN	WEIGHT JOINT TOTAL MAX LBS.
NOM SIZE	M DIA +0.010	N DIA +0.001	P DIA +0.005 -0.001	R DIA +0.003 -0.001	S DIA	T SWING DIA	U	V			
$\frac{3}{8}$	.875	1.251	.3729	.203	2.250	$2\frac{1}{8}$	$\frac{3}{16}$	.125		1500	.20
1	.875	1.251	.3729	.203	2.250	$2\frac{1}{8}$	$\frac{3}{16}$	.125		3000	.45
$1\frac{1}{4}$	.875	1.251	.3729	.203	2.250	$2\frac{1}{8}$	$\frac{3}{16}$	.125		7500	.80
$1\frac{1}{2}$	1.062	1.501	.3729	.266	2.562	$3\frac{1}{8}$	$\frac{3}{16}$	.125		11000	1.25
$1\frac{3}{4}$	1.250	1.501	.4379	.266	2.937	$3\frac{1}{8}$	$\frac{3}{16}$	.155		15000	2.00
2	1.250	1.501	.4379	.266	2.937	$3\frac{1}{8}$	$\frac{3}{16}$	.155		20000	3.00

- (A) FEDERAL ITEM IDENTIFICATION NO.
 (B) DIMENSION IS LENGTH OF STRAIGHT CYLINDRICAL SECTION.
 (C) CENTER LINE OF PILOT HOLE (U) SHALL LIE IN A DIRECTION PARALLEL TO THE PIVOT CENTER LINE OF THE YOKE WITHIN 0°30'.
 (D) CENTER LINE OF PILOT HOLE (S) SHALL BE PERPENDICULAR TO THE PIVOT CENTER LINE OF THE YOKE WITHIN 0°30'.
 (E) CENTER LINE OF INSPECTION HOLE SHALL LIE IN A DIRECTION PARALLEL TO THE PIVOT CENTER LINE OF THE YOKE WITHIN 0°30'.

MATERIALS: SEE PROCUREMENT SPECIFICATION.
 FINISH: SEE PROCUREMENT SPECIFICATION.
 REMOVE ALL BURRS AND SHARP EDGES.
 ALL DIMENSIONS TO BE MET AFTER PLATING.
 DIMENSIONS IN INCHES, UNLESS OTHERWISE SPECIFIED. TOLERANCES: FRACTIONS $\pm .001$, DECIMALS $\pm .0005$, ANGLES $\pm 0'15''$.
 THE TWO YOKE OF THE ASSEMBLED UNIVERSAL JOINT SHALL BE CONCENTRIC TO EACH OTHER WITHIN .015 TIR.
 ADD-N BEFORE DASH NO. FOR JOINTS WITHOUT PREDRILLED PILOT HOLES.
 EXAMPLE OF PART NOS: MS24313-12 + 3/4 IN. NOMINAL HUB WITH PREDRILLED PILOT HOLES;
 MS24313-N-12 + 3/4 IN. NOMINAL HUB WITHOUT PREDRILLED PILOT HOLES.
 ALL MACHINED SURFACES MUST BE SMOOTH $\sqrt{16}$ MAX. AND FREE FROM TOOL MARKS.
 C 2 IN DIMENSIONS TO BE CONCENTRIC WITHIN 0.005 TIR.
 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 30 DAYS AFTER THE LATEST DATE OF APPROVAL SHOWN.

Ⓐ CANCELLED AFTER 15 AUG 1977 NO SUPERSEDING STANDARD Ⓐ DENOTES CHANGES

CUSTODIAN Navy - BuAer Air Force	OTHER INT. A - ET N - ON	MILITARY STANDARD		MS24313
		UNIVERSAL JOINT, ANTIFRICTION BEARING, FLANGE HUB		
PROCUREMENT SPECIFICATION MIL-U-3963		SUPERSEDES:		SHEET 1 OF 1

DO FORM 472-1
1 OCT 62

APPROVED 6 FEBRUARY 1968 REVISED Ⓐ 15 AUG 1977