Simple tube connection and disconnection - no tools
required required
Fewer component parts - Internally machined form in body to secure collet reduces number of potential leak paths

## Corrosion resistant

Easy identification - All collets marked with tube size
Total fittings system solution
Reduced assembly \& maintenance times provide time/labor savings
Greater reliability and reduced testing
Ease of tube insertion in areas of restricted access

## Technical data

## Operating Medium:

Compressed air
Maximum Working Pressure:
0 to 150 psi (0 to 10 bar)
Working Temperature:
$-40^{\circ} \mathrm{F}$ to $220^{\circ} \mathrm{F}\left(-40^{\circ} \mathrm{C}\right.$ to $\left.100^{\circ} \mathrm{C}\right)$

## Materials:

Body (Straights), Tube support, Collet - Brass BS 2874 CZ 121
Body (Elbows, Tees) - Brass BS 2874 CZ 122
'O' Ring - Buna N (Low Nitrile).
Thread Sealant - Precoat 5

## Tube Connection / Disconnection



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.

## Tubing:

Tube should be to SAE J844 (Imperial) or DIN 74324 (Metric) Standards \& Legislation:
Fittings and Tubing Comply to Department Of Transport Federal Motor Vehicle Safety Standard,
(DOT FMVSS 106) (Mandatory requirements for Inch tube fittings in U.S.A.)
Society for Automotive Engineers (SAE) J2494 (Inch tube and fittings) and meet DIN 74324 and German TÜV requirements (Metric Tube and Fittings)

3. Continue pushing the tube through the ' $O$ ' ring until it bottoms on the tube stop. Then pull back on the tube to reinforce the collet teeth gripping action.

4. To disconnect - First ensure there is no air present. Push the tube into the fitting until it bottoms on the tube stop. Then hold down the collet and withdraw the tube.

## Component Functions



Body - The body has an internally machined form to secure the collet(s), "O" ring(s) and Tube support(s). It also has internal \& externally machined thread form(s) for connection to ports where applicable.
Collet - The purpose of the collet is to grip the tube and ensure it is retained by the fitting at all times.
" $\mathbf{O}$ " Ring - The " $O$ " ring is to ensure adequate interference between the tube \& fitting body therefore
providing a pneumatic seal at all times.
Tube Support - The tube support prevents the tube collapsing during extreme tensile loading conditions.
Such conditions are only encountered during performance testing and far exceed those experienced during normal use.

## Male Connectors NPT

| O/D <br> tube | NPT | Product <br> number |
| :--- | :--- | :--- |
| $3 / 16^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95453003 M |
| $1 / 4^{\prime \prime}$ | $1 / 1^{\prime \prime}$ | 95453001 M |
| $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95453004 M |
| $1 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95453010 M |
| $1 / 4^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95453018 M |
| $38^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95453006 M |
| $3 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95453012 M |
| $3 / 8^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95453020 M |
| $3 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95453029 M |
| $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95453013 M |
| $1 / 2^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95453021 M |
| $1 / 2^{\text {" }}$ | $1 / 2^{\prime \prime}$ | 95453030 M |
| $5 / 8^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95453022 M |
| $5 / 8^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95453031 M |
| $3 / 4^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95453049 M |
| $3 / 4^{\prime \prime}$ | $3 / 4^{\prime \prime}$ | 95453055 M |



## Female Connectors <br> \section*{NPT Female}

| 0/D <br> tube | B <br> NPT | Product <br> number |
| :--- | :--- | :--- |
| $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95435504 M |
| $1 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95435510 M |
| $3 / 8^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95435506 M |
| $38^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95435512 M |
| $3 / 8^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95435520 M |
| $1 / 2^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95435530 M |



SAE 630103

## Bulkhead Unions Metric

| O/D |  | Product |
| :--- | :--- | :--- |
| tube | Thread | number |
| $1 / 4^{\prime \prime}$ | M15 $\times 1.0$ | 94450704 M |
| $3 / 8^{\prime \prime}$ | $\mathrm{M} 20 \times 1.5$ | 94450706 M |
| $1 / 2^{\prime \prime}$ | $\mathrm{M} 24 \times 1.5$ | 94450707 M |



