

# RATIONALE

ESTABLISH AS1946 PART SPECIFICATIONS FOR FLARED FITTINGS.

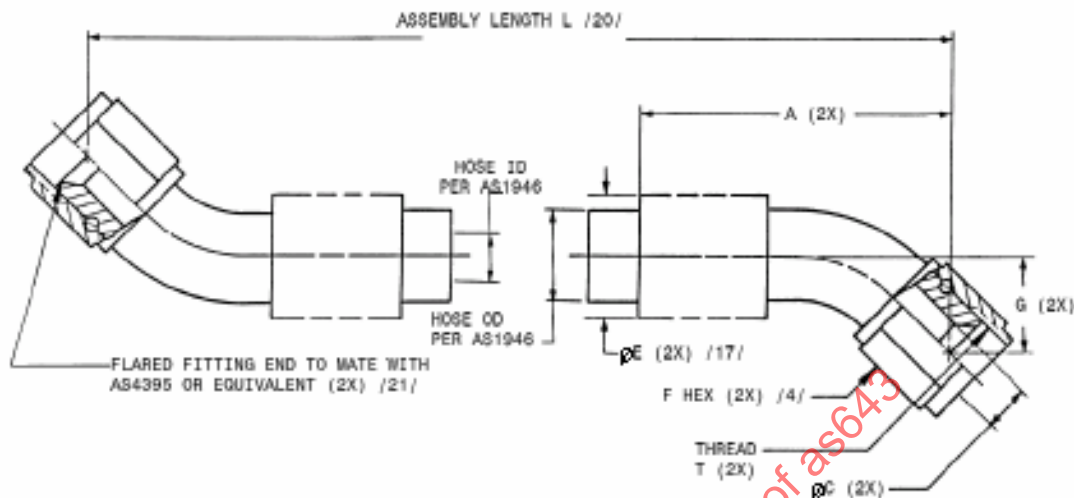


FIGURE 1 - HOSE ASSEMBLY

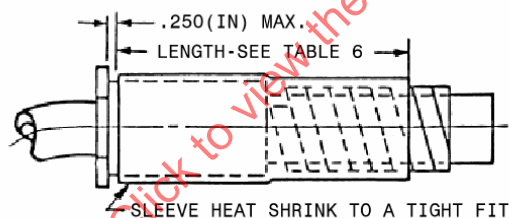


FIGURE 2 - ABRASION SLEEVE ATTACHMENT /7/ /8/

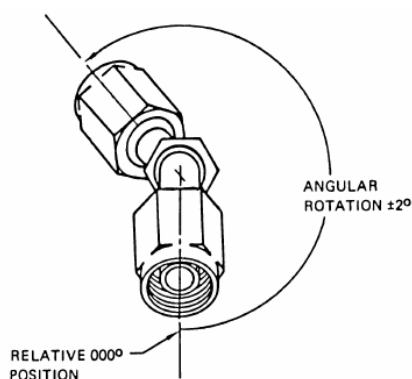
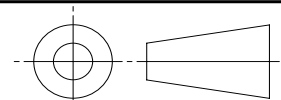


FIGURE 3 - FITTING ANGULAR ORIENTATION /26/

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: /15/ AS1946

**SAE Aerospace**  
An SAE International Group

## AEROSPACE STANDARD

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE,  
METAL BRAID, MEDIUM PRESSURE, FLARED,  
45° TO 45°

