

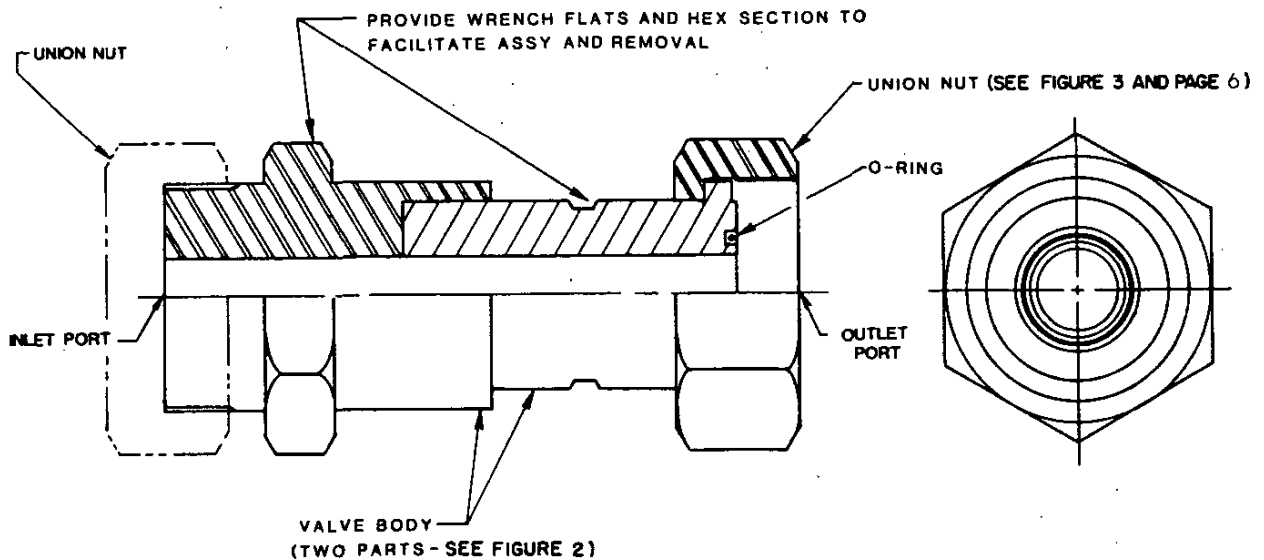
MIL-V-24630/1A(SH)
 8 August 1986
 SUPERSEDING
 MIL-V-24630/1(SH)
 19 March 1984

MILITARY SPECIFICATION SHEET

VALVES, CHECK, IN-LINE, NON-REVERSIBLE
 INSTALLATION FOR HYDRAULIC FLUID AND
 LUBRICATING OIL FLUID

This specification is approved for use within the Naval Sea Systems Command, Department of the Navy, and is available for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the valves described herein shall consist of this specification and the latest issue of MIL-V-24630(SH).



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FIGURE 1. Non-reversible in-line check valve.

Ⓐ denotes changes.

AMSC N/A

DISTRIBUTION STATEMENT A

Approved for public release; distribution unlimited

FSC 4820

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REQUIREMENTS:

Rated flow and pressure drop shall be as shown in table I.

Dimensions are in inches.

Tolerances, unless otherwise specified herein, shall be plus or minus 1/64 for fractions and plus or minus 0.010 for decimals.

Union nut material shall be aluminum bronze in accordance with ASTM B 148.

(User's Note: union nut is equal to PC 8 of NAVSHIPS Drawing 810-1385884).

Part number: The part numbers consist of the basic number of this specification sheet and a dash number taken from table I for a valve assembly complete with union nut. For the union nut alone, the part number consists of the basic number of this specification sheet and a dash number from table III.

