



# Brass, Composite and Thermoplastic Fittings and Valves

Catalog 3501E USA | January 2015

aerospace  
climate control  
electromechanical  
filtration  
fluid & gas handling  
hydraulics  
pneumatics  
process control  
sealing & shielding



ENGINEERING YOUR SUCCESS.



# Water & Beverage: Thermoplastic Fittings and Valves

LIQUIfit

TrueSeal™

Fast & Tite®

Par-Barb®







# LIQUIfit Fittings

Parker's LIQUIfit Fittings offers an "eco-designed" innovative alternative for water applications; no fluid contamination occurs and environmental protection is guaranteed.

## Product Features:

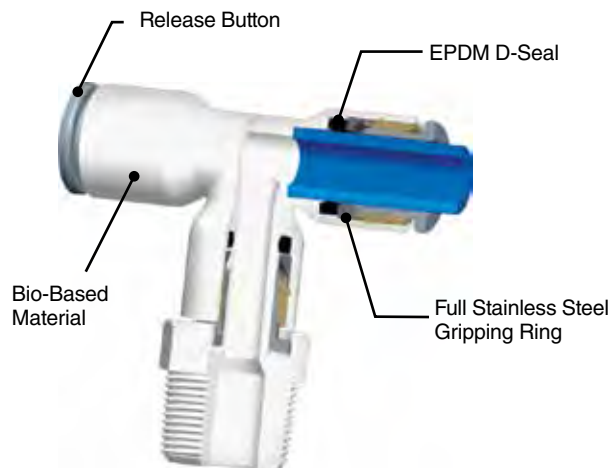
- Stainless steel grab ring
- Engineered polymer body
- EPDM D – seal
- No Pumping effect
- FDA, NSF 51, NSF 61
- Silicone free
- 100% leak tested in production
- Date coding to guarantee quality and traceability

## Markets:

- Water Filtration
- Beverage Dispensing
- Life Science
- Bottling
- Semi-Conductor

## Applications:

- Water
- Beverages
- Food
- CO<sub>2</sub>



## Specifications:






































**Pressure Range** Up to 230 psi

**Temperature Range** 35° to 200°F

**Note:** The working specification depends on the type and wall thickness of the tube, the type of fluid, fluid Temperature and ambient temperature

## Compatible Tubing:

- Polyethylene

|  |  |  |   |  |   |   |
|--|--|--|---|--|---|---|
| <b>Tube to Male NPTF</b>   | <b>6548</b><br>Male Y Connector<br><br>p. C13 | <b>6505</b><br>Male Connector<br><br>p. C7          | <b>6579</b><br>Male Elbow<br><br>p. C8             | <b>6521</b><br>Male Standpipe<br><br>p. C8         | <b>6509</b><br>Male Elbow Swivel<br><br>p. C8      | <b>6508</b><br>Branch Tee Swivel<br><br>p. C9  |
|  | <b>6503</b><br>Run Tee Swivel<br><br>p. C9    | <b>Tube to Male BSPT</b>   | <b>6505</b><br>Male Connector<br><br>p. C7         | <b>6579</b><br>Male Elbow<br><br>p. C8              | <b>6521</b><br>Male Standpipe<br><br>p. C8          | <b>6509</b><br>Male Elbow Swivel<br><br>p. C9  |
| <b>6503</b><br>Run Tee Swivel<br><br>p. C10       | <b>Tube to Female Connector</b>  |  | <b>6325</b><br>Faucet Connector - UNS<br><br>p. C8 | <b>6315</b><br>Female Connector - NPTF<br><br>p. C7 | <b>6315</b><br>Female Connector - BSPT<br><br>p. C7 | <b>Tube to Tube</b>   |
| <b>6304</b><br>Union Tee<br><br>p. C10           |  | <b>6302</b><br>Union Elbow<br><br>p. C11           | <b>6340</b><br>Union Y<br><br>p. C11              | <b>Bulkhead Union</b>  | <b>6316</b><br>Bulkhead Union<br><br>p. C7         |   |
| <b>6388</b><br>Plug-In Branch Tee<br><br>p. C12 | <b>6382</b><br>Plug-In Elbow<br><br>p. C12  | <b>6383</b><br>Plug-In Run Tee<br><br>p. C12      | <b>Auxiliary Components</b>   |  | <b>6351</b><br>End Cap<br><br>p. C12              | <b>6326</b><br>Plug<br><br>p. C13            |
| <b>Metric Tube to Metric Tube</b>  | <b>6306</b><br>Union<br><br>p. C10          | <b>6404</b><br>Union Tee<br><br>p. C10            |   | <b>6302</b><br>Union Elbow<br><br>p. C11          | <b>6340</b><br>Union Y<br><br>p. C11              | <b>6307</b><br>Cross<br><br>p. C13           |
|  | <b>Metric Bulkhead Union</b>   | <b>6316</b><br>Metric Bulkhead Union<br><br>p. C7 | <b>Metric Plug-Ins</b>  | <b>6366</b><br>Tube Reducer<br><br>p. C11         | <b>6388</b><br>Plug-In Branch Tee<br><br>p. C12   | <b>6382</b><br>Plug-In Elbow<br><br>p. C12   |
| <b>6380</b><br>Plug-In 45° Elbow<br><br>p. C13  |  | <b>Metric Auxiliary Components</b>   |   | <b>6351</b><br>End Cap<br><br>p. C12              | <b>6326</b><br>Plug<br><br>p. C13                  | <b>6322</b><br>Barbed Connector<br><br>p. C13 |

**VFE**  
Female Elbow



p. C14

**VUC**  
Union Connector



p. C14

**VEU**  
Elbow Union



p. C15

**VMC**  
Male Connector



p. C15

**VFC**  
Female Connector



p. C15

**VUCPB**  
Union Connector

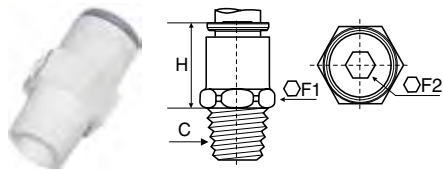


p. C15

**VAS**  
Valve Angle Stop

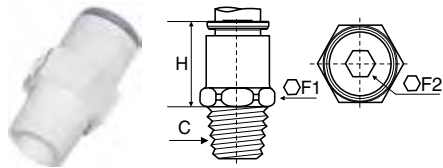


p. C15



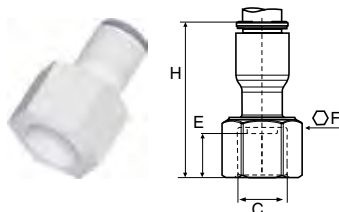
### 6505 Male Connector Inch Tube to NPTF

| PART NO.      | TUBE SIZE IN | C NPTF | F1    | F2   | H    |
|---------------|--------------|--------|-------|------|------|
| 6505 56 11WP2 | 1/4          | 1/8    | 1/2   | 5/32 | .67  |
| 6505 56 14WP2 | 1/4          | 1/4    | 9/16  | 5/32 | .67  |
| 6505 56 18WP2 | 1/4          | 3/8    | 3/4   | 1/4  | .85  |
| 6505 60 11WP2 | 3/8          | 1/8    | 3/4   | 5/32 | .87  |
| 6505 60 14WP2 | 3/8          | 1/4    | 3/4   | 1/4  | .87  |
| 6505 60 18WP2 | 3/8          | 3/8    | 3/4   | 1/4  | .87  |
| 6505 60 22WP2 | 3/8          | 1/2    | 15/16 | 1/4  | 1.06 |
| 6505 62 18WP2 | 1/2          | 3/8    | 15/16 | 3/8  | 1.10 |
| 6505 62 22WP2 | 1/2          | 1/2    | 15/16 | 3/8  | 1.10 |



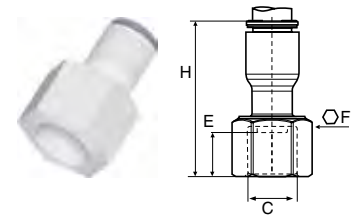
### 6505 Male Connector Metric Tube to BSPT

| PART NO.      | TUBE SIZE MM | C BSPT | F1 | F2 | H     |
|---------------|--------------|--------|----|----|-------|
| 6505 04 10WP2 | 4            | 1/8    | 11 | 3  | 18.00 |
| 6505 04 13WP2 | 4            | 1/4    | 14 | 3  | 18.00 |
| 6505 06 10WP2 | 6            | 1/8    | 11 | 4  | 18.00 |
| 6505 06 13WP2 | 6            | 1/4    | 14 | 4  | 18.00 |
| 6505 08 10WP2 | 8            | 1/8    | 17 | 6  | 20.00 |
| 6505 08 13WP2 | 8            | 1/4    | 17 | 6  | 20.00 |
| 6505 08 17WP2 | 8            | 3/8    | 17 | 6  | 20.00 |
| 6505 10 13WP2 | 10           | 1/4    | 17 | 7  | 21.50 |
| 6505 10 17WP2 | 10           | 3/8    | 19 | 7  | 21.50 |
| 6505 10 21WP2 | 10           | 1/2    | 22 | 7  | 21.50 |
| 6505 12 17WP2 | 12           | 3/8    | 19 | 9  | 24.50 |
| 6505 12 21WP2 | 12           | 1/2    | 22 | 9  | 24.50 |



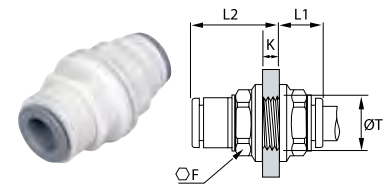
### 6315 Female Connector Inch Tube to NPTF

| PART NO.      | TUBE SIZE IN | C NPTF | E  | F     | H    |
|---------------|--------------|--------|----|-------|------|
| 6315 56 14WP2 | 1/4          | 1/4    | 14 | 11/16 | 1.18 |
| 6315 60 18WP2 | 3/8          | 3/8    | 14 | 3/16  | 1.42 |



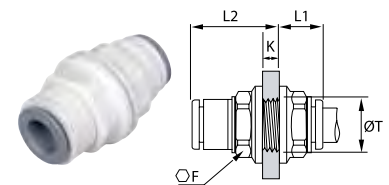
### 6315 Female Connector Metric Tube to BSPT

| PART NO.      | TUBE SIZE MM | C BSPT | E  | F  | H     |
|---------------|--------------|--------|----|----|-------|
| 6315 06 10WP2 | 6            | 1/8    | 11 | 13 | 32.00 |
| 6315 06 13WP2 | 6            | 1/4    | 14 | 16 | 33.00 |
| 6315 08 13WP2 | 8            | 1/4    | 14 | 16 | 33.50 |
| 6315 08 17WP2 | 8            | 3/8    | 14 | 20 | 36.00 |



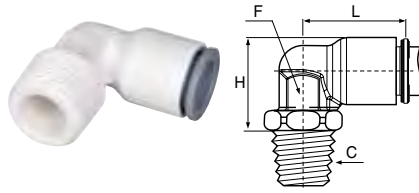
### 6316 Bulkhead Union Inch Tube

| PART NO.      | TUBE SIZE IN | F    | K MAX | L1  | L2   | T MIN |
|---------------|--------------|------|-------|-----|------|-------|
| 6316 04 00WP2 | 5/32         | .51  | .22   | .41 | .61  | .41   |
| 6316 56 00WP2 | 1/4          | .59  | .33   | .39 | .79  | .49   |
| 6316 08 00WP2 | 5/16         | .71  | .57   | .41 | 1.06 | .61   |
| 6316 60 00WP2 | 3/8          | .87  | .57   | .49 | 1.16 | .73   |
| 6316 62 00WP2 | 1/2          | 1.41 | .81   | .67 | 1.59 | 1.00  |



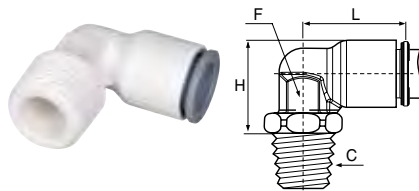
### 6316 Bulkhead Union Metric Tube

| PART NO.      | TUBE SIZE MM | F  | K MAX | L1    | L2    | T MIN |
|---------------|--------------|----|-------|-------|-------|-------|
| 6316 04 00WP2 | 4            | 13 | 5.50  | 10.50 | 15.50 | 10.50 |
| 6316 06 00WP2 | 6            | 15 | 8.50  | 10.00 | 20.00 | 12.50 |
| 6316 08 00WP2 | 8            | 18 | 14.50 | 10.50 | 27.00 | 15.50 |
| 6316 10 00WP2 | 10           | 22 | 14.50 | 13.00 | 30.00 | 18.50 |
| 6316 12 00WP2 | 12           | 26 | 18.50 | 15.50 | 35.00 | 22.50 |



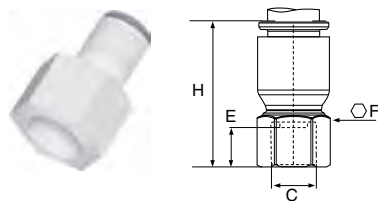
**6579 Fixed Elbow Inch Tube to NPTF**

| PART NO.      | TUBE SIZE IN | C NPTF | F   | H    | L    |
|---------------|--------------|--------|-----|------|------|
| 6579 56 11WP2 | 1/4          | 1/8    | 3/8 | .87  | .71  |
| 6579 56 14WP2 | 1/4          | 1/4    | 3/8 | 1.03 | .71  |
| 6579 56 18WP2 | 1/4          | 3/8    | 3/8 | 1.04 | .71  |
| 6579 60 14WP2 | 3/8          | 1/4    | 1/2 | 1.26 | 1.02 |
| 6579 60 18WP2 | 3/8          | 3/8    | 1/2 | 1.26 | 1.02 |



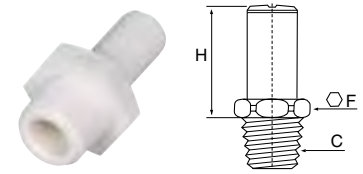
**6579 Fixed Elbow Metric Tube to BSPT**

| PART NO.      | TUBE SIZE MM | C BSPT | F  | H  | L  |
|---------------|--------------|--------|----|----|----|
| 6579 06 10WP2 | 6            | 1/8    | 10 | 14 | 19 |
| 6579 06 13WP2 | 6            | 1/4    | 10 | 14 | 19 |
| 6579 06 17WP2 | 6            | 3/8    | 10 | 14 | 19 |



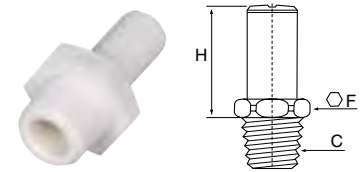
**6325 Faucet Connector Inch Tube to UNS**

| PART NO.       | TUBE SIZE IN | C UNS   | E  | F    | H    |
|----------------|--------------|---------|----|------|------|
| 6325 56 133WP2 | 1/4          | 7/16-24 | 27 | 9/16 | 1.22 |
| 6325 60 133WP2 | 3/8          | 7/16-24 | 27 | 9/16 | 1.26 |



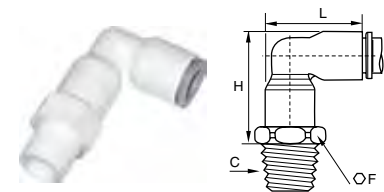
**6521 Stem Adapter Inch Tube to NPTF**

| PART NO.      | TUBE SIZE IN | C NPTF | F     | H    |
|---------------|--------------|--------|-------|------|
| 6521 56 11WP2 | 1/4          | 1/8    | 1/2   | .75  |
| 6521 56 14WP2 | 1/4          | 1/4    | 1/2   | .75  |
| 6521 56 18WP2 | 1/4          | 3/8    | 3/4   | .77  |
| 6521 60 14WP2 | 3/8          | 1/4    | 3/4   | .98  |
| 6521 60 18WP2 | 3/8          | 3/8    | 3/4   | .98  |
| 6521 62 18WP2 | 1/2          | 3/8    | 15/16 | 1.22 |
| 6521 62 22WP2 | 1/2          | 1/2    | 15/16 | 1.28 |



**6521 Stem Adapter Metric Tube to BSPT**

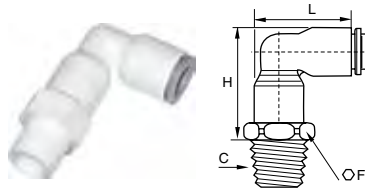
| PART NO.      | TUBE SIZE MM | C BSPT | F  | H  |
|---------------|--------------|--------|----|----|
| 6521 06 10WP2 | 6            | 1/8    | 13 | 19 |
| 6521 06 13WP2 | 6            | 1/4    | 14 | 19 |
| 6521 06 17WP2 | 6            | 3/8    | 17 | 19 |
| 6521 08 10WP2 | 8            | 1/8    | 19 | 23 |
| 6521 08 13WP2 | 8            | 1/4    | 19 | 23 |
| 6521 08 17WP2 | 8            | 3/8    | 19 | 23 |
| 6521 10 13WP2 | 10           | 1/4    | 19 | 25 |
| 6521 10 17WP2 | 10           | 3/8    | 19 | 25 |
| 6521 10 21WP2 | 10           | 1/2    | 22 | 25 |
| 6521 12 17WP2 | 12           | 3/8    | 22 | 28 |
| 6521 12 21WP2 | 12           | 1/2    | 22 | 28 |



**6509 Swivel Elbow Inch Tube to NPTF**

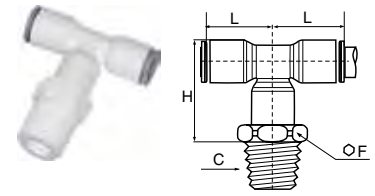
| PART NO.      | TUBE SIZE IN | C NPTF | F     | H    | L    |
|---------------|--------------|--------|-------|------|------|
| 6509 56 11WP2 | 1/4          | 1/8    | 1/2   | 1.10 | .93  |
| 6509 56 14WP2 | 1/4          | 1/4    | 9/16  | 1.10 | .93  |
| 6509 56 18WP2 | 1/4          | 3/8    | 3/4   | 1.12 | .93  |
| 6509 60 14WP2 | 3/8          | 1/4    | 3/4   | 1.50 | 1.34 |
| 6509 60 18WP2 | 3/8          | 3/8    | 3/4   | 1.50 | 1.34 |
| 6509 62 18WP2 | 1/2          | 3/8    | 15/16 | 1.99 | 1.83 |
| 6509 62 22WP2 | 1/2          | 1/2    | 15/16 | 1.99 | 1.83 |





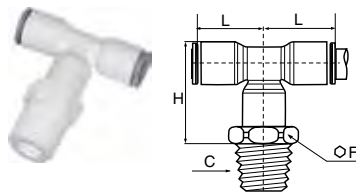
**6509 Swivel Elbow Metric Tube to BSPT**

| PART NO.      | TUBE SIZE MM | C BSPT | F  | H  | L     |
|---------------|--------------|--------|----|----|-------|
| 6509 06 10WP2 | 6            | 1/8    | 13 | 28 | 24.00 |
| 6509 06 13WP2 | 6            | 1/4    | 14 | 28 | 24.00 |
| 6509 06 17WP2 | 6            | 3/8    | 17 | 28 | 24.00 |
| 6509 08 10WP2 | 8            | 1/8    | 19 | 34 | 29.50 |
| 6509 08 13WP2 | 8            | 1/4    | 19 | 34 | 29.50 |
| 6509 08 17WP2 | 8            | 3/8    | 19 | 34 | 29.50 |
| 6509 10 13WP2 | 10           | 1/4    | 19 | 38 | 34.50 |
| 6509 10 17WP2 | 10           | 3/8    | 19 | 38 | 34.50 |
| 6509 10 21WP2 | 10           | 1/2    | 22 | 38 | 34.50 |
| 6509 12 17WP2 | 12           | 3/8    | 22 | 44 | 40.00 |
| 6509 12 21WP2 | 12           | 1/2    | 22 | 44 | 40.00 |



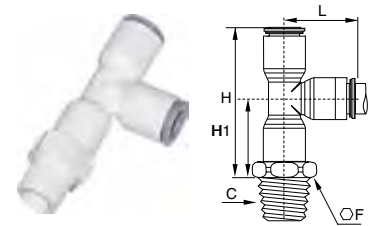
**6508 Swivel Branch Tee Metric Tube to BSPT**

| PART NO.      | TUBE SIZE MM | C BSPT | F  | H     | L     |
|---------------|--------------|--------|----|-------|-------|
| 6508 06 10WP2 | 6            | 1/8    | 13 | 28.00 | 18.00 |
| 6508 06 13WP2 | 6            | 1/4    | 14 | 28.00 | 18.00 |
| 6508 06 17WP2 | 6            | 3/8    | 17 | 28.00 | 18.00 |
| 6508 08 10WP2 | 8            | 1/8    | 19 | 34.00 | 23.00 |
| 6508 08 13WP2 | 8            | 1/4    | 19 | 34.00 | 23.00 |
| 6508 08 17WP2 | 8            | 3/8    | 19 | 34.00 | 23.00 |
| 6508 10 13WP2 | 10           | 1/4    | 19 | 38.00 | 26.50 |
| 6508 10 17WP2 | 10           | 3/8    | 19 | 38.00 | 26.50 |
| 6508 10 21WP2 | 10           | 1/2    | 22 | 38.00 | 26.50 |
| 6508 12 17WP2 | 12           | 3/8    | 22 | 44.00 | 31.00 |
| 6508 12 21WP2 | 12           | 1/2    | 22 | 44.00 | 31.00 |