**AS643**  
SHEET 1 OF 8

TABLE 1 - DIMENSIONS

| HOSE<br>ASSEMBLY<br>NO. & SIZE<br>/24/ | HOSE<br>SIZE<br>(REF) | FITTING<br>TYPE<br>/25/ | FITTING<br>MATL<br>/5/ | THREAD T<br>PER AS8879<br>(REF) | HOSE<br>ID<br>MIN<br>(REF) | A<br>MAX | C MIN<br>BALL<br>DIA<br>/16/ | E MAX<br>WITHOUT<br>SLEEVEING<br>/17/ | F<br>HEX<br>(REF) | G<br>MIN | G<br>MAX |
|----------------------------------------|-----------------------|-------------------------|------------------------|---------------------------------|----------------------------|----------|------------------------------|---------------------------------------|-------------------|----------|----------|
| AS643D (-03)                           | .188                  | -                       | -                      | -                               | -                          | -        | -                            | -                                     | -                 | -        | -        |
| AS643D (-03)                           | .188                  | S                       | CRES                   | .3750-24UNJF-3B                 | .110                       | 1.63     | .068                         | .49                                   | .500              | .263     | .388     |
|                                        |                       |                         | AL                     | .3750-24UNJF-3B                 | .110                       | 1.63     | .068                         | .49                                   | .500              | .263     | .388     |
|                                        |                       |                         | TI                     | .3750-24UNJF-3B                 | .110                       | 1.63     | .068                         | .49                                   | .500              | .263     | .388     |
| AS643D (-03)                           | .188                  | E                       | CRES                   | .4375-20UNJF-3B                 | .110                       | 1.92     | .068                         | .49                                   | .562              | .302     | .427     |
|                                        |                       |                         | AL                     | .4375-20UNJF-3B                 | .110                       | 1.92     | .068                         | .49                                   | .562              | .302     | .427     |
|                                        |                       |                         | TI                     | .4375-20UNJF-3B                 | .110                       | 1.92     | .068                         | .49                                   | .562              | .302     | .427     |
| AS643E (-04)                           | .250                  | R                       | CRES                   | .3750-24UNJF-3B                 | .173                       | 1.92     | .068                         | .55                                   | .500              | .302     | .427     |
|                                        |                       |                         | AL                     | .3750-24UNJF-3B                 | .173                       | 1.92     | .068                         | .55                                   | .500              | .302     | .427     |
|                                        |                       |                         | TI                     | .3750-24UNJF-3B                 | .173                       | 1.92     | .068                         | .55                                   | .500              | .302     | .427     |
| AS643E (-04)                           | .250                  | S                       | CRES                   | .4375-20UNJF-3B                 | .173                       | 1.92     | .112                         | .55                                   | .562              | .302     | .427     |
|                                        |                       |                         | AL                     | .4375-20UNJF-3B                 | .173                       | 1.92     | .112                         | .55                                   | .562              | .302     | .427     |
|                                        |                       |                         | TI                     | .4375-20UNJF-3B                 | .173                       | 1.92     | .112                         | .55                                   | .562              | .302     | .427     |
| AS643E (-04)                           | .250                  | E                       | CRES                   | .5000-20UNJF-3B                 | .173                       | 1.94     | .112                         | .55                                   | .625              | .314     | .445     |
|                                        |                       |                         | AL                     | .5000-20UNJF-3B                 | .173                       | 1.94     | .112                         | .55                                   | .625              | .314     | .445     |
|                                        |                       |                         | TI                     | .5000-20UNJF-3B                 | .173                       | 1.94     | .112                         | .55                                   | .625              | .314     | .445     |
| AS643F (-05)                           | .313                  | R                       | CRES                   | .4375-20UNJF-3B                 | .235                       | 1.94     | .112                         | .63                                   | .562              | .314     | .445     |
|                                        |                       |                         | AL                     | .4375-20UNJF-3B                 | .235                       | 1.94     | .112                         | .63                                   | .562              | .314     | .445     |
|                                        |                       |                         | TI                     | .4375-20UNJF-3B                 | .235                       | 1.94     | .112                         | .63                                   | .562              | .314     | .445     |
| AS643F (-05)                           | .313                  | S                       | CRES                   | .5000-20UNJF-3B                 | .235                       | 1.94     | .164                         | .63                                   | .625              | .314     | .445     |
