

- Suitable for use in most general industrial applications
- Bright nickel plated brass
- Compact design
- Reliable and corrosion resistant
- Washers included where necessary



### Technical Data

#### Medium:

Compressed air or any fluids compatible with the materials listed below

#### Operating Pressure and Temperature:

Generally limited by tubing specification except where plastic sealing washers are used (Banjo bolts M3 & M5 units). In these cases temperature limited to +70°C, pressure limited to 18 bar. Suitable for vacuum applications.

Flow regulating banjos are limited to 1-10 bar operating range

### Materials

Bar parts brass to BS 2874: 1986 (CZ121), bright nickel plated.  
Stamped parts brass to BS 2872: 1969 (CZ122), bright nickel plated.

Copper sealing washers (nylon for M3 & M5 units and banjo assemblies).



















### Ordering Information

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






M3, M5, 1/8", 1/4", 3/8", 1/2", 3/4", 1", 1 1/4", 1 1/2" BSP threads







**Straight Adaptors and Connectors**

<p><b>BULKHEAD CONNECTOR</b> 16029  Page 9.8.001.03</p>	<p><b>SLEEVE ADAPTOR</b> female BSPP 16022  Page 9.8.001.03</p>	<p><b>NIPPLE ADAPTOR</b> male BSPP 16020  Page 9.8.001.03</p>	<p><b>NIPPLE ADAPTOR</b> male BSPT 15020  Page 9.8.001.03</p>	<p><b>BSP CONNECTOR</b> reducer male x female 16023  Page 9.8.001.03</p>	<p><b>BSP CONNECTOR</b> expander male x female 16023  Page 9.8.001.03</p>	<p><b>ADAPTOR</b> female NPTF to male BSPT 15423  Page 9.8.001.04</p>
<p><b>GAUGE ADAPTOR</b> female BSPP to male NPTF 17223  Page 9.8.001.04</p>	<p><b>HEXAGON NIPPLE</b> male NPTF to male BSPT 15420  Page 9.8.001.04</p>	<p><b>BSP CONNECTOR</b> reducer - male BSPT x female BSPP 15023  Page 9.8.001.04</p>	<p><b>BSP CONNECTOR</b> expander - male BSPT x female BSPP 15023  Page 9.8.001.04</p>	<p><b>PLUG</b> male BSPP 16005  Page 9.8.001.05</p>	<p><b>PLUG</b> male BSPT 15005  Page 9.8.001.05</p>	<p><b>HOSE ADAPTOR</b> metric I/D hose bore x male BSPT 29117  Page 9.8.001.06</p>
<p><b>HOSE ADAPTOR</b> imperial I/D hose bore x male BSPT 30117  Page 9.8.001.06</p>	<p><b>HOSE ADAPTOR</b> metric I/D hose bore x male BSPP 29217  Page 9.8.001.06</p>	<p><b>SWIVEL HOSE ADAPTOR</b> imperial I/D x female BSPP 30218  Page 9.8.001.06</p>	<p><b>HOSE CONNECTOR</b> imperial 30014  Page 9.8.001.07</p>			





**Elbow Connectors and Adaptors**







<p><b>ELBOW</b> 2 x female BSPP 16042  Page 9.8.001.04</p>	<p><b>ELBOW</b> male BSPT x female BSPP 15043  Page 9.8.001.04</p>	<p><b>ELBOW</b> 2 x male BSPT 15040  Page 9.8.001.05</p>	<p><b>ELBOW BANJO ASSEMBLY</b> non regulating bolt 16A51  Page 9.8.001.07</p>	<p><b>ELBOW BANJO ASSEMBLY</b> regulating out 16K51  Page 9.8.001.07</p>		
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**Tee Connectors and Adaptors**

<p><b>TEE</b> 3 x female BSPP 16062  Page 9.8.001.05</p>	<p><b>TEE</b> 3 x male BSPT 15060  Page 9.8.001.05</p>	<p><b>TEE</b> 2 x female BSPT x male BSPP leg 15069  Page 9.8.001.05</p>	<p><b>CROSS</b> 4 x female BSPP 16092  Page 9.8.001.05</p>			
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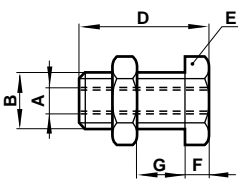
**Banjo Bodies and Bolts**

<p><b>ELBOW BANJO BODY</b> 16051  Page 9.8.001.07</p>	<p><b>BANJO BOLT</b> non regulating single stacking 20A00  Page 9.8.001.07</p>	<p><b>BANJO BOLT</b> non regulating double stacking 20B00  Page 9.8.001.07</p>	<p><b>BANJO BOLT</b> regulating single stacking BSP parallel 20K00  Page 9.8.001.07</p>			
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<p><b>MANIFOLD</b> single sided 34050  Page 9.8.001.08</p>	<p><b>LOCKNUT</b> metric 36054  Page 9.8.001.08</p>	<p><b>LOCKNUT</b> inch 34022  Page 9.8.001.08</p>	<p><b>FLAT UNION</b> 15033  Page 9.8.001.08</p>	<p><b>TAPER PLUG</b> with internal hexagon 25013  Page 9.8.001.08</p>	<p><b>4 WAY BLOCK CONNECTOR</b>  Page 9.8.001.08</p>	
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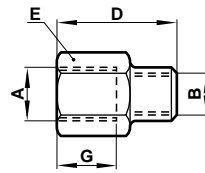
**Bulkhead Connector**