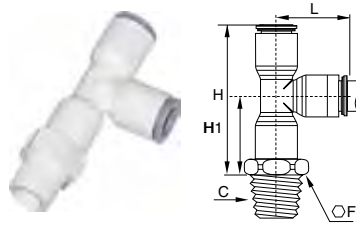
**6508 Swivel Branch Tee Inch Tube to NPTF**

| PART NO.      | TUBE SIZE IN | C NPTF | F     | H    | L    |
|---------------|--------------|--------|-------|------|------|
| 6508 56 11WP2 | 1/4          | 1/8    | 1/2   | 1.10 | .71  |
| 6508 56 14WP2 | 1/4          | 1/4    | 9/16  | 1.10 | .71  |
| 6508 56 18WP2 | 1/4          | 3/8    | 3/4   | 1.10 | .71  |
| 6508 60 14WP2 | 3/8          | 1/4    | 3/4   | 1.50 | 1.02 |
| 6508 60 18WP2 | 3/8          | 3/8    | 3/4   | 1.50 | 1.02 |
| 6508 62 18WP2 | 1/2          | 3/8    | 15/16 | 1.97 | 1.40 |
| 6508 62 22WP2 | 1/2          | 1/2    | 15/16 | 2.00 | 1.40 |



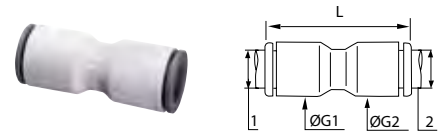
**6503 Swivel Run Tee Inch Tube to NPTF**

| PART NO.      | TUBE SIZE IN | C NPTF | F     | H    | H1   | L    |
|---------------|--------------|--------|-------|------|------|------|
| 6503 56 11WP2 | 1/4          | 1/8    | 1/2   | 1.60 | .88  | .71  |
| 6503 56 14WP2 | 1/4          | 1/4    | 9/16  | 1.60 | .88  | .71  |
| 6503 56 18WP2 | 1/4          | 3/8    | 3/4   | 1.63 | .90  | .71  |
| 6503 60 14WP2 | 3/8          | 1/4    | 3/4   | 1.63 | 1.18 | 1.02 |
| 6503 60 18WP2 | 3/8          | 3/8    | 3/4   | 1.63 | 1.18 | 1.02 |
| 6503 62 18WP2 | 1/2          | 3/8    | 15/16 | 2.29 | 1.55 | 1.40 |
| 6503 62 22WP2 | 1/2          | 1/2    | 15/16 | 2.99 | 1.59 | 1.40 |



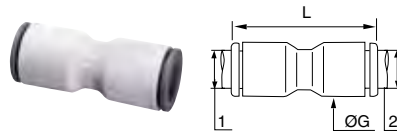
### 6503 Swivel Run Tee Metric Tube to BSPT

| PART NO.      | TUBE SIZE MM | C BSPT | F  | H     | H1    | L     |
|---------------|--------------|--------|----|-------|-------|-------|
| 6503 06 10WP2 | 6            | 1/8    | 13 | 40.00 | 22.00 | 18.50 |
| 6503 06 13WP2 | 6            | 1/4    | 14 | 40.00 | 22.00 | 18.50 |
| 6503 06 17WP2 | 6            | 3/8    | 17 | 40.00 | 22.00 | 18.50 |
| 6503 08 10WP2 | 8            | 1/8    | 19 | 50.00 | 27.00 | 23.00 |
| 6503 08 13WP2 | 8            | 1/4    | 19 | 50.00 | 27.00 | 23.00 |
| 6503 08 17WP2 | 8            | 3/8    | 19 | 50.00 | 27.00 | 23.00 |
| 6503 10 13WP2 | 10           | 1/4    | 19 | 56.50 | 30.00 | 26.50 |
| 6503 10 17WP2 | 10           | 3/8    | 19 | 56.50 | 30.00 | 26.50 |
| 6503 10 21WP2 | 10           | 1/2    | 22 | 56.50 | 30.00 | 26.50 |
| 6503 12 17WP2 | 12           | 3/8    | 22 | 65.50 | 34.50 | 31.00 |
| 6503 12 21WP2 | 12           | 1/2    | 22 | 65.50 | 34.50 | 31.00 |



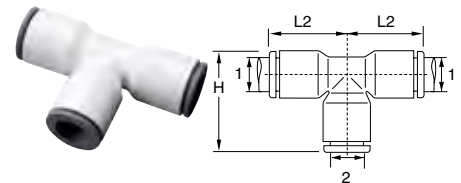
### 6306 Union Connector Metric Tube

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | G1    | G2    | L     |
|---------------|----------------|----------------|-------|-------|-------|
| 6306 04 00WP2 | 4              | 4              | 8.50  | 8.50  | 26.50 |
| 6306 06 00WP2 | 6              | 6              | 10.50 | 10.50 | 30.00 |
| 6306 08 00WP2 | 8              | 8              | 13.50 | 13.50 | 37.00 |
| 6306 10 00WP2 | 10             | 10             | 16.00 | 16.00 | 42.00 |
| 6306 12 00WP2 | 12             | 12             | 19.00 | 19.00 | 50.50 |
| 6306 04 06WP2 | 4              | 6              | 8.50  | 10.50 | 29.00 |
| 6306 04 08WP2 | 4              | 8              | 13.50 | 13.50 | 37.00 |
| 6306 06 08WP2 | 6              | 8              | 13.50 | 13.50 | 37.00 |
| 6306 06 10WP2 | 6              | 10             | 16.00 | 16.00 | 42.00 |
| 6306 08 10WP2 | 8              | 10             | 16.00 | 16.00 | 42.00 |
| 6306 08 12WP2 | 8              | 12             | 19.00 | 19.00 | 50.00 |
| 6306 10 12WP2 | 10             | 12             | 19.00 | 19.00 | 50.00 |



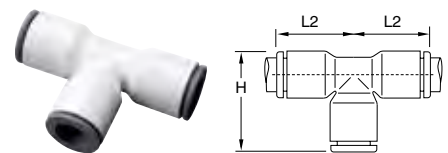
### 6306 Union Connector Inch Tube

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | G   | L    |
|---------------|----------------|----------------|-----|------|
| 6306 56 00WP2 | 1/4            | 1/4            | .43 | 1.18 |
| 6306 08 00WP2 | 5/16           | 5/16           | .53 | 1.46 |
| 6306 60 00WP2 | 3/8            | 3/8            | .63 | 1.65 |
| 6306 62 00WP2 | 1/2            | 1/2            | .87 | 2.24 |
| 6306 56 60WP2 | 1/4            | 3/8            | .63 | 1.61 |
| 6306 56 08WP2 | 1/4            | 5/16           | .53 | 1.46 |
| 6306 08 60WP2 | 5/16           | 3/8            | .63 | 1.65 |
| 6306 08 62WP2 | 5/16           | 1/2            | .87 | 2.16 |
| 6306 60 62WP2 | 3/8            | 1/2            | .87 | 2.20 |



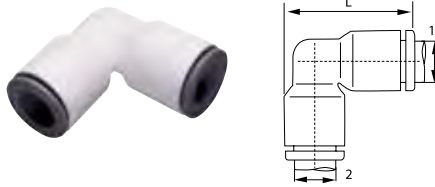
### 6304 Union Tee Inch Tube

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | H    | L2   |
|---------------|----------------|----------------|------|------|
| 6304 04 00WP2 | 5/32           | 5/32           | .79  | .61  |
| 6304 56 00WP2 | 1/4            | 1/4            | .94  | .71  |
| 6304 08 00WP2 | 5/16           | 5/16           | 1.14 | .89  |
| 6304 60 00WP2 | 3/8            | 3/8            | 1.34 | 1.02 |
| 6304 62 00WP2 | 1/2            | 1/2            | 1.85 | 1.42 |
| 6304 60 56WP2 | 3/8            | 1/4            | 1.34 | 1.02 |
| 6304 62 60WP2 | 1/2            | 3/8            | 1.85 | 1.42 |



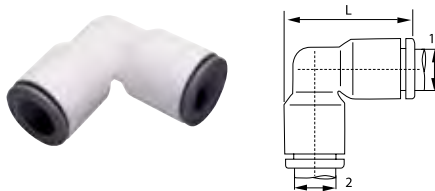
### 6304 Union Tee Metric Tube

| PART NO.      | TUBE SIZE MM | H     | L2    |
|---------------|--------------|-------|-------|
| 6304 04 00WP2 | 4            | 20.00 | 15.50 |
| 6304 06 00WP2 | 6            | 23.00 | 18.00 |
| 6304 08 00WP2 | 8            | 29.00 | 22.50 |
| 6304 10 00WP2 | 10           | 34.50 | 26.50 |
| 6304 12 00WP2 | 12           | 40.00 | 31.00 |



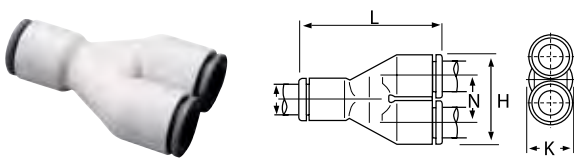
**6302 Union Elbow Inch Tube**

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | L    |
|---------------|----------------|----------------|------|
| 6302 04 00WP2 | 5/32           | 5/32           | .75  |
| 6302 56 00WP2 | 1/4            | 1/4            | .94  |
| 6302 08 00WP2 | 5/16           | 5/16           | 1.16 |
| 6302 60 00WP2 | 3/8            | 3/8            | 1.34 |
| 6302 62 00WP2 | 1/2            | 1/2            | 1.83 |
| 6302 56 08WP2 | 1/4            | 5/16           | 1.16 |
| 6302 08 60WP2 | 5/16           | 3/8            | 1.34 |
| 6302 56 60WP2 | 3/8            | 1/4            | 1.30 |
| 6302 60 62WP2 | 3/8            | 1/2            | 1.83 |



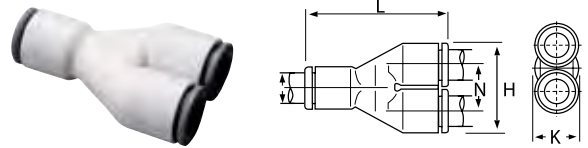
**6302 Union Elbow Metric Tube**

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | L     |
|---------------|----------------|----------------|-------|
| 6302 04 00WP2 | 4              | 4              | 19.50 |
| 6302 06 00WP2 | 6              | 6              | 24.00 |
| 6302 08 00WP2 | 8              | 8              | 29.50 |
| 6302 10 00WP2 | 10             | 10             | 34.50 |
| 6302 12 00WP2 | 12             | 12             | 40.50 |
| 6302 04 06WP2 | 4              | 6              | 24.00 |
| 6302 06 08WP2 | 6              | 8              | 29.50 |
| 6302 08 10WP2 | 8              | 10             | 34.50 |
| 6302 10 12WP2 | 10             | 12             | 40.50 |



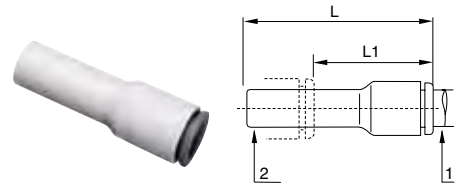
**6340 Union Y Connector Inch Tube**

| PART NO.      | TUBE SIZE IN | H    | K   | L    | N   |
|---------------|--------------|------|-----|------|-----|
| 6340 04 00WP2 | 5/32         | .69  | .33 | 1.18 | .35 |
| 6340 56 00WP2 | 1/4          | .87  | .43 | 1.42 | .45 |
| 6340 08 00WP2 | 5/16         | 1.10 | .53 | 1.75 | .57 |
| 6340 60 00WP2 | 3/8          | 1.30 | .63 | 2.08 | .67 |
| 6340 62 00WP2 | 1/2          | 1.77 | .87 | 2.64 | .91 |



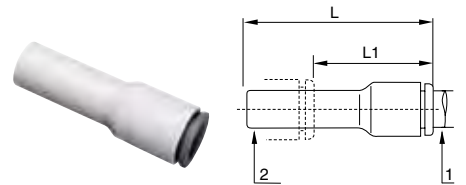
**6340 Union Y Connector Metric Tube**

| PART NO.      | TUBE SIZE MM | H     | K     | L     | N     |
|---------------|--------------|-------|-------|-------|-------|
| 6340 04 00WP2 | 4            | 17.50 | 8.50  | 30.00 | 9.00  |
| 6340 06 00WP2 | 6            | 21.50 | 10.50 | 36.50 | 11.00 |
| 6340 08 00WP2 | 8            | 28.00 | 13.50 | 44.50 | 14.50 |
| 6340 10 00WP2 | 10           | 33.00 | 16.00 | 53.00 | 17.00 |
| 6340 12 00WP2 | 12           | 39.00 | 19.00 | 60.50 | 20.00 |



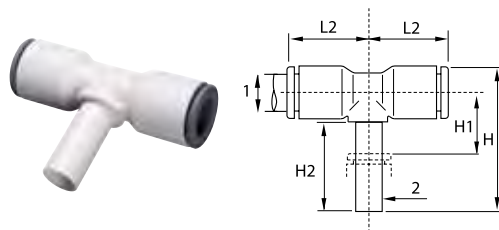
**6366 Reducer Inch Tube to Stem**

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | L    | L1   |
|---------------|----------------|----------------|------|------|
| 6366 56 08WP2 | 1/4            | 5/16           | 1.61 | .89  |
| 6366 56 60WP2 | 1/4            | 3/8            | 1.61 | .81  |
| 6366 08 60WP2 | 5/16           | 3/8            | 1.91 | 1.14 |
| 6366 08 62WP2 | 5/16           | 1/2            | 1.91 | .87  |
| 6366 60 62WP2 | 3/8            | 1/2            | 2.01 | 1.18 |



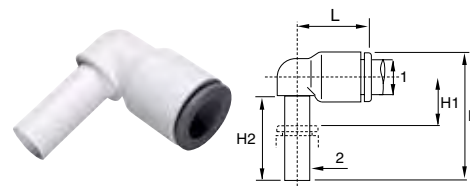
**6366 Reducer Metric Tube to Stem**

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | L     | L1    |
|---------------|----------------|----------------|-------|-------|
| 6366 04 06WP2 | 4              | 6              | 38.00 | 23.50 |
| 6366 04 08WP2 | 4              | 8              | 38.00 | 19.00 |
| 6366 06 08WP2 | 6              | 8              | 38.00 | 20.00 |
| 6366 06 10WP2 | 6              | 10             | 39.00 | 17.50 |
| 6366 08 10WP2 | 8              | 10             | 48.50 | 28.50 |
| 6366 08 12WP2 | 8              | 12             | 48.50 | 24.50 |
| 6366 10 12WP2 | 10             | 12             | 52.00 | 33.50 |
| 6366 10 14WP2 | 10             | 14             | 53.00 | 33.50 |
| 6366 12 14WP2 | 12             | 14             | 55.50 | 33.50 |



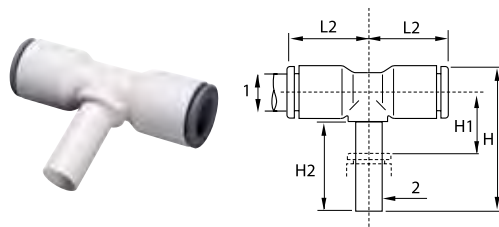
**6388 Plug-In Tee Inch Tube to Stem**

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | H    | H1  | H2   | L2   |
|---------------|----------------|----------------|------|-----|------|------|
| 6388 56 00WP2 | 1/4            | 1/4            | 1.20 | .43 | .79  | .71  |
| 6388 08 00WP2 | 5/16           | 5/16           | 1.32 | .31 | .85  | .90  |
| 6388 60 00WP2 | 3/8            | 3/8            | 1.65 | .49 | .98  | .98  |
| 6388 62 00WP2 | 1/2            | 1/2            | 2.01 | .51 | 1.14 | 1.26 |



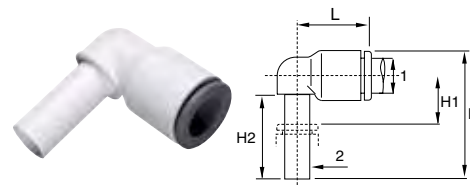
**6382 Plug-In Elbow Inch Tube to Stem**

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | H    | H1  | H2   | L    |
|---------------|----------------|----------------|------|-----|------|------|
| 6382 56 00WP2 | 1/4            | 1/4            | 1.20 | .43 | .71  | .71  |
| 6382 08 00WP2 | 5/16           | 5/16           | 1.32 | .31 | .85  | .88  |
| 6382 60 00WP2 | 3/8            | 3/8            | 1.53 | .35 | .96  | 1.04 |
| 6382 56 60WP2 | 1/4            | 3/8            | 1.93 | .51 | 1.12 | 1.42 |
| 6382 60 56WP2 | 3/8            | 1/4            | 1.26 | .43 | .71  | 1.04 |



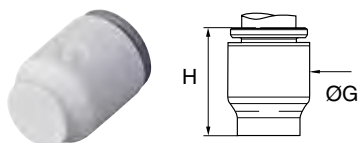
**6388 Plug-In Tee Metric Tube to Stem**

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | H     | H1   | H2    | L2    |
|---------------|----------------|----------------|-------|------|-------|-------|
| 6388 04 00WP2 | 4              | 4              | 25.00 | 6.00 | 15.50 | 15.00 |
| 6388 06 00WP2 | 6              | 6              | 28.50 | 7.00 | 17.00 | 16.00 |
| 6388 08 00WP2 | 8              | 8              | 33.50 | 8.00 | 21.50 | 23.00 |
| 6388 10 00WP2 | 10             | 10             | 41.00 | 9.50 | 24.50 | 26.50 |



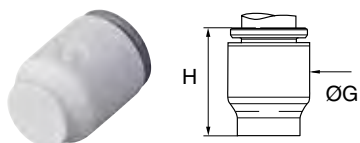
**6382 Plug-In Elbow Metric Tube to Stem**

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | H     | H1    | H2    | L     |
|---------------|----------------|----------------|-------|-------|-------|-------|
| 6382 04 00WP2 | 4              | 4              | 23.00 | 6.00  | 15.50 | 15.00 |
| 6382 06 00WP2 | 6              | 6              | 26.50 | 7.00  | 17.00 | 17.00 |
| 6382 08 00WP2 | 8              | 8              | 33.00 | 8.00  | 21.50 | 22.50 |
| 6382 10 00WP2 | 10             | 10             | 39.00 | 9.50  | 24.50 | 26.50 |
| 6382 12 00WP2 | 12             | 12             | 44.50 | 10.00 | 27.00 | 31.00 |
| 6382 04 06WP2 | 4              | 6              | 26.50 | 7.00  | 17.00 | 16.50 |
| 6382 06 04WP2 | 6              | 4              | 25.00 | 7.00  | 15.50 | 17.00 |
| 6382 06 08WP2 | 6              | 8              | 33.50 | 8.00  | 21.50 | 22.50 |
| 6382 08 10WP2 | 8              | 10             | 39.00 | 9.50  | 24.50 | 26.00 |
| 6382 10 12WP2 | 10             | 12             | 44.50 | 10.00 | 27.00 | 30.00 |



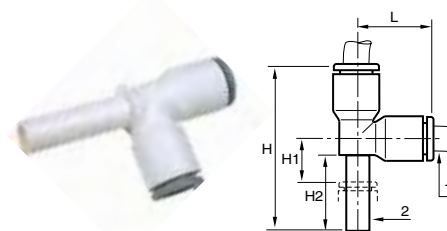
**6351 End Stop Inch Tube**

| PART NO.      | TUBE SIZE IN | G   | H   |
|---------------|--------------|-----|-----|
| 6351 04 00WP2 | 5/32         | .33 | .59 |
| 6351 56 00WP2 | 1/4          | .43 | .63 |
| 6351 08 00WP2 | 5/16         | .53 | .85 |
| 6351 60 00WP2 | 3/8          | .63 | .88 |



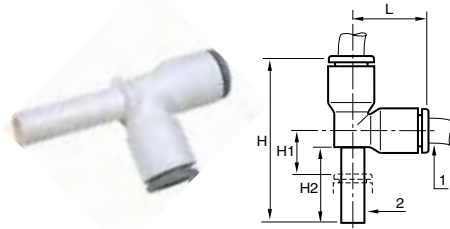
**6351 End Stop Metric Tube**

| PART NO.      | TUBE SIZE MM | G     | H     |
|---------------|--------------|-------|-------|
| 6351 04 00WP2 | 4            | 8.50  | 15.00 |
| 6351 06 00WP2 | 6            | 10.50 | 17.00 |
| 6351 08 00WP2 | 8            | 13.50 | 21.50 |
| 6351 10 00WP2 | 10           | 16.00 | 22.00 |
| 6351 12 00WP2 | 12           | 19.00 | 27.50 |



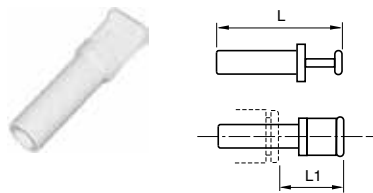
**6383 Plug-In Run Tee Inch Tube to Stem**

| PART NO.      | TUBE 1 SIZE IN | TUBE 2 SIZE IN | H    | H1  | H2   | L    |
|---------------|----------------|----------------|------|-----|------|------|
| 6383 56 00WP2 | 1/4            | 1/4            | 1.20 | .43 | .71  | .71  |
| 6383 56 60WP2 | 1/4            | 3/8            | 1.55 | .43 | .96  | 1.00 |
| 6383 60 00WP2 | 3/8            | 3/8            | 1.55 | .43 | .96  | 1.04 |
| 6383 62 00WP2 | 1/2            | 1/2            | 1.93 | .71 | 1.12 | 1.42 |