|                                        |                       |                         | AL                     | .5000-20UNJF-3B                 | .235                       | 1.94     | .164                         | .63                                   | .625              | .314     | .445     |
|                                        |                       |                         | TI                     | .5000-20UNJF-3B                 | .235                       | 1.94     | .164                         | .63                                   | .625              | .314     | .445     |
| AS643F (-05)                           | .313                  | E                       | CRES                   | .5625-18UNJF-3B                 | .235                       | 2.11     | .164                         | .63                                   | .688              | .369     | .494     |
|                                        |                       |                         | AL                     | .5625-18UNJF-3B                 | .235                       | 2.11     | .164                         | .63                                   | .688              | .369     | .494     |
|                                        |                       |                         | TI                     | .5625-18UNJF-3B                 | .235                       | 2.11     | .164                         | .63                                   | .688              | .369     | .494     |
| AS643G (-06)                           | .375                  | R                       | CRES                   | .5000-20UNJF-3B                 | .298                       | 2.11     | .164                         | .70                                   | .625              | .369     | .494     |
|                                        |                       |                         | AL                     | .5000-20UNJF-3B                 | .298                       | 2.11     | .164                         | .70                                   | .625              | .369     | .494     |
|                                        |                       |                         | TI                     | .5000-20UNJF-3B                 | .298                       | 2.11     | .164                         | .70                                   | .625              | .369     | .494     |
| AS643G (-06)                           | .375                  | S                       | CRES                   | .5625-18UNJF-3B                 | .298                       | 2.11     | .218                         | .70                                   | .688              | .369     | .494     |
|                                        |                       |                         | AL                     | .5625-18UNJF-3B                 | .298                       | 2.11     | .218                         | .70                                   | .688              | .369     | .494     |
|                                        |                       |                         | TI                     | .5625-18UNJF-3B                 | .298                       | 2.11     | .218                         | .70                                   | .688              | .369     | .494     |
| AS643G (-06)                           | .375                  | E                       | CRES                   | .7500-16UNJF-3B                 | .298                       | 2.36     | .218                         | .70                                   | .875              | .445     | .632     |
|                                        |                       |                         | AL                     | .7500-16UNJF-3B                 | .298                       | 2.36     | .218                         | .70                                   | .875              | .445     | .632     |
|                                        |                       |                         | TI                     | .7500-16UNJF-3B                 | .298                       | 2.36     | .218                         | .70                                   | .875              | .445     | .632     |
| AS643H (-08)                           | .500                  | R                       | CRES                   | .5625-18UNJF-3B                 | .391                       | 2.36     | .218                         | .83                                   | .688              | .445     | .632     |
|                                        |                       |                         | AL                     | .5625-18UNJF-3B                 | .391                       | 2.36     | .218                         | .83                                   | .688              | .445     | .632     |
|                                        |                       |                         | TI                     | .5625-18UNJF-3B                 | .391                       | 2.36     | .218                         | .83                                   | .688              | .445     | .632     |
| AS643H (-08)                           | .500                  | S                       | CRES                   | .7500-16UNJF-3B                 | .391                       | 2.36     | .289                         | .83                                   | .875              | .445     | .632     |
|                                        |                       |                         | AL                     | .7500-16UNJF-3B                 | .391                       | 2.36     | .289                         | .83                                   | .875              | .445     | .632     |
|                                        |                       |                         | TI                     | .7500-16UNJF-3B                 | .391                       | 2.36     | .289                         | .83                                   | .875              | .445     | .632     |
| AS643H (-08)                           | .500                  | E                       | CRES                   | .8750-14UNJF-3B                 | .391                       | 2.73     | .289                         | .83                                   | 1.000             | .501     | .688     |
|                                        |                       |                         | AL                     | .8750-14UNJF-3B                 | .391                       | 2.73     | .289                         | .83                                   | 1.000             | .501     | .688     |
|                                        |                       |                         | TI                     | .8750-14UNJF-3B                 | .391                       | 2.73     | .289                         | .83                                   | 1.000             | .501     | .688     |