Product number	A BSPP female thread	B metric male thread	D	E A/F	F	G max.
160290005	M5x0,8	M10x1,0	14,0	14	3,5	7,0
160290018	1/8"	M16x1,5	18,0	22	4,0	10,0
160290028	1/4"	M20x1,5	25,0	27	4,0	16,0
160290038	3/8"	M26x1,5	26,0	32	5,0	15,0
160290048	1/2"	M28x1,5	33,0	36	6,0	21,0
160290068	3/4"	M33x1,5	36,5	41	6,0	22,5
160290088	1"	M42x1,5	41,5	46	8,0	24,5
1602900A8	1 1/4"	M48x1,5	50,0	55	8,0	29,5

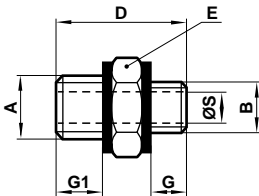
Supplied complete with locknut

**Sleeve - Female BSPP**



Product number	A BSPP female thread	B BSPP female thread	D	E A/F	G
160220505	M5x0,8	M5x0,8	11,0	8	-
160221805	1/8"	M5x0,8	13,0	14	7,4
160221818	1/8"	1/8"	15,0	14	-
160222818	1/4"	1/8"	19,0	17	9,5
160222828	1/4"	1/4"	22,0	17	-
160223818	3/8"	1/8"	20,0	22	10,5
160223828	3/8"	1/4"	23,0	22	10,5
160223838	3/8"	3/8"	24,0	22	-
160224818	1/2"	1/8"	24,0	24	13,0
160224828	1/2"	1/4"	25,0	24	13,0
160224838	1/2"	3/8"	27,5	24	13,0
160224848	1/2"	1/2"	30,0	26	-
160226848	3/4"	1/2"	30,0	30	14,5
160226868	3/4"	3/4"	32,0	32	-
160228868	1"	3/4"	41,0	40	17
160228888	1"	1"	45,5	41	-

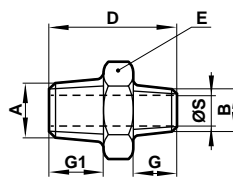
**Nipple - Male BSPP**



Product number	A BSPP male thread	B BSPP male thread	D	E A/F	G1	G	ØS
160200505	M5x0,8	M5x0,8	11,5	8	4,0	4,0	2,0
160201805	1/8"	M5x0,8	14,5	14	6,0	4,0	2,0
160201818	1/8"	1/8"	16,5	14	6,0	6,0	5,5
160202818	1/4"	1/8"	19,0	17	8,0	6,0	5,5
160202828	1/4"	1/4"	21,0	17	8,0	8,0	8,0
160203828	3/8"	1/4"	22,0	19	9,0	8,0	8,0
160203838	3/8"	3/8"	23,0	19	9,0	9,0	11,0
160204828	1/2"	1/4"	23,5	24	10,0	8,0	8,0
160204838	1/2"	3/8"	24,5	24	10,0	9,0	11,0
160204848	1/2"	1/2"	25,5	24	10,0	10,0	15,0
160206848	3/4"	1/2"	27,5	30	12,0	10,0	15,0
160206868	3/4"	3/4"	53,0	32	14,7	14,7	18,0
160208848	1"	1/2"	56,7	41	17,5	13,4	14,0
160208868	1"	3/4"	58,0	41	17,5	14,7	18,0
160208888	1"	1"	60,8	41	17,5	17,5	25,0