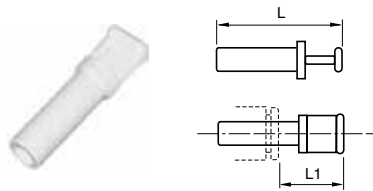
### 6383 Plug-In Run Tee Metric Tube to Stem

| PART NO.      | TUBE 1 SIZE MM | TUBE 2 SIZE MM | H     | H1    | H2    | L     |
|---------------|----------------|----------------|-------|-------|-------|-------|
| 6383 04 00WP2 | 4              | 4              | 33.00 | 6.00  | 15.50 | 15.00 |
| 6383 06 00WP2 | 6              | 6              | 38.50 | 7.00  | 17.00 | 18.00 |
| 6383 08 00WP2 | 8              | 8              | 49.00 | 8.00  | 21.50 | 23.00 |
| 6383 10 00WP2 | 10             | 10             | 57.00 | 10.50 | 25.50 | 26.50 |



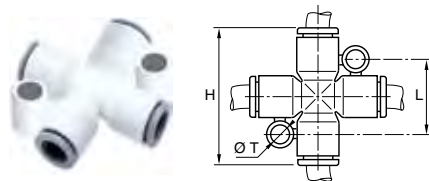
### 6326 Plug Inch

| PART NUMBER   | STEM SIZE IN | L    | L1  |
|---------------|--------------|------|-----|
| 6326 56 00WP2 | 1/4          | 1.44 | .87 |
| 6326 08 00WP2 | 5/16         | 1.38 | .69 |
| 6326 60 00WP2 | 3/8          | 1.67 | .87 |
| 6326 62 00WP2 | 1/2          | 1.91 | .85 |



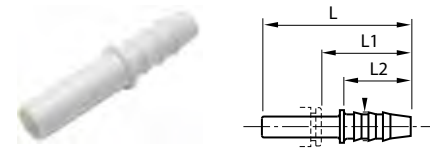
### 6326 Plug Metric

| PART NUMBER   | STEM SIZE MM | L  | L1   |
|---------------|--------------|----|------|
| 6326 04 00WP2 | 4            | 30 | 15.5 |
| 6326 06 00WP2 | 6            | 33 | 16.5 |
| 6326 08 00WP2 | 8            | 33 | 17.5 |
| 6326 10 00WP2 | 10           | 42 | 21.0 |
| 6326 12 00WP2 | 12           | 45 | 22.0 |



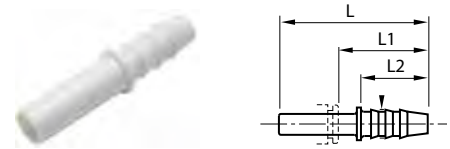
### 6307 Cross Metric

| PART NUMBER   | TUBE SIZE MM | H  | L    | T   |
|---------------|--------------|----|------|-----|
| 6307 06 00WP2 | 6            | 46 | 22.5 | 4.2 |
| 6307 08 00WP2 | 8            | 46 | 22.5 | 4.2 |



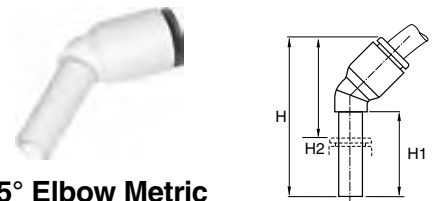
### 6322 Stem to Hose Barb Inch

| PART NUMBER   | STEM SIZE IN | HOSE BARB | L    | L1   | L2   |
|---------------|--------------|-----------|------|------|------|
| 6322 56 56WP2 | 1/4          | 1/4       | 1.65 | 1.00 | .67  |
| 6322 60 56WP2 | 3/8          | 1/4       | 1.97 | 1.16 | .87  |
| 6322 60 08WP2 | 3/8          | 5/16      | 1.97 | 1.16 | .87  |
| 6322 60 60WP2 | 3/8          | 3/8       | 1.97 | 1.16 | .87  |
| 6322 62 60WP2 | 1/2          | 3/8       | 2.05 | 1.30 | 1.07 |



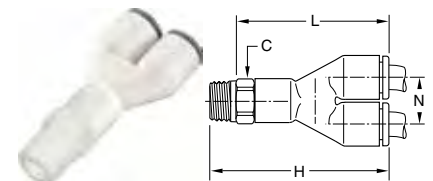
### 6322 Stem to Hose Barb Metric

| PART NUMBER   | STEM SIZE MM | HOSE BARB | L    | L1   | L2 |
|---------------|--------------|-----------|------|------|----|
| 6322 06 04WP2 | 6            | 4         | 37.0 | 25.0 | 17 |
| 6322 08 06WP2 | 8            | 6         | 39.5 | 21.0 | 17 |
| 6322 10 07WP2 | 10           | 7         | 50.0 | 29.5 | 22 |



### 6380 Plug-in 45° Elbow Metric

| PART NUMBER   | TUBE SIZE MM | STEM SIZE MM | H    | H1   | H2   |
|---------------|--------------|--------------|------|------|------|
| 6380 04 00WP2 | 4            | 4            | 33.5 | 19.0 | 13.0 |
| 6380 06 00WP2 | 6            | 6            | 39.0 | 21.0 | 14.5 |
| 6380 08 00WP2 | 8            | 8            | 44.0 | 21.5 | 19.5 |
| 6380 10 00WP2 | 10           | 10           | 53.0 | 27.0 | 23.0 |
| 6380 12 00WP2 | 12           | 12           | 58.5 | 27.5 | 26.5 |



### 6548 Swivel Y Connector Inch Tube to NPTF

| PART NUMBER   | TUBE SIZE IN | NPTF | C HEX | L    | H    | N   |
|---------------|--------------|------|-------|------|------|-----|
| 6548 56 11WP2 | 1/4          | 1/8  | 1/2   | 1.59 | .88  | .45 |
| 6548 56 14WP2 | 1/4          | 1/4  | 1/2   | 1.59 | .88  | .45 |
| 6548 56 18WP2 | 1/4          | 3/8  | 3/4   | 1.62 | .88  | .45 |
| 6548 60 14WP2 | 3/8          | 1/4  | 3/4   | 2.24 | 1.30 | .66 |
| 6548 60 18WP2 | 3/8          | 3/8  | 3/4   | 2.24 | 1.30 | .66 |
| 6548 62 18WP2 | 1/2          | 3/8  | 15/16 | 2.80 | 1.78 | .91 |
| 6548 62 22WP2 | 1/2          | 1/2  | 15/16 | 2.84 | 1.78 | .91 |

## LIQUIfit Polypropylene Ball Valves

This range of valves offers an innovative solution in the treatment of water and the handling of beverages while protecting health. LIQUIfit's corrosion-resistant, all plastic design makes them ideal for water filtration units, coffee and beverage machines and a wide variety of other fluid applications. The polypropylene material meets all FDA and NSF-51 requirements for food contact.

### Features/Benefits:

- Full-flow self-cleaning ball maintains the cleanliness of the circuit
- Sealing technology using EPDM D seal
- High temperature, scale-resistant Polysulfone ball
- Tube retention with gripping ring prevents pumping effect
- Push-in connection and disconnection
- FDA compliant

### Specifications:

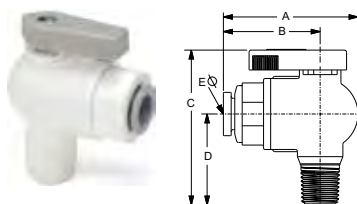
- Temperature range: +35°F to +200°F (1°C to 93°C)
- O-ring seal material: EPDM
- NSF-51 Listed
- Pressure rated to 150 psi

### Advantages:

- Reduce costs – Built-in LIQUIfit connection eliminates the need for a secondary fitting
- Save space – Low profile design allows for easy assembly and access where space is at a premium.

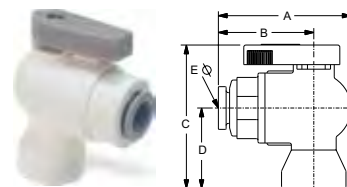
### Assembly Instructions:

1. Inspect the mating threads for debris or damage. Remove any old fluoropolymer tape or sealant on previously used threads. If threads are damaged, replace with new adapter before proceeding.
2. Apply 2 to 3 wraps of fluoropolymer tape, or an NSF/FDA approved silicone sealant. Do not use Plumbers Putty or Pipe Dope. These chemically react with plastic materials and could cause a failure.
3. Align ball valve onto mating thread to ensure cross threading does not occur.
4. Screw ball valve onto mating thread 3 to 5 turns. This should be sufficient to properly seal the threads.
5. Pressurize system and check for leaks.



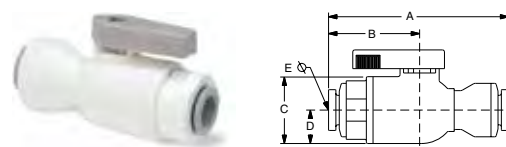
### VME - Valve Male Elbow

| PART NO.  | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-----------|----------------|------------------|------|------|------|------|-------------------|
| LFPP4VME2 | 1/4            | 1/8              | 1.74 | 1.21 | 2.00 | 1.10 | .19               |
| LFPP4VME4 | 1/4            | 1/4              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| LFPP4VME6 | 1/4            | 3/8              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| LFPP4VME8 | 1/4            | 1/2              | 1.74 | 1.21 | 2.37 | 1.47 | .19               |
| LFPP6VME2 | 3/8            | 1/8              | 1.85 | 1.32 | 2.00 | 1.10 | .25               |
| LFPP6VME4 | 3/8            | 1/4              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |
| LFPP6VME6 | 3/8            | 3/8              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |
| LFPP6VME8 | 3/8            | 1/2              | 1.85 | 1.32 | 2.37 | 1.47 | .25               |
| LFPP8VME8 | 1/2            | 1/2              | 2.73 | 1.74 | 2.38 | 1.47 | .37               |



### VFE - Valve Female Elbow

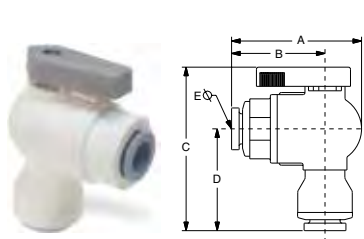
| PART NO.  | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-----------|----------------|------------------|------|------|------|------|-------------------|
| LFPP4VFE2 | 1/4            | 1/8              | 1.74 | 1.21 | 1.82 | .92  | .19               |
| LFPP4VFE4 | 1/4            | 1/4              | 1.74 | 1.21 | 2.05 | 1.15 | .19               |
| LFPP4VFE6 | 1/4            | 3/8              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| LFPP6VFE2 | 3/8            | 1/8              | 1.85 | 1.32 | 1.82 | .92  | .25               |
| LFPP6VFE4 | 3/8            | 1/4              | 1.85 | 1.32 | 2.05 | 1.15 | .25               |
| LFPP6VFE6 | 3/8            | 3/8              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |



### VUC - Valve Union Connector

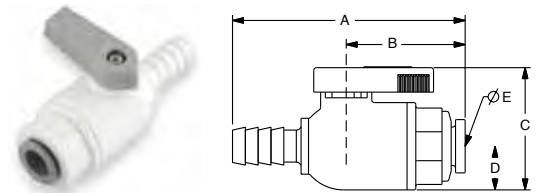
| PART NO.  | 1 TUBE SIZE | 2 TUBE SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|-----------|-------------|-------------|------|------|-----|----|-------------------|
| LFPP4VUC4 | 1/4         | 1/4         | 2.55 | 1.22 | 1.0 | .5 | .19               |
| LFPP4VUC6 | 1/4         | 3/8         | 2.57 | 1.30 | 1.0 | .5 | .19               |
| LFPP6VUC6 | 3/8         | 3/8         | 2.67 | 1.32 | 1.4 | .5 | .25               |
| LFPP8VUC8 | 1/2         | 1/2         | 3.50 | 1.74 | 1.4 | .5 | .37               |

NOTE: PPL refers to Polypropylene. FCB refers to Fluorocarbon.



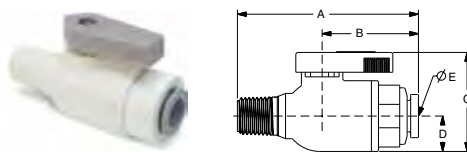
### VEU - Valve Elbow Union

| PART NO.  | 1 TUBE SIZE | 2 TUBE SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-----------|-------------|-------------|------|------|------|------|-------------------|
| LFPP4VEU4 | 1/4         | 1/4         | 1.75 | 1.22 | 2.33 | 1.42 | .19               |
| LFPP4VEU6 | 1/4         | 3/8         | 1.75 | 1.22 | 2.33 | 1.42 | .11               |
| LFPP6VEU4 | 3/8         | 1/4         | 1.83 | 1.30 | 2.32 | 1.40 | .19               |
| LFPP6VEU6 | 3/8         | 3/8         | 1.85 | 1.32 | 2.34 | 1.44 | .25               |



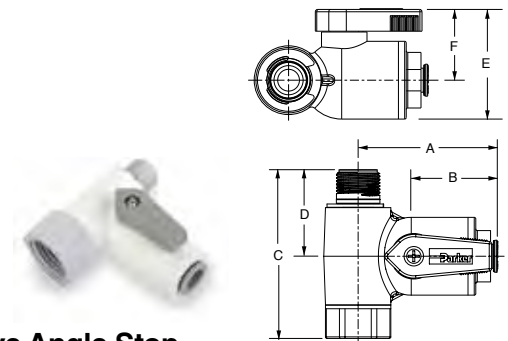
### VUCPB - Valve Union Connector Barbed x Tube

| PART NO.    | HOSE ID | TUBE OD | OD  | A    | B    | C    | D   | ØE THRU HOLE MIN. |
|-------------|---------|---------|-----|------|------|------|-----|-------------------|
| LFPP4VUCPB4 | 1/4     | 1/4     | .31 | 2.40 | 1.08 | 1.42 | .50 | .15               |
| LFPP6VUCPB6 | 3/8     | 3/8     | .43 | 2.63 | 1.32 | 1.42 | .50 | .19               |



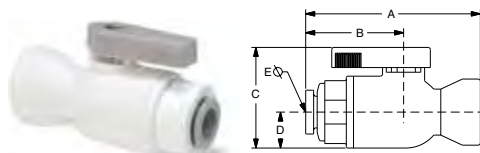
### VMC - Valve Male Connector

| PART NO.  | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|-----------|----------------|------------------|------|------|-----|----|-------------------|
| LFPP4VMC2 | 1/4            | 1/8              | 2.22 | 1.21 | 1.4 | .5 | .19               |
| LFPP4VMC4 | 1/4            | 1/4              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| LFPP4VMC6 | 1/4            | 3/8              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| LFPP4VMC8 | 1/4            | 1/2              | 2.59 | 1.21 | 1.4 | .5 | .19               |
| LFPP6VMC2 | 3/8            | 1/8              | 2.33 | 1.32 | 1.4 | .5 | .25               |
| LFPP6VMC4 | 3/8            | 1/4              | 2.51 | 1.32 | 1.4 | .5 | .25               |
| LFPP6VMC6 | 3/8            | 3/8              | 2.51 | 1.32 | 1.4 | .5 | .25               |
| LFPP6VMC8 | 3/8            | 1/2              | 2.70 | 1.32 | 1.4 | .5 | .25               |
| LFPP8VMC8 | 1/2            | 1/2              | 3.14 | 1.74 | 1.4 | .5 | .37               |



### VAS - Valve Angle Stop

| PART NO.  | TUBE O.D. | MALE THD. | FEMALE THD. | A    | B    | C    | D    | E    | F   |
|-----------|-----------|-----------|-------------|------|------|------|------|------|-----|
| LFPP4VAS6 | 1/4       | 3/8       | 3/8         | 1.95 | 1.24 | 2.17 | 1.11 | 1.41 | .91 |
| LFPP4VAS8 | 1/4       | 3/8       | 3/8         | 1.95 | 1.24 | 2.40 | 1.11 | 1.41 | .91 |
| LFPP6VAS6 | 3/8       | 3/8       | 1/2         | 2.06 | 1.35 | 2.17 | 1.11 | 1.41 | .91 |
| LFPP6VAS8 | 3/8       | 3/8       | 1/2         | 2.06 | 1.35 | 2.40 | 1.11 | 1.41 | .91 |



### VFC - Valve Female Connector

| PART NO.  | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|-----------|----------------|------------------|------|------|-----|----|-------------------|
| LFPP4VFC2 | 1/4            | 1/8              | 2.04 | 1.21 | 1.4 | .5 | .19               |
| LFPP4VFC4 | 1/4            | 1/4              | 2.27 | 1.21 | 1.4 | .5 | .19               |
| LFPP4VFC6 | 1/4            | 3/8              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| LFPP6VFC2 | 3/8            | 1/8              | 2.15 | 1.32 | 1.4 | .5 | .25               |
| LFPP6VFC4 | 3/8            | 1/4              | 2.38 | 1.32 | 1.4 | .5 | .25               |
| LFPP6VFC6 | 3/8            | 3/8              | 2.51 | 1.32 | 1.4 | .5 | .25               |

NOTE: PPL refers to Polypropylene. FCB refers to Fluorocarbon.

# TrueSeal™ Fittings



Parker's TrueSeal Fittings are lightweight, field attachable and connect to tubing without the use of tools. These all plastic push-to-connect fittings are manufactured from FDA compliant materials.

## Product Features:

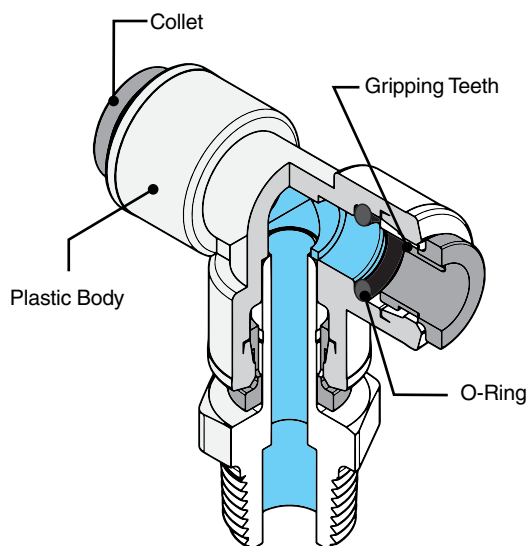
- Available in Acetal, Polypropylene and Kynar materials
- EPDM seal in acetal and polypropylene, Fluorocarbon in Kynar
- Gripping ring with stainless steel bite edge or with an engineered thermoplastic bite edge
- FDA compliant, NSF-51 and gray acetal fittings are NSF-61

## Markets:

- Food
- Potable Water
- Chemical
- Filtration

## Applications:

- Air
- Water
- Soft Drinks
- Beer
- Wine
- Dyes



## Specifications:

**Pressure Range** Acetal and Kynar up to 300 psi  
Polypropylene up to 150 psi

**Temperature Range** Acetal: -20° to +180°F  
Polypropylene: 0° to +225°F  
Kynar: 0° to +275°F

## Compatible Tubing:

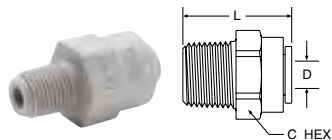
- Polyethylene
- Polypropylene
- Nylon
- Vinyl
- Fluoropolymer
- Polyurethane
- Kynar® is a registered trademark of The Arkema Group



|   |   |  |  |  |  |   |
|---|---|--|--|--|--|---|
| <b>Tube to NPTF</b>   | <b>MC</b><br>Male Connector<br><br>p. C18  | <b>MES</b><br>Male Elbow Swivel<br><br>p. C19 | <b>MRS</b><br>Male Run Tee Swivel<br><br>p. C19 | <b>MTS</b><br>Male Branch Tee Swivel<br><br>p. C19 | <b>TMC</b><br>Male Standpipe<br><br>p. C20    | <b>ME</b><br>Male Elbow<br><br>p. C22          |
|   | <b>FA</b><br>Faucet Adapter<br><br>p. C20  | <b>Tube to Female NPTF</b>   | <b>FC</b><br>Female Connector<br><br>p. C20     | <b>FE</b><br>Female Elbow<br><br>p. C21            | <b>Tube to Straight Thread</b>   | <b>ST</b><br>Straight Thread<br><br>p. C22     |
| <b>FF</b><br>45° Female Flare<br><br>p. C20  | <b>Tube to Tube</b>   |  | <b>EU</b><br>Union Elbow<br><br>p. C18          | <b>TU</b><br>Union Tee<br><br>p. C18               |  | <b>WY</b><br>Union Y<br><br>p. C18             |
| <b>CU</b><br>Cross<br><br>p. C20            |   | <b>Bulkhead Union</b>  | <b>BU</b><br>Bulkhead Union<br><br>p. C21      | <b>Plug-ins</b>  | <b>TEU</b><br>Tube Elbow Union<br><br>p. C21  | <b>RD</b><br>Tube Reducer<br><br>p. C21       |
| <b>VC</b><br>Check Valve<br><br>p. C23     | <b>Auxiliary Components</b>   |  | <b>CAP</b><br>Cap<br><br>p. C21               |  | <b>TCB</b><br>Barbed Connector<br><br>p. C22 | <b>TEB</b><br>Barbed Connector<br><br>p. C22 |
| <b>TFA</b><br>Faucet Adapter<br><br>p. C20 |   | <b>TAF</b><br>Faucet Adapter<br><br>p. C20  | <b>SC</b><br>Safety Clip<br><br>p. C26        | <b>TS</b><br>Tube Support<br><br>p. C26           | <b>AQRT</b><br>Release Tool<br><br>p. C26    | <b>TSC</b><br>Cartridge<br><br>p. C23        |
| <b>Ball Valves</b>  | <b>VME</b><br>Male Elbow<br><br>p. C24   | <b>VFE</b><br>Female Elbow<br><br>p. C24    | <b>VUC</b><br>Union Connector<br><br>p. C25   | <b>VEU</b><br>Elbow Union<br><br>p. C25          | <b>VMC</b><br>Male Connector<br><br>p. C25  | <b>VFC</b><br>Female Connector<br><br>p. C25 |
|   | <b>VTEU</b><br>Elbow Union<br><br>p. C25 |  |  |  |  |   |

### MC - Male Connector

Tube-to-Pipe

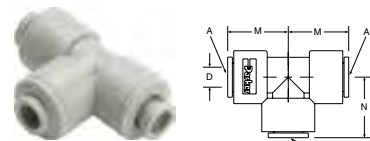


| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM TUBE O.D. | NPTF THD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|---------------|---------------|-------|------------------|------------------|
|                       |                     |                        |               |               |       |                  |                  |
| A4MC4-MG              | PP4MC4              | F4MC4                  | 1/4           | 1/4           | 11/16 | 1.14             | .175             |
| A4MC6-MG              | PP4MC6              | F4MC6                  | 1/4           | 3/8           | 11/16 | 1.18             | .175             |
| A5MC2-MG              |                     | F5MC2                  | 5/16          | 1/8           | 13/16 | 1.46             | .175             |
| A5MC4-MG              |                     | F5MC4                  | 5/16          | 1/4           | 13/16 | 1.41             | .188             |
| A5MC6-MG              |                     |                        | 5/16          | 3/8           | 13/16 | 1.27             | .188             |
| A6MC2-MG              |                     | F6MC2                  | 3/8           | 1/8           | 13/16 | 1.46             | .175             |
| A6MC4-MG              | PP6MC4              | F6MC4                  | 3/8           | 1/4           | 13/16 | 1.41             | .250             |
| A6MC6-MG              | PP6MC6              | F6MC6                  | 3/8           | 3/8           | 13/16 | 1.27             | .250             |
| A6MC8-MG              |                     | F6MC8                  | 3/8           | 1/2           | 15/16 | 1.45             | .250             |
| A8MC6-MG              | PP8MC6              | F8MC6                  | 1/2           | 3/8           | 15/16 | 1.65             | .360             |
| A8MC8-MG              | PP8MC8              | F8MC8                  | 1/2           | 1/2           | 15/16 | 1.46             | .375             |

For nonstandard plastic collet, remove -MG suffix.

