

REV.  
A

SAE AS5421

FEDERAL SUPPLY CLASS  
4720

# RATIONALE

AS5421A HAS BEEN REAFFIRMED TO COMPLY WITH THE SAE FIVE-YEAR REVIEW POLICY.

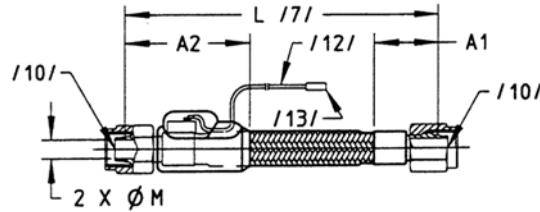


FIGURE 1 - STYLE A1

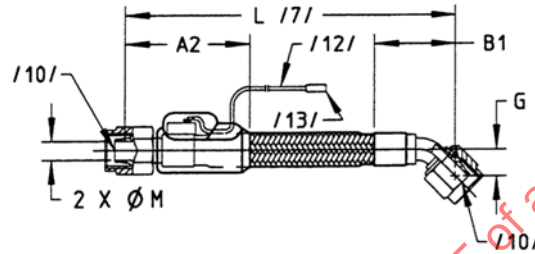


FIGURE 2 - STYLE B1

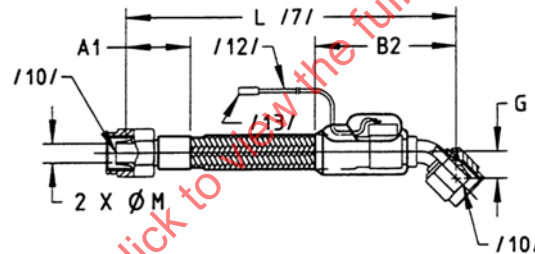


FIGURE 3 - STYLE B2

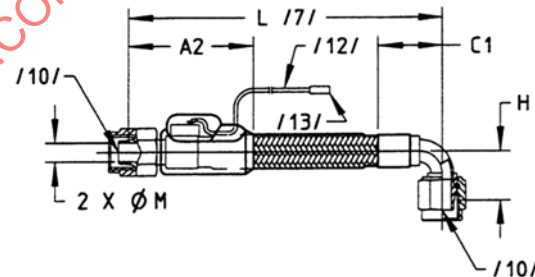
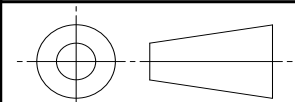


FIGURE 4 - STYLE C1

SAE values your input. To provide feedback on this Technical Report, please visit <http://www.sae.org/technical/standards/AS5421A>

THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3D

PROCUREMENT SPECIFICATION: AS5420 /2/

**SAE Aerospace**  
An SAE International Group

## AEROSPACE STANDARD

HOSE ASSEMBLY, LINED SILICONE,  
HEATED, FLARELESS,  
125 PSI, POTABLE WATER

**SAE AS5421**  
SHEET 1 OF 8

REV.  
A

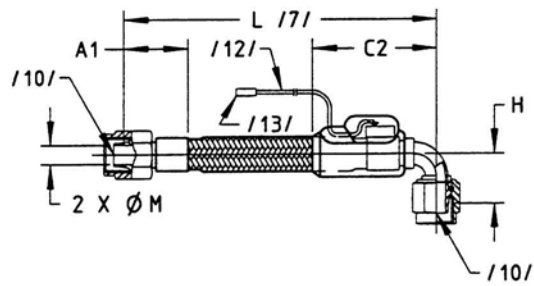


FIGURE 5 - STYLE C2

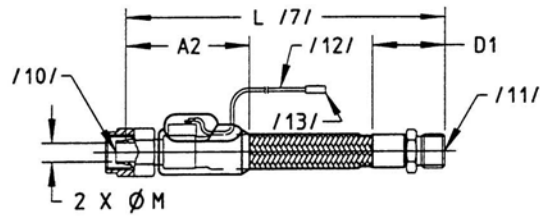


FIGURE 6 - STYLE D1

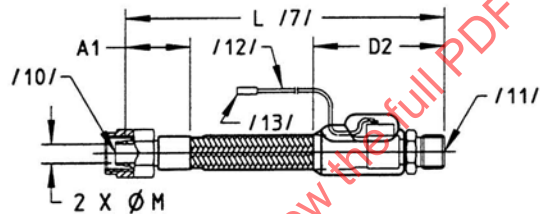


FIGURE 7 - STYLE D2

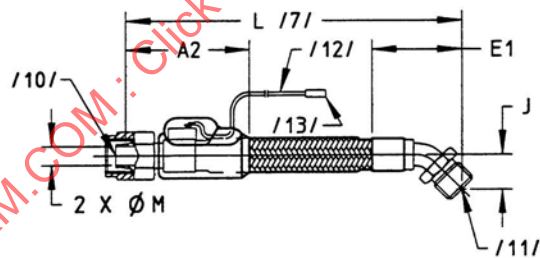


FIGURE 8 - STYLE E1

|                                                                                                                          |                                                                                |  |                                   |                         |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--|-----------------------------------|-------------------------|
| <br><i>An SAE International Group</i> | <b>AEROSPACE STANDARD</b>                                                      |  | <b>SAE AS5421</b><br>SHEET 2 OF 8 | <b>REV.</b><br><b>A</b> |
|                                                                                                                          | HOSE ASSEMBLY, LINED SILICONE,<br>HEATED, FLARELESS,<br>125 PSI, POTABLE WATER |  |                                   |                         |

