

- Easy tube insertion for rapid assembly of pneumatic & water circuits
- Silicone free 'O' rings
- Very compact
- Nickel plated
- Provides system protection from weld spatter when combined with Weldtube
- Tube support provides high pull out loads
- Easy to disassemble, enables quick re-tubing of system
- Counterbored collet head gives complete protection to inner tube even if side loads are applied



Technical Data

Operating Medium:
 Compressed Air, Water

Working Pressure:
 Vacuum to 18 bar except banjo flow regulators
 which are 10 bar max

Working Temperature:
 -30°C to 70°C

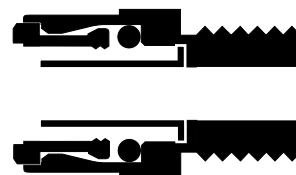
Tube Sizes:
 6, 8, 10, 12 mm O/D
 1/4, 3/8, 1/2 O/D

Materials:
 Nickel plated brass for body
 Nickel plated brass for collet
 Silicone free 'O' ring
 'O' Ring sealing washer on parallel threads
 Non PTFE thread sealant on taper threads

Tubing:
 To be used in conjunction with WeldTube.
 See section N/AL 9.12.005




Ordering Information

To order, quote the appropriate product number from the tables on the following pages.








Straight Adaptors, Connectors and Plugs

<p>BULKHEAD UNION O/D tube to O/D tube</p>  <p>33029</p> <p>Page 9.12.007.03</p>	<p>UNION O/D tube to O/D tube</p>  <p>33020</p> <p>Page 9.12.007.03</p>	<p>MALE CONNECTOR O/D tube to male NPTF</p>  <p>33425</p> <p>Page 9.12.007.03</p>				
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
Elbow Adaptors and Connectors

<p>UNION ELBOW O/D tube to O/D tube</p>  <p>33040</p> <p>Page 9.12.007.04</p>	<p>90° SWIVEL ELBOW ADAPTOR O/D tube to male NPTF</p>  <p>33447</p> <p>Page 9.12.007.04</p>	<p>45° SWIVEL ELBOW ADAPTOR O/D tube to male NPTF</p>  <p>33457</p> <p>Page 9.12.007.04</p>				
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Tee Adaptors and Connectors

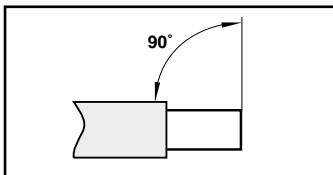
<p>MALE BRANCH TEE SWIVEL O/D tube to male NPTF</p>  <p>33467</p> <p>Page 9.12.007.03</p>	<p>MALE RUN TEE SWIVEL O/D tube to male NPTF</p>  <p>33468</p> <p>Page 9.12.007.03</p>	<p>UNION TEE O/D tube to O/D tube</p>  <p>33060</p> <p>Page 9.12.007.04</p>				
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Banjos

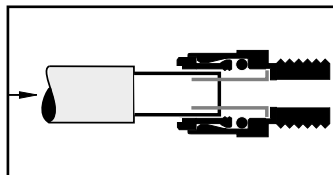
<p>RIGHT ANGLE FLOW CONTROL VALVE regulating out</p>  <p>33V00</p> <p>Page 9.12.007.03</p>						
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Installation

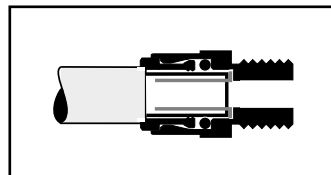
Tube Connection / Disconnection



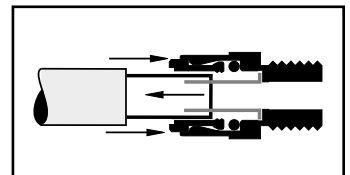
1. Ensure that the end of the tube is cut square and is free from burrs. Correct length of inner tube must be exposed. See WeldTube section for details of tube preparation.



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 on the tube to reinforce the collet teeth gripping action.

