

## PNEUFIT 12 Series Push-in Fittings

- Positive tube connection
- Wide range of types available
- Reliable and corrosion resistant
- Very compact units
- Port size:  $\varnothing$  1/8" ... 1/2",  $\varnothing$  4 ... 12 mm tube size, BSP and NPT threads
- All taper threads pre-coated with non-PTFE based sealant
- Straight Adaptors feature internal hexagon for Allen key
- Silicon free, 'O'-rings



### Technical features

**Medium:**  
Compressed air  
(for other media please consult Technical Department)

**Operating pressure:**  
Vacuum; ... 18 bar (... 261 psi)  
dependent upon operating specification of tubing

**Vacuum:**  
-750mmHg

**Operating temperature:**  
-20 ... +80°C (-4 ... +176°F)  
"Special" low temperature options  
contact Norgren Technical service

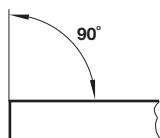
**Tube sizes:**  
1/8", 5/32", 3/16", 1/4",  
5/16", 3/8", 1/2" O/D

**Standard:**  
Conforms to BS ISO 14743

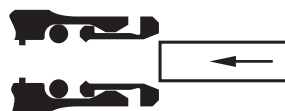
**Tubing types:**  
PA11 or 12, PU and other  
plasticised or unplasticised tubing  
which conforms to the tolerances  
specified in BS 5409, Part 1, 1976,  
light and normal duty, DIN 73378,  
DIN 74234,  
NFE 49-100

**Materials:**  
Body: nickel plated brass  
Collet: nickel plated brass  
'O'-ring: VMQ free NBR  
(FKM on request)  
Washer (Banjo): PA  
Thread sealant: Non-PTFE  
Elbow flow controls and function  
fittings: See individual product  
details

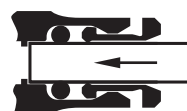
### Method of assembly



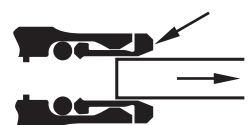
1. Ensure that the end of the tube is cut square and is free from burrs.



2. Push the tube through the collet into the fitting.

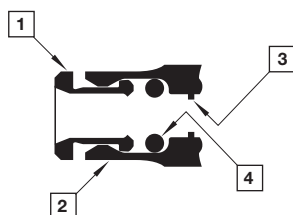


3. Continue pushing the tube through the 'O'-ring until it bottoms on the tube stop then pull back.



4. To disconnect push the tube into the fitting, hold down the collet and withdraw the tube.

### Components



- 1 Collet
- 2 Body
- 3 Tube stop
- 4 'O'-ring

### Option selector

|             |                    |                       |
|-------------|--------------------|-----------------------|
| Thread type | 12 ★ ★ ★ ★ ★ ★ ★ ★ | Thread size/tube size |
| Shape       |                    | Thread size/tube size |

## Straight adaptors and connectors

|                                                                                                                                                                                |                                                                                                                                                                                 |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                |                                                                                                                                                                    |                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Straight adaptor<br/>Inch O/D tube to male<br/>NPTF taper<br/>12425</p>  <p>Page 3</p>     | <p>Straight adaptor<br/>Metric O/D Tube to NPTF<br/>(male) thread<br/>10425</p>  <p>Page 3</p> | <p>Straight adaptor<br/>Inch O/D tube to<br/>BSPT thread<br/>10125/12125</p>  <p>Page 3</p> | <p>Straight adaptor Inch O/D<br/>tube to 10-32 UNF thread<br/>12425</p>  <p>Page 3</p> | <p>Straight adaptor Metric<br/>O/D tube to 10-32 UNF<br/>thread<br/>12425</p>  <p>Page 3</p> | <p>Straight Adaptor<br/>(internal hex)<br/>1242A</p>  <p>Page 4</p>             | <p>Straight adaptor<br/>O/D tube to female NPTF<br/>thread<br/>12426</p>  <p>Page 4</p> |
| <p>Female Bulkhead Adap-<br/>tor Inch<br/>O/D tube to NPT female<br/>12432</p>  <p>Page 4</p> | <p>Cap / Female<br/>Plug Fitting<br/>12012</p>  <p>Page 4</p>                                  | <p>Straight connector<br/>O/D tube to O/D<br/>tube<br/>12020</p>  <p>Page 4</p>             | <p>Tube end reducer<br/>tube stem to O/D tube<br/>12023</p>  <p>Page 4</p>             | <p>Tube end expander tube<br/>stem<br/>to O/D tube 12023</p>  <p>Page 4</p>                  | <p>Bulkhead connector<br/>O/D tube to O/D<br/>tube<br/>12029</p>  <p>Page 5</p> | <p>Straight connector<br/>inch tube to mm tube<br/>12037</p>  <p>Page 5</p>             |
| <p>Plug<br/>(Nickel plated brass)<br/>12004</p>  <p>Page 5</p>                                | <p>Projective cap<br/>10000</p>  <p>Page 5</p>                                                 | <p>Cartridge Fitting<br/>12036</p>  <p>Page 5</p>                                           |                                                                                                                                                                         |                                                                                                                                                                                |                                                                                                                                                                    |                                                                                                                                                                            |

## Elbow adaptors, connectors and banjos

|                                                                                                                                                                             |                                                                                                                                                                           |                                                                                                                                                                                  |                                                                                                                                                                                    |                                                                                                                                                              |                                                                                                                                                                       |                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Fixed elbow adaptor<br/>O/D tube to male NPTF<br/>thread<br/>12445</p>  <p>Page 6</p> | <p>Swivel male elbow<br/>O/D tube to male NPTF<br/>thread<br/>12447</p>  <p>Page 6</p> | <p>Swivel elbow<br/>adaptor<br/>O/D tube to male<br/>BSPT thread<br/>12147</p>  <p>Page 6</p> | <p>Swivel elbow adaptor<br/>Inch O/D tube to male ISO<br/>G thread<br/>12247</p>  <p>Page 7</p> | <p>Elbow connector<br/>O/D tube to O/D tube<br/>12040</p>  <p>Page 7</p> | <p>Swivel Female Elbow<br/>Inch Tube NPT<br/>Thread<br/>12448</p>  <p>Page 7</p> | <p>Extended swivel elbow<br/>adaptor<br/>O/D tube to male NPTF<br/>thread<br/>12454</p>  <p>Page 7</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Tee, Y adaptors and connectors

|                                                                                                                                                                                 |                                                                                                                                                                                |                                                                                                                                  |                                                                                                                                                                                               |                                                                                                                                                                              |                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Swivel tee adaptor<br/>Inch O/D tube to male<br/>BSPT thread<br/>12167</p>  <p>Page 8</p> | <p>Swivel male centre tee<br/>O/D tube to male NPTF<br/>thread<br/>12467</p>  <p>Page 8</p> | <p>Tee connector<br/>12060</p>  <p>Page 9</p> | <p>Swivel male side tee adap-<br/>tor, O/D tube to male taper<br/>NPTF thread<br/>12468</p>  <p>Page 9</p> | <p>Swivel male Y adaptor<br/>Inch<br/>O/D Tube NPT Thread<br/>12488</p>  <p>Page 10</p> | <p>Y Connector Inch O/D<br/>Tube<br/>12082</p>  <p>Page 10</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|

## Elbow flow controls and banjo flow controls

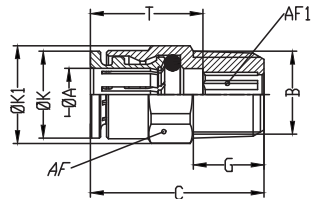
|                                                                                                                                                                         |                                                                                                                                                                                                          |                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Elbow flow control<br/>NPT Thread to NPT<br/>Thread<br/>12VA0</p>  <p>Page 10</p> | <p>Banjo Flow Control -<br/>Screw Driver Adjustment<br/>Inch O/D Tube to NPT<br/>Thread<br/>12VB0</p>  <p>Page 10</p> | <p>Banjo Flow Control -<br/>Screw Driver Adjustment<br/>NPT Thread to NPT<br/>Thread<br/>12VB0</p>  <p>Page 10</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Function fittings

|                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Pilot Operated Check<br/>Valve<br/>NPT Thread<br/>124GA</p>  <p>Page 11</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|

