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D

AS623™

FEDERAL SUPPLY CLASS  
4720

## RATIONALE

ADD CONFIGURATION FOR A NEW "N" CODE THIN WALL INTEGRAL FIRESLEEVE (15 MINUTE); TABLE 2 DIMENSIONS CHANGED TO ALIGN WITH AS604 AND AS627-632 STANDARDS; NOTE 2 CHANGED TO CURRENT PRI STANDARD.

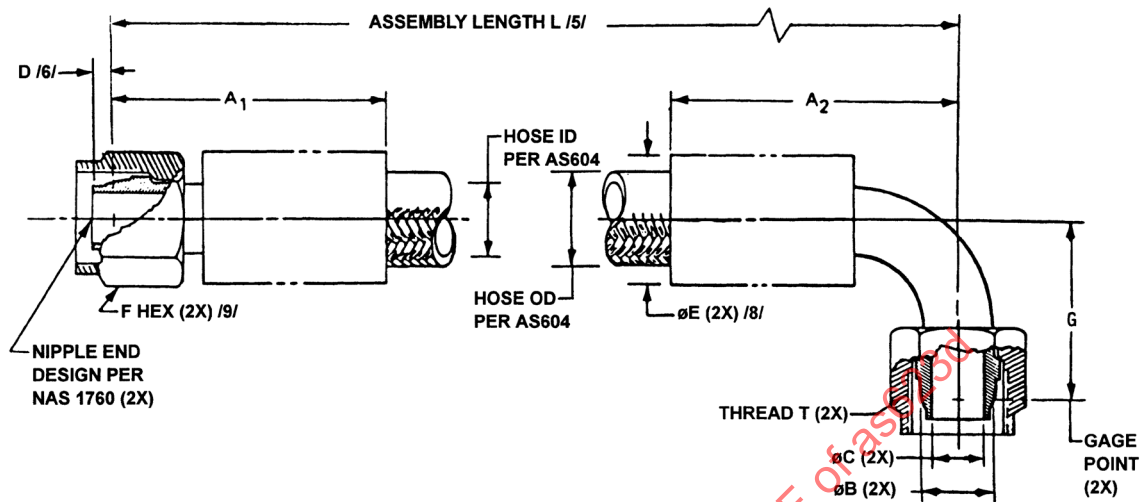


FIGURE 1 - HOSE AND FITTING DIMENSIONS

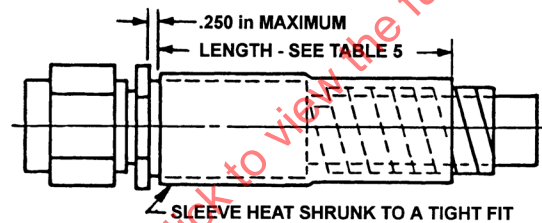
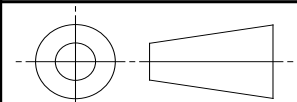


FIGURE 2 - TUBULAR/COIL ABRASION END /10/ /11/

For more information on this standard, visit  
<https://www.sae.org/standards/content/AS623D/>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS604 /2/



## AEROSPACE STANDARD

HOSE ASSEMBLY, 3000 PSI, PTFE, FLARELESS,  
STRAIGHT TO 90°, HEAVYWEIGHT

AS623™  
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ISSUED 1984-07 REAFFIRMED 2013-01 REVISED 2022-05

