



## Smooth Bore Fittings

A wide selection of end fittings are available to suit the complete range of smooth bore PTFE hose options. These fittings are offered in both permanently attached (crimped) for the ultimate in weight and space saving, and in reusable form (section 6).

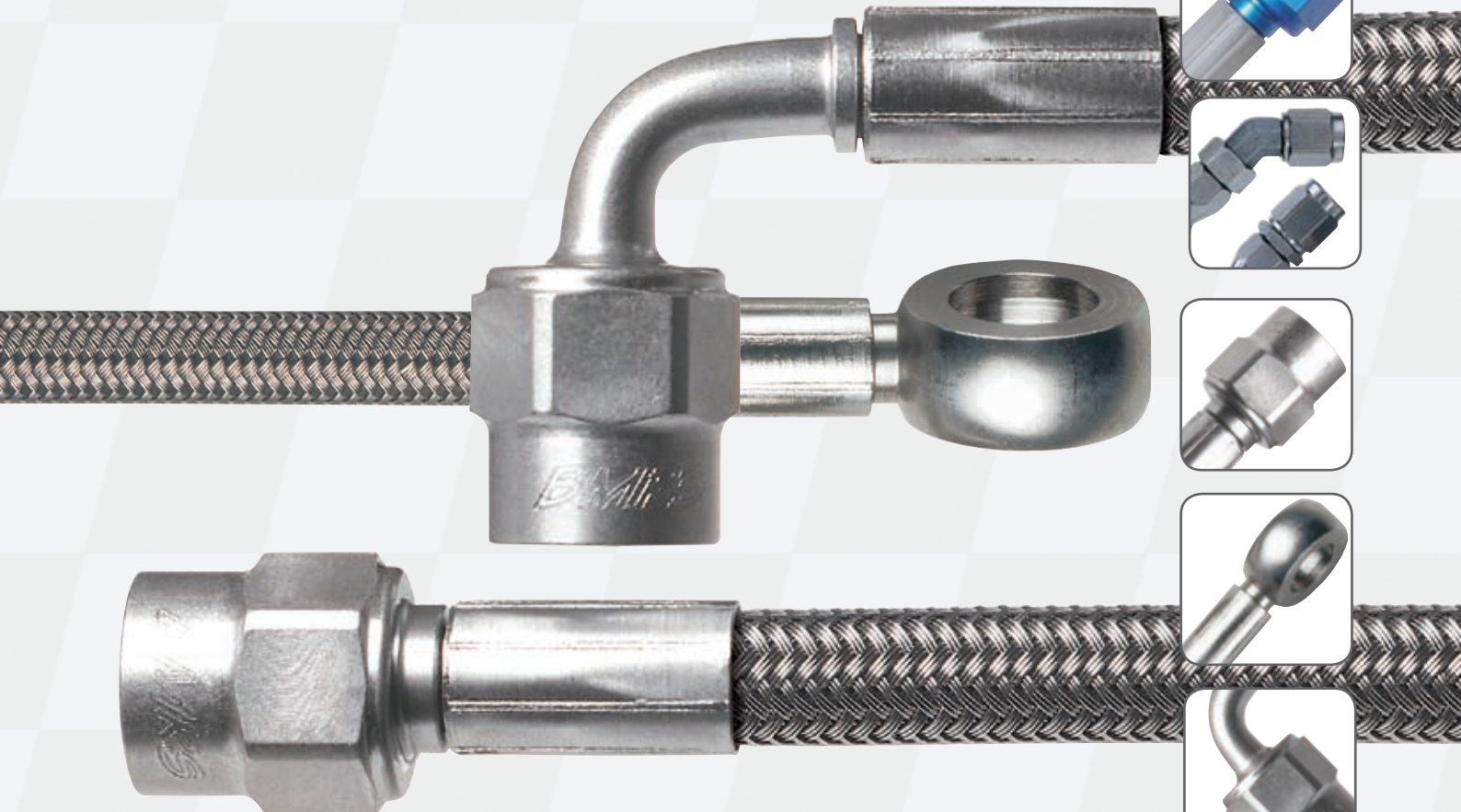
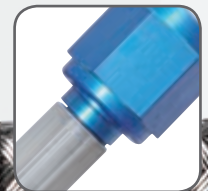
The standard range of fittings includes JIC, SAE, banjos, fixed and swivel male. All elbow fittings are of one piece construction eliminating welded or brazed joints.

To complement the standard range of fittings there is an ever increasing range of custom designs to produce the ultimate installation

package. These include a range of elbows bent to specific angles, plug in head, flanged fittings and swivel banjos.

Fittings are produced in a wide variety of materials, the most common being stainless steel, aluminium and titanium.

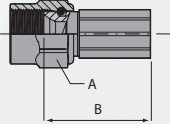
All factory made assemblies are pressure tested for ultimate reliability and safety.





