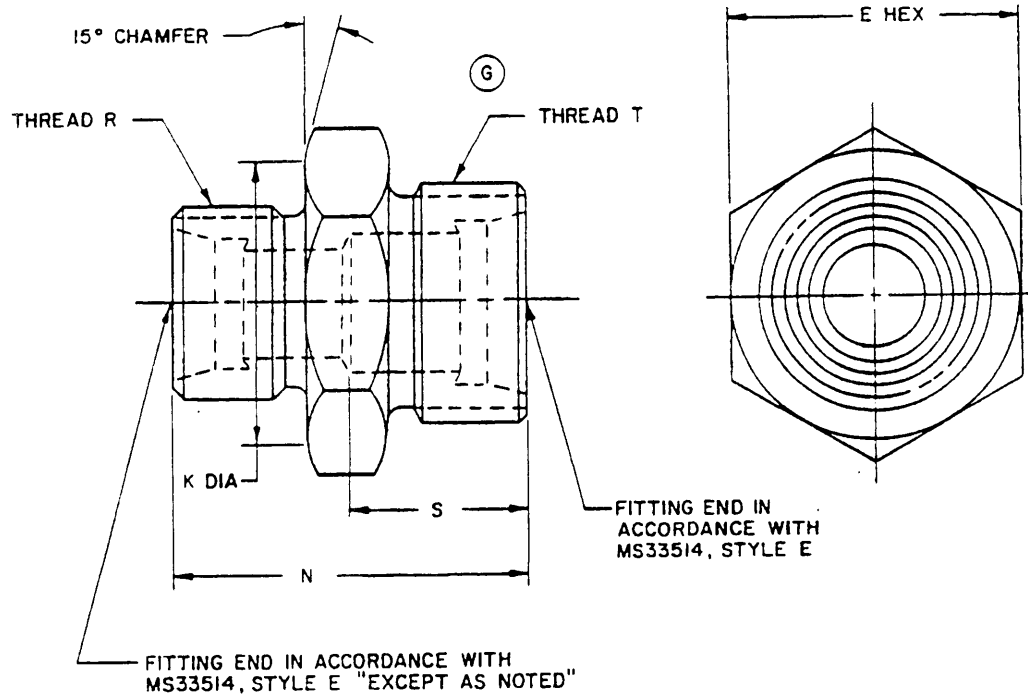


FED. SUP CLASS
4730

USER SYMBOLS:

NAVY - OS
ARMY - GL, CR, ME, AT

REVIEWER SYMBOLS:

USAF - 82, 71
ARMY - AR, MI
DLA - CS

Review/user information is current as of the date of this document.
For future coordination of changes to this document draft circulation
should be based on the information in the current DODISS.