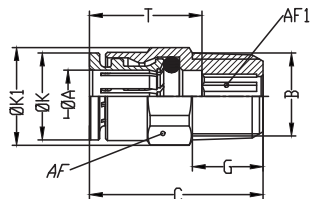
## Dimensions

### Straight adaptor Inch O/D tube to male NPTF taper 12425



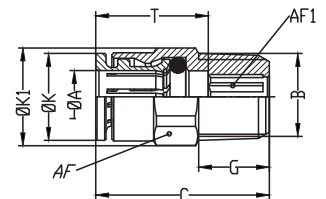
| ØA   | B         | C    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|------|-----------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1/16 NPTF | 0,79 | 0,31 | 0,35 | 0,40 | 0,55 | 0,35 | 0,10 | 7          | 124250116 |
| 1/8  | 1/8 NPTF  | 0,75 | 0,31 | 0,35 | 0,55 | 0,55 | 0,47 | 0,10 | 11         | 124250118 |
| 1/8  | 1/4 NPTF  | 0,91 | 0,47 | 0,35 | 0,63 | 0,55 | 0,55 | 0,10 | 21         | 124250128 |
| 5/32 | 1/8 NPTF  | 0,75 | 0,31 | 0,35 | 0,55 | 0,55 | 0,47 | 0,10 | 10         | 124250218 |
| 5/32 | 1/4 NPTF  | 0,93 | 0,47 | 0,35 | 0,63 | 0,55 | 0,55 | 0,10 | 20         | 124250228 |
| 3/16 | 1/8 NPTF  | 0,79 | 0,31 | 0,39 | 0,55 | 0,59 | 0,47 | 0,12 | 10         | 124250318 |
| 3/16 | 1/4 NPTF  | 0,94 | 0,47 | 0,39 | 0,63 | 0,59 | 0,55 | 0,12 | 20         | 124250328 |
| 1/4  | 1/8 NPTF  | 0,93 | 0,31 | 0,52 | 0,55 | 0,64 | 0,47 | 0,16 | 10         | 124250418 |
| 1/4  | 1/4 NPTF  | 1,04 | 0,47 | 0,46 | 0,63 | 0,64 | 0,55 | 0,16 | 20         | 124250428 |
| 1/4  | 3/8 NPTF  | 1,06 | 0,47 | 0,46 | 0,87 | 0,64 | 0,75 | 0,16 | 37         | 124250438 |
| 5/16 | 1/8 NPTF  | 1,08 | 0,31 | 0,54 | 0,63 | 0,69 | 0,55 | 0,20 | 15         | 124250518 |
| 5/16 | 1/4 NPTF  | 1,10 | 0,47 | 0,54 | 0,63 | 0,69 | 0,55 | 0,24 | 18         | 124250528 |
| 5/16 | 3/8 NPTF  | 1,10 | 0,47 | 0,54 | 0,87 | 0,69 | 0,75 | 0,24 | 35         | 124250538 |
| 3/8  | 1/8 NPTF  | 1,18 | 0,31 | 0,61 | 0,78 | 0,79 | 0,67 | 0,20 | 23         | 124250618 |
| 3/8  | 1/4 NPTF  | 1,34 | 0,47 | 0,61 | 0,78 | 0,79 | 0,67 | 0,28 | 28         | 124250628 |
| 3/8  | 3/8 NPTF  | 1,14 | 0,47 | 0,61 | 0,87 | 0,79 | 0,75 | 0,28 | 33         | 124250638 |
| 3/8  | 1/2 NPTF  | 1,16 | 0,61 | 0,61 | 1,00 | 0,79 | 0,87 | 0,28 | 52         | 124250648 |
| 1/2  | 1/4 NPTF  | 1,30 | 0,47 | 0,72 | 0,87 | 0,77 | 0,75 | 0,28 | 27         | 124250728 |
| 1/2  | 3/8 NPTF  | 1,24 | 0,47 | 0,72 | 0,87 | 0,77 | 0,75 | 0,39 | 31         | 124250738 |
| 1/2  | 1/2 NPTF  | 1,18 | 0,61 | 0,72 | 1,00 | 0,77 | 0,87 | 0,39 | 46         | 124250748 |

### Straight adaptor Inch O/D tube to BSPT thread 10125/12125



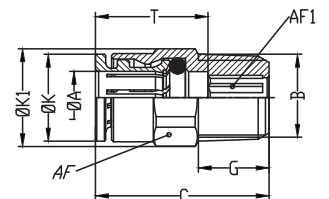
| ØA   | B    | C    | ØK   | ØK1  | G    | T    | AF   | AF1  | Weight (g) | Model     |
|------|------|------|------|------|------|------|------|------|------------|-----------|
| 5/32 | R1/8 | 0,75 | 0,35 | 0,52 | 0,30 | 0,55 | 0,47 | 0,10 | 10         | 101250418 |
| 5/32 | R1/4 | 0,89 | 0,35 | 0,60 | 0,43 | 0,55 | 0,55 | 0,10 | 19         | 101250428 |
| 5/16 | R1/8 | 1,06 | 0,54 | 0,60 | 0,30 | 0,69 | 0,55 | 0,20 | 16         | 101250818 |
| 5/16 | R1/4 | 1,06 | 0,54 | 0,60 | 0,43 | 0,69 | 0,55 | 0,24 | 18         | 101250828 |
| 5/16 | R3/8 | 1,08 | 0,54 | 0,81 | 0,45 | 0,69 | 0,75 | 0,24 | 35         | 101250838 |
| 1/8  | R1/8 | 0,73 | 0,31 | 0,52 | 0,30 | 0,55 | 0,47 | 0,10 | 10         | 121250118 |
| 3/16 | R1/8 | 0,79 | 0,39 | 0,52 | 0,30 | 0,59 | 0,47 | 0,12 | 10         | 121250318 |
| 3/16 | R1/4 | 0,91 | 0,39 | 0,60 | 0,43 | 0,59 | 0,55 | 0,12 | 19         | 121250328 |
| 1/4  | R1/8 | 0,91 | 0,46 | 0,52 | 0,30 | 0,64 | 0,47 | 0,16 | 10         | 121250418 |
| 1/4  | R1/4 | 0,96 | 0,46 | 0,60 | 0,43 | 0,64 | 0,55 | 0,16 | 17         | 121250428 |
| 3/8  | R1/8 | 1,16 | 0,61 | 0,73 | 0,30 | 0,79 | 0,67 | 0,20 | 22         | 121250618 |
| 3/8  | R1/4 | 1,30 | 0,61 | 0,73 | 0,43 | 0,79 | 0,67 | 0,28 | 27         | 121250628 |
| 3/8  | R3/8 | 1,12 | 0,61 | 0,81 | 0,45 | 0,79 | 0,75 | 0,28 | 32         | 121250638 |
| 3/8  | R1/2 | 1,10 | 0,61 | 0,96 | 0,55 | 0,79 | 0,87 | 0,28 | 48         | 121250648 |
| 1/2  | R1/4 | 1,28 | 0,72 | 0,81 | 0,43 | 0,76 | 0,75 | 0,28 | 28         | 121250728 |
| 1/2  | R3/8 | 1,22 | 0,72 | 0,81 | 0,45 | 0,76 | 0,75 | 0,31 | 32         | 121250738 |
| 1/2  | R1/2 | 1,16 | 0,72 | 0,96 | 0,55 | 0,76 | 0,87 | 0,39 | 47         | 121250748 |