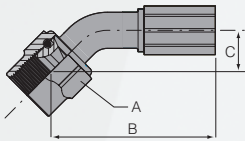
## JIC Female

### Straight JIC (AN) Female



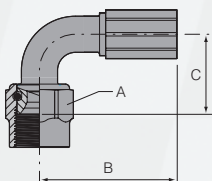
Fitting part number			Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium	Stainless insert with Aluminium nut			ins	mm	ins	mm	ins	mm
SB-02-F7			-02	5/16 x 24	3/8	9.52	0.81	20.5		
SB-02-03-F7		SB-02-03-F7-3	-02	3/8 x 24	7/16	11.10	0.81	20.5		
SB-02-04-F7		SB-02-04-F7-3	-02	7/16 x 20	9/16	14.27	0.91	23.0		
SB-03-F7	SB-03-F3	SB-03-F7-3	-03	3/8 x 24	7/16	11.10	0.92	23.3		
SB-03-02-F7			-03	5/16 x 24	3/8	9.52	0.92	23.3		
SB-03-04-F7		SB-03-04-F7-3	-03	7/16 x 20	9/16	14.27	1.03	26.2		
SB-04-03-F7		SB-04-03-F7-3	-04	3/8 x 24	1/2	12.70	1.03	26.2		
SB-04-F7	SB-04-F3	SB-04-F7-3	-04	7/16 x 20	9/16	14.27	1.05	26.67		
SB-06-F7	SB-06-F3	SB-06-F7-3	-06	9/16 x 18	11/16	17.45	1.40	35.56		
SB-08-F7	SB-08-F3	SB-08-F7-3	-08	3/4 x 16	7/8	22.20	1.44	36.70		

### 45° Elbow JIC (AN) Female



Fitting part number			Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium	Stainless insert with Aluminium nut			ins	mm	ins	mm	ins	mm
SB-02-G7			-02	5/16 x 24	3/8	9.52	1.42	36.07	0.32	8.13
SB-02-03-G7		SB-02-03-G7-3	-02	3/8 x 24	7/16	11.10	1.45	36.83	0.32	8.13
SB-02-04-G7		SB-02-04-G7-3	-02	7/16 x 20	9/16	14.27	1.60	40.80	0.37	9.50
SB-03-G7	SB-03-G3	SB-03-G7-3	-03	3/8 x 24	7/16	11.10	1.45	36.83	0.32	8.13
SB-03-02-G7			-03	5/16 x 24	3/8	9.52	1.45	36.83	0.32	8.13
SB-03-04-G7		SB-03-04-G7-3	-03	7/16 x 20	9/16	14.27	1.45	36.83	0.34	8.60
SB-04-03-G7		SB-04-03-G7-3	-04	3/8 x 24	1/2	12.70	1.54	39.11	0.35	8.89
SB-04-G7	SB-04-G3	SB-04-G7-3	-04	7/16 x 20	9/16	14.27	1.54	39.11	0.35	8.89
SB-06-G7	SB-06-G3	SB-06-G7-3	-06	9/16 x 18	11/16	17.45	1.88	47.75	0.47	11.94
SB-08-G7	SB-08-G3	SB-08-G7-3	-08	3/4 x 16	7/8	22.20	2.32	59.10	0.61	15.60

### 90° Elbow JIC (AN) Female

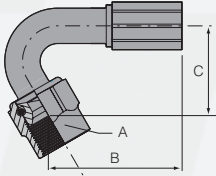


Fitting part number			Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium	Stainless insert with Aluminium nut			ins	mm	ins	mm	ins	mm
SB-02-H7			-02	5/16 x 24	3/8	9.52	1.21	30.73	0.55	14.13
SB-02-03-H7		SB-02-03-H7-3	-02	3/8 x 24	7/16	11.10	1.21	30.73	0.55	14.13
SB-02-04-H7		SB-02-04-H7-3	-02	7/16 x 20	9/16	14.27	1.21	30.70	0.64	16.25
SB-03-H7	SB-03-H3	SB-03-H7-3	-03	3/8 x 24	7/16	11.10	1.24	31.49	0.55	14.13
SB-03-02-H7			-03	5/16 x 24	3/8	9.52	1.24	31.49	0.55	14.13
SB-03-04-H7		SB-03-04-H7-3	-03	7/16 x 20	9/16	14.27	1.24	31.49	0.58	14.90
SB-04-03-H7		SB-04-03-H7-3	-04	3/8 x 24	1/2	12.70	1.34	34.11	0.64	16.25
SB-04-H7	SB-04-H3	SB-04-H7-3	-04	7/16 x 20	9/16	14.27	1.34	34.11	0.64	16.25
SB-06-H7	SB-06-H3	SB-06-H7-3	-06	9/16 x 18	11/16	17.45	1.63	41.75	0.86	21.84
SB-08-H7	SB-08-H3	SB-08-H7-3	-08	3/4 x 16	7/8	22.20	1.61	40.90	1.16	29.50



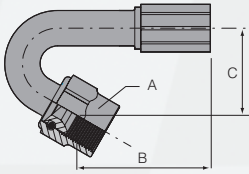
## JIC Female

### 120° Elbow JIC (AN) Female



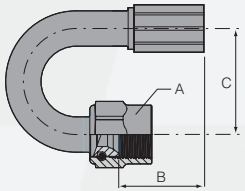
Fitting part number		Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-P7		-03	3/8 x 24	7/16	11.10	0.98	25.00	0.59	15.20
SB-04-P7		-04	7/16 x 20	9/16	14.27	1.14	29.00	0.71	18.10
SB-06-P7	SB-06-P3	-06	9/16 x 18	11/16	17.45	1.54	39.30	1.04	26.40
SB-08-P7		-08	3/4 x 16	7/8	22.22	1.70	43.40	1.32	33.60