DASH NO.	LARGE END		SMALL END		E HEX	K ±.010 DIA	N	S ±.031	WT LB MAX		
	TUBE OD	THREAD T MIL-S-8879	TUBE OD	THREAD R MIL-S-8879					STEEL	ALUM ALLOY	T1 ALLOY
-3-2	3/16	.3750-24UNJF-3A	1/8	.3125-24UNJF-3A	.625	.612	1.047	.547	.036	.014	.020
-4-2	1/4	.4375-20UNJF-3A	3/16	.3750-24UNJF-3A	.688	.674	1.094	.594	.042	.016	.024
-4-3	1/4	.4375-20UNJF-3A	3/16	.3750-24UNJF-3A	.688	1.141			.046	.017	.026
-5-4	5/16	.5000-20UNJF-3A	1/4	.4375-20UNJF-3A	.750	.736	1.156	.563	.065	.019	.037
-6-2	3/8	.5625-18UNJF-3A	1/8	.3125-24UNJF-3A	813	.799	1.203	.625	.066	.021	.038
-6-3	3/8	.5625-18UNJF-3A	3/16	.3750-24UNJF-3A	813	1.219			.067	.023	.038
-6-4	3/8	.5625-18UNJF-3A	1/4	.4375-20UNJF-3A	813	1.219			.068	.024	.039
-6-5	3/8	.5625-18UNJF-3A	5/16	.5000-20UNJF-3A	813	1.219			.070	.025	.040
-8-2	1/2	.7500-16UNJF-3A	1/8	.3125-24UNJF-3A	1.000	1.250			.101	.037	.058
-8-3	1/2	.7500-16UNJF-3A	3/16	.3750-24UNJF-3A	1.000	1.297			.108	.038	.062
-8-4	1/2	.7500-16UNJF-3A	1/4	.4375-20UNJF-3A	1.000	1.115	.719		.115	.039	.066
-8-5	1/2	.7500-16UNJF-3A	5/16	.5000-20UNJF-3A	1.000	1.344			.118	.040	.068
-8-6	1/2	.7500-16UNJF-3A	3/8	.5625-18UNJF-3A	1.000	1.344			.120	.042	.069
-10-4	5/8	.8750-14UNJF-3A	1/4	.4375-20UNJF-3A	1.125	1.438			.155	.053	.089
-10-5	5/8	.8750-14UNJF-3A	3/8	.5625-18UNJF-3A	1.125	1.625	.781		.204	.072	.117
-10-8	5/8	.8750-14UNJF-3A	1/2	.7500-16UNJF-3A	1.125				.222	.081	.128
-12-4	3/4	1.0625-12UNJF-3A	1/4	.4375-20UNJF-3A	1.375	1.531			.230	.084	.132
-12-5	3/4	1.0625-12UNJF-3A	5/16	.5000-20UNJF-3A	1.375	1.531	.875		.235	.086	.135
-12-6	3/4	1.0625-12UNJF-3A	3/8	.5625-18UNJF-3A	1.375	1.531			.240	.088	.138
-12-8	3/4	1.0625-12UNJF-3A	1/2	.7500-16UNJF-3A	1.375	1.625	.944		.250	.090	.144
-12-10	3/4	1.0625-12UNJF-3A	5/8	.8750-14UNJF-3A	1.375	1.688	.875		.260	.098	.150
-16-4	1	1.3125-12UNJF-3A	1/4	.4375-20UNJF-3A	1.625	1.531	.688		.327	.120	.188
-16-10	1	1.3125-12UNJF-3A	5/8	.8750-14UNJF-3A	1.625	1.688	.875		.335	.115	.193
-16-12	1	1.3125-12UNJF-3A	3/4	1.0625-12UNJF-3A	1.625	1.750			.342	.122	.197
-20-4	1-1/4	1.6250-12UNJF-3A	1/4	.4375-20UNJF-3A	1.875	1.531	.719		.439	.162	.253
-20-12	1-1/4	1.6250-12UNJF-3A	3/4	1.0625-12UNJF-3A	1.875	1.813	.306		.485	.172	.279
-20-16	1-1/4	1.6250-12UNJF-3A	1	1.3125-12UNJF-3A	1.875	1.750	.875		.450	.165	.259
-24-16	1-1/2	1.8750-12UNJF-3A	1	1.3125-12UNJF-3A	2.125	1.750	.875		.525	.173	.302
-24-20	1-1/2	1.8750-12UNJF-3A	1-1/4	1.6250-12UNJF-3A	2.125	2.095			.570	.209	.328

(G) DENOTES CHANGES

P.A. NAVY - AS
Other Cust
USAF - 99
ARMY - AVINTERNATIONAL
INTEREST
(G)

TITLE

REDUCER, EXTERNAL THREAD, FLARELESS TUBE

MILITARY STANDARD

MS21916

SC N/A

Approved for public release,
distribution is unlimited.

military standard is approved for use by all Departments
in excess of the Department of Defense Selection for all new
drawing and design applications and for repetitive use shall
be from this document

APPROVED 4 OCT 51
REVISED (G) 6 JUNE 88

FED. SUP CLASS

4730

REQUIREMENTS:

1. MATERIAL: CARBON STEEL - BARS
ALUMINUM ALLOY - BARS
CORROSION RESISTANT STEEL - BARS
TITANIUM ALLOY - BARS

SEE PROCUREMENT SPECIFICATION

2. FINISH: SEE PROCUREMENT SPECIFICATION.

NOTES:

1. BREAK ALL SHARP EDGES AND REMOVE ALL BURRS AND SLIVERS.

- (G) 2. DIMENSIONS ARE IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: DECIMALS ± 0.016 ; ANGLE $\pm 5^\circ$

3. PART NUMBERS:

NO CODE LETTER IN PART NUMBER FOR CARBON STEEL
ADD D IN PLACE OF FIRST DASH FOR ALUMINUM ALLOY (2024)
ADD W IN PLACE OF FIRST DASH FOR ALUMINUM ALLOY (7075)
ADD J IN PLACE OF FIRST DASH FOR CORROSION RESISTANT STEEL, TYPE 304
ADD K IN PLACE OF FIRST DASH FOR CORROSION RESISTANT STEEL, TYPE 316
ADD T AFTER DASH NUMBER FOR TITANIUM ALLOY (6AL-4V)
ADD R AFTER DASH NUMBER FOR CORROSION RESISTANT STEEL, TYPE 321

EXAMPLES OF PART NUMBERS:

MS21916-8-4 = REDUCER, 1/2 TUBING TO 1/4 TUBING, CARBON STEEL.
MS21916D8-4 = REDUCER, 1/2 TUBING TO 1/4 TUBING, ALUMINUM ALLOY (2024).
MS21916W8-4 = REDUCER, 1/2 TUBING TO 1/4 TUBING, ALUMINUM ALLOY (7075).
MS21916J8-4 = REDUCER, 1/2 TUBING TO 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 304.
MS21916K8-4 = REDUCER, 1/2 TUBING TO 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 316.
MS21916-8-4T = REDUCER, 1/2 TUBING TO 1/4 TUBING, TITANIUM ALLOY (6AL-4V).
MS21916-8-4R = REDUCER, 1/2 TUBING TO 1/4 TUBING, CORROSION RESISTANT STEEL, TYPE 321.

- (G) 4. ITEMS CODED "C" ON PREVIOUS ISSUES OF THIS STANDARD ARE NO LONGER TO BE FURNISHED. UNLESS OTHERWISE SPECIFIED, PARTS CODED J, K, OR R (AT SUPPLIER'S OPTION) SHALL BE FURNISHED IN LIEU OF "C" CODED PARTS.

5. TITANIUM IS NOT RECOMMENDED FOR USE IN OXYGEN SYSTEMS.

- (G) 6. PARTS ARE NOT TO BE MANUFACTURED FROM CORROSION RESISTANT STEEL TYPE 347 MATERIAL AFTER 31 DECEMBER 1989. HOWEVER, TYPE CODE "S" PARTS MAY BE USED UNTIL EXISTING STOCKS ARE DEPLETED.

- (G) 7. IN THE EVENT OF A CONFLICT BETWEEN THE TEXT OF THIS STANDARD AND THE REFERENCES CITED HEREIN, THE TEXT OF THIS STANDARD SHALL TAKE PRECEDENCE.

- (G) 8. REFERENCED GOVERNMENT (OR NON-GOVERNMENT) DOCUMENTS OF THE ISSUE LISTED IN THAT ISSUE OF THE DEPARTMENT OF DEFENSE INDEX OF SPECIFICATIONS AND STANDARDS (DoDISS) SPECIFIED IN THE SOLICITATION FORM A PART OF THIS STANDARD TO THE EXTENT SPECIFIED HEREIN.

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P.A. NAVY - AS Other Cust USAF - 99 ARMY - AV	INTERNATIONAL INTEREST (G)	TITLE REDUCER, EXTERNAL THREAD, FLARELESS TUBE	MILITARY STANDARD
PROCUREMENT SPECIFICATION M11 - F-18280	SUPERSEDES: MS21916 (ASG)	SHEET 2 OF 2	MS 21916

REVISED (G) FOR CHANGES SEE SHEETS 1 AND 2
REVISED 4 OCT 51