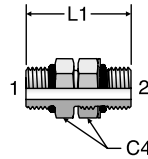


### F5OHAO Full Dimensions

Straight Thread Union  
SAE-ORB / SAE-ORB

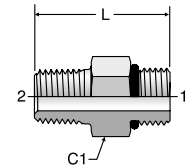
HPD Base # 0505



| TUBE FITTING PART # | END SIZE  |           | C4 HEX (in.) | L1 (in.) | STANDARD Dynamic Pressure (x 1,000 PSI) |     |    |
|---------------------|-----------|-----------|--------------|----------|---|-----|----|
|                     | 1         | 2         |              |          | -S                                      | -SS | -B |
|                     | UN/UNF-2A | UN/UNF-2A |              |          |   |     |    |
| 4 F5OHAO            | 7/16-20   | 7/16-20   | 9/16         | 1.27     | 6.0                                     | 6.0 |    |
| 6 F5OHAO            | 9/16-18   | 9/16-18   | 11/16        | 1.41     | 6.0                                     | 6.0 |    |
| 8 F5OHAO            | 3/4-16    | 3/4-16    | 7/8          | 1.56     | 6.0                                     | 6.0 |    |
| 10 F5OHAO           | 7/8-14    | 7/8-14    | 1            | 1.81     | 5.0                                     | 5.0 |    |
| 12 F5OHAO           | 1 1/16-12 | 1 1/16-12 | 1 1/4        | 2.13     | 5.0                                     | 5.0 |    |
| 16 F5OHAO           | 1 5/16-12 | 1 5/16-12 | 1 1/2        | 2.13     | 4.0                                     | 4.0 |    |
| 20 F5OHAO           | 1 5/8-12  | 1 5/8-12  | 1 7/8        | 2.13     | 4.0                                     | 4.0 |    |
| 24 F5OHAO           | 1 7/8-12  | 1 7/8-12  | 2 1/8        | 2.13     | 3.0                                     | 3.0 |    |
| 32 F5OHAO           | 2 1/2-12  | 2 1/2-12  | 2 3/4        | 2.13     | 2.0                                     | 2.0 |    |

### F5OF Full Dimensions

Male Pipe Adapter  
SAE-ORB / NPTF



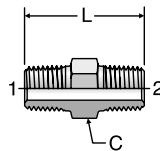
| TUBE FITTING PART # | END SIZE  |              | C1 HEX (in.) | L (in.) | STANDARD Dynamic Pressure (x 1,000 PSI) |     |    |
|---------------------|-----------|--------------|--------------|---------|---|-----|----|
|                     | 1         | 2            |              |         | -S                                      | -SS | -B |
|                     | UN/UNF-2A | NPTF         |              |         |   |     |    |
| 4-1/8 F5OF          | 7/16-20   | 1/8-27       | 9/16         | 1.00    | 6.0                                     | 6.0 |    |
| 4-1/4 F5OF          | 7/16-20   | 1/4-18       | 9/16         | 1.20    |   | 6.0 |    |
| 5-1/4 F5OF          | 1/2-20    | 1/4-18       | 5/8          | 1.20    |   | 6.0 |    |
| 6-1/4 F5OF          | 9/16-18   | 1/4-18       | 11/16        | 1.25    | 6.0                                     | 6.0 |    |
| 6-3/8 F5OF          | 9/16-18   | 3/8-18       | 11/16        | 1.34    | 6.0                                     | 6.0 |    |
| 8-1/4 F5OF          | 3/4-16    | 1/4-18       | 7/8          | 1.36    |   |     |    |
| 8-3/8 F5OF          | 3/4-16    | 3/8-18       | 7/8          | 1.36    | 6.0                                     | 6.0 |    |
| 8-1/2 F5OF          | 3/4-16    | 1/2-14       | 7/8          | 1.53    | 6.0                                     | 6.0 |    |
| 10-1/2 F5OF         | 7/8-14    | 1/2-14       | 1            | 1.59    | 6.0                                     | 6.0 |    |
| 12-1/2 F5OF         | 1 1/16-12 | 1/2-14       | 1 1/4        | 1.80    |   |     |    |
| 12-3/4 F5OF         | 1 1/16-12 | 3/4-14       | 1 1/4        | 1.80    | 5.0                                     | 6.0 |    |
| 16-3/4 F5OF         | 1 5/16-12 | 3/4-14       | 1 1/2        | 1.78    |   | 5.4 |    |
| 16-1 F5OF           | 1 5/16-12 | 1-11 1/2     | 1 1/2        | 1.98    | 4.5                                     | 5.4 |    |
| 20-1 1/4 F5OF       | 1 5/8-12  | 1 1/4-11 1/2 | 1 7/8        | 2.02    | 3.0                                     | 3.6 |    |
| 24-1 1/2 F5OF       | 1 7/8-12  | 1 1/2-11 1/2 | 2 1/8        | 2.25    |   |     |    |

Note: All "F5OF" fittings have a 30° chamfer for sealing with NPSM swivel type fittings.