Supplied with sealing washers

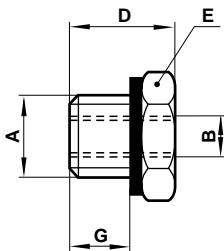
**Nipple - Male BSPT**



Product number	A BSPT male thread	B BSPT male thread	D	E A/F	G1	G	ØS min.
150201818	1/8"	1/8"	19,5	12	7,5	7,5	5,5
150202818	1/4"	1/8"	23,5	14	11,0	7,5	5,5
150202828	1/4"	1/4"	27,6	14	11,0	11,0	6,35
150203818	3/8"	1/8"	24,0	17	11,5	7,5	5,5
150203828	3/8"	1/4"	27,5	17	11,5	11,0	8,0
150203838	3/8"	3/8"	28,0	17	11,5	11,5	11,0
150204818	1/2"	1/8"	27,0	22	14,0	7,5	5,5
150204828	1/2"	1/4"	30,5	22	14,0	11,0	8,0
150204838	1/2"	3/8"	31,0	22	14,0	11,5	11,0
150204848	1/2"	1/2"	33,5	22	14,0	14,0	15,0
150206828	3/4"	1/4"	37,2	27	19,0	11,1	6,35
150206838	3/4"	3/8"	38,8	27	19,0	12,7	9,0
150206848	3/4"	1/2"	37,5	27	16,0	14,0	15,0
150206868	3/4"	3/4"	40,0	27	16,5	16,5	19,0
150208838	1"	3/8"	42,8	36	22,1	12,7	9,0
150208848	1"	1/2"	46,0	36	22,1	15,9	12,7
150208868	1"	3/4"	43,0	34	19,0	16,5	19,0
150208888	1"	1"	45,5	34	19,0	19,0	23,0

**BSP - Connector**

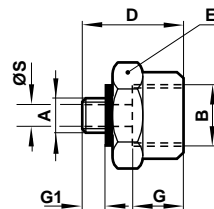
**Reducer - Male BSPP x Female BSPP**



Product number	A BSPP male thread	B BSPP female thread	D	E A/F	G max.
160231805	1/8"	M5x0,8	10,5	14	6,0
160232805	1/4"	M5x0,8	13,3	17	7,3
160232818	1/4"	1/8"	13,0	17	8,0
160233818	3/8"	1/8"	14,0	19	9,0
160233828	3/8"	1/4"	14,0	19	9,0
160234818	1/2"	1/8"	15,5	24	10,0
160234828	1/2"	1/4"	15,5	24	10,0
160234838	1/2"	3/8"	15,5	24	10,0
160236828	3/4"	1/4"	23,0	32	14,2
160236838	3/4"	3/8"	17,5	30	12,0
160236848	3/4"	1/2"	17,5	30	12,0

Supplied with sealing washers

**Expander - Male BSPP x Female BSPP**



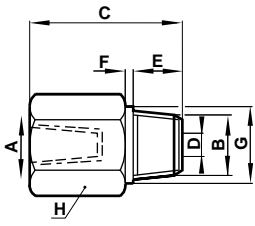
Product number	A BSPP male thread	B BSPP female thread	D	E A/F	G1	ØS min.	G
160230518	M5x0,8	1/8"	14,5	14	4,0	2,0	7,4
160231828	1/8"	1/4"	19,5	17	6,0	5,5	9,5
160231838	1/8"	3/8"	21,0	22	6,0	5,5	10,5
160232838	1/4"	3/8"	22,5	22	8,0	8,0	10,5
160232848	1/4"	1/2"	26,0	26	8,0	8,0	13,0
160232868	1/4"	3/4"	32,8	32	7,3	6,5	16,3
160233848	3/8"	1/2"	27,0	26	9,0	11	13,0
160233868	3/8"	3/4"	34,2	32	8,7	9,5	16,3
160234868	1/2"	3/4"	37,8	32	11,75	13,6	16,3

Supplied with sealing washers

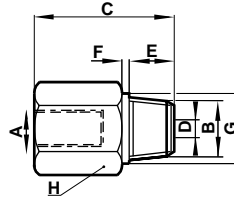


**Adaptor- Female NPTF to Male BSPT**

**Gauge Adaptor  
Female BSPP to Male NPTF**

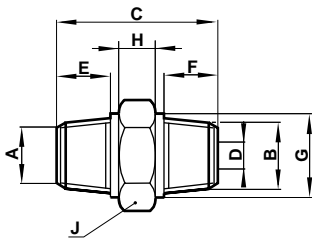


Product number	A NPTF thread	B BSPT thread	C	∅D	E	F	∅G	H A/F
154231818	1/8"	1/8"	27,5	4,75	9,50	2,0	10,7	15,0
154232828	1/4"	1/4"	36,0	7,60	11,10	2,0	13,7	19,0
154233838	3/8"	3/8"	38,0	9,60	12,70	2,0	16,7	22,0
154234848	1/2"	1/2"	47,0	12,70	15,90	2,0	21,7	27,0
154236868	3/4"	3/4"	50,0	17,45	19,05	2,0	26,7	36,0



Product number	A BSPP thread	B NPTF thread	C	∅D	E	F	∅G	H A/F
172232828	1/4"	1/4"	33,5	7,60	14,3	2,0	17,7	19,0
172233838	3/8"	3/8"	33,5	9,60	14,3	2,0	16,7	24,0
172234848	1/2"	1/2"	44,0	12,70	19,0	2,0	21,7	27,0

**Hexagon Nipple - Male NPTF to Male BSPT**

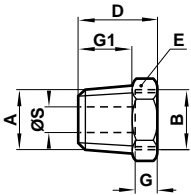


Product number	A NPTF thread	B BSPT thread	C	∅D	E	F	∅G	H	J
154201818	1/8"	1/8"	27,0	4,75	9,5	9,50	10,7	2,0	11,0
154202828	1/4"	1/4"	3,50	7,60	14,3	11,10	13,7	2,0	14,0
154203838	3/8"	3/8"	37,0	9,60	14,3	12,70	16,7	2,0	17,0
154204848	1/2"	1/2"	46,5	12,70	19,0	15,90	21,7	2,0	22,0
154206868	3/4"	3/4"	47,5	17,45	19,0	19,05	26,7	2,0	27,0

