

# LF 3000® Push-In Fittings Range

## Stud Fittings

### Straights

**3175**  
BSPT/NPT  
Page 1-7



**3101**  
BSPP/Metric  
Page 1-8



**3181**  
Metric  
Page 1-8



**3114**  
BSPP/Metric  
Page 1-9



**3121**  
BSPT/NPT  
Page 1-9



**3131**  
BSPP/Metric  
Page 1-10



### Straights - Inch

**3175**  
NPT/BSPT  
Page 1-7/8



**3121**  
NPT  
Page 1-9



### Elbows

**3109**  
BSPT/NPT  
Page 1-10



**3199**  
BSPP/Metric  
Page 1-11



**3192**  
BSPP  
Page 1-12



**3129**  
BSPT  
Page 1-12



**3169**  
BSPP/Metric  
Page 1-13



**3113**  
BSPT  
Page 1-13



**3133**  
BSPP/Metric  
Page 1-13



**3109**  
NPT/BSPT  
Page 1-11



### Elbows - Inch

### Tees

**3108**  
BSPT  
Page 1-14



**3198**  
BSPP/Metric  
Page 1-14



**3103**  
BSPT  
Page 1-14



**3193**  
BSPP/Metric  
Page 1-15



### Y

**3148**  
BSPT  
Page 1-15



**3158**  
BSPP/Metric  
Page 1-15



**3112**  
BSPT  
Page 1-16



**3132**  
BSPP  
Page 1-16



### Cartridge

**3100**  
Carstick®  
Page 1-16



### Cartridge - Inch

**3100**  
Carstick®  
Page 1-16



## Tube-to-Tube Fittings

### Straight

**3106**  
Page 1-17



### Straight - Inch

**3106**  
Page 1-17



### Elbow

**3102**  
Page 1-17



### Elbow - Inch

**3102**  
Page 1-17



### Tee

**3104**  
Page 1-18



### Tee - Inch

**3104**  
Page 1-18



### Y

**3140**  
Page 1-18



### Cross

**3107**  
Page 1-19



## Bulkhead Connector Fittings

### Straights

**3116**  
Page 1-20



**3146**  
Page 1-20



**3136**  
Page 1-20



### Elbow

**3139**  
Page 1-20



## Multiple Fittings

### Y

**3144**  
Page 1-21



### Tee

**3304**  
Page 1-21



### Elbow

**3306**  
Page 1-21



### Manifold

**3310**  
Page 1-21



# LF 3000® Push-In Fittings Range

## Plug-In Fittings and Accessories

### Elbows

**3182**  
Page 1-22

**3184**  
Page 1-22

**3180**  
Page 1-22

### Tees

**3183**  
Page 1-23

**3188**  
Page 1-23

### Y

**3142**  
Page 1-23

**3143**  
Page 1-23

### Elbows - Inch

**3182**  
Page 1-22



### Accessories

**3120**  
Page 1-24

**3166**  
Page 1-24

**3168**  
Page 1-24

**3126**  
Page 1-25

**3122**  
Page 1-25

**3151**  
Page 1-25

### Accessories - Inch

**3166**  
Page 1-24

**3168**  
Page 1-24

**3126**  
Page 1-25



## Banjo Fittings

### Banjo Fittings

**3118**  
BSPP/Metric  
Page 1-27

**3018**  
BSPT  
Page 1-27

**3124**  
BSPP/Metric  
Page 1-27

**3149**  
BSPP/Metric  
Page 1-27

**3119**  
BSPP/Metric  
Page 1-27



### Modular Banjo Fittings

**3538**  
Single Body  
Page 1-28

**3539**  
Double Body  
Page 1-28

**3549**  
Y Body  
Page 1-28

**3527**  
BSPP/Metric  
Page 1-29

**3528**  
BSPP/Metric  
Page 1-29

**3529**  
BSPP  
Page 1-29

**3524**  
BSPP/Metric  
Page 1-29



## Multi-Connectors

**3300**  
Page 1-31

**3320**  
Page 1-31

**3321**  
Page 1-31

**3329**  
Page 1-31

**3379**  
Page 1-32

**3381**  
Page 1-32



## Self-Sealing and Oscillating Fittings

### Self-Sealing Fittings

**3391**  
BSPP  
Page 1-35

**3091**  
BSPT  
Page 1-35

**3160**  
Page 1-35

**3159**  
BSPT  
Page 1-35

**3189**  
BSPP/Metric  
Page 1-35



### Oscillating Fittings

## Accessories for Push-In Fittings

**3130**  
Page 1-37

**Clip**  
Page 1-37

**3000 70**  
Page 1-37

**3110**  
Page 1-37

**0178**  
BSPP/Metric  
Page 1-37

**0222**  
BSPP/Metric  
Page 1-37



# LF 3000® Push-In Fittings

The LF 3000® range, with its wide variety of shapes and configurations, allows you to find **the perfect product to meet your needs** and thus **optimise the use** of your equipment.

## Product Advantages

### World-Class Performance

- 40 years of expertise
- Full bore for optimum flow
- Ideal for vacuum or pressure applications
- Automatic sealing guaranteed, in both static and dynamic applications
- Materials with high resistance
- Durability of product and equipment

### Optimal Design

- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Compact and aesthetic design: reduced dimensions for space-saving
- Tube fixed during connection, preventing leakage
- Conforms to ISO 14743
- Excellent vacuum performance thanks to the patented sealing technology
- Lightweight: reduced energy consumption of operating systems
- Parallel threaded fitting with a patented captive O-ring seal
- Maximum flexibility due to the wide product range



- Robotics
- Automotive Process
- Pneumatics
- Semi-Conductors
- Textile
- Packaging
- Vacuum

Applications

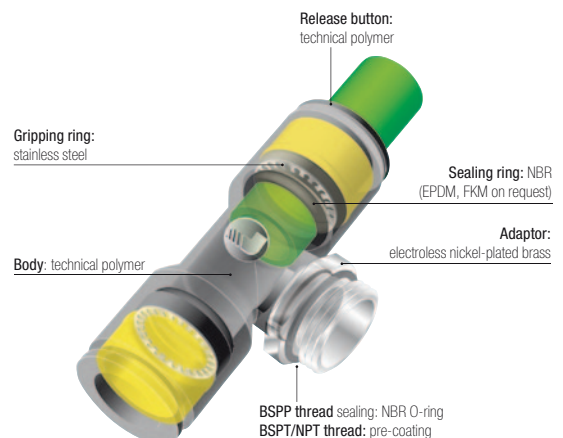
## Technical Characteristics

<b>Compatible Fluids</b>	Compressed air Other fluids: please consult us
<b>Working Pressure</b>	Vacuum to 20 bar
<b>Working Temperature</b>	-20°C to +80°C

Tightening Torque (daN.m)	Threads								
	M3 x0.5	M5 x0.8	M7 x1	M10 x1	M12 x1.5	G1/8	G1/4	G3/8	G1/2
	0.06	0.16	0.8	0.8	1.1	0.8	1.2	3	3.5

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.  
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

### Component Materials



### Silicone-free


### Regulations

**ISO 14743:** Pneumatic fluid power, push-in connectors for thermoplastic tubes  
**DI:** 97/23/EC (PED)

**DI:** 2002/95/EC (RoHS), 2011/65/EC  
**DI:** 1907/2006 (REACH)

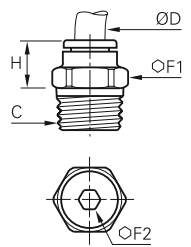
# Stud Fittings

## 3175 Stud Fitting, Male BSPT Thread


ØD	C					kg
			F1	F2	H	
4	R1/8	<a href="#">3175 04 10</a>	10	3	9.5	0.005
	R1/4	<a href="#">3175 04 13</a>	14	3	6.5	0.012
	R3/8	<a href="#">3175 04 17</a>	17	3	8	0.024
6	R1/8	<a href="#">3175 06 10</a>	10	4	11.5	0.005
	R1/4	<a href="#">3175 06 13</a>	14	4	8.5	0.011
	R3/8	<a href="#">3175 06 17</a>	17	4	8.5	0.022
8	R1/2	<a href="#">3175 06 21</a>	21	4	9	0.043
	R1/8	<a href="#">3175 08 10</a>	13	5	20	0.011
	R1/4	<a href="#">3175 08 13</a>	14	6	17	0.014
10	R3/8	<a href="#">3175 08 17</a>	17	6	13	0.021
	R1/2	<a href="#">3175 08 21</a>	21	6	12	0.040
	R1/8	<a href="#">3175 10 10</a>	16	5	22.5	0.017
12	R1/4	<a href="#">3175 10 13</a>	16	7	20	0.017
	R3/8	<a href="#">3175 10 17</a>	17	8	16.5	0.019
	R1/2	<a href="#">3175 10 21</a>	21	8	14	0.037
14	R1/4	<a href="#">3175 12 13</a>	19	7	26.5	0.029
	R3/8	<a href="#">3175 12 17</a>	19	9	24	0.028
	R1/2	<a href="#">3175 12 21</a>	21	10	19.5	0.036
16	R3/8	<a href="#">3175 14 17</a>	22	9	28.5	0.043
	R1/2	<a href="#">3175 14 21</a>	24	10	23.5	0.047
16	R3/8	<a href="#">3175 16 17</a>	27	9	32.5	0.068
	R1/2	<a href="#">3175 16 21</a>	27	12	32.5	0.079

Pre-coated thread

Nickel-plated brass, NBR

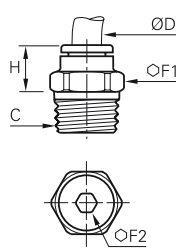


## 3175 Stud Fitting, Male NPT Thread

ØD	C					kg
			F1	F2	H	
6	NPT1/8	<a href="#">3175 06 11</a>	11	4	11.5	0.006
	NPT1/4	<a href="#">3175 06 14</a>	14	4	8.5	0.012
10	NPT1/4	<a href="#">3175 10 14</a>	16	7	20	0.018
	NPT3/8	<a href="#">3175 10 18</a>	18	8	16.5	0.023
12	NPT1/2	<a href="#">3175 10 22</a>	22	8	14	0.037
	NPT3/8	<a href="#">3175 12 18</a>	19	9	24	0.030
	NPT1/2	<a href="#">3175 12 22</a>	22	10	19.5	0.037


Pre-coated thread

Nickel-plated brass, NBR



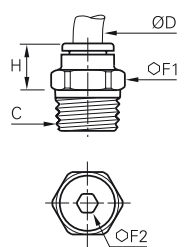
## 3175 Stud Fitting, Male NPT Thread

Inch

ØD	C					kg
			F1	F2	H	
1/8	NPT1/8	<a href="#">3175 53 11</a>	11	2	7.2	0.006
	NPT1/4	<a href="#">3175 53 14</a>	14	2	8	0.016
1/4	NPT1/8	<a href="#">3175 56 11</a>	11	4	11.9	0.006
	NPT1/4	<a href="#">3175 56 14</a>	14	4	9.4	0.013
3/8	NPT3/8	<a href="#">3175 56 18</a>	18	5	7.6	0.024
	NPT1/8	<a href="#">3175 60 11</a>	16	4	22.7	0.019
1/2	NPT1/4	<a href="#">3175 60 14</a>	16	7	20.5	0.019
	NPT3/8	<a href="#">3175 60 18</a>	18	7	17.5	0.026
1/2	NPT3/8	<a href="#">3175 62 18</a>	22	9.5	25.9	0.047
	NPT1/2	<a href="#">3175 62 22</a>	24	9.5	22.1	0.064

Pre-coated thread

Nickel-plated brass, NBR



Other products are available upon request; please do not hesitate to consult us.