### TU - Tee Union

Tube-to-Tube

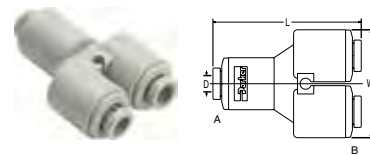


| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. |             | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|-------------|------|------|------------------|
|                       |                     |                        | TUBE A RUN     | TUBE B STEM |      |      |                  |
| A4TU4-MG              | PP4TU4              | F4TU4                  | 1/4            | 1/4         | .81  | 0.85 | .175             |
| A5TU5-MG              |                     | F5TU5                  | 5/16           | 5/16        | 1.02 | 1.02 | .188             |
| A6TU4-MG              | PP6TU4              | F6TU4                  | 3/8            | 1/4         | 1.02 | 1.03 | .175             |
| A6TU6-MG              | PP6TU6              | F6TU6                  | 3/8            | 3/8         | 1.02 | 1.02 | .290             |
| A8TU8-MG              | PP8TU8              | F8TU8                  | 1/2            | 1/2         | 1.20 | 1.20 | .375             |

For nonstandard plastic collet, remove -MG suffix.

### WY - "Y" Union

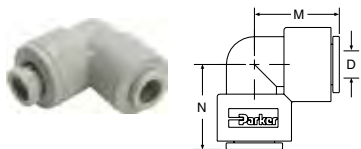
Tube-to-Tube



| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D.   |                    | L     | W    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|------------------|--------------------|-------|------|------------------|
|                       |                     |                        | INLET TUBE A RUN | OUTLET TUBE B STEM |       |      |                  |
| A5WY5-MG              |                     |                        | 5/16             | 5/16               | 2.250 | 1.75 | 0.190            |
| A6WY4-MG              |                     |                        | 3/8              | 1/4                | 2.100 | 1.43 | 0.190            |
| A6WY5-MG              |                     |                        | 3/8              | 5/16               | 2.200 | 1.75 | 0.190            |
| A6WY6-MG              |                     |                        | 3/8              | 3/8                | 2.175 | 1.75 | 0.250            |

### EU - Elbow Union

Tube-to-Tube



| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | M     | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|-------|------|------------------|
| A4EU4-MG              | PP4EU4              | F4EU4                  | 1/4            | 0.87  | .87  | .175             |
| A5EU4-MG              |                     |                        | 5/16-1/4       | 1.052 | .90  | .175             |
| A5EU5-MG              |                     |                        | 5/16           | 1.02  | 1.02 | .188             |
| A6EU4-MG              | PP6EU4              | F6EU4                  | 3/8-1/4        | 1.02  | .90  | .212             |
| A6EU5-MG              |                     |                        | 3/8-5/16       | 1.02  | 1.02 | .175             |
| A6EU6-MG              | PP6EU6              | F6EU6                  | 3/8            | 1.02  | 1.02 | .250             |
| A8EU6-MG              |                     |                        | 1/2-3/8        | 1.20  | 1.20 | .250             |
| A8EU8-MG              | PP8EU8              | F8EU8                  | 1/2            | 1.20  | 1.20 | .375             |

For nonstandard plastic collet, remove -MG suffix.

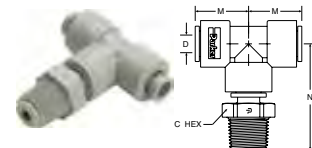


### MES - Male Elbow Swivel

Tube-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | NPTF THD SIZE | C HEX | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|---------------|-------|------|------|------------------|
| A4MES2-MG             | PP4MES2             | F4MES2                 | 1/4            | 1/8           | 9/16  | .87  | 1.60 | .175             |
| A4MES4-MG             | PP4MES4             | F4MES4                 | 1/4            | 1/4           | 11/16 | .87  | 1.71 | .175             |
| A4MES6-MG             | PP4MES6             | F4MES6                 | 1/4            | 3/8           | 13/16 | .90  | 1.91 | .212             |
| A5MES2-MG             |                     |                        | 5/16           | 1/8           | 9/16  | 1.02 | 1.78 | .188             |
| A5MES4-MG             |                     |                        | 5/16           | 1/4           | 11/16 | 1.02 | 1.90 | .188             |
| A5MES6-MG             |                     |                        | 5/16           | 3/8           | 13/16 | 1.02 | 1.90 | .188             |
| A6MES2-MG             |                     | F6MES2                 | 3/8            | 1/8           | 9/16  | 1.02 | 1.65 | .175             |
| A6MES4-MG             | PP6MES4             | F6MES4                 | 3/8            | 1/4           | 13/16 | 1.02 | 1.90 | .250             |
| A6MES6-MG             | PP6MES6             | F6MES6                 | 3/8            | 3/8           | 13/16 | 1.02 | 1.90 | .250             |
| A8MES4-MG             |                     |                        | 1/2            | 1/4           | 13/16 | 1.20 | 2.10 | .240             |
| A8MES6-MG             | PP8MES6             |                        | 1/2            | 3/8           | 13/16 | 1.20 | 2.10 | .375             |
| A8MES8-MG             | PP8MES8             |                        | 1/2            | 1/2           | 1     | 1.20 | 2.32 | .375             |

\* Part consists of elbow union and tube stem adaptor.  
 Note: Assemblies with metal gripper collets are permanent.  
 Assemblies with plastic collets can be taken apart.

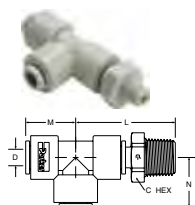


### MTS - Male Tee Swivel

Tube-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM TUBE O.D. | NPTF THD SIZE | C HEX | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|---------------|---------------|-------|------|------|------------------|
| A4MTS2-MG             | PP4MTS2             | F4MTS2                 | 1/4           | 1/8           | 9/16  | .81  | 1.60 | .175             |
| A4MTS4-MG             | PP4MTS4             | F4MTS4                 | 1/4           | 1/4           | 11/16 | .81  | 1.71 | .175             |
| A5MTS2-MG             |                     |                        | 5/16          | 1/8           | 9/16  | 1.02 | 1.78 | .188             |
| A5MTS4-MG             |                     |                        | 5/16          | 1/4           | 11/16 | 1.02 | 1.90 | .188             |
| A5MTS6-MG             |                     |                        | 5/16          | 3/8           | 13/16 | 1.02 | 1.90 | .188             |
| A6MTS2-MG             |                     | F6MTS2                 | 3/8           | 1/8           | 9/16  | 1.02 | 1.75 | .175             |
| A6MTS4-MG             | PP6MTS4             | F6MTS4                 | 3/8           | 1/4           | 13/16 | 1.02 | 1.90 | .250             |
| A6MTS6-MG             | PP6MTS6             | F6MTS6                 | 3/8           | 3/8           | 13/16 | 1.02 | 1.90 | .250             |
| A8MTS4-MG             |                     |                        | 1/2           | 1/4           | 13/16 | 1.20 | 2.10 | .240             |
| A8MTS6-MG             | PP8MTS6             |                        | 1/2           | 3/8           | 13/16 | 1.20 | 2.10 | .375             |
| A8MTS8-MG             | PP8MTS8             |                        | 1/2           | 1/2           | 1     | 1.20 | 2.32 | .375             |

\* Part consists of tee union and tube stem adaptor.  
 Note: Assemblies with metal gripper collets are permanent.  
 Assemblies with plastic collets can be taken apart.

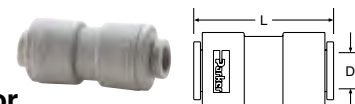


### MRS - Male Run Tee Swivel

Tube-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM TUBE O.D. | NPTF THD SIZE | C HEX | L    | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|---------------|---------------|-------|------|------|------|------------------|
| A4MRS2-MG             | PP4MRS2             | F4MRS2                 | 1/4           | 1/8           | 9/16  | 1.55 | 0.81 | 0.85 | .175             |
| A4MRS4-MG             | PP4MRS4             | F4MRS4                 | 1/4           | 1/4           | 11/16 | 1.67 | 0.81 | 0.85 | .175             |
| A5MRS2-MG             |                     |                        | 5/16          | 1/8           | 9/16  | 1.78 | 1.02 | 1.02 | .188             |
| A5MRS4-MG             |                     |                        | 5/16          | 1/4           | 11/16 | 1.90 | 1.02 | 1.02 | .188             |
| A5MRS6-MG             |                     |                        | 5/16          | 3/8           | 13/16 | 1.90 | 1.02 | 1.02 | .188             |
| A6MRS4-MG             | PP6MRS4             | F6MRS4                 | 3/8           | 1/4           | 13/16 | 1.90 | 1.02 | 1.02 | .250             |
| A6MRS6-MG             | PP6MRS6             | F6MRS6                 | 3/8           | 3/8           | 13/16 | 1.90 | 1.02 | 1.02 | .250             |
| A8MRS4-MG             |                     |                        | 1/2           | 1/4           | 13/16 | 2.10 | 1.20 | 1.20 | .240             |
| A8MRS6-MG             | PP8MRS6             |                        | 1/2           | 3/8           | 13/16 | 2.10 | 1.20 | 1.20 | .375             |
| A8MRS8-MG             | PP8MRS8             |                        | 1/2           | 1/2           | 1     | 2.32 | 1.20 | 1.20 | .375             |

\*Part consists of tee union and tube stem adaptor.  
 Note: Assemblies with metal gripper collets are permanent.  
 Assemblies with plastic collets can be taken apart.



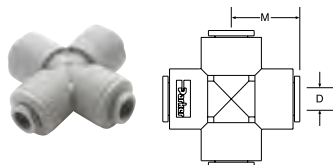
### UC - Union Connector

Tube-to-Tube

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|------------------|------------------|
| A4UC4-MG              | PP4UC4              | F4UC4                  | 1/4            | 1.49             | .175             |
| A5UC4-MG              |                     |                        | 5/16-1/4       | 1.70             | .175             |
| A5UC5-MG              |                     | F5UC5                  | 5/16           | 1.70             | .188             |
| A6UC4-MG              | PP6UC4              | F6UC4                  | 3/8-1/4        | 1.70             | .175             |
| A6UC5-MG              |                     |                        | 3/8-5/16       | 1.70             | .188             |
| A6UC6-MG              | PP6UC6              | F6UC6                  | 3/8            | 1.70             | .250             |
| A8UC5-MG              |                     |                        | 1/2-5/16       | 1.90             | .188             |
| A8UC6-MG              | PP8UC6              |                        | 1/2-3/8        | 1.90             | .250             |
| A8UC8-MG              | PP8UC8              | F8UC8                  | 1/2            | 1.91             | .375             |

For nonstandard plastic collet, remove -MG suffix.

### CU - Cross Union

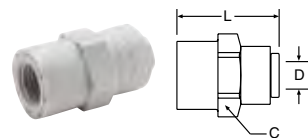


Tube-to-Tube

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | M    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|------|------------------|
| A4CU4-MG              |                     |                        | 1/4            | .91  | .175             |
| A6CU6-MG              |                     |                        | 3/8            | 1.08 | .250             |

For nonstandard plastic collet, remove -MG suffix.

### FF - 45° Female Flare

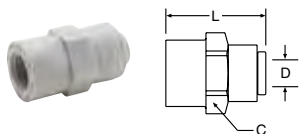


Tube-to-Flare

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | UNF-2B THREAD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|--------------------|-------|------------------|------------------|
| A4FF4-MG              | PP4FF4              | F4FF4                  | 1/4            | 7/16-20            | 23/32 | 1.32             | .190             |
| A6FF4-MG              |                     | F6FF4                  | 3/8            | 7/16-20            | 13/16 | 1.41             | .190             |
| A6FF6-MG              | PP6FF6              | F6FF6                  | 3/8            | 5/8-18             | 1     | 1.50             | .250             |

For nonstandard plastic collet, remove -MG suffix.

### FA - Faucet Adapter

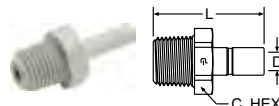


Tube-to-Faucet

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | UNS-2B THREAD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|--------------------|-------|------------------|------------------|
| A4FA7-MG              | PP4FA7              | F4FA7                  | 1/4            | 7/16-24            | 23/32 | 1.32             | .190             |
| A5FA7-MG              |                     |                        | 5/16           | 7/16-24            | 13/16 | 1.41             | .190             |
| A6FA7-MG              | PP6FA7              | F6FA7                  | 3/8            | 7/16-24            | 13/16 | 1.41             | .190             |

For nonstandard plastic collet, remove -MG suffix.

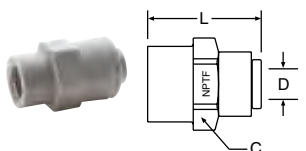
### TMC - Tube Stem Adapter



Tube Stem-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | NPTF THREAD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|------------------|-------|------------------|------------------|
| A4TMC2                | PP4TMC2             | F4TMC2                 | 1/4            | 1/8              | 9/16  | 1.44             | .175             |
| A4TMC4                | PP4TMC4             | F4TMC4                 | 1/4            | 1/4              | 11/16 | 1.56             | .175             |
| A5TMC2                |                     |                        | 5/16           | 1/8              | 9/16  | 1.5              | .188             |
| A5TMC4                |                     | F5TMC4                 | 5/16           | 1/4              | 11/16 | 1.67             | .188             |
| A5TMC6                |                     |                        | 5/16           | 3/8              | 13/16 | 1.67             | .188             |
| A6TMC4                | PP6TMC4             | F6TMC4                 | 3/8            | 1/4              | 13/16 | 1.70             | .250             |
| A6TMC6                | PP6TMC6             | F6TMC6                 | 3/8            | 3/8              | 13/16 | 1.70             | .250             |
| A8TMC4                |                     |                        | 1/2            | 1/4              | 13/16 | 1.82             | .240             |
| A8TMC6                | PP8TMC6             |                        | 1/2            | 3/8              | 13/16 | 1.82             | .375             |
| A8TMC8                | PP8TMC8             |                        | 1/2            | 1/2              | 1     | 2.04             | .375             |

### FC - Female Connector

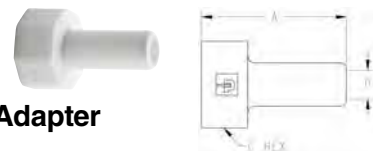


Tube-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | NPTF THREAD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|------------------|-------|------------------|------------------|
| A4FC2-MG              | PP4FC2              | F4FC2                  | 1/4            | 1/8              | 11/16 | 1.20             | .175             |
| A4FC4-MG              | PP4FC4              | F4FC4                  | 1/4            | 1/4              | 23/32 | 1.32             | .175             |
| A5FC4-MG              |                     | F5FC4                  | 5/16           | 1/4              | 13/16 | 1.41             | .188             |
| A5FC6-MG              |                     |                        | 5/16           | 3/8              | 1     | 1.50             | .188             |
| A6FC4-MG              | PP6FC4              | F6FC4                  | 3/8            | 1/4              | 13/16 | 1.41             | .250             |
| A6FC6-MG              | PP6FC6              | F6FC6                  | 3/8            | 3/8              | 1     | 1.50             | .250             |
| A6FC8-MG              |                     |                        | 3/8            | 1/2              | 1-1/8 | 1.52             | .250             |
| A8FC6-MG              | PP8FC6              | F8FC6                  | 1/2            | 3/8              | 1-1/8 | 1.60             | .375             |
| A8FC8-MG              | PP8FC8              | F8FC8                  | 1/2            | 1/2              | 1-1/8 | 1.75             | .375             |

For nonstandard plastic collet, remove -MG suffix.

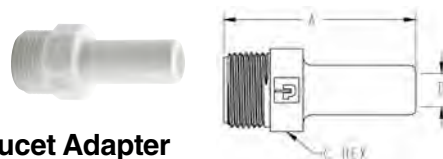
### TFA - Tube Faucet Adapter



(Female Thread)

| WHITE ACETAL | TUBE STEM O.D. | THREAD SIZE | A    | C HEX | D MIN. |
|--------------|----------------|-------------|------|-------|--------|
| AW6TFA7-MG   | 3/8            | 7/16-24     | 1.25 | .69   | .17    |
| AW6TFA8-MG   | 3/8            | 1/2-14 NPSM | 1.45 | 1.06  | .22    |
| AW6TFA9-MG   | 3/8            | 9/16-24     | 1.25 | .75   | .22    |

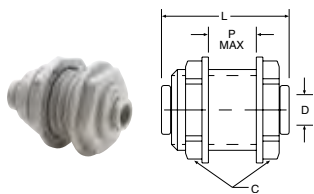
### TAF - Tube Faucet Adapter



(Male Thread)

| WHITE ACETAL | TUBE STEM O.D. | THREAD SIZE | A    | C HEX | D MIN. |
|--------------|----------------|-------------|------|-------|--------|
| AW6TAF7-MG   | 3/8            | 7/16-24     | 1.41 | .50   | .22    |
| AW6TAF8-MG   | 3/8            | 1/2-14 NPSM | 1.65 | .88   | .22    |
| AW6TAF9-MG   | 3/8            | 9/16-24     | 1.45 | .63   | .22    |

### BU - Bulkhead Union

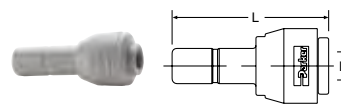


Tube-to-Tube

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | C1 HEX | C2 HEX | L OVERALL LENGTH | P MAX. WALL THK. | D THRU HOLE MIN. | BKHD HOLE DRILL SIZE |
|-----------------------|---------------------|------------------------|----------------|--------|--------|------------------|------------------|------------------|----------------------|
| A4BU4-MG              | PP4BU4              | F4BU4                  | 1/4            | 15/16  | 15/16  | 1.50             | .50              | .175             | 7/8                  |
| A5BU5-MG              |                     | F5BU5                  | 5/16           | 1-1/16 | 1-1/16 | 1.75             | .62              | .188             | 1                    |
| A6BU4-MG              | PP6BU4              |                        | 3/8-1/4        | 1-1/16 | 1-1/16 | 1.75             | .62              | .175             | 1                    |
| A6BU6-MG              | PP6BU6              | F6BU6                  | 3/8            | 1-1/16 | 1-1/16 | 1.75             | .62              | .250             | 1                    |
| A8BU8-MG              |                     | F8BU8                  | 1/2            | 1-1/4  | 1-1/4  | 2.04             | .70              | .375             | 1-1/8                |

For nonstandard plastic collet, remove -MG suffix.

### RD - Tube Reducer

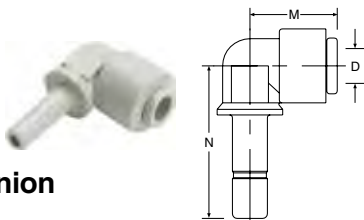


Tube-to-Tube Stem

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | TUBE STEM O.D. | L    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|----------------|------|------------------|
| A4RD5-MG              | PP4RD5              |                        | 1/4            | 5/16           | 1.62 | .18              |
| A4RD6-MG              | PP4RD6              |                        | 1/4            | 3/8            | 1.62 | .18              |
| A5RD6-MG              |                     |                        | 5/16           | 3/8            | 1.78 | .25              |
| A5RD8-MG              |                     |                        | 5/16           | 1/2            | 1.90 | .25              |
| A6RD8-MG              |                     |                        | 3/8            | 1/2            | 1.90 | .25              |

For nonstandard plastic collet, remove -MG suffix.

