

REV.
A

AS4405

RATIONALE

FEDERAL SUPPLY CLASS
4730

CADMIUM NOTICE NOTE ADDED, NADCAP QML NOTE UPDATED, CANCELLED REFERENCE DOCUMENTS REPLACED WITH ACTIVE DOCUMENTS, 2024 ALUMINUM ALLOY MATERIAL MADE INACTIVE FOR NEW DESIGN, AND HEX SIZES DIRECTLY SPECIFIED ON DRAWING.

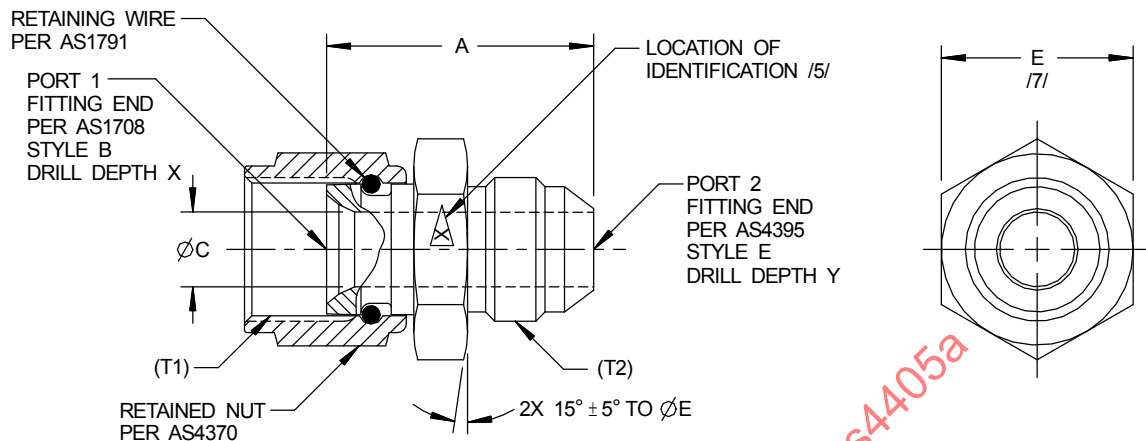


FIGURE 1 - FITTING ASSEMBLY, ADAPTER

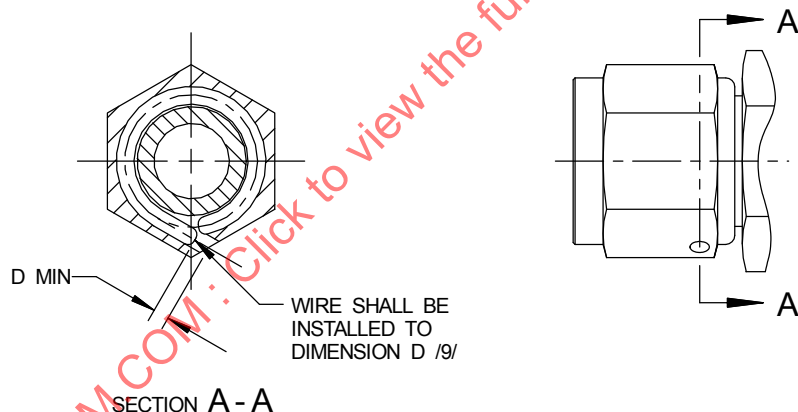
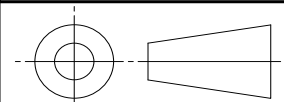


FIGURE 2 - INSTALLATION, RETAINED NUT AND RETAINING WIRE

INACTIVE IN PART /17/

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS4405A>

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4841

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) FITTING ASSEMBLY, ADAPTER, REDUCER AND NONREDUCER, INTERNAL FLARE TO FLARED TUBE

SAE AS4405
SHEET 1 OF 6

REV.
A

TABLE 1 - OVERALL LENGTH A

SIZE OF PORT #2	SIZE OF PORT #1 02	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24	SIZE OF PORT #1 32
02	.877	.889	.906	.962	1.002	1.082	1.148	1.166	1.254	1.383	1.462	1.690
03	.917	.920	.937	.993	1.033	1.113	1.179	1.197	1.285	1.414	1.493	1.721
04	.997	1.000	1.008	1.064	1.104	1.184	1.250	1.268	1.356	1.485	1.564	1.792
05	1.006	1.009	1.017	1.064	1.104	1.184	1.250	1.268	1.356	1.485	1.564	1.792
06	1.021	1.024	1.032	1.079	1.110	1.190	1.256	1.274	1.362	1.491	1.570	1.798
08	1.140	1.143	1.151	1.198	1.229	1.291	1.357	1.375	1.463	1.592	1.671	1.899
10	1.259	1.262	1.270	1.317	1.348	1.410	1.458	1.476	1.564	1.693	1.772	2.000
12	1.383	1.386	1.394	1.441	1.472	1.534	1.582	1.582	1.670	1.799	1.878	2.106
16	1.466	1.469	1.477	1.524	1.555	1.617	1.665	1.665	1.717	1.846	1.925	2.153
20	1.549	1.552	1.560	1.607	1.638	1.700	1.748	1.748	1.800	1.893	1.972	2.200
24	1.710	1.713	1.721	1.768	1.799	1.861	1.909	1.909	1.961	2.054	2.097	2.325
32	2.032	2.035	2.043	2.090	2.121	2.183	2.231	2.231	2.283	2.376	2.419	2.575