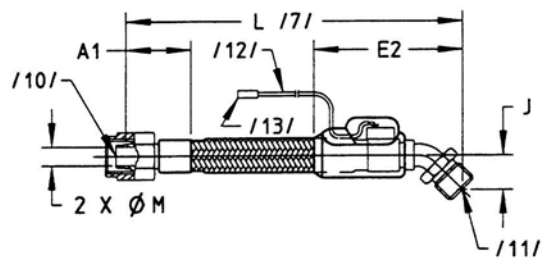


FIGURE 9 - STYLE E2

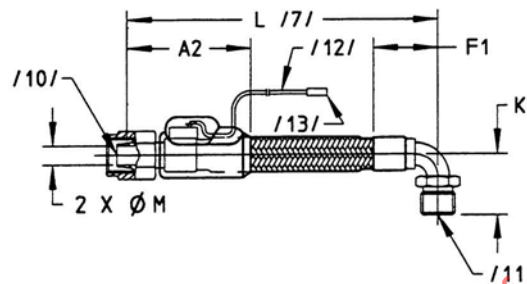


FIGURE 10 - STYLE F1

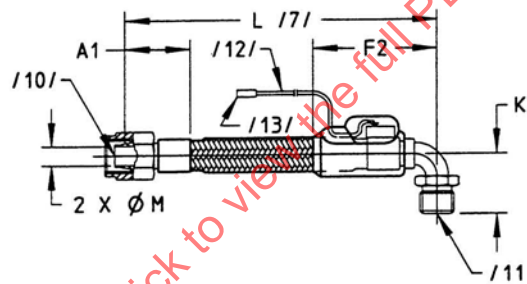


FIGURE 11 - STYLE F2

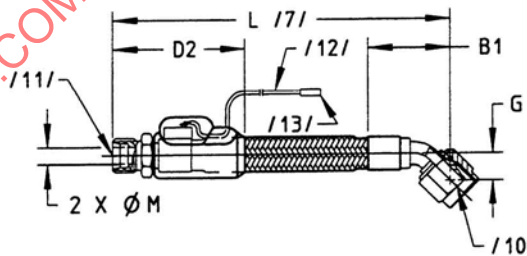


FIGURE 12 - STYLE G1

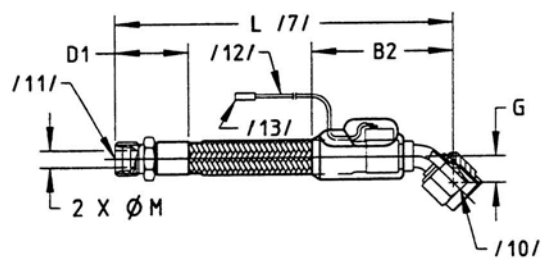


FIGURE 13 - STYLE G2

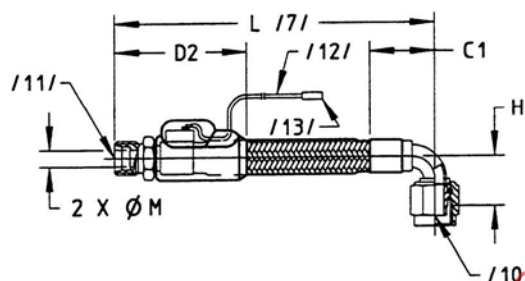


FIGURE 14 - STYLE H1

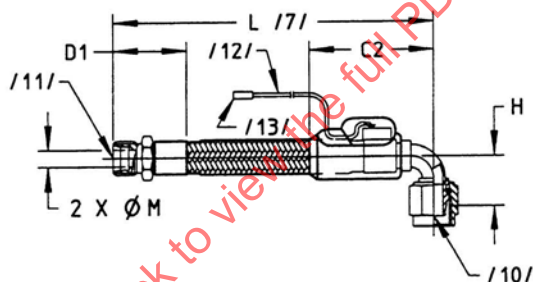


FIGURE 15 - STYLE H2

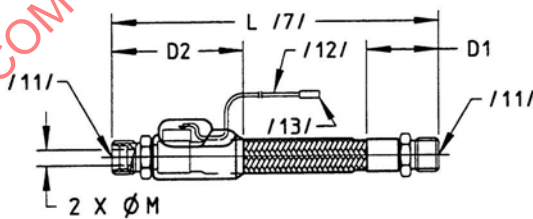


FIGURE 16 - STYLE J1

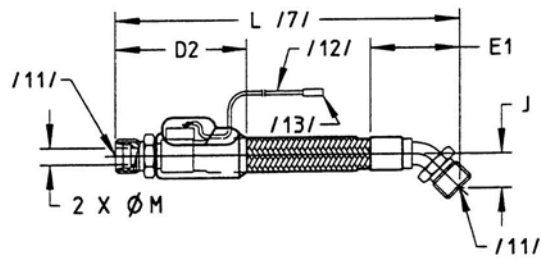


FIGURE 17 - STYLE K1

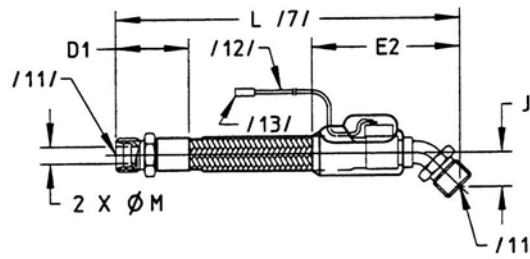


FIGURE 18 - STYLE K2

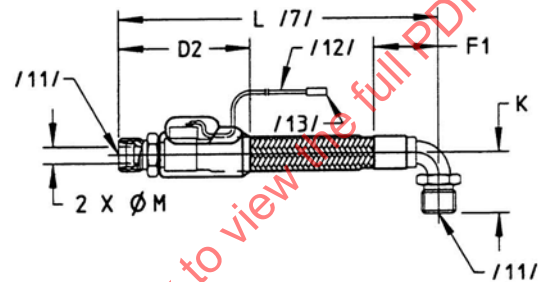


FIGURE 19 - STYLE L1

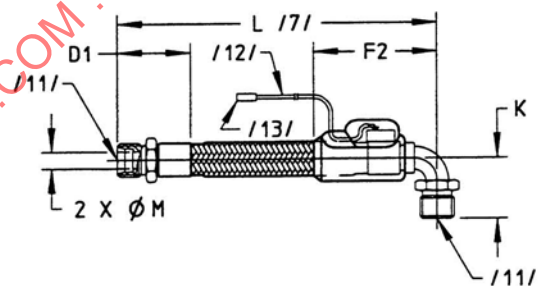


FIGURE 20 - STYLE L2

|                                                                                                                          |                                                                                |  |                                   |                         |
|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--|-----------------------------------|-------------------------|
| <br><i>An SAE International Group</i> | <b>AEROSPACE STANDARD</b>                                                      |  | <b>SAE AS5421</b><br>SHEET 5 OF 8 | <b>REV.</b><br><b>A</b> |
|                                                                                                                          | HOSE ASSEMBLY, LINED SILICONE,<br>HEATED, FLARELESS,<br>125 PSI, POTABLE WATER |  |                                   |                         |

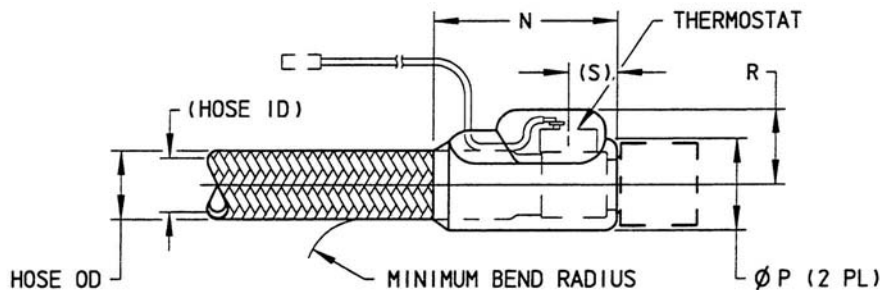


FIGURE 21 - HOSE AND THERMOSTAT DATA

TABLE 1A - FITTING DIMENSIONS A1-E2

| HOSE<br>ASSY<br>SIZE | LETTER<br>SIZE<br>CODE | A1<br>MAX | A2<br>MAX | B1<br>MAX | B2<br>MAX | C1<br>MIN | C2<br>MAX | D1<br>MAX | D2<br>MAX | E1<br>MAX | E2<br>MAX |