# Stud Fittings

**3175**

Stud Fitting, Male BSPT Thread

Inch

Image	Nickel-plated brass, NBR	Diagram	ØD	C	Icon	F1	F2	H	kg
			1/8	R1/8	<a href="#">3175 53 10</a>	11	3	8.5	0.005
3/16	R1/8	<a href="#">3175 55 10</a>	11.1	3.2	15.5	0.009			
			R1/4	<a href="#">3175 55 13</a>	14.3	4	15	0.020	
1/4	R1/8	<a href="#">3175 56 10</a>	11	4	12	0.006			
			R1/4	<a href="#">3175 56 13</a>	14	4	9.5	0.021	
3/8	R1/4	<a href="#">3175 60 13</a>	18	5	7.5	0.017			
			R3/8	<a href="#">3175 60 17</a>	13	5	20	0.019	
			R1/2	<a href="#">3175 60 21</a>	14	6	16.8	0.061	
1/2	R1/4	<a href="#">3175 62 13</a>	22	6	26.9	0.044			
			R3/8	<a href="#">3175 62 17</a>	22	7	25.9	0.048	
			R1/2	<a href="#">3175 62 21</a>	24	7	20.5	0.049	

Pre-coated thread

**3101**

Stud Fitting, Male BSPP and Metric Thread

Image	Nickel-plated brass, NBR	Diagram	ØD	C	Icon	E	F1	F2	H	kg
			3	M3x0.5	<a href="#">3101 03 09*</a>	2.5	8	-	12.5	0.003
M5x0.8	<a href="#">3101 03 19</a>	3.5				8	2.5	12.5	0.004	
4	M3x0.5	<a href="#">3101 04 09*</a>	2.5	8	-	14.5	0.003			
			M5x0.8	<a href="#">3101 04 19</a>	3	9	2.5	14	0.003	
6	M7x1	<a href="#">3101 04 55</a>	5	10	2.5	14	0.004			
			G1/8	<a href="#">3101 04 10</a>	5	13	3	11.5	0.007	
8	G1/4	<a href="#">3101 04 13</a>	5.5	16	3	10.5	0.011			
			M5x0.8	<a href="#">3101 06 19</a>	3	11	2.5	16	0.005	
10	M7x1	<a href="#">3101 06 55</a>	5	10	3	16	0.006			
			M10x1	<a href="#">3101 06 60</a>	5	13	4	13	0.007	
12	M12x1.5	<a href="#">3101 06 67</a>	5.5	15	4	13	0.009			
			G1/8	<a href="#">3101 06 10</a>	5	13	4	13	0.007	
14	G1/4	<a href="#">3101 06 13</a>	5.5	16	4	12.5	0.011			
			G3/8	<a href="#">3101 06 17</a>	5.5	20	4	13	0.020	
16	G1/2	<a href="#">3101 06 21</a>	7.5	24	4	20	0.040			
			M10x1	<a href="#">3101 08 60</a>	5	13	5	21	0.011	
18	M12x1.5	<a href="#">3101 08 67</a>	5.5	15	5	21	0.015			
			G1/8	<a href="#">3101 08 10</a>	4.5	13	5	20.5	0.011	
20	G1/4	<a href="#">3101 08 13</a>	5.5	16	6	19.5	0.016			
			G3/8	<a href="#">3101 08 17</a>	5.5	20	6	18	0.022	
22	G1/2	<a href="#">3101 08 21</a>	7.5	24	6	16.5	0.039			
			G1/4	<a href="#">3101 10 13</a>	5.5	16	7	23	0.018	
24	G3/8	<a href="#">3101 10 17</a>	5.5	20	8	19.5	0.021			
			G1/2	<a href="#">3101 10 21</a>	7.5	24	8	18.5	0.033	
26	G1/4	<a href="#">3101 12 13</a>	5.5	19	7	27.5	0.027			
			G3/8	<a href="#">3101 12 17</a>	5.5	20	9	27	0.029	
28	G1/2	<a href="#">3101 12 21</a>	7	24	11	22.5	0.035			
			G3/8	<a href="#">3101 14 17</a>	5.5	22	9	29.5	0.041	
30	G1/2	<a href="#">3101 14 21</a>	7	24	11	28	0.047			
			G3/8	<a href="#">3101 16 17</a>	7.5	27	9	32.5	0.061	
32	G1/2	<a href="#">3101 16 21</a>	9	27	12	32.5	0.066			

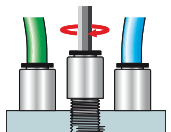
\* Bi-material O ring seal

**3181**

Stud Fitting Round Body, Male Metric Thread


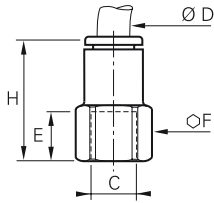

Image	Nickel-plated brass, NBR	Diagram	ØD	C	Icon	E	F	G	H	kg
			4	M5x0.8	<a href="#">3181 04 19</a>	3.5	2.5	8.5	14.5	0.005
M7x1	<a href="#">3181 04 55</a>	5				3	10	14	0.004	
6	M5x0.8	<a href="#">3181 06 19</a>	3.5	2.5	11	16	0.007			
			M7x1	<a href="#">3181 06 55</a>	5	3	10	16	0.005	

The internal hexagon and circular external shape ensure that model 3181 provides highly compact assembly. They can be easily installed with an Allen key without the need of a spanner.


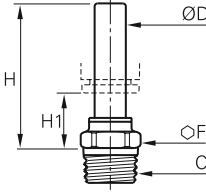



# Stud Fittings

## 3114 Stud Fitting, Female BSPP and Metric Thread


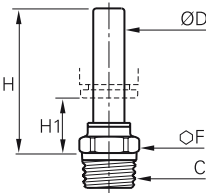

	Nickel-plated brass, NBR		<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>H</b>	<b>kg</b>
			4	M5x0.8	<a href="#">3114 04 19</a>	6.5	8	19.5	0.005
				G1/8	<a href="#">3114 04 10</a>	9.5	13	22.5	0.010
				G1/4	<a href="#">3114 04 13</a>	13.5	16	26.5	0.015
			6	G1/8	<a href="#">3114 06 10</a>	9.5	13	24.5	0.011
				G1/4	<a href="#">3114 06 13</a>	13.5	16	28.5	0.017
			8	G1/8	<a href="#">3114 08 10</a>	9.5	13	29	0.015
				G1/4	<a href="#">3114 08 13</a>	13.5	16	33	0.021
				G3/8	<a href="#">3114 08 17</a>	14	19	34	0.025
			10	G1/4	<a href="#">3114 10 13</a>	13.5	16	36	0.027
				G3/8	<a href="#">3114 10 17</a>	14	19	36	0.027
				G1/2	<a href="#">3114 10 21</a>	19.5	24	41.5	0.048
			12	G3/8	<a href="#">3114 12 17</a>	14	19	40	0.033
				G1/2	<a href="#">3114 12 21</a>	19.5	24	45.5	0.052
			14	G3/8	<a href="#">3114 14 17</a>	14	22	42.5	0.057
			16	G1/2	<a href="#">3114 16 21</a>	15	27	49	0.096

## 3121 Stud Standpipe, Male BSPT Thread

	Technical polymer, nickel-plated brass		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>kg</b>
			4	R1/8	<a href="#">3121 04 10</a>	10	26	14	0.005
				R1/4	<a href="#">3121 04 13</a>	14	26.5	14.5	0.014
			6	R1/8	<a href="#">3121 06 10</a>	10	28	14	0.005
				R1/4	<a href="#">3121 06 13</a>	14	28.5	14.5	0.014
			8	R1/8	<a href="#">3121 08 10</a>	10	29.5	11	0.006
				R1/4	<a href="#">3121 08 13</a>	14	28.5	10	0.012
				R3/8	<a href="#">3121 08 17</a>	17	28.5	10	0.015
			10	R1/4	<a href="#">3121 10 13</a>	15	36	15.5	0.012
				R3/8	<a href="#">3121 10 17</a>	17	36	15.5	0.017
				R1/2	<a href="#">3121 10 21</a>	21	36	15.5	0.028
			12	R3/8	<a href="#">3121 12 17</a>	17	36.5	12	0.018
				R1/2	<a href="#">3121 12 21</a>	21	36.5	12	0.028
			14	R1/2	<a href="#">3121 14 21</a>	21	41	13.5	0.042

Pre-coated thread


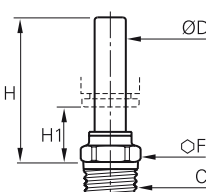

## 3121 Stud Standpipe, Male NPT Thread

	Technical polymer, nickel-plated brass		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>kg</b>
			4	NPT1/8	<a href="#">3121 04 11</a>	11	25.9	14.5	0.007
				NPT1/4	<a href="#">3121 04 14</a>	14	26.4	15	0.017
			8	NPT1/8	<a href="#">3121 08 11</a>	11	29.5	10.9	0.008
				NPT1/4	<a href="#">3121 08 14</a>	14	28.4	9.9	0.014

Pre-coated thread  
5/32" (4 mm) and 5/16" (8 mm) are also available

## 3121 Stud Standpipe, Male NPT Thread

Inch

	Technical polymer, nickel-plated brass		<b>ØD</b>	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>kg</b>
			1/4	NPT1/8	<a href="#">3121 56 11</a>	11	30	15.5	0.001
				NPT1/4	<a href="#">3121 56 14</a>	14	28.4	14.5	0.001
				NPT1/8	<a href="#">3121 60 11</a>	15	44.4	16.5	0.013
			3/8	NPT1/4	<a href="#">3121 60 14</a>	15	36.1	17	0.014
				NPT3/8	<a href="#">3121 60 18</a>	18	36.1	15.5	0.023
			1/2	NPT3/8	<a href="#">3121 62 18</a>	17	36.6	9.4	0.026
				NPT1/2	<a href="#">3121 62 22</a>	21	37.1	9.9	0.046

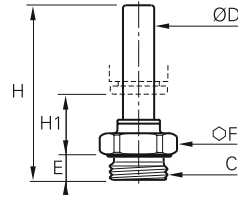
Pre-coated thread  
5/32" (4 mm) and 5/16" (8 mm) are also available

# Stud Fittings

## 3131 Stud Standpipe, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR

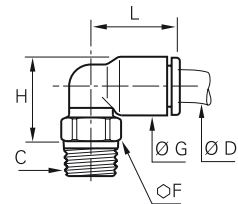


ØD	C		E	F	H	H1	kg
4	M5x0.8	<a href="#">3131 04 19</a>	3.5	8	31	16	0.002
	G1/8	<a href="#">3131 04 10</a>	5	13	30	13.5	0.005
	G1/4	<a href="#">3131 04 13</a>	5.5	16	31	13.5	0.010
6	G1/8	<a href="#">3131 06 10</a>	5	13	32	13.5	0.005
	G1/4	<a href="#">3131 06 13</a>	5.5	16	33	13.5	0.010
8	G1/8	<a href="#">3131 08 10</a>	5	13	35.5	12.5	0.008
	G1/4	<a href="#">3131 08 13</a>	5.5	16	34.5	10.5	0.010
	G3/8	<a href="#">3131 08 17</a>	5.5	20	34.5	10.5	0.015
10	G1/4	<a href="#">3131 10 13</a>	5.5	16	43.5	17.5	0.012
	G3/8	<a href="#">3131 10 17</a>	5.5	20	41.5	15.5	0.015
	G1/2	<a href="#">3131 10 21</a>	7.5	24	41.5	15.5	0.024
12	G3/8	<a href="#">3131 12 17</a>	5.5	20	42	12	0.015
	G1/2	<a href="#">3131 12 21</a>	7	24	43.5	12	0.025
14	G3/8	<a href="#">3131 14 17</a>	5.5	20	46.5	14	0.018
	G1/2	<a href="#">3131 14 21</a>	7	24	48	13.5	0.025

## 3109 Stud Elbow, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



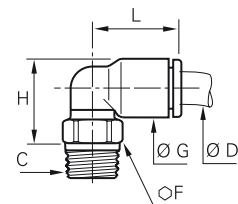
ØD	C		F	G	H	L	kg
4	R1/8	<a href="#">3109 04 10</a>	10	8.5	13.5	14	0.006
	R1/4	<a href="#">3109 04 13</a>	14	8.5	14	14	0.015
	R3/8	<a href="#">3109 04 17</a>	17	8.5	13.5	14	0.018
6	R1/8	<a href="#">3109 06 10</a>	10	10.5	15.5	16	0.006
	R1/4	<a href="#">3109 06 13</a>	14	10.5	16	16	0.015
	R3/8	<a href="#">3109 06 17</a>	17	10.5	16	16	0.019
8	R1/2	<a href="#">3109 06 21</a>	21	10.5	16.5	16	0.034
	R1/8	<a href="#">3109 08 10</a>	10	13.5	19	23	0.007
	R1/4	<a href="#">3109 08 13</a>	14	13.5	18	23	0.014
10	R3/8	<a href="#">3109 08 17</a>	17	13.5	18	23	0.018
	R1/2	<a href="#">3109 08 21</a>	21	13.5	19.5	23	0.033
	R1/8	<a href="#">3109 10 10</a>	15	16	23	26.5	0.012
12	R1/4	<a href="#">3109 10 13</a>	15	16	22	26.5	0.014
	R3/8	<a href="#">3109 10 17</a>	17	16	22	26.5	0.019
	R1/2	<a href="#">3109 10 21</a>	21	16	22	26.5	0.031
14	R1/4	<a href="#">3109 12 13</a>	15	19	25	31	0.016
	R3/8	<a href="#">3109 12 17</a>	17	19	25	31	0.022
	R1/2	<a href="#">3109 12 21</a>	21	19	25	31	0.033
16	R3/8	<a href="#">3109 14 17</a>	20	22	30.5	35.5	0.031
	R1/2	<a href="#">3109 14 21</a>	24	22	28.5	35.5	0.041
16	R3/8	<a href="#">3109 16 17</a>	27	27	53	39	0.106
	R1/2	<a href="#">3109 16 21</a>	27	27	53	39	0.104

Pre-coated thread  
The body swivels for positioning purposes.