### 150° Elbow JIC (AN) Female



Fitting part number		Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-R7		-03	3/8 x 24	7/16	11.10	1.06	27.00	0.53	13.50
SB-04-R7		-04	7/16 x 20	9/16	14.27	1.18	30.00	0.65	16.70
SB-06-R7	SB-06-R3	-06	9/16 x 18	11/16	17.45	1.52	38.60	1.00	25.60
SB-08-R7		-08	3/4 x 16	7/8	22.22	1.55	39.40	1.26	32.20

### 180° Elbow JIC (AN) Female



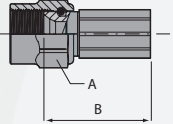
Fitting part number		Hose size	Fitting thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-S7	-	-03	3/8 x 24	7/16	11.10	0.87	22.20	0.44	11.10
SB-04-S7	-	-04	7/16 x 20	9/16	14.27	1.06	27.00	0.75	19.00



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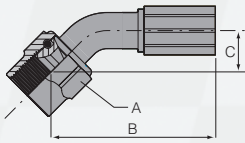
## HPSB Crimped End Fittings\* – JIC Female

### Straight JIC (AN) Female



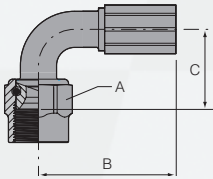
Fitting part number	Hose size	Fitting thread size	A		B		C	
			ins	mm	ins	mm	ins	mm
Stainless steel								
HPSB-04-F7	-04	7/16 x 20	9/16	14.27	1.24	31.50	-	-
HPSB-06-F7	-06	9/16 x 18	11/16	17.45	1.53	39.00	-	-

### 45° Elbow JIC (AN) Female



Fitting part number	Hose size	Fitting thread size	A		B		C	
			ins	mm	ins	mm	ins	mm
Stainless steel								
HPSB-04-G7	-04	7/16 x 20	9/16	14.27	1.77	45.11	0.35	8.89
HPSB-06-G7	-06	9/16 x 18	11/16	17.45	2.16	54.85	0.47	11.94

### 90° Elbow JIC (AN) Female



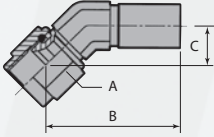
Fitting part number	Hose size	Fitting thread size	A		B		C	
			ins	mm	ins	mm	ins	mm
Stainless steel								
HPSB-04-H7	-04	7/16 x 20	9/16	14.27	1.58	40.11	0.64	16.25
HPSB-06-H7	-06	9/16 x 18	11/16	17.45	1.92	48.85	0.86	21.84

\* All HPSB fittings must be used with HPSB hose found on page 4.5



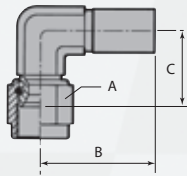
## JIC Female Block Elbows

### 45° Block Elbow JIC (AN) Female



Fitting part number	Hose size	Fitting thread size	A		B		C	
Stainless steel	size	thread size	ins	mm	ins	mm	ins	mm
SB-03-B-G7	-03	3/8 x 24	1/2	12.70	1.28	32.60	0.36	9.12

### 90° Block Elbow JIC (AN) Female



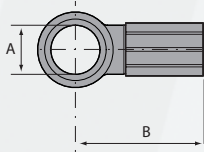
Fitting part number	Hose size	Fitting thread size	A		B		C	
Stainless steel	size	thread size	ins	mm	ins	mm	ins	mm
SB-03-B-H7	-03	3/8 x 24	1/2	12.70	0.87	22.20	0.53	13.50



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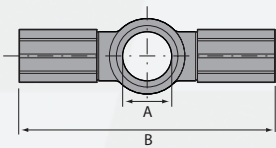
## Banjo

### Banjo



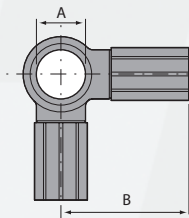
Fitting part number		Hose	"A" Bolt	B	
Stainless steel	Aluminium	size	thread size	ins	mm
SB-02-BJ-M5-7		-02	M5	0.78	20.0
SB-02-BJ-M6-7		-02	M6	0.78	20.0
SB-02-BJ-M8-7		-02	M8	0.92	23.3
SB-02-BJ-M10-7		-02	M10 / 3/8	0.92	23.3
SB-03-BJ-M8-7		-03	M8	1.00	25.4
SB-03-BJ-M10-7	SB-03-BJ-M10-3	-03	M10 / 3/8	1.00	25.4
SB-03-BJ-04-7	SB-03-BJ-04-3	-03	7/16	1.05	26.6
SB-04-BJ-M10-7	SB-04-BJ-M10-3	-04	M10 / 3/8	1.04	26.5
SB-04-BJ-04-7	SB-04-BJ-04-3	-04	7/16	1.09	27.7
SB-04-BJ-M12-7	SB-04-BJ-M12-3	-04	M12	1.09	27.7
SB-04-BJ-M14-7	SB-04-BJ-M14-3	-04	M14 / 9/16	1.15	29.2
SB-06-BJ-M12-7	SB-06-BJ-M12-3	-06	M12	1.35	34.5
SB-06-BJ-M14-7	SB-06-BJ-M14-3	-06	M14 / 9/16	1.41	36.0

### Banjo Double Tail Straight



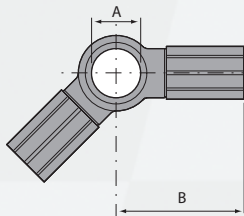
Fitting part number	Hose	"A" Bolt	B	
Stainless steel	size	thread size	ins	mm
SB-03-DBJ-M10-7	-03	M10 / 3/8	2.0	50.8