|----------------------|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| -06                  | G                      | 1.26      | 2.45      | 1.55      | 2.75      | 1.27      | 2.46      | 1.39      | 2.55      | 1.73      | 3.01      |
| -08                  | H                      | 1.28      | 2.46      | 1.63      | 2.83      | 1.39      | 2.58      | 1.52      | 2.69      | 1.82      | 3.11      |
| -10                  | J                      | 1.37      | 2.56      | 1.82      | 3.01      | 1.58      | 2.76      | 1.61      | 2.77      | 2.02      | 3.36      |
| -12                  | K                      | 1.53      | 2.71      | 2.19      | 3.37      | 2.05      | 3.23      | 1.87      | 3.02      | 2.54      | 3.87      |
| -16                  | M                      | 1.57      | 2.75      | 2.41      | 3.59      | 2.18      | 3.35      | 1.91      | 3.06      | 2.63      | 3.96      |

TABLE 1B - FITTING DIMENSIONS F1-M

| HOSE<br>ASSY<br>SIZE | LETTER<br>SIZE<br>CODE | F1<br>MIN | F2<br>MAX | G<br>±.030 | H<br>±.030 | J<br>±.030 | K<br>±.030 | ØM<br>THRU<br>REF |
|----------------------|------------------------|-----------|-----------|------------|------------|------------|------------|-------------------|
| -06                  | G                      | 1.26      | 2.56      | .459       | .814       | .626       | 1.049      | .297              |
| -08                  | H                      | 1.39      | 2.68      | .526       | 1.018      | .702       | 1.267      | .422              |
| -10                  | J                      | 1.57      | 2.91      | .622       | 1.246      | .818       | 1.524      | .500              |
| -12                  | K                      | 2.05      | 3.38      | .646       | 1.409      | .994       | 1.900      | .656              |
| -16                  | M                      | 2.17      | 3.50      | .817       | 1.724      | 1.030      | 2.025      | .875              |

