

REV.  
B

AS4570

FEDERAL SUPPLY CLASS  
4720

RATIONALE

AS4570B HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

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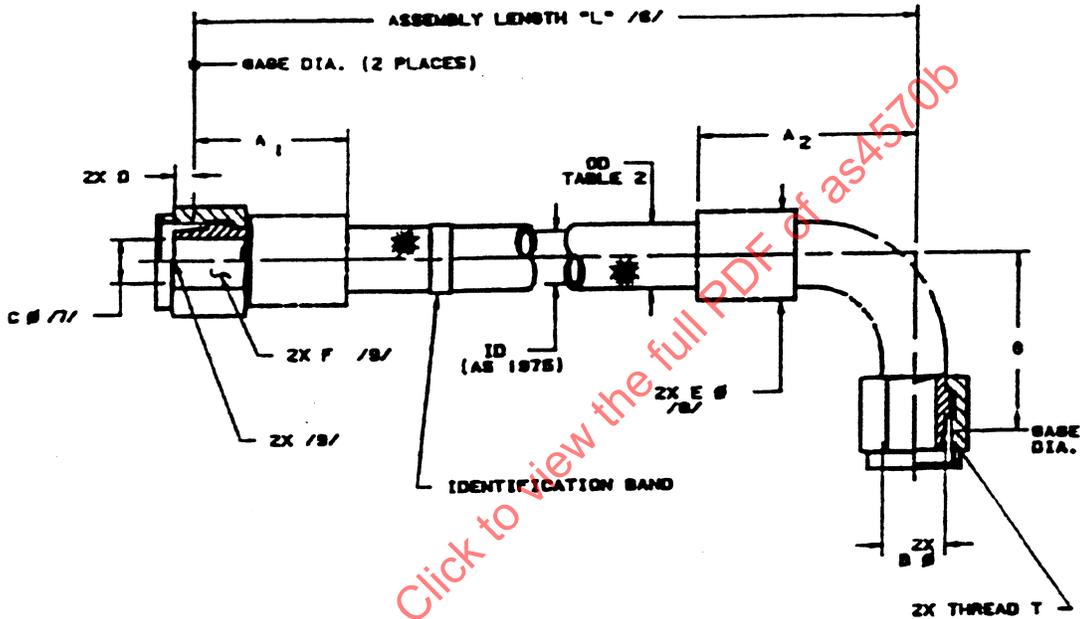
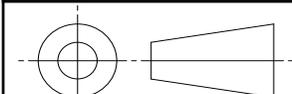


FIGURE 1 HOSE ASSEMBLY, STRAIGHT TO 90° ELBOW

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS1975 /2/



**AEROSPACE STANDARD**

(R) HOSE ASSEMBLY, PTFE, PARA-ARAMID REINFORCED, STANDARD DUTY, 3000 PSI, 275 °F, TITANIUM FITTINGS, FLARELESS, STRAIGHT TO 90°