**TABLE 1 - ASSEMBLY DIMENSIONS**

| HOSE<br>ASSEMBLY<br>AS623<br>SIZE CODE | HOSE<br>ASSEMBLY<br>SIZE<br>(REF) | THREAD T<br>PER AS8879<br>(REF) | A <sub>1</sub><br>MAX | A <sub>2</sub><br>MAX | B<br>GAGE<br>BASIC | C /7/<br>MIN | D<br>(REF) | E<br>MAX<br>WITHOUT<br>SLEEVEING | F<br>HEX<br>(REF) |
|----------------------------------------|-----------------------------------|---------------------------------|-----------------------|-----------------------|--------------------|--------------|------------|----------------------------------|-------------------|
| 04                                     | .250                              | .4375-20 UNJF-3B                | 1.56                  | 1.58                  | .2930              | .135         | .16        | .88                              | .56               |
| 06                                     | .375                              | .5625-18 UNJF-3B                | 1.80                  | 1.80                  | .4120              | .240         | .16        | 1.00                             | .69               |
| 08                                     | .500                              | .7500-16 UNJF-3B                | 2.06                  | 2.40                  | .5600              | .340         | .19        | 1.20                             | .88               |
| 10                                     | .625                              | .8750-14 UNJF-3B                | 2.44                  | 3.04                  | .6730              | .410         | .20        | 1.41                             | 1.00              |
| 12                                     | .750                              | 1.0625-12 UNJ-3B                | 2.56                  | 3.35                  | .8100              | .510         | .23        | 1.69                             | 1.25              |
| 16                                     | 1.00                              | 1.3125-12 UNJ-3B                | 3.00                  | 4.26                  | 1.0620             | .760         | .30        | 2.00                             | 1.50              |
| 20                                     | 1.25                              | 1.6250-12 UNJ-3B                | 3.00                  | 4.72                  | 1.3160             | .925         | .30        | 2.13                             | 2.00              |

**TABLE 1 - ASSEMBLY DIMENSIONS (CONTINUED)**

| HOSE<br>ASSEMBLY<br>AS623<br>SIZE CODE | HOSE<br>ASSEMBLY<br>SIZE<br>(REF) | G<br>MIN | G<br>MAX | INSPECTION<br>BALL SIZE /7/<br>STRAIGHT<br>END FITTING<br>DIA<br>IN | INSPECTION<br>BALL SIZE /7/<br>ELBOW<br>END FITTING<br>DIA<br>IN |
|----------------------------------------|-----------------------------------|----------|----------|---------------------------------------------------------------------|------------------------------------------------------------------|
| 04                                     | .250                              | .69      | .88      | .122                                                                | .115                                                             |
| 06                                     | .375                              | .88      | 1.09     | .216                                                                | .204                                                             |
| 08                                     | .500                              | 1.00     | 1.31     | .306                                                                | .289                                                             |
| 10                                     | .625                              | 1.19     | 1.50     | .369                                                                | .349                                                             |
| 12                                     | .750                              | 1.38     | 1.75     | .459                                                                | .434                                                             |
| 16                                     | 1.00                              | 1.69     | 2.06     | .684                                                                | .646                                                             |
| 20                                     | 1.25                              | 2.51     | 2.57     | .833                                                                | .786                                                             |



**AEROSPACE STANDARD**

HOSE ASSEMBLY, 3000 PSI, PTFE, FLARELESS,  
STRAIGHT TO 90°, HEAVYWEIGHT

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**TABLE 2 - HOSE OR SLEEVE OUTSIDE DIAMETER /14/**