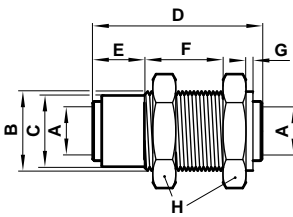


4. To disconnect - First ensure there is no air present. Push the tube into the fitting until it bottoms on the tube stop. Then hold down the collet and withdraw the tube.



Bulkhead Union

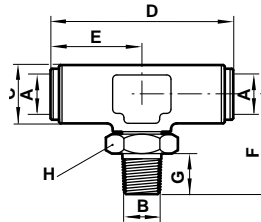
O/D tube to O/D tube



Product number	A O/D tube	B thread	C	D	E	F Max	G Min	H A/F
330290400	1/4	M15 x 1.0	-	36	-	22,0	2	22
330290600	3/8	M20 x 1.5	17,7	45	11,00	22,0	2	27
330290700	1/2	M24 x 1.5	21,7	52	18,00	22,0	2	30,0

Male Branch Tee Swivel

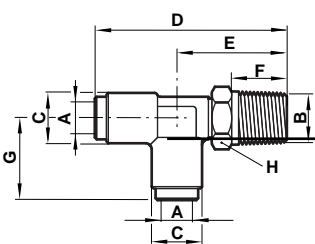
O/D tube to male NPTF



Product number	A O/D tube	B thread NPTF	C	D	E	F	G	H A/F
334670418	1/4	1/8	13,0	42,4	21,2	22,2	9,5	11,0
334670428	1/4	1/4	13,0	42,4	21,2	28,1	14,3	14,0
334670438	1/4	3/8	15,0	43	21,5	29,4	14,3	19,0
334670628	3/8	1/4	17,0	55	27,5	32,4	14,3	19,0
334670638	3/8	3/8	17,0	55	27,5	31,1	14,3	19,0
334670648	3/8	1/2	17,0	55	27,5	36,6	19,1	22,0
334670728	1/2	1/4	20,6	65	32,5	34,4	14,3	22,0
334670738	1/2	3/8	20,6	65	32,5	35,3	14,3	22,0
334670748	1/2	1/2	20,6	65	32,5	40,8	19,1	22,0

Male Run Tee Swivel

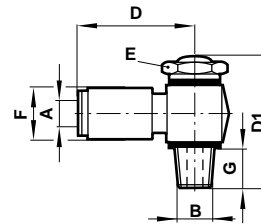
O/D tube to male NPTF



Product number	A O/D tube	B thread NPTF	C	D	E	F	G	H A/F
334680418	1/4	1/8	13,0	44,0	22,8	9,5	21,2	11,0
334680428	1/4	1/4	13,0	49,3	28,1	14,3	21,2	14,0
334680438	1/4	3/8	13,0	52,9	31,4	14,3	21,5	19,0
334680628	3/8	1/4	17,0	59,7	32,2	14,3	27,5	19,0
334680638	3/8	3/8	17,0	58,9	31,1	14,3	27,5	19,0
334680648	3/8	1/2	17,0	64,1	36,6	19,1	27,5	22,0
334680728	1/2	1/4	20,6	66,9	34,4	14,3	32,5	22,0
334680738	1/2	3/8	20,6	67,8	35,3	14,3	32,5	22,0
334680748	1/2	1/2	20,6	73,3	40,8	19,1	32,5	22,0

Right Angle Flow Control Valves

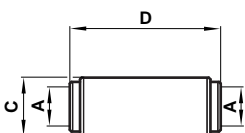
Regulating out O/D tube to male NPTF



Product number	A O/D tube	B thread NPTF	C	D	E A/F	F	G
33VB00418	1/4	1/8	40,0	24,8	9/16	16	9,5
33VB00428	1/4	1/4	46,5	26,8	3/4	20	14,3
33VB00628	3/8	1/4	46,5	31,5	3/4	20	14,3
33VB00638	3/8	3/8	56,5	33,5	7/8	24	14,3
33VB00748	1/2	1/2	65,0	40,5	1 1/16	30	19,0