### FF Full Dimensions

Pipe Nipple  
NPTF / NPTF

HPD Base # 0101

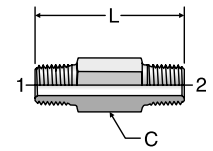


| TUBE FITTING PART # | END SIZE     |              | C HEX (in.) | L (in.) | STANDARD Dynamic Pressure (x 1,000 PSI) |     |     |
|---------------------|--------------|--------------|-------------|---------|---|-----|-----|
|                     | 1            | 2            |             |         | -S                                      | -SS | -B  |
|                     | NPTF         | NPTF         |             |         |   |     |     |
| 1/8 FF              | 1/8-27       | 1/8-27       | 7/16        | 1.06    | 6.0                                     | 7.2 | 3.9 |
| 1/4 x 1/8 FF        | 1/4-18       | 1/8-27       | 5/8         | 1.25    | 6.0                                     | 7.2 | 3.9 |
| 1/4 FF              | 1/4-18       | 1/4-18       | 5/8         | 1.45    | 6.0                                     | 7.2 | 3.9 |
| 3/8 x 1/8 FF        | 3/8-18       | 1/8-27       | 3/4         | 1.45    | 6.0                                     | 7.2 | 3.9 |
| 3/8 x 1/4 FF        | 3/8-18       | 1/4-18       | 3/4         | 1.45    | 6.0                                     | 7.2 | 3.9 |
| 3/8 FF              | 3/8-18       | 3/8-18       | 3/4         | 1.45    | 6.0                                     | 7.2 | 3.9 |
| 1/2 x 1/8 FF        | 1/2-14       | 1/8-27       | 7/8         | 1.52    |   | 7.2 |     |
| 1/2 x 3/8 FF        | 1/2-14       | 3/8-18       | 7/8         | 1.70    | 6.0                                     | 7.2 | 3.9 |
| 1/2 x 1/4 FF        | 1/2-14       | 1/4-18       | 7/8         | 1.70    | 6.0                                     | 7.2 | 3.9 |
| 1/2 FF              | 1/2-14       | 1/2-14       | 7/8         | 1.89    | 6.0                                     | 7.2 | 3.9 |
| 3/4 x 1/4 FF        | 3/4-14       | 1/4-18       | 1 1/8       | 1.78    | 5.5                                     | 6.6 | 3.5 |
| 3/4 x 3/8 FF        | 3/4-14       | 3/8-18       | 1 1/8       | 1.78    |   | 6.6 |     |
| 3/4 x 1/2 FF        | 3/4-14       | 1/2-14       | 1 1/8       | 1.96    | 5.5                                     | 6.6 | 3.5 |
| 3/4 FF              | 3/4-14       | 3/4-14       | 1 1/8       | 1.96    | 5.5                                     | 6.6 | 3.5 |
| 1 x 1/4 FF          | 1-11 1/2     | 1/4-18       | 1 3/8       | 1.96    |   |     |     |
| 1 x 3/8 FF          | 1-11 1/2     | 3/8-18       | 1 3/8       | 1.96    |   | 5.4 |     |
| 1 x 1/2 FF          | 1-11 1/2     | 1/2-14       | 1 3/8       | 2.09    |   | 5.4 |     |
| 1 x 3/4 FF          | 1-11 1/2     | 3/4-14       | 1 3/8       | 2.09    | 4.5                                     | 5.4 |     |
| 1 FF                | 1-11 1/2     | 1-11 1/2     | 1 3/8       | 2.34    | 4.5                                     | 5.4 | 3.0 |
| 1 1/4 x 1 FF        | 1 1/4-11 1/2 | 1-11 1/2     | 1 3/4       | 2.45    | 3.0                                     | 3.6 |     |
| 1 1/4 FF            | 1 1/4-11 1/2 | 1 1/4-11 1/2 | 1 3/4       | 2.48    | 3.0                                     | 3.6 |     |
| 1 1/2 x 1 FF        | 1 1/2-11 1/2 | 1-11 1/2     | 2           | 2.55    | 3.0                                     | 3.6 |     |
| 1 1/2 FF            | 1 1/2-11 1/2 | 1 1/2-11 1/2 | 2           | 2.61    | 3.0                                     | 3.6 |     |
| 2 x 1 1/2 FF        | 2-11 1/2     | 1 1/2-11 1/2 | 2 1/2       | 2.79    |   | 2.4 |     |
| 2 FF                | 2-11 1/2     | 2-11 1/2     | 2 1/2       | 2.83    | 2.0                                     | 2.4 |     |