| SLEEVE<br>CODE | SLEEVE<br>MATERIAL                                             | TEMP.<br>LIMIT<br>°F | HOSE<br>SIZE<br>.250 | HOSE<br>SIZE<br>.375 | HOSE<br>SIZE<br>.500 | HOSE<br>SIZE<br>.625 | HOSE<br>SIZE<br>.750 | HOSE<br>SIZE<br>1.00 | HOSE<br>SIZE<br>1.25 |
|----------------|----------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| NONE           | (-) INDICATES HOSE ONLY,<br>NO SLEEVE                          | 400                  | .465<br>.405         | .595<br>.535         | .735<br>.675         | .935<br>.875         | 1.090<br>1.030       | 1.410<br>1.350       | 1.650<br>1.560       |
| A              | ABRASION SLEEVE TUBULAR<br>(TFE-AS1291-CODE B) /10/            | 400                  | .540<br>.468         | .715<br>.635         | .855<br>.770         | 1.025<br>.960        | 1.195<br>1.125       | 1.515<br>1.445       | 1.825<br>1.755       |
| B              | ABRASION SLEEVE COIL<br>(NYLON AS1294) /11/                    | 275                  | .509<br>.413         | .684<br>.584         | .809<br>.733         | 1.005<br>.923        | 1.170<br>1.088       | 1.492<br>1.408       | 1.750<br>1.690       |
| C              | FIRESLEEVE (AS1072 SIL-FG)<br>(15 MINUTES) /12/ /13/ /18/      | 400                  | .688<br>.562         | .875<br>.750         | 1.000<br>.875        | 1.250<br>1.125       | 1.375<br>1.250       | 1.750<br>1.625       | 2.000<br>1.875       |
| E              | ABRASION SLEEVE SHRINK-ON<br>(FEP) /16/                        | 350                  | .458<br>.417         | .638<br>.592         | .773<br>.727         | .973<br>.927         | 1.148<br>1.102       | 1.438<br>1.392       | 1.688<br>1.632       |
| F              | ABRASION SLEEVE SHRINK-ON<br>(POLYOLEFIN AS1073 - CODE B) /16/ | 275                  | .490<br>.440         | .670<br>.610         | .795<br>.745         | .997<br>.937         | 1.174<br>1.112       | 1.482<br>1.428       | 1.740<br>1.680       |
| G              | FIRESLEEVE (AS1072 SIL-FG)<br>(5 MINUTES) /12/ /13/ /17/       | 400                  | .688<br>.562         | .875<br>.750         | 1.000<br>.875        | 1.250<br>1.125       | 1.375<br>1.250       | 1.750<br>1.625       | 2.000<br>1.875       |
| H              | FIRESLEEVE INTEGRAL SILICONE<br>(15 MINUTES) /18/              | 400                  | .700<br>.640         | .880<br>.820         | 1.000<br>.940        | 1.203<br>1.143       | 1.343<br>1.283       | 1.656<br>1.596       | 1.906<br>1.846       |
| J              | FIRESLEEVE INTEGRAL SILICONE<br>(5 MINUTES) /17/               | 400                  | .705<br>.645         | .880<br>.820         | 1.005<br>.945        | 1.217<br>1.143       | 1.382<br>1.280       | 1.748<br>1.593       | 1.906<br>1.846       |
| K              | INTEGRAL ABRASION SLEEVE<br>(BRAIDED) POLYESTER /15/           | 300                  | .505<br>.480         | .675<br>.645         | .795<br>.765         | .985<br>.955         | 1.150<br>1.120       | 1.470<br>1.440       | 1.720<br>1.680       |
| L              | ABRASION SLEEVE COIL<br>(PTFE-AS1293) /11/                     | 400                  | .522<br>.449         | .692<br>.622         | .817<br>.747         | 1.007<br>.937        | 1.172<br>1.102       | 1.492<br>1.422       | 1.750<br>1.690       |
| N              | THIN WALL FIRESLEEVE INTEGRAL<br>SILICONE (15 MINUTES) /18/    | 400                  | .650<br>.590         | .790<br>.730         | .930<br>.870         | 1.130<br>1.070       | 1.295<br>1.235       | 1.630<br>1.570       | 1.860<br>1.800       |

**TABLE 3 - ASSEMBLY LENGTH TOLERANCE**

| 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%       |

|                                                                                     |                                                                           |                               |                   |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------|-------------------|
|  | <b>AEROSPACE STANDARD</b>                                                 | <b>AS623™</b><br>SHEET 3 OF 6 | <b>REV.<br/>D</b> |
|                                                                                     | HOSE ASSEMBLY, 3000 PSI, PTFE, FLARELESS,<br>STRAIGHT TO 90°, HEAVYWEIGHT |                               |                   |

