

- > **Port size: Ø 4 ... 22 mm**
- > **Rugged and durable**
- > **Ideal for most industrial applications**
- > **Wide range of types and sizes**
- > **Thread sizes from 1/8" to 1" BSP**
- > **Supplied assembled with tubing sleeves, nuts and appropriate seals**


**Medium:**

These fittings are designed for use with compressed air, oils, water and other fluids used in pneumatic and low pressure hydraulic applications.

**Operating pressure:**

Ø 4 ... 14 mm = 100 bar (1450 psi)  
 Ø 16 ... 22 mm = 40 bar (580 psi)

These maximum working pressure is limited by copper tubing with 1 mm wall thickness and +20 °C (+68°F) or limited by metal and PA tubing

**Tube sizes:**

4, 6, 8, 10, 12, 14, 15, 16, 18 or 22 mm

**Thread sizes:**

1/8", 1/4", 3/8", 1/2", 3/4", 1"

**Tube types:**

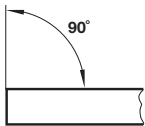
PA 11 or 12 and other plasticised or unplasticised tubing and other soft plastic tubing Copper, annealed and half-hard. Double wall brazed steel tube (Bundy)

**Ambient/Media temperature:**

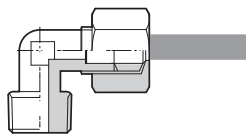
The maximum working temperature is limited by the type of tubing being used

**Materials:**

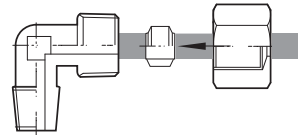
Brass to OT 58 UNI 5705 for all items, except plastic washers  
 Plastic washers: PA  
 All brass items have a nickel plated finish unless otherwise stated

**Method of assembly**


1. Ensure that the tube is cut square and is free from fraze.



2. For larger sizes of metal tubes it is beneficial to lightly oil the tubing nut and sleeve before tightening the joint. Place the tubing nut and sleeve on the tube and push the tube into the fitting until it bottoms on the tube stop.



3. Holding the tube firmly in contact with the tube stop screw the tubing nut down finger tight and then tighten a further 1 1/4-1 1/2 full turns. Slacken off the assembly and ensure that the groove made by sleeve even. Release nut and re-tighten nut an extra quarter turn.


**Note**

When fitting to curved tubes ensure that section entering the fitting is straight for a minimum of twice the nut height. The method of preparation and assembly described will ensure leak-proof joints over a wide pressure range, depending upon the size and type of tubing being used. Failure to follow this guide, or over-tightening at any joint, may lead to damage of the fittings or an unsatisfactory seal.

**Straight adaptors and connectors**

<p><b>Straight male adaptor</b> 43125</p>  <p>Page 3</p>	<p><b>Straight male adaptor with seal</b> 43225</p>  <p>Page 3</p>	<p><b>Straight female adaptor</b> 43226</p>  <p>Page 3</p>	<p><b>Straight stem adaptor with seal</b> 43215</p>  <p>Page 3</p>	<p><b>Straight connector</b> 43020</p>  <p>Page 4</p>	<p><b>Bulkhead connector</b> 43029</p>  <p>Page 4</p>
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**Elbow adaptors and connectors**

<p><b>Male elbow adaptor</b> 43145</p>  <p>Page 4</p>	<p><b>Elbow connector</b> 43040</p>  <p>Page 4</p>
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**Tee connectors and adaptors**

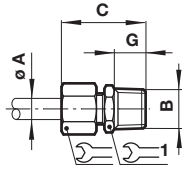
<p><b>Male tee adaptor</b> 43165</p>  <p>Page 5</p>	<p><b>Tee connector</b> 43060</p>  <p>Page 5</p>	<p><b>Male side tee adaptor</b> 43175</p>  <p>Page 5</p>	<p><b>Four way connector</b> 43090</p>  <p>Page 5</p>
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**Elbow banjo assembly**

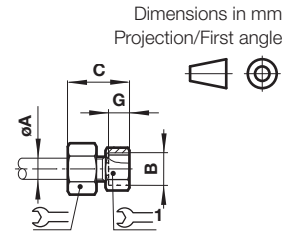
<p><b>Elbow banjo assembly with seals</b> 43A51</p>  <p>Page 5</p>	<p><b>Banjo bolt with seals</b> 43A00</p>  <p>Page 6</p>	<p><b>Single banjo body</b> 43051</p>  <p>Page 6</p>
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**Accessories**