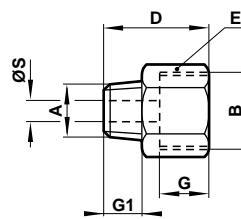
Adaptor Fittings - Allow connection between components and system using BSP or NPT threads

**BSP Connector  
Reducer – Male BSPT x Female BSPP**

**Expander – Male BSPT x Female BSPP**



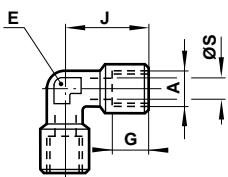
Product number	A BSPT male thread	B BSPP female thread	D	E A/F	G1 min.	∅S min.	G
150231818	1/8"	1/8"	20,0	14	7,5	5,5	7,4
150232818	1/4"	1/8"	16,0	14	11,0	5,5	7,4
150232828	1/4"	1/4"	26,0	17	11,0	8,0	9,5
150233818	3/8"	1/8"	16,5	17	11,5	5,5	7,4
150233828	3/8"	1/4"	16,5	17	11,5	8,0	9,5
150233838	3/8"	3/8"	27,5	22	11,5	11,0	10,5
150234818	1/2"	1/8"	19,5	22	14,0	5,5	7,4
150234828	1/2"	1/4"	19,5	22	14,0	8,0	9,5
150234838	1/2"	3/8"	19,5	22	14,0	11,0	10,5
150234848	1/2"	1/2"	33,0	26	14,0	15,0	13,0
150236828	3/4"	1/4"	29,5	27	19,05	11,5	11,0
150236838	3/4"	3/8"	23,5	27	16,5	11,0	10,5
150236848	3/4"	1/2"	23,5	27	16,5	15,0	13,0
150238838	1"	3/8"	34,5	35	22,1	15,0	11,4
150238848	1"	1/2"	26,5	34	19,0	15,0	13,0
150238868	1"	3/4"	26,5	34	19,0	19,0	16,5



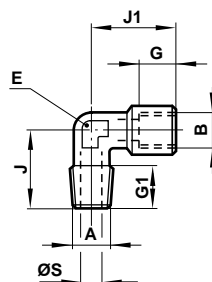
Product number	A BSPT male thread	B BSPP female thread	D	E A/F	G1 min.	∅S min.	G
150231828	1/8"	1/4"	22,0	17	7,5	5	9,5
150231838	1/8"	3/8"	22,5	22	7,5	5	10,5
150231848	1/8"	1/2"	31,0	27	8,6	5	15,0
150232838	1/4"	3/8"	27,0	22	11,0	8	10,5
150232848	1/4"	1/2"	30,0	26	11,0	8	13,0
150232868	1/4"	3/4"	37,3	32	11,1	7	16,3
150233848	3/8"	1/2"	30,5	26	11,5	11	13,0
150233868	3/8"	3/4"	38,3	32	12,7	11	16,3
150234868	1/2"	3/4"	35,0	32	14,0	15	14,5
150236888	3/4"	1"	47,5	41	19,05	18	19,0

**Elbow – 2 x Female BSPP**

**Elbow – Male BSPT x Female BSPP**



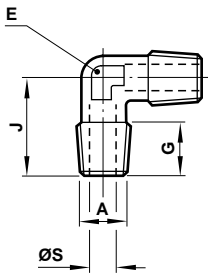
Product number	A BSPP female thread	E A/F	G min.	J	∅S
160420018	1/8"	12	7,0	21	5,5
160420028	1/4"	13	9,5	25,5	8
160420038	3/8"	16	11,5	28	11
160420048	1/2"	20	15,0	32	15
160420068	3/4"	27	14,5	36,5	19



Product number	A BSPT male thread	B BSPP female thread	E A/F	G1	G min.	J	J1	∅S
150430018	1/8"	1/8"	12	8	7,0	21	18,5	5,5
150430028	1/4"	1/4"	13	11	9,5	25,5	24	8
150430038	3/8"	3/8"	16	11,5	11,5	28	27	11
150430048	1/2"	1/2"	20	14	13,0	32	29,5	15
150430068	3/4"	3/4"	27	14,5	14,5	36,5	32	19

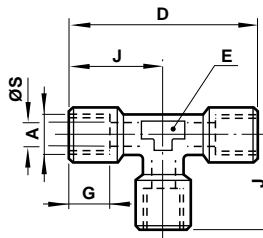


**Elbow – 2 x Male BSPT**



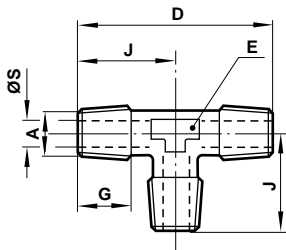
Product number	A BSPT male thread	E A/F	G	J	ØS
150400018	1/8"	12	7,5	18,5	6
150400028	1/4"	13	11	24	8
150400038	3/8"	16	12	27	11
150400048	1/2"	20	14	29,5	15