TABLE 2A - FITTING DEDUCT LENGTHS AND NOMINAL WEIGHTS (REF) FIGURES 1-11 /8/

| HOSE<br>ASSY<br>SIZE | FIGURE<br>1<br>DED<br>LG | FIGURE<br>1<br>FTG<br>WT | FIGURE<br>2 & 3<br>DED<br>LG | FIGURE<br>2 & 3<br>FTG<br>WT | FIGURE<br>4 & 5<br>DED<br>LG | FIGURE<br>4 & 5<br>FTG<br>WT | FIGURE<br>6 & 7<br>DED<br>LG | FIGURE<br>6 & 7<br>FTG<br>WT | FIGURE<br>8 & 9<br>DED<br>LG | FIGURE<br>8 & 9<br>FTG<br>WT | FIGURE<br>10 & 11<br>DED<br>LG | FIGURE<br>10 & 11<br>FTG<br>WT |
|----------------------|--------------------------|--------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------------------|--------------------------------|
| -06                  | 1.38                     | .259                     | 1.67                         | .261                         | 1.38                         | .263                         | 1.51                         | .229                         | 1.84                         | .240                         | 1.38                           | .242                           |
| -08                  | 1.40                     | .343                     | 1.76                         | .351                         | 1.52                         | .356                         | 1.65                         | .306                         | 1.94                         | .317                         | 1.52                           | .322                           |
| -10                  | 1.60                     | .424                     | 2.05                         | .441                         | 1.80                         | .450                         | 1.84                         | .376                         | 2.24                         | .400                         | 1.80                           | .408                           |
| -12                  | 1.58                     | .670                     | 2.25                         | .686                         | 2.10                         | .700                         | 1.93                         | .582                         | 2.59                         | .611                         | 2.10                           | .625                           |
| -16                  | 1.66                     | .863                     | 2.51                         | .906                         | 2.27                         | .926                         | 2.01                         | .748                         | 2.72                         | .778                         | 2.27                           | .798                           |

TABLE 2B - FITTING DEDUCT LENGTHS AND NOMINAL WEIGHTS (REF) FIGURES 12-20 /8/

| HOSE<br>ASSY<br>SIZE | FIGURE<br>12 & 13<br>DED<br>LG | FIGURE<br>12 & 13<br>FTG<br>WT | FIGURE<br>14 & 15<br>DED<br>LG | FIGURE<br>14 & 15<br>FTG<br>WT | FIGURE<br>16<br>DED<br>LG | FIGURE<br>16<br>FTG<br>WT | FIGURE<br>17 & 18<br>DED<br>LG | FIGURE<br>17 & 18<br>FTG<br>WT | FIGURE<br>19 & 20<br>DED<br>LG | FIGURE<br>19 & 20<br>FTG<br>WT |
|----------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------|---------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| -06                  | 1.77                           | .231                           | 1.48                           | .233                           | 1.61                      | .199                      | 1.94                           | .210                           | 1.48                           | .212                           |
| -08                  | 1.98                           | .315                           | 1.74                           | .320                           | 1.87                      | .270                      | 2.16                           | .281                           | 1.74                           | .286                           |
| -10                  | 2.26                           | .394                           | 2.01                           | .403                           | 2.05                      | .329                      | 2.45                           | .353                           | 2.01                           | .361                           |
| -12                  | 2.57                           | .599                           | 2.42                           | .613                           | 2.25                      | .495                      | 2.91                           | .524                           | 2.42                           | .538                           |
| -16                  | 2.83                           | .793                           | 2.59                           | .813                           | 2.33                      | .635                      | 3.04                           | .665                           | 2.59                           | .685                           |