**TABLE 4 - WEIGHTS (NOMINAL)**

| HOSE<br>OR<br>SLEEVE<br>CODE | HOSE OR TYPE SLEEVE                                   | UNITS | HOSE<br>SIZE<br>.250 | HOSE<br>SIZE<br>.375 | HOSE<br>SIZE<br>.500 | HOSE<br>SIZE<br>.625 | HOSE<br>SIZE<br>.750 | HOSE<br>SIZE<br>1.00 | HOSE<br>SIZE<br>1.25 |
|------------------------------|-------------------------------------------------------|-------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| NONE                         | HOSE ONLY                                             | LB/IN | .012                 | .028                 | .040                 | .062                 | .086                 | .140                 | .154                 |
| A                            | ABRASION SLEEVE (TFE-AS1291-CODE B)                   | LB/IN | .003                 | .004                 | .004                 | .005                 | .007                 | .009                 | .011                 |
| B                            | ABRASION SLEEVE (NYLON AS1294)                        | LB/IN | .001                 | .002                 | .003                 | .003                 | .004                 | .005                 | .007                 |
| C                            | FIRESLEEVE (15 MINUTES) AS1072                        | LB/IN | .007                 | .010                 | .011                 | .015                 | .017                 | .021                 | .025                 |
| E                            | ABRASION SLEEVE (FEP)                                 | LB/IN | .002                 | .003                 | .003                 | .005                 | .006                 | .007                 | .009                 |
| F                            | ABRASION SLEEVE (AS1073-CODE B)                       | LB/IN | .002                 | .003                 | .003                 | .004                 | .005                 | .006                 | .008                 |
| G                            | FIRESLEEVE (5 MINUTES) AS1072                         | LB/IN | .007                 | .010                 | .011                 | .015                 | .017                 | .021                 | .025                 |
| H                            | FIRESLEEVE INTEGRAL (15 MINUTES) ON<br>HOSE           | LB/IN | .022                 | .042                 | .056                 | .081                 | .102                 | .154                 | .190                 |
| J                            | FIRESLEEVE INTEGRAL (5 MINUTES) ON<br>HOSE            | LB/IN | .022                 | .042                 | .056                 | .081                 | .102                 | .154                 | .190                 |
| K                            | ABRASION SLEEVE POLYESTER WITH HOSE                   | LB/IN | .013                 | .028                 | .039                 | .060                 | .082                 | .130                 | .160                 |
| L                            | ABRASION SLEEVE (PTFE-AS1293)                         | LB/IN | .003                 | .004                 | .005                 | .005                 | .006                 | .007                 | .009                 |
| N                            | THIN WALL FIRESLEEVE INTEGRAL<br>(15 MINUTES) ON HOSE | LB/IN | .020                 | .038                 | .052                 | .072                 | .101                 | .163                 | .173                 |
| NONE                         | FIRESLEEVE CLAMP (*)                                  | LB/EA | .020                 | .020                 | .025                 | .026                 | .026                 | .033                 | .038                 |
| NONE                         | FITTING END (STRAIGHT) (*)                            | LB/EA | .070                 | .117                 | .172                 | .266                 | .520                 | .713                 | 1.400                |
| NONE                         | FITTING END (90°) (*)                                 | LB/EA | .078                 | .136                 | .233                 | .327                 | .615                 | .945                 | 1.710                |

(\*) NOTE: FIRESLEEVE CLAMP AND FITTING END ARE IN POUNDS EACH.

**TABLE 5 - SLEEVE LENGTH**

| HOSE SIZE | LENGTH (INCHES) |
|-----------|-----------------|
| .250      | 2.00 ± .25      |
| .375      |                 |
| .500      | 2.50 ± .25      |
| .625      |                 |
| .750      | 3.00 ± .25      |
| 1.00      |                 |
| 1.25      | 3.50 ± .25      |



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