### TEU - Tube Elbow Union



Tube-to-Tube Stem

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | TUBE STEM O.D. | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|----------------|------|------|------------------|
| A4TEU4-MG             | PP4TEU4             | F4TEU4                 | 1/4            | 1/4            | .84  | 1.21 | .125             |
| A4TEU6-MG             |                     | F4TEU6                 | 1/4            | 3/8            | .84  | 1.35 | .125             |
| A5TEU5-MG             |                     | F5TEU5                 | 5/16           | 5/16           | 1.03 | 1.40 | .188             |
| A6TEU4-MG             |                     | F6TEU4                 | 3/8            | 1/4            | 1.03 | 1.29 | .125             |
| A6TEU6-MG             | PP6TEU6             | F6TEU6                 | 3/8            | 3/8            | 1.03 | 1.64 | .250             |
| A8TEU8-MG             | PP8TEU8             | F8TEU8                 | 1/2            | 1/2            | 1.21 | 1.64 | .380             |

For nonstandard plastic collet, remove -MG suffix.

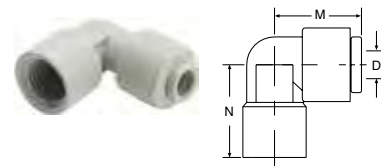
### CAP - Tube Cap



| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | L OVERALL LENGTH |
|-----------------------|---------------------|------------------------|----------------|------------------|
| A4CAP-MG              | PP4CAP              | F4CAP                  | 1/4            | .77              |
| A6CAP-MG              | PP6CAP              |                        | 3/8            | 0.88             |

For nonstandard plastic collet, remove -MG suffix.

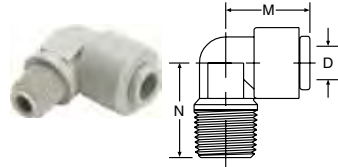
### FE - Female Elbow



Tube-to-Pipe

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | NPTF THREAD SIZE | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|------------------|------|------|------------------|
| A4FE4-MG              |                     |                        | 1/4            | 1/4              | 0.84 | 1.00 | .18              |
| A6FE4-MG              |                     |                        | 3/8            | 1/4              | 1.03 | 1.00 | .25              |
| A6FE6-MG              |                     |                        | 3/8            | 3/8              | 1.03 | 1.00 | .25              |

For nonstandard plastic collet, remove -MG suffix.

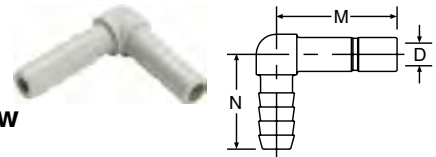


### ME - Male Elbow

Tube-to-Pipe

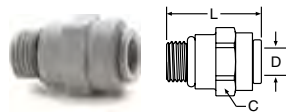
| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | NPTF THD SIZE | M    | N    | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|---------------|------|------|------------------|
| A4ME2-MG              | PP4ME2              | F4ME2                  | 1/4            | 1/8           | .84  | .94  | .175             |
| A4ME4-MG              | PP4ME4              | F4ME4                  | 1/4            | 1/4           | .84  | .94  | .175             |
| A4ME6-MG              | PP4ME6              | F4ME6                  | 1/4            | 3/8           | .84  | 1.04 | .175             |
| A5ME4-MG              |                     | F5ME4                  | 5/16           | 1/4           | 1.03 | 1.08 | .175             |
| A5ME6-MG              |                     |                        | 5/16           | 3/8           | 1.03 | 1.06 | .188             |
| A6ME4-MG              | PP6ME4              | F6ME4                  | 3/8            | 1/4           | 1.03 | 1.08 | .250             |
| A6ME6-MG              | PP6ME6              | F6ME6                  | 3/8            | 3/8           | 1.03 | 1.06 | .250             |

For nonstandard plastic collet, remove -MG suffix.



### TEB - Tube Elbow Barb Connector

| GRAY ACETAL | WHITE PPL | NATURAL KYNAR | TUBE STEM O.D. | TUBE I.D. | M     | N     | D THRU HOLE MIN. |
|-------------|-----------|---------------|----------------|-----------|-------|-------|------------------|
| A4TEB4      | PP4TEB4   | F4TEB4        | 1/4            | 1/4       | .89   | 1.00  | .140             |
| A6TEB4      | PP6TEB4   | F6TEB4        | 3/8            | 1/4       | 1.335 | 1.055 | .375             |
| A6TEB6      | PP6TEB6   | F6TEB6        | 3/8            | 3/8       | 1.34  | 1.21  | .250             |
| A8TEB8      |           |               | 1/2            | 1/2       | 1.30  | 1.30  | .390             |

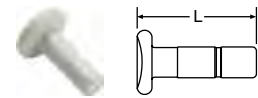


### ST - Straight Thread

Tube-to-Male O-Ring Boss

| GRAY ACETAL EPDM SEAL | WHITE PPL EPDM SEAL | NATURAL KYNAR FCB SEAL | NOM. TUBE O.D. | UNF-2B THD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|---------------------|------------------------|----------------|-----------------|-------|------------------|------------------|
| A6ST9-MG              |                     | F6ST9 (+)              | 3/8            | 9/16-18         | 13/16 | 1.39             | .250             |

For nonstandard plastic collet, remove -MG suffix.



### TPL - Plug

| GRAY ACETAL | WHITE PPL | NATURAL KYNAR | FITTING SIZE | L OVERALL LENGTH |
|-------------|-----------|---------------|--------------|------------------|
| A4TPL       | PP4TPL    | F4TPL         | 1/4          | 0.88             |
| A6TPL       | PP6TPL    | F6TPL         | 3/8          | 1.45             |
| A8TPL       | PP8TPL    |               | 1/2          | 1.50             |



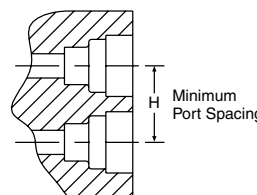
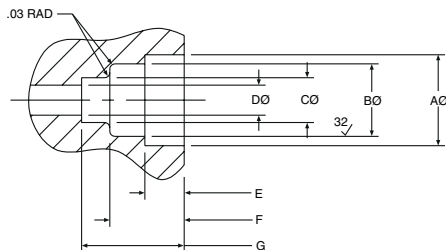
### TCB - Tube-to-Barb Connector

| GRAY ACETAL | WHITE PPL | NATURAL KYNAR | TUBE STEM O.D. | TUBE I.D. | L OVERALL LENGTH | D THRU HOLE MIN. |
|-------------|-----------|---------------|----------------|-----------|------------------|------------------|
| A4TCB4      | PP4TCB4   | F4TCB4        | 1/4            | 1/4       | 1.67             | .140             |
| A6TCB4      |           | F6TCB4        | 3/8            | 1/4       | 1.82             | .140             |
| A6TCB6      | PP6TCB6   | F6TCB6        | 3/8            | 3/8       | 1.98             | .250             |
| A8TCB6      |           |               | 1/2            | 3/8       | 2.10             | .250             |
| A8TCB8      |           | F8TCB8        | 1/2            | 1/2       | 2.10             | .375             |



### TSC - Cartridge Insert

| PART NUMBER WITH EPDM SEAL | NOM. TUBE O.D. | A* DIAMETER ±.002 | B DIAMETER ±.003 | C DIAMETER ±.003 | D DIAMETER MAXIMUM | E DEPTH ±.002 | F DEPTH ±.002 | G DEPTH ±.002 | H* CENTERLINE OF PORTS MINIMUM |
|----------------------------|----------------|-------------------|------------------|------------------|--------------------|---------------|---------------|---------------|--------------------------------|
| ATSC4-MG                   | 1/4            | .528              | .421             | .260             | .19                | .230          | .435          | .600          | .670                           |
| ATSC6-MG                   | 3/8            | .632              | .545             | .385             | .31                | .280          | .455          | .705          | .790                           |
| ATSC8-MG                   | 1/2            | .774              | .668             | .510             | .41                | .315          | .510          | .810          | 1.250                          |



#### Parker TrueSeal™ Cartridge Inserts:

Allow you to machine or mold a tube connection into your equipment or components. By using cartridge inserts, you will reduce your material and assembly costs, reduce potential leak paths, and give your equipment a new, clean profile by eliminating the need for threaded connections. TSC Cartridge Inserts consist of 1 o-ring, 1 cartridge, and 1 collet.

\*Cartridge inserts are rated at 150 psi in ports dimensioned as above and having Noryl as the receiving material. Other materials may have different ratings and require different port dimensions. Consult the Fluid System Connectors Division when using polypropylene, unfilled polypropylene, ABS or Nylon.

#### Assembly Instructions:

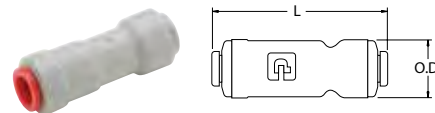
1. Machine or mold the receiving orifice as per the above dimensions.
2. Place the cartridge insert squarely onto the prepared port opening making sure that the barbs of the cartridge are going into the hole and the lettering on the face of the cartridge is visible.
3. Using a rubber mallet or press, insert the cartridge into the first gland orifice until its face is flush with the top surface of the port.
4. Insert the o-ring into the cartridge and seat it evenly into the second gland orifice.
5. Insert the collet into the cartridge opening.
6. Insert tubing.

### TrueSeal Check Valves

Push-to-Connect check valves that ensures protection against reversal of flow. The valves have an arrow molded into the body to indicate the direction of flow. Valves are designed for connection with either thermoplastic or soft metal tubing and are intended for use with liquids only.

#### Materials of Construction

|                   |  |
|-------------------|--|
| Body              | Acetal                                       |
| O-ring            | EPDM   |
| Metal Grip Edge   | 300 Stainless                                |
| Working Pressure  | Up to 150 PSI depending on tubing being used |
| Temperature Range | +34°F (1° C) to +150°F (65°C)                |
| Cracking Pressure | 1/3 PSI                                      |



#### VC – Check Valve

| PART NO. | TUBE SIZE | L    | O.D. |
|----------|-----------|------|------|
| A4VC4-MG | 1/4       | 2.00 | .66  |
| A5VC5-MG | 5/16      | 2.10 | .70  |
| A6VC6-MG | 3/8       | 2.15 | .80  |
| A8VC8-MG | 1/2       | 2.68 | .91  |

NORYL® is a registered trademark of the General Electric Co.

## Polypropylene Ball Valves

For proven leak-free performance, specify Polypropylene Ball Valves. Their corrosion-resistant, all-plastic design makes them ideal for water filtration units, coffee and beverage machines and a wide variety of other fluid applications. Polypropylene material meets all FDA and NSF-51 requirements for food contact.

### Features/Benefits:

- Precision molded, all-plastic design is leak free and corrosion resistant.
- Polypropylene material offers a wider chemical acceptance range, as well as a wide temperature range.
- Bi-directional flow maximizes productivity.
- Full flow design reduces pressure drop across the valve.
- Special o-ring seal ensures a reliable leak-tight connection.
- TrueSeal™ connection reduces potential leaks.

### Specifications:

- Temperature range: 0°F to 225°F (-18°C to 107°C).
- O-ring seal material: EPDM.
- NSF-51 listed.
- Pressure rated to 150 PSI with a 600 PSI burst pressure. Actual working pressures will be lower at elevated temperatures

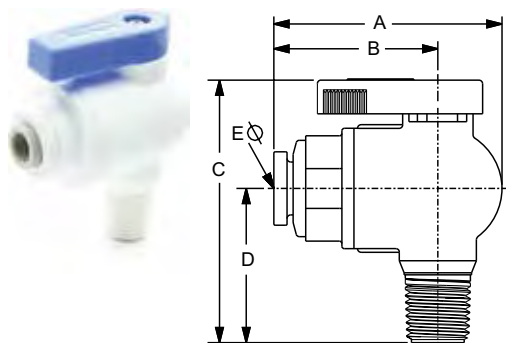
### Advantages:

- Reduce costs—Built-in TrueSeal™ connection eliminates the need for a secondary fitting.
- Save space—Low-profile design allows for easy assembly and access where space is at a premium.

### Assembly Instructions:

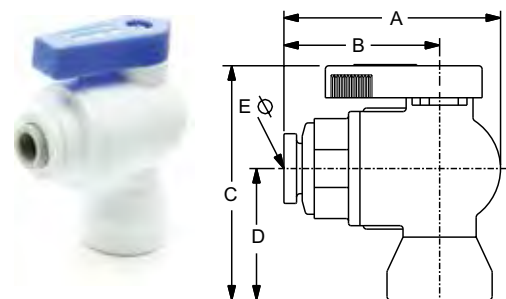
1. Inspect the mating threads for debris or damage. Remove any old fluoropolymer tape or sealant on previously used threads. If threads are damaged, replace with new adapter before proceeding.
2. Apply 2 to 3 wraps of fluoropolymer tape, or an NSF/FDA approved silicon sealant. Do not use Plumbers Putty or Pipe Dope. These chemically react with plastic materials and could cause a failure.
3. Align ball valve to mating thread to ensure cross threading does not occur.
4. Screw ball valve onto mating thread 3 to 5 turns. This should be sufficient to properly seal the threads.
5. Pressurize system and check for leaks.

## VME - Valve Male Elbow



| PART NUMBER    | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|----------------|----------------|------------------|------|------|------|------|-------------------|
| PP4VME2-MG (+) | 1/4            | 1/8              | 1.74 | 1.21 | 2.00 | 1.10 | .19               |
| PP4VME4-MG     | 1/4            | 1/4              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| PP4VME6-MG     | 1/4            | 3/8              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| PP4VME8-MG (+) | 1/4            | 1/2              | 1.74 | 1.21 | 2.37 | 1.47 | .19               |
| PP6VME2-MG (+) | 3/8            | 1/8              | 1.85 | 1.32 | 2.00 | 1.10 | .25               |
| PP6VME4-MG     | 3/8            | 1/4              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |
| PP6VME6-MG     | 3/8            | 3/8              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |
| PP6VME8-MG     | 3/8            | 1/2              | 1.85 | 1.32 | 2.37 | 1.47 | .25               |

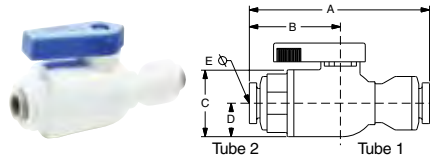
## VFE - Valve Female Elbow



| PART NUMBER    | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|----------------|----------------|------------------|------|------|------|------|-------------------|
| PP4VFE2-MG (+) | 1/4            | 1/8              | 1.74 | 1.21 | 1.82 | .92  | .19               |
| PP4VFE4-MG     | 1/4            | 1/4              | 1.74 | 1.21 | 2.05 | 1.15 | .19               |
| PP4VFE6-MG     | 1/4            | 3/8              | 1.74 | 1.21 | 2.18 | 1.28 | .19               |
| PP6VFE2-MG (+) | 3/8            | 1/8              | 1.85 | 1.32 | 1.82 | .92  | .25               |
| PP6VFE4-MG     | 3/8            | 1/4              | 1.85 | 1.32 | 2.05 | 1.15 | .25               |
| PP6VFE6-MG     | 3/8            | 3/8              | 1.85 | 1.32 | 2.18 | 1.28 | .25               |

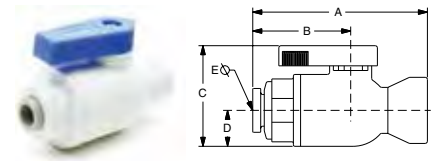
(+) Non Standard.





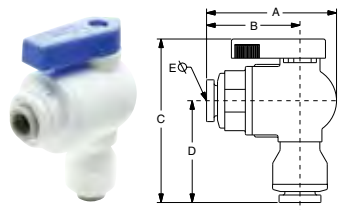
**VUC - Valve Union Connector**

| PART NUMBER | 1 TUBE SIZE | 2 TUBE SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|-------------|-------------|-------------|------|------|-----|----|-------------------|
| PP4VUC4-MG  | 1/4         | 1/4         | 2.55 | 1.22 | 1.0 | .5 | .19               |
| PP4VUC6-MG  | 1/4         | 3/8         | 2.55 | 1.22 | 1.0 | .5 | .19               |
| PP6VUC4-MG  | 3/8         | 1/4         | 2.57 | 1.30 | 1.0 | .5 | .19               |
| PP6VUC6-MG  | 3/8         | 3/8         | 2.67 | 1.32 | 1.4 | .5 | .25               |



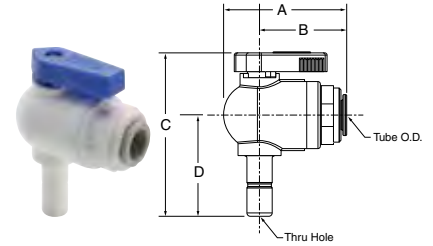
**VFC - Valve Female Connector**

| PART NUMBER | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|-------------|----------------|------------------|------|------|-----|----|-------------------|
| PP4VFC2-MG  | 1/4            | 1/8              | 2.04 | 1.21 | 1.4 | .5 | .19               |
| PP4VFC4-MG  | 1/4            | 1/4              | 2.27 | 1.21 | 1.4 | .5 | .19               |
| PP4VFC6-MG  | 1/4            | 3/8              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| PP6VFC2-MG  | 3/8            | 1/8              | 2.15 | 1.32 | 1.4 | .5 | .25               |
| PP6VFC4-MG  | 3/8            | 1/4              | 2.38 | 1.32 | 1.4 | .5 | .25               |
| PP6VFC6-MG  | 3/8            | 3/8              | 2.51 | 1.32 | 1.4 | .5 | .25               |



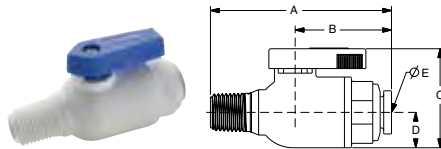
**VEU - Valve Elbow Union**

| PART NUMBER | 1 TUBE SIZE | 2 TUBE SIZE | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-------------|-------------|-------------|------|------|------|------|-------------------|
| PP4VEU4-MG  | 1/4         | 1/4         | 1.75 | 1.22 | 2.33 | 1.42 | .19               |
| PP4VEU6-MG  | 1/4         | 3/8         | 1.75 | 1.22 | 2.33 | 1.42 | .11               |
| PP6VEU4-MG  | 3/8         | 1/4         | 1.83 | 1.30 | 2.32 | 1.40 | .19               |
| PP6VEU6-MG  | 3/8         | 3/8         | 1.85 | 1.32 | 2.34 | 1.44 | .25               |



**VTEU - Valve Tube Elbow Union**

| PART NUMBER | NOM. TUBE O.D. | STEM | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-------------|----------------|------|------|------|------|------|-------------------|
| PP4VTEU6-MG | 1/4            | 3/8  | 1.75 | 1.22 | 2.43 | 1.50 | .17               |
| PP6VTEU6-MG | 3/8            | 3/8  | 1.83 | 1.30 | 2.43 | 1.50 | .25               |



**VMC - Valve Male Connector**

| PART NUMBER    | NOM. TUBE O.D. | NPTF THREAD SIZE | A    | B    | C   | D  | ØE THRU HOLE MIN. |
|----------------|----------------|------------------|------|------|-----|----|-------------------|
| PP4VMC2-MG (+) | 1/4            | 1/8              | 2.22 | 1.21 | 1.4 | .5 | .19               |
| PP4VMC4-MG     | 1/4            | 1/4              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| PP4VMC6-MG     | 1/4            | 3/8              | 2.40 | 1.21 | 1.4 | .5 | .19               |
| PP4VMC8-MG (+) | 1/4            | 1/2              | 2.59 | 1.21 | 1.4 | .5 | .19               |
| PP6VMC2-MG (+) | 3/8            | 1/8              | 2.33 | 1.32 | 1.4 | .5 | .25               |
| PP6VMC4-MG     | 3/8            | 1/4              | 2.51 | 1.32 | 1.4 | .5 | .25               |
| PP6VMC6-MG     | 3/8            | 3/8              | 2.51 | 1.32 | 1.4 | .5 | .25               |
| PP6VMC8-MG (+) | 3/8            | 1/2              | 2.70 | 1.32 | 1.4 | .5 | .25               |

### SC - Safety Clip

(Patent No. 6,065,779)



| PART NUMBER | PART NUMBER | FOR NOMINAL TUBE O.D. |
|-------------|-------------|-----------------------|
| SC-4        | SC-4-B      | 1/4                   |
| SC-5        | SC-5-B      | 5/16                  |
| SC-6        | SC-6-B      | 3/8                   |
| SC-8        | SC-8-B      | 1/2                   |

### TS - Tube Supports



| NYLON PART NUMBER | PPL PART NUMBER |
|-------------------|-----------------|
| N4TS3             | P4TS3           |
| N5TS3             | P5TS3           |
| N6TS4             | P6TS4           |
| N8TS6             | P8TS6           |

To be used with soft durometer tubing.

### AQRT - Quick Release Tool

Makes disconnection of tube adapters and tubing a breeze.





# Fast & Tite® Fittings



Parker's Fast & Tite Fittings are a compression style fitting that installs in seconds without tools and provides a tight, sure, leak proof seal without clamps or adjustments. A unique grab ring for tube retention, coupled with a Nitrile o-ring creates a positive seal and assures good tube retention with only hand tight assembly.