TABLE 2 - DIMENSIONS AND WEIGHTS

BASIC NO. AS4405 /16/ SIZE CODE	(NOMINAL TUBE SIZE)	T1, T2 THREAD PER AS8879	C	D	E	LB/EA APPROX REF ALUM	LB/EA APPROX REF CRES	LB/EA APPROX REF TI
02	.125	.3125-24 UNJF	.058- .065	.045	.552- .565	.018	.051	.029
03	.188	.3750-24 UNJF	.121- .128	.045	.615- .628	.021	.062	.036
04	.250	.4375-20 UNJF	.168- .175	.045	.678- .691	.024	.071	.041
05	.312	.5000-20 UNJF	.230- .237	.045	.740- .753	.028	.081	.046
06	.375	.5625-18 UNJF	.293- .301	.045	.802- .815	.041	.120	.069
08	.500	.7500-16 UNJF	.387- .395	.055	.990-1.003	.073	.211	.121
10	.625	.8750-14 UNJF	.480- .488	.063	1.113-1.128	.105	.303	.174
12	.750	1.0625-12 UNJ	.604- .614	.095	1.363-1.380	.179	.520	.298
16	1.000	1.3125-12 UNJ	.839- .851	.125	1.613-1.630	.248	.719	.412
20	1.250	1.6250-12 UNJ	1.073-1.086	.155	1.863-1.880	.438	1.269	.727
24	1.500	1.8750-12 UNJ	1.307-1.320	.180	2.109-2.135	.586	1.700	.974
32	2.000	2.5000-12 UNJ	1.776-1.791	.180	2.734-2.760	1.117	3.240	1.856

TABLE 3 - DRILL DEPTH X

SIZE OF PORT #2	SIZE OF PORT #1 02	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24	SIZE OF PORT #1 32
02	THRU	.301	.305	.343	.364	.417	.456	.437	.457	.518	.529	.620
03	--	THRU	.323	.361	.383	.436	.475	.456	.475	.536	.547	.639
04	--	--	THRU	.373	.394	.447	.486	.467	.486	.547	.558	.650
05	--	--	--	THRU	.412	.465	.504	.485	.504	.565	.576	.668
06	--	--	--	--	THRU	.488	.527	.508	.528	.588	.600	.691
08	--	--	--	--	--	THRU	.512	.493	.513	.574	.585	.676
10	--	--	--	--	--	--	THRU	.510	.530	.591	.602	.693
12	--	--	--	--	--	--	--	THRU	.544	.605	.616	.707
16	--	--	--	--	--	--	--	--	THRU	.667	.678	.769
20	--	--	--	--	--	--	--	--	--	THRU	.707	.799
24	--	--	--	--	--	--	--	--	--	--	THRU	.859
32	--	--	--	--	--	--	--	--	--	--	--	THRU

TABLE 4 - DRILL DEPTH Y

SIZE OF PORT #2	SIZE OF PORT #1 02	SIZE OF PORT #1 03	SIZE OF PORT #1 04	SIZE OF PORT #1 05	SIZE OF PORT #1 06	SIZE OF PORT #1 08	SIZE OF PORT #1 10	SIZE OF PORT #1 12	SIZE OF PORT #1 16	SIZE OF PORT #1 20	SIZE OF PORT #1 24
03	.473	--	--	--	--	--	--	--	--	--	--
04	.540	.558	--	--	--	--	--	--	--	--	--
05	.531	.549	.561	--	--	--	--	--	--	--	--
06	.527	.546	.557	.575	--	--	--	--	--	--	--
08	.619	.638	.649	.667	.690	--	--	--	--	--	--
10	.711	.730	.741	.759	.782	.767	--	--	--	--	--
12	.798	.817	.831	.846	.869	.854	.871	--	--	--	--
16	.813	.831	.842	.860	.884	.869	.886	.900	--	--	--
20	.827	.846	.857	.875	.898	.884	.901	.915	.997	--	--
24	.921	.939	.950	.968	.991	.977	.994	1.008	1.070	1.100	--
32	1.106	1.125	1.136	1.154	1.177	1.162	1.179	1.193	1.255	1.285	1.345

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 BAR PER AMS-S-6758 OR AMS6370.
- (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 /17/:

- (1) BODY: 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 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 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 S:

- (1) BODY: TYPE 347 CORROSION RESISTANT STEEL 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).

F. CODE LETTER T:

- (1) BODY: TYPE 6AL-4V TITANIUM ALLOY 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).

G. CODE LETTER W:

- (1) BODY: 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-A-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 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).

F. 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).

 An SAE International Group	AEROSPACE STANDARD	AS4405 SHEET 4 OF 6	REV. A
	(R) FITTING ASSEMBLY, ADAPTER, REDUCER AND NONREDUCER, INTERNAL FLARE TO FLARED TUBE		