## 3109 Stud Elbow, Male NPT Thread



Technical polymer, nickel-plated brass, NBR




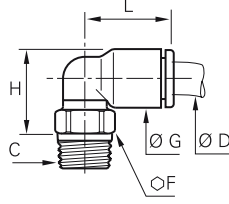

ØD	C		F	G	H	L	kg
4	NPT1/8	<a href="#">3109 04 11</a>	11	8.4	13.5	14	0.007
	NPT1/4	<a href="#">3109 04 14</a>	14	8.4	14	14	0.016
6	NPT1/8	<a href="#">3109 06 11</a>	11	10.5	15.5	16	0.007
	NPT1/4	<a href="#">3109 06 14</a>	14	10.5	16	16	0.017
8	NPT1/8	<a href="#">3109 08 11</a>	11	13.5	19	23.1	0.009
	NPT1/4	<a href="#">3109 08 14</a>	14	13.5	18	23.1	0.015
10	NPT1/4	<a href="#">3109 10 14</a>	15	16	23	26.5	0.017
	NPT3/8	<a href="#">3109 10 18</a>	18	16	22	26.5	0.024
	NPT1/2	<a href="#">3109 10 22</a>	22	16	23	26.5	0.045
12	NPT3/8	<a href="#">3109 12 18</a>	18	19	25	31	0.050
	NPT1/2	<a href="#">3109 12 22</a>	22	19	26	31	0.092

Pre-coated thread  
The body swivels for positioning purposes.

# Stud Fittings

## 3109 Stud Elbow, Male NPT Thread


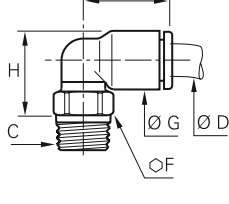

Inch

		Technical polymer, nickel-plated brass, NBR	<b>ØD</b>	<b>C</b>		<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>kg</b>
			1/8	NPT1/8	<a href="#">3109 53 11</a>	11	8.5	13.5	14.5	0.007
			NPT1/4	<a href="#">3109 53 14</a>	14	8.5	14	14.5	0.015	
			NPT1/8	<a href="#">3109 56 11</a>	11	10.9	17	18	0.007	
			1/4	NPT1/4	<a href="#">3109 56 14</a>	14	10.9	16	18	0.014
			NPT3/8	<a href="#">3109 56 18</a>	18	10.9	16.5	18	0.021	
			NPT1/8	<a href="#">3109 60 11</a>	15	16	23.1	27.4	0.014	
			3/8	NPT1/4	<a href="#">3109 60 14</a>	15	16	23.1	27.4	0.017
			NPT3/8	<a href="#">3109 60 18</a>	18	16	22.1	27.4	0.023	
			1/2	NPT3/8	<a href="#">3109 62 18</a>	20	22.1	31	35.1	0.041
			NPT1/2	<a href="#">3109 62 22</a>	24	22.1	28.4	35.1	0.054	

Pre-coated thread - 5/32" (4 mm) and 5/16" (8 mm) are also available.  
The body swivels for positioning purposes.


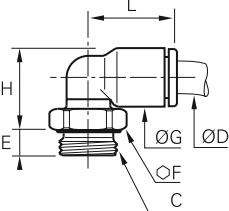

## 3109 Stud Elbow, Male BSPT Thread

Inch

		Technical polymer, nickel-plated brass, NBR	<b>ØD</b>	<b>C</b>		<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>kg</b>
			1/8	R1/8	<a href="#">3109 53 10</a>	10	8.5	13.5	14.5	0.011
			R1/8	<a href="#">3109 55 10</a>	11	10.9	17	21.6	0.010	
			3/16	R1/4	<a href="#">3109 55 13</a>	14	8.4	14	14	0.016
			R1/8	<a href="#">3109 56 10</a>	10	10.9	17	18	0.006	
			1/4	R1/4	<a href="#">3109 56 13</a>	14	10.9	17	18	0.013
			R1/4	<a href="#">3109 60 13</a>	15	16	22.1	26.4	0.016	
			3/8	R3/8	<a href="#">3109 60 17</a>	17	16	22.1	26.4	0.054
			R1/4	<a href="#">3109 62 13</a>	20	22.1	31	35.1	0.064	
			1/2	R3/8	<a href="#">3109 62 17</a>	20	22.1	31	35.1	0.067
			R1/2	<a href="#">3109 62 21</a>	24	22.1	28.4	35.1	0.046	

Pre-coated thread  
The body swivels for positioning purposes.  
5/32" (4 mm) and 5/16" (8 mm) are also available.

## 3199 Stud Elbow, Male BSPP and Metric Thread

		Technical polymer, nickel-plated brass, NBR	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>kg</b>
			3	M3x0.5	<a href="#">3199 03 09*</a>	2.5	8	8.5	15	14.5	0.003
			M5x0.8	<a href="#">3199 03 19</a>	3.5	8	8.5	13.5	14.5	0.003	
			M3x0.5	<a href="#">3199 04 09*</a>	2.5	8	8.5	15	14.5	0.002	
			M5x0.8	<a href="#">3199 04 19</a>	3.5	8	8.5	13.5	14	0.002	
			4	M7x1	<a href="#">3199 04 55</a>	4.5	10	8.5	15	14	0.005
			G1/8	<a href="#">3199 04 10</a>	5	13	8.5	13	14	0.006	
			G1/4	<a href="#">3199 04 13</a>	5.5	16	8.5	13	14	0.011	
			M5x0.8	<a href="#">3199 06 19</a>	3.5	8	10.5	15.5	16	0.003	
			M7x1	<a href="#">3199 06 55</a>	4.5	10	10.5	17.5	16	0.006	
			M10x1	<a href="#">3199 06 60</a>	5	13	10.5	15	14	0.006	
			M12x1.5	<a href="#">3199 06 67</a>	5.5	15	10.5	15	16	0.009	
			6	G1/8	<a href="#">3199 06 10</a>	5	13	10.5	15	16	0.006
			G1/4	<a href="#">3199 06 13</a>	5.5	16	10.5	15	16	0.011	
			G3/8	<a href="#">3199 06 17</a>	5.5	20	10.5	15.5	16	0.022	
			G1/2	<a href="#">3199 06 21</a>	7	24	10.5	16	16	0.027	
			M10x1	<a href="#">3199 08 60</a>	5	13	13.5	20.5	23	0.009	
			M12x1.5	<a href="#">3199 08 67</a>	5.5	15	13.5	19.5	23	0.009	
			8	G1/8	<a href="#">3199 08 10</a>	4.5	13	13.5	20.5	23	0.009
			G1/4	<a href="#">3199 08 13</a>	5.5	16	13.5	18.5	23	0.012	
			G3/8	<a href="#">3199 08 17</a>	5.5	20	13.5	18.5	23	0.017	
			G1/2	<a href="#">3199 08 21</a>	7	24	13.5	19	23	0.027	
			G1/4	<a href="#">3199 10 13</a>	5.5	16	16	23.5	26.5	0.014	
			10	G3/8	<a href="#">3199 10 17</a>	5.5	20	16	22	26.5	0.017
			G1/2	<a href="#">3199 10 21</a>	7.5	24	16	22	26.5	0.026	
			G1/4	<a href="#">3199 12 13</a>	5.5	16	19	26.5	31	0.016	
			12	G3/8	<a href="#">3199 12 17</a>	5.5	20	19	25	31	0.019
			G1/2	<a href="#">3199 12 21</a>	7	24	19	25	31	0.029	
			14	G3/8	<a href="#">3199 14 17</a>	5.5	20	22	32.5	35.5	0.029
			G1/2	<a href="#">3199 14 21</a>	7	24	22	27	35.5	0.028	
			16	G3/8	<a href="#">3199 16 17</a>	7.5	27	27	54.5	39	0.101
			G1/2	<a href="#">3199 16 21</a>	9	27	27	54.5	39	0.097	

The body swivels for positioning purposes.  
\*Bi-material seal

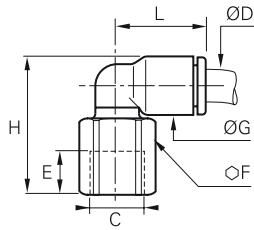


# Stud Fittings

## 3192 Stud Elbow, Female BSPP Thread



Technical polymer, nickel-plated brass, NBR



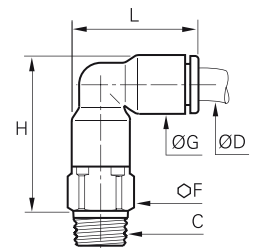
ØD	C		E	F	G	H	L	kg
4	G1/8	<a href="#">3192 04 10</a>	8.5	13	8.5	23	14	0.010
	G1/4	<a href="#">3192 04 13</a>	11.5	16	8.5	27	14	0.017
6	G1/8	<a href="#">3192 06 10</a>	8.5	13	10.5	25	16	0.010
	G1/4	<a href="#">3192 06 13</a>	11.5	16	10.5	29	16	0.017
8	G1/8	<a href="#">3192 08 10</a>	8.5	13	13.5	28	23	0.012
	G1/4	<a href="#">3192 08 13</a>	11.5	16	13.5	32	23	0.020
10	G3/8	<a href="#">3192 08 17</a>	12	19	13.5	33	23	0.026
	G1/4	<a href="#">3192 10 13</a>	11	16	16	34.5	26.5	0.020
	G3/8	<a href="#">3192 10 17</a>	12	19	16	35	26.5	0.025
12	G1/2	<a href="#">3192 10 21</a>	16	24	16	41	26.5	0.049
	G1/4	<a href="#">3192 12 13</a>	11	16	19	38	30.5	0.023
	G3/8	<a href="#">3192 12 17</a>	12	19	19	38.5	30.5	0.027
	G1/2	<a href="#">3192 12 21</a>	16	24	19	43.5	30.5	0.050

The body swivels for positioning purposes.

## 3129 Extended Stud Elbow, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H	L	kg
4	R1/8	<a href="#">3129 04 10</a>	10	8.5	23	19	0.008
	R1/4	<a href="#">3129 04 13</a>	14	8.5	23.5	19	0.018
6	R1/8	<a href="#">3129 06 10</a>	10	10.5	27	22.5	0.010
	R1/4	<a href="#">3129 06 13</a>	14	10.5	27.5	22.5	0.020
8	R1/8	<a href="#">3129 08 10</a>	13	13.5	34.5	29.5	0.018
	R1/4	<a href="#">3129 08 13</a>	14	13.5	32.5	29.5	0.022
10	R3/8	<a href="#">3129 08 17</a>	17	13.5	33	29.5	0.032
	R1/4	<a href="#">3129 10 13</a>	15	16	39.5	34.5	0.031
	R3/8	<a href="#">3129 10 17</a>	17	16	39.5	34.5	0.041
12	R1/2	<a href="#">3129 10 21</a>	21	16	39.5	34.5	0.060
	R1/4	<a href="#">3129 12 13</a>	19	19	45.5	40.5	0.035
	R3/8	<a href="#">3129 12 17</a>	19	19	45.5	40.5	0.051
14	R1/2	<a href="#">3129 12 21</a>	21	19	45.5	40.5	0.065
	R3/8	<a href="#">3129 14 17</a>	21	22	51.5	46.5	0.064
	R1/2	<a href="#">3129 14 21</a>	21	22	51.5	46.5	0.070

Pre-coated thread

The body swivels for positioning purposes.

