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REV.  
B

AS4625

FEDERAL SUPPLY CLASS  
4720

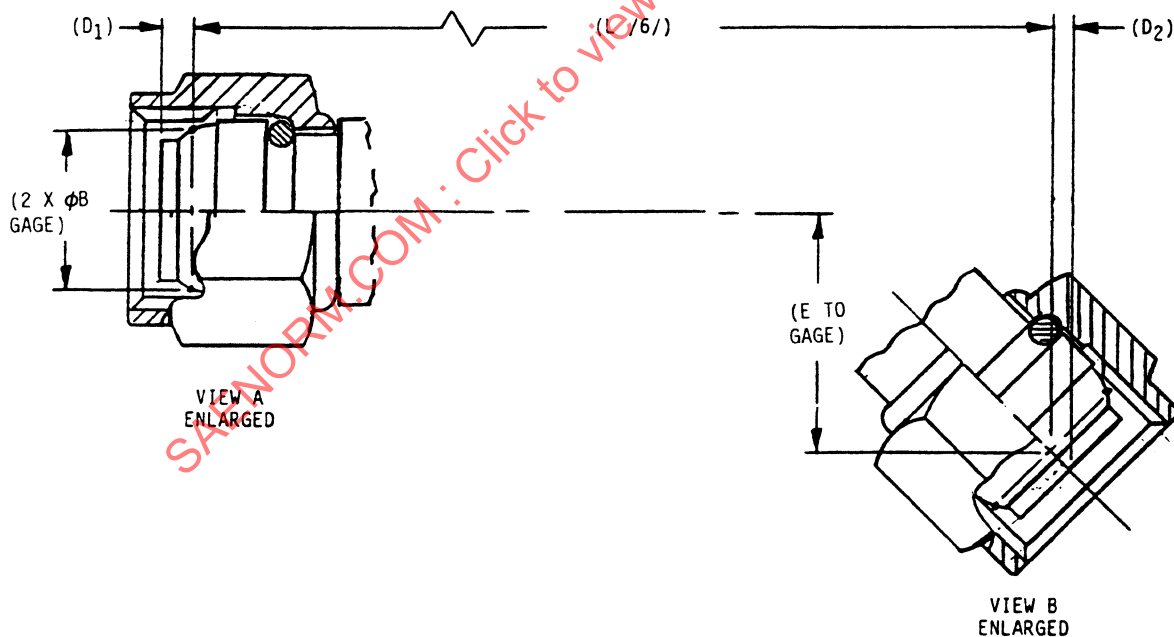
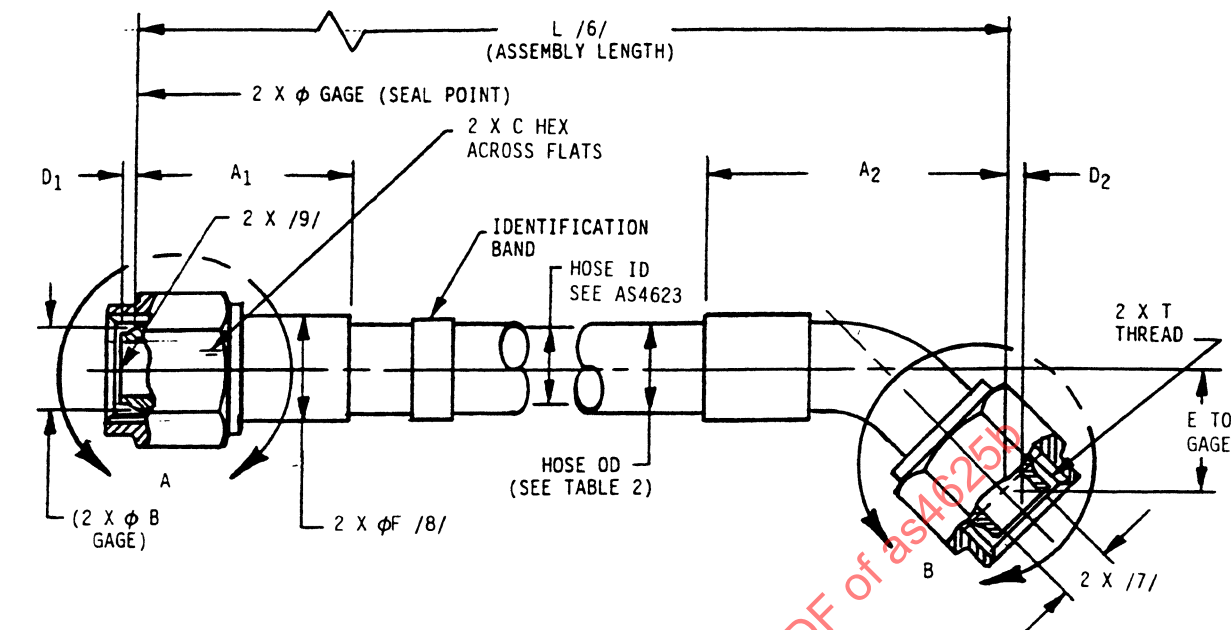
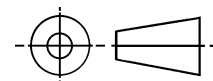