**AS4570**  
SHEET 1 OF 6

**REV. B**

ISSUED 1992-06 REVISED 2001-01 REAFFIRMED 2015-04

TABLE 1 - ASSEMBLY DIMENSIONS

| HOSE ASSEMBLY NO. & SIZE CODE | HOSE SIZE (REF) | /15/ FITTING TYPE (REF) | THREAD T PER AS8879 (REF) | HOSE ID MIN | A <sub>1</sub> MAX | A <sub>2</sub> MAX | B GAGE BASIC | C /7/ MIN STR FTG BORE AFTER ASSEMBLY | D (REF) |
|-------------------------------|-----------------|-------------------------|---------------------------|-------------|--------------------|--------------------|--------------|---------------------------------------|---------|
| AS4570E                       | .250            | -                       |                           |             |                    |                    |              |                                       |         |
| AS4570E                       | .250            | S                       | .4375-20UNJF-3B           | .212        | 1.630              | 1.880              | .2930        | .135                                  | .16     |
| AS4570E                       | .250            | E                       | .5625-18UNJF-3B           | .212        | 1.695              | 1.930              | .4120        | .135                                  | .16     |
| AS4570G                       | .375            | R                       | .4375-20UNJF-3B           | .298        | 1.820              | 2.180              | .2930        | .135                                  | .16     |
| AS4570G                       | .375            | S                       | .5625-18UNJF-3B           | .298        | 1.835              | 2.180              | .4120        | .240                                  | .16     |
| AS4570G                       | .375            | E                       | .7500-16UNJF-3B           | .298        | 1.915              | 2.530              | .5600        | .240                                  | .19     |
| AS4570H                       | .500            | R                       | .5625-18UNJF-3B           | .391        | 2.145              | 2.530              | .4120        | .240                                  | .16     |
| AS4570H                       | .500            | S                       | .7500-16UNJF-3B           | .391        | 2.165              | 2.530              | .5600        | .340                                  | .19     |
| AS4570H                       | .500            | E                       | .8750-14UNJF-3B           | .391        | 2.675              | 2.780              | .6730        | .340                                  | .20     |
| AS4570J                       | .625            | R                       | .7500-16UNJF-3B           | .485        | 2.860              | 3.375              | .5600        | .340                                  | .19     |
| AS4570J                       | .625            | S                       | .8750-14UNJF-3B           | .485        | 2.905              | 3.375              | .6730        | .410                                  | .20     |
| AS4570J                       | .625            | E                       | 1.0625-12UNJ-3B           | .485        | 2.920              | 3.655              | .8100        | .410                                  | .23     |
| AS4570K                       | .750            | R                       | .8750-14UNJF-3B           | .602        | 3.240              | 3.940              | .6730        | .410                                  | .20     |
| AS4570K                       | .750            | S                       | 1.0625-12UNJ-3B           | .602        | 3.205              | 3.940              | .8100        | .510                                  | .23     |
| AS4570K                       | .750            | E                       | 1.3125-12UNJ-3B           | .602        | 3.320              | 4.060              | 1.0620       | .510                                  | .30     |
| AS4570M                       | 1.000           | R                       | 1.0625-12UNJ-3B           | .852        | 3.690              | 4.485              | .8100        | .510                                  | .23     |
| AS4570M                       | 1.000           | S                       | 1.3125-12UNJ-3B           | .852        | 3.740              | 4.485              | 1.0620       | .760                                  | .30     |
| AS4570M                       | 1.000           | E                       | 1.5625-12UNJ-3B           | .852        | 3.570              | 4.680              | 1.3160       | .760                                  | .04     |
| AS4570N                       | 1.250           | R                       | 1.3125-12UNJ-3B           | 1.100       | 4.600              | 5.085              | 1.0620       | .760                                  | .30     |
| AS4570N                       | 1.250           | S                       | 1.5625-12UNJ-3B           | 1.100       | 4.330              | 5.225              | 1.3160       | .960                                  | .04     |
| AS4570N                       | 1.250           | -                       | TBD                       | TBD         | TBD                | TBD                | TBD          | TBD                                   | TBD     |
| AS4570P                       | 1.500           | -                       |                           |             |                    |                    |              |                                       |         |
| AS4570P                       | 1.500           | S                       | TBD                       | TBD         | TBD                | TBD                | TBD          | TBD                                   | TBD     |
| AS4570P                       | 1.500           | -                       |                           |             |                    |                    |              |                                       |         |

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TABLE 1 (CONTINUED)

