

# PFA Tubing

Series 104, 105, 204, 205: Fractional & Metric

Combines the high temperature of PTFE with the long continuous lengths of FEP



## Features

- Virgin Perfluoroalkoxy
- Translucent
- Low permeability
- Exceptional heat resistance
- Chemically inert
- Long continuous lengths
- Low coefficient of friction
- Self extinguishing
- Non-wetting
- Non leaching

## High Purity (105, 205)

- Withstands corrosive surfactants for longer periods of time
- Highest molecular weight available

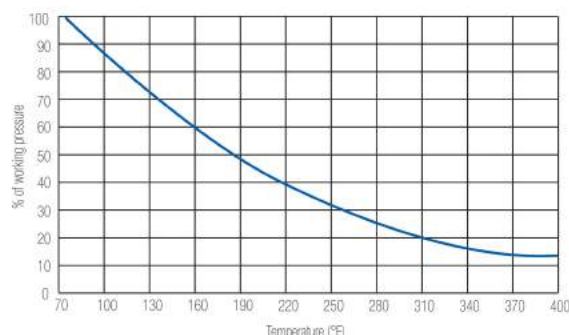
## Compliance

- ASTM D3307
- 21 CFR 177.1550 Compliant
- USP Class VI
- UL94V-0

## Notes

- Working Temperature: -100°F (-73°C) to 500°F (260°C)
- Vacuum Rating 28 @ 73°F
- Working pressure calculated using a Design Factor of 4
- Custom packaging and sizes are quoted upon request

## PFA Tubing (Series 104, 105, 204, 205) Maximum Working Pressure (psi)



## Fittings

Parker Fittings available from:  
Fluid System Connectors Division  
Otsego, MI

(269) 692-6555  
(269) 692-6634 FAX  
parker.com/fsc

For approved fittings and/or suggested use of tube supports, reference Tube/Fitting Compatibility Chart (pg. B-8/B-9) or contact Parker Fluid Systems Connectors Division

## Order Information

Example: 104-0188062-NT-100

104-0188062-NT-100 – PFA

104-0188062-NT-100 – Tube O.D. in inches (3/16")

104-0188062-NT-100 – Tube Wall Thickness in inches (.062")

104-0188062-NT-100 – Natural

104-0188062-NT-100 – Bulk Tubing

104-0188062-NT-100 – Package Quantity in feet (100')



## WARNING

This product can expose you to chemicals including Tetrafluoroethylene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