### Straight adaptor Metric O/D Tube to NPTF (male) thread 10425



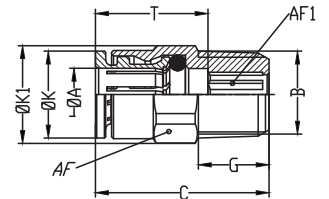
| ØA | B        | C    | ØK   | ØK1  | G    | T    | AF   | AF1  | Weight (g) | Model     |
|----|----------|------|------|------|------|------|------|------|------------|-----------|
| 6  | 1/8 NPTF | 0,93 | 0,46 | 0,52 | 0,31 | 0,63 | 0,47 | 0,16 | 11         | 104250618 |
| 6  | 1/4 NPTF | 1,04 | 0,46 | 0,60 | 0,47 | 0,63 | 0,55 | 0,16 | 20         | 104250628 |
| 6  | 3/8 NPTF | 1,06 | 0,46 | 0,81 | 0,47 | 0,63 | 0,75 | 0,16 | 37         | 104250638 |
| 10 | 1/8 NPTF | 1,18 | 0,61 | 0,73 | 0,31 | 0,80 | 0,67 | 0,20 | 22         | 104251018 |
| 10 | 1/4 NPTF | 1,34 | 0,61 | 0,73 | 0,47 | 0,80 | 0,67 | 0,28 | 28         | 104251028 |
| 10 | 3/8 NPTF | 1,14 | 0,61 | 0,81 | 0,47 | 0,80 | 0,75 | 0,28 | 33         | 104251038 |
| 10 | 1/2 NPTF | 1,16 | 0,61 | 0,96 | 0,61 | 0,80 | 0,87 | 0,28 | 51         | 104251048 |
| 12 | 1/4 NPTF | 1,30 | 0,72 | 0,81 | 0,47 | 0,76 | 0,75 | 0,28 | 30         | 104251228 |
| 12 | 3/8 NPTF | 1,24 | 0,72 | 0,81 | 0,47 | 0,76 | 0,75 | 0,39 | 32         | 104251238 |
| 12 | 1/2 NPTF | 1,18 | 0,72 | 0,96 | 0,61 | 0,76 | 0,87 | 0,39 | 47         | 104251248 |

### Straight adaptor Metric O/D tube to 10-32 UNF thread 10425



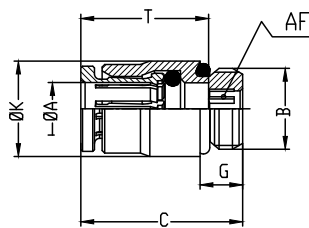
| ØA | B         | C    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|----|-----------|------|------|------|------|------|------|------|------------|-----------|
| 6  | 10/32 UNF | 0,87 | 0,46 | 0,52 | 0,16 | 0,63 | 0,47 | 0,08 | 7          | 104250610 |

### Straight adaptor Inch O/D tube to 10-32 UNF thread 12425



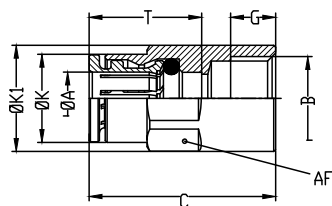
| ØA   | B         | C    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|------|-----------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 10/32 UNF | 0,79 | 0,16 | 0,35 | 0,36 | 0,55 | 0,31 | 0,08 | 5          | 124250110 |
| 5/32 | 10/32 UNF | 0,79 | 0,16 | 0,35 | 0,36 | 0,55 | 0,31 | 0,08 | 5          | 124250210 |
| 1/4  | 10/32 UNF | 0,87 | 0,16 | 0,46 | 0,52 | 0,64 | 0,47 | 0,08 | 6          | 124250410 |

### Straight Adaptor (internal hex) Inch O/D Tube 1242A



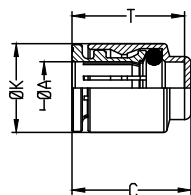
| ØA  | B         | C    | G    | ØK   | T    | AF   | Weight (g) | Model     |
|-----|-----------|------|------|------|------|------|------------|-----------|
| 1/8 | 10/32 UNF | 0,79 | 0,16 | 0,31 | 0,55 | 0,08 | 5          | 1242A0110 |
| 1/4 | 10/32 UNF | 0,83 | 0,16 | 0,41 | 0,59 | 0,08 | 5          | 1242A0410 |
| 1/4 | M5        | 0,83 | 0,16 | 0,41 | 0,59 | 0,08 | 5          | 1222A0405 |

### Straight adaptor O/D tube to female NPTF thread 12426



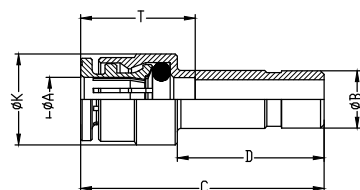
| ØA   | B        | C    | G    | ØK   | ØK1  | T    | AF   | Weight (g) | Model     |
|------|----------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1/8 NPTF | 0,94 | 0,28 | 0,35 | 0,51 | 0,55 | 0,47 | 15         | 124260118 |
| 1/8  | 1/4 NPTF | 1,10 | 0,39 | 0,35 | 0,65 | 0,55 | 0,59 | 28         | 124260128 |
| 5/32 | 1/8 NPTF | 0,94 | 0,28 | 0,35 | 0,51 | 0,55 | 0,47 | 15         | 124260218 |
| 5/32 | 1/4 NPTF | 1,10 | 0,39 | 0,35 | 0,65 | 0,55 | 0,59 | 28         | 124260228 |
| 1/4  | 1/8 NPTF | 1,02 | 0,28 | 0,46 | 0,51 | 0,64 | 0,47 | 14         | 124260418 |
| 1/4  | 1/4 NPTF | 1,18 | 0,39 | 0,47 | 0,65 | 0,64 | 0,59 | 27         | 124260428 |
| 5/16 | 1/8 NPTF | 1,06 | 0,28 | 0,54 | 0,60 | 0,69 | 0,55 | 16         | 124260518 |
| 5/16 | 1/4 NPTF | 1,24 | 0,39 | 0,54 | 0,65 | 0,69 | 0,59 | 28         | 124260528 |
| 3/8  | 1/4 NPTF | 1,30 | 0,39 | 0,61 | 0,73 | 0,79 | 0,67 | 30         | 124260628 |
| 3/8  | 3/8 NPTF | 1,34 | 0,41 | 0,61 | 0,79 | 0,79 | 0,67 | 38         | 124260638 |
| 1/2  | 1/4 NPTF | 1,23 | 0,39 | 0,74 | 0,81 | 0,76 | 0,75 | 30         | 124260728 |

### Cap / Female Plug Fitting Inch O/D Tube 12012



| ØA   | C    | ØK   | T    | Weight (g) | Model     |
|------|------|------|------|------------|-----------|
| 5/32 | 0,59 | 0,35 | 0,55 | 4          | 120120200 |
| 1/4  | 0,68 | 0,47 | 0,64 | 7          | 120120400 |
| 3/8  | 0,83 | 0,60 | 0,79 | 12         | 120120600 |
| 1/2  | 0,80 | 0,72 | 0,77 | 15         | 120120700 |

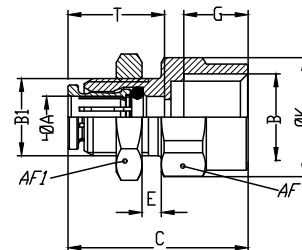
### Tube end reducer tube stem to O/D tube 12023



| ØA  | ØB   | C    | D    | ØK   | T    | Weight (g) | Model     |
|-----|------|------|------|------|------|------------|-----------|
| 1/4 | 1/8  | 1,34 | 0,65 | 0,50 | 0,64 | 11         | 120230104 |
| 1/4 | 5/32 | 1,34 | 0,65 | 0,50 | 0,64 | 15         | 120230204 |

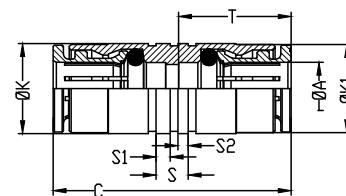
### Female Bulkhead Adaptor Inch O/D tube to NPT female 12432

Dimensions in mm  
Projection/First angle



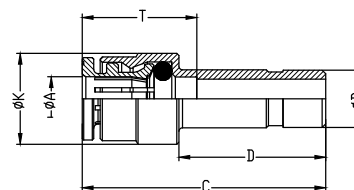
| ØA  | B        | B1    | C    | E    | T    | AF   | AF1  | Weight (g) | Model     |
|-----|----------|-------|------|------|------|------|------|------------|-----------|
| 1/4 | 1/4 NPTF | M12X1 | 1,10 | 0,28 | 0,59 | 0,67 | 0,67 | 30         | 124320628 |
| 3/8 | 1/4 NPTF | M18X1 | 1,32 | 0,47 | 0,79 | 0,87 | 0,87 | 61         | 124320428 |