FIGURE 1 - FLARELESS HOSE ASSEMBLY  
STRAIGHT TO 45° ELBOW

THIRD ANGLE PROJECTION



CUSTODIAN: SAE G-3/G-3D

PROCUREMENT SPECIFICATION: /2/ AS4623

**SAE Aerospace**  
An SAE International Group

**AEROSPACE STANDARD**

HOSE ASSEMBLY, POLYTETRAFLUOROETHYLENE, PARA ARAMID  
REINFORCED, HEAVY-DUTY, 275 °F, 3000 psi FLARELESS  
TITANIUM FITTINGS, INCLUDING JUMP SIZE, STRAIGHT TO 45°

**AS4625**  
SHEET 1 OF 6

**REV.  
B**

TABLE 1 - HOSE AND FITTING DIMENSIONS

| BASIC HOSE<br>ASSEMBLY<br>NO. 4625<br>SIZE CODE | SIZE  | /14/<br>FITTING<br>TYPE | THREAD T<br>PER AS8879 | A1<br>MAX | A2<br>MAX | B GAGE (C)<br>BASIC | D1   | D2  | E<br>MAX | E<br>MIN | F<br>/8/<br>MAX | BALL SIZE MIN<br>THRU 7/<br>IN |
|-------------------------------------------------|-------|-------------------------|------------------------|-----------|-----------|---------------------|------|-----|----------|----------|-----------------|--------------------------------|
|                                                 |       |                         |                        |           |           |                     |      |     |          |          |                 |                                |
| E                                               | .250  | --                      | --                     | --        | --        | --                  | --   | --  | --       | --       | --              | --                             |
| E                                               | .250  | S                       | .4375-20UNJF-38        | 1.630     | 2.160     | .2930               | .56  | .11 | .475     | .350     | .69             | .109                           |
| E                                               | .250  | E                       | .5625-18UNJF-38        | 1.695     | 2.240     | .4120               | .69  | .12 | .500     | .375     | .69             | .109                           |
| G                                               | .375  | R                       | .4375-20UNJF-38        | 1.740     | 2.620     | .2930               | .56  | .11 | .475     | .350     | .80             | .109                           |
| G                                               | .375  | S                       | .5625-18UNJF-38        | 1.835     | 2.460     | .4120               | .69  | .12 | .500     | .375     | .80             | .188                           |
| G                                               | .375  | E                       | .7500-16UNJF-38        | 1.930     | 2.770     | .5600               | .88  | .13 | .560     | .435     | .80             | .188                           |
| H                                               | .500  | R                       | .5625-18UNJF-38        | 2.145     | 2.695     | .4120               | .69  | .12 | .500     | .375     | .97             | .188                           |
| H                                               | .500  | S                       | .7500-16UNJF-38        | 2.165     | 2.740     | .5600               | .88  | .13 | .560     | .435     | .97             | .313                           |
| H                                               | .500  | E                       | .8750-14UNJF-38        | 2.675     | 3.050     | .6730               | 1.00 | .20 | .670     | .545     | .97             | .313                           |
| J                                               | .625  | R                       | .7500-16UNJF-38        | 2.860     | 3.685     | .5600               | .88  | .13 | .560     | .435     | 1.15            | .313                           |
| J                                               | .625  | S                       | .8750-14UNJF-38        | 2.905     | 3.785     | .6730               | 1.00 | .20 | .670     | .545     | 1.15            | .375                           |
| J                                               | .625  | E                       | 1.0625-12UNJ-38        | 2.920     | 3.875     | .8100               | 1.25 | .23 | .705     | .580     | 1.15            | .375                           |
| K                                               | .750  | R                       | .8750-14UNJF-38        | 3.240     | 4.760     | .6730               | 1.00 | .20 | .670     | .545     | 1.38            | .375                           |
| K                                               | .750  | S                       | 1.0625-12UNJ-38        | 3.205     | 4.810     | .8100               | 1.25 | .23 | .705     | .580     | 1.38            | .469                           |
| K                                               | .750  | E                       | 1.3125-12UNJ-38        | 3.320     | 5.140     | 1.0620              | 1.50 | .30 | .840     | .715     | 1.38            | .469                           |
| M                                               | 1.000 | R                       | 1.0625-12UNJ-38        | 3.690     | 5.350     | .8100               | 1.25 | .23 | .705     | .580     | 1.66            | .469                           |
| M                                               | 1.000 | S                       | 1.3125-12UNJ-38        | 3.740     | 5.540     | 1.0620              | 1.50 | .30 | .840     | .715     | 1.66            | .719                           |
| M                                               | 1.000 | E                       | 1.5625-12UNJ-38        | 3.570     | 5.760     | 1.3160              | 1.81 | .04 | .875     | .750     | 1.66            | .719                           |
| N                                               | 1.250 | --                      | --                     | --        | --        | --                  | --   | --  | --       | --       | --              | --                             |
| N                                               | 1.250 | S                       | 1.5625-12UNJ-38        | 4.330     | 6.770     | 1.3160              | 1.81 | .04 | .875     | .750     | 2.32            | .875                           |
| N                                               | 1.250 | --                      | --                     | --        | --        | --                  | --   | --  | --       | --       | --              | --                             |