Parker Legris offers the solution to enable many types of configuration options.

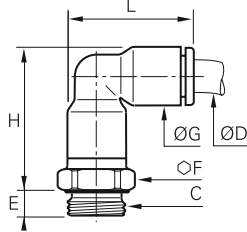


# Stud Fittings

## 3169 Extended Stud Elbow, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



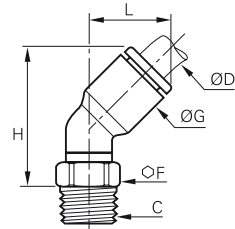
ØD	C		E	F	G	H	L	kg
4	M5x0.8	<a href="#">3169 04 19</a>	3.5	8	8.5	23	19	0.005
	M7x1	<a href="#">3169 04 55</a>	4.5	10	8.5	22.5	19	0.008
	G1/8	<a href="#">3169 04 10</a>	5	13	8.5	22.5	19	0.009
	G1/4	<a href="#">3169 04 13</a>	5.5	16	8.5	22.5	19	0.014
6	M5x0.8	<a href="#">3169 06 19</a>	3.5	10	10.5	27.5	23	0.008
	M7x1	<a href="#">3169 06 55</a>	4.5	10	10.5	26	23	0.012
	G1/8	<a href="#">3169 06 10</a>	5	13	10.5	27	23	0.011
	G1/4	<a href="#">3169 06 13</a>	5.5	16	10.5	27	23	0.016
8	G1/8	<a href="#">3169 08 10</a>	5	13	13.5	36	29.5	0.018
	G1/4	<a href="#">3169 08 13</a>	5.5	16	13.5	33	29.5	0.020
	G3/8	<a href="#">3169 08 17</a>	5.5	20	13.5	33	29.5	0.028
10	G1/4	<a href="#">3169 10 13</a>	5.5	16	16	40.5	34.5	0.029
	G3/8	<a href="#">3169 10 17</a>	5.5	20	16	40.5	34.5	0.037
12	G1/2	<a href="#">3169 12 21</a>	7.5	24	16	40.5	34.5	0.042
	G1/4	<a href="#">3169 12 13</a>	5.5	19	19	44.5	40.5	0.049
14	G3/8	<a href="#">3169 14 17</a>	5.5	20	19	42	40.5	0.040
	G1/2	<a href="#">3169 12 21</a>	7.5	24	19	42	40.5	0.049
	G3/8	<a href="#">3169 14 17</a>	5.5	22	22	51	46.5	0.059
16	G1/2	<a href="#">3169 14 21</a>	7.5	24	22	48.5	46.5	0.063
	G3/8	<a href="#">3169 16 17</a>	7.5	27	27	82.5	52	0.220
	G1/2	<a href="#">3169 16 21</a>	9	27	27	82.5	52	0.206

The body swivels for positioning purposes.

## 3113 45° Elbow, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



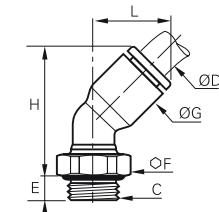
ØD	C		F	G	H	L	kg
4	R1/8	<a href="#">3113 04 10</a>	10	9	21	13	0.006
6	R1/8	<a href="#">3113 06 10</a>	10	11	24.5	14.5	0.006
	R1/4	<a href="#">3113 06 13</a>	14	11	25	14.5	0.015
8	R1/8	<a href="#">3113 08 10</a>	10	13.5	30	19.5	0.008
	R3/8	<a href="#">3113 08 17</a>	17	13.5	28.5	19.5	0.020
10	R1/4	<a href="#">3113 10 13</a>	15	16	33.5	23	0.014
	R3/8	<a href="#">3113 10 17</a>	17	16	33.5	23	0.019
	R1/2	<a href="#">3113 10 21</a>	21	16	34	23	0.100
12	R1/4	<a href="#">3113 12 13</a>	15	19	39	26	0.016
	R3/8	<a href="#">3113 12 17</a>	17	19	39	26	0.022
	R1/2	<a href="#">3113 12 21</a>	21	19	39	26	0.040

Pre-coated thread  
The body swivels for positioning purposes.  
This model prevents distortion of the tube.

## 3133 45° Elbow, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		E	F	G	H	L	kg
4	M5x0.8	<a href="#">3133 04 19</a>	3.5	8	9	23	13	0.003
	G1/8	<a href="#">3133 04 10</a>	4.5	13	9	20.5	13	0.006
6	M5x0.8	<a href="#">3133 06 19</a>	3.5	8	11	28	14.5	0.003
	G1/8	<a href="#">3133 06 10</a>	4.5	13	11	24	14.5	0.006
	G1/4	<a href="#">3133 06 13</a>	5.5	16	11	24	14.5	0.011
8	G1/8	<a href="#">3133 08 10</a>	4.5	13	13.5	31	19.5	0.011
	G1/4	<a href="#">3133 08 13</a>	5.5	16	13.5	29	19.5	0.012
10	G3/8	<a href="#">3133 08 17</a>	5.5	20	13.5	29	19.5	0.020
	G1/4	<a href="#">3133 10 13</a>	5.5	16	16	35	23	0.014
	G3/8	<a href="#">3133 10 17</a>	5.5	20	16	33.5	23	0.017
12	G1/2	<a href="#">3133 10 21</a>	7	24	16	33.5	23	0.026
	G1/4	<a href="#">3133 12 13</a>	5.5	16	19	40.5	26	0.016
12	G3/8	<a href="#">3133 12 17</a>	5.5	20	19	39	26	0.019
	G1/2	<a href="#">3133 12 21</a>	7	24	19	39	26	0.028

The body swivels for positioning purposes.  
This model prevents distortion of the tube.

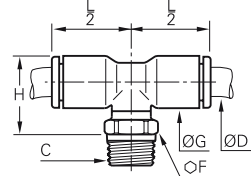
# Stud Fittings

## 3108

### Stud Branch Tee, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H	L/2	kg
4	R1/8	<a href="#">3108 04 10</a>	10	8.5	15.5	14	0.006
	R1/4	<a href="#">3108 04 13</a>	14	8.5	16	14	0.015
6	R1/8	<a href="#">3108 06 10</a>	10	10.5	17.5	16	0.007
	R1/4	<a href="#">3108 06 13</a>	14	10.5	18	16	0.016
8	R1/8	<a href="#">3108 08 10</a>	10	13.5	22	23	0.009
	R1/4	<a href="#">3108 08 13</a>	14	13.5	21	23	0.016
	R3/8	<a href="#">3108 08 17</a>	17	13.5	21	23	0.020
10	R1/4	<a href="#">3108 10 13</a>	15	16	24	26.5	0.017
	R3/8	<a href="#">3108 10 17</a>	17	16	24	26.5	0.022
	R1/2	<a href="#">3108 10 21</a>	21	16	24	26.5	0.033
12	R1/4	<a href="#">3108 12 13</a>	15	19	27	31	0.021
	R3/8	<a href="#">3108 12 17</a>	17	19	27	31	0.026
	R1/2	<a href="#">3108 12 21</a>	21	19	27	31	0.037
14	R3/8	<a href="#">3108 14 17</a>	20	22	30.5	35	0.038
	R1/2	<a href="#">3108 14 21</a>	24	22	28.5	35	0.048
16	R3/8	<a href="#">3108 16 17</a>	27	27	53	38.5	0.128
	R1/2	<a href="#">3108 16 21</a>	27	27	53	38.5	0.124

Pre-coated thread

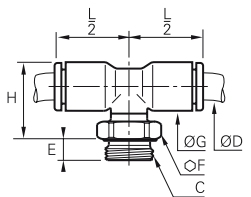
The body swivels for positioning purposes.

## 3198

### Stud Branch Tee, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		E	F	G	H	L/2	kg
4	M5x0.8	<a href="#">3198 04 19</a>	3.5	8	8.5	17.5	14	0.003
	G1/8	<a href="#">3198 04 10</a>	5	13	8.5	15	14	0.006
	G1/4	<a href="#">3198 04 13</a>	5.5	16	8.5	15	14	0.011
6	M5x0.8	<a href="#">3198 06 19</a>	3.5	8	10.5	19.5	16	0.004
	G1/8	<a href="#">3198 06 10</a>	5	13	10.5	17	16	0.007
	G1/4	<a href="#">3198 06 13</a>	5.5	16	10.5	17	16	0.012
8	G1/8	<a href="#">3198 08 10</a>	4.5	13	13.5	23.5	23	0.011
	G1/4	<a href="#">3198 08 13</a>	5.5	16	13.5	21.5	23	0.014
	G3/8	<a href="#">3198 08 17</a>	5.5	20	13.5	21.5	23	0.019
10	G1/4	<a href="#">3198 10 13</a>	5.5	16	16	26	26.5	0.017
	G3/8	<a href="#">3198 10 17</a>	5.5	20	16	24	26.5	0.020
	G1/2	<a href="#">3198 10 21</a>	7.5	24	16	24	26.5	0.029
12	G1/4	<a href="#">3198 12 13</a>	5.5	16	19	29	31	0.021
	G3/8	<a href="#">3198 12 17</a>	5.5	20	19	27	31	0.024
	G1/2	<a href="#">3198 12 21</a>	7	24	19	27	31	0.033
14	G3/8	<a href="#">3198 14 17</a>	5.5	20	22	32.5	35.5	0.036
	G1/2	<a href="#">3198 14 21</a>	7	24	22	27	35.5	0.036
16	G3/8	<a href="#">3198 16 17</a>	7.5	27	27	54.5	38.5	0.121
	G1/2	<a href="#">3198 16 21</a>	9	27	27	54.5	38.5	0.117

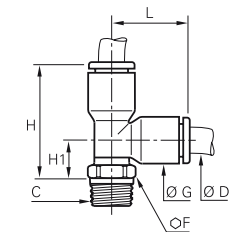
The body swivels for positioning purposes.

## 3103

### Stud Run Tee, BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H	H1	L	kg
4	R1/8	<a href="#">3103 04 10</a>	10	8.5	23.5	9	14.5	0.006
	R1/4	<a href="#">3103 04 13</a>	14	8.5	24	9.5	14.5	0.015
6	R1/8	<a href="#">3103 06 10</a>	10	10.5	27.5	10	17.5	0.007
	R1/4	<a href="#">3103 06 13</a>	14	10.5	28	10.5	17.5	0.016
8	R1/8	<a href="#">3103 08 10</a>	10	13.5	35	12	23	0.009
	R1/4	<a href="#">3103 08 13</a>	14	13.5	34	11	23	0.015
	R3/8	<a href="#">3103 08 17</a>	17	13.5	34	11	23	0.020
10	R1/4	<a href="#">3103 10 13</a>	15	16	40.5	14	26.5	0.017
	R3/8	<a href="#">3103 10 17</a>	17	16	40.5	14	26.5	0.022
	R1/2	<a href="#">3103 10 21</a>	21	16	40.5	14	26.5	0.033
12	R1/4	<a href="#">3103 12 13</a>	15	19	46.5	15.5	31	0.028
	R3/8	<a href="#">3103 12 17</a>	17	19	46.5	15.5	31	0.026
	R1/2	<a href="#">3103 12 21</a>	21	19	46.5	15.5	31	0.037
14	R3/8	<a href="#">3103 14 17</a>	20	22	55	19.5	35.5	0.037
	R1/2	<a href="#">3103 14 21</a>	24	22	52.5	17.5	35.5	0.048
16	R3/8	<a href="#">3103 16 17</a>	27	27	78	27	38.5	0.126
	R1/2	<a href="#">3103 16 21</a>	27	27	78	27	38.5	0.124

Pre-coated thread

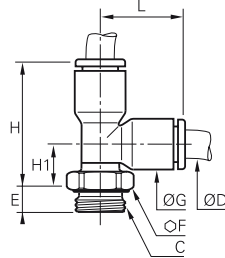
The body swivels for positioning purposes.