**Tee – 3 x Female BSPP**



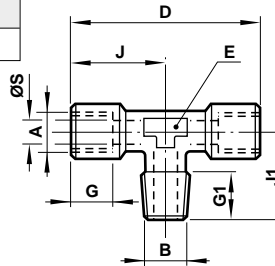
Product number	A BSPP female thread	D	E A/F	G min.	J	ØS
160620018	1/8"	39	12	7,4	19,5	6
160620028	1/4"	49	13	9,5	24,5	8
160620038	3/8"	54	16	10,5	27	11
160620048	1/2"	64	20	13,0	29	15
160620068	3/4"	73	27	14,5	36,5	19

**Tee – 3 x Male BSPT**



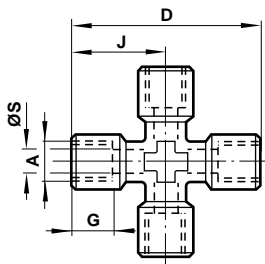
Product number	A BSPT male thread	D	E A/F	G	J	ØS
150600028	1/4"	46	13	11	23	8

**Tee – 2 x Female BSPP x Male BSPT Leg**



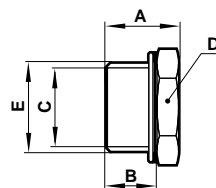
Product number	A BSPP female thread	B BSPT male thread	D	E A/F	G1	G min.	J1	J	ØS
150690018	1/8"	1/8"	39	12	8	8,5	17,5	19,5	6
150690028	1/4"	1/4"	49	13	11	11	23	24,5	8
150690038	3/8"	3/8"	54	16	11,5	12	25,5	27	11
150690048	1/2"	1/2"	64	20	14	15	29	32	15
150690068	3/4"	3/4"	73	27	14,5	16,5	32	36,5	19

**Cross – 4 x Female BSPP**



Product number	A BSPP female thread	D	G	J	ØS
160920018	1/8"	39	8,5	19,5	6
160920028	1/4"	50	11	25	8
160920038	3/8"	56	12	28	11
160920048	1/2"	64	15	32	15

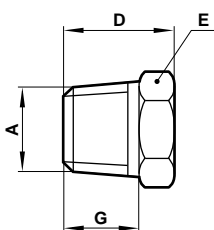
**Plug – Male BSPP**



Product number	A	B	C BSPP male thread	D A/F	E Ø
160050005	8,0	4,5	M5	8	-
160050018	10,0	6,5	1/8"	14	13,4
160050028	13,0	9	1/4"	17	17,6
160050038	13,5	9,5	3/8"	19	20,9
160050048	14,5	10	1/2"	24	26,4
160050068	16	11	3/4"	30	32,4
160050088	17	12	1"	40	38,9

Supplied with sealing washer

**Plug – Male BSPT**

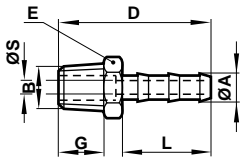


Product number	A BSPT male thread	D	E A/F	G
150050018	1/8"	14,5	10	9,5
150050028	1/4"	16,5	14	11,1
150050038	3/8"	19	17	12,7
150050048	1/2"	22,5	22	15,9
150050068	3/4"	27	27	19,05
150050088	1"	30	36	22,1