# PFA Tubing

## Series 104, 204

### Series 104 - PFA Fractional Industrial Wall Tubing

| Part Number | Order Size | Nominal O.D. |         |       |         | Nominal I.D. |         |       |         | Reference Wall Thickness |      | Working Pressure 73°F (23°C) |     | Minimum Burst Pressure |     | Minimum Bend Radius |     | Vac. Rating | Weight  |        |
|-------------|------------|--------------|---------|-------|---------|--------------|---------|-------|---------|--------------------------|------|------------------------------|-----|------------------------|-----|---------------------|-----|-------------|---------|--------|
|             |            | inch         | tol.    | mm    | tol.    | inch         | tol.    | mm    | tol.    | inch                     | mm   | psi                          | bar | psi                    | bar | inch                | mm  |             | lb./ft. | kg./mt |
| 104-0094031 | 3/32       | 0.094        | ± 0.004 | 2.40  | ± 0.102 | 0.031        | ± 0.002 | 0.79  | ± 0.051 | 0.031                    | 0.79 | 680                          | 47  | 2720                   | 188 | 0.250               | 6   | 28          | 0.006   | 0.009  |
| 104-0125031 | 1/8        | 0.125        | ± 0.004 | 3.18  | ± 0.102 | 0.064        | ± 0.004 | 1.63  | ± 0.102 | 0.031                    | 0.79 | 500                          | 34  | 2000                   | 138 | 0.375               | 10  | 28          | 0.009   | 0.013  |
| 104-0156031 | 5/32       | 0.157        | ± 0.005 | 3.99  | ± 0.127 | 0.094        | ± 0.003 | 2.39  | ± 0.076 | 0.031                    | 0.79 | 390                          | 27  | 1560                   | 108 | 0.625               | 16  | 28          | 0.011   | 0.016  |
| 104-0188031 | 3/16       | 0.188        | ± 0.005 | 4.78  | ± 0.127 | 0.125        | ± 0.005 | 3.18  | ± 0.127 | 0.031                    | 0.79 | 320                          | 22  | 1280                   | 88  | 0.625               | 16  | 28          | 0.014   | 0.021  |
| 104-0250031 | 1/4        | 0.250        | ± 0.005 | 6.35  | ± 0.127 | 0.188        | ± 0.005 | 4.78  | ± 0.127 | 0.031                    | 0.79 | 230                          | 16  | 920                    | 63  | 0.875               | 22  | 28          | 0.020   | 0.030  |
| 104-0312031 | 5/16       | 0.312        | ± 0.005 | 7.92  | ± 0.127 | 0.250        | ± 0.005 | 6.35  | ± 0.127 | 0.031                    | 0.79 | 180                          | 12  | 720                    | 50  | 1.750               | 44  | 28          | 0.025   | 0.037  |
| 104-0375031 | 3/8        | 0.375        | ± 0.005 | 9.52  | ± 0.127 | 0.312        | ± 0.005 | 7.92  | ± 0.127 | 0.031                    | 0.79 | 140                          | 10  | 560                    | 39  | 3.250               | 83  | 28          | 0.031   | 0.046  |
| 104-0438031 | 7/16       | 0.438        | ± 0.005 | 11.13 | ± 0.127 | 0.375        | ± 0.005 | 9.53  | ± 0.127 | 0.031                    | 0.79 | 120                          | 8   | 480                    | 33  | 3.250               | 83  | 28          | 0.037   | 0.055  |
| 104-0500031 | 1/2        | 0.500        | ± 0.005 | 12.70 | ± 0.127 | 0.438        | ± 0.005 | 11.13 | ± 0.127 | 0.031                    | 0.79 | 100                          | 7   | 400                    | 28  | 4.750               | 121 | 28          | 0.043   | 0.064  |
| 104-0563031 | 9/16       | 0.563        | ± 0.006 | 14.30 | ± 0.152 | 0.500        | ± 0.006 | 12.70 | ± 0.152 | 0.031                    | 0.79 | 80                           | 6   | 320                    | 22  | 5.000               | 127 | 28          | 0.054   | 0.080  |