## Product Features:

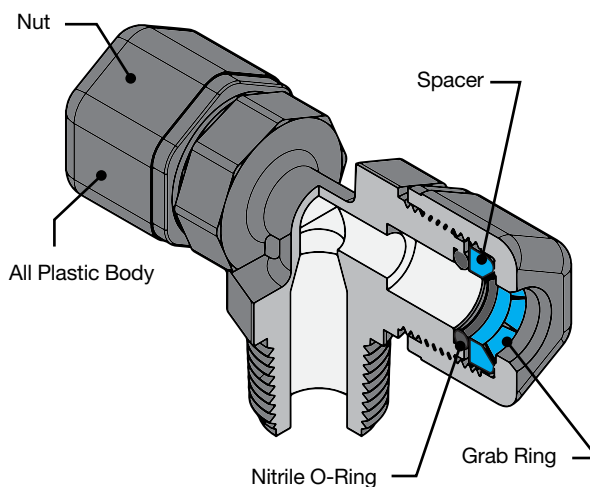
- Available in white polypropylene, black polypropylene and white nylon
- 302 stainless steel grab ring
- Nitrile O-ring
- FDA compliant material
- NSF-51

## Markets:

- Water Filtration
- Beverage Dispensing
- Life Science
- Bottling
- Semi-Conductor

## Applications:

- Water
- Beverages
- Food
- Cooling Systems



## Specifications:

### Air-Oil-Water Pressure in PSI













| TUBE O. D. IN. | UP TO 75°F | 76° TO 125°F | 126° TO 175°F |
|----------------|------------|--------------|---------------|
| 1/4            | 300        | 300          | 300           |
| 5/16           | 300        | 300          | 300           |
| 3/8            | 250        | 250          | 150           |
| 1/2            | 200        | 200          | 150           |
| 5/8            | 150        | 100          | 50            |

### Temperature Range

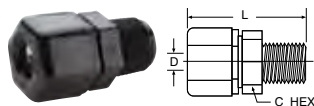
Nylon: -40° to +200°F  
Polypropylene: 0° to +212°F

## Compatible Tubing:

- Thermoplastic
- Soft Metal
- Glass

|   |  |  |  |  |  |
|---|--|--|--|--|--|
| <b>Tube to NPTF</b>   | <b>MC</b><br>Male Connector<br><br>p. C30 | <b>ME</b><br>Male Elbow<br><br>p. C30       | <b>MR</b><br>Male Run Tee<br><br>p. C31 | <b>MT</b><br>Male Branch Tee<br><br>p. C31 |  |
|   | <b>FE</b><br>Female Elbow<br><br>p. C31   | <b>FC</b><br>Female Connector<br><br>p. C31 | <b>Tube to Tube</b>  | <b>UC</b><br>Union<br><br>p. C30           | <b>EU</b><br>Union Elbow<br><br>p. C30  |
| <b>Bulkhead Union</b><br><b>BU</b><br>Bulkhead Union<br><br>p. C31 | <b>Auxiliary Components</b>  | <b>GR</b><br>Grab Ring<br><br>p. C32        |  | <b>NS</b><br>Nut & Spacer<br><br>p. C32    | <b>TS</b><br>Tube Support<br><br>p. C32 |

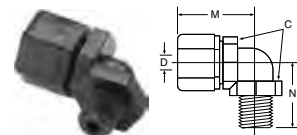
### MC - Male Connector



Tube to male pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM TUBE O.D. | NPTF THREAD SIZE | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|---------------|------------------|-------|------------------|------------------|
| W4MC2                 | P4MC2                 | N4MC2                   | 1/4           | 1/8              | 11/16 | 1.28             | .170             |
| W4MC4                 | P4MC4                 | N4MC4                   | 1/4           | 1/4              | 11/16 | 1.51             | .170             |
| W4MC6 (+)             | P4MC6 (+)             | N4MC6 (+)               | 1/4           | 3/8              | 11/16 | 1.48             | .170             |
| W5MC2 (+)             | P5MC2                 | N5MC2                   | 5/16          | 1/8              | 11/16 | 1.38             | .170             |
| W5MC4 (+)             | P5MC4                 | N5MC4                   | 5/16          | 1/4              | 11/16 | 1.50             | .250             |
| W6MC2 (+)             | P6MC2                 | N6MC2                   | 3/8           | 1/8              | 13/16 | 1.50             | .170             |
| W6MC4                 | P6MC4                 | N6MC4                   | 3/8           | 1/4              | 13/16 | 1.67             | .250             |
| W6MC6                 | P6MC6                 | N6MC6                   | 3/8           | 3/8              | 13/16 | 1.67             | .250             |
| W6MC8 (+)             | P6MC8                 | N6MC8                   | 3/8           | 1/2              | 1     | 1.78             | .250             |
| W6MC12                | P6MC12                | N6MC12                  | 3/8           | 3/4              | 1     | 1.84             | .250             |
| W8MC2 (+)             | P8MC2                 | N8MC2                   | 1/2           | 1/8              | 1     | 1.61             | .170             |
| W8MC4 (+)             | P8MC4                 | N8MC4                   | 1/2           | 1/4              | 1     | 1.74             | .250             |
| W8MC6                 | P8MC6                 | N8MC6                   | 1/2           | 3/8              | 1     | 1.74             | .375             |
| W8MC8                 | P8MC8                 | N8MC8                   | 1/2           | 1/2              | 1     | 1.87             | .375             |
| W8MC12 (+)            | P8MC12                | N8MC12                  | 1/2           | 3/4              | 1     | 1.89             | .375             |
| W10MC2 (+)            | P10MC2                | N10MC2                  | 5/8           | 1/8              | 1-1/8 | 1.75             | .170             |
| W10MC4 (+)            | P10MC4                | N10MC4                  | 5/8           | 1/4              | 1-1/8 | 1.90             | .250             |
| W10MC6 (+)            | P10MC6                | N10MC6                  | 5/8           | 3/8              | 1-1/8 | 1.90             | .375             |
| W10MC8 (+)            | P10MC8                | N10MC8                  | 5/8           | 1/2              | 1-1/8 | 2.01             | .500             |
| W10MC12 (+)           | P10MC12               | N10MC12                 | 5/8           | 3/4              | 1-1/8 | 2.04             | .500             |

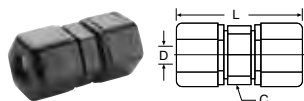
### ME - Male Elbow



Tube to male pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM TUBE O.D. | NPTF THD SIZE | C HEX  | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|---------------|---------------|--------|------|------|------------------|
| W4ME2                 | P4ME2                 | N4ME2                   | 1/4           | 1/8           | 3/4    | 1.06 | 0.81 | .170             |
| W4ME4                 | P4ME4                 | N4ME4                   | 1/4           | 1/4           | 3/4    | 1.06 | 1.02 | .170             |
| W4ME6                 | P4ME6                 | N4ME6                   | 1/4           | 3/8           | 3/4    | 1.06 | 1.02 | .170             |
| W5ME2 (+)             | P5ME2                 | N5ME2                   | 5/16          | 1/8           | 3/4    | 1.06 | 0.81 | .193             |
| W5ME4 (+)             | P5ME4                 | N5ME4                   | 5/16          | 1/4           | 3/4    | 1.06 | 1.02 | .193             |
| W5ME6 (+)             | P5ME6                 | N5ME6                   | 5/16          | 3/8           | 3/4    | 1.06 | 1.02 | .193             |
| W6ME4                 | P6ME4                 | N6ME4                   | 3/8           | 1/4           | 7/8    | 1.28 | 1.12 | .250             |
| W6ME6                 | P6ME6                 | N6ME6                   | 3/8           | 3/8           | 7/8    | 1.28 | 1.12 | .250             |
| W6ME8                 | P6ME8                 | N6ME8                   | 3/8           | 1/2           | 1      | 1.28 | 1.34 | .250             |
| W6ME12 (+)            | P6ME12                | N6ME12                  | 3/8           | 3/4           | 1-3/16 | 1.59 | 1.40 | .250             |
| W8ME4 (+)             | P8ME4                 | N8ME4 (+)               | 1/2           | 1/4           | 1-1/16 | 1.48 | 1.22 | .250             |
| W8ME6                 | P8ME6                 | N8ME6                   | 1/2           | 3/8           | 1-1/16 | 1.56 | 1.21 | .375             |
| W8ME8                 | P8ME8                 | N8ME8                   | 1/2           | 1/2           | 1-1/16 | 1.56 | 1.34 | .375             |
| W8ME12 (+)            | P8ME12 (+)            | N8ME12 (+)              | 1/2           | 3/4           | 1-1/8  | 1.50 | 1.40 | .375             |
| W10ME8 (+)            | P10ME8                | N10ME8                  | 5/8           | 1/2           | 1-3/16 | 1.72 | 1.40 | .500             |

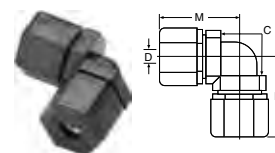
### UC - Union Connector



Tube to tube

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM. TUBE O.D. | C HEX | L OVERALL LENGTH | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|----------------|-------|------------------|------------------|
| W4UC4                 | P4UC4                 | N4UC4                   | 1/4            | 11/16 | 1.62             | .170             |
| W5UC4 (+)             | P5UC4                 | N5UC4                   | 5/16-1/4       | 11/16 | 1.62             | .170             |
| W5UC5 (+)             | P5UC5                 | N5UC5                   | 5/16           | 11/16 | 1.62             | .190             |
| W6UC4                 | P6UC4                 | N6UC4                   | 3/8-1/4        | 13/16 | 1.80             | .170             |
| W6UC5 (+)             | P6UC5                 | N6UC5                   | 3/8-5/16       | 13/16 | 1.80             | .190             |
| W6UC6                 | P6UC6                 | N6UC6                   | 3/8            | 13/16 | 1.92             | .250             |
| W8UC6                 | P8UC6                 | N8UC6                   | 1/2-3/8        | 1     | 1.95             | .250             |
| W8UC8                 | P8UC8                 | N8UC8                   | 1/2            | 1     | 2.03             | .375             |
| W10UC6 (+)            | P10UC6                | N10UC6                  | 5/8-3/8        | 1-1/8 | 2.19             | .250             |
| W10UC8 (+)            | P10UC8                | N10UC8                  | 5/8-1/2        | 1-1/8 | 2.24             | .375             |
| W10UC10 (+)           | P10UC10               | N10UC10                 | 5/8            | 1-1/8 | 2.40             | .500             |

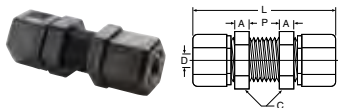
### EU - Elbow Union



Tube to tube

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM. TUBE O.D. | C HEX  | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|----------------|--------|------|------|------------------|
| W4EU4                 | P4EU4                 | N4EU4                   | 1/4            | 3/4    | 1.06 | 1.06 | .170             |
| W5EU4 (+)             | P5EU4                 | N5EU4                   | 5/16-1/4       | 3/4    | 1.06 | 1.06 | .170             |
| W5EU5 (+)             | P5EU5                 | N5EU5                   | 5/16           | 3/4    | 1.06 | 1.06 | .193             |
| W6EU4                 | P6EU4                 | N6EU4                   | 3/8-1/4        | 7/8    | 1.06 | 1.28 | .170             |
| W6EU5 (+)             | P6EU5                 | N6EU5                   | 3/8-5/16       | 7/8    | 1.06 | 1.28 | .170             |
| W6EU6                 | P6EU6                 | N6EU6                   | 3/8            | 7/8    | 1.28 | 1.28 | .250             |
| W8EU6                 | P8EU6                 | N8EU6                   | 1/2-3/8        | 1-1/16 | 1.37 | 1.56 | .250             |
| W8EU8                 | P8EU8                 | N8EU8                   | 1/2            | 1-1/16 | 1.56 | 1.56 | .375             |
| W10EU10 (+)           | P10EU10               | N10EU10                 | 5/8            | 1-3/16 | 1.72 | 1.72 | .500             |

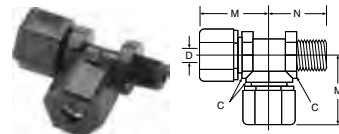
### BU - Bulkhead Union



Tube to tube

| WHITE PPL PART NUMBER | BLACK PPL PART NO. | WHITE NYLON PART NO. | NOM TUBE O.D. | A REF. | C HEX  | L OVERALL LENGTH | P MAX | D THRU HOLE MIN. | BLKHD HOLE DRILL SIZE |
|-----------------------|--------------------|----------------------|---------------|--------|--------|------------------|-------|------------------|-----------------------|
| W4BU4                 | P4BU4              | N4BU4                | 1/4           | 1/4    | 13/16  | 2-11/64          | 3/8   | .170             | 21/32                 |
| W5BU5 (+)             | P5BU5              | N5BU5                | 5/16          | 1/4    | 13/16  | 2-11/64          | 3/8   | .187             | 21/32                 |
| W6BU6                 | P6BU6              | N6BU6                | 3/8           | 9/32   | 15/16  | 2-39/64          | 1/2   | .250             | 25/32                 |
| W8BU8                 | P8BU8              | N8BU8                | 1/2           | 5/16   | 1-5/32 | 2-3/4            | 1/2   | .375             | 31/32                 |

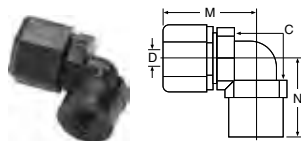
### MR - Male Run Tee



Tube to male pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM TUBE O.D. | NPTF THD SIZE | C HEX | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|---------------|---------------|-------|------|------|------------------|
| W4MR2                 | P4MR2                 | N4MR2                   | 1/4           | 1/8           | 11/16 | 1.09 | 0.89 | .170             |
| W6MR4                 | P6MR4                 | N6MR4                   | 3/8           | 1/4           | 13/16 | 1.30 | 1.17 | .250             |
| W8MR6                 | P8MR6                 | N8MR6                   | 1/2           | 3/8           | 1     | 1.46 | 1.28 | .375             |
| W10MR8 (+)            | P10MR8                | N10MR8                  | 5/8           | 1/2           | 1-1/8 | 1.68 | 1.50 | .500             |

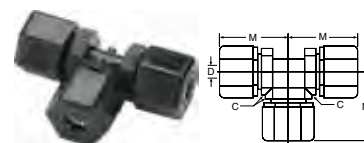
### FE - Female Elbow



Tube to female pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM TUBE O.D. | NPTF THD SIZE | C HEX | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|---------------|---------------|-------|------|------|------------------|
| W4FE2                 | P4FE2                 | N4FE2                   | 1/4           | 1/8           | 11/16 | 1.10 | 0.84 | .170             |
| W4FE4                 | P4FE4                 | N4FE4                   | 1/4           | 1/4           | 11/16 | 1.10 | 0.94 | .170             |
| W5FE2 (+)             | P5FE2                 | N5FE2                   | 5/16          | 1/8           | 11/16 | 1.10 | 0.84 | .193             |
| W6FE4                 | P6FE4                 | N6FE4                   | 3/8           | 1/4           | 13/16 | 1.30 | 1.06 | .250             |
| W6FE6                 | P6FE6                 | N6FE6                   | 3/8           | 3/8           | 13/16 | 1.30 | 1.03 | .250             |
| W8FE6 (+)             | P8FE6                 | N8FE6                   | 1/2           | 3/8           | 1     | 1.50 | 1.16 | .375             |
| W8FE8                 | P8FE8                 | N8FE8                   | 1/2           | 1/2           | 1     | 1.50 | 1.27 | .375             |
| W10FE8 (+)            | P10FE8                | N10FE8                  | 5/8           | 1/2           | 1-1/8 | 1.70 | 1.34 | .500             |

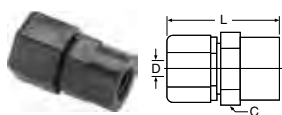
### TU - Tee Union



Tube to tube

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM. TUBE O.D. | C HEX  | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|----------------|--------|------|------|------------------|
| W4TU4                 | P4TU4                 | N4TU4                   | 1/4            | 11/16  | 1.09 | 1.09 | .170             |
| W5TU5 (+)             | P5TU5                 | N5TU5                   | 5/16           | 11/16  | 1.09 | 1.09 | .187             |
| W6TU6                 | P6TU6                 | N6TU6                   | 3/8            | 13/16  | 1.30 | 1.30 | .250             |
| W8TU6 (+)             | P8TU6                 | N8TU6                   | 1/2-3/8        | 1      | 1.46 | 1.39 | .250             |
| W8TU8                 | P8TU8                 | N8TU8                   | 1/2            | 1      | 1.46 | 1.46 | .375             |
| W10TU6 (+)            | P10TU6                | N10TU6                  | 5/8-3/8        | 1-1/8  | 1.68 | 1.46 | .250             |
| W10TU10 (+)           | P10TU10               | N10TU10                 | 5/8            | 1-3/16 | 1.68 | 1.68 | .500             |

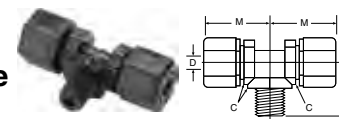
### FC - Female Connector



Tube to female pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM TUBE O.D. | NPTF THREAD SIZE | C HEX | L    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|---------------|------------------|-------|------|------------------|
| W4FC2                 | P4FC2                 | N4FC2                   | 1/4           | 1/8              | 11/16 | 1.31 | .170             |
| W4FC4                 | P4FC4                 | N4FC4                   | 1/4           | 1/4              | 11/16 | 1.44 | .170             |
| W6FC4                 | P6FC4                 | N6FC4                   | 3/8           | 1/4              | 13/16 | 1.61 | .250             |
| W6FC6                 | P6FC6                 | N6FC6                   | 3/8           | 3/8              | 13/16 | 1.64 | .250             |
| W6FC8                 | P6FC8                 | N6FC8                   | 3/8           | 1/2              | 13/16 | 1.75 | .250             |
| W8FC6 (+)             | P8FC6                 | N8FC6                   | 1/2           | 3/8              | 1     | 1.70 | .375             |
| W8FC8                 | P8FC8                 | N8FC8                   | 1/2           | 1/2              | 1     | 1.85 | .375             |
| W10FC8 (+)            | P10FC8                | N10FC8                  | 5/8           | 1/2              | 1-1/8 | 1.96 | .500             |

### MT - Male Branch Tee



Tube to male pipe

| WHITE PPL PART NUMBER | BLACK PPL PART NUMBER | WHITE NYLON PART NUMBER | NOM. TUBE O.D. | NPTF THD SIZE | C HEX | M    | N    | D THRU HOLE MIN. |
|-----------------------|-----------------------|-------------------------|----------------|---------------|-------|------|------|------------------|
| W4MT2                 | P4MT2                 | N4MT2                   | 1/4            | 1/8           | 11/16 | 1.09 | 0.89 | .170             |
| W4MT4                 | P4MT4                 | N4MT4                   | 1/4            | 1/4           | 11/16 | 1.09 | 1.06 | .170             |
| W5MT2 (+)             | P5MT2                 | N5MT2                   | 5/16           | 1/8           | 11/16 | 1.09 | 0.89 | .170             |
| W5MT4 (+)             | P5MT4                 | N5MT4                   | 5/16           | 1/4           | 11/16 | 1.09 | 1.06 | .187             |
| W6MT4                 | P6MT4                 | N6MT4                   | 3/8            | 1/4           | 13/16 | 1.30 | 1.12 | .250             |
| W6MT6                 | P6MT6                 | N6MT6                   | 3/8            | 3/8           | 13/16 | 1.30 | 1.10 | .250             |
| W8MT6                 | P8MT6                 | N8MT6                   | 1/2            | 3/8           | 1     | 1.46 | 1.22 | .375             |
| W8MT8                 | P8MT8                 | N8MT8                   | 1/2            | 1/2           | 1     | 1.46 | 1.43 | .375             |
| W10MT8 (+)            | P10MT8                | N10MT8                  | 5/8            | 1/2           | 1-1/8 | 1.68 | 1.41 | .500             |

### GR - Grab Ring



(Stainless or Plastic)

| STAINLESS GRAB RING PART NUMBER | PLASTIC GRAB RING PART NUMBER | FOR NOM. TUBE O. D. |
|---------------------------------|-------------------------------|---------------------|
| 4GR                             | 4GRP                          | 1/4                 |
| 5GR                             | 5GRP                          | 5/16                |
| 6GR                             | 6GRP                          | 3/8                 |
| 8GR                             | 8GRP                          | 1/2                 |
| 10GR                            | 10GRP                         | 5/8                 |

### NS - Nut and Spacer Sets



| WHITE POLYPROPYLENE PART NUMBER | BLACK POLYPROPYLENE PART NUMBER | WHITE NYLON PARTNUMBER | FOR NOM. TUBE O. D. |
|---------------------------------|---------------------------------|------------------------|---------------------|
| W4NS                            | P4NS                            | N4NS                   | 1/4                 |
| W5NS                            | P5NS                            | N5NS                   | 5/16                |
| W6NS                            | P6NS                            | N6NS                   | 3/8                 |
| W8NS                            | P8NS                            | N8NS                   | 1/2                 |
| W10NS                           | P10NS                           | N10NS                  | 5/8                 |

### TS - Tube Support



| POLYPROPYLENE PART NUMBER | NYLON PART NUMBER | FOR TUBE PART NUMBER |
|---------------------------|-------------------|----------------------|
| P4TS3                     | N4TS3             | PV43                 |
| P5TS3                     | N5TS3             | PV53                 |
| P6TS4                     | N6TS3             | PV64                 |
| P8TS6                     | N8TS6             | PV86                 |
| P10TS8                    | N10TS8            | PV108                |

### OR - O-Ring



| O-RING PART NUMBER | FOR NOM. TUBE O. D. |
|--------------------|---------------------|
| 4OR                | 1/4                 |
| 5OR                | 5/16                |
| 6OR                | 3/8                 |
| 8OR                | 1/2                 |
| 10OR               | 5/8                 |





# Par-Barb® Fittings



Parker's Par-Barb Fittings are injection molded from high strength chemically inert, thermoplastic materials. The multiple barb design generates the maximum gripping and sealing power when combined with a hose clamp.