**AS643**

| HOSE<br>ASSEMBLY<br>NO. & SIZE<br>/24/ | HOSE<br>SIZE<br>(REF) | FITTING<br>TYPE<br>/25/ | FITTING<br>MATL<br>/5/ | THREAD T<br>PER AS8879<br>(REF) | HOSE<br>ID<br>MIN<br>(REF) | A<br>MAX | C MIN<br>BALL<br>DIA<br>/16/ | E MAX<br>WITHOUT<br>SLEEVEING<br>/17/ | F<br>HEX<br>(REF) | G<br>MIN | G<br>MAX |
|----------------------------------------|-----------------------|-------------------------|------------------------|---------------------------------|----------------------------|----------|------------------------------|---------------------------------------|-------------------|----------|----------|
| AS643J (-10)                           | .625                  | R                       | CRES                   | .7500-16UNJF-3B                 | .485                       | 2.73     | .289                         | .97                                   | .875              | .501     | .688     |
|                                        |                       |                         | AL                     | .7500-16UNJF-3B                 | .485                       | 2.73     | .289                         | .97                                   | .875              | .501     | .688     |
|                                        |                       |                         | TI                     | .7500-16UNJF-3B                 | .485                       | 2.73     | .289                         | .97                                   | .875              | .501     | .688     |
| AS643J (-10)                           | .625                  | S                       | CRES                   | .8750-14UNJF-3B                 | .485                       | 2.73     | .366                         | .97                                   | 1.000             | .501     | .688     |
|                                        |                       |                         | AL                     | .8750-14UNJF-3B                 | .485                       | 2.73     | .366                         | .97                                   | 1.000             | .501     | .688     |
|                                        |                       |                         | TI                     | .8750-14UNJF-3B                 | .485                       | 2.73     | .366                         | .97                                   | 1.000             | .501     | .688     |
| AS643J (-10)                           | .625                  | E                       | CRES                   | 1.0625-12UNJ-3B                 | .485                       | 3.15     | .366                         | .97                                   | 1.250             | .588     | .775     |
|                                        |                       |                         | AL                     | 1.0625-12UNJ-3B                 | .485                       | 3.15     | .366                         | .97                                   | 1.250             | .588     | .775     |
|                                        |                       |                         | TI                     | 1.0625-12UNJ-3B                 | .485                       | 3.15     | .366                         | .97                                   | 1.250             | .588     | .775     |
| AS643K (-12)                           | .750                  | R                       | CRES                   | .8750-14UNJF-3B                 | .615                       | 3.15     | .366                         | 1.17                                  | 1.000             | .588     | .775     |
|                                        |                       |                         | AL                     | .8750-14UNJF-3B                 | .615                       | 3.15     | .366                         | 1.17                                  | 1.000             | .588     | .775     |
|                                        |                       |                         | TI                     | .8750-14UNJF-3B                 | .615                       | 3.15     | .366                         | 1.17                                  | 1.000             | .588     | .775     |
| AS643K (-12)                           | .750                  | S                       | CRES                   | 1.0625-12UNJ-3B                 | .615                       | 3.15     | .466                         | 1.17                                  | 1.250             | .588     | .775     |
|                                        |                       |                         | AL                     | 1.0625-12UNJ-3B                 | .615                       | 3.15     | .466                         | 1.17                                  | 1.250             | .588     | .775     |
|                                        |                       |                         | TI                     | 1.0625-12UNJ-3B                 | .615                       | 3.15     | .466                         | 1.17                                  | 1.250             | .588     | .775     |
| AS643K (-12)                           | .750                  | E                       | CRES                   | 1.3125-12UNJ-3B                 | .615                       | 3.44     | .466                         | 1.17                                  | 1.500             | .609     | .857     |
|                                        |                       |                         | AL                     | 1.3125-12UNJ-3B                 | .615                       | 3.44     | .466                         | 1.17                                  | 1.500             | .609     | .857     |
|                                        |                       |                         | TI                     | 1.3125-12UNJ-3B                 | .615                       | 3.44     | .466                         | 1.17                                  | 1.500             | .609     | .857     |
| AS643M (-16)                           | 1.000                 | R                       | CRES                   | 1.0625-12UNJ-3B                 | .851                       | 3.44     | .466                         | 1.52                                  | 1.250             | .609     | .857     |
|                                        |                       |                         | AL                     | 1.0625-12UNJ-3B                 | .851                       | 3.44     | .466                         | 1.52                                  | 1.250             | .609     | .857     |