### Banjo Double Tail 90°



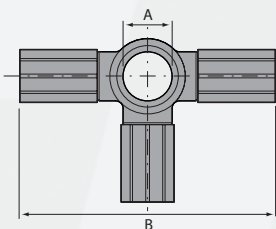
Fitting part number	Hose	"A" Bolt	B	
Stainless steel	size	thread size	ins	mm
SB-03DBJ90M10-7	-03	M10 / 3/8	1.0	25.4

### Banjo Double Tail 135°



Fitting part number	Hose	"A" Bolt	B	
Stainless steel	size	thread size	ins	mm
SB-03DBJ135M107	-03	M10 / 3/8	1.0	25.4

### Banjo "T"

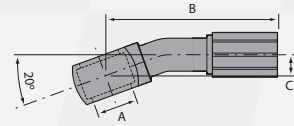


Fitting part number	Hose	"A" Bolt	B	
Stainless steel	size	thread size	ins	mm
SB-03-BJT-M10-7	-03	M10 / 3/8	2.0	50.8



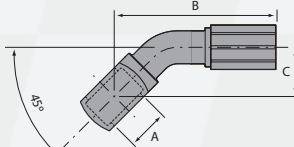
## Banjo

### Banjo 20° Elbow



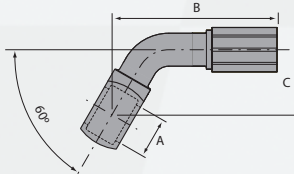
Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-E20-7	-03	M10 / 3/8	1.61	41.0	0.22	5.5

### Banjo 45° Elbow



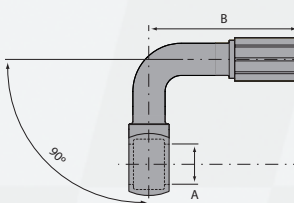
Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-E45-7	-03	M10 / 3/8	1.45	37.00	0.49	12.50

### Banjo 60° Elbow



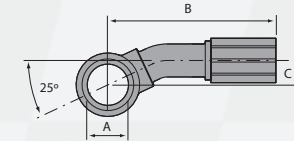
Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-E60-7	-03	M10 / 3/8	1.55	39.40	0.62	15.90

### Banjo 90° Elbow



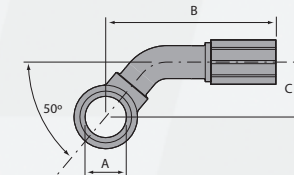
Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-E90-7	-03	M10 / 3/8	1.17	29.70	0.80	20.45

### Banjo 25° Elbow Side Bend



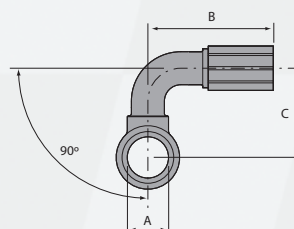
Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-SB25-7	--03	M10/3/8	1.60	40.6	0.22	5.7

### Banjo 50° Elbow Side Bend



Fitting part number	Stainless steel	Aluminium	Hose size	"A" Bolt thread size	B		C	
					ins	mm	ins	mm
SB-03-BJ-SB50-7		-	-03	M10 / 3/8	1.41	35.90	0.54	13.65
SB-04-0017-7		SB-04-0017-3	-04	M10 / 3/8	1.60	40.60	0.56	14.20

### Banjo 90° Elbow Side Bend

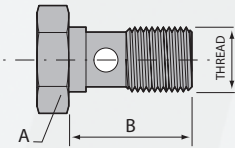


Fitting part number	Hose size	"A" Bolt thread size	B		C	
Stainless steel			ins	mm	ins	mm
SB-03-BJ-SB90-7	-03	M10 / 3/8	1.17	29.70	0.80	20.45



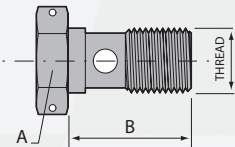
## Banjo Bolt

### Banjo Bolt



Part number			Thread size	A		B	
Stainless steel	Aluminium	Plated steel		ins	mm	ins	mm
BJB-02-1-7	-	BJB-02-1-P	5/16 x 24	1/2	12.7	0.79	20.0
-	-	BJB-02-1-P-L	5/16 x 24	1/2	12.7	0.98	25.0
BJB-02-2-7	BJB-02-2-3	BJB-02-2-P	M8 x 1.00	1/2	12.7	0.76	19.0
BJB-02-3-7	-	-	M8 x 1.25	1/2	12.7	0.79	20.0
BJB-03-1-7	BJB-03-1-3	BJB-03-1-P	3/8 x 24	9/16	14.3	0.79	20.0
BJB-03-1-7-L	BJB-03-1-3-L	BJB-03-1-P-L	3/8 x 24	9/16	14.3	0.98	25.0
BJB-03-1-7S	-	BJB-03-1-PS	3/8 x 24	9/16	14.3	0.71	18.0
BJB-03-2-7	BJB-03-2-3	BJB-03-2-P	M10 x 1.00	9/16	14.3	0.79	20.0
BJB-03-2-7-L	BJB-03-2-3-L	BJB-03-2-P-L	M10 x 1.00	9/16	14.3	0.98	25.0
BJB-03-2-7S	-	-	M10 x 1.00	9/16	14.3	0.71	18.0
BJB-03-3-7	BJB-03-3-3	BJB-03-3-P	M10 x 1.25	9/16	14.3	0.79	20.0
BJB-03-3-7-L	BJB-03-3-3-L	BJB-03-3-P-L	M10 x 1.25	9/16	14.3	0.98	25.0
BJB-04-7	BJB-04-3	BJB-04-P	7/16 x 20	5/8	15.9	1.06	27.0
-	BJB-04-M12-3	BJB-04-M12-P	M12 x 1.25	5/8	15.9	1.06	27.0
-	BJB-06-3	-	9/16 x 18	7/8	22.2	1.30	33.0
-	BJB-06-M14-3	-	M14 x 1.50	7/8	22.2	1.30	33.0