### Series 104 - PFA Fractional Heavy Wall Tubing

|             |      |       |         |       |         |       |         |       |         |       |      |     |    |      |     |       |     |    |       |       |
|-------------|------|-------|---------|-------|---------|-------|---------|-------|---------|-------|------|-----|----|------|-----|-------|-----|----|-------|-------|
| 104-0188062 | 3/16 | 0.188 | ± 0.005 | 4.78  | ± 0.127 | 0.064 | ± 0.005 | 1.63  | ± 0.127 | 0.062 | 1.57 | 630 | 43 | 2520 | 174 | 0.250 | 6   | 28 | 0.023 | 0.034 |
| 104-0250040 | 1/4  | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.170 | ± 0.005 | 4.32  | ± 0.127 | 0.040 | 1.02 | 280 | 19 | 1120 | 77  | 1.250 | 32  | 28 | 0.025 | 0.037 |
| 104-0250047 | 1/4  | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.156 | ± 0.005 | 3.96  | ± 0.127 | 0.047 | 1.19 | 340 | 23 | 1360 | 94  | 0.750 | 19  | 28 | 0.028 | 0.042 |
| 104-0250062 | 1/4  | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.125 | ± 0.005 | 3.18  | ± 0.127 | 0.062 | 1.57 | 470 | 32 | 1880 | 130 | 0.750 | 19  | 28 | 0.034 | 0.051 |
| 104-0312062 | 5/16 | 0.312 | ± 0.005 | 7.92  | ± 0.127 | 0.188 | ± 0.005 | 4.78  | ± 0.127 | 0.062 | 1.57 | 360 | 25 | 1440 | 99  | 1.375 | 35  | 28 | 0.045 | 0.067 |
| 104-0375062 | 3/8  | 0.375 | ± 0.005 | 9.52  | ± 0.127 | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.062 | 1.57 | 290 | 20 | 1160 | 80  | 1.500 | 38  | 28 | 0.057 | 0.085 |
| 104-0438062 | 7/16 | 0.438 | ± 0.005 | 11.13 | ± 0.127 | 0.312 | ± 0.005 | 7.92  | ± 0.127 | 0.062 | 1.57 | 250 | 17 | 1000 | 69  | 2.625 | 67  | 28 | 0.068 | 0.101 |
| 104-0500062 | 1/2  | 0.500 | ± 0.005 | 12.70 | ± 0.127 | 0.375 | ± 0.005 | 9.53  | ± 0.127 | 0.062 | 1.57 | 210 | 14 | 840  | 58  | 2.125 | 54  | 28 | 0.079 | 0.118 |
| 104-0625062 | 5/8  | 0.625 | ± 0.006 | 15.88 | ± 0.152 | 0.500 | ± 0.006 | 12.70 | ± 0.152 | 0.062 | 1.57 | 160 | 11 | 640  | 44  | 3.000 | 76  | 28 | 0.102 | 0.152 |
| 104-0750062 | 3/4  | 0.750 | ± 0.006 | 19.05 | ± 0.152 | 0.625 | ± 0.006 | 15.88 | ± 0.152 | 0.062 | 1.57 | 130 | 9  | 520  | 36  | 6.000 | 152 | 28 | 0.125 | 0.186 |
| 104-1000062 | 1    | 1.000 | ± 0.010 | 25.40 | ± 0.254 | 0.875 | ± 0.010 | 22.22 | ± 0.254 | 0.062 | 1.57 | 90  | 6  | 360  | 25  | 8.000 | 203 | 28 | 0.170 | 0.253 |

### Series 204 - PFA Metric Size Tubing

| Part Number | Order Size | Nominal O.D. |        |       |         | Nominal I.D. |        |       |         | Reference Wall Thickness |       | Working Pressure 73°F (23°C) |     | Minimum Burst Pressure |      | Minimum Bend Radius |       | Vac. Rating | Weight |       |
|-------------|------------|--------------|--------|-------|---------|--------------|--------|-------|---------|--------------------------|-------|------------------------------|-----|------------------------|------|---------------------|-------|-------------|--------|-------|
|             |            | mm           | tol.   | inch  | tol.    | mm           | tol.   | inch  | tol.    | mm                       | inch  | bar                          | psi | bar                    | psi  | mm                  | inch  |             | kg/mtr | lb/ft |
| 204-0400100 | 4          | 4            | ± 0.11 | 0.157 | ± 0.004 | 2            | ± 0.11 | 0.079 | ± 0.004 | 1                        | 0.039 | 20                           | 290 | 80                     | 1160 | 13                  | 0.500 | 28          | 0.020  | 0.014 |
| 204-0600100 | 6          | 6            | ± 0.13 | 0.236 | ± 0.005 | 4            | ± 0.13 | 0.157 | ± 0.005 | 1                        | 0.039 | 12                           | 180 | 50                     | 720  | 29                  | 1.125 | 28          | 0.034  | 0.023 |
| 204-0800100 | 8          | 8            | ± 0.13 | 0.315 | ± 0.005 | 6            | ± 0.13 | 0.236 | ± 0.005 | 1                        | 0.039 | 9                            | 130 | 36                     | 520  | 51                  | 2.000 | 28          | 0.047  | 0.032 |
| 204-1000100 | 10         | 10           | ± 0.13 | 0.393 | ± 0.005 | 8            | ± 0.13 | 0.315 | ± 0.005 | 1                        | 0.039 | 7                            | 100 | 28                     | 400  | 70                  | 2.750 | 28          | 0.061  | 0.041 |
| 204-1200100 | 12         | 12           | ± 0.15 | 0.472 | ± 0.006 | 10           | ± 0.15 | 0.394 | ± 0.006 | 1                        | 0.039 | 6                            | 80  | 22                     | 320  | 76                  | 3.000 | 28          | 0.074  | 0.050 |