## Product Features:

- Available in black polypropylene and white nylon
- FDA compliant material
- NSF-51
- Uniprene washer
- Up to 1 1/2" sizes

## Markets:

- Water
- Beverage Dispensing
- Bottling
- Semi-Conductor

## Applications:

- Water
- Beverages
- Cooling Systems



## Specifications:

**Pressure Range** Up to 125 psi

**Temperature Range** Nylon: -40° to +200°F  
Polypropylene: 10° to +220°F

## Compatible Tubing:

- Vinyl
- Polyurethane
- Rubber hose

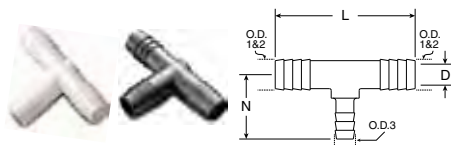
|                     |   |   |   |  |  |  |
|---------------------|---|---|---|--|--|--|
| Tube to Male NPTF   | <b>325HB</b><br>Male Connector<br><br>p. C37   | <b>372HB</b><br>Male Branch Tee<br><br>p. C38      | <b>329HB</b><br>Male Elbow<br><br>p. C38               | Tube to Female NPTF  | <b>326HB</b><br>Female Connector<br><br>p. C37    | <b>370HB</b><br>Female Elbow<br><br>p. C38          |
|                     | <b>322HB</b><br>Union<br><br>p. C36            | <b>364HB</b><br>Union Tee<br><br>p. C36            | <b>365HB</b><br>Union Elbow<br><br>p. C36              |  | <b>362HB</b><br>Union Y<br><br>p. C38              |  |
| Pipe Fittings       | <b>318P</b><br>Hex Plug<br><br>p. C36          | <b>309P</b><br>Bushing<br><br>p. C36               | <b>316P</b><br>Nipple<br><br>p. C37                    | Garden Hose Fitting  | <b>316GH</b><br>Garden Hose Adapter<br><br>p. C39 | <b>325GH</b><br>Garden Hose Connector<br><br>p. C39 |
|                     | <b>328HB</b><br>Hose Barb Stem<br><br>p. C39  | <b>31HB</b><br>Hose Barb Swivel Nut<br><br>p. C39 | <b>325GHSV</b><br>Swivel Hose Barb Stem<br><br>p. C39 |  | <b>31GH</b><br>Garden Hose Nut<br><br>p. C39      | <b>313GH</b><br>Garden Hose Cap<br><br>p. C39      |
| Auxiliary Component | <b>VFC</b><br>Female Connector<br><br>p. C40 | <b>VFE</b><br>Female Elbow<br><br>p. C40         | <b>VMC</b><br>Male Connector<br><br>p. C40           | <b>VME</b><br>Male Elbow<br><br>p. C40 | <b>VUC</b><br>Union Connector<br><br>p. C40     | <b>VUCPB</b><br>Barb x Tuber<br><br>p. C40        |
| Ball Valves         | <b>VFC</b><br>Female Connector<br><br>p. C40 | <b>VFE</b><br>Female Elbow<br><br>p. C40         | <b>VMC</b><br>Male Connector<br><br>p. C40           | <b>VME</b><br>Male Elbow<br><br>p. C40 | <b>VUC</b><br>Union Connector<br><br>p. C40     | <b>VUCPB</b><br>Barb x Tuber<br><br>p. C40        |



### Union Connector 322HB

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. 1 | TUBE OR HOSE I.D. 2 | O.D. 1 | O.D. 2 | L    | FLOW DIA. D |
|----------------------|------------------------------|---------------------|---------------------|--------|--------|------|-------------|
| 322HB-2N*            | 322HB-2PP*                   | 1/8                 | 1/8                 | .18    | .18    | .66  | .09         |
| 322HB-3N             | 322HB-3PP                    | 3/16                | 3/16                | .25    | .25    | 1.61 | .12         |
| 322HB-4-2N           | 322HB-4-2PP                  | 1/4                 | 1/8                 | .31    | .21    | 1.61 | .08         |
| 322HB-4-3N           | 322HB-4-3PP                  | 1/4                 | 3/16                | .31    | .25    | 1.61 | .13         |
| 322HB-4N             | 322HB-4PP                    | 1/4                 | 1/4                 | .31    | .31    | 1.61 | .16         |
| 322HB-5N             | 322HB-5PP                    | 5/16                | 5/16                | .37    | .37    | 1.61 | .22         |
| 322HB-6-4N           | 322HB-6-4PP                  | 3/8                 | 1/4                 | .43    | .31    | 1.61 | .15         |
| 322HB-6-5N           | 322HB-6-5PP                  | 3/8                 | 5/16                | .43    | .37    | 1.62 | .22         |
| 322HB-6N             | 322HB-6PP                    | 3/8                 | 3/8                 | .43    | .43    | 1.61 | .25         |
| 322HB-8-4N           | 322HB-8-4PP                  | 1/2                 | 1/4                 | .55    | .31    | 1.73 | .15         |
| 322HB-8-6N           | 322HB-8-6PP                  | 1/2                 | 3/8                 | .55    | .43    | 1.73 | .25         |
| 322HB-8N             | 322HB-8PP                    | 1/2                 | 1/2                 | .56    | .56    | 1.74 | .38         |
| 322HB-10-6N          | 322HB-10-6PP                 | 5/8                 | 3/8                 | .66    | .43    | 1.73 | .25         |
| 322HB-10-8N          | 322HB-10-8PP                 | 5/8                 | 1/2                 | .66    | .55    | 1.73 | .37         |
| 322HB-10N            | 322HB-10PP                   | 5/8                 | 5/8                 | .67    | .67    | 1.73 | .47         |
| 322HB-12-8N          | 322HB-12-8PP                 | 3/4                 | 1/2                 | .81    | .55    | 2.99 | .38         |
| 322HB-12N            | 322HB-12PP                   | 3/4                 | 3/4                 | .80    | .80    | 2.97 | .58         |
| 322HB-16N            |                              | 1                   | 1                   | 1.08   | 1.08   | 3.12 | .82         |
| 322HB-20N            |                              | 1-1/4               | 1-1/4               | 1.26   | 1.26   | 3.58 | 1.00        |
| 322HB-24N            |                              | 1-1/2               | 1-1/2               | 1.51   | 1.51   | 3.58 | 1.25        |

\*Note: 1/8" tube connections contain one barb.



### Union Tee 364HB

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. 1-2 | TUBE OR HOSE I.D. 3 | O.D. 1-2 | O.D. 3 | L    | N    | FLOW DIA. D |
|----------------------|------------------------------|-----------------------|---------------------|----------|--------|------|------|-------------|
| 364HBM-2N*           |                              | 1/8                   | 1/8                 | .15      | .15    | 1.19 | .60  | .08         |
| 364HB-3N             | 364HB-3PP                    | 3/16                  | 3/16                | .25      | .25    | 1.49 | .75  | .12         |
| 364HB-4N             | 364HB-4PP                    | 1/4                   | 1/4                 | .32      | .32    | 1.92 | .96  | .16         |
| 364HB-4-6N           |                              | 1/4                   | 3/8                 | .32      | .44    | 1.92 | 1.18 | .16         |
| 364HB-5N             | 364HB-5PP                    | 5/16                  | 5/16                | .36      | .36    | 2.22 | 1.17 | .22         |
| 364HB-6-3N           | 364HB-6-3PP                  | 3/8                   | 3/16                | .43      | .24    | 2.23 | 1.04 | .09         |
| 364HB-6-4N           | 364HB-6-4PP                  | 3/8                   | 1/4                 | .44      | .32    | 1.92 | 1.18 | .16         |
| 364HB-6N             | 364HB-6PP                    | 3/8                   | 3/8                 | .43      | .43    | 2.22 | 1.18 | .25         |
| 364HB-6-8N           | 364HB-6-8PP                  | 3/8                   | 1/2                 | .43      | .56    | 2.22 | 1.27 | .25         |
| 364HB-8-6N           | 364HB-8-6PP                  | 1/2                   | 3/8                 | .55      | .43    | 2.52 | 1.27 | .25         |
| 364HB-8N             | 364HB-8PP                    | 1/2                   | 1/2                 | .56      | .56    | 2.52 | 1.27 | .37         |
| 364HB-10N            | 364HB-10PP                   | 5/8                   | 5/8                 | .66      | .66    | 2.74 | 1.37 | .46         |
| 364HB-12N            |                              | 3/4                   | 3/4                 | .81      | .81    | 2.98 | 1.50 | .58         |
| 364HB-16N            |                              | 1                     | 1                   | 1.06     | 1.06   | 3.10 | 1.55 | .81         |
| 364HB-20N            |                              | 1-1/4                 | 1-1/4               | 1.25     | 1.25   | 5.29 | 2.64 | 1.00        |
| 364HB-24N            |                              | 1-1/2                 | 1-1/2               | 1.51     | 1.51   | 5.48 | 2.74 | 1.25        |

\*Note: 1/8" tube connections contain one barb.



### Union Elbow 365HB

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. 1 | TUBE OR HOSE I.D. 2 | O.D. 1 | O.D. 2 | M    | N    | FLOW DIA. D |
|----------------------|------------------------------|---------------------|---------------------|--------|--------|------|------|-------------|
| 365HB-3N             | 365HB-3PP                    | 3/16                | 3/16                | .25    | .25    | .75  | .75  | .12         |
| 365HB-4N             | 365HB-4PP                    | 1/4                 | 1/4                 | .31    | .31    | 1.13 | 1.13 | .15         |
| 365HB-5N             | 365HB-5PP                    | 5/16                | 5/16                | .38    | .37    | 1.19 | 1.19 | .22         |
| 365HB-6N             | 365HB-6PP                    | 3/8                 | 3/8                 | .43    | .43    | 1.26 | 1.26 | .25         |
| 365HB-8-4N           | 365HB-8-4PP                  | 1/2                 | 1/4                 | .55    | .31    | 1.26 | 1.24 | .16         |
| 365HB-8-6N           | 365HB-8-6PP                  | 1/2                 | 3/8                 | .55    | .43    | 1.26 | 1.27 | .25         |
| 365HB-8N             | 365HB-8PP                    | 1/2                 | 1/2                 | .55    | .55    | 1.26 | 1.26 | .37         |
| 365HB-10N            | 365HB-10PP                   | 5/8                 | 5/8                 | .66    | .66    | 1.37 | 1.37 | .46         |
| 365HB-12N            | 365HB-12PP                   | 3/4                 | 3/4                 | .80    | .80    | 1.48 | 1.48 | .57         |
| 365HB-16N            |                              | 1                   | 1                   | 1.07   | 1.07   | 1.50 | 1.50 | .81         |
| 365HB-20N            |                              | 1-1/4               | 1-1/4               | 1.25   | 1.25   | 2.63 | 2.63 | 1.00        |
| 365HB-24N            |                              | 1-1/2               | 1-1/2               | 1.50   | 1.50   | 2.74 | 2.74 | 1.25        |



### Hex Plug 318P

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | NPT PIPE THREAD | C HEX | L    |
|----------------------|------------------------------|-----------------|-------|------|
| 318P-2N              | 318P-2PP                     | 1/8             | 7/16  | .62  |
| 318P-4N              | 318P-4PP                     | 1/4             | 9/16  | .75  |
| 318P-6N              | 318P-6PP                     | 3/8             | 11/16 | .74  |
| 318P-8N              | 318P-8PP                     | 1/2             | 7/8   | .87  |
| 318P-12N             | 318P-12PP                    | 3/4             | 1-1/8 | .86  |
| 318P-16N             | 318P-16PP                    | 1               | 1-3/8 | 1.05 |
| 318P-20N             | 318P-20PP                    | 1-1/4           | 1-1/2 | 1.44 |
| 318P-24N             | 318P-24PP                    | 1-1/2           | 1-3/4 | 1.61 |



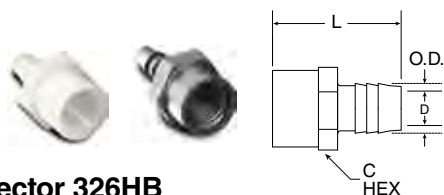
### Reducer Bushing 309P

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | EXTERNAL NPT PIPE THREAD | INTERNAL NPT PIPE THREAD | C HEX | L   |
|----------------------|------------------------------|--------------------------|--------------------------|-------|-----|
| 309P-4-2N            | 309P-4-2PP                   | 1/4                      | 1/8                      | 9/16  | .75 |
| 309P-6-2N            | 309P-6-2PP                   | 3/8                      | 1/8                      | 11/16 | .74 |
| 309P-6-4N            | 309P-6-4PP                   | 3/8                      | 1/4                      | 11/16 | .75 |
| 309P-8-2N            | 309P-8-2PP                   | 1/2                      | 1/8                      | 7/8   | .88 |
| 309P-8-4N            | 309P-8-4PP                   | 1/2                      | 1/4                      | 7/8   | .87 |
| 309P-8-6N            | 309P-8-6PP                   | 1/2                      | 3/8                      | 7/8   | .87 |
| 309P-12-2N           | 309P-12-2PP                  | 3/4                      | 1/8                      | 1-1/8 | .86 |
| 309P-12-4N           | 309P-12-4PP                  | 3/4                      | 1/4                      | 1-1/8 | .75 |
| 309P-12-6N           | 309P-12-6PP                  | 3/4                      | 3/8                      | 1-1/8 | .85 |
| 309P-12-8N           | 309P-12-8PP                  | 3/4                      | 1/2                      | 1-1/8 | .87 |



### Hex Nipple 316P

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | NPT PIPE THREAD SIDE 1 | NPT PIPE THREAD SIDE 2 | C HEX  | L    | FLOW DIA. D |
|----------------------|------------------------------|------------------------|------------------------|--------|------|-------------|
| 316P-2N              | 316P-2PP                     | 1/8                    | 1/8                    | 7/16   | .99  | .22         |
| 316P-4-2N            | 316P-4-2PP                   | 1/4                    | 1/8                    | 9/16   | 1.13 | .22         |
| 316P-4N              | 316P-4PP                     | 1/4                    | 1/4                    | 9/16   | 1.24 | .31         |
| 316P-6-2N            | 316P-6-2PP                   | 3/8                    | 1/8                    | 11/16  | 1.11 | .22         |
| 316P-6-4N            | 316P-6-4PP                   | 3/8                    | 1/4                    | 11/16  | 1.25 | .31         |
| 316P-6N              | 316P-6PP                     | 3/8                    | 3/8                    | 11/16  | 1.23 | .43         |
| 316P-8-2N            | 316P-8-2PP                   | 1/2                    | 1/8                    | 7/8    | 1.23 | .22         |
| 316P-8-4N            | 316P-8-4PP                   | 1/2                    | 1/4                    | 7/8    | 1.36 | .31         |
| 316P-8-6N            | 316P-8-6PP                   | 1/2                    | 3/8                    | 7/8    | 1.35 | .43         |
| 316P-8N              | 316P-8PP                     | 1/2                    | 1/2                    | 7/8    | 1.45 | .59         |
| 316P-12-6N           | 316P-12-6PP                  | 3/4                    | 3/8                    | 1- 1/8 | 1.36 | .43         |
| 316P-12-8N           | 316P-12-8PP                  | 3/4                    | 1/2                    | 1- 1/8 | 1.47 | .59         |
| 316P-12N             | 316P-12PP                    | 3/4                    | 3/4                    | 1- 1/8 | 1.48 | .74         |
| 316P-16N             | 316P-16PP                    | 1                      | 1                      | 1- 3/8 | 1.85 | .98         |



### Female Connector 326HB

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | NPT PIPE THREAD | O.D. | C HEX  | L    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|-----------------|------|--------|------|-------------|
| 326HB-3-2N           | 326HB-3-2PP                  | 3/16              | 1/8             | .25  | 5/8    | 1.29 | .12         |
| 326HB-3-4N           | 326HB-3-4PP                  | 3/16              | 1/4             | .25  | 3/4    | 1.31 | .13         |
| 326HB-4-2N           | 326HB-4-2PP                  | 1/4               | 1/8             | .31  | 5/8    | 1.51 | .16         |
| 326HB-4-4N           | 326HB-4-4PP                  | 1/4               | 1/4             | .31  | 3/4    | 1.52 | .15         |
| 326HB-4-6N           | 326HB-4-6PP                  | 1/4               | 3/8             | .31  | 1      | 1.73 | .15         |
| 326HB-4-8N           | 326HB-4-8PP                  | 1/4               | 1/2             | .31  | 1-1/8  | 1.74 | .15         |
| 326HB-6-2N           | 326HB-6-2PP                  | 3/8               | 1/8             | .44  | 5/8    | 1.51 | .25         |
| 326HB-6-4N           | 326HB-6-4PP                  | 3/8               | 1/4             | .43  | 3/4    | 1.52 | .25         |
| 326HB-6-6N           | 326HB-6-6PP                  | 3/8               | 3/8             | .43  | 1      | 1.73 | .25         |
| 326HB-6-8N           | 326HB-6-8PP                  | 3/8               | 1/2             | .43  | 1-1/8  | 1.74 | .25         |
| 326HB-8-4N           | 326HB-8-4PP                  | 1/2               | 1/4             | .55  | 3/4    | 1.52 | .37         |
| 326HB-8-6N           | 326HB-8-6PP                  | 1/2               | 3/8             | .55  | 1      | 1.74 | .37         |
| 326HB-8-8N           | 326HB-8-8PP                  | 1/2               | 1/2             | .56  | 1- 1/8 | 1.74 | .37         |
| 326HB-10-6N          | 326HB-10-6PP                 | 5/8               | 3/8             | .66  | 1      | 1.61 | .46         |
| 326HB-10-8N          | 326HB-10-8PP                 | 5/8               | 1/2             | .66  | 1- 1/8 | 1.73 | .46         |
| 326HB-12-8N          | 326HB-12-8PP                 | 3/4               | 1/2             | .80  | 1- 1/8 | 1.86 | .62         |
| 326HB-12-12N         | 326HB-12-12PP                | 3/4               | 3/4             | .80  | 1- 1/8 | 1.85 | .62         |



### Male Connector 325HB

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | NPT PIPE THD. | O.D. | C HEX  | L    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|---------------|------|--------|------|-------------|
| 325HB-3-2N           | 325HB-3-2PP                  | 3/16              | 1/8           | .25  | 7/16   | 1.49 | .12         |
| 325HB-3-4N           | 325HB-3-4PP                  | 3/16              | 1/4           | .25  | 9/16   | 1.61 | .13         |
| 325HB-4-2N           | 325HB-4-2PP                  | 1/4               | 1/8           | .31  | 7/16   | 1.50 | .15         |
| 325HB-4-4N           | 325HB-4-4PP                  | 1/4               | 1/4           | .31  | 9/16   | 1.60 | .16         |
| 325HB-4-6N           |                              | 1/4               | 3/8           | .31  | 11/16  | 1.62 | .16         |
| 325HB-4-8N           | 325HB-4-8PP                  | 1/4               | 1/2           | .31  | 7/8    | 1.73 | .15         |
| 325HB-4-12N          |                              | 1/4               | 3/4           | .31  | 1- 1/8 | 1.74 | .16         |
| 325HB-5-2N           |                              | 5/16              | 1/8           | .37  | 7/16   | 1.50 | .22         |
| 325HB-5-4N           |                              | 5/16              | 1/4           | .37  | 9/16   | 1.62 | .22         |
| 325HB-5-6N           | 325HB-5-6PP                  | 5/16              | 3/8           | .37  | 11/16  | 1.60 | .21         |
| 325HB-6-2N           | 325HB-6-2PP                  | 3/8               | 1/8           | .43  | 7/16   | 1.49 | .25         |
| 325HB-6-4N           | 325HB-6-4PP                  | 3/8               | 1/4           | .43  | 9/16   | 1.62 | .25         |
| 325HB-6-6N           | 325HB-6-6PP                  | 3/8               | 3/8           | .43  | 11/16  | 1.61 | .25         |
| 325HB-6-8N           | 325HB-6-8PP                  | 3/8               | 1/2           | .43  | 7/8    | 1.73 | .25         |
| 325HB-6-12N          | 325HB-6-12PP                 | 3/8               | 3/4           | .43  | 1- 1/8 | 1.72 | .25         |
| 325HB-8-4N           | 325HB-8-4PP                  | 1/2               | 1/4           | .55  | 9/16   | 1.61 | .35         |
| 325HB-8-6N           | 325HB-8-6PP                  | 1/2               | 3/8           | .55  | 11/16  | 1.60 | .37         |
| 325HB-8-8N           | 325HB-8-8PP                  | 1/2               | 1/2           | .55  | 7/8    | 1.73 | .37         |
| 325HB-8-12N          | 325HB-8-12PP                 | 1/2               | 3/4           | .55  | 1- 1/8 | 1.72 | .37         |
| 325HB-10-6N          | 325HB-10-6PP                 | 5/8               | 3/8           | .66  | 11/16  | 1.61 | .46         |
| 325HB-10-8N          | 325HB-10-8PP                 | 5/8               | 1/2           | .66  | 7/8    | 1.73 | .46         |
| 325HB-10-12N         | 325HB-10-12PP                | 5/8               | 3/4           | .67  | 1- 1/8 | 1.82 | .46         |
| 325HB-12-8N          | 325HB-12-8PP                 | 3/4               | 1/2           | .80  | 7/8    | 1.86 | .62         |
| 325HB-12-12N         | 325HB-12-12PP                | 3/4               | 3/4           | .80  | 1- 1/8 | 1.85 | .62         |
| 325HB-12-16N         |                              | 3/4               | 1             | .82  | 1- 3/8 | 2.35 | .59         |
| 325HB-12-20N         |                              | 3/4               | 1- 1/4        | .86  | 1- 1/2 | 3.47 | .59         |
| 325HB-12-24N         |                              | 3/4               | 1- 1/2        | .86  | 1- 3/4 | 3.66 | .59         |
| 325HB-16-8N          |                              | 1                 | 1/2           | 1.08 | 1- 1/8 | 2.49 | .77         |
| 325HB-16-12N         |                              | 1                 | 3/4           | 1.07 | 1- 1/8 | 2.30 | .81         |
| 325HB-16-16N         |                              | 1                 | 1             | 1.07 | 1- 3/8 | 2.35 | .81         |
| 325HB-16-20N         |                              | 1                 | 1- 1/4        | 1.11 | 1- 1/2 | 3.45 | .78         |
| 325HB-16-24N         |                              | 1                 | 1- 1/2        | 1.11 | 1- 3/4 | 3.63 | .78         |
| 325HB-20-20N         |                              | 1- 1/4            | 1- 1/4        | 1.36 | 1- 1/2 | 3.47 | 1.04        |
| 325HB-20-24N         |                              | 1- 1/4            | 1- 1/2        | 1.36 | 1- 3/4 | 3.64 | 1.04        |
| 325HB-24-20N         |                              | 1- 1/2            | 1- 1/4        | 1.60 | 1- 1/2 | 3.45 | 1.28        |
| 325HB-24-24N         |                              | 1- 1/2            | 1- 1/2        | 1.61 | 1- 3/4 | 3.63 | 1.28        |