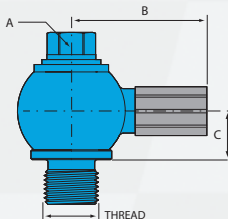
### Banjo Bolt with wire locking holes



Part number	Thread size	A		B	
		ins	mm	ins	mm
BJB-03-1-7S-W	3/8 x 24	9/16	14.3	0.71	18.0
BJB-03-2-7S-W	M10 x 1.00	9/16	14.3	0.71	18.0

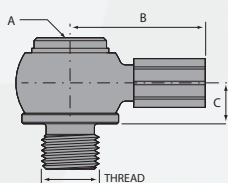
## Swivel Banjo

### Swivel Banjo - External Drive



Fitting part number	Hose size	Thread	A		B		C	
			ins	mm	ins	mm	ins	mm
SB-04-0012-3	-04	7/16 x 20	11/32	8.73	1.14	29.00	0.39	10.00
SB-04-0015-3	-04	M10 x 1.00	11/32	8.73	1.14	29.00	0.39	10.00

### Swivel Banjo - Internal Drive



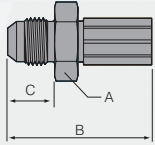
Fitting part number	Hose size	Thread	A		B		C	
			ins	mm	ins	mm	ins	mm
SB-03-0041-7	-03	3/8 x 24	3/16	4.75	0.98	25.00	0.26	6.72





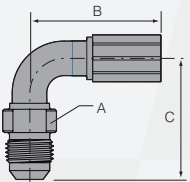
## Male and Female Threads

### Straight JIC Male Fixed



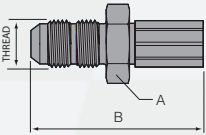
Fitting part number		Hose size	UNF thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-02-J7		-02	5/16 x 24	3/8	9.52	1.17	29.75	0.45	11.38
SB-03-J7		-03	3/8 x 24	7/16	11.10	1.42	36.00	0.48	12.16
SB-04-J7		-04	7/16 x 20	9/16	14.27	1.49	38.00	0.55	14.00
SB-06-J7	SB-06-J3	-06	9/16 x 18	13/16	20.62	1.75	44.50	0.56	14.12

### 90° Elbow JIC Male Fixed



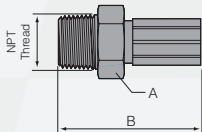
Fitting part number		Hose size	UNF thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-J7-90		-3	3/8 x 24	3/8	9.52	1.24	31.49	1.00	25.40

### JIC (AN) Male Bulkhead



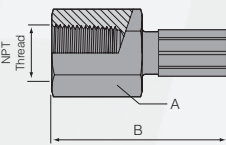
Fitting part number		Hose size	NPT thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-04-BH-J7		-04	7/16 x 20	11/16	17.45	2.00	51.00

### Straight NPT Male Fixed



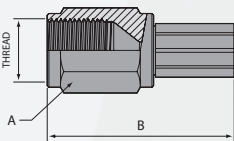
Fitting part number		Hose size	NPT thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-03-V7		-03	1/8	7/16	11.10	1.34	34.00
SB-04-03-V7	SB-04-03-V3	-04	1/8"	7/16	11.10	1.36	34.50
SB-04-V7		-04	1/4	9/16	14.27	1.47	37.25
SB-06-V7		-06	3/8	3/4	19.05	1.97	50.00

### Straight NPT Female Fixed



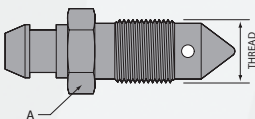
Fitting part number		Hose size	NPT thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-03-T7		-03	1/8	9/16	14.27	1.36	34.50

### Straight UNF Female Fixed Bleed Fitting



Fitting part number		Hose size	UNF thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-03-0033-7		-03	3/8 x 24	7/16	11.1	1.27	32.3

### Bleed Nipple



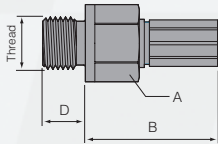
Fitting part number	Material	UNF Thread size	A	
			ins	mm
BN-11S	Plated Steel	3/8 x 24	7/16	11.1



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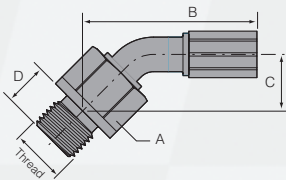
## Male Swivel Port Thread (ORB)

