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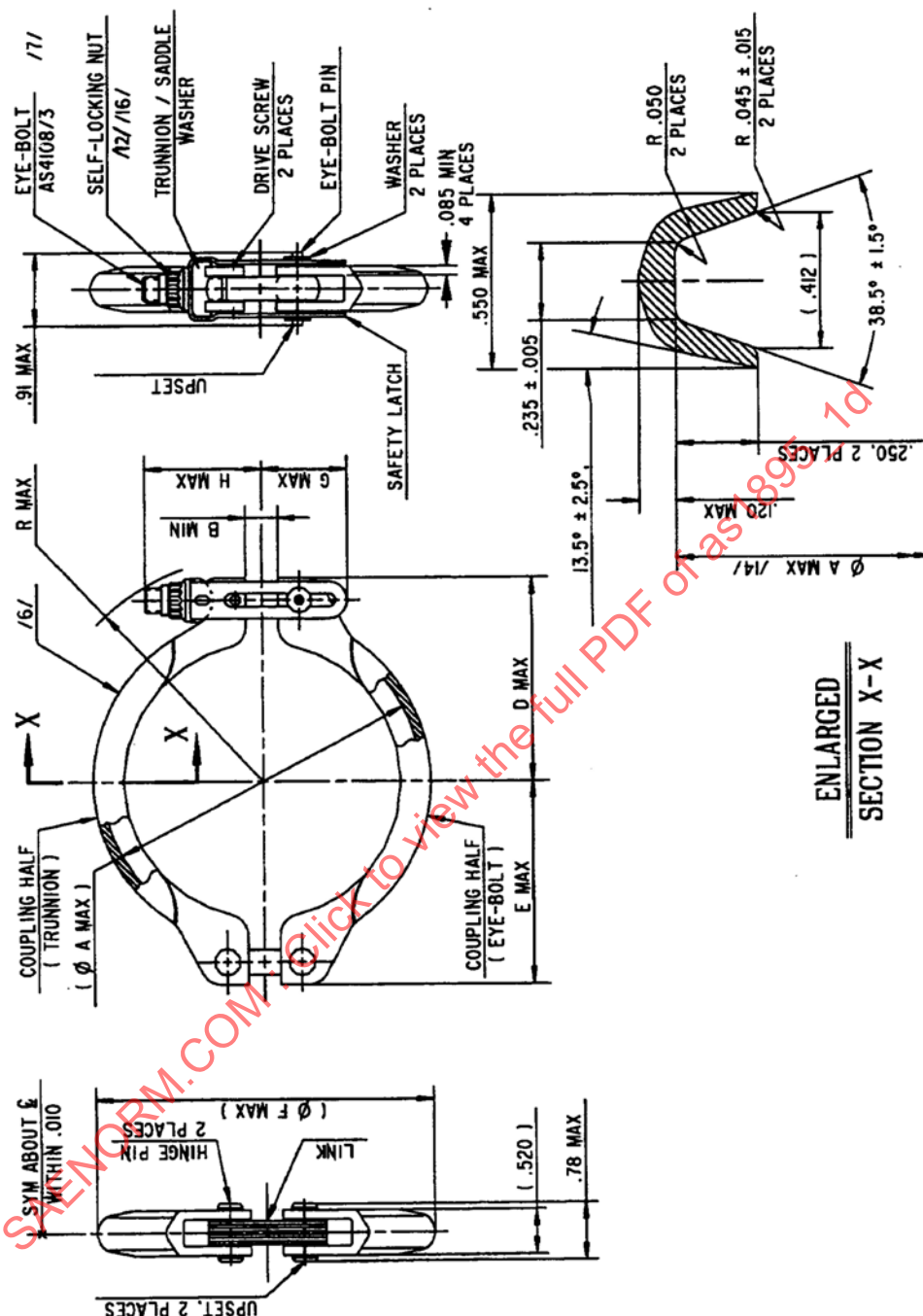
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REV. D  
SAE AS1895/1