TABLE 2 - HOSE OR SLEEVE OUTSIDE DIAMETERS /10/

| SLEEVE CODE | SLEEVE MATERIAL                                              | TEMP. LIMIT °F | HOSE SIZE .250 | HOSE SIZE .375 | HOSE SIZE .500 | HOSE SIZE .625 | HOSE SIZE .750 | HOSE SIZE 1.000 | HOSE SIZE 1.250 |
|-------------|--------------------------------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| -           | (-) INDICATES HOSE ONLY<br>NO SLEEVE (SEE AS4623)            | 275            | --             | --             | --             | --             | --             | --              | --              |
| A           | FIRE SLEEVE (AS1072 STL-FG)<br>(5 min) /11/ /12/ /13/        | 275            | .930/.730      | 1.070/.880     | 1.205/1.015    | 1.370/1.130    | 1.590/1.380    | 1.847/1.677     | 2.130/1.950     |
| B           | ABRASION SLEEVE SHRINK-ON<br>(POLYOLEFIN AS1073-CODE B) /20/ | 275            | .596/.524      | .760/.680      | .905/.825      | 1.030/.940     | 1.302/1.198    | 1.599/1.495     | 1.884/1.776     |

TABLE 3 - HOSE ASSEMBLY LENGTH TOLERANCES

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

TABLE 4 - MAXIMUM HOSE AND FITTING WEIGHTS

| HOSE<br>OR<br>SLEEVE<br>CODE | HOSE, PORT OR SLEEVE                        | UNITS   | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE | REFERENCE<br>WEIGHT<br>LB/IN<br>HOSE<br>SIZE |
|------------------------------|---------------------------------------------|---------|----------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|----------------------------------------------|
| --                           | HOSE ONLY (SEE AS4623)                      | LB/IN   | --                                           | --                                           | --                                           | --                                           | --                                           | --                                           |
| A                            | FIRE SLEEVE (AS1072 SIL-F6)<br>(5 min) /15/ | LB/IN   | --                                           | --                                           | --                                           | --                                           | --                                           | --                                           |
| B                            | ABRASION SLEEVE (AS1073 -<br>CODE B) /20/   | LB/IN   | .0006                                        | .0012                                        | .0018                                        | .0032                                        | .0032                                        | .0049                                        |
| NONE                         | FIRE SLEEVE CLAMP                           | LB/EA   | .020                                         | .020                                         | .021                                         | .025                                         | .025                                         | .032                                         |
| NONE                         | FITTING END (STRAIGHT)<br>/14/ /16/         | R LB/EA | --                                           | .077                                         | .118                                         | .427                                         | .823                                         | --                                           |
| NONE                         |                                             | S LB/EA | .054                                         | .081                                         | .135                                         | .476                                         | .853                                         | TBD /9/                                      |
| NONE                         |                                             | E LB/EA | .074                                         | .115                                         | .193                                         | .591                                         | 1.000                                        | --                                           |
| NONE                         | FITTING END (45°)<br>/14/ /16/              | R LB/EA | --                                           | .099                                         | .132                                         | .454                                         | .839                                         | --                                           |
| NONE                         |                                             | S LB/EA | .066                                         | .110                                         | .154                                         | .535                                         | .944                                         | TBD /9/                                      |
| NONE                         |                                             | E LB/EA | .088                                         | .143                                         | .209                                         | .690                                         | 1.029                                        | --                                           |