### Straight Male Swivel



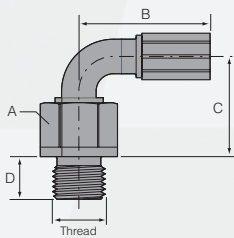
Fitting part number		Hose size	Thread size	A		B		D	
Stainless	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-M7-00		-03	3/8 x 24 UNF	1/2	12.70	1.14	28.9	0.29	7.4
SB-04-M7-00	SB-04-M3-00	-04	7/16 x 20 UNF	9/16	14.27	1.20	30.6	0.35	9.0
SB-04-M7-00-M10		-04	M10 x 1.00	9/16	14.27	1.20	30.6	0.31	8.0
SB-04-06-M7-00	SB-04-06-M3-00	-04	9/16 x 18	9/16	14.27	1.20	30.6	0.35	9.0

### 45° Elbow Male Swivel



Fitting part number		Hose size	Thread size	A		B		C		D	
Stainless	Aluminium			ins	mm	ins	mm	ins	mm	ins	mm
SB-03-M7-45		-03	3/8 x 24 UNF	1/2	12.70	1.35	34.40	0.48	12.3	0.29	7.4
SB-04-M7-45		-04	7/16 x 20 UNF	9/16	14.27	1.66	42.40	0.57	14.6	0.35	9.0
SB-04-M7-45-M10		-04	M10 x 1.00	9/16	14.27	1.66	42.40	0.57	14.6	0.31	8.0

### 90° Elbow Male Swivel

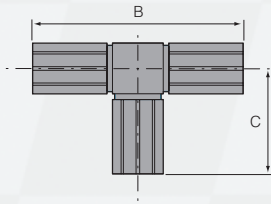


Fitting part number		Hose size	Thread size	A		B		C		D	
Stainless	Aluminium			ins	mm	ins	mm	ins	mm	ins	mm
SB-03-M7-90		-03	3/8 x 24 UNF	1/2	12.70	0.98	25.00	0.79	20.2	0.29	7.4
SB-04-M7-90	SB-04-M3-90	-04	7/16 x 20 UNF	9/16	14.27	1.33	34.00	0.94	24.0	0.35	9.0
SB-04-M7-90-M10		-04	M10 x 1.00	9/16	14.27	1.33	34.00	0.94	24.0	0.31	8.0
SB-04-06-M7-90	SB-04-06-M3-90	-04	9/16x18	9/16	14.27	1.33	34.00	0.94	24.0	0.35	9.0
SB-06-M7-90		-06	9/16x18	3/4	19.00	1.63	41.75	1.34	34.1	0.35	9.0



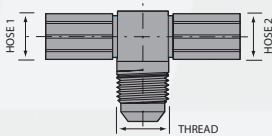
## 'T' Piece

### 'T' Piece to 3 Tails



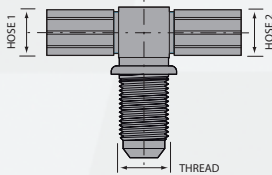
Fitting part number		Hose size	B ins	B mm	C ins		C mm
Stainless Steel	Aluminium	-02	1.35	34.2	0.67	17.1	
SB-02-0026-7		-03	1.69	43.0	0.85	21.5	
SB-03-0006-7	SB-04-0034-3	-04	1.81	46.0	0.91	23.0	
SB-04-0034-7							

### 'T' Piece JIC (AN) Male



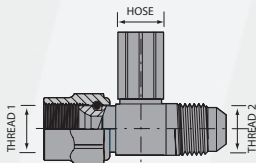
Fitting part number	Material	Hose size 1	Hose size 2	Thread
SB-04-0006-7	Stainless steel	-04	-04	9/16 x 18

### 'T' Piece Bulkhead

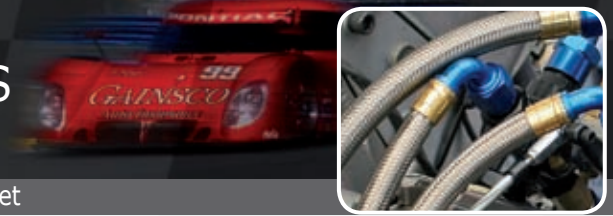


Fitting part number	Material	Hose size 1	Hose size 2	Thread
SB-03-0015-7	Stainless steel	-03	-03	3/8 x 24
SB-04-0007-3	Aluminium	-04	-04	9/16 x 18
SB-04-0007-7	Stainless steel	-04	-04	9/16 x 18
SB-04-0011-7	Stainless steel	-04	-04	7/16 x 20

### 'T' Piece JIC (AN) Male / Female



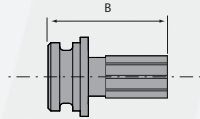
Fitting part number	Material	Hose size	Thread 1	Thread 2
SB-04-0025-7	Stainless steel	-04	7/16 x 20	9/16 x 18



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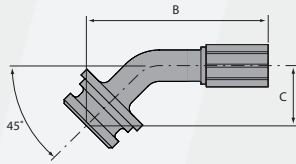
## AP Master Cylinder

### AP Master Cylinder Straight



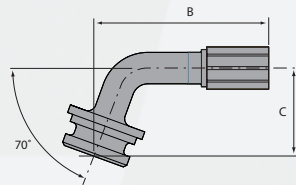
Fitting part number		Hose size	Angle	B		C	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-04-0016-00-7		-04	0	1.12	28.5		

### AP Master Cylinder 45°



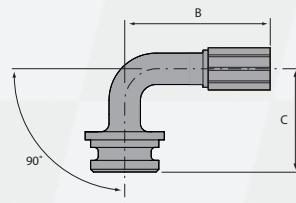
Fitting part number		Hose size	Angle	B		C	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-04-0016-45-7		-04	45	1.44	36.5	0.40	10.2