# Stud Fittings

## 3193 Stud Run Tee, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



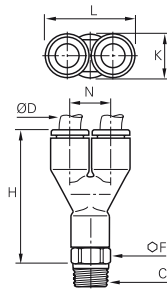
ØD	C		E	F	G	H	H1	L	kg
4	M5x0.8	<a href="#">3193 04 19</a>	3.5	8	8.5	26	11.5	14.5	0.003
	G1/8	<a href="#">3193 04 10</a>	5	13	8.5	23	8.5	14.5	0.006
	G1/4	<a href="#">3193 04 13</a>	5.5	16	8.5	23	8.5	14.5	0.011
6	M5x0.8	<a href="#">3193 06 19</a>	3.5	8	10.5	29.5	12.5	17.5	0.004
	G1/8	<a href="#">3193 06 10</a>	5	13	10.5	27	10	17.5	0.007
	G1/4	<a href="#">3193 06 13</a>	5.5	16	10.5	27	10	17.5	0.012
8	G1/8	<a href="#">3193 08 10</a>	4.5	13	13.5	36.5	14	23	0.011
	G1/4	<a href="#">3193 08 13</a>	5.5	16	13.5	34.5	12	23	0.014
	G3/8	<a href="#">3193 08 17</a>	5.5	20	13.5	34.5	12	23	0.019
10	G1/4	<a href="#">3193 10 13</a>	5.5	16	16	42	15.5	26.5	0.017
	G3/8	<a href="#">3193 10 17</a>	5.5	20	16	40.5	14	26.5	0.020
	G1/2	<a href="#">3193 10 21</a>	7.5	24	16	40.5	14	26.5	0.029
12	G1/4	<a href="#">3193 12 13</a>	5.5	16	19	48	17	31	0.021
	G3/8	<a href="#">3193 12 17</a>	5.5	20	19	46.5	15.5	31	0.024
	G1/2	<a href="#">3193 12 21</a>	7	24	19	46.5	15.5	31	0.038
14	G3/8	<a href="#">3193 14 17</a>	5.5	20	22	56.5	21.5	35.5	0.107
	G1/2	<a href="#">3193 14 21</a>	7	24	22	51	16	35.5	0.120
	G3/8	<a href="#">3193 16 17</a>	7.5	27	27	79.5	41	38.5	0.121
16	G1/2	<a href="#">3193 16 21</a>	9	27	27	79.5	41	38.5	0.117

The body swivels for positioning purposes.

## 3148 Y Piece, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



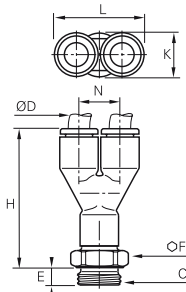
ØD	C		F	H	K	L	N	kg
4	R1/8	<a href="#">3148 04 10</a>	10	32.5	8.5	17.5	9	0.010
	R1/4	<a href="#">3148 04 13</a>	14	33	8.5	17.5	9	0.019
6	R1/8	<a href="#">3148 06 10</a>	10	39.5	10.5	21.5	11	0.011
	R1/4	<a href="#">3148 06 13</a>	14	40	10.5	21.5	11	0.021
8	R1/8	<a href="#">3148 08 10</a>	13	56.5	13.5	28	14.5	0.020
	R1/4	<a href="#">3148 08 13</a>	14	55.5	13.5	28	14.5	0.025
	R3/8	<a href="#">3148 08 17</a>	16	48.5	13.5	28	14.5	0.034
10	R1/4	<a href="#">3148 10 13</a>	14	60	19	39	20	0.033
	R3/8	<a href="#">3148 10 17</a>	16	60.5	19	39	20	0.042
	R1/2	<a href="#">3148 10 21</a>	24	61	19	39	20	0.062
12	R3/8	<a href="#">3148 12 17</a>	19	66	19	39	20	0.054
	R1/2	<a href="#">3148 12 21</a>	21	66	19	39	20	0.059

Pre-coated thread  
The body swivels for positioning purposes.

## 3158 Y Piece, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR


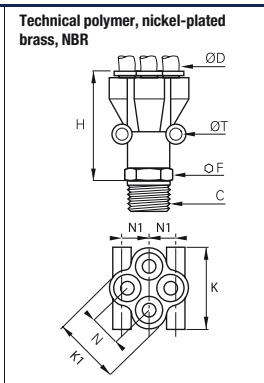



ØD	C		E	F	H	K	L	N	kg
4	M5x0.8	<a href="#">3158 04 19</a>	3.5	8	32.5	8.5	17.5	9	0.006
	G1/8	<a href="#">3158 04 10</a>	5	13	32	8.5	17.5	9	0.009
	G1/4	<a href="#">3158 04 13</a>	5.5	16	32.5	8.5	17.5	9	0.014
6	M5x0.8	<a href="#">3158 06 19</a>	3.5	10	39.5	10.5	21.5	11	0.009
	G1/8	<a href="#">3158 06 10</a>	5	13	39	10.5	21.5	11	0.012
	G1/4	<a href="#">3158 06 13</a>	5.5	16	39.5	10.5	21.5	11	0.017
8	G1/8	<a href="#">3158 08 10</a>	5	13	49	13.5	28	14.5	0.020
	G1/4	<a href="#">3158 08 13</a>	5.5	16	49.5	13.5	28	14.5	0.023
	G3/8	<a href="#">3158 08 17</a>	6	19	48	13.5	28	14.5	0.030
10	G1/4	<a href="#">3158 10 13</a>	5.5	16	58	16	33	17	0.031
	G3/8	<a href="#">3158 10 17</a>	6	20	57.5	16	33	17	0.039
	G1/2	<a href="#">3158 10 21</a>	7	24	58	16	33	17	0.053
12	G3/8	<a href="#">3158 12 17</a>	6	20	62	19	39	20	0.044
	G1/2	<a href="#">3158 12 21</a>	7	24	63	19	39	20	0.049

The body swivels for positioning purposes.


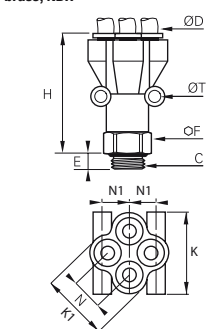

# Stud Fittings

## 3112 Double Y Piece, Male BSPT Thread

	<p>Technical polymer, nickel-plated brass, NBR</p> 	<p><b>ØD</b>   <b>C</b>   </p>	<b>F</b>	<b>H</b>	<b>K</b>	<b>K1</b>	<b>N</b>	<b>N1</b>	<b>ØT</b>	<b>kg</b>	
		<p>4   R1/8   <a href="#">3112 04 10</a></p> <p>4   R1/4   <a href="#">3112 04 13</a></p> <p>6   R1/8   <a href="#">3112 06 10</a></p> <p>6   R1/4   <a href="#">3112 06 13</a></p>	13	41.5	25.5	21	10	8.5	3.7	0.023	0.027


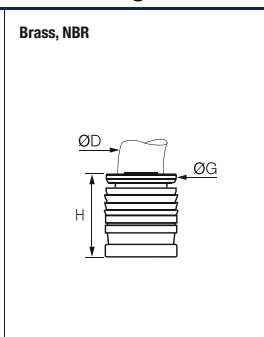

Pre-coated thread  
The body swivels for positioning purposes.

## 3132 Double Y, Male BSPP Thread


	<p>Technical polymer, nickel-plated brass, NBR</p> 	<p><b>ØD</b>   <b>C</b>   </p>	<b>E</b>	<b>F</b>	<b>H</b>	<b>K</b>	<b>K1</b>	<b>N</b>	<b>N1</b>	<b>ØT</b>	<b>kg</b>
		<p>4   G1/8   <a href="#">3132 04 10</a></p> <p>4   G1/4   <a href="#">3132 04 13</a></p> <p>6   G1/8   <a href="#">3132 06 10</a></p> <p>6   G1/4   <a href="#">3132 06 13</a></p>	5	13	41	25.5	21	10	8.5	3.7	0.025

The body swivels for positioning purposes.


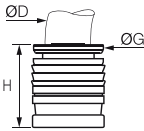

## 3100 Carstick® Cartridge

	<p>Brass, NBR</p> 	<p><b>ØD</b>   </p>	<b>G</b>	<b>G1</b>	<b>H</b>	<b>L</b>	<b>kg</b>		
		<p>4   <a href="#">3100 04 00</a></p> <p>6   <a href="#">3100 06 00</a></p> <p>8   <a href="#">3100 08 00</a></p> <p>10   <a href="#">3100 10 00</a></p> <p>12   <a href="#">3100 12 00</a></p>	8	11	10	554	0.001	0.002	0.002


50 cartridges per Carstick®  
Cavity dimensions are available in chapter 2.



## 3100 Carstick® Cartridge

	<p>Nickel-plated brass, NBR</p> 	<p><b>ØD</b>   </p>	<b>G</b>	<b>G1</b>	<b>H</b>	<b>L</b>	<b>kg</b>
		<p>1/8   <a href="#">3100 53 00 99</a></p> <p>1/4   <a href="#">3100 56 00 99</a></p> <p>3/8   <a href="#">3100 60 00 99</a></p>	7	10	9	508	0.002


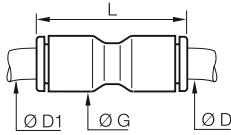

50 cartridges per Carstick®  
Cavity dimensions are available in chapter 2.



Other products are available upon request; please do not hesitate to consult us.


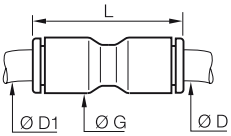

# Tube-to-Tube Fittings

## 3106 Equal and Unequal Tube-to-Tube Connector

	Technical polymer, NBR  	<b>ØD</b>	<b>ØD1</b>		<b>G</b>	<b>L</b>	<b>kg</b>
		3	3	<a href="#">3106 03 00</a>	8.5	25	0.002
			4	<a href="#">3106 03 04</a>	8.5	25	0.002
			1/4	<a href="#">3106 04 56</a>	11	29.5	0.010
		4	4	<a href="#">3106 04 00</a>	8.5	25	0.001
			6	<a href="#">3106 04 06</a>	11	28	0.002
			8	<a href="#">3106 04 08</a>	13.5	38	0.005
			1/4	<a href="#">3106 06 56</a>	13.5	36	0.009
		6	6	<a href="#">3106 06 00</a>	10.5	28.5	0.002
			8	<a href="#">3106 06 08</a>	13.5	38	0.005
			10	<a href="#">3106 06 10</a>	16	42	0.007
		8	8	<a href="#">3106 08 00</a>	13.5	38	0.004
			10	<a href="#">3106 08 10</a>	16	42	0.008
			12	<a href="#">3106 08 12</a>	19	50.5	0.026
		10	10	<a href="#">3106 10 00</a>	16	42	0.006
			12	<a href="#">3106 10 12</a>	19	50.5	0.022
			1/2	<a href="#">3106 12 62</a>	22	56.5	0.024
		12	12	<a href="#">3106 12 00</a>	19	50.5	0.009
			14	<a href="#">3106 12 14</a>	22	56	0.026
			16	<a href="#">3106 12 16</a>	27	61	0.066
14	14	<a href="#">3106 14 00</a>	22	56	0.014		
16	16	<a href="#">3106 16 00</a>	27	60.5	0.041		


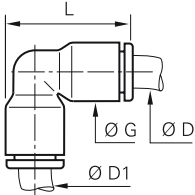

## 3106 Equal and Unequal Tube-to-Tube Connector

Inch

	Technical polymer, NBR  	<b>ØD</b>	<b>ØD1</b>		<b>G</b>	<b>L</b>	<b>kg</b>
		1/4	1/4	<a href="#">3106 56 00</a>	10.9	29.5	0.002
			3/8	<a href="#">3106 60 00</a>	16	42	0.006
		3/8	10	<a href="#">3106 60 10</a>	12	50.5	0.029
			1/4	<a href="#">3106 60 56</a>	16	41	0.016
		1/2	1/2	<a href="#">3106 62 00</a>	22	55	0.015