### Straight connector O/D tube to O/D tube 12020



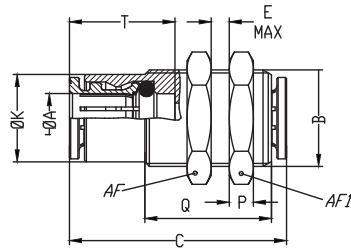
| ØA   | C    | ØK   | ØK1  | S    | S1   | S2   | T    | Weight (g) | Model     |
|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1,14 | 0,33 | 0,35 | -    | -    | -    | 0,55 | 11         | 120200100 |
| 5/32 | 1,14 | 0,33 | 0,35 | 0,20 | 0,09 | 0,06 | 0,55 | 11         | 120200200 |
| 3/16 | 1,22 | 0,39 | 0,43 | -    | -    | -    | 0,59 | 16         | 120200300 |
| 1/4  | 1,32 | 0,46 | 0,47 | -    | -    | -    | 0,64 | 16         | 120200400 |
| 5/16 | 1,46 | 0,54 | 0,55 | 0,20 | 0,09 | 0,06 | 0,69 | 23         | 120200500 |
| 3/8  | 1,63 | 0,61 | 0,67 | -    | -    | -    | 0,79 | 33         | 120200600 |
| 1/2  | 1,56 | 0,72 | 0,74 | -    | -    | -    | 0,76 | 40         | 120200700 |

### Tube end expander tube stem to O/D tube 12023



| ØA   | ØB   | C    | D    | ØK   | T    | Weight (g) | Model     |
|------|------|------|------|------|------|------------|-----------|
| 1/8  | 5/32 | 1,24 | 0,65 | 0,35 | 0,55 | 8          | 120230201 |
| 1/8  | 1/4  | 1,16 | 0,71 | 0,35 | 0,55 | 8          | 120230401 |
| 5/32 | 1/4  | 1,16 | 0,71 | 0,35 | 0,55 | 10         | 120230402 |
| 5/32 | 3/8  | 1,22 | 0,96 | 0,38 | 0,55 | 16         | 120230602 |
| 1/4  | 3/8  | 1,46 | 0,91 | 0,50 | 0,64 | 17         | 120230604 |
| 1/4  | 1/2  | 1,32 | 1,02 | 0,50 | 0,64 | 21         | 120230704 |
| 3/8  | 1/2  | 1,57 | 0,94 | 0,57 | 0,79 | 27         | 120230706 |

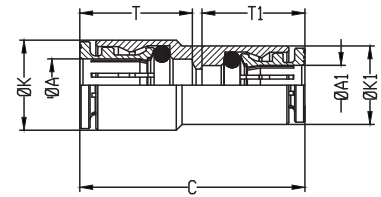
## Bulkhead connector O/D tube to O/D tube 12029



| ØA   | B     | C    | E    | ØK   | P    | Q    | T    | AF   | AF1  | Weight (g) | Model     |
|------|-------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | M10X1 | 1,14 | 0,41 | 0,35 | 0,16 | 0,79 | 0,55 | 0,55 | 0,55 | 16         | 120290100 |
| 5/32 | M10X1 | 1,14 | 0,41 | 0,35 | 0,16 | 0,79 | 0,55 | 0,55 | 0,55 | 16         | 120290200 |
| 3/16 | M12X1 | 1,22 | 0,41 | 0,39 | 0,16 | 0,79 | 0,59 | 0,67 | 0,67 | 21         | 120290300 |
| 1/4  | M14X1 | 1,32 | 0,45 | 0,49 | 0,16 | 0,83 | 0,64 | 0,67 | 0,67 | 25         | 120290400 |
| 5/16 | M16X1 | 1,42 | 0,45 | 0,57 | 0,16 | 0,83 | 0,69 | 0,75 | 0,75 | 31         | 120290500 |
| 3/8  | M18X1 | 1,61 | 0,51 | 0,62 | 0,18 | 0,93 | 0,79 | 0,87 | 0,87 | 42         | 120290600 |
| 1/2  | M20X1 | 1,56 | 0,57 | 0,74 | 0,18 | 0,98 | 0,76 | 0,94 | 0,94 | 43         | 120290700 |

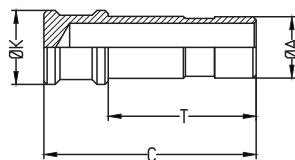
## Straight connector inch tube to mm tube 12037

Dimensions in mm  
Projection/First angle



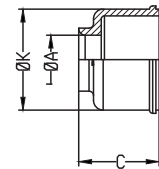
| ØA  | ØA1 | C    | ØK   | ØK1  | T    | T1   | Weight (g) | Model     |
|-----|-----|------|------|------|------|------|------------|-----------|
| 1/4 | 6   | 1,32 | 0,47 | 0,47 | 0,64 | 0,63 | 16         | 120370406 |
| 3/8 | 10  | 1,63 | 0,66 | 0,66 | 0,79 | 0,80 | 33         | 120370610 |
| 1/2 | 12  | 1,56 | 0,74 | 0,74 | 0,76 | 0,76 | 40         | 120370712 |

## Plug (Nickel plated brass) 12004



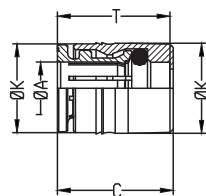
| ØA   | C     | ØK   | T    | Weight (g) | Model     |
|------|-------|------|------|------------|-----------|
| 1/8  | 1,043 | 0,22 | 0,65 | 3          | 120040100 |
| 1/4  | 1,102 | 0,24 | 0,65 | 6          | 120040400 |
| 5/16 | 1,043 | 0,33 | 0,71 | 4          | 120040500 |
| 3/8  | 1,299 | 0,45 | 0,91 | 10         | 120040600 |

## Projective cap 10000



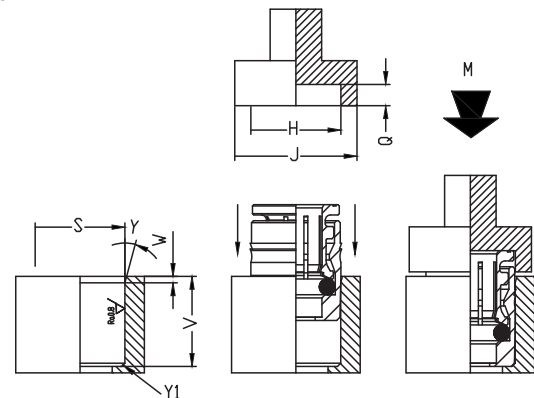
| ØA | C    | ØK   | Weight (g) | Model     |
|----|------|------|------------|-----------|
| 4  | 10,7 | 10,7 | 1          | 100000400 |
| 5  | 11   | 11,7 | 1          | 100000500 |
| 6  | 11,5 | 13,7 | 1          | 100000600 |
| 8  | 14,5 | 15,7 | 1          | 100000800 |
| 10 | 13,2 | 18,5 | 1          | 100001000 |
| 12 | 15,5 | 20,7 | 2          | 100001200 |

## Cartridge Fitting Inch O/D tube 12036



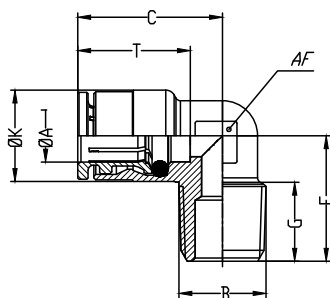
| ØA   | C    | ØK   | ØK1  | T    | Weight (g) | Model     |
|------|------|------|------|------|------------|-----------|
| 1/8  | 0,59 | 0,34 | 0,35 | 0,55 | 4          | 120360100 |
| 5/32 | 0,57 | 0,34 | 0,35 | 0,55 | 4          | 120360200 |
| 1/4  | 0,67 | 0,46 | 0,48 | 0,64 | 8          | 120360400 |
| 5/16 | 0,71 | 0,54 | 0,56 | 0,69 | 11         | 120360500 |
| 3/8  | 0,81 | 0,62 | 0,64 | 0,79 | 15         | 120360600 |
| 1/2  | 0,78 | 0,74 | 0,76 | 0,76 | 16         | 120360700 |