### AP Master Cylinder 70°



Fitting part number		Hose size	Angle	B		C	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-04-0016-70-7	SB-04-0016-70-3	-04	70	1.35	34.5	0.60	15.3

### AP Master Cylinder 90°



Fitting part number		Hose size	Angle	B		C	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-04-0016-90-7	SB-04-0016-90-3	-04	90	1.13	28.7	0.71	18.1

### Aluminium Keep Plate (supplied separately)

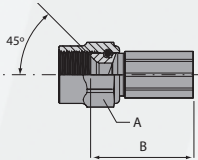


Fitting part number	
Stainless steel	Aluminium
-	22-0010-04-3



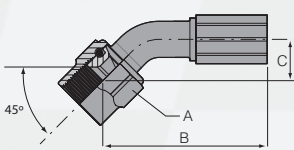
## Injector

### SB 45° Seat (SAE) Fittings (Injector) Straight Female



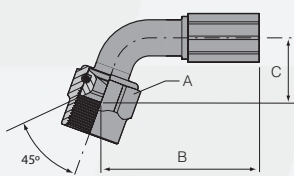
Fitting part number		Hose size	Thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-03-0038-00-7	SB-03-0038-00-3	-03	3/8 x 24	7/16	11.10	24.35	0.95
SB-04-0008-00-7	SB-04-0008-00-3	-04	3/8 x 24	1/2	12.70	27.15	1.07

### SB 45° Seat (SAE) Fittings (Injector) 45° Elbow Female



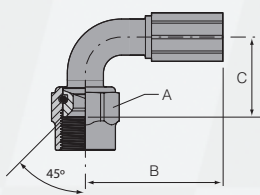
Fitting part number		Hose size	Thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-0038-45-7	SB-03-0038-45-3	-03	3/8 x 24	7/16	11.10	38.23	1.50	9.53	0.37
SB-04-0008-45-7	SB-04-0008-45-3	-04	3/8 x 24	1/2	12.70	40.50	1.59	10.30	0.40

### SB 45° Seat (SAE) Fittings (Injector) 70° Elbow Female



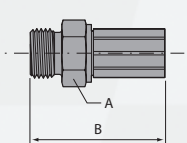
Fitting part number		Hose size	Thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-0038-70-7	SB-03-0038-70-3	-03	3/8 x 24	7/16	11.10	36.0	1.41	12.0	0.47
SB-04-0008-70-7	SB-04-0008-70-3	-04	3/8 x 24	1/2	12.70	40.0	1.57	15.35	0.60

### SB 45° Seat (SAE) Fittings (Injector) 90° Elbow Female



Fitting part number		Hose size	Thread size	A		B		C	
Stainless steel	Aluminium			ins	mm	ins	mm	ins	mm
SB-03-0038-90-7	SB-03-0038-90-3	-03	3/8 x 24	7/16	11.10	31.49	1.24	14.13	0.55
SB-04-0008-90-7	SB-04-0008-90-3	-04	3/8 x 24	1/2	12.70	34.11	1.34	18.25	0.72

### SB Fitting Fixed Male to suit Injector Distribution Block



Fitting part number		Hose size	Thread size	A		B	
Stainless steel	Aluminium			ins	mm	ins	mm
SB-03-0039-7	SB-03-0039-3	-03	3/8 x 24	7/16	11.10	32.0	1.25
SB-04-0009-7	SB-04-0009-3	-04	3/8 x 24	7/16	11.10	33.0	1.30



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## Plug-In

There are multitudes of 'O' ring fitting designs in use although a range of design conventions has developed around the "Plug In" system.

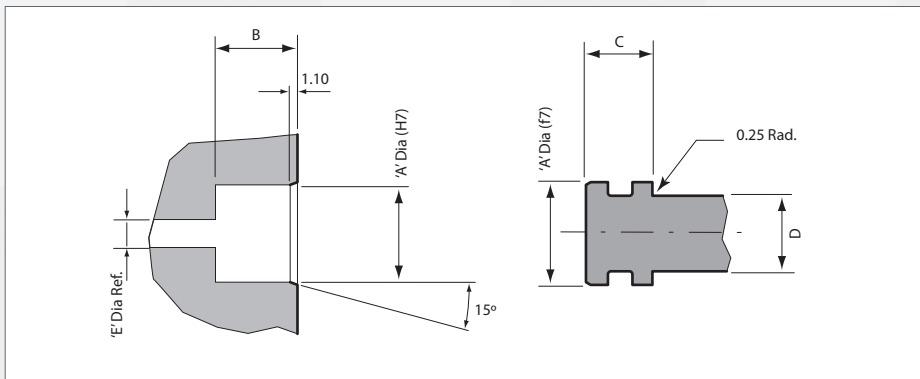
Widely used in sophisticated hydraulic and pneumatic systems the "Plug In" fitting is a simple 'O' ring head and port design, the 'O' ring head being retained to the port by a simple keep plate.

The advantage of this system is its compact design allowing close mounting of multiple assemblies, this combined with multiple fitting stand off options allows tight packaging of the complete valve, manifold and hose package.

As the designs have developed over the years the number of port size options has expanded, primarily due to these fitting systems being somewhat specific to each design group.