Note: All steel "FF" fittings have a 30° chamfer for sealing with NPSM swivel type fittings.

### FFF Full Dimensions

Long Pipe Nipple  
NPTF / NPTF



| TUBE FITTING PART # | END SIZE |          | C HEX (in.) | L (in.) | STANDARD Dynamic Pressure (x 1,000 PSI) |     |     |
|---------------------|----------|----------|-------------|---------|---|-----|-----|
|                     | 1        | 2        |             |         | -S                                      | -SS | -B  |
|                     | NPTF     | NPTF     |             |         |   |     |     |
| 1/8 x 1.5 FFF       | 1/8-27   | 1/8-27   | 7/16        | 1.5     |   | 7.2 | 3.9 |
| 1/8 x 2.0 FFF       | 1/8-27   | 1/8-27   | 7/16        | 2.0     |   | 7.2 | 3.9 |
| 1/8 x 2.5 FFF       | 1/8-27   | 1/8-27   | 7/16        | 2.5     |   | 7.2 | 3.9 |
| 1/8 x 3.0 FFF       | 1/8-27   | 1/8-27   | 7/16        | 3.0     |   | 7.2 | 3.9 |
| 1/4 x 1.5 FFF       | 1/4-18   | 1/4-18   | 5/8         | 1.5     |   | 7.2 | 3.9 |
| 1/4 x 2.0 FFF       | 1/4-18   | 1/4-18   | 5/8         | 2.0     |   | 7.2 | 3.9 |
| 1/4 x 2.5 FFF       | 1/4-18   | 1/4-18   | 5/8         | 2.5     |   | 7.2 | 3.9 |
| 1/4 x 3.0 FFF       | 1/4-18   | 1/4-18   | 5/8         | 3.0     |   | 7.2 | 3.9 |
| 1/4 x 4.0 FFF       | 1/4-18   | 1/4-18   | 5/8         | 4.0     |   | 7.2 | 3.9 |
| 3/8 x 2.0 FFF       | 3/8-18   | 3/8-18   | 3/4         | 2.0     |   | 7.2 |     |
| 3/8 x 3.0 FFF       | 3/8-18   | 3/8-18   | 3/4         | 3.0     |   | 7.2 |     |
| 3/8 x 3.5 FFF       | 3/8-18   | 3/8-18   | 3/4         | 3.5     |   | 7.2 |     |
| 3/8 x 4.0 FFF       | 3/8-18   | 3/8-18   | 3/4         | 4.0     |   | 7.2 |     |
| 1/2 x 2.0 FFF       | 1/2-14   | 1/2-14   | 7/8         | 2.0     |   | 7.2 |     |
| 1/2 x 2.5 FFF       | 1/2-14   | 1/2-14   | 7/8         | 2.5     |   | 7.2 |     |
| 1/2 x 3.0 FFF       | 1/2-14   | 1/2-14   | 7/8         | 3.0     |   | 7.2 | 3.9 |
| 1/2 x 4.0 FFF       | 1/2-14   | 1/2-14   | 7/8         | 4.0     |   | 7.2 |     |
| 1/2 x 6.0 FFF       | 1/2-14   | 1/2-14   | 7/8         | 6.0     |   | 7.2 |     |
| 3/4 x 3.0 FFF       | 3/4-14   | 3/4-14   | 1 1/8       | 3.0     |   | 6.6 |     |
| 1 x 3.0 FFF         | 1-11 1/2 | 1-11 1/2 | 1 3/8       | 3.0     |   | 5.4 |     |

Dimensions and pressures for reference only, subject to change.

