

- 1 **Easy tube insertion for rapid assembly of pneumatic & water circuits**
- 1 **Silicone free 'O' rings**
- 1 **Very compact**
- 1 **Nickel plated**
- 1 **Provides system protection from weld spatter when combined with Weldtube**
- 1 **Tube support provides high pull out loads**
- 1 **Easy to disassemble, enables quick re-tubing of system**
- 1 **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

Materials:

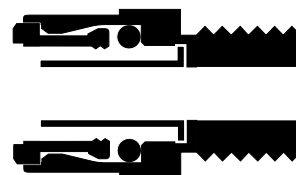
Nickel plated brass for body
Nickel plated brass for collet
Silicone free 'O' ring
'O' Ring sealing on parallel threads

Tubing:

To be used in conjunction with WeldTube.
See section N/UK 9.12.005

Ordering Information

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





Straight Adaptors, Connectors and Plugs

STRAIGHT CONNECTOR O/D tube to O/D tube  21020 Page 9.12.006.03	STRAIGHT ADAPTOR Metric  21225 Page 9.12.006.03					
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Elbow Adaptors and Connectors

ELBOW ADAPTORS O/D tube to O/D tube  21040 Page 9.12.006.03	90° SWIVEL ELBOW ADAPTOR O/D tube to male BSPP  21247 Page 9.12.006.03	45° SWIVEL ELBOW ADAPTOR O/D tube to male BSPP  21257 Page 9.12.006.03				
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Tee Adaptors and Connectors

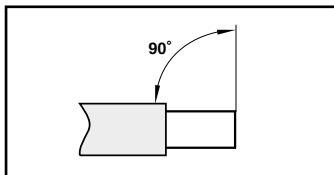
TEE CONNECTOR O/D tube to O/D tube  21060 Page 9.12.006.03						
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Banjos

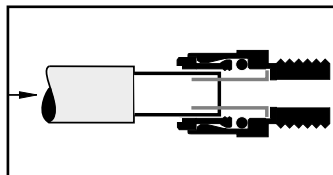
ELBOW BANJO ASSEMBLY non regulating bolt  21A51 Page 9.12.006.04	ELBOW BANJO BODY O/D tube  21051 Page 9.12.006.04	ELBOW BANJO ASSEMBLY regulating out O/D tube to male BSPP  21K51 Page 9.12.006.04	BANJO BOLT non regulating - single stacking top port BSP parallel  20*00 Page 9.12.006.04	BANJO BOLT non regulating - single stacking BSP parallel  20A00 Page 9.12.006.04	BANJO BOLT non regulating - double stacking BSP parallel  20B00 Page 9.12.006.04	BANJO BOLT regulating - single stacking BSP parallel  20*00 Page 9.12.006.05
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Installation

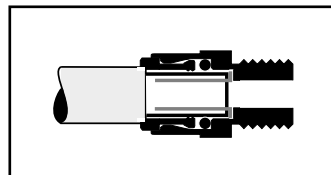
Tube Connection / Disconnection



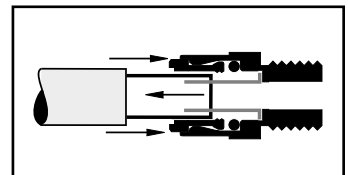
1. Ensure that the end of the tube is cut square and is free from burrs. Correct length of inner tube must be exposed. See WeldTube section for details of tube preparation.



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.

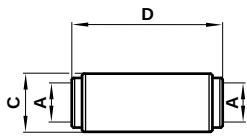


4. To disconnect - First ensure there is no air present. Push the tube into the fitting until it bottoms on the tube stop. Then hold down the collet and withdraw the tube.



Straight Connector

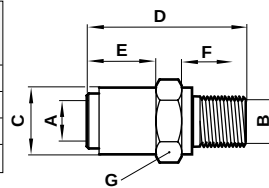
O/D tube to O/D tube



Product number	A O/D tube	C	D
210200600	6	13	36
210200800	8	15	38
210201000	10	17	45
210201200	12	20,5	52