## Plug-In Fitting Size guide



Size	A	B	C +/- 0.025	D +/- 0.05	E	'O' Ring size code	Max op. pressure BAR
-02	6.00	6.12	5.90	4.45	2.0	3.00 x 1.50	200 +
-02	6.20	7.55	7.42	3.60	2.0	801	100
-02	6.80	9.25	9.12	4.75	2.0	007	200 +
-03	8.70	9.25	9.12	6.10	3.0	009	200 +
-03	8.80	9.50	9.37	6.10	3.0	009	200 +
-04	9.50	9.25	9.12	6.30	4.0	010	200 +
-04	9.60	9.25	9.12	6.30	4.0	010	200 +
-04	10.00	10.00	9.87	7.00	4.0	610	200 +
-04	10.30	10.50	10.37	6.50	4.0	610	200 +
-05	10.80	9.25	9.12	7.80	6.0	011	200 +
-05	12.00	10.00	9.87	9.00	6.0	012	200 +
-06	12.70	10.00	9.87	10.30	8.0	012	200 +
-06	14.38	12.00	11.87	11.00	8.0	806	200 +
-08	16.00	12.50	12.37	13.00	10.0	014	200 +

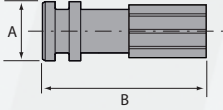
For pressures above 100 BAR an anti extrusion ring must be used.

Depth of port 'B' may be tolerated for interference or clearance on 'C'.



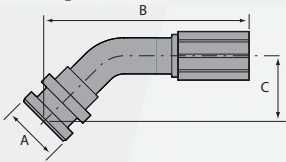
## Plug-In

### Straight Plug-In



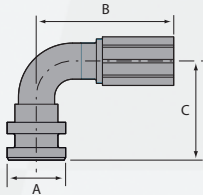
Fitting part number		Hose size	"A" Port size (nom)	B		Prevision for Anti Extrusion Ring
Stainless steel	Titanium			ins	mm	
SB-02-0001-7		-02	6.0	1.35	34.5	YES
SB-02-0009-7		-02	6.0	1.00	25.5	YES
SB-03-0007-7		-03	8.7	1.09	27.7	YES
SB-03-0040-00-7		-03	8.8	1.24	31.5	NO
SB-04-0002-7		-04	8.7	1.14	29.0	YES
SB-04-0029-7		-04	9.5	1.21	30.7	YES
SB-04-0038-7		-04	9.6	1.27	32.2	YES
SB-05-0002-7		-05	12.0	1.38	35.0	YES
SB-06-0007-7		-06	12.7	1.57	40.0	YES
SB-06-0016-7		-06	12.0	1.51	38.5	YES

### 45° Plug-In



Fitting part number		Hose size	"A" Port size (nom)	B		C		Prevision for Anti Extrusion Ring
Stainless steel	Titanium			ins	mm	ins	mm	
SB-03-0017-7		-03	8.7	1.49	38.0	0.47	12.0	YES
SB-04-0003-7		-04	8.7	1.67	42.5	0.47	12.0	YES

### 90° Plug-In



Fitting part number		Hose size	"A" Port size (nom)	B		C		Prevision for Anti Extrusion Ring
Stainless steel	Titanium			ins	mm	ins	mm	
SB-02-0002-7		-02	6.0	1.20	30.7	0.63	16.0	YES
SB-02-0004-7		-02	8.7	1.20	30.7	0.78	20.0	YES
SB-02-0007-7		-02	6.0	1.20	30.7	0.98	25.0	YES
SB-02-0028-7		-02	6.0	1.25	31.7	0.94	24.0	YES
SB-03-0001-7		-03	8.7	1.24	31.5	0.78	20.0	YES
SB-03-0002-7		-03	8.7	1.24	31.5	0.90	23.0	YES
SB-03-0028-7		-03	8.7	1.24	31.5	1.18	30.0	YES
SB-04-0001-7		-04	8.7	1.33	34.0	0.78	20.0	YES
SB-04-0030-7		-04	9.5	1.33	34.0	0.86	22.0	YES
SB-06-0009-7		-06	12.7	1.64	41.8	1.23	31.4	YES

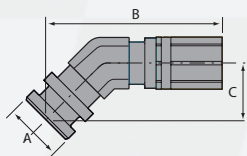
# SMOOTH BORE CRIMPED FITTINGS



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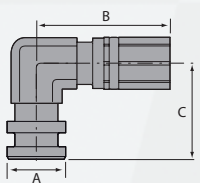
## Plug-In

### 45° Plug-In BlockElbow



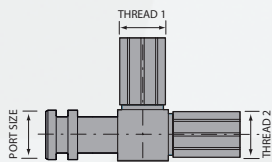
Fitting part number	Material	Hose size	"A" Port size (nom)	B		C		Prevision for Anti Extrusion Ring
				ins	mm	ins	mm	
-	Titanium	-04	10.8	1.28	32.5	0.46	11.8	YES

### 90° Plug-In BlockElbow



Fitting part number	Material	Hose size	"A" Port Size (nom)	B		C		Prevision for Anti Extrusion Ring
				ins	mm	ins	mm	
-	Titanium	-02	6.0	0.65	16.7	0.54	13.9	YES
-	Titanium	-03	8.8	1.01	25.7	0.78	20.0	NO
-	Titanium	-04	10.8	0.92	23.3	0.73	18.5	YES

### 'T' Piece Plug In



Fitting part number	Material	Hose size 1	Hose size 2	Port size
SB-04-0031-7	Stainless Steel	-04	-04	9.50mm