Examples: MIL-V-24630/1-08 (complete valve with union nut),

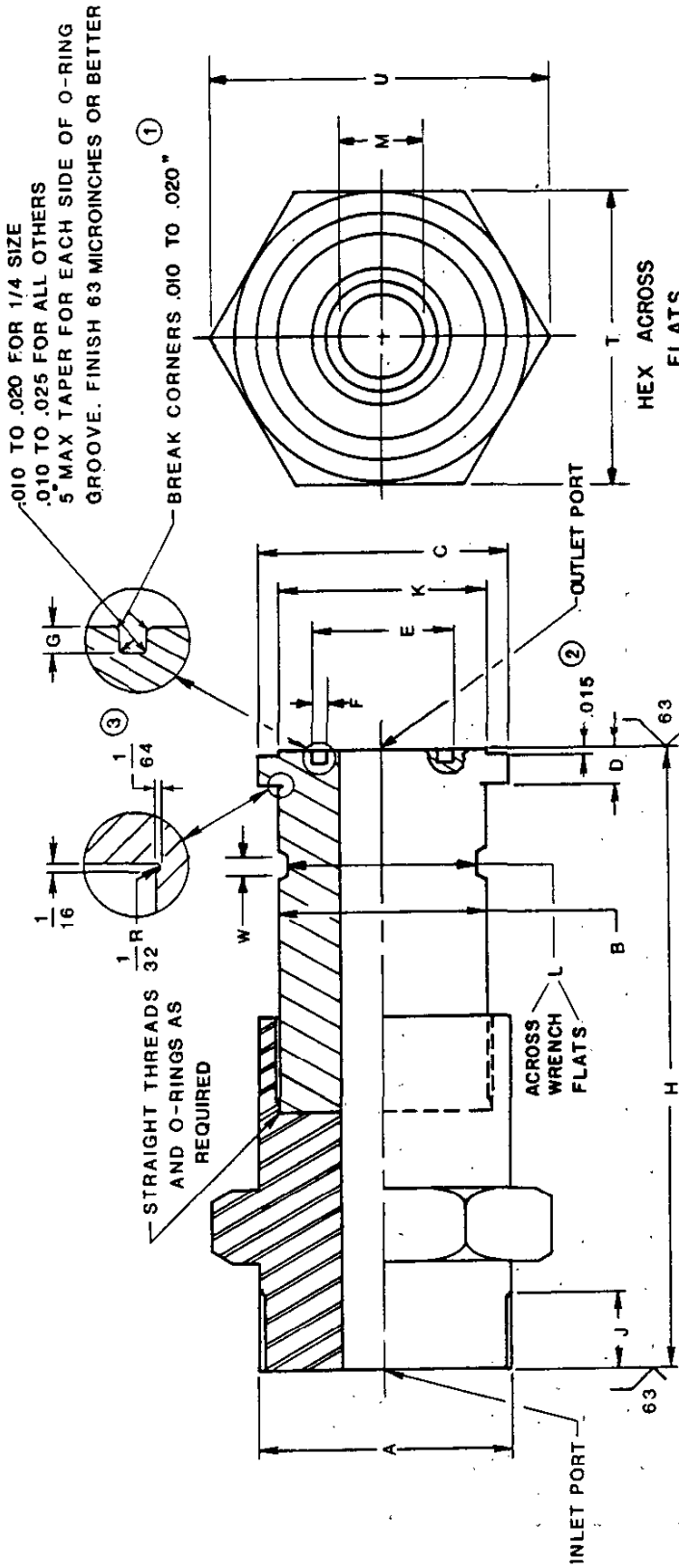
MIL-V-24630/1-08N (union nut only).

TABLE I. Rated flow, pressure drop and leakage requirements.

Dash no.	Nps 1/	Rated flow (minimum)		Pressure drop (max at rate of flow)		Maximum internal leakage drops/3 minutes
		liters/min	gal/min	lb/in ²	(kPa)	
04	1/4	10	2.6	10	69	2.0
06	3/8	16	4.2	10	69	3.0
08	1/2	25	6.6	10	69	4.0
12	3/4	40	10.6	10	69	5.0
16	1	64	16.9	10	69	6.0
20	1-1/4	100	26.4	10	69	7.0
24	1-1/2	160	42.3	10	69	8.0
32	2	250	66.0	10	69	9.0
40	2-1/2	400	105.7	10	69	10.0

1/ Check valve port dimensions are based on schedule 80 pipe. Use in other schedule piping may increase noise characteristic slightly.