| HOSE ASSEMBLY NO. & SIZE CODE | HOSE SIZE (REF) | /15/ FITTING TYPE (REF) | E /8/ DIA MAX WITHOUT SLEEVING | F HEX (REF) | G MIN | G MAX | SPHERICAL BALL SIZE FOR DETERMINING MINIMUM HOSE ASSEMBLY ID /7/ IN STRAIGHT FITTING | SPHERICAL BALL SIZE FOR DETERMINING MINIMUM HOSE ASSEMBLY ID /7/ IN ELBOW FITTING |
|-------------------------------|-----------------|-------------------------|--------------------------------|-------------|-------|-------|--|---|
|                               |                 |                         |                                |             |       |       | ASSEMBLY ID /7/ IN STRAIGHT FITTING  | ASSEMBLY ID /7/ IN ELBOW FITTING  |
| AS4570E                       | .250            | -                       |                                |             |       |       |  |   |
| AS4570E                       | .250            | S                       | .69                            | .56         | .645  | .770  | .122   | .115  |
| AS4570E                       | .250            | E                       | .69                            | .69         | .715  | .840  | .122   | .115  |
| AS4570G                       | .375            | R                       | .80                            | .56         | .645  | .770  | .122   | .115  |
| AS4570G                       | .375            | S                       | .80                            | .69         | .715  | .840  | .216   | .204  |
| AS4570G                       | .375            | E                       | .80                            | .88         | .845  | .970  | .216   | .204  |
| AS4570H                       | .500            | R                       | .97                            | .69         | .715  | .840  | .216   | .204  |
| AS4570H                       | .500            | S                       | .97                            | .88         | .845  | .970  | .306   | .289  |
| AS4570H                       | .500            | E                       | .97                            | 1.00        | 1.085 | 1.210 | .306   | .289  |
| AS4570J                       | .625            | R                       | 1.15                           | .88         | .845  | .970  | .306   | .289  |
| AS4570J                       | .625            | S                       | 1.15                           | 1.00        | 1.085 | 1.210 | .369   | .349  |
| AS4570J                       | .625            | E                       | 1.15                           | 1.25        | 1.275 | 1.400 | .369   | .349  |
| AS4570K                       | .750            | R                       | 1.38                           | 1.00        | 1.085 | 1.210 | .369   | .349  |
| AS4570K                       | .750            | S                       | 1.38                           | 1.25        | 1.275 | 1.400 | .459   | .434  |
| AS4570K                       | .750            | E                       | 1.38                           | 1.50        | 1.500 | 1.625 | .459   | .434  |
| AS4570M                       | 1.000           | R                       | 1.66                           | 1.25        | 1.275 | 1.400 | .459   | .434  |
| AS4570M                       | 1.000           | S                       | 1.66                           | 1.50        | 1.500 | 1.625 | .684   | .646  |
| AS4570M                       | 1.000           | E                       | 1.66                           | 1.81        | 1.700 | 1.825 | .684   | .646  |
| AS4570N                       | 1.250           | R                       | 2.33                           | 1.50        | 1.500 | 1.625 | .684   | .646  |
| AS4570N                       | 1.250           | S                       | 2.33                           | 1.81        | 1.700 | 1.825 | .864   | .816  |
| AS4570N                       | 1.250           | -                       | TBD                            | TBD         | TBD   | TBD   | TBD  | TBD   |
| AS4570P                       | 1.500           | -                       |                                |             |       |       |  |   |
| AS4570P                       | 1.500           | S                       | TBD                            | TBD         | TBD   | TBD   | TBD  | TBD   |
| AS4570P                       | 1.500           | -                       |                                |             |       |       |  |   |