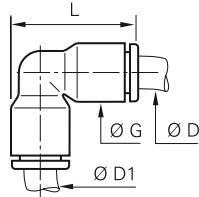

5/32" (4 mm) and 5/16" (8 mm) also available

## 3102 Equal and Unequal Elbow

	Technical polymer, NBR  	<b>ØD</b>	<b>ØD1</b>		<b>G</b>	<b>L</b>	<b>kg</b>
		4	4	<a href="#">3102 04 00</a>	8.5	19	0.001
			6	<a href="#">3102 04 06</a>	10.5	22.5	0.004
		6	6	<a href="#">3102 06 00</a>	10.5	22.5	0.002
			8	<a href="#">3102 06 08</a>	13.5	29.5	0.009
		8	8	<a href="#">3102 08 00</a>	13.5	29.5	0.004
			10	<a href="#">3102 08 10</a>	16	34.5	0.031
			10	<a href="#">3102 10 00</a>	16	34.5	0.006
		10	12	<a href="#">3102 10 12</a>	19	40.5	0.022
			12	<a href="#">3102 12 00</a>	19	40.5	0.010
		14	14	<a href="#">3102 14 00</a>	22	46.5	0.015
		16	16	<a href="#">3102 16 00</a>	27	52	0.043

## 3102 Equal Elbow

Inch

	Technical polymer, NBR  	<b>ØD</b>	<b>ØD1</b>		<b>G</b>	<b>L</b>	<b>kg</b>
		1/4	1/4	<a href="#">3102 56 00</a>	11	23.5	0.002
		3/8	3/8	<a href="#">3102 60 00</a>	16	34	0.006
		1/2	1/2	<a href="#">3102 62 00</a>	22	35	0.018

5/32" (4 mm) and 5/16" (8 mm) also available

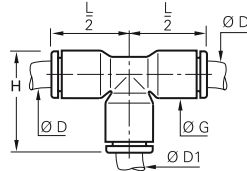
# Tube-to-Tube Fittings

**3104**

Equal and Unequal Tee



Technical polymer, NBR



ØD	ØD1		G	H	L/2	kg
3	3	<a href="#">3104 03 00</a>	8.5	19	14.5	0.004
4	4	<a href="#">3104 04 00</a>	8.5	19	14.5	0.002
	6	<a href="#">3104 04 06</a>	10.5	22.5	17.5	0.007
6	4	<a href="#">3104 06 04</a>	10.5	22.5	17.5	0.005
	6	<a href="#">3104 06 00</a>	10.5	22.5	17.5	0.003
8	8	<a href="#">3104 06 08</a>	13.5	29.5	23	0.015
	4	<a href="#">3104 08 04</a>	13.5	29	22.5	0.114
	6	<a href="#">3104 08 06</a>	13.5	29.5	23	0.010
	8	<a href="#">3104 08 00</a>	13.5	29.5	23	0.006
10	10	<a href="#">3104 08 10</a>	16	34.5	26.5	0.021
	4	<a href="#">3104 10 04</a>	16	39	31	0.027
	8	<a href="#">3104 10 08</a>	16	34.5	26.5	0.014
	10	<a href="#">3104 10 00</a>	16	34.5	26.5	0.009
12	12	<a href="#">3104 10 12</a>	19	40.5	31	0.036
	4	<a href="#">3104 12 04</a>	19	39	31	0.034
	10	<a href="#">3104 12 10</a>	19	40.5	31	0.024
14	12	<a href="#">3104 12 00</a>	19	40.5	31	0.014
	8	<a href="#">3104 14 08</a>	22	46	35.5	0.054
16	14	<a href="#">3104 14 00</a>	22	46	35.5	0.023
	12	<a href="#">3104 16 12</a>	27	52.5	39	0.088
16	16	<a href="#">3104 16 00</a>	27	52	39	0.063

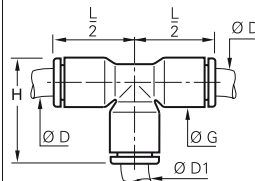
**3104**

Equal and Unequal Tee

Inch



Technical polymer, NBR



ØD	ØD1		G	H	L/2	kg
5/32	1/4	<a href="#">3104 04 56</a>	11	23.5	18	0.014
1/8	1/8	<a href="#">3104 53 00</a>	8.4	19	14.5	0.003
	1/4	<a href="#">3104 53 56</a>	11	23.5	18	0.011
3/16	3/16	<a href="#">3104 55 00</a>	10.9	27.2	21.6	0.015
1/4	5/32	<a href="#">3104 56 04</a>	11	23.5	18.5	0.014
	1/4	<a href="#">3104 56 00</a>	11	23	24	0.003
	1/8	<a href="#">3104 56 53</a>	11	23.5	18.5	0.007
	3/8	<a href="#">3104 56 60</a>	16	33.5	24.5	0.017
3/8	1/4	<a href="#">3104 60 56</a>	16	32.5	25.5	0.019
	1/2	<a href="#">3104 60 62</a>	22	46	35	0.070
	3/8	<a href="#">3104 60 00</a>	16	34	26	0.009
1/2	1/2	<a href="#">3104 62 00</a>	22	46	35	0.026
	1/4	<a href="#">3104 62 56</a>	22.1	45.2	35.3	0.021
	3/8	<a href="#">3104 62 60</a>	22	46	35	0.060

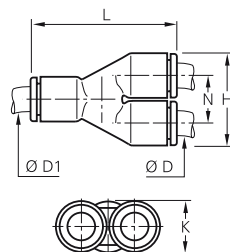
5/32" (4 mm) and 5/16" (8 mm) also available

**3140**

Equal and Unequal Single Y Piece



Technical polymer, NBR



ØD	ØD1		H	K	L	N	kg
4	4	<a href="#">3140 04 00</a>	17.5	8.5	28.5	9	0.002
	6	<a href="#">3140 04 06</a>	17.5	10.5	33	9	0.003
6	6	<a href="#">3140 06 00</a>	21.5	10.5	35	11	0.003
	8	<a href="#">3140 06 08</a>	22.5	13.5	41	11.5	0.005
8	8	<a href="#">3140 08 00</a>	28	13.5	45	14.5	0.007
	10	<a href="#">3140 08 10</a>	28	16	47	14.5	0.011
10	10	<a href="#">3140 10 00</a>	33	16	53	17	0.010
	12	<a href="#">3140 10 12</a>	33	19	57	17	0.018
12	12	<a href="#">3140 12 00</a>	39	19	57	17	0.028

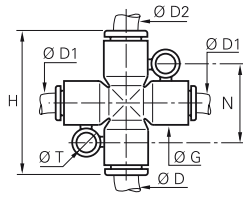
# Tube-to-Tube Fittings


## 3107

### Equal and Unequal Cross



Technical polymer, NBR



ØD	ØD1	ØD2		G	H	N	ØT	kg
4	4	4	3107 04 00	11	36	20	4.2	0.013
6	4	6	3107 04 06	11	36	20	4.2	0.010
4	4	6	3107 06 04	11	36	20	4.2	0.011
6	6	6	3107 06 00	11	36	20	4.2	0.005
8	6	8	3107 06 08	11	46	22.5	4.2	0.018
6	6	8	3107 08 06	13.5	46	22.5	4.2	0.023
8	8	8	3107 08 00	13.5	46	22.5	4.2	0.020

Boxes protect the contents and are designed to meet your requirements:


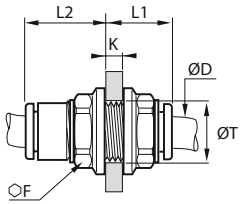

- part numbers and corresponding product pictures allow for immediate visual identification
- bar codes
- easy storage
- tamper-proof system of opening/closing
- recyclable material




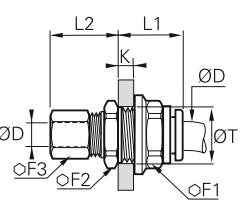



# Bulkhead Connector Fittings

## 3116 Equal Bulkhead Connector


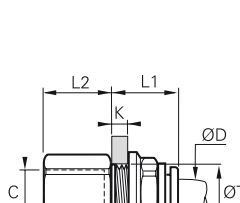

	Technical polymer, NBR 	<b>ØD</b>		<b>F</b>	<b>K<sub>max</sub></b>	<b>L1</b>	<b>L2</b>	<b>ØT<sub>min</sub></b>	<b>kg</b>
		4	<a href="#">3116 04 00</a>	13	5.5	15	10	10.5	0.003
		6	<a href="#">3116 06 00</a>	15	8.5	18	10.5	12.5	0.004
		8	<a href="#">3116 08 00</a>	18	14.5	25	13.5	15.5	0.007
		10	<a href="#">3116 10 00</a>	22	14.5	27.5	15.5	18.5	0.015
		12	<a href="#">3116 12 00</a>	26	18.5	33	18	22.5	0.019
		14	<a href="#">3116 14 00</a>	29	20.5	37.5	20.5	25.5	0.028

## 3146 Equal Mixed Bulkhead Connector


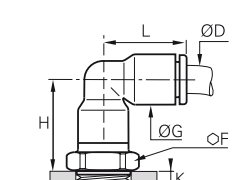

	Nickel-plated brass, NBR 	<b>ØD</b>		<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>K<sub>max</sub></b>	<b>L1</b>	<b>L2</b>	<b>ØT<sub>min</sub></b>	<b>kg</b>
		4	<a href="#">3146 04 00</a>	13	13	10	7	17.5	17.5	10.5	0.018
		6	<a href="#">3146 06 00</a>	15	17	13	8	19	18	12.5	0.029
		8	<a href="#">3146 08 00</a>	18	19	14	8	20.5	20.5	15.5	0.036
		10	<a href="#">3146 10 00</a>	22	22	19	8.5	23	24.5	18.5	0.065
		12	<a href="#">3146 12 00</a>	26	25	22	8.5	27	25	22.5	0.096
		14	<a href="#">3146 14 00</a>	29	29	24	10.5	27	27	25.5	0.125

Push-in connection with compression fitting

## 3136 Bulkhead Connector, Female BSPP Thread

	Nickel-plated brass, NBR 	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F1</b>	<b>F2</b>	<b>K<sub>max</sub></b>	<b>L1</b>	<b>L2</b>	<b>ØT<sub>min</sub></b>	<b>kg</b>
		4	G1/8	<a href="#">3136 04 10</a>	9.5	13	13	7	17	11.5	10.5	0.015
			G1/4	<a href="#">3136 04 13</a>	13.5	13	16	7	17	15.5	10.5	0.021
		6	G1/8	<a href="#">3136 06 10</a>	9.5	15	15	8	19	10.5	12.5	0.020
			G1/4	<a href="#">3136 06 13</a>	13.5	15	17	7	19	15.5	12.5	0.027
		8	G1/8	<a href="#">3136 08 10</a>	9.5	18	17	8	20.5	10.5	15.5	0.029
			G1/4	<a href="#">3136 08 13</a>	13.5	18	17	8	20.5	14.5	15.5	0.029
		10	G3/8	<a href="#">3136 10 17</a>	14	22	22	8.5	23	16	18.5	0.051
			G3/8	<a href="#">3136 12 17</a>	14	26	24	8.5	27	16	22.5	0.078
		12	G1/2	<a href="#">3136 12 21</a>	19.5	26	27	8.5	27	21.5	22.5	0.097
			G3/8	<a href="#">3136 16 17</a>	12	29	29	10.5	30	15	27.5	0.125
		16	G1/2	<a href="#">3136 16 21</a>	15	29	29	10.5	30	19.5	27.5	0.126


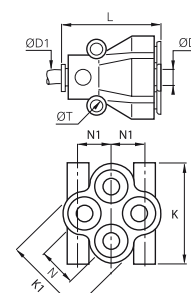

## 3139 Equal Bulkhead Elbow

	Technical polymer, nickel-plated brass, NBR 	<b>ØD</b>		<b>F</b>	<b>G</b>	<b>H</b>	<b>K<sub>max</sub></b>	<b>L</b>	<b>ØT<sub>min</sub></b>	<b>kg</b>
		4	<a href="#">3139 04 00</a>	13	8.5	17	6.5	14.5	10.5	0.014
		6	<a href="#">3139 06 00</a>	15	10.5	19.5	7	17.5	12.5	0.021
		8	<a href="#">3139 08 00</a>	18	13.5	24	8	23	15.5	0.032
		10	<a href="#">3139 10 00</a>	22	16	28	8.5	26	18.5	0.050
		12	<a href="#">3139 12 00</a>	26	19	33	8.5	31	22.5	0.086
		14	<a href="#">3139 14 00</a>	29	25.5	37.5	10.5	36	25.5	0.116


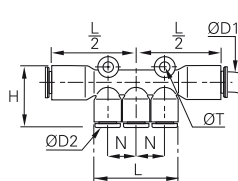

The body swivels for positioning purposes.