### Colors

- Standard is natural
- Colors available as custom run

| Color Code |   |         | Color Code |   |        |
|------------|---|---------|------------|---|--------|
| ○          | N | Natural | ●          | 5 | Green  |
| ●          | 0 | Black   | ●          | 6 | Blue   |
| ●          | 1 | Brown   | ●          | 7 | Violet |
| ●          | 2 | Red     | ●          | 8 | Gray   |
| ●          | 3 | Orange  | ○          | 9 | White  |
| ●          | 4 | Yellow  |            |   |        |

**WARNING**  
 This product can expose you to chemicals including Tetrafluoroethylene, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

# PFA Tubing - High Purity

## Series 105, 205

### Series 105 - High Purity PFA Fractional Industrial Wall Tubing

| Part Number | Order Size | Nominal O.D. |         |      |         | Nominal I.D. |         |      |         | Reference Wall Thickness |      | Working Pressure 73°F (23°C) |     | Minimum Burst Pressure |     | Minimum Bend Radius |    | Vac. Rating | Weight  |        |
|-------------|------------|--------------|---------|------|---------|--------------|---------|------|---------|--------------------------|------|------------------------------|-----|------------------------|-----|---------------------|----|-------------|---------|--------|
|             |            | inch         | tol.    | mm   | tol.    | inch         | tol.    | mm   | tol.    | inch                     | mm   | psi                          | bar | psi                    | bar | inch                | mm |             | lb./ft. | kg./mt |
| 105-0125031 | 1/8        | 0.125        | ± 0.004 | 3.18 | ± 0.102 | 0.064        | ± 0.004 | 1.63 | ± 0.102 | 0.031                    | 0.79 | 500                          | 34  | 2000                   | 138 | 0.375               | 10 | 28          | 0.009   | 0.013  |
| 105-0188031 | 3/16       | 0.188        | ± 0.005 | 4.78 | ± 0.127 | 0.125        | ± 0.005 | 3.18 | ± 0.127 | 0.031                    | 0.79 | 320                          | 22  | 1280                   | 88  | 0.625               | 16 | 28          | 0.014   | 0.021  |
| 105-0250031 | 1/4        | 0.250        | ± 0.005 | 6.35 | ± 0.127 | 0.188        | ± 0.005 | 4.78 | ± 0.127 | 0.031                    | 0.79 | 230                          | 16  | 920                    | 63  | 0.875               | 22 | 28          | 0.020   | 0.030  |
| 105-0375031 | 3/8        | 0.375        | ± 0.005 | 9.52 | ± 0.127 | 0.312        | ± 0.005 | 7.92 | ± 0.127 | 0.031                    | 0.79 | 140                          | 10  | 560                    | 39  | 3.250               | 83 | 28          | 0.031   | 0.046  |

### Series 105 - High Purity PFA Fractional Heavy Wall Tubing

|             |     |       |         |       |         |       |         |       |         |       |      |     |    |      |     |       |     |    |       |       |
|-------------|-----|-------|---------|-------|---------|-------|---------|-------|---------|-------|------|-----|----|------|-----|-------|-----|----|-------|-------|
| 105-0250040 | 1/4 | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.170 | ± 0.005 | 4.32  | ± 0.127 | 0.040 | 1.02 | 280 | 19 | 1120 | 77  | 1.250 | 32  | 28 | 0.025 | 0.037 |
| 105-0250047 | 1/4 | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.156 | ± 0.005 | 3.96  | ± 0.127 | 0.047 | 1.19 | 340 | 23 | 1360 | 94  | 0.750 | 19  | 28 | 0.028 | 0.042 |
| 105-0250062 | 1/4 | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.125 | ± 0.005 | 3.18  | ± 0.127 | 0.062 | 1.57 | 470 | 32 | 1880 | 130 | 0.750 | 19  | 28 | 0.034 | 0.051 |
| 105-0375062 | 3/8 | 0.375 | ± 0.005 | 9.52  | ± 0.127 | 0.250 | ± 0.005 | 6.35  | ± 0.127 | 0.062 | 1.57 | 290 | 20 | 1160 | 80  | 1.500 | 38  | 28 | 0.057 | 0.085 |
| 105-0500062 | 1/2 | 0.500 | ± 0.005 | 12.70 | ± 0.127 | 0.375 | ± 0.005 | 9.53  | ± 0.127 | 0.062 | 1.57 | 210 | 14 | 840  | 58  | 2.125 | 54  | 28 | 0.079 | 0.118 |
| 105-0750062 | 3/4 | 0.750 | ± 0.006 | 19.05 | ± 0.152 | 0.625 | ± 0.006 | 15.88 | ± 0.152 | 0.062 | 1.57 | 130 | 9  | 520  | 36  | 6.000 | 152 | 28 | 0.125 | 0.186 |
| 105-1000062 | 1   | 1.000 | ± 0.010 | 25.40 | ± 0.254 | 0.875 | ± 0.010 | 22.22 | ± 0.254 | 0.062 | 1.57 | 90  | 6  | 360  | 25  | 8.000 | 203 | 28 | 0.170 | 0.253 |