Straight Adaptor

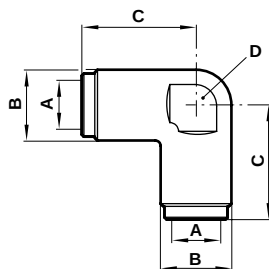
O/D tube to male BSPP



Product number	A O/D tube	B thread BSPP	C	D	E	F	G A/F
212250618	6	1/8	12,7	26	12	7,2	14
212250628	6	1/4	12,7	26	7	9,8	19
212250818	8	1/8	14,7	27	13	7,2	15
212250828	8	1/4	14,7	30	11	9,8	19
212250838	8	3/8	14,7	26	5	11,2	22
212250848	8	1/2	14,7	32	5	14,8	27
212251028	10	1/4	16,5	34	15	9,8	19
212251038	10	3/8	16,5	34	12	11,2	22
212251048	10	1/2	16,5	33	5	14,8	27
212251238	12	3/8	20	39	17	11,2	22
212251248	12	1/2	20	39	10	14,8	27

Elbow Connector

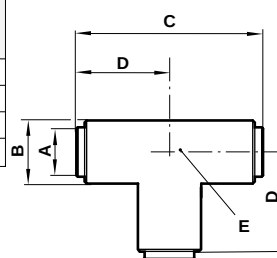
O/D tube to O/D tube



Product number	A O/D tube	B	C	D A/F
210400600	6	13	21	9,5
210400800	8	15	23	11,0
2104001000	10	17	27	13,3
2104001200	12	20,5	32	16

Tee Connector

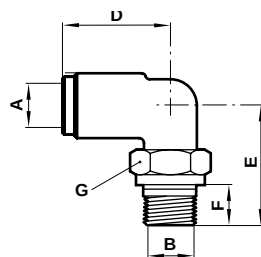
O/D tube to O/D tube



Product number	A O/D tube	B	C	D	E A/F
210600600	6	13	43	21	9,5
210600800	8	15	46	23	11,0
210601000	10	17	55	27	13,3
210601200	12	20,5	65	33	16,0

90° Swivel Elbow Adaptor

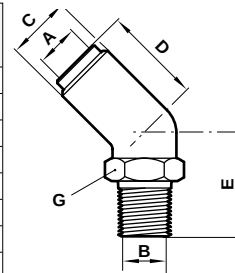
O/D tube to male BSPP



Product number	A O/D tube	B BSPP thread	D	E	F	G A/F
212470618	6	1/8	21	23,2	7,2	15
212470628	6	1/4	21	28,5	9,8	19
212470818	8	1/8	23	24,2	7,2	15
212470828	8	1/4	23	30,3	9,8	19
212470838	8	3/8	25	33,8	11,2	22
212470848	8	1/2	25	39,3	14,75	27
212471018	10	1/8	27	26,2	7,2	15
212471028	10	1/4	27	31,0	9,8	19
212471038	10	3/8	27	33,8	11,2	22
212471048	10	1/2	27	39,3	14,75	27
212471228	12	1/4	32	33,4	9,8	19
212471238	12	3/8	32	37,8	11,2	22
212471248	12	1/2	32	43,3	14,75	27

45° Swivel Elbow Adaptor

O/D tube to male BSPP



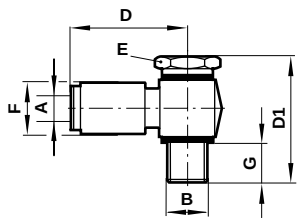
Product number	A O/D tube	B thread	C	D	E	G A/F
212570618	6	1/8	13	19	19,2	15
212570628	6	1/4	13	19	24,5	19
212570818	8	1/8	15	21	20,5	15
212570828	8	1/4	15	21	25,8	19
212571018	10	1/8	17	24	21	15

Supplied with sealing washer



Elbow Banjo Assembly

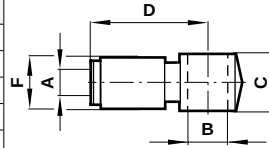
Non regulating bolt



Product number	A O/D tube	B thread BSPP	D	D1	E A/F	F	G
21A510618	6	1/8	25	29	14	12	5
21A510628	6	1/4	26	32	17	13	6
21A510828	8	1/4	27	32	17	15	6
21A510838	8	3/8	25	46	22	15	9
21A511038	10	3/8	32	46	22	15	9
21A511238	12	3/8	36	46	22	20	9
21A511048	10	1/2	35	48	27	17	13
21A511248	12	1/2	39	48	27	20	13