AS1895/1D HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

RATIONALE

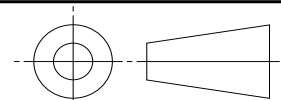
FEDERAL SUPPLY CLASS  
5340



(R) FIGURE 1 - STANDARD PROFILE COUPLING

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3A

PROCUREMENT SPECIFICATION: /3/ AS1895

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

COUPLING, V-RETAINER, SINGLE LATCH,  
TYPE I STANDARD PROFILE

**SAE AS1895/1**  
SHEET 1 OF 4

**REV. D**

(R) TABLE 1 - DIMENSIONS AND WEIGHTS

| BASIC<br>NUMBER<br>AS1895/1<br>SIZE CODE<br>/1/ /2/ /17/ | (TUBE<br>SIZE) | A     | B    | D     | E     | F     | G     | H     | R     | LB/EA<br>MAX |
|----------------------------------------------------------|----------------|-------|------|-------|-------|-------|-------|-------|-------|--------------|
| 150                                                      | 1.50           | 2.385 | .100 | 1.843 | 1.780 | 2.656 | .968  | 1.410 | 2.126 | .40          |
| 175                                                      | 1.75           | 2.635 | .150 | 1.880 | 1.857 | 2.906 | .875  | 1.425 | 2.250 | .41          |
| 200                                                      | 2.00           | 2.885 | .175 | 2.093 | 2.030 | 3.156 | .898  | 1.450 | 2.360 | .42          |
| 225                                                      | 2.25           | 3.135 | .175 | 2.130 | 2.107 | 3.406 | .898  | 1.450 | 2.485 | .44          |
| 250                                                      | 2.50           | 3.385 | .190 | 2.343 | 2.280 | 3.656 | .925  | 1.475 | 2.569 | .46          |
| 275                                                      | 2.75           | 3.635 | .190 | 2.468 | 2.410 | 3.906 | .984  | 1.525 | 2.700 | .49          |
| 300                                                      | 3.00           | 3.885 | .190 | 2.593 | 2.530 | 4.156 | 1.000 | 1.550 | 2.824 | .51          |
| 325                                                      | 3.25           | 4.135 | .190 | 2.630 | 2.607 | 4.406 | 1.024 | 1.575 | 2.950 | .54          |
| 350                                                      | 3.50           | 4.385 | .190 | 2.755 | 2.780 | 4.656 | 1.059 | 1.550 | 3.058 | .57          |
| 400                                                      | 4.00           | 4.885 | .250 | 3.015 | 2.972 | 5.156 | 1.024 | 1.575 | 3.263 | .63          |
| 450                                                      | 4.50           | 5.385 | .250 | 3.265 | 3.222 | 5.656 | 1.109 | 1.600 | 3.519 | .67          |
| 500                                                      | 5.00           | 5.885 | .300 | 3.520 | 3.467 | 6.156 | 1.074 | 1.625 | 3.732 | .72          |
| 550                                                      | 5.50           | 6.385 | .300 | 3.765 | 3.722 | 6.656 | 1.149 | 1.650 | 3.970 | .77          |
| 600                                                      | 6.00           | 6.885 | .400 | 4.015 | 3.972 | 7.156 | 1.400 | 1.675 | 4.208 | .81          |
| 650                                                      | 6.50           | 7.385 | .400 | 4.265 | 4.222 | 7.656 | 1.400 | 1.675 | 4.468 | .86          |
| 700                                                      | 7.00           | 7.885 | .450 | 4.515 | 4.477 | 8.156 | 1.400 | 1.675 | 4.724 | .93          |
| 750                                                      | 7.50           | 8.385 | .450 | 4.765 | 4.732 | 8.656 | 1.400 | 1.800 | 4.973 | .98          |