SAE 630601

## Male Elbows NPT

| 0/D tube | NPT | Product number |
| :---: | :---: | :---: |
| 3/16" | 1/8" | 95433103M |
| 1/4" | 1/8" | 95433104M |
| 1/4" | 1/4" | 95433110M |
| 1/4" | 3/8" | 95433118M |
| 1/4" | 1/2" | 95433127M |
| $38{ }^{\prime \prime}$ | 1/8" | 95433106M |
| $38{ }^{\prime \prime}$ | 1/4" | 95433112M |
| $38^{\prime \prime}$ | 3/8" | 95433120M |
| $38^{\prime \prime}$ | 1/2" | 95433129M |
| 1/2" | 1/4" | 95433113M |
| 1/2" | $38{ }^{\prime \prime}$ | 95433121M |
| 1/2" | 1/2" | 95433130M |
| 5/8" | 38" | 95433198M |
| 5/8" | 1/2" | 95433131M |
| 3/4" | 1/2" | 95433149M |
| $3 / 4 "$ | $3 / 4 "$ | 95433155M |

## Reducing Unions Inch

$\left.\begin{array}{lll}\hline \text { O/D } \\ \text { tube }\end{array} \quad \begin{array}{l}\text { Tube } \\ \text { tube }\end{array} \quad \begin{array}{l}\text { Product } \\ \text { number }\end{array}\right\}$

Female Bulkhead Connectors
NPT Female, UNF
$\begin{array}{llll}\hline \mathbf{0} / \mathbf{D} \\ \text { tube }\end{array}$ NPT $\left.\begin{array}{l}\text { female }\end{array} \begin{array}{l}\text { CNF } \\ \text { UNF }\end{array} \begin{array}{l}\text { Product } \\ \text { number }\end{array}\right\}$


## Male Connectors Metric

| 0/D tube | Thread | Product number |
| :---: | :---: | :---: |
| 1/4" | M10 $\times 1.0$ | 94466631M |
| 1/4" | M12 $\times 1.5$ | 94466633M |
| 1/4" | M16 $\times 1.5$ | 94466635M |
| $3 / 8{ }^{\prime \prime}$ | M12 $\times 1.5$ | 94466653M |

## Male Hobbs Elbows Metric

$\begin{array}{lll}\hline \text { O/D } \\ \text { tube }\end{array} \quad$ Thread $\left.\quad \begin{array}{l}\text { Product } \\ \text { number }\end{array}\right\}$

## Male Swivel Elbows NPT

$\begin{array}{lll}\text { O/D } \\ \text { tube }\end{array} \quad$ NPT $\left.\begin{array}{l}\text { Product } \\ \text { number }\end{array}\right\}$

## Female Elbows NPT

| A | B | Product |
| :--- | :--- | :--- |
| 0/D tube | NPT | number |
| 3/16" | $1 / 8^{\prime \prime}$ | 95456401 BP |
| 1/4" | $1 / 4^{\prime \prime}$ | 95456410 BP |
| 1/4" | $1 / 8^{\prime \prime}$ | 95456204 M |
| 3/8" | $3 / 8^{\prime \prime}$ | 95456420 BP |
| $1 / 2^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95456430 BP |



SAE 630203

## Male Branch Tees NPT

| O/D tube | 0/D tube | NPT | Product number |
| :---: | :---: | :---: | :---: |
| 1/4" | 1/4" | 1/8" | 95459002M |
| 1/4" | 1/4" | $1 / 4 "$ | 95459012M |
| 1/4" | 1/4" | 3/8" | 95459019M |
| 3/8" | 1/4" | 1/4" | 95459016M |
| $38{ }^{\prime \prime}$ | $38^{\prime \prime}$ | 1/4" | 95459010M |
| 3/8" | $38{ }^{\prime \prime}$ | 3/8" | 95459001M |
| 1/2" | 1/4" | 1/4" | 95459009M |
| 1/2" | 1/4" | 3/8" | 95459006M |
| 1/2" | 1/4" | 1/2" | 95459008M |
| 1/2" | $38{ }^{\prime \prime}$ | 1/2" | 95459014M |
| 1/2" | 1/2" | 1/4" | 95459013M |
| 1/2" | 1/2" | 1/2" | 95459004M |
| 5/8" | 1/2" | 3/8" | 95459015M |
| 5/8" | 1/2" | 1/2" | 95459007M |