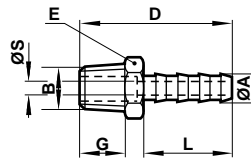
## Nickel Plated BSP & Hose Fittings

### Hose Adaptor Metric I/D Hose Bore x Male BSPT



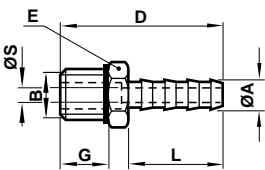
Product number	A hose bore	B BSPT male thread	D	E A/F	G	L	ØS min.
291170418	4	1/8"	32,0	12	7,5	19,5	3,2
291170618	6	1/8"	32,0	12	7,5	19,5	3,2
291170628	6	1/4"	35,5	14	11,0	19,5	3,2
291170638	6	3/8"	42,5	17	14,3	22,5	5,0
291170718	7	1/8"	32,0	12	7,5	19,5	5,0
291170728	7	1/4"	35,5	14	11,0	19,5	6,0
291170738	7	3/8"	36,0	17	11,5	19,5	6,0
291170828	8	1/4"	35,5	14	11,0	19,5	7,5
291170838	8	3/8"	36,0	17	11,5	19,5	7,5
291170918	9	1/8"	36,0	13	8,3	22,5	5,0
291170928	9	1/4"	41,0	14	12,3	22,5	7,6
291170938	9	3/8"	42,5	17	14,25	22,5	7,6
291170948	9	1/2"	45,5	22	16,8	22,5	7,6
291171018	10	1/8"	36,0	13	8,3	22,5	8,8
291171028	10	1/4"	35,5	14	11,0	19,5	7,5
291171038	10	3/8"	36,0	17	11,5	19,5	7,5
291171238	12	3/8"	36,0	17	11,5	19,5	9,5
291171328	13	1/4"	48,5	16	12,3	29,5	7,0
291171338	13	3/8"	49,5	17	14,25	29,5	11,0
291171348	13	1/2"	52,5	22	16,8	29,5	11,0
291171368	13	3/4"	55,0	27	18,5	29,5	11,0
291171638	16	3/8"	36,0	19	11,5	19,5	11
291171648	16	1/2"	39,0	22	14,0	19,5	12,5
291171668	16	3/4"	43,5	27	16,5	19,5	14,5
291171938	19	3/8"	58,5	22	14,25	38,0	11,0
291171948	19	1/2"	61,0	22	16,8	38,0	14,0
291171968	19	3/4"	63,5	27	18,5	38,0	17,5
291172568	25	3/4"	63,5	27	18,5	38,0	18,0
291172588	25	1"	67,5	35	21,4	38,0	22,0
291173288	32	1"	72,5	35	21,4	43,0	24,0

### Hose Adaptor Imperial I/D Hose Bore x Male BSPT



Product number	A hose bore	B BSPT male thread	D	E A/F	G	L	ØS min.
301170318	3/16"	1/8"	36	10	8,3	22,5	4,2
301170328	3/16"	1/4"	41	14	12,3	22,5	4,2
301170418	1/4"	1/8"	36	10	8,3	22,5	5,35
301170428	1/4"	1/4"	41	14	12,3	22,5	5,35
301170438	1/4"	3/8"	42,5	17	14,25	22,5	5,35
301170448	1/4"	1/2"	45,5	22	16,8	22,5	5,35
301170518	5/16"	1/8"	36	12	8,3	22,5	5
301170528	5/16"	1/4"	41	14	12,3	22,5	7
301170618	3/8"	1/8"	36	12	8,3	22,5	5
301170628	3/8"	1/4"	41	14	12,3	22,5	7
301170638	3/8"	3/8"	42,5	17	14,25	22,5	8,33
301170648	3/8"	1/2"	45,5	22	16,8	22,5	8,33
301170728	1/2"	1/4"	48,5	17	12,3	29,5	7
301170738	1/2"	3/8"	49,5	17	14,25	29,5	10,7
301170748	1/2"	1/2"	52,5	22	16,8	29,5	10,7
301170768	1/2"	3/4"	55,0	27	18,5	29,5	10,7
301170848	5/8"	1/2"	61,0	22	16,8	38,0	14,0
301170868	5/8"	3/4"	63,5	27	18,5	38,0	14,5
301170948	3/4"	1/2"	61,0	22	16,8	38,0	14,0
301170968	3/4"	3/4"	63,5	27	18,5	38,0	17,5
301170988	3/4"	1"	67,5	35	21,4	38,0	17,55
301171088	1"	1"	67,5	35	21,4	38,0	22,4
3011711A8	1 1/4"	1 1/4"	80,0	42	24,7	43,0	29,25
3011712B8	1 1/2"	1 1/2"	80,0	50	24,7	43,0	36,0

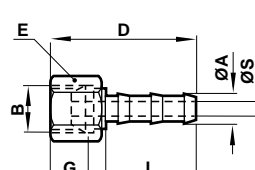
### Hose Adaptor – Metric I/D Hose Bore x Male BSPP



Product number	A hose bore	B BSPP male thread	D	E A/F	G	L	ØS min.
292170203	2,5	M3	14,0	5	3,5	7,5	1,8
292170305	3	M5x0,8"	15,6	8	3,5	7,5	2,0
292170318	3	1/8"	21,0	14	7,4	7,5	2,0
292170418	4	1/8"	36,5	14	7,4	22,5	3,3
292170428	4	1/4"	40,5	19	10,0	22,5	3,3
292170518	5	1/8"	36,5	14	7,4	22,5	4,0
292170618	6	1/8"	36,5	14	7,4	22,5	5,0
292170628	6	1/4"	40,5	19	10,0	22,5	5,0
292170638	6	3/8"	43,0	22	11,4	22,5	5,0
292170918	9	1/8"	36,5	14	7,4	22,5	7,6
292170928	9	1/4"	40,5	19	10,0	22,5	7,6
292170938	9	3/8"	43,0	22	11,4	22,5	7,6
292170948	9	1/2"	47,0	27	15,0	22,5	7,6
292171328	13	1/4"	47,5	19	10,0	29,5	11,0
292171338	13	3/8"	49,5	22	11,4	29,5	11,0
292171348	13	1/2"	54,5	27	15,0	29,5	11,0
292171368	13	3/4"	59,5	32	16,3	29,5	11,0
292171968	19	3/4"	67,5	32	16,3	38,0	17,5