**Male Branch Tee 372HB**

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | NPT PIPE THD. | O.D. | C HEX | L    | N    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|---------------|------|-------|------|------|-------------|
| 372HB-3-2N           |                              | 3/16              | 1/8           | .25  | 7/16  | 1.94 | 1.06 | .13         |
| 372HB-3-4N           |                              | 3/16              | 1/4           | .24  | 9/16  | 1.93 | 1.17 | .13         |
| 372HB-4-2N           | 372HB-4-2PP                  | 1/4               | 1/8           | .32  | 7/16  | 1.92 | 1.06 | .16         |
| 372HB-4-4N           | 372HB-4-4PP                  | 1/4               | 1/4           | .32  | 9/16  | 1.92 | 1.16 | .16         |
| 372HB-4-6N           | 372HB-4-6PP                  | 1/4               | 3/8           | .32  | 11/16 | 1.92 | 1.18 | .16         |
| 372HB-6-4N           | 372HB-6-4PP                  | 3/8               | 1/4           | .43  | 9/16  | 2.22 | 1.18 | .25         |
| 372HB-6-6N           | 372HB-6-6PP                  | 3/8               | 3/8           | .43  | 11/16 | 2.22 | 1.17 | .25         |
| 372HB-6-8N           | 372HB-6-8PP                  | 3/8               | 1/2           | .43  | 7/8   | 2.22 | 1.29 | .25         |
| 372HB-8-4N           | 372HB-8-4PP                  | 1/2               | 1/4           | .55  | 9/16  | 2.52 | 1.17 | .37         |
| 372HB-8-6N           | 372HB-8-6PP                  | 1/2               | 3/8           | .56  | 11/16 | 2.52 | 1.17 | .37         |
| 372HB-8-8N           | 372HB-8-8PP                  | 1/2               | 1/2           | .55  | 7/8   | 2.52 | 1.30 | .37         |
| 372HB-12-12N         | 372HB-12-12PP                | 3/4               | 3/4           | .81  | 1-1/8 | 2.97 | 1.92 | .58         |
| 372HB-16-8N          |                              | 1                 | 1/2           | 1.07 | 7/8   | 3.10 | 1.74 | .81         |
| 372HB-16-12N         |                              | 1                 | 3/4           | 1.07 | 1-1/8 | 3.10 | 1.92 | .81         |
| 372HB-16-16N         |                              | 1                 | 1             | 1.07 | 1-3/8 | 3.11 | 1.98 | .81         |



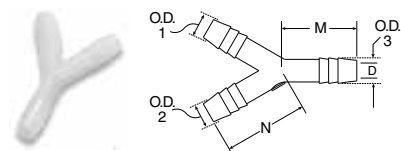
**Female Elbow 370HB**

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | NPT PIPE THD. | O.D. | C HEX | M    | N    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|---------------|------|-------|------|------|-------------|
| 370HB-4-2N           | 370HB-4-2PP                  | 1/4               | 1/8           | .31  | 5/8   | 1.19 | 1.07 | .16         |
| 370HB-4-4N           | 370HB-4-4PP                  | 1/4               | 1/4           | .31  | 3/4   | 1.18 | 1.08 | .16         |
| 370HB-4-6N           | 370HB-4-6PP                  | 1/4               | 3/8           | .31  | 1     | 1.16 | 1.30 | .16         |
| 370HB-4-8N           | 370HB-4-8PP                  | 1/4               | 1/2           | .31  | 1-1/8 | 1.18 | 1.30 | .15         |
| 370HB-6-2N           | 370HB-6-2PP                  | 3/8               | 1/8           | .43  | 5/8   | 1.18 | 1.06 | .25         |
| 370HB-6-4N           | 370HB-6-4PP                  | 3/8               | 1/4           | .44  | 3/4   | 1.18 | 1.06 | .25         |
| 370HB-6-6N           | 370HB-6-6PP                  | 3/8               | 3/8           | .43  | 1     | 1.18 | 1.29 | .25         |
| 370HB-6-8N           | 370HB-6-8PP                  | 3/8               | 1/2           | .43  | 1-1/8 | 1.18 | 1.29 | .25         |
| 370HB-8-4N           | 370HB-8-4PP                  | 1/2               | 1/4           | .55  | 3/4   | 1.25 | 1.22 | .37         |
| 370HB-8-6N           | 370HB-8-6PP                  | 1/2               | 3/8           | .55  | 1     | 1.25 | 1.44 | .37         |
| 370HB-8-8N           | 370HB-8-8PP                  | 1/2               | 1/2           | .55  | 1-1/8 | 1.25 | 1.45 | .37         |
| 370HB-8-12N          | 370HB-8-12PP                 | 1/2               | 3/4           | .55  | 1-3/8 | 1.26 | 1.72 | .37         |
| 370HB-12-12N         | 370HB-12-12PP                | 3/4               | 3/4           | .80  | 1-3/8 | 1.38 | 1.84 | .59         |



**Male Elbow 329HB**

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | NPT PIPE THD. | O.D. | C HEX | M    | N    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|---------------|------|-------|------|------|-------------|
| 329HB-3-2N           | 329HB-3-2PP                  | 3/16              | 1/8           | .25  | 7/16  | .76  | 1.06 | .12         |
| 329HB-3-4N           |                              | 3/16              | 1/4           | .25  | 9/16  | .76  | 1.17 | .13         |
| 329HB-4-2N           | 329HB-4-2PP                  | 1/4               | 1/8           | .31  | 7/16  | 1.18 | 1.04 | .16         |
| 329HB-4-4N           | 329HB-4-4PP                  | 1/4               | 1/4           | .31  | 9/16  | 1.18 | 1.16 | .22         |
| 329HB-4-6N           | 329HB-4-6PP                  | 1/4               | 3/8           | .31  | 11/16 | 1.18 | 1.17 | .15         |
| 329HB-4-8N           | 329HB-4-8PP                  | 1/4               | 1/2           | .32  | 7/8   | 1.18 | 1.30 | .15         |
| 329HB-5-2N           |                              | 5/16              | 1/8           | .37  | 7/16  | 1.18 | 1.06 | .22         |
| 329HB-6-2N           | 329HB-6-2PP                  | 3/8               | 1/8           | .43  | 7/16  | 1.18 | 1.05 | .25         |
| 329HB-6-4N           | 329HB-6-4PP                  | 3/8               | 1/4           | .43  | 9/16  | 1.18 | 1.16 | .25         |
| 329HB-6-6N           | 329HB-6-6PP                  | 3/8               | 3/8           | .43  | 11/16 | 1.17 | 1.17 | .25         |
| 329HB-6-8N           | 329HB-6-8PP                  | 3/8               | 1/2           | .43  | 7/8   | 1.18 | 1.28 | .25         |
| 329HB-8-4N           | 329HB-8-4PP                  | 1/2               | 1/4           | .55  | 9/16  | 1.27 | 1.16 | .37         |
| 329HB-8-6N           | 329HB-8-6PP                  | 1/2               | 3/8           | .56  | 11/16 | 1.26 | 1.16 | .37         |
| 329HB-8-8N           | 329HB-8-8PP                  | 1/2               | 1/2           | .55  | 7/8   | 1.25 | 1.29 | .37         |
| 329HB-8-12N          | 329HB-8-12PP                 | 1/2               | 3/4           | .55  | 1-1/8 | 1.30 | 1.89 | .37         |
| 329HB-10-6N          |                              | 5/8               | 3/8           | .67  | 11/16 | 1.27 | 1.18 | .47         |
| 329HB-10-8N          | 329HB-10-8PP                 | 5/8               | 1/2           | .68  | 7/8   | 1.30 | 1.73 | .48         |
| 329HB-10-12N         | 329HB-10-12PP                | 5/8               | 3/4           | .69  | 1-1/8 | 1.32 | 1.92 | .49         |
| 329HB-12-8N          | 329HB-12-8PP                 | 3/4               | 1/2           | .81  | 7/8   | 1.51 | 1.74 | .58         |
| 329HB-12-12N         | 329HB-12-12PP                | 3/4               | 3/4           | .81  | 1-1/8 | 1.50 | 1.91 | .58         |
| 329HB-12-16N         |                              | 3/4               | 1             | .82  | 1-3/8 | 1.49 | 1.98 | .58         |
| 329HB-12-20N         |                              | 3/4               | 1-1/4         | .86  | 1-1/2 | 1.52 | 2.39 | .59         |
| 329HB-12-24N         |                              | 3/4               | 1-1/2         | .85  | 1-1/2 | 2.26 | 3.09 | .59         |
| 329HB-16-8N          |                              | 1                 | 1/2           | 1.12 | 7/8   | 1.58 | 1.78 | .86         |
| 329HB-16-12N         |                              | 1                 | 3/4           | 1.11 | 1-1/8 | 1.58 | 1.93 | .86         |
| 329HB-16-16N         |                              | 1                 | 1             | 1.08 | 1-3/8 | 1.55 | 1.98 | .81         |
| 329HB-16-20N         |                              | 1                 | 1-1/4         | 1.12 | 1-1/2 | 2.28 | 2.93 | .84         |
| 329HB-16-24N         |                              | 1                 | 1-1/2         | 1.12 | 1-1/2 | 2.27 | 3.11 | .84         |
| 329HB-20-20N         |                              | 1-1/4             | 1-1/4         | 1.25 | 1-1/2 | 2.63 | 2.94 | 1.00        |
| 329HB-20-24N         |                              | 1-1/4             | 1-1/2         | 1.36 | 1-1/2 | 2.63 | 3.11 | 1.08        |
| 329HB-24-20N         |                              | 1-1/2             | 1-1/4         | 1.60 | 1-1/2 | 2.77 | 2.93 | 1.30        |
| 329HB-24-24N         |                              | 1-1/2             | 1-1/2         | 1.60 | 1-1/2 | 2.77 | 3.10 | 1.30        |



**Union Y 362HB**

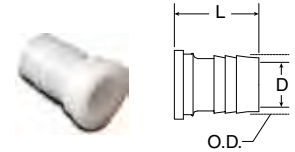
| WHITE NYLON PART NO. | TUBE OR HOSE I.D. 1 & 2 | TUBE OR HOSE I.D. 3 | O.D. 1 & 2 | O.D. 3 | M    | N    | FLOW DIA. D |
|----------------------|-------------------------|---------------------|------------|--------|------|------|-------------|
| 362HB-4N             | 1/4                     | 1/4                 | .31        | .31    | 1.13 | 1.13 | .16         |
| 362HB-6N             | 3/8                     | 3/8                 | .43        | .43    | 1.25 | 1.40 | .25         |
| 362HB-8N             | 1/2                     | 1/2                 | .55        | .55    | 1.25 | 1.50 | .38         |



**Ball Nose Hose Barb Stem 328HB**

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | TUBE OR HOSE I.D. | SWIVEL NUT NPT PIPE THREAD | O.D. | L    | FLOW DIA. D |
|----------------------|------------------------------|-------------------|----------------------------|------|------|-------------|
| 328HB-4BN            | 328HB-4BPP                   | 1/4               | 1/4 *                      | .30  | 1.19 | .19         |
| 328HB-4-8BN          | 328HB-4-8BPP                 | 1/4               | 1/2 *                      | .30  | 1.29 | .15         |
| 328HB-6BN            | 328HB-6BPP                   | 3/8               | 3/8 *                      | .56  | 1.41 | .25         |
| 328HB-8BN            | 328HB-8BPP                   | 1/2               | 1/2 *                      | .67  | 1.30 | .37         |

\*Use with hose barb swivel nut (31HB-XX) for desired NPT thread.



**Garden Hose Swivel Hose Barb Stem 325GHSV**

| WHITE NYLON PART NO. | TUBE OR HOSE I.D. | GARDEN HOSE THREAD | O.D. | L    | FLOW DIA. D |
|----------------------|-------------------|--------------------|------|------|-------------|
| 325GHSV-4-12BN*      | 1/4               | 3/4                | .31  | 1.16 | .16         |
| 325GHSV-6-12BN*      | 3/8               | 3/4                | .44  | 1.17 | .25         |
| 325GHSV-8-12BN*      | 1/2               | 3/4                | .56  | 1.17 | .38         |
| 325GHSV-10-12BN*     | 5/8               | 3/4                | .64  | 1.18 | .47         |
| 325GHSV-12-12BN*     | 3/4               | 3/4                | .81  | 1.18 | .62         |

\*Use with Garden Hose washer (30GH-12) and Garden Hose Nut (31GH-12N)



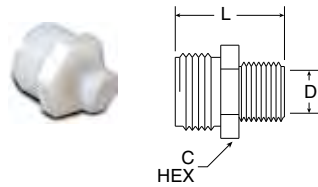
**Hose Barb Swivel Nut 31HB**

| WHITE NYLON PART NO. | BLACK POLYPROPYLENE PART NO. | NPT PIPE THREAD | C HEX   | L   |
|----------------------|------------------------------|-----------------|---------|-----|
| 31HB-4N              | 31HB-4PP                     | 1/4             | 3/4     | .62 |
| 31HB-6N              | 31HB-6PP                     | 3/8             | 7/8     | .63 |
| 31HB-8N              | 31HB-8PP                     | 1/2             | 1- 1/16 | .75 |



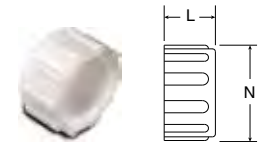
**Garden Hose Nut 31GH**

| WHITE NYLON PART NO. | GARDEN HOSE THREAD | L   | DIA. N |
|----------------------|--------------------|-----|--------|
| 31GH-12N             | 3/4                | .74 | 1.38   |



**Male Garden Hose - Male Pipe Adapter 316GH**

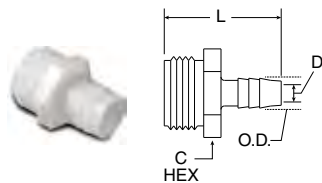
| WHITE NYLON PART NO. | GARDEN HOSE THREAD | NPT PIPE THREAD | C HEX  | L    | FLOW DIA. D |
|----------------------|--------------------|-----------------|--------|------|-------------|
| 316GH-12-6N          | 3/4                | 3/8             | 1- 1/8 | 1.33 | .44         |
| 316GH-12-8N          | 3/4                | 1/2             | 1- 1/8 | 1.44 | .59         |
| 316GH-12-12N         | 3/4                | 3/4             | 1- 1/8 | 1.48 | .75         |



**Garden Hose Cap 313GH**

| WHITE NYLON PART NO. | GARDEN HOSE THREAD | L   | DIA. N |
|----------------------|--------------------|-----|--------|
| 313GH-12N**          | 3/4                | .74 | 1.38   |

\*\*Use with Garden Hose Washer (30GH-12)



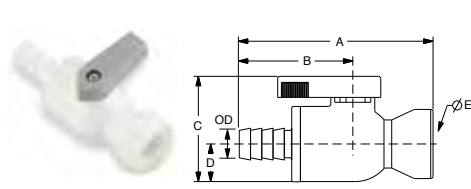
**Male Garden Hose - Hose Barb 325GH**

| WHITE NYLON PART NO. | TUBE OR HOSE I.D. | GARDEN HOSE THREAD | O.D. | C HEX  | L    | FLOW DIA. D |
|----------------------|-------------------|--------------------|------|--------|------|-------------|
| 325GH-4-12N          | 1/4               | 3/4                | .31  | 1- 1/8 | 1.70 | .16         |
| 325GH-6-12N          | 3/8               | 3/4                | .44  | 1- 1/8 | 1.69 | .25         |
| 325GH-8-12N          | 1/2               | 3/4                | .55  | 1- 1/8 | 1.68 | .38         |
| 325GH-10-12N         | 5/8               | 3/4                | .64  | 1- 1/8 | 1.70 | .47         |
| 325GH-12-12N         | 3/4               | 3/4                | .81  | 1- 1/8 | 1.70 | .62         |



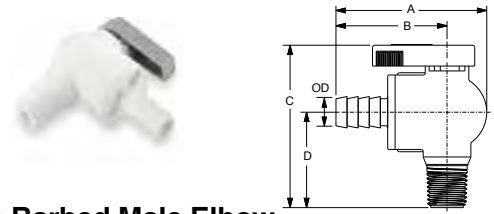
**Garden Hose Washer 30GH**

| WHITE TPE PART NO. | GARDEN HOSE THREAD | L   |
|--------------------|--------------------|-----|
| 30GH-12            | 3/4                | .13 |



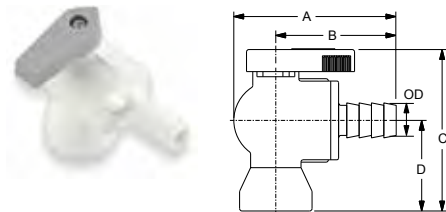
**VFC - Valve Barbed Female Connector**

| PART NO.  | HOSE I.D. | NPTF THD. | O.D. | A    | B    | C    | D   | ØE THRU HOLE MIN. |
|-----------|-----------|-----------|------|------|------|------|-----|-------------------|
| PBPP4VFC4 | 1/4       | 1/4       | .31  | 2.76 | 1.60 | 1.41 | .50 | .15               |
| PBPP6VFC6 | 3/8       | 3/8       | .43  | 2.79 | 1.60 | 1.41 | .50 | .19               |



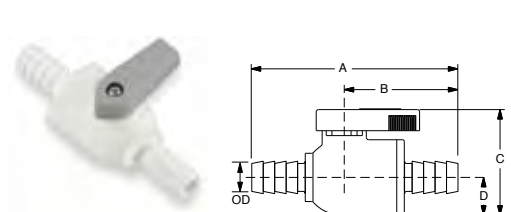
**VME - Valve Barbed Male Elbow**

| PART NO.  | HOSE I.D. | NPTF THD. | O.D. | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-----------|-----------|-----------|------|------|------|------|------|-------------------|
| PBPP4VME4 | 1/4       | 1/4       | .31  | 2.13 | 1.60 | 2.18 | 1.28 | .15               |
| PBPP6VME6 | 3/8       | 3/8       | .43  | 2.13 | 1.60 | 2.18 | 1.28 | .19               |



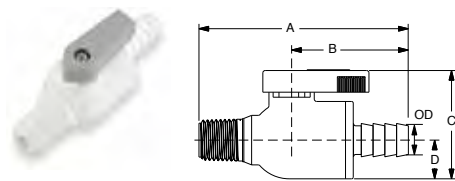
**VFE - Valve Barbed Female Elbow**

| PART NO.  | HOSE I.D. | NPTF THD. | O.D. | A    | B    | C    | D    | ØE THRU HOLE MIN. |
|-----------|-----------|-----------|------|------|------|------|------|-------------------|
| PBPP4VFE4 | 1/4       | 1/4       | .31  | 2.13 | 1.60 | 2.05 | 1.15 | .15               |
| PBPP6VFE4 | 3/8       | 1/4       | .43  | 2.13 | 1.60 | 2.05 | 1.15 | .15               |
| PBPP6VFE6 | 3/8       | 3/8       | .43  | 2.13 | 1.60 | 2.18 | 1.28 | .19               |



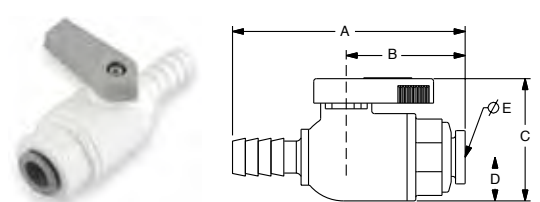
**VUC - Valve Barbed Union Connector**

| PART NO.  | HOSE I.D. | O.D. | A    | B    | C    | D   | ØE THRU HOLE MIN. |
|-----------|-----------|------|------|------|------|-----|-------------------|
| PBPP4VUC4 | 1/4       | .31  | 2.91 | 1.60 | 1.42 | .50 | .15               |
| PBPP6VUC6 | 3/8       | .43  | 2.91 | 1.60 | 1.42 | .50 | .19               |
| PBPP8VUC8 | 1/2       | .55  | 2.91 | 1.60 | 1.42 | .50 | .25               |



**VMC - Valve Barbed Male Connector**

| PART NO.  | HOSE I.D. | NPTF THD. | O.D. | A    | B    | C    | D   | ØE THRU HOLE MIN. |
|-----------|-----------|-----------|------|------|------|------|-----|-------------------|
| PBPP4VMC4 | 1/4       | 1/4       | .31  | 2.79 | 1.60 | 1.42 | .50 | .15               |
| PBPP6VMC6 | 3/8       | 3/8       | .43  | 2.79 | 1.60 | 1.42 | .50 | .19               |



**VUCPB - Valve Union Connector Barbed x Tube**

| PART NO.    | HOSE ID | TUBE OD | OD  | A    | B    | C    | D   | ØE THRU HOLE MIN. |
|-------------|---------|---------|-----|------|------|------|-----|-------------------|
| LFPP4VUCPB4 | 1/4     | 1/4     | .31 | 2.40 | 1.08 | 1.42 | .50 | .15               |
| LFPP6VUCPB6 | 3/8     | 3/8     | .43 | 2.63 | 1.32 | 1.42 | .50 | .19               |