## Insertion & tool 12036



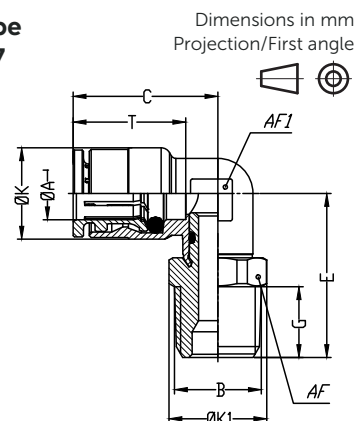
| ØH   | ØJ   | M Min<br>(Kg) | M Max<br>(Kg) | Q (+0,004/<br>-0,0) | ØS<br>(+0,0004/<br>-0,0016) | V    | W    | Y   | Y1        | Model     |
|------|------|---------------|---------------|---------------------|-----------------------------|------|------|-----|-----------|-----------|
| 0,35 | 0,55 | 200           | 360           | 0,13                | 0,34                        | 0,45 | 0,02 | 15° | 0,020X45° | 120360100 |
| 0,35 | 0,55 | 200           | 360           | 0,13                | 0,34                        | 0,43 | 0,02 | 15° | 0,020X45° | 120360200 |
| 0,47 | 0,67 | 160           | 570           | 0,15                | 0,47                        | 0,47 | 0,02 | 15° | 0,020X45° | 120360400 |
| 0,55 | 0,75 | 140           | 400           | 0,13                | 0,55                        | 0,55 | 0,02 | 15° | 0,020X45° | 120360500 |
| 0,63 | 0,83 | 150           | 650           | 0,14                | 0,63                        | 0,65 | 0,02 | 15° | 0,020X45° | 120360600 |
| 0,75 | 0,94 | 150           | 650           | 0,14                | 0,75                        | 0,61 | 0,02 | 15° | 0,020X45° | 120360800 |

## Fixed elbow adaptor O/D tube to male NPTF thread 12445



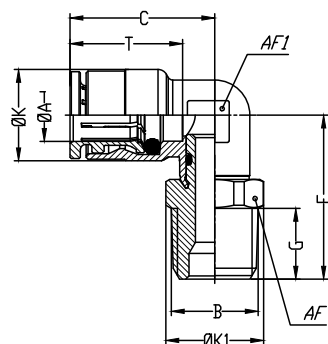
| ØA   | B        | C    | E    | G    | ØK   | T    | AF   | Weight (g) | Model     |
|------|----------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1/8 NPTF | 0,69 | 0,59 | 0,30 | 0,35 | 0,55 | 0,31 | 10         | 124450118 |
| 5/32 | 1/8 NPTF | 0,69 | 0,59 | 0,30 | 0,35 | 0,55 | 0,31 | 10         | 124450218 |
| 3/16 | 1/8 NPTF | 0,81 | 0,61 | 0,31 | 0,39 | 0,59 | 0,35 | 12         | 124450318 |
| 1/4  | 1/8 NPTF | 0,81 | 0,65 | 0,33 | 0,50 | 0,64 | 0,35 | 18         | 124450418 |
| 1/4  | 1/4 NPTF | 0,81 | 0,77 | 0,47 | 0,50 | 0,64 | 0,35 | 18         | 124450428 |
| 1/4  | 3/8 NPTF | 0,91 | 0,87 | 0,51 | 0,50 | 0,64 | 0,47 | 26         | 124450438 |
| 5/16 | 1/8 NPTF | 0,89 | 0,67 | 0,30 | 0,56 | 0,69 | 0,43 | 19         | 124450518 |
| 5/16 | 1/4 NPTF | 0,89 | 0,77 | 0,49 | 0,56 | 0,69 | 0,43 | 20         | 124450528 |
| 3/8  | 1/8 NPTF | 1,02 | 0,71 | 0,33 | 0,65 | 0,79 | 0,51 | 27         | 124450618 |
| 3/8  | 1/4 NPTF | 1,02 | 0,85 | 0,47 | 0,65 | 0,79 | 0,51 | 29         | 124450628 |
| 3/8  | 3/8 NPTF | 1,02 | 0,85 | 0,47 | 0,65 | 0,79 | 0,51 | 30         | 124450638 |
| 3/8  | 1/2 NPTF | 1,04 | 1,14 | 0,63 | 0,65 | 0,79 | 0,59 | 52         | 124450648 |
| 1/2  | 1/4 NPTF | 1,04 | 0,91 | 0,49 | 0,77 | 0,76 | 0,59 | 39         | 124450728 |
| 1/2  | 3/8 NPTF | 1,04 | 0,91 | 0,49 | 0,77 | 0,76 | 0,59 | 39         | 124450738 |
| 1/2  | 1/2 NPTF | 1,04 | 1,14 | 0,63 | 0,77 | 0,76 | 0,59 | 54         | 124450748 |

## Swivel male elbow O/D tube to male NPTF thread 12447



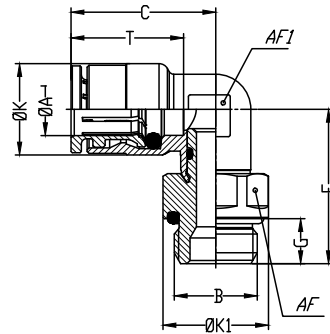
| ØA   | B         | C    | E    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|------|-----------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 10/32 UNF | 0,69 | 0,67 | 0,16 | 0,35 | 0,35 | 0,55 | 0,31 | 0,31 | 15         | 124470110 |
| 1/8  | 1/8 NPTF  | 0,69 | 0,83 | 0,31 | 0,35 | -    | 0,55 | 0,47 | 0,31 | 25         | 124470118 |
| 1/8  | 1/4 NPTF  | 0,69 | 0,98 | 0,47 | 0,35 | -    | 0,55 | 0,55 | 0,31 | 16         | 124470128 |
| 5/32 | 10/32 UNF | 0,69 | 0,67 | 0,16 | 0,35 | 0,43 | 0,55 | 0,31 | 0,31 | 26         | 124470210 |
| 5/32 | 1/8 NPTF  | 0,69 | 0,83 | 0,31 | 0,35 | -    | 0,55 | 0,47 | 0,31 | 21         | 124470218 |
| 5/32 | 1/4 NPTF  | 0,69 | 0,98 | 0,47 | 0,35 | -    | 0,55 | 0,55 | 0,31 | 28         | 124470228 |
| 3/16 | 1/4 NPTF  | 0,81 | 0,98 | 0,47 | 0,39 | -    | 0,59 | 0,55 | 0,35 | 39         | 124470328 |
| 1/4  | 10/32 UNF | 0,81 | 0,69 | 0,31 | 0,50 | -    | 0,64 | 0,39 | 0,35 | 22         | 124470410 |
| 1/4  | 1/8 NPTF  | 0,81 | 0,85 | 0,31 | 0,50 | -    | 0,64 | 0,47 | 0,35 | 29         | 124470418 |
| 1/4  | 1/4 NPTF  | 0,81 | 1,00 | 0,47 | 0,50 | -    | 0,64 | 0,55 | 0,35 | 47         | 124470428 |
| 1/4  | 3/8 NPTF  | 0,81 | 1,02 | 0,47 | 0,50 | -    | 0,64 | 0,75 | 0,35 | 65         | 124470438 |
| 5/16 | 1/8 NPTF  | 0,89 | 0,89 | 0,31 | 0,56 | -    | 0,69 | 0,47 | 0,43 | 37         | 124470518 |
| 5/16 | 1/4 NPTF  | 0,89 | 1,04 | 0,47 | 0,56 | -    | 0,69 | 0,55 | 0,43 | 42         | 124470528 |
| 3/8  | 1/8 NPTF  | 0,89 | 0,98 | 0,31 | 0,65 | -    | 0,79 | 0,55 | 0,51 | 45         | 124470618 |
| 3/8  | 1/4 NPTF  | 1,02 | 1,14 | 0,47 | 0,65 | -    | 0,79 | 0,55 | 0,51 | 66         | 124470628 |
| 3/8  | 3/8 NPTF  | 1,02 | 1,16 | 0,47 | 0,65 | -    | 0,79 | 0,75 | 0,51 | 51         | 124470638 |
| 3/8  | 1/2 NPTF  | 1,02 | 1,32 | 0,61 | 0,65 | -    | 0,79 | 0,87 | 0,51 | 58         | 124470648 |
| 1/2  | 1/4 NPTF  | 1,04 | 1,20 | 0,47 | 0,77 | -    | 0,76 | 0,67 | 0,59 | 58         | 124470728 |
| 1/2  | 3/8 NPTF  | 1,04 | 1,20 | 0,47 | 0,77 | -    | 0,76 | 0,75 | 0,59 | 57         | 124470738 |
| 1/2  | 1/2 NPTF  | 1,04 | 1,36 | 0,61 | 0,77 | -    | 0,76 | 0,87 | 0,59 | 73         | 124470748 |