### Series 205 - PFA High Purity Metric Size Tubing

| Part Number | Order Size | Nominal O.D. |        |       |         | Nominal I.D. |        |       |         | Reference Wall Thickness |       | Working Pressure 73°F (23°C) |     | Minimum Burst Pressure |      | Minimum Bend Radius |       | Vac. Rating | Weight |       |
|-------------|------------|--------------|--------|-------|---------|--------------|--------|-------|---------|--------------------------|-------|------------------------------|-----|------------------------|------|---------------------|-------|-------------|--------|-------|
|             |            | mm           | tol.   | inch  | tol.    | mm           | tol.   | inch  | tol.    | mm                       | inch  | bar                          | psi | bar                    | psi  | mm                  | inch  |             | kg/mtr | lb/ft |
| 205-0300100 | 3          | 3            | ± 0.11 | 0.118 | ± 0.004 | 1            | ± 0.11 | 0.039 | ± 0.004 | 1                        | 0.039 | 27                           | 390 | 108                    | 1560 | 6                   | 0.250 | 28          | 0.014  | 0.009 |
| 205-0400100 | 4          | 4            | ± 0.11 | 0.157 | ± 0.004 | 2            | ± 0.11 | 0.079 | ± 0.004 | 1                        | 0.039 | 20                           | 290 | 80                     | 1160 | 13                  | 0.500 | 28          | 0.020  | 0.014 |
| 205-0600100 | 6          | 6            | ± 0.13 | 0.236 | ± 0.005 | 4            | ± 0.13 | 0.157 | ± 0.005 | 1                        | 0.039 | 12                           | 180 | 50                     | 720  | 29                  | 1.125 | 28          | 0.034  | 0.023 |
| 205-0800100 | 8          | 8            | ± 0.13 | 0.315 | ± 0.005 | 6            | ± 0.13 | 0.236 | ± 0.005 | 1                        | 0.039 | 9                            | 130 | 36                     | 520  | 51                  | 2.000 | 28          | 0.047  | 0.032 |
| 205-1000100 | 10         | 10           | ± 0.13 | 0.393 | ± 0.005 | 8            | ± 0.13 | 0.315 | ± 0.005 | 1                        | 0.039 | 7                            | 100 | 28                     | 400  | 70                  | 2.750 | 28          | 0.061  | 0.041 |
| 205-1200100 | 12         | 12           | ± 0.15 | 0.472 | ± 0.006 | 10           | ± 0.15 | 0.394 | ± 0.006 | 1                        | 0.039 | 6                            | 80  | 22                     | 320  | 76                  | 3.000 | 28          | 0.074  | 0.050 |

### Colors

- Standard is natural
- Colors available as custom run

| Color Code |   |         | Color Code |   |        |
|------------|---|---------|------------|---|--------|
| ○          | N | Natural | ●          | 5 | Green  |
| ●          | 0 | Black   | ●          | 6 | Blue   |
| ●          | 1 | Brown   | ●          | 7 | Violet |
| ●          | 2 | Red     | ●          | 8 | Gray   |
| ●          | 3 | Orange  | ○          | 9 | White  |
| ●          | 4 | Yellow  |            |   |        |



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