FEDERAL SUPPLY CLASS
4730

RATIONALE

WRENCH PAD DIMENSION V RELOCATED TO ACTUAL PAD FEATURE. “INACTIVE” REPLACED BY “NOT RECOMMENDED.” CLASSES 3A AND 3B ADDED TO TABLE 1 HEADING FOR THE THREADS. MATERIAL CODE LETTER R, CRES 321, INTRODUCED AS AN OPTIONAL MATERIAL. FINISH FOR MATERIAL CODE LETTER R BEING INTRODUCED. PROCUREMENT SPECIFICATION NOTE UPDATED TO CURRENT QML VERBIAGE. UPDATED SPECIFICATION CALLOUTS FROM MIL-A-8625 TO MIL-PRF-8625 AND ARP4296 TO AS4296. NOTE /17/ REVISED TO REFLECT OPTIONAL DRY FILM CODE LETTER N CALLOUT FOR SWIVEL NUT. RECOMMENDATION USAGE NOTE FOR ALUMINUM IN NOTE /18/ REVISED. NEW USAGE RECOMMENDATION FOR MATERIAL 347 ADDED TO NOTE /18/. INVENTORY DISPOSITION NOTE 19 ADDED.

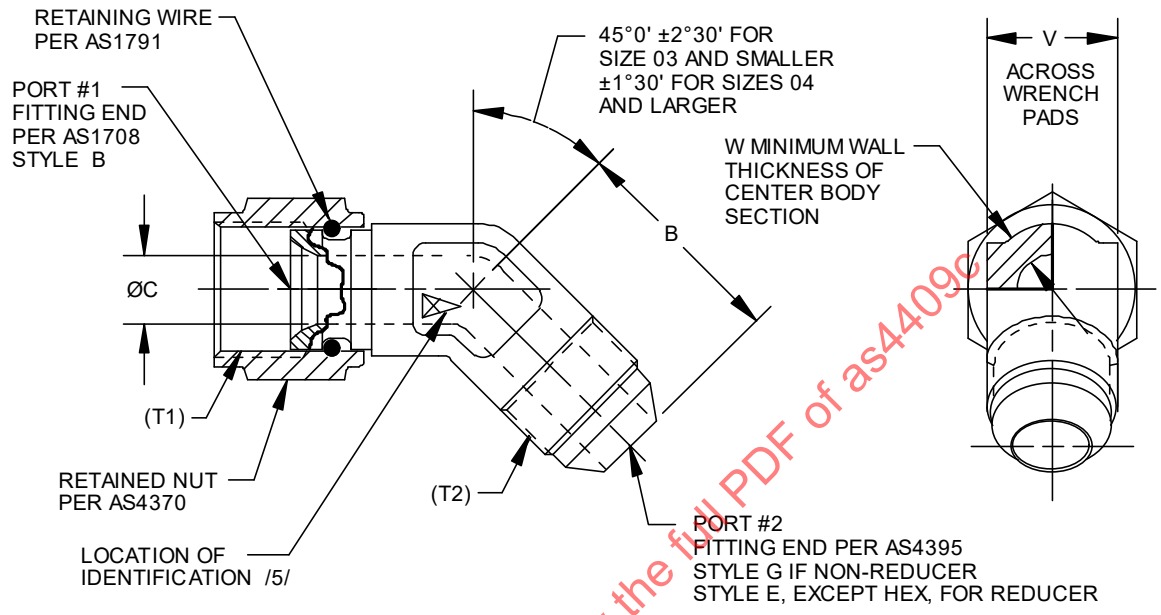


FIGURE 1 - FITTING ASSEMBLY, ELBOW 45°

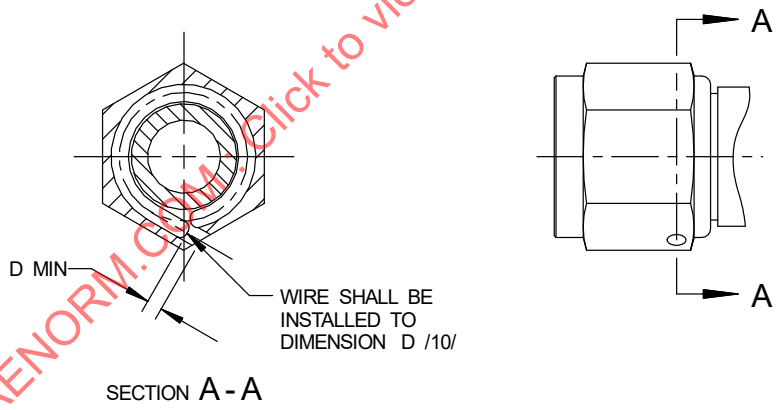
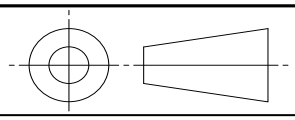