Male Swivel Branch Tees NPT

| O/D <br> tube | NPT | Product <br> number |
| :--- | :--- | :--- |
| $3 / 16^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95411103 M |
| $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95411104 M |
| $3 / 8^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95411112 M |
| $3 / 8^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95411120 M |
| $1 / 2^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95411113 M |
| $1 / 2^{\prime \prime}$ | $3 / 8^{\prime \prime}$ | 95411121 M |
| $1 / 2^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95411130 M |



## SAE 6304AC

CAUTION: Swivel adapters are not suitable for use in continuously rotating or gyrating applications.

## Male Swivel Run Tees NPT

| O/D <br> tube | NPT | Product <br> number |
| :--- | :--- | :--- |
| $1 / 4^{\prime \prime}$ | $1 / 8^{\prime \prime}$ | 95411204 M |
| $1 / 4^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95411210 M |
| $38^{\prime \prime}$ | $1 / 4^{\prime \prime}$ | 95411212 M |
| $38^{\prime \prime}$ | $38^{\prime \prime}$ | 95411220 M |
| $1 / 2^{\prime \prime}$ | $38^{\prime \prime}$ | 95411221 M |
| $1 / 2^{\prime \prime}$ | $1 / 2^{\prime \prime}$ | 95411230 M |



SAE 6308AB


Note: Ports are threaded on side shown.

| Male Run Tees NPT |  |  |  |
| :---: | :---: | :---: | :---: |
| O/D tube | 0/D tube | NPT | Product number |
| 1/4" | $1 / 4 "$ | $1 / 8{ }^{\prime \prime}$ | 95458628M |
| 1/4" | 1/4" | 1/4" | 95458613M |
| 1/4" | 1/4" | $38{ }^{\prime \prime}$ | 95458617M |
| 1/4" | $3 / 8{ }^{\prime \prime}$ | 1/4" | 95458621M |
| 1/4" | 3/8" | 38" | 95458607M |
| 1/4" | 1/2" | $38{ }^{\prime \prime}$ | 95458606A |
| 3/8" | 1/4" | 1/4" | 95458605M |
| 38" | 1/4" | $38{ }^{\prime \prime}$ | 95458627M |
| 3/8" | 3/8" | $1 / 4{ }^{\prime \prime}$ | 95458603M |
| 3/8" | 3/8" | 38" | 95458610M |
| 3/8" | 3/8" | $1 / 2^{\prime \prime}$ | 95458604M |
| 3/8" | $1 / 2$ " | $38^{\prime \prime}$ | 95458626M |
| 1/2" | 3/8" | $38{ }^{\prime \prime}$ | 95458620M |
| 1/2" | 1/2" | $1 / 4{ }^{\prime \prime}$ | 95458616M |
| 1/2" | 1/2" | $38{ }^{\prime \prime}$ | 95458611M |



SAE 630424

## Special $90^{\circ}$ Tees NPT

| 0/D tube | 0/D tube | NPT | Product number |
| :---: | :---: | :---: | :---: |
| 1/4" | 1/4" | 1/4" | 95458901A |
| 3/8" | 3/8" | 1/4" | 95458916M |
| 3/8" | 1/2" | 1/2" | 95458907M |
| 1/2" | 1/2" | 1/2" | 95458902M |
| 1/2" | 5/8" | 1/2" | 95458905BP |
| 5/8" | 3/8" | 1/2" | 95458920M |
| 5/8" | 5/8" | 1/2" | 95458906M |



## Union Tee

| O/D |  |
| :--- | :--- |
| tube | Product <br> number |
| $1 / 4^{\prime \prime}$ | 94451404 M |
| $3 / 8^{\prime \prime}$ | 94451406 M |
| $1 / 2^{\prime \prime}$ | 94451407 M |
| $5 / 8^{\prime \prime}$ | 94451408 M |



SAE 630401