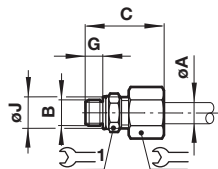
<p><b>Universal tubing sleeve</b> 43002</p>  <p>Page 6</p>	<p><b>Tube support</b> 43033</p>  <p>Page 6</p>	<p><b>Tubing nut</b> 43001</p>  <p>Page 6</p>	<p><b>Reducing connector</b> 43028</p>  <p>Page 6</p>	<p><b>Tubing plug</b> 43004</p>  <p>Page 7</p>	<p><b>Stem tailpiece connector</b> 43019</p>  <p>Page 7</p>
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**Straight male adaptor**  
**43125**


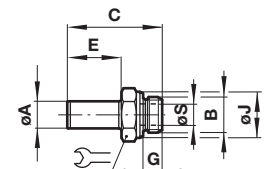
Ø A	B	C	G			Model
4	R1/8	26,5	7,5	10	10	431250418
4	R1/4	29,5	11	10	14	431250428
6	R1/8	28	7,5	13	11	431250618
6	R1/4	31,5	11	13	14	431250628
6	R3/8	32	11,5	13	17	431250638
8	R1/8	30	7,5	14	13	431250818
8	R1/4	33,5	11	14	14	431250828
8	R3/8	34	11,5	14	17	431250838
10	R1/4	36	11	19	16	431251028
10	R3/8	36,5	11,5	19	17	431251038
10	R1/2	38	13	19	21	431251048
12	R1/4	36,5	11	22	18	431251228
12	R3/8	37	11,5	22	18	431251238
12	R1/2	38,5	13	22	21	431251248
14	R3/8	38,5	11,5	24	20	431251438
14	R1/2	39,5	13	24	21	431251448
15	R1/2	39,5	13	24	21	431251548
16	R1/2	42	13	27	22	431251648
16	R3/4	43,5	14,5	27	27	431251668
18	R1/2	42,5	13	30	24	431251848
18	R3/4	44	14,5	30	27	431251868
22	R1/2	45	13	36	30	431252248
22	R3/4	46,5	14,5	36	30	431252268

**Straight female adaptor**  
**43226**


Ø A	B	C	G			Model
4	G1/8	25	8,5	14	10	432260418
6	G1/8	26	8,5	14	13	432260618
6	G1/4	28,5	11	17	13	432260628
8	G1/8	28	8,5	14	14	432260818
8	G1/4	30,5	11	17	14	432260828
8	G3/8	31	11,5	20	14	432260838
10	G1/4	33	11	17	19	432261028
10	G3/8	33,5	11,5	20	19	432261038
10	G1/2	35,5	13,5	24	19	432261048
12	G1/4	33,5	11	18	22	432261228
12	G3/8	34	11,5	20	22	432261238
12	G1/2	36	13,5	24	22	432261248
14	G3/8	33,5	20	24	11,5	432261438
14	G1/2	36	24	24	13,5	432261448
15	G1/2	36,5	24	24	13,5	432261548
16	G1/2	38,5	24	27	13,5	432261648
16	G3/4	40	30	27	14,5	432261668
18	G1/2	39	24	30	13,5	432261848
18	G3/4	40,5	30	30	14,5	432261868
22	G3/4	41	30	36	14,5	432262268

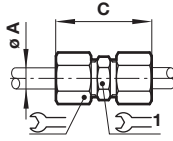
**Straight male adaptor with seal**  
**43225**




Ø A	B	C	G	Ø J			Model
4	G1/8	26	7,5	14	10	13	432250418
6	G1/8	27	7,5	14	13	13	432250618
6	G1/4	30,5	9,5	18	13	17	432250628
8	G1/8	30	7,5	14	14	13	432250818
8	G1/4	32,5	9,5	18	14	17	432250828
8	G3/8	36,5	13	21	14	22	432250838
10	G1/4	35	9,5	18	19	17	432251028
10	G3/8	39	13	21	19	22	432251038
14	G3/8	39,5	13	21	24	22	432251438
14	G1/2	41,5	14,5	26	24	27	432251448
22	G3/4	48	15,5	33	36	32	432252268
22	G1	51	17,5	41	36	41	432252288