Union

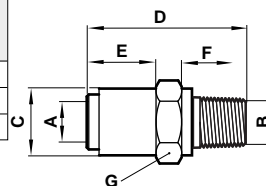
O/D tube to O/D tube



Product number	A O/D tube	C	D
330200400	1/4	13,0	36
330200600	3/8	17,0	45
330200700	1/2	20,5	52

Male Connector

O/D tube to male NPTF

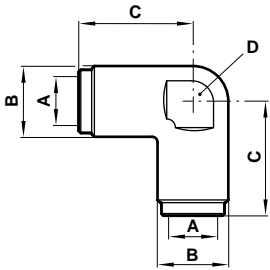


Product number	A O/D tube	B thread NPTF	C	D	E	F	G A/F
334250418	1/4	1/8	12,7	26,5	11	9,5	1/2
334250428	1/4	1/4	12,7	30,0	14,3	14,3	9/16
334250438	1/4	3/8	12,7	30,5	8,0	14,3	1 1/16
334250628	3/8	1/4	16,5	38,0	16,5	14,3	1 1/16
334250638	3/8	3/8	16,5	36,5	14,0	14,3	1 1/16
334250648	3/8	1/2	16,5	37,5	9,5	19,0	7/8
334250728	1/2	1/4	20,0	43,0	19,5	14,3	7/8
334250738	1/2	3/8	20,0	42,0	18,5	14,3	7/8
334250748	1/2	1/2	20,0	44,0	16,0	19,0	7/8



Union Elbow

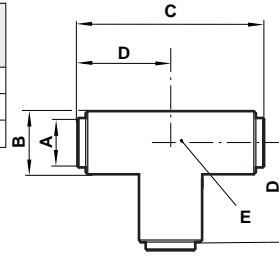
O/D tube to O/D tube



Product number	A O/D tube	B	C	D A/F
330400400	1/4	13.0	21.3	9.5
330400600	3/8	17.0	27.5	13.3
330400700	1/2	20.5	32.5	16.0

Union Tee

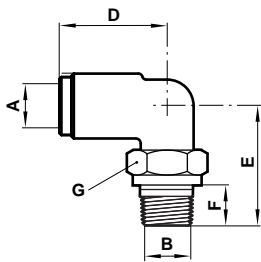
O/D tube to O/D tube



Product number	A O/D tube	B	C	D	E A/F
330600400	1/4	13.0	42.6	21.3	9.5
330600600	3/8	17.0	55.0	27.5	13.3
330600700	1/2	20.5	65.0	32.5	16.0

90° Swivel Elbow Adaptor

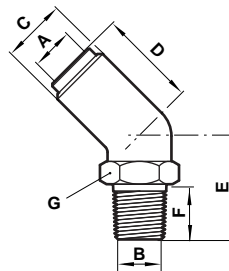
O/D tube to male NPTF



Product number	A O/D tube	B thread NPTF	C	D	E	F	G A/F
334470418	1/4	1/8	13.0	21.2	23.2	9.5	11.0
334470428	1/4	1/4	13.0	21.2	28.4	14.3	14.0
334470438	1/4	3/8	15.0	21.5	31.7	14.3	19.0
334470628	3/8	1/4	17.0	27.5	32.7	14.3	19.0
334470638	3/8	3/8	17.0	27.5	31.6	14.3	19.0
334470648	3/8	1/2	17.0	27.5	36.8	19.0	22.0
334470738	1/2	3/8	20.6	32.5	36.1	14.3	22.0
334470748	1/2	1/2	20.6	32.5	41.1	19.0	22.0

45° Swivel Elbow Adaptor

O/D tube to male NPTF



Product number	A O/D tube	B thread NPTF	C	D	E	F	G A/F
334570418	1/4	1/8	13.0	19.5	18.9	9.5	11.0
334570428	1/4	1/4	13.0	19.5	24.1	14.3	14.0
334570628	3/8	1/4	17.7	24.5	27.4	14.3	19.0
334570638	3/8	3/8	17.7	24.5	29.8	14.3	19.0
334570748	1/2	1/2	23.2	30.0	36.4	19.0	22.0

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 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 Norgren.

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 where applicable.