|                                        |                       |                         | TI                     | 1.0625-12UNJ-3B                 | .851                       | 3.44     | .466                         | 1.52                                  | 1.250             | .609     | .857     |
| AS643M (-16)                           | 1.000                 | S                       | CRES                   | 1.3125-12UNJ-3B                 | .851                       | 3.44     | .661                         | 1.52                                  | 1.500             | .609     | .857     |
|                                        |                       |                         | AL                     | 1.3125-12UNJ-3B                 | .851                       | 3.44     | .661                         | 1.52                                  | 1.500             | .609     | .857     |
|                                        |                       |                         | TI                     | 1.3125-12UNJ-3B                 | .851                       | 3.44     | .661                         | 1.52                                  | 1.500             | .609     | .857     |
| AS643M (-16)                           | 1.000                 | E                       | CRES                   | 1.6250-12UNJ-3B                 | .851                       | 3.97     | .661                         | 1.52                                  | 1.812             | .697     | 1.017    |
|                                        |                       |                         | AL                     | 1.6250-12UNJ-3B                 | .851                       | 3.97     | .661                         | 1.52                                  | 1.812             | .697     | 1.017    |
|                                        |                       |                         | TI                     | 1.6250-12UNJ-3B                 | .851                       | 3.97     | .661                         | 1.52                                  | 1.812             | .697     | 1.017    |
| AS643N (-20)                           | 1.250                 | R                       | CRES                   | 1.3125-12UNJ-3B                 | 1.101                      | 3.97     | .661                         | 2.00                                  | 1.500             | .697     | 1.017    |
|                                        |                       |                         | AL                     | 1.3125-12UNJ-3B                 | 1.101                      | 3.97     | .661                         | 2.00                                  | 1.500             | .697     | 1.017    |
|                                        |                       |                         | TI                     | 1.3125-12UNJ-3B                 | 1.101                      | 3.97     | .661                         | 2.00                                  | 1.500             | .697     | 1.017    |
| AS643N (-20)                           | 1.250                 | S                       | CRES                   | 1.6250-12UNJ-3B                 | 1.101                      | 3.97     | .850                         | 2.00                                  | 1.812             | .697     | 1.017    |
|                                        |                       |                         | AL                     | 1.6250-12UNJ-3B                 | 1.101                      | 3.97     | .850                         | 2.00                                  | 1.812             | .697     | 1.017    |
|                                        |                       |                         | TI                     | 1.6250-12UNJ-3B                 | 1.101                      | 3.97     | .850                         | 2.00                                  | 1.812             | .697     | 1.017    |
| AS643N (-20)                           | 1.250                 | E                       | CRES                   | 1.8750-12UNJ-3B                 | 1.101                      | 4.34     | .850                         | 2.00                                  | 2.125             | .785     | 1.127    |
|                                        |                       |                         | AL                     | 1.8750-12UNJ-3B                 | 1.101                      | 4.34     | .850                         | 2.00                                  | 2.125             | .785     | 1.127    |
|                                        |                       |                         | TI                     | 1.8750-12UNJ-3B                 | 1.101                      | 4.34     | .850                         | 2.00                                  | 2.125             | .785     | 1.127    |
| AS643P (-24)                           | 1.500                 | R                       | CRES                   | 1.6250-12UNJ-3B                 | 1.344                      | 4.34     | .850                         | 2.28                                  | 1.812             | .785     | 1.127    |
|                                        |                       |                         | AL                     | 1.6250-12UNJ-3B                 | 1.344                      | 4.34     | .850                         | 2.28                                  | 1.812             | .785     | 1.127    |
|                                        |                       |                         | TI                     | 1.6250-12UNJ-3B                 | 1.344                      | 4.34     | .850                         | 2.28                                  | 1.812             | .785     | 1.127    |
| AS643P (-24)                           | 1.500                 | S                       | CRES                   | 1.8750-12UNJ-3B                 | 1.344                      | 4.34     | 1.063                        | 2.28                                  | 2.125             | .785     | 1.127    |
|                                        |                       |                         | AL                     | 1.8750-12UNJ-3B                 | 1.344                      | 4.34     | 1.063                        | 2.28                                  | 2.125             | .785     | 1.127    |
|                                        |                       |                         | TI                     | 1.8750-12UNJ-3B                 | 1.344                      | 4.34     | 1.063                        | 2.28                                  | 2.125             | .785     | 1.127    |
| AS643P (-24)                           | 1.500                 | -                       | -                      | -                               | -                          | -        | -                            | -                                     | -                 | -        | -        |