**Straight stem adaptor with seal**  
**43215**


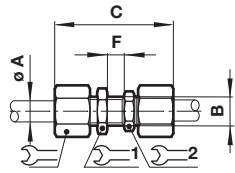
Ø A	B	C	E	G	Ø J	Ø S		Model
6	G1/8	27,5	16	6,5	14	4	10	432150618
6	G1/4	31	16	8	18	4	13	432150628
8	G1/8	31,5	19	6,5	14	5,5	14	432150818
8	G1/4	34	19	8	18	6	19	432150828
8	G3/8	38	19	11	21	6	22	432150838
10	G1/4	35	20	8	18	8	24	432151028
10	G3/8	39	20	11	21	8	24	432151038
14	G3/8	40	21	11	21	11	27	432151438
14	G1/2	42	21	12	26	12	30	432151448

**Straight connector  
43020**



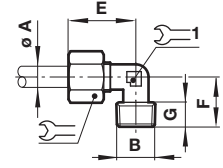
Ø A	C		 1	Model
4	33	10	10	430200400
6	36	13	11	430200600
8	40	14	13	430200800
10	45,5	19	16	430201000
12	46,5	22	18	430201200
14	47	24	21	430201400
15	51	24	21	430201500
16	52	27	22	430201600
18	54	30	26	430201800
22	57	36	30	430202200

**Bulkhead connector  
43029**





Ø A	B	C	F		 1	 2	Model
4	M 8x1,0	49	12	10	13	10	430290400
6	M10x1,0	53	12,5	13	14	13	430290600
8	M12x1,0	57	12,5	14	17	14	430290800
10	M16x1,5	64	13	19	22	19	430291000
12	M18x1,5	70	17	22	22	22	430291200
14	M20x1,5	72	19	24	24	24	430291400

**Male elbow adaptor  
43145**

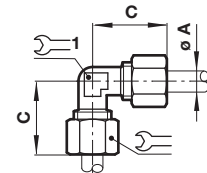




Dimensions in mm  
Projection/First angle

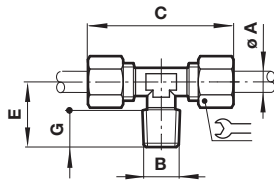


Ø A	B	E	F	G		 1	Model
4	R1/8	21,5	15	7,5	10	8	431450418
6	R1/8	26	18	7,5	13	9	431450618
6	R1/4	24	19	11	13	9	431450628
8	R1/8	30	18	7,5	14	11	431450818
8	R1/4	30	22	11	14	11	431450828
8	R3/8	30,5	24	11,5	14	13	431450838
10	R1/4	33	23,5	11	19	13	431451028
10	R3/8	33	24	11,5	19	13	431451038
10	R1/2	35	25	13	19	14	431451048
12	R1/4	35,5	24	11	22	14	431451228
12	R3/8	35,5	24,5	11,5	22	14	431451238
12	R1/2	35,5	25	13	22	14	431451248
14	R3/8	38,5	26	11,5	24	17	431451438
14	R1/2	38,5	28,5	13	24	17	431451448
15	R1/2	38,5	28,5	13	24	17	431451548
16	R1/2	39,5	28	13	27	17	431451648
18	R1/2	40,5	29,5	13	30	20	431451848
18	R3/4	40,5	32	11,5	30	20	431451868
22	R3/4	43	34	11,5	36	27	431452268

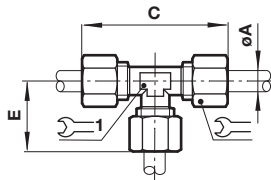
**Elbow connector  
43040**



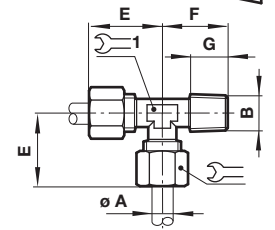
Ø A	C		 1	Model
4	21,5	10	8	430400400
6	26	13	9	430400600
8	30	14	11	430400800
10	33	19	13	430401000
12	35,5	22	14	430401200
14	36,5	24	17	430401400
15	37,5	24	17	430401500
16	39	27	17	430401600
18	40,5	30	20	430401800
22	43	36	27	430402200