TABLE 2 - HOSE AND SLEEVE OUTSIDE DIAMETER

| SLEEVE<br>CODE | SLEEVE MATERIAL   | TEMP<br>LIMIT<br>°F | TOLERANCE  | HOSE                 | HOSE                 | HOSE                 | HOSE                 | HOSE                 | HOSE                  | HOSE                  | HOSE                  |
|----------------|---|---------------------|------------|----------------------|----------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
|                |   |                     |            | SIZE<br>/10/<br>.250 | SIZE<br>/10/<br>.375 | SIZE<br>/10/<br>.500 | SIZE<br>/10/<br>.625 | SIZE<br>/10/<br>.750 | SIZE<br>/10/<br>1.000 | SIZE<br>/10/<br>1.250 | SIZE<br>/10/<br>1.500 |
| -              | BRAIDED HOSE ONLY PER AS1975                                      | 275                 | MAX<br>MIN | .465<br>.405         | .555<br>.495         | .710<br>.650         | .920<br>.850         | 1.075<br>.995        | 1.365<br>1.285        | 1.660<br>1.580        | TBD<br>TBD            |
| A              | FIRESLEEVE (AS1072 SIL FG)<br>(5 min) /11/ /12/                   | 275                 | MAX<br>MIN | .840<br>.658         | .970<br>.788         | 1.150<br>.968        | 1.380<br>1.198       | 1.590<br>1.318       | 1.750<br>1.568        | 1.950<br>1.768        | TBD<br>TBD            |
| B              | FIRESLEEVE INTEGRAL SILICONE<br>(5 min) /13/                      | 275                 | MAX<br>MIN | TBD                  | TBD                  | TBD                  | TBD                  | TBD                  | TBD                   | TBD                   | TBD                   |
| C              | PROTECTIVE SLEEVE<br>SHRINK-ON (POLYOLEFIN AS1073<br>CODE B) /21/ | 275                 | MAX<br>MIN | .520<br>.450         | .620<br>.550         | .795<br>.725         | 1.000<br>.920        | 1.170<br>1.060       | 1.460<br>1.350        | TBD                   | TBD                   |

TABLE 3 - ASSEMBLY LENGTH TOLERANCE

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

TABLE 4 - HOSE AND FITTING WEIGHTS

| HOSE<br>OR<br>SLEEVE<br>CODE | HOSE OR SLEEVE OR PART  | UNITS         | HOSE         | HOSE         | HOSE         | HOSE         | HOSE         | HOSE          | HOSE          | HOSE          |
|------------------------------|---|---------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
|                              |   |               | SIZE<br>.250 | SIZE<br>.375 | SIZE<br>.500 | SIZE<br>.625 | SIZE<br>.750 | SIZE<br>1.000 | SIZE<br>1.250 | SIZE<br>1.500 |
| -                            | BRAIDED HOSE ONLY PER AS1975                                    | LB/IN (MAX)   | .006         | .008         | .012         | .020         | .025         | .040          | .050          | TBD           |
| A                            | FIRESLEEVE AS1072 (5 min<br>PER AS1055) /16/                    | LB/IN         |              |              |              |              |              |               |               |               |
| B                            | FIRESLEEVE INTEGRAL WITH<br>HOSE (5 min PER AS1055) /16/        | LB/IN         |              |              |              |              |              |               |               |               |
| C                            | PROTECTIVE SLEEVE SHRINK-ON<br>(POLYOLEFIN AS1073, CODE B) /21/ | LB/IN         | .001         | .001         | .001         | .002         | .002         | .003          | TBD           | TBD           |
| NONE                         | FIRESLEEVE CLAMP  | LB/EA (REF)   | .020         | .020         | .021         | .021         | .025         | .025          | .032          | TBD           |
| NONE                         | FITTING END (STRAIGHT) TITANIUM<br>/15/ /17/                    | R LB/EA (REF) | -            | .077         | .118         | .210         | .382         | .730          | TBD           | -             |
|                              |   | S LB/EA (REF) | .048         | .081         | .135         | .248         | .431         | .760          | TBD           | TBD /9/       |
|                              |   | E LB/EA (REF) | .068         | .115         | .193         | .296         | .546         | .890          | -             | -             |
| NONE                         | FITTING END (90°) TITANIUM<br>/15/ /17/                         | R LB/EA (REF) | -            | .110         | .143         | .275         | .460         | .810          | TBD           | -             |
|                              |   | S LB/EA (REF) | .077         | .121         | .176         | .297         | .560         | .950          | TBD           | TBD /9/       |
|                              |   | E LB/EA (REF) | .099         | .154         | .242         | .410         | .740         | 1.075         | -             | -             |



## AEROSPACE STANDARD

(R) HOSE ASSEMBLY, PTFE, PARA-ARAMID REINFORCED,  
STANDARD DUTY, 3000 PSI, 275 °F, TITANIUM  
FITTINGS, FLARELESS, STRAIGHT TO 90°

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