## NOTES:

/1/

(R) TABLE 2 - COUPLING COMPONENT MATERIAL

| PART                       | MATL            | TYPE       | SPEC                                         | REMARKS                                                                                                   |
|----------------------------|-----------------|------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| COUPLING HALVES            | CRES            | A-286      | AMS 5525<br>AMS 5732                         | SOLUTION AND PRECIPITATION<br>HEAT TREATED. SEE /2/.                                                      |
|                            | NICKEL<br>ALLOY | 718        | AMS 5596<br>AMS 5662                         |                                                                                                           |
| TRUNNION/<br>SADDLE WASHER | CRES            | A-286      | AMS 5731<br>AMS 5732<br>AMS 5734<br>AMS 5737 | SOLUTION AND PRECIPITATION<br>HEAT TREATED OR EQUIVALENT<br>MATERIAL PROPERTIES ACHIEVED<br>BY COLD WORK. |
|                            | NICKEL<br>ALLOY | 713        | AMS 5377                                     |                                                                                                           |
| EYEBOLT                    | CRES            | A-286      | AMS 5731<br>AMS 5732<br>AMS 5737             | SEE /2/ AND /7/.                                                                                          |
| SAFETY LATCH               | NICKEL<br>ALLOY | 718        | AMS 5596                                     | SOLUTION AND PRECIPITATION<br>HEAT TREATED.                                                               |
| SELF-LOCKING<br>NUT        | CRES            | A-286      | AMS 5731<br>AMS 5732                         | SEE /2/ AND /7/.                                                                                          |
| EYEBOLT PIN                | CRES            | A-286      | AMS 5731<br>AMS 5732                         | SOLUTION AND PRECIPITATION<br>HEAT TREATED.                                                               |
| WASHER                     | CRES            | 303 OR 304 | AMS 5640<br>AMS 5513                         |                                                                                                           |
| LINK                       | CRES            | A-286      | AMS 5731<br>AMS 5732<br>AMS 5525             | SOLUTION HEAT TREATED OR<br>SOLUTION AND PRECIPITATION<br>HEAT TREATED.                                   |
| HINGE PIN                  | CRES            | A-286      | AMS 5731<br>AMS 5732<br>AMS 5734<br>AMS 5737 | SOLUTION AND PRECIPITATION<br>HEAT TREATED.                                                               |
| DRIVE SCREW                | CRES            | 302HQ      |                                              |                                                                                                           |
|                            | CRES            | 305        |                                              |                                                                                                           |
|                            | CRES            | A-286      |                                              |                                                                                                           |
|                            | NICKEL<br>ALLOY | 718        |                                              |                                                                                                           |

## /2/ FINISH:

- (R) a. SELF-LOCKING NUT: BLANK = SILVER PLATED OR L = DRY FILM LUBED.
- b. COUPLING HALVES: INSIDE SURFACE OF ALL COUPLING HALVES SHALL BE COATED WITH SOLID DRY FILM LUBRICANT PER AS1895 AFTER PASSIVATION. A-286 CRES MATERIAL - PASSIVATE PER QQ-P-35 TYPES I, II, III, OR VIII AND/OR MECHANICAL POLISH OR ELECTROPOLISH TO REMOVE IRON PARTICLES.
- c. 718 MATERIAL: NO FINISH REQUIRED. NOTE: THE OUTSIDES OF 718 COUPLING FLANKS SHALL HAVE LAY LINE MARKINGS WITH "—1000F—" (SEE AS1895).
- d. EYEBOLT: LUBRICATE WITH FEL-PRO C102, FEL-PRO C-200 (FEL-PRO INC CAGE CODE 73165) OR EQUIVALENT.