# Multiple Fittings


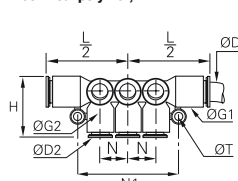

## 3144 Equal and Unequal Multiple Y Piece

	<p>Technical polymer, NBR</p> 	<p>ØD ØD1 </p>	<p>K K1 L N N1 ØT kg</p>																																			
		<table border="1"> <tr> <td rowspan="2">4</td> <td>4</td> <td><a href="#">3144 04 04</a></td> <td>25.5</td> <td>21</td> <td>30.5</td> <td>10</td> <td>8.5</td> <td>3.7</td> <td>0.015</td> </tr> <tr> <td>6</td> <td><a href="#">3144 04 06</a></td> <td>26</td> <td>21</td> <td>30.5</td> <td>10</td> <td>10</td> <td>3.7</td> <td>0.013</td> </tr> <tr> <td rowspan="2">6</td> <td>6</td> <td><a href="#">3144 06 06</a></td> <td>31.5</td> <td>26.5</td> <td>37.5</td> <td>12</td> <td>8.5</td> <td>3.7</td> <td>0.034</td> </tr> <tr> <td>8</td> <td><a href="#">3144 06 08</a></td> <td>31.5</td> <td>26.5</td> <td>38</td> <td>12</td> <td>10</td> <td>3.7</td> <td>0.026</td> </tr> </table>	4	4	<a href="#">3144 04 04</a>	25.5	21	30.5	10	8.5	3.7	0.015	6	<a href="#">3144 04 06</a>	26	21	30.5	10	10	3.7	0.013	6	6	<a href="#">3144 06 06</a>	31.5	26.5	37.5	12	8.5	3.7	0.034	8	<a href="#">3144 06 08</a>	31.5	26.5	38	12	10
4	4	<a href="#">3144 04 04</a>		25.5	21	30.5	10	8.5	3.7	0.015																												
	6	<a href="#">3144 04 06</a>	26	21	30.5	10	10	3.7	0.013																													
6	6	<a href="#">3144 06 06</a>	31.5	26.5	37.5	12	8.5	3.7	0.034																													
	8	<a href="#">3144 06 08</a>	31.5	26.5	38	12	10	3.7	0.026																													


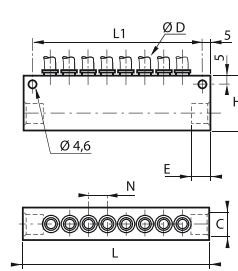

## 3304 Multiple Tee

	<p>Technical polymer, NBR</p> 	<p>ØD1 ØD2 </p>	<p>H L L/2 N ØT kg</p>																																								
		<table border="1"> <tr> <td rowspan="2">6</td> <td>4</td> <td><a href="#">3304 06 04</a></td> <td>24.5</td> <td>34</td> <td>37</td> <td>11.5</td> <td>4.2</td> <td>0.015</td> </tr> <tr> <td>8</td> <td><a href="#">3304 08 04</a></td> <td>24.5</td> <td>34</td> <td>37</td> <td>11.5</td> <td>4.2</td> <td>0.012</td> </tr> <tr> <td rowspan="2">8</td> <td>6</td> <td><a href="#">3304 08 06</a></td> <td>24.5</td> <td>34</td> <td>37</td> <td>11.5</td> <td>4.2</td> <td>0.010</td> </tr> <tr> <td>10</td> <td><a href="#">3304 10 06</a></td> <td>36</td> <td>44</td> <td>40.5</td> <td>14.5</td> <td>4.2</td> <td>0.019</td> </tr> <tr> <td>10</td> <td>8</td> <td><a href="#">3304 10 08</a></td> <td>36</td> <td>44</td> <td>40.5</td> <td>15.5</td> <td>4.2</td> <td>0.015</td> </tr> </table>	6	4	<a href="#">3304 06 04</a>	24.5	34	37	11.5	4.2	0.015	8	<a href="#">3304 08 04</a>	24.5	34	37	11.5	4.2	0.012	8	6	<a href="#">3304 08 06</a>	24.5	34	37	11.5	4.2	0.010	10	<a href="#">3304 10 06</a>	36	44	40.5	14.5	4.2	0.019	10	8	<a href="#">3304 10 08</a>	36	44	40.5	15.5
6	4	<a href="#">3304 06 04</a>		24.5	34	37	11.5	4.2	0.015																																		
	8	<a href="#">3304 08 04</a>	24.5	34	37	11.5	4.2	0.012																																			
8	6	<a href="#">3304 08 06</a>	24.5	34	37	11.5	4.2	0.010																																			
	10	<a href="#">3304 10 06</a>	36	44	40.5	14.5	4.2	0.019																																			
10	8	<a href="#">3304 10 08</a>	36	44	40.5	15.5	4.2	0.015																																			

## 3306 90° Multiple Elbow


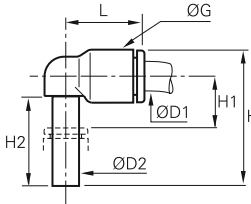

	<p>Technical polymer, NBR</p> 	<p>ØD1 ØD2 </p>	<p>G G1 H L/2 N N1 ØT kg</p>																																																		
		<table border="1"> <tr> <td rowspan="2">6</td> <td>4</td> <td><a href="#">3306 06 04</a></td> <td>13.5</td> <td>11</td> <td>18.5</td> <td>36</td> <td>43</td> <td>11.5</td> <td>4.2</td> <td>0.034</td> </tr> <tr> <td>8</td> <td><a href="#">3306 08 04</a></td> <td>13.5</td> <td>11</td> <td>18.5</td> <td>36.5</td> <td>43</td> <td>11.5</td> <td>4.2</td> <td>0.025</td> </tr> <tr> <td rowspan="2">8</td> <td>6</td> <td><a href="#">3306 08 06</a></td> <td>13.5</td> <td>11</td> <td>18.5</td> <td>36.5</td> <td>43</td> <td>11.5</td> <td>4.2</td> <td>0.022</td> </tr> <tr> <td>10</td> <td><a href="#">3306 10 06</a></td> <td>16</td> <td>13.5</td> <td>23</td> <td>42</td> <td>52</td> <td>14.5</td> <td>4.2</td> <td>0.048</td> </tr> <tr> <td>10</td> <td>8</td> <td><a href="#">3306 10 08</a></td> <td>16</td> <td>13.5</td> <td>23.5</td> <td>42</td> <td>52</td> <td>14.5</td> <td>4.2</td> <td>0.036</td> </tr> </table>	6	4	<a href="#">3306 06 04</a>	13.5	11	18.5	36	43	11.5	4.2	0.034	8	<a href="#">3306 08 04</a>	13.5	11	18.5	36.5	43	11.5	4.2	0.025	8	6	<a href="#">3306 08 06</a>	13.5	11	18.5	36.5	43	11.5	4.2	0.022	10	<a href="#">3306 10 06</a>	16	13.5	23	42	52	14.5	4.2	0.048	10	8	<a href="#">3306 10 08</a>	16	13.5	23.5	42	52	14.5
6	4	<a href="#">3306 06 04</a>		13.5	11	18.5	36	43	11.5	4.2	0.034																																										
	8	<a href="#">3306 08 04</a>	13.5	11	18.5	36.5	43	11.5	4.2	0.025																																											
8	6	<a href="#">3306 08 06</a>	13.5	11	18.5	36.5	43	11.5	4.2	0.022																																											
	10	<a href="#">3306 10 06</a>	16	13.5	23	42	52	14.5	4.2	0.048																																											
10	8	<a href="#">3306 10 08</a>	16	13.5	23.5	42	52	14.5	4.2	0.036																																											

## 3310 In-Line Manifold

	<p>Treated aluminium, NBR</p> 	<p>ØD C </p>	<p>Number of Outlets E H L L1 N kg</p>																																															
		<table border="1"> <tr> <td>4</td> <td>G1/4</td> <td><a href="#">3310 04 13</a></td> <td>8</td> <td>10</td> <td>33</td> <td>114</td> <td>104</td> <td>11.5</td> <td>0.175</td> </tr> <tr> <td>6</td> <td>G1/4</td> <td><a href="#">3310 06 13</a></td> <td>8</td> <td>10</td> <td>33</td> <td>114</td> <td>104</td> <td>12.5</td> <td>0.170</td> </tr> <tr> <td>8</td> <td>G3/8</td> <td><a href="#">3310 08 17</a></td> <td>6</td> <td>12</td> <td>33</td> <td>114</td> <td>104</td> <td>15</td> <td>0.157</td> </tr> <tr> <td>10</td> <td>G1/2</td> <td><a href="#">3310 10 21</a></td> <td>6</td> <td>16</td> <td>48</td> <td>145.5</td> <td>135.5</td> <td>17</td> <td>0.348</td> </tr> <tr> <td>12</td> <td>G1/2</td> <td><a href="#">3310 12 21</a></td> <td>6</td> <td>16</td> <td>45</td> <td>158</td> <td>148</td> <td>20.5</td> <td>0.370</td> </tr> </table>	4	G1/4	<a href="#">3310 04 13</a>	8	10	33	114	104	11.5	0.175	6	G1/4	<a href="#">3310 06 13</a>	8	10	33	114	104	12.5	0.170	8	G3/8	<a href="#">3310 08 17</a>	6	12	33	114	104	15	0.157	10	G1/2	<a href="#">3310 10 21</a>	6	16	48	145.5	135.5	17	0.348	12	G1/2	<a href="#">3310 12 21</a>	6	16	45	158	148
4	G1/4	<a href="#">3310 04 13</a>	8	10	33	114	104	11.5	0.175																																									
6	G1/4	<a href="#">3310 06 13</a>	8	10	33	114	104	12.5	0.170																																									
8	G3/8	<a href="#">3310 08 17</a>	6	12	33	114	104	15	0.157																																									
10	G1/2	<a href="#">3310 10 21</a>	6	16	48	145.5	135.5	17	0.348																																									
12	G1/2	<a href="#">3310 12 21</a>	6	16	45	158	148	20.5	0.370																																									


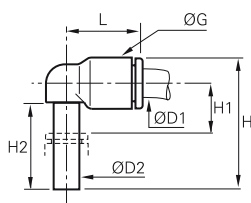

# Plug-In Fittings and Accessories

## 3182 Equal and Unequal Plug-In Elbow

	Technical polymer, NBR			<b>ØD1</b>	<b>ØD2</b>		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L</b>	<b>kg</b>
	4	4		<a href="#">3182 04 00</a>	8.5	23	6	15.5	14	0.001		
	4	6	<a href="#">3182 04 06</a>	10.5	26.5	7	17	16	0.003			
	6	4	<a href="#">3182 06 04</a>	10.5	24.5	7	15.5	16	0.001			
	6	6	<a href="#">3182 06 00</a>	10.5	26.5	7	17	16	0.001			
	6	8	<a href="#">3182 06 08</a>	13.5	33.5	8	21.5	23	0.007			
	8	8	<a href="#">3182 08 00</a>	13.5	33.5	8	21.5	23	0.003			
	8	10	<a href="#">3182 08 10</a>	16	39	10	24.5	26.5	0.010			
	10	10	<a href="#">3182 10 00</a>	16	39	10	24.5	26.5	0.004			
	10	12	<a href="#">3182 10 12</a>	19	44.5	10.5	27.5	31	0.017			
	12	12	<a href="#">3182 12 00</a>	19	45.5	10.5	27.5	31	0.007			