**Male tee adaptor**  
**43165**


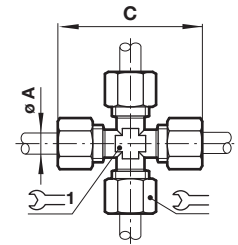
Ø A	B	C	E	G		1	Model
4	R1/8	42	15	7,5	10	8	431650418
6	R1/8	48	16,5	7,5	13	9	431650618
6	R1/4	48	20,5	11	13	9	431650628
8	R1/8	56	16,5	7,5	14	12	431650818
8	R1/4	56	20,5	11	14	12	431650828
8	R3/8	60	23	11,5	14	13	431650838
10	R1/4	64	22,5	11	19	13	431651028
10	R3/8	64	23,5	11,5	19	13	431651038
10	R1/2	68	27	13	19	14	431651048
12	R1/4	68	24,5	11	22	14	431651228
12	R3/8	71	24,5	11,5	22	14	431651238
12	R1/2	71	25	13	22	14	431651248
14	R3/8	77	26	11,5	24	17	431651438
14	R1/2	77	28,5	13	24	17	431651448
15	R1/2	77	28,5	13	24	17	431651548
16	R1/2	79	28	13	27	17	431651648
18	R1/2	81	29,5	13	30	20	431651848
18	R3/4	81	32	14,5	30	20	431651868
22	R3/4	86	34	11,5	36	27	431652268

**Tee connector**  
**43060**


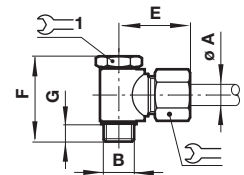
Ø A	C	E		1	Model
4	43	21,5	10	8	430600400
6	48	24	13	9	430600600
8	57	28,5	14	12	430600800
10	64	32	19	13	430601000
12	70	35	22	14	430601200
14	77	38,5	24	18	430601400
15	77	38,5	24	18	430601500
16	78	39	27	17	430601600
18	81	40,5	30	20	430601800
22	86	43	36	27	430602200

**Male side tee adaptor**  
**43175**


Ø A	B	E	F	G		1	Model
4	R1/8	15	21	7,5	10	8	431750418
6	R1/8	19	24	7,5	13	9	431750618
6	R1/4	20	26	11	13	9	431750628
8	R1/8	18	26	7,5	14	12	431750818
8	R1/4	20	26	11	14	12	431750828
8	R3/8	23	26	11,5	14	13	431750838

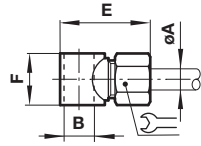
**Four way connector**  
**43090**



Ø A	Ø A1	C	Model
4	10,5	18	C00120400
6	12,5	19	C00120600
8	14,5	21	C00120800
10	17,5	23	C00121000
12	19,5	25	C00121200
16	24	25	C00121600

**Elbow banjo assembly with seals**  
**43A51**


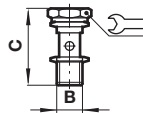
Ø A	B	E	F	G		1	Model
4	G1/8	22,5	31	8	10	14	43A510418
6	G1/8	23,5	31	8	13	14	43A510618
6	G1/4	26,5	33,5	6	13	17	43A510628
8	G1/8	28,5	31	8	14	14	43A510818
8	G1/4	28,5	33,5	6	14	17	43A510828
8	G3/8	30	34,5	8	14	19	43A510838
10	G1/4	32,5	33,5	7	19	17	43A511028
10	G3/8	32,5	34,5	8	19	19	43A511038
14	G1/4	36,5	44	8	24	17	43A511428
14	G3/8	36,5	46	9	24	22	43A511438
14	G1/2	36,5	49	11	24	24	43A511448
22	G3/4	46	64	12	36	32	43A512268