NOTES (CONTINUED):

- /3/ QUALIFICATION: PARTS SHALL BE QUALIFIED IN A COMPLETE COUPLING ASSEMBLY IN ACCORDANCE WITH PROCUREMENT SPECIFICATION AS1895. USERS OF THIS STANDARD ARE ADVISED TO CONTROL SOURCE APPROVAL(S) BY STANDARD PAGE SUPPLEMENT SHEET OR SIMILAR MEANS.
4. ACCEPTANCE TEST: EACH COUPLING SHALL BE SUBJECT TO A HYDROSTATIC PROOF PRESSURE TEST PER AS1895.
5. INTERMATEABILITY: THIS COUPLING, WHEN MATED WITH FLANGES, FLANGE ENDS, AND SEALS CONFORMING TO AS1895/2-XXX, AS1895/3-XXX, AS1895/7-XXX, AS1895/10-XXX, AS1895/11-XXX, AS1895/12-XXX, AS1895/13-XXX, AS1895/18-XXX, AS1895/19-XXX, AND AS1895/23-XXX SHALL MEET ALL THE REQUIREMENTS OF SPECIFICATIONS AS1895.
- /6/ MARKING: BY ELECTROCHEMICAL ETCHING PER AS478-7A2 OR LASER MARKING PER AS478-15A2. THE COUPLING SHALL BE MARKED AS FOLLOWS:
- (R) a. AS1895/1  
b. SUPPLIER PART NO.  
c. SUPPLIER NAME OR TRADEMARK AND CAGE CODE  
d. DATE OF MANUFACTURE  
e. TORQUE - \*CAUTION: TORQUE TO  $120 \pm 5$  lb-in\* /12/
- /7/ THREADS:  
a. EYEBOLT AND NUT THREADS CONFORM TO MIL-S-8879  
b. EYEBOLT THREAD .3125-24UNJF-3A  
c. SELF-LOCKING NUT THREAD .3125-24UNJF-3B
8. OPERATING TEMPERATURE: -65 TO +1200 °F FLUID TEMPERATURE.
9. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.
10. DIMENSIONING AND TOLERANCING: ANSI Y14.5M 1982
11. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS .XXX =  $\pm .010$ , .XX =  $\pm .03$ , ANGULAR DIMENSIONS  $\pm 0.5^\circ$ .
- /12/ TORQUE - COUPLING INSTALLATION TORQUE =  $120 \pm 5$  lb-in.
- /13/ THE FOOL PROOF SAFETY FEATURE RESULTS IN AN INCREASE OF R MAX BY .020 in MAX, AND IN A WEIGHT INCREASE OF .026 lb MAX.
- /14/ DIA A MAX IS FOR MACHINING PURPOSES ONLY, TO BE INSPECTED DURING MACHINING OPERATION.
15. THE (R) IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS STANDARD.
- /16/ INTENDED USE: USE SOLID FILM LUBRICATED NUTS AT NUT TEMPERATURES OF 1000 °F AND OVER.
- (R)
- /17/ EXAMPLE OF PART NUMBER: AS1895/1 E L 250 S

(R)

BLANK = NO FOOL PROOF FEATURE  
S = FOOL PROOF SAFETY LATCH  
T = FOOL PROOF SAFETY LATCH WITH TAB /13/  
  
TUBE SIZE (2.50 in)  
  
SELF-LOCKING NUT FINISH /2/  
(BLANK) = SILVER PLATE  
L = DRY FILM LUBRICANT /15/  
  
COUPLING HALF MATERIAL CODE /1/  
- = A-286 CRES PER AMS 5732  
E = NICKEL ALLOY 718 PER AMS 5662  
  
BASIC PART NUMBER

NOTE: AS1895/1-250 IS SAME SIZE COUPLING AS ABOVE, WITH A-286 COUPLING HALVES, A SILVER PLATED NONLUBRICATED NUT, AND WITHOUT FOOL PROOF FEATURE.

|                                                                                                                          |                                                                |  |                                     |                         |
|--------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--|-------------------------------------|-------------------------|
| <br><i>An SAE International Group</i> | <b>AEROSPACE STANDARD</b>                                      |  | <b>SAE AS1895/1</b><br>SHEET 4 OF 4 | <b>REV.</b><br><b>D</b> |
|                                                                                                                          | COUPLING, V-RETAINER, SINGLE LATCH,<br>TYPE I STANDARD PROFILE |  |                                     |                         |