TABLE 2 - TOLERANCES

| HOSE ASSEMBLY LENGTH  | TOLERANCE |
|-----------------------|-----------|
| UNDER 18 IN           | ±.125     |
| 18 TO 36 IN EXCLUSIVE | ±.250     |
| 36 TO 50 IN EXCLUSIVE | ±.500     |
| 50 IN AND OVER        | ±1%       |

TABLE 3 - HOSE AND SLEEVE CODES

| HOSE<br>OR<br>SLEEVE<br>CODE | SLEEVE MATERIAL                                             | TEMP.<br>LIMIT<br>°F |
|------------------------------|-------------------------------------------------------------|----------------------|
| -                            | (-) INDICATES HOSE ONLY, NO SLEEVE (AS1946)                 | 450                  |
| A                            | ABRASION SLEEVE TUBULAR (PTFE - AS1291 - CODE B) /7/        | 450                  |
| B                            | ABRASION SLEEVE COIL (NYLON AS1294) /8/                     | 275                  |
| C                            | FIRE SLEEVE (AS1072 SIL-FG) (15 MIN) /9/ /10/ /14/          | 450                  |
| E                            | ABRASION SLEEVE SHRINK-ON (FEP) /12/                        | 350                  |
| F                            | ABRASION SLEEVE SHRINK-ON (POLYOLEFIN AS1073 - CODE B) /12/ | 275                  |
| G                            | FIRE SLEEVE (AS1072 SIL-FG) (5 MIN) /9/ /10/ /13/           | 450                  |
| H                            | FIRE SLEEVE INTEGRAL SILICONE (AS1723) (15 MIN) /14/        | 450                  |
| J                            | FIRE SLEEVE INTEGRAL SILICONE (5 MIN) /13/                  | 450                  |
| K                            | INTEGRAL ABRASION SLEEVE (BRAIDED) POLYESTER /11/           | 300                  |
| L                            | ABRASION SLEEVE COIL (PTFE - AS1293) /8/                    | 450                  |