## Swivel elbow adaptor O/D tube to male BSPT thread 12147



| ØA   | B    | C    | E    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 3/16 | R1/8 | 0,81 | 0,81 | 0,30 | 0,39 | 0,52 | 0,59 | 0,47 | 0,35 | 18         | 121470318 |
| 3/16 | R1/4 | 0,81 | 0,94 | 0,43 | 0,39 | 0,60 | 0,59 | 0,55 | 0,35 | 25         | 121470328 |
| 1/4  | R1/8 | 0,81 | 0,83 | 0,30 | 0,50 | 0,52 | 0,64 | 0,47 | 0,35 | 25         | 121470418 |
| 1/4  | R1/4 | 0,81 | 0,96 | 0,43 | 0,50 | 0,60 | 0,64 | 0,55 | 0,35 | 27         | 121470428 |
| 3/8  | R1/4 | 1,02 | 1,10 | 0,43 | 0,65 | 0,60 | 0,79 | 0,55 | 0,51 | 35         | 121470628 |
| 3/8  | R3/8 | 1,02 | 1,14 | 0,45 | 0,65 | 0,81 | 0,79 | 0,75 | 0,51 | 47         | 121470638 |
| 3/8  | R1/2 | 1,02 | 1,26 | 0,55 | 0,65 | 0,96 | 0,79 | 0,87 | 0,51 | 68         | 121470648 |
| 1/2  | R1/4 | 1,04 | 1,16 | 0,43 | 0,77 | 0,73 | 0,76 | 0,67 | 0,59 | 44         | 121470728 |
| 1/2  | R3/8 | 1,04 | 1,18 | 0,45 | 0,77 | 0,81 | 0,76 | 0,75 | 0,59 | 50         | 121470738 |
| 1/2  | R1/2 | 1,04 | 1,30 | 0,55 | 0,77 | 0,96 | 0,76 | 0,87 | 0,59 | 71         | 121470748 |

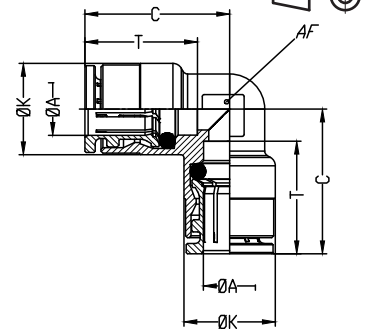
### Swivel elbow adaptor Inch O/D tube to male ISO G thread 12247



| ØA  | B    | C    | E    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|-----|------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/4 | G1/8 | 0,79 | 0,83 | 0,24 | 0,37 | 0,53 | 0,64 | 0,47 | 0,35 | 21         | 122470418 |
| 3/8 | G3/8 | 0,81 | 0,91 | 0,28 | 0,37 | 0,65 | 0,64 | 0,59 | 0,35 | 53         | 122470638 |

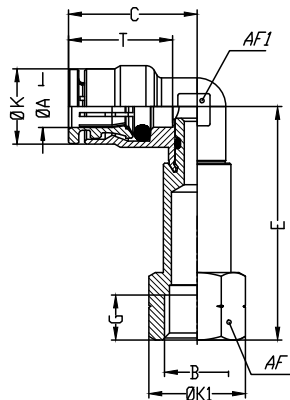
### Elbow connector O/D tube to O/D tube 12040

Dimensions in mm  
Projection/First angle



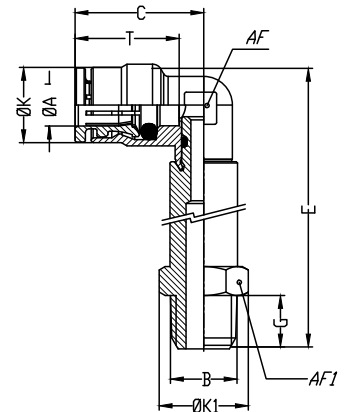
| ØA   | C    | ØK   | T    | AF   | Weight (g) | Model     |
|------|------|------|------|------|------------|-----------|
| 1/8  | 0,69 | 0,35 | 0,55 | 0,31 | 14         | 120400100 |
| 5/32 | 0,69 | 0,35 | 0,55 | 0,31 | 12         | 120400200 |
| 3/16 | 0,81 | 0,39 | 0,59 | 0,35 | 15         | 120400300 |
| 1/4  | 0,81 | 0,50 | 0,64 | 0,35 | 17         | 120400400 |
| 5/16 | 0,89 | 0,56 | 0,69 | 0,43 | 22         | 120400500 |
| 3/8  | 1,02 | 0,65 | 0,80 | 0,51 | 33         | 120400600 |
| 1/2  | 1,04 | 0,77 | 0,76 | 0,59 | 40         | 120400700 |

### Swivel Female Elbow Inch Tube NPT Thread 12448



| ØA   | B        | C    | E    | G    | ØK   | ØK1 | T    | AF   | AF1  | Weight (g) | Model     |
|------|----------|------|------|------|------|-----|------|------|------|------------|-----------|
| 1/8  | 1/8 NPTF | 0,69 | 1,18 | 0,28 | 0,35 | -   | 0,55 | 0,51 | 0,31 | 25         | 124480118 |
| 5/32 | 1/8 NPTF | 0,69 | 1,18 | 0,28 | 0,35 | -   | 0,55 | 0,51 | 0,31 | 21         | 124480218 |
| 1/4  | 1/8 NPTF | 0,81 | 1,22 | 0,28 | 0,50 | -   | 0,64 | 0,51 | 0,35 | 29         | 124480418 |
| 1/4  | 1/4 NPTF | 0,81 | 1,44 | 0,39 | 0,50 | -   | 0,64 | 0,67 | 0,35 | 47         | 124480428 |
| 3/8  | 1/4 NPTF | 1,02 | 1,81 | 0,39 | 0,65 | -   | 0,79 | 0,67 | 0,51 | 66         | 124480628 |

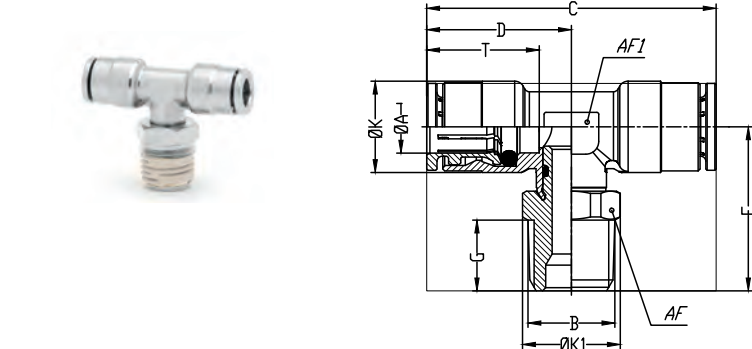
### Extended swivel elbow adaptor O/D tube to male NPTF thread 12454



| ØA  | B        | C    | E    | G    | ØK   | ØK1 | T    | AF   | AF1  | Weight (g) | Model     |
|-----|----------|------|------|------|------|-----|------|------|------|------------|-----------|
| 1/4 | 1/8 NPTF | 0,81 | 1,46 | 0,31 | 0,50 | -   | 0,64 | 0,47 | 0,35 | 41         | 124540418 |
| 1/4 | 1/4 NPTF | 0,81 | 1,65 | 0,47 | 0,50 | -   | 0,64 | 0,55 | 0,35 | 49         | 124540428 |
| 3/8 | 1/4 NPTF | 1,02 | 2,03 | 0,47 | 0,65 | -   | 0,79 | 0,55 | 0,51 | 84         | 124540628 |

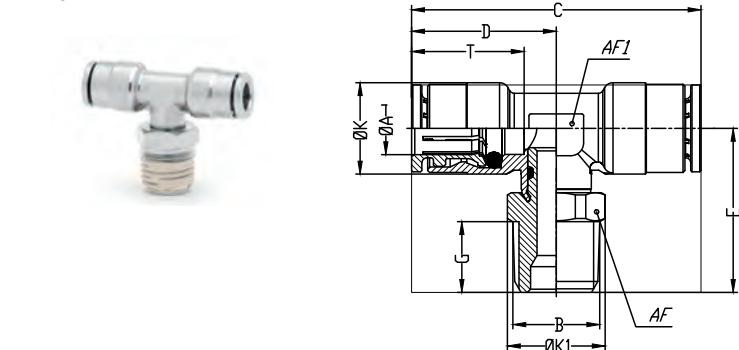
## Swivel tee adaptor Inch O/D tube to male BSPT thread 12167