Supplied with sealing washer

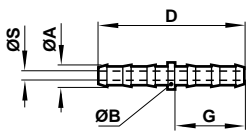
### Swivel Hose Adaptor – Imperial I/D x Female BSPP



Product number	A hose bore	B BSPP female thread	D	E A/F	G	L	ØS min.
302180418	1/4"	1/8"	32,3	13	4,6	22,5	4,0
302180428	1/4"	1/4"	34,8	17	6,0	22,5	5,35
302180438	1/4"	3/8"	35,8	22	6,0	22,5	5,35
302180628	3/8"	1/4"	34,8	17	6,0	22,5	6,35
302180638	3/8"	3/8"	35,8	22	6,0	22,5	8,33
302180648	3/8"	1/2"	37,9	27	7,4	22,5	8,33
302180748	1/2"	1/2"	44,9	27	7,4	29,5	10,7
302180768	1/2"	3/4"	49,9	32	11,9	29,5	10,7
302180968	3/4"	3/4"	58,4	32	11,9	38,0	16,5



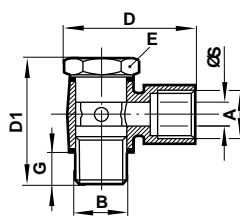
### Hose Connector – Imperial



Product number	A hose bore	B	D	G	ØS
300140303	3/16"	8	47	22,5	4,2
300140404	1/4"	9	47	22,5	5,35
300140505	5/16"	12	47	22,5	7,0
300140606	3/8"	13	47	22,5	8,33
300140707	1/2"	16	62	29,5	10,7
300140808	5/8"	19	79	38,0	14,0
300140909	3/4"	23	79	38,0	17,55
300141010	1"	28	79	38,0	22,4

Both ends identical.

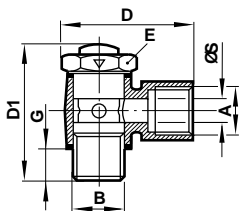
### Elbow Banjo Assembly Non Regulating Bolt



Product number	A thread BSP	B thread BSP	D	D1	E A/F	G	ØS
16A511818	1/8"	1/8"	29	29	14	5	6,0
16A512828	1/4"	1/4"	38	32	17	6	7,6
16A513838	3/8"	3/8"	44	45	22	9,5	9,6
16A514848	1/2"	1/2"	63	47	27	12	9,6

Female parallel BSP thread to male parallel BSP thread

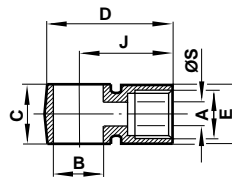
### Elbow Banjo Assembly Regulating Out



Product number	A thread BSP	B thread BSP	D	D1	E A/F	G	ØS
16K511818	1/8"	1/8"	29	34	14	5,0	6,0
16K512828	1/4"	1/4"	38	37	17	6,0	7,6
16K513838	3/8"	3/8"	44	52	22	9,5	9,6
16K514848	1/2"	1/2"	63	58	27	12,0	9,6

Arrow on bolt hexagon indicates free flow direction.  
Pressure range 1 -10 bar.

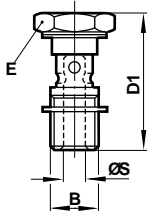
### Elbow Banjo Body



Product number	A thread BSP	B for BSP bolt	C	D	E Ø	J	ØS
160511818	1/8"	1/8"	14,0	28,0	13,0	21	6,0
160512828	1/4"	1/4"	16,0	37,0	16,0	28	7,6
160513838	3/8"	3/8"	20,5	42,0	20,5	31	9,6
160514848	1/2"	1/2"	22,0	61,0	24,7	47	9,6

Female parallel BSP thread

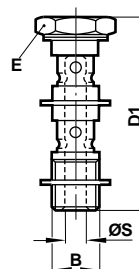
### Banjo Bolt – Non Regulating Single Stacking



Product number	B thread BSP	D1	E A/F	ØS
20A000018	1/8"	29	14	4,5
20A000028	1/4"	33	17	5,5
20A000038	3/8"	41	22	9,2
20A000048	1/2"	49	27	10,5

Male parallel BSP thread.  
All banjo bolts supplied complete with sealing washers.

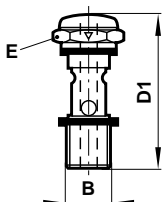
### Banjo Bolt – Non Regulating Double Stacking



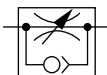
Product number	B thread BSP	D1	E A/F	ØS
20B000018	1/8"	44	14	4,5
20B000028	1/4"	50	17	5,5
20B000038	3/8"	62,5	22	9,2
20B000048	1/2"	74	27	10,5

Male parallel BSP thread

### Banjo Bolt – Regulating Single stacking BSP parallel

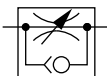


#### Regulating Out



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

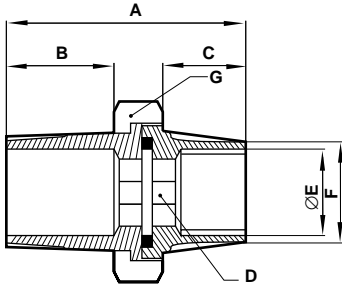
### Bi-Directional Flow

Product number	B thread	D1	E A/F
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.  
Pressure range 1 -10 bar.