TABLE 4 - HOSE AND SLEEVE OUTSIDE DIAMETERS

| HOSE<br>OR<br>SLEEVE<br>CODE | TOLERANCE | HOSE<br>SIZE<br>/6/<br>.188 | HOSE<br>SIZE<br>/6/<br>.250 | HOSE<br>SIZE<br>/6/<br>.313 | HOSE<br>SIZE<br>/6/<br>.375 | HOSE<br>SIZE<br>/6/<br>.500 | HOSE<br>SIZE<br>/6/<br>.625 | HOSE<br>SIZE<br>/6/<br>.750 | HOSE<br>SIZE<br>/6/<br>1.000 | HOSE<br>SIZE<br>/6/<br>1.250 | HOSE<br>SIZE<br>/6/<br>1.500 |
|------------------------------|-----------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|
| -                            | MAX       | .285                        | .347                        | .417                        | .500                        | .614                        | .799                        | .906                        | 1.140                        | 1.390                        | 1.707                        |
|                              | MIN       | .234                        | .304                        | .367                        | .430                        | .546                        | .641                        | .766                        | 1.078                        | 1.328                        | 1.637                        |
| A                            | MAX       | .390                        | .473                        | .524                        | .620                        | .715                        | .818                        | .955                        | 1.295                        | 1.550                        | 1.841                        |
|                              | MIN       | .320                        | .393                        | .454                        | .515                        | .645                        | .748                        | .870                        | 1.210                        | 1.450                        | 1.771                        |
| B                            | MAX       | .339                        | .409                        | .472                        | .535                        | .669                        | .767                        | .896                        | 1.224                        | 1.474                        | 1.807                        |
|                              | MIN       | .260                        | .330                        | .393                        | .456                        | .590                        | .681                        | .810                        | 1.122                        | 1.372                        | 1.681                        |
| C                            | MAX       | .692                        | .692                        | .780                        | .840                        | .970                        | 1.090                       | 1.220                       | 1.590                        | 1.900                        | 2.190                        |
|                              | MIN       | .487                        | .533                        | .598                        | .658                        | .778                        | .891                        | 1.016                       | 1.288                        | 1.578                        | 1.887                        |
| E                            | MAX       | .301                        | .375                        | .438                        | .507                        | .635                        | .749                        | .887                        | 1.288                        | 1.460                        | 1.777                        |
|                              | MIN       | .248                        | .320                        | .383                        | .452                        | .578                        | .679                        | .811                        | 1.146                        | 1.358                        | 1.667                        |
| F                            | MAX       | .341                        | .411                        | .474                        | .547                        | .663                        | .769                        | .904                        | 1.244                        | 1.482                        | 1.823                        |
|                              | MIN       | .278                        | .348                        | .411                        | .484                        | .600                        | .699                        | .834                        | 1.158                        | 1.396                        | 1.729                        |
| G                            | MAX       | .692                        | .692                        | .780                        | .840                        | .970                        | 1.090                       | 1.220                       | 1.590                        | 1.900                        | 2.190                        |
|                              | MIN       | .487                        | .533                        | .598                        | .658                        | .778                        | .891                        | 1.016                       | 1.288                        | 1.578                        | 1.887                        |
| H                            | MAX       | .641                        | .641                        | .704                        | .766                        | .891                        | 1.016                       | 1.141                       | 1.454                        | 1.704                        | 2.016                        |
|                              | MIN       | .537                        | .594                        | .657                        | .719                        | .844                        | .949                        | 1.074                       | 1.394                        | 1.649                        | 1.957                        |
| J                            | MAX       | .641                        | .641                        | .704                        | .766                        | .891                        | 1.016                       | 1.141                       | 1.454                        | 1.704                        | 2.016                        |
|                              | MIN       | .450                        | .550                        | .595                        | .670                        | .775                        | .875                        | .995                        | 1.310                        | 1.508                        | 1.815                        |
| K                            | MAX       | .378                        | .430                        | .499                        | .559                        | .665                        | .772                        | .887                        | 1.210                        | 1.460                        | 1.782                        |
|                              | MIN       | .320                        | .390                        | .450                        | .510                        | .625                        | .726                        | .841                        | 1.148                        | 1.398                        | 1.712                        |
| L                            | MAX       | .375                        | .445                        | .508                        | .571                        | .687                        | .789                        | .914                        | 1.242                        | 1.492                        | 1.809                        |
|                              | MIN       | .267                        | .333                        | .407                        | .470                        | .586                        | .681                        | .828                        | 1.138                        | 1.388                        | 1.697                        |