Dimensions in mm  
Projection/First angle



| ØA  | B    | C    | D    | E    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|-----|------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/4 | R1/8 | 1,61 | 0,81 | 0,94 | 0,30 | 0,50 | 0,52 | 0,65 | 0,35 | 0,47 | 32         | 121670418 |
| 1/4 | R1/4 | 1,61 | 0,81 | 1,00 | 0,43 | 0,50 | 0,60 | 0,65 | 0,35 | 0,55 | 42         | 121670428 |
| 3/8 | R1/4 | 2,05 | 1,02 | 1,14 | 0,43 | 0,65 | 0,60 | 0,79 | 0,51 | 0,55 | 47         | 121670628 |

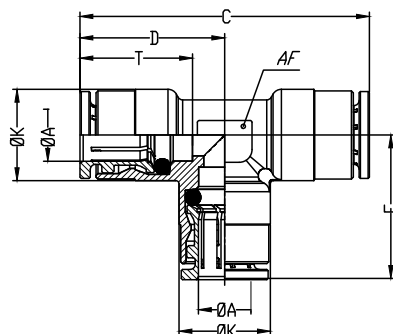
## Swivel male centre tee O/D tube to male NPTF thread 12467



| ØA   | B         | C    | E    | F    | G    | ØK   | ØK1  | T    | AF   | AF1  | Weight (g) | Model     |
|------|-----------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1/8 NPTF  | 1,38 | 0,69 | 0,83 | 0,32 | 0,35 | -    | 0,55 | 0,47 | 0,32 | 26         | 124670118 |
| 1/8  | 1/4 NPTF  | 1,38 | 0,69 | 0,98 | 0,47 | 0,35 | -    | 0,55 | 0,55 | 0,32 | 28         | 124670128 |
| 5/32 | 10/32 UNF | 1,38 | 0,69 | 0,67 | 0,16 | 0,35 | 0,35 | 0,55 | 0,32 | 0,32 | 17         | 124670210 |
| 5/32 | 1/8 NPTF  | 1,38 | 0,69 | 0,83 | 0,32 | 0,35 | -    | 0,55 | 0,47 | 0,32 | 25         | 124670218 |
| 1/4  | 1/8 NPTF  | 1,61 | 0,81 | 0,85 | 0,32 | 0,50 | -    | 0,64 | 0,47 | 0,35 | 26         | 124670418 |
| 1/4  | 1/4 NPTF  | 1,61 | 0,81 | 1,00 | 0,47 | 0,50 | -    | 0,64 | 0,55 | 0,35 | 38         | 124670428 |
| 1/4  | 3/8 NPTF  | 1,61 | 0,81 | 1,02 | 0,47 | 0,50 | -    | 0,64 | 0,75 | 0,35 | 43         | 124670438 |
| 5/16 | 1/8 NPTF  | 1,77 | 0,89 | 0,89 | 0,32 | 0,56 | -    | 0,69 | 0,47 | 0,43 | 40         | 124670518 |
| 5/16 | 1/4 NPTF  | 1,77 | 0,89 | 1,04 | 0,47 | 0,56 | -    | 0,69 | 0,55 | 0,43 | 39         | 124670528 |
| 3/8  | 1/8 NPTF  | 2,05 | 1,02 | 0,98 | 0,32 | 0,65 | -    | 0,79 | 0,55 | 0,51 | 50         | 124670618 |
| 3/8  | 1/4 NPTF  | 2,05 | 1,02 | 1,14 | 0,47 | 0,65 | -    | 0,79 | 0,55 | 0,51 | 49         | 124670628 |
| 3/8  | 3/8 NPTF  | 2,05 | 1,02 | 1,16 | 0,47 | 0,65 | -    | 0,79 | 0,75 | 0,51 | 70         | 124670638 |
| 3/8  | 1/2 NPTF  | 2,05 | 1,02 | 1,32 | 0,61 | 0,65 | -    | 0,79 | 0,87 | 0,51 | 85         | 124670648 |
| 1/2  | 1/4 NPTF  | 2,09 | 1,04 | 1,20 | 0,47 | 0,77 | -    | 0,76 | 0,67 | 0,59 | 56         | 124670728 |
| 1/2  | 3/8 NPTF  | 2,09 | 1,04 | 1,20 | 0,47 | 0,77 | -    | 0,76 | 0,75 | 0,59 | 64         | 124670738 |
| 1/2  | 1/2 NPTF  | 2,09 | 1,04 | 1,36 | 0,61 | 0,77 | -    | 0,76 | 0,87 | 0,59 | 86         | 124670748 |

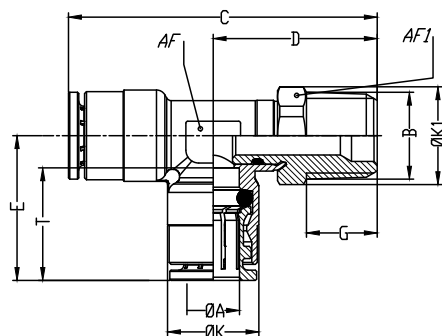
## Tee connector O/D tube to O/D tube 12060

Dimensions in mm  
Projection/First angle



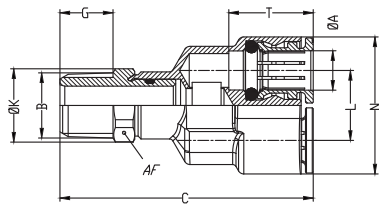
| ØA   | C    | D    | E    | ØK   | T    | AF   | Weight (g) | Model     |
|------|------|------|------|------|------|------|------------|-----------|
| 1/8  | 1,38 | 0,69 | 0,69 | 0,35 | 0,55 | 0,31 | 18         | 120600100 |
| 5/32 | 1,38 | 0,69 | 0,69 | 0,35 | 0,55 | 0,31 | 18         | 120600200 |
| 3/16 | 1,61 | 0,81 | 0,81 | 0,39 | 0,59 | 0,35 | 19         | 120600300 |
| 1/4  | 1,61 | 0,81 | 0,81 | 0,50 | 0,64 | 0,35 | 24         | 120600400 |
| 5/16 | 1,77 | 0,89 | 0,89 | 0,56 | 0,69 | 0,43 | 31         | 120600500 |
| 3/8  | 2,05 | 1,02 | 1,02 | 0,65 | 0,79 | 0,51 | 43         | 120600600 |
| 1/2  | 2,09 | 1,04 | 1,04 | 0,77 | 0,76 | 0,59 | 54         | 120600700 |

## Swivel male side tee adaptor, O/D tube to male taper NPTF thread 12468



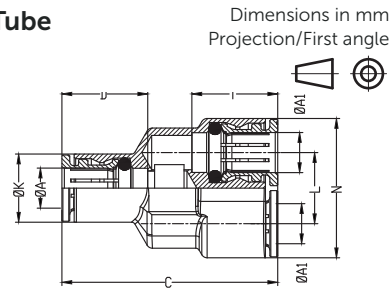
| ØA   | B         | C    | D    | E    | G    | ØK   | ØK1  | T    | AF1  | AF   | Weight (g) | Model     |
|------|-----------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 5/32 | 10/32 UNF | 1,36 | 0,67 | 0,69 | 0,16 | 0,35 | 0,35 | 0,55 | 0,31 | 0,31 | 17         | 124680210 |
| 5/32 | 1/8 NPTF  | 1,52 | 0,83 | 0,69 | 0,31 | 0,35 | -    | 0,55 | 0,31 | 0,47 | 25         | 124680218 |
| 1/4  | 1/8 NPTF  | 1,65 | 0,85 | 0,81 | 0,47 | 0,50 | -    | 0,64 | 0,35 | 0,47 | 26         | 124680418 |
| 1/4  | 1/4 NPTF  | 1,81 | 1,00 | 0,81 | 0,47 | 0,50 | -    | 0,64 | 0,35 | 0,55 | 38         | 124680428 |
| 5/16 | 1/4 NPTF  | 1,93 | 1,04 | 0,89 | 0,47 | 0,56 | -    | 0,69 | 0,43 | 0,55 | 39         | 124680528 |
| 3/8  | 1/8 NPTF  | 2,01 | 0,98 | 1,02 | 0,31 | 0,65 | -    | 0,79 | 0,51 | 0,55 | 50         | 124680618 |
| 3/8  | 1/4 NPTF  | 2,17 | 1,14 | 1,02 | 0,47 | 0,65 | -    | 0,79 | 0,51 | 0,55 | 49         | 124680628 |
| 3/8  | 3/8 NPTF  | 2,19 | 1,16 | 1,02 | 0,47 | 0,65 | -    | 0,79 | 0,51 | 0,75 | 70         | 124680638 |
| 1/2  | 1/2 NPTF  | 2,40 | 1,20 | 1,04 | 0,47 | 0,77 | -    | 0,76 | 0,87 | 0,67 | 56         | 124680748 |