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

NOT RECOMMENDED IN PART /18/

For more information on this standard, visit
https://www.sae.org/standards/content/AS4409C

THIRD ANGLE PROJECTION



ISSUED 1995-03 REAFFIRMED 2007-10 REVISED 2023-05

CUSTODIAN: G-3

PROCUREMENT SPECIFICATION: AS4841 /4/

TABLE 1 - DIMENSIONS C-W AND WEIGHTS

BASIC NO. AS4409 /17/ SIZE CODE	(NOMINAL TUBE SIZE)	T1, T2 THREAD PER AS8879 CLASS 3B, 3A	C	D	V	W	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.058- .065	.045	.297- .314	.090	.012	.034	.019
03	.188	.3750-24 UNJF	.121- .128	.045	.360- .377	.100	.021	.060	.034
04	.250	.4375-20 UNJF	.168- .175	.045	.423- .440	.110	.025	.072	.041
05	.312	.5000-20 UNJF	.230- .237	.045	.485- .502	.120	.032	.092	.053
06	.375	.5625-18 UNJF	.293- .301	.045	.547- .565	.120	.044	.123	.071
08	.500	.7500-16 UNJF	.387- .395	.055	.735- .753	.150	.077	.224	.140
10	.625	.8750-14 UNJF	.480- .488	.063	.860- .878	.170	.118	.343	.196
12	.750	1.0625-12 UNJ	.604- .614	.095	1.047-1.065	.185	.196	.570	.326
16	1.000	1.3125-12 UNJ	.839- .851	.125	1.292-1.317	.205	.294	.852	.488
20	1.250	1.6250-12 UNJ	1.073-1.086	.155	1.605-1.630	.240	.551	1.600	.916
24	1.500	1.8750-12 UNJ	1.307-1.320	.180	1.855-1.880	.250	.734	2.130	1.220
32	2.000	2.5000-12 UNJ	1.776-1.791	.180	2.542-2.572	.350	.961	2.790	1.598

TABLE 2 - LEG LENGTH A

SIZE OF PORT #1	FORG. SIZE /8/ 02	FORG. SIZE /8/ 03	FORG. SIZE /8/ 04	FORG. SIZE /8/ 05	FORG. SIZE /8/ 06	FORG. SIZE /8/ 08	FORG. SIZE /8/ 10	FORG. SIZE /8/ 12	FORG. SIZE /8/ 16	FORG. SIZE /8/ 20	FORG. SIZE /8/ 24	FORG. SIZE /8/ 32
02	.403	.414	.427	.439	.466	.504	.530	.596	.634	.699	.796	.940
03	--	.416	.430	.442	.469	.507	.533	.572	.637	.702	.799	.943
04	--	--	.438	.450	.477	.515	.541	.580	.645	.710	.807	.951
05	--	--	--	.492	.519	.557	.583	.622	.687	.752	.798	.998
06	--	--	--	--	.603	.641	.667	.706	.771	.836	.888	1.029
08	--	--	--	--	--	.749	.775	.814	.878	.943	.995	1.091
10	--	--	--	--	--	--	.825	.864	.927	.992	1.044	1.139
12	--	--	--	--	--	--	--	.828	.892	.957	1.009	1.139
16	--	--	--	--	--	--	--	--	.911	.976	1.028	1.191
20	--	--	--	--	--	--	--	--	--	1.023	1.075	1.284
24	--	--	--	--	--	--	--	--	--	--	1.155	1.327
32	--	--	--	--	--	--	--	--	--	--	--	1.483

TABLE 3 - LEG LENGTH B

SIZE OF PORT #2	FORG. SIZE /8/ 02	FORG. SIZE /8/ 03	FORG. SIZE /8/ 04	FORG. SIZE /8/ 05	FORG. SIZE /8/ 06	FORG. SIZE /8/ 08	FORG. SIZE /8/ 10	FORG. SIZE /8/ 12	FORG. SIZE /8/ 16	FORG. SIZE /8/ 20	FORG. SIZE /8/ 24	FORG. SIZE /8/ 32
02	.664	.633	.633	.671	.728	.783	.807	.873	1.013	1.091	1.154	1.341
03	--	.664	.655	.702	.759	.814	.838	.904	1.044	1.122	1.185	1.372
04	--	--	.726	.773	.830	.885	.909	.975	1.115	1.193	1.256	1.443
05	--	--	--	.773	.830	.885	.909	.975	1.115	1.193	1.256	1.443
06	--	--	--	--	.836	.891	.915	.981	1.121	1.199	1.262	1.449
08	--	--	--	--	--	.992	1.016	1.082	1.222	1.300	1.363	1.550
10	--	--	--	--	--	--	1.117	1.183	1.323	1.401	1.464	1.651
12	--	--	--	--	--	--	--	1.289	1.429	1.507	1.570	1.757
16	--	--	--	--	--	--	--	--	1.476	1.554	1.617	1.804
20	--	--	--	--	--	--	--	--	--	1.601	1.664	1.851
24	--	--	--	--	--	--	--	--	--	--	1.789	1.976
32	--	--	--	--	--	--	--	--	--	--	--	2.226