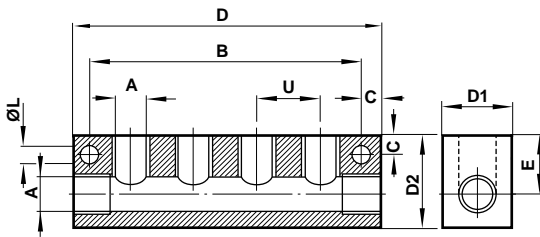


Flat Union



Assembly part number	Nom size	A O/All Length	B Length	C Length	D A/F Hex Thro'	E Ø	F BSPT thread	G A/F Hex
150331818	1/8"	33,3	15,0	10,0	5	6,0	1/8"	15
150332828	1/4"	42,0	18,5	13,0	8	9,5	1/4"	24
150333838	3/8"	43,0	19,0	13,0	10	12,0	3/8"	27
150334848	1/2"	52,0	23,0	17,5	14	15,0	1/2"	30
150336868	3/4"	56,5	25,0	19,0	17	20,0	3/4"	38
150338888	1"	68,0	29,0	23,0	19	24,0	1"	46

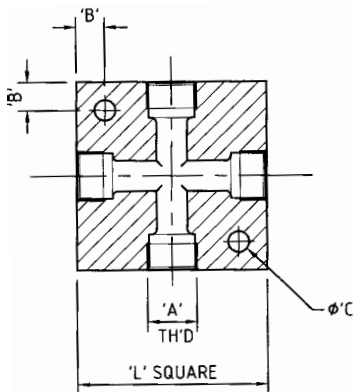
Single Sided Manifold



Product number	No. of outlets	A thread BSP	B	C	D	D1	D2	E	L	U
34 0504 01	4	1/8"	71	5	81	16,0	25,0	15	5,5	17
34 0504 02	4	1/4"	99	5	109	23,0	31,0	20	5,5	23
34 0504 03	4	3/8"	115	6	127	25,4	34,9	23	6,5	27
34 0506 01	6	1/8"	105	5	115	16,0	25,0	15	5,5	17
34 0506 02	6	1/4"	145	5	155	23,0	31,0	20	5,5	23
34 0506 03	6	3/8"	169	6	181	25,4	34,9	23	6,5	27

Product is unplated brass

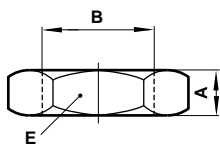
4 Way Block Cross Connector



Product number	A	B	C	L
160940018	1/8"	4,3	4,5	25,0
160940028	1/4"	6,5	5,5	40,0
160940038	3/8"	7,5	5,5	50,0
160940048	1/2"	7,5	5,5	50,0

Product is aluminium

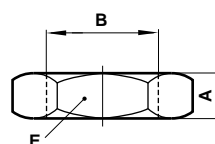
Locknut - Metric



Product number	B thread BSP	A	E A/F
360546 01	1/8"	4,8	13
360546 02	1/4"	6,4	17
360546 03	3/8"	6,4	22
360546 04	1/2"	6,4	27
360546 06	3/4"	7,1	32
360546 07	7/8"	7,9	36
360546 08	1"	8,7	41
360546 09	1 1/4"	8,7	50
360546 10	1 1/2"	9,5	55

Product is unplated brass

Locknut - Inch



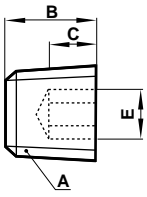
Product number	B thread BSP	A	E A/F
340223 01	1/8"	0,19	0,53
340223 02	1/4"	0,25	0,71
340223 03	3/8"	0,25	0,82
340223 04	1/2"	0,25	1,01
360546 06	3/4"	0,28	1,30
340223 07	7/8"	0,31	1,48
340223 08	1"	0,34	1,67

Product is unplated brass



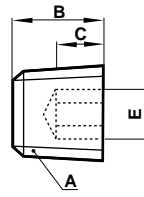


**Taper plug  
Brass - unplated**



Product number	A thread BSPT	B	C	E A/F
250130018	1/8"	8	6	5
250130028	1/4"	10	8	6
250130038	3/8"	11	8	8
250130048	1/2"	13	8	10
250130068	3/4"	17	11	14
250130088	1"	19	13	17

**Taper plug  
Steel - zinc plated**



Product number	A thread BSPT	B	C	E A/F
250130018FZ	1/8"	8	6	5
250130028FZ	1/4"	10	8	6
250130038FZ	3/8"	11	8	8
250130048FZ	1/2"	13	8	10
250130068FZ	3/4"	17	11	14
250130088FZ	1"	19	13	17

**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.