### Swivel male Y adaptor Inch O/D Tube NPT Thread 12488



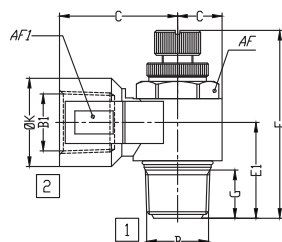
| ØA  | B        | C    | G    | ØK   | N    | L    | T    | AF   | Weight (g) | Model     |
|-----|----------|------|------|------|------|------|------|------|------------|-----------|
| 1/4 | 1/8 NPTF | 1,67 | 0,32 | 0,47 | 0,96 | 0,49 | 0,64 | 0,47 | 34         | 124880418 |
| 1/4 | 1/4 NPTF | 1,83 | 0,47 | 0,55 | 0,96 | 0,49 | 0,64 | 0,55 | 40         | 124880428 |
| 3/8 | 3/8 NPTF | 2,36 | 0,47 | 0,75 | 1,24 | 0,63 | 0,79 | 0,75 | 100        | 124880638 |

### Y Connector Inch O/D Tube 12082



| ØA   | ØA1  | B    | C    | ØK   | N    | L    | T    | T1   | Weight (g) | Model     |
|------|------|------|------|------|------|------|------|------|------------|-----------|
| 5/32 | 5/32 | 5/32 | 1,30 | 0,35 | 0,71 | 0,35 | 0,55 | 0,55 | 19         | 120820200 |
| 1/4  | 1/4  | 1/4  | 1,54 | 0,47 | 0,96 | 0,49 | 0,64 | 0,63 | 30         | 120820400 |

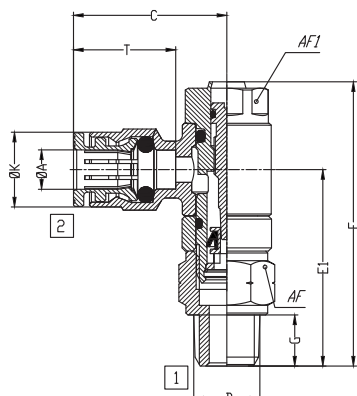
### Elbow flow control - Hand Adjustment NPT Thread to NPT Thread 12VA0



| B       | B1      | C    | C1   | E    | E1   | G    | ØK   | AF   | AF1  | Weight (g) | Model     |
|---------|---------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8 NPT | 1/8 NPT | 0,72 | 0,29 | 1,60 | 0,63 | 0,30 | 0,57 | 0,47 | 0,59 | 30         | 12VA01818 |
| 1/4 NPT | 1/4 NPT | 1,04 | 0,37 | 1,80 | 0,83 | 0,38 | 0,71 | 0,59 | 0,75 | 60         | 12VA02828 |
| 3/8 NPT | 3/8 NPT | 1,21 | 0,46 | 2,16 | 0,98 | 0,50 | 0,91 | 0,75 | 0,94 | 107        | 12VA03838 |
| 1/2 NPT | 1/2 NPT | 1,52 | 0,55 | 2,39 | 1,14 | 0,56 | 1,04 | 0,94 | 1,10 | 170        | 12VA04848 |

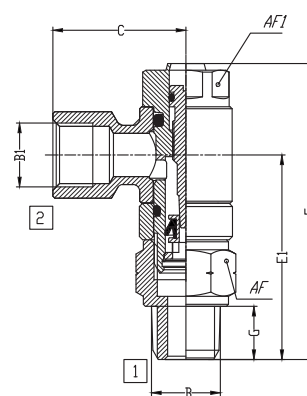
Material: Die-cast aluminium

### Banjo Flow Control - Screw Driver Adjustment Inch O/D Tube to NPT Thread 12VB0



| ØA  | B        | C    | E    | E1   | G    | ØK   | T    | AF   | AF1  | Weight (g) | Model     |
|-----|----------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/4 | 1/8 NPTF | 0,96 | 1,75 | 1,20 | 0,31 | 0,46 | 0,65 | 0,51 | 0,47 | 51         | 12VB00418 |
| 1/4 | 1/4 NPTF | 1,04 | 1,97 | 1,42 | 0,47 | 0,46 | 0,65 | 0,67 | 0,59 | 76         | 12VB00428 |
| 3/8 | 1/4 NPTF | 1,14 | 1,97 | 1,42 | 0,47 | 0,61 | 0,79 | 0,67 | 0,59 | 81         | 12VB00628 |
| 3/8 | 3/8 NPTF | 1,20 | 1,46 | 0,49 | 0,47 | 0,61 | 0,79 | 0,79 | 0,71 | 114        | 12VB00638 |

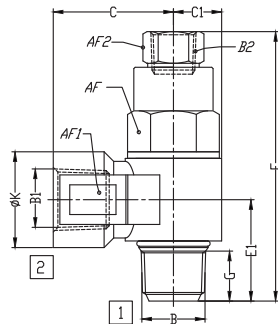
### Banjo Flow Control - Screw Driver Adjustment NPT Thread to NPT Thread 12VB0



| B        | B1  | C    | E    | E1   | G    | AF   | AF1  | Weight (g) | Model     |
|----------|-----|------|------|------|------|------|------|------------|-----------|
| 1/8 NPTF | 1/8 | 0,79 | 1,75 | 1,20 | 0,31 | 0,51 | 0,47 | 41         | 12VB01818 |
| 1/4 NPTF | 1/4 | 1,00 | 1,97 | 1,42 | 0,47 | 0,67 | 0,59 | 71         | 12VB02828 |
| 3/8 NPTF | 3/8 | 1,10 | 2,30 | 1,46 | 0,47 | 0,79 | 0,75 | 104        | 12VB03838 |

## Pilot Operated Check Valve NPT Thread 124GA

Dimensions in mm  
Projection/First angle



| B       | B1      | B2      | C    | C1   | E    | E1   | G    | ØK   | AF   | AF1  | AF2  | Weight (g) | Model     |
|---------|---------|---------|------|------|------|------|------|------|------|------|------|------------|-----------|
| 1/8 NPT | 1/8 NPT | M5      | 1,61 | 0,29 | 1,61 | 0,64 | 0,20 | 0,57 | 0,47 | 0,59 | 0,31 | 35         | 124GA1818 |
| 1/4 NPT | 1/4 NPT | 1/8 NPT | 1,93 | 0,37 | 1,93 | 0,84 | 0,26 | 0,71 | 0,67 | 0,75 | 0,47 | 77         | 124GA2828 |
| 3/8 NPT | 3/8 NPT | 1/8 NPT | 2,23 | 0,46 | 2,23 | 0,98 | 0,28 | 0,91 | 0,79 | 0,94 | 0,47 | 128        | 124GA3838 |
| 1/2 NPT | 1/2 NPT | 1/4 NPT | 2,78 | 0,55 | 2,78 | 1,17 | 0,34 | 1,04 | 0,94 | 1,10 | 0,67 | 219        | 124GA4848 |

Material: Body - Die-cast aluminium

### Warning

These products are intended for use in industrial compressed air systems only. Do not use these products where pressures and temperatures can exceed those listed under

#### »Technical features/data«

Before using these products with fluids other than those specified, for non-industrial applications, life-support systems or other applications not within published specifications, consult IMI Precision Engineering, Norgren GmbH.

Through misuse, age, or malfunction, components used in fluid power systems can fail in various modes.

The system designer is warned to consider the failure modes of all

component parts used in fluid power systems and to provide adequate safeguards to prevent personal injury or damage to equipment in the event of such failure.

System designers must provide a warning to end users in the system instructional manual if protection against a failure mode cannot be adequately provided.

System designers and end users are cautioned to review specific warnings found in instruction sheets packed and shipped with these products.