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

a. DASH AS CODE LETTER:

(1) BODY: TYPE 4130 STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758.

(2) NUT: DASH AS CODE LETTER OF AS4370 (TYPE 4130 STEEL).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

b. CODE LETTER D /18/:

(1) BODY: TYPE 2014-T6 ALUMINUM ALLOY FORGING PER AMS4133; OR TYPE 2024-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6; OR TYPE 2024-T851 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/6 OR AMS4339.

(2) NUT: CODE LETTER D OF AS4370 (TYPE 2024 ALUMINUM ALLOY).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

c. CODE LETTER J:

(1) BODY: TYPE 304 CORROSION-RESISTANT STEEL FORGING OR BAR PER AMS5639 OR AMS-QQ-S-763.

(2) NUT: CODE LETTER J OF AS4370 (TYPE 304 CORROSION-RESISTANT STEEL).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

d. CODE LETTER K:

(1) BODY: TYPE 316 CORROSION-RESISTANT STEEL FORGING OR BAR PER AMS5648 OR AMS-QQ-S-763.

(2) NUT: CODE LETTER K OF AS4370 (TYPE 316 CORROSION-RESISTANT STEEL).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

e. CODE LETTER R:

(1) BODY: TYPE 321 CORROSION-RESISTANT STEEL BAR PER AMS5645 OR AMS-QQ-S-763.

(2) NUT: CODE LETTER R OF AS4370 (TYPE 321 CORROSION-RESISTANT STEEL).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

f. CODE LETTER S: /18/

(1) BODY: TYPE 347 CORROSION-RESISTANT STEEL FORGING OR BAR PER AMS5646 OR AMS-QQ-S-763.

(2) NUT: CODE LETTER S OF AS4370 (TYPE 347 CORROSION-RESISTANT STEEL).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

g. CODE LETTER T:

(1) BODY: TYPE 6Al-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928.

(2) NUT: CODE LETTER T OF AS4370 (TYPE 6Al-4V TITANIUM ALLOY).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

h. CODE LETTER W:

(1) BODY: TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

(2) NUT: CODE LETTER W OF AS4370 (TYPE 7075 ALUMINUM ALLOY).

(3) WIRE: PER AS1791 (CLASS 302 OR 305 CORROSION-RESISTANT STEEL).

2. HEAT TREATMENT PER PROCUREMENT SPECIFICATION.

3. FINISH:

a. DASH AS MATERIAL CODE LETTER:

(1) BODY: CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK.

(2) NUT: DASH AS MATERIAL CODE LETTER OF AS4370 (CADMIUM PLATE, DYED BLACK).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

b. MATERIAL CODE LETTER D:

(1) BODY: ANODIZE PER AMS2472 OR MIL-PRF-8625, TYPE II, CLASS 2, DYE BLUE, DUPLEX SEAL.

(2) NUT: MATERIAL CODE LETTER D OF AS4370 (ANODIC COATING, DYE BLUE).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

c. MATERIAL CODE LETTER J:

(1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.

(2) NUT: MATERIAL CODE LETTER J OF AS4370 (PASSIVATED).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

d. MATERIAL CODE LETTER K:

(1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.

(2) NUT: MATERIAL CODE LETTER K OF AS4370 (PASSIVATED).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

e. MATERIAL CODE LETTER R:

(1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.

(2) NUT: MATERIAL CODE LETTER R OF AS4370 (PASSIVATED).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

f. MATERIAL CODE LETTER S:

(1) BODY: PASSIVATE PER AMS2700, TYPE 6 OR TYPE 7.

(2) NUT: MATERIAL CODE LETTER S OF AS4370 (PASSIVATED).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).

g. MATERIAL CODE LETTER T:

(1) BODY: ANODIZE PER AMS2488 TYPE 2 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486.

(2) NUT: MATERIAL CODE LETTER T OF AS4370 (FLUORIDE PHOSPHATE CONVERSION COAT).

(3) WIRE: PER AS1791 (PASSIVATE AND COAT WITH DRY FILM LUBRICANT).