TABLE 5 - HOSE WEIGHT MAX. ALL OTHERS REF

| HOSE OR<br>SLEEVE CODE<br>OR FITTING | FITTING<br>TYPE<br>/25/<br>UNITS | HOSE<br>SIZE<br>.188 | HOSE<br>SIZE<br>.250 | HOSE<br>SIZE<br>.313 | HOSE<br>SIZE<br>.375 | HOSE<br>SIZE<br>.500 | HOSE<br>SIZE<br>.625 | HOSE<br>SIZE<br>.750 | HOSE<br>SIZE<br>1.000 | HOSE<br>SIZE<br>1.250 | HOSE<br>SIZE<br>1.500 |
|--------------------------------------|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| -                                    | LB/IN                            | .005                 | .007                 | .008                 | .010                 | .012                 | .016                 | .020                 | .045                  | .058                  | .074                  |
| A                                    | LB/IN                            | .003                 | .004                 | .004                 | .006                 | .007                 | .008                 | .010                 | .014                  | .020                  | .045                  |
| B                                    | LB/IN                            | .001                 | .001                 | .002                 | .002                 | .003                 | .004                 | .004                 | .005                  | .006                  | .009                  |
| C                                    | LB/IN                            | .009                 | .009                 | .011                 | .012                 | .017                 | .018                 | .028                 | .030                  | .040                  | .047                  |
| E                                    | LB/IN                            | .001                 | .002                 | .002                 | .002                 | .003                 | .004                 | .006                 | .007                  | .007                  | .008                  |
| F                                    | LB/IN                            | .002                 | .002                 | .002                 | .002                 | .003                 | .003                 | .005                 | .006                  | .006                  | .007                  |
| G                                    | LB/IN                            | .009                 | .009                 | .011                 | .012                 | .017                 | .018                 | .028                 | .030                  | .040                  | .047                  |
| H                                    | LB/IN                            | .016                 | .018                 | .020                 | .023                 | .030                 | .037                 | .045                 | .085                  | .107                  | .132                  |
| J                                    | LB/IN                            | .016                 | .017                 | .018                 | .021                 | .027                 | .035                 | .042                 | .079                  | .100                  | .123                  |
| K                                    | LB/IN                            | .006                 | .008                 | .009                 | .011                 | .015                 | .018                 | .023                 | .050                  | .063                  | .081                  |
| L                                    | LB/IN                            | .003                 | .004                 | .004                 | .005                 | .008                 | .009                 | .011                 | .018                  | .022                  | .028                  |
| FIRESLEEVE<br>CLAMP                  | LB/EA                            | .015                 | .016                 | .018                 | .019                 | .021                 | .023                 | .025                 | .029                  | .033                  | .037                  |
| FITTING<br>END                       |                                  |                      |                      |                      |                      |                      |                      |                      |                       |                       |                       |
| A/D - CRES                           | R, S, E LB/EA                    | .040                 | .055                 | .075                 | .085                 | .155                 | .235                 | .330                 | .535                  | .995                  | 1.370                 |
| B/E - AL                             | R, S, E LB/EA                    | ---                  | .019                 | .026                 | .029                 | .053                 | .080                 | .112                 | .182                  | .338                  | .466                  |
| C/F - TI                             | R, S, E LB/EA                    | .024                 | .033                 | .045                 | .051                 | .093                 | .141                 | .198                 | .321                  | .597                  | .822                  |

TABLE 6 - SLEEVE LENGTH

| HOSE SIZE              | LENGTH     |
|------------------------|------------|
| .188, .250, .313, .375 | 2.00 ± .25 |
| .500, .625             | 2.50 ± .25 |
| .750, 1.000            | 3.00 ± .25 |
| 1.250, 1.500           | 4.00 ± .25 |

## NOTES:

1. CONSTRUCTION AND PERFORMANCE: AS1946, FITTINGS SHALL BE PERMANENTLY ATTACHED TO THE HOSE.
2. OPERATING CHARACTERISTICS: SEE AS1946.
3. MATERIALS:
  - a. HOSE AND FITTINGS - PER AS1946 /5/
  - b. SLEEVES - SEE APPLICABLE STANDARDS, TABLE 3
- /4/ STANDARD COUPLING NUTS SHALL BE IN ACCORDANCE WITH AN818, AS1790, OR AS4370 (AS1791 WIRE AS APPLICABLE) AND MATE WITH AS4395 OR AS5309 FITTING ENDS. NONSTANDARD COUPLING NUTS MAY BE USED, PROVIDED THEY ARE FUNCTIONALLY EQUIVALENT, AND PROVIDED THEY CANNOT BE REMOVED FROM THE FITTING. NUTS SHALL MEET THE TORQUE TEST REQUIREMENTS PER AS1946.