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- NOTES:
1. For dash no. 04 edgebreak to be 0.005-0.015.
 2. Tolerance plus or minus 0.003.
 3. Tolerance plus 1/64, minus 0.

FIGURE 2. Valve body.

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A TABLE II. Body dimensions.

Dash no.	Nps ₁	A (dia)	B (dia) +0.000 -0.003	C (dia) +1/64 -0	D +0.015	E (dia) +0.005	F +0.000 -0.010	G +0.000 -0.006	H +1/16	J (min)	K +1/64	O-ring M83248/1- ref. only	L	M	T	U	W
04	1/4	1-3/16-12UN-3A	0.872	1-1/16	1/4	0.813	0.142	0.080	3-7/8	1/2	—	114	3/4	0.302	1-3/8	1.588	9/16
06	3/8	1-3/8-12UNF-3A	.997	1-1/4	5/16	1.007	.187	.107	4-1/16	1/2	--	210	7/8	.423	1-5/8	1.876	5/8
08	1/2	1-3/4-12UN-3A	1.372	1-5/8	5/16	1.132	.187	.107	4-3/8	1/2	—	212	1-1/4	.546	2	2.309	13/16
12	3/4	2-12UN-3A	1.622	1-7/8	5/16	1.257	.187	.107	5-3/16	1/2	1-5/8	214	1-3/8	.742	2-3/8	2.742	1
16	1	2-5/16-12NS-3A ₂	1.934	2-3/16	5/16	1.444	.187	.107	5-7/8	5/8	1-13/16	217	1-5/8	.957	2-3/4	3.175	1
20	1-1/4	2-3/4-12UN-3A	2.372	2-5/8	5/16	1.757	.187	.107	6-7/16	5/8	2-1/8	222	2-1/16	1.280	3-1/4	3.752	1-1/4
24	1-1/2	3-1/16-12NS-3A ₃	2.559	2-15/16	3/8	2.007	.187	.107	7-5/8	3/4	2-3/8	224	2-1/4	1.500	3-3/4	4.330	1-1/2
32	2	3-3/4-12UN-3A	3.184	3-5/8	7/16	2.507	.187	.107	8-1/8	3/4	2-7/8	228	2-3/4	1.940	4-3/8	5.051	1-5/8
40	2-1/2	4-1/2-12UN-3A	3.935	4-5/16	7/16	2.882	.187	.107	9-1/8	1	3-3/8	231	3-7/16	2.320	5-1/8	5.918	1-5/8

1/ Check valve port dimensions are based on schedule 80 pipe. Use in other schedule piping may increase noise characteristic slightly.

2/ PD 2.2584 - 2.2539.

3/ PD 3.0084 - 3.0037.