**Single banjo body  
43051**



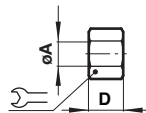
Ø A	B	E	F	Version		Model
4	1/8"	30	17	short banjo bolt	10	430510418
6	1/8"	28	17	short banjo bolt	13	430510618
6	1/4"	36	17	short banjo bolt	13	430510628
8	1/8"	38	17	short banjo bolt	14	430510818
8	1/4"	38	17	short banjo bolt	14	430510828
8	3/8"	41	20	short banjo bolt	14	430510838
10	1/4"	43	20	short banjo bolt	19	430511028
10	3/8"	43	20	short banjo bolt	19	430511038
14	1/4"	50	30	long banjo bolt	24	430511428
14	3/8"	50	30	long banjo bolt	24	430511438
14	1/2"	50	30	long banjo bolt	24	430511448
22	3/4"	63	42	long banjo bolt	36	430512268


**Banjo bolt with seals  
43A00**



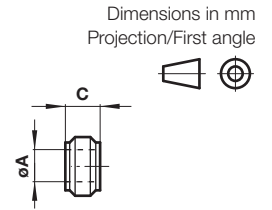
B	C	Version		Model
G1/8	31	short	14	43A000018
G1/4	33,5	short	17	43A000028
G3/8	34,5	short	19	43A000038
G1/4	44	long	17	43A000L28
G3/8	46	long	22	43A000L38
G1/2	49	long	24	43A000L48
G3/4	64	long	32	43A000L68

**Tubing nut  
43001**



Ø A	B	C		Model
4	M8x1,0	10,5	10	430010400
6	M10x1,0	10,5	13	430010600
8	M12x1,0	12,5	14	430010800
10	M16x1,5	15	19	430011000
12	M18x1,5	15	22	430011200
14	M20x1,5	15	24	430011400
15	M20x1,5	15	24	430011500
16	M22x1,5	17	27	430011600
18	M24x1,5	18	30	430011800
22	M30x1,5	19	36	430012200

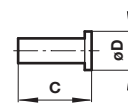
**Universal tubing sleeve  
43002**  
Natural brass finish



Ø A	C	Model
4	6	430020400
6	6,5	430020600
8	7	430020800
10	8	430021000
12	8,5	430021200
14	8,5	430021400
15	8,5	430021500
16	9	430021600
18	9,5	430021800
22	10	430022200

**Tube support  
43033**

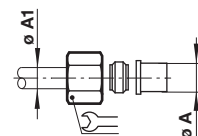
Natural brass finish,  
for use on plastic tubing.




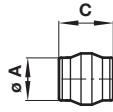
Ø Rohr Außen/Innen	C	ØD	Model
4/2,7	13,5	3,8	430330403
6/4	13,5	5	430330604
8/6	16,5	7	430330806
10/8	17,5	9	430331008
12/9	19,5	11	430331209
14/10	19	11	430331210
14/12	21,5	13,5	430331412
15/12,5	21,5	14	430331512
16/13	22,5	15	430331613
18/15	23,5	17,5	430331815
18/16	23,5	17,5	430331816
22/18	25	19	430332218

**Reducing connector  
43028**

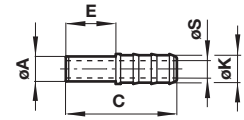
Natural brass finish  
for sleeve and reducer.



Ø A	Ø A1		Model
6	4	13	430280604
8	6	14	430280806
10	8	19	430281008
12	10	22	430281210
14	12	24	430281412

**Tubing plug**  
**43004**  
 Natural brass finish


$\varnothing A$	C	Model
4	10	430040400
6	10,5	430040600
8	10,5	430040800
10	11,5	430041000
12	12	430041200
14	14	430041400
15	14	430041500
16	14	430041600
18	16	430041800
22	15	430042200

**Stem tailpiece connector**  
**43019**  
 Natural brass finish

 Dimensions in mm  
 Projection/First angle


$\varnothing A$	C	E	$\varnothing K$	$\varnothing S$	Model
6	40,5	22,5	7	5,5	430190607
8	43,5	22,5	7	5,5	430190807
8	43,5	22,5	10	8	430190810
10	44,5	22,5	7	5,5	430191007
10	44,5	22,5	10	8	430191010
12	45	22,5	10	8	430191210
12	52	29,5	13	11	430191213
14	52,5	29,5	13	11,5	430191413

**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 NORGRN.

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.