Elbow Banjo Body

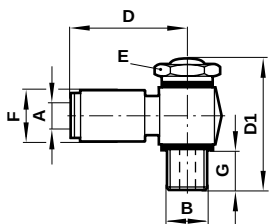
O/D tube



Product number	A O/D tube	B thread BSPP	C	D	F
210510605	6	M5	12,6	22	12,3
210510618	6	1/8	14	25	13
210510628	6	1/4	16	26	13
210510828	8	1/4	16	27	15
210510838	8	3/8	20,5	25	15
210511038	10	3/8	20,5	32	17
210511238	12	3/8	20,5	36	20
210511048	10	1/2	22	35	17
210511248	12	1/2	22	39	20

Elbow Banjo Assembly

Regulating out O/D tube to male BSPP

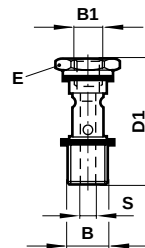


Product number	A O/D tube	B thread BSPP	D	D1	E A/F	F	G
21K510618	6	1/8	25	34	13	13	6
21K510628	6	1/4	26	36,5	17	13	6
21K510828	8	1/4	27	36,5	17	15	6
21K510838	8	3/8	25	51,5	22	15	10
21K511038	10	3/8	32	51,5	22	17	10
21K511248	12	1/2	39	57,5	27	20	12

Pressure rating on this item is 10 bar

Banjo Bolt – Non Regulating

Single Stacking with Top Port BSP Parallel

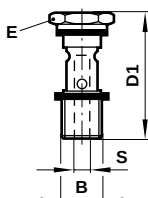


Product number	B1 thread BSP	B thread BSP	D1	E A/F	S
20D000505	M5x0,8	M5x0,8	25,6	8	2,5
20D000528	M5x0,8	1/4	34,0	17	8,5
20D000538	M5x0,8	3/8	41,0	22	10,0
20E001818	1/8	1/8	36,0	14	5,0
20E001828	1/8	1/4	35,5	17	6,0
20E001838	1/8	3/8	41,0	22	10,0
20F002828	1/4	1/4	45,0	17	8,5
20G003838	3/8	3/8	52,0	22	10,0

Supplied complete with sealing washers.

Banjo Bolt – Non Regulating

Single Stacking BSP Parallel

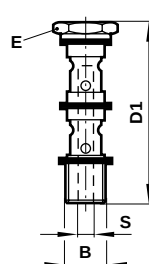


Product number	B thread	D1	E A/F	S
20A000005	M5x0,8	22	8	2,5
20A000018	1/8	30	14	5,0
20A000028	1/4	34	17	8,5
20A000038	3/8	41	22	10,0
20A000048	1/2	47,5	27	11,5

Supplied complete with sealing washers.

Banjo Bolt – Non Regulating

Double Stacking BSP Parallel



Product number	B thread	D1	E A/F	S
20B000005	M5x0,8	34,5	8	2,5
20B000018	1/8	46,5	14	5,0
20B000028	1/4	52,5	17	8,5
20B000038	3/8	64,0	22	10,0
20B000048	1/2	72,5	27	11,5

Supplied complete with sealing washers.

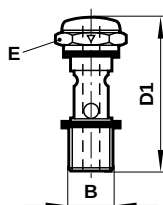


Banjo Bolt – Regulating

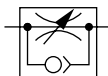
20*00

Single stacking BSP Parallel

Pressure rating on this item 10 bar

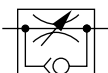


Regulating Out



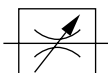
Product number	B thread	D1	E A/F
20K000005	M5 x 0,8	27,3	8
20K000018	1/8	34,0	14
20K000028	1/4	36,5	17
20K000038	3/8	51,5	22
20K000048	1/2	57,0	27

Regulating In



Product number	B thread	D1	E A/F
20L000005	M5 x 0,8	27,3	8
20L000018	1/8	34,0	14
20L000028	1/4	36,5	17
20L000038	3/8	51,5	22
20L000048	1/2	57,0	27

Bi-Directional Flow



Product number	B thread	D1	E A/F
20M000005	M5 x 0,8	27,3	8
20M000018	1/8	34,0	14
20M000028	1/4	36,5	17
20M000038	3/8	51,5	22
20M000048	1/2	57,0	27

All banjo bolts supplied complete with sealing washers.
Arrow on bolt hexagon indicates free flow direction.

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.