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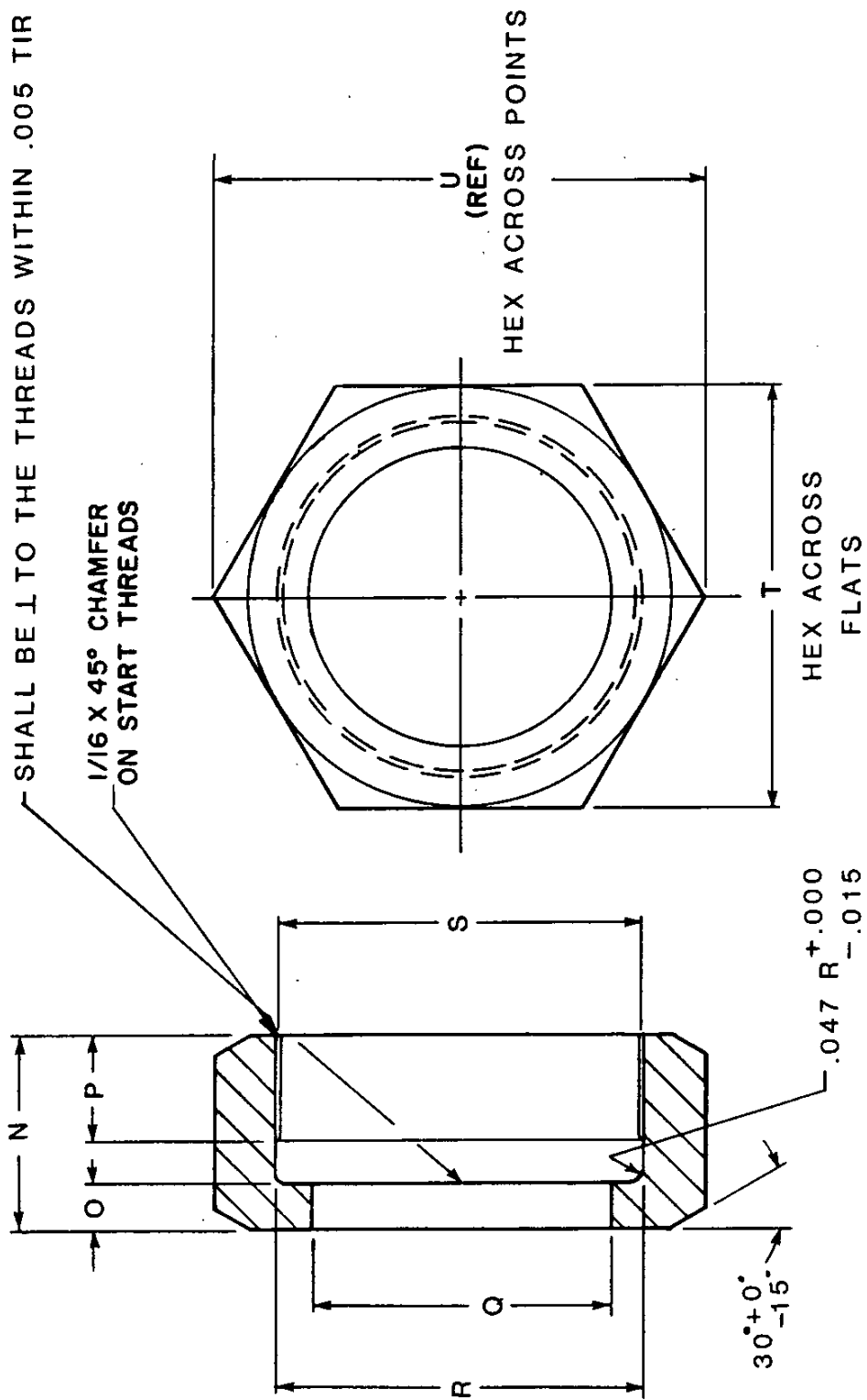


FIGURE 3. Union nut.

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A TABLE III. Union nut dimensions.

Dash no.	Nps ^{1/}	N	O +0.015 -0.000	P (min length of full threads)	Q (dia) +0.003 -0.000	R (dia) +0.010 -0.000	S (dia)	T	U (ref)
04N	1/4	1	0.250	9/16	0.878	1.201	1-3/16-12UN-3B	1-3/8	1.588
06N	3/8	1-1/16	.250	9/16	1.003	1.388	1-3/8-12UNF-3B	1-5/8	1.876
08N	1/2	1-1/16	.250	9/16	1.378	1.763	1-3/4-12UN-3B	2	2.309
12N	3/4	1-1/8	.313	9/16	1.628	2.013	2-12UN-3B	2-3/8	2.742
16N	1	1-1/4	.313	11/16	1.940	2.326	2-5/16-12NS-3B ^{2/}	2-3/4	3.175
20N	1-1/4	1-1/4	.313	11/16	2.378	2.763	2-3/4-12UN-3B	3-1/4	3.752
24N	1-1/2	1-1/2	.375	13/16	2.565	3.076	3-1/16-12NS-3B ^{3/}	3-3/4	4.330
32N	2	1-1/2	.375	13/16	3.190	3.763	3-3/4-12UN-3B	4-3/8	5.051
40N	2-1/2	1-7/8	.438	1-1/16	3.941	4.513	4-1/2-12UN-3B	5-1/8	5.918

^{1/} Check valve port dimensions are based on schedule 80 pipe. Use in other schedule piping may increase noise characteristic slightly.

^{2/} PD 2.2643-2.2584.

^{3/} PD 3.0146-3.0084.

Preparing activity:
Navy - SH
(Project 4820-N494)