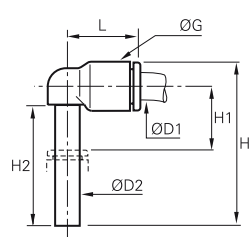

## 3182 Equal Plug-In Elbow

Inch


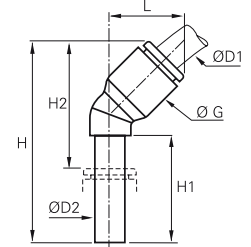

	Technical polymer, NBR			<b>ØD1</b>	<b>ØD2</b>		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L</b>	<b>kg</b>
	1/4	1/4		<a href="#">3182 56 00</a>	11	27.5	7.5	18	18.5	0.002		
	3/8	3/8	<a href="#">3182 60 00</a>	16	38.5	9	24	26	0.010			
	1/2	1/2	<a href="#">3182 62 00</a>	22	51	13	28	35	0.030			

5/32" (4 mm) and 5/16" (8 mm) also available

## 3184 Extended Equal and Unequal Plug-In Elbow


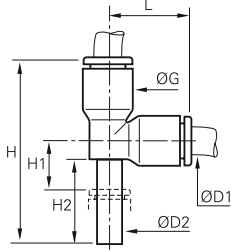

	Technical polymer, NBR			<b>ØD1</b>	<b>ØD2</b>		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L</b>	<b>kg</b>
	4	4		<a href="#">3184 04 00</a>	8.5	32.5	15.5	25	14	0.004		
	4	6	<a href="#">3184 04 06</a>	10.5	38.5	19	29	16	0.004			
	6	6	<a href="#">3184 06 00</a>	10.5	38.5	19	29	16	0.002			
	6	8	<a href="#">3184 06 08</a>	13.5	49	23.5	37	23	0.010			
	8	8	<a href="#">3184 08 00</a>	13.5	49	23.5	37	23	0.003			
	8	10	<a href="#">3184 08 10</a>	16	56	26.5	41.5	26.5	0.013			
	10	10	<a href="#">3184 10 00</a>	16	56	26.5	41.5	26.5	0.010			
	10	12	<a href="#">3184 10 12</a>	19	62.5	28	45.5	31	0.020			
	12	12	<a href="#">3184 12 00</a>	19	62.5	28	45.5	31	0.014			

## 3180 45° Plug-In Equal Elbow


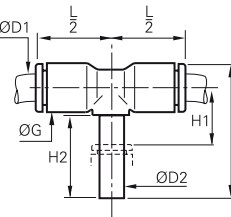

	Technical polymer, NBR			<b>ØD1</b>	<b>ØD2</b>		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L</b>	<b>kg</b>
	4	4		<a href="#">3180 04 00</a>	9	33.5	19	21	13	0.001		
	6	6	<a href="#">3180 06 00</a>	11	39	21	25	14.5	0.003			
	8	8	<a href="#">3180 08 00</a>	13.5	44	21.5	25.5	19.5	0.005			
	10	10	<a href="#">3180 10 00</a>	16	53	27	32.5	23	0.004			
	12	12	<a href="#">3180 12 00</a>	19	58.5	27.5	34	26.5	0.007			

# Plug-In Fittings and Accessories


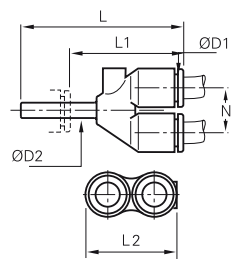

## 3183 Equal and Unequal Plug-In Run Tee

	<p>Technical polymer, NBR</p> 	$\text{ØD1}$	$\text{ØD2}$		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L</b>	<b>kg</b>
		4	4	<a href="#">3183 04 00</a>	8.5	33	6	15.5	14.5	0.002
		4	6	<a href="#">3183 04 06</a>	10.5	38.5	7	17	17.5	0.006
		6	6	<a href="#">3183 06 00</a>	10.5	38.5	7	17	17	0.002
		6	8	<a href="#">3183 06 08</a>	13.5	48.5	8	21.5	23	0.014
		8	8	<a href="#">3183 08 00</a>	13.5	49	8	21.5	23	0.004
		8	10	<a href="#">3183 08 10</a>	16	56.5	10.5	24.5	26.5	0.018
		10	10	<a href="#">3183 10 00</a>	16	57	10.5	24.5	26.5	0.007
		10	12	<a href="#">3183 10 12</a>	19	65.5	10.5	27.5	31	0.034
		12	12	<a href="#">3183 12 00</a>	19	65.5	10.5	27.5	31	0.011


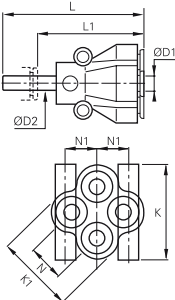

## 3188 Equal and Unequal Plug-In Branch Tee

	<p>Technical polymer, NBR</p> 	$\text{ØD1}$	$\text{ØD2}$		<b>G</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>L/2</b>	<b>kg</b>
		4	4	<a href="#">3188 04 00</a>	8.5	25	8	15.5	14.5	0.002
		4	6	<a href="#">3188 04 06</a>	10.5	28.5	9	17	16	0.007
		6	6	<a href="#">3188 06 00</a>	10.5	28.5	9	17	16	0.002
		6	8	<a href="#">3188 06 08</a>	13.5	36.5	11	21.5	22	0.014
		8	8	<a href="#">3188 08 00</a>	13.5	36.5	11	21.5	23	0.005
		8	10	<a href="#">3188 08 10</a>	16	41	12.5	24.5	26.5	0.018
		10	10	<a href="#">3188 10 00</a>	16	41	12.5	24.5	26.5	0.007
		10	12	<a href="#">3188 10 12</a>	19	46.5	12.5	27.5	31	0.034
		12	12	<a href="#">3188 12 00</a>	19	46.5	12.5	27.5	31	0.020

## 3142 Equal and Unequal Plug-In Single Y Piece

	<p>Technical polymer, NBR</p> 	$\text{ØD1}$	$\text{ØD2}$		<b>L</b>	<b>L1</b>	<b>L2</b>	<b>N</b>	<b>kg</b>
		4	4	<a href="#">3142 04 00</a>	34	21.5	17.5	9	0.002
		4	6	<a href="#">3142 04 06</a>	35.5	21.5	17.5	9	0.004
		6	6	<a href="#">3142 06 00</a>	39.5	25.5	21.5	11	0.004
		6	8	<a href="#">3142 06 08</a>	44	25.5	21.5	11	0.015
		8	8	<a href="#">3142 08 00</a>	50.5	32	28	14.5	0.007
		8	10	<a href="#">3142 08 10</a>	53.5	32	28	14.5	0.024
		10	10	<a href="#">3142 10 00</a>	57.5	36	33	17	0.010
		10	12	<a href="#">3142 10 12</a>	60	35	33	17	0.037
		12	12	<a href="#">3142 12 00</a>	66	41	39	20	0.017

## 3143 Multiple Plug-In Y Piece

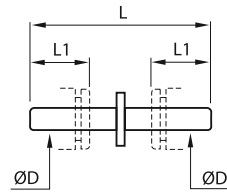
	<p>Technical polymer, nickel-plated brass, NBR</p> 	$\text{ØD1}$	$\text{ØD2}$		<b>K</b>	<b>K1</b>	<b>L</b>	<b>L1</b>	<b>N</b>	<b>N1</b>	<b>kg</b>
		4	6	<a href="#">3143 04 06</a>	26	21.5	49.5	35.5	11	8.5	0.012
		4	8	<a href="#">3143 04 08</a>	26	21.5	51	32	11	8.5	0.021
		6	8	<a href="#">3143 06 08</a>	31.5	26.5	57.5	39	12	10	0.035

# Plug-In Fittings and Accessories

## 3120 Stem Connector



Technical polymer



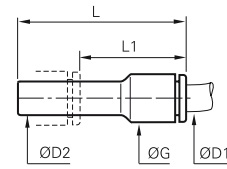
ØD		L	L1	kg
4	<a href="#">3120 04 00</a>	34.5	12	0.001
6	<a href="#">3120 06 00</a>	38.5	14	0.001
8	<a href="#">3120 08 00</a>	41	18.5	0.001
10	<a href="#">3120 10 00</a>	51.5	20.5	0.002
12	<a href="#">3120 12 00</a>	60	24.5	0.004
14	<a href="#">3120 14 00</a>	69.5	25.5	0.007

This model is available in nickel-plated brass; please use suffix 85. Example: 3120 04 00 85.  
Only compatible with Parker Legris fittings.  
Drawing available upon request.

## 3166 Plug-In Reducer



Technical polymer, NBR



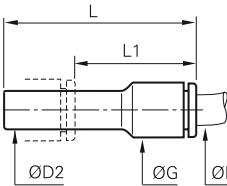
ØD1	ØD2		G	L	L1	kg
3	4	<a href="#">3166 03 04</a>	8.5	37.5	23.5	0.002
	6	<a href="#">3166 04 06</a>	8.5	37.5	23.5	0.001
4	8	<a href="#">3166 04 08</a>	8.5	37.5	19	0.001
	10	<a href="#">3166 04 10</a>	12	44	22.5	0.003
6	8	<a href="#">3166 06 08</a>	10.5	37.5	20	0.001
	10	<a href="#">3166 06 10</a>	10.5	38	17.5	0.002
	12	<a href="#">3166 06 12</a>	14.5	46	23	0.005
8	14	<a href="#">3166 06 14</a>	14.5	48	23	0.006
	10	<a href="#">3166 08 10</a>	13.5	49	28.5	0.003
	12	<a href="#">3166 08 12</a>	13.5	49	24.5	0.004
10	14	<a href="#">3166 08 14</a>	17	48	23	0.007
	12	<a href="#">3166 10 12</a>	21.5	56.5	33.5	0.006
12	14	<a href="#">3166 10 14</a>	21.5	58.5	33.5	0.007
	14	<a href="#">3166 12 14</a>	23.5	58.5	33.5	0.010

## 3166 Plug-In Reducer

Inch



Technical polymer, NBR

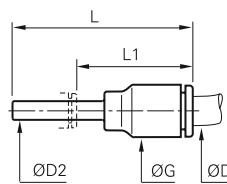


ØD1	ØD2		G	L	L1	kg
1/4	5/16	<a href="#">3166 56 08</a>	11	41	23	0.002
	3/8	<a href="#">3166 56 60</a>	11	41	21	0.002

## 3168 Plug-In Increaser



Technical polymer, NBR



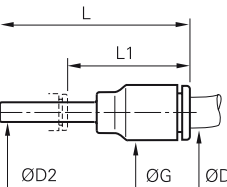
ØD1	ØD2		G	L	L1	kg
6	4	<a href="#">3168 06 04</a>	10.5	35	23	0.001
	6	<a href="#">3168 08 06</a>	13.5	45	31.5	0.003
8	1/4	<a href="#">3168 08 56</a>	16	40	25.5	0.008
	8	<a href="#">3168 10 08</a>	16	42.5	21	0.009
12	10	<a href="#">3168 12 10</a>	19	49	24.5	0.012

## 3168 Plug-In Increaser

Inch




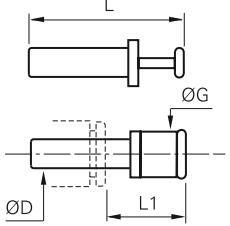

Technical polymer, NBR



ØD1	ØD2		G	L	L1	kg
1/4	5/32	<a href="#">3168 56 04</a>	11	41	29	0.001
	3/16	<a href="#">3168 56 55</a>	20.5	41	25	0.003

# Plug-In Fittings and Accessories


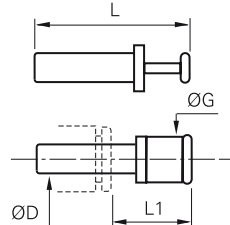

## 3126 Blanking Plug

	<p>Technical polymer</p> 	<b>ØD</b>		<b>G</b>	<b>L</b>	<b>L1</b>	<b>kg</b>
		3	<a href="#">3126 03 00</a>	6	25	13.5	0.001
		4	<a href="#">3126 04 00</a>	4	30	15.5	0.001
		6	<a href="#">3126 06 00</a>	8	33	16.5	0.001
		8	<a href="#">3126 08 00</a>	10	35	17.5	0.001
		10	<a href="#">3126 10 00</a>	12	42	21	0.002
		12	<a href="#">3126 12 00</a>	14	45	22	0.003
		14	<a href="#">3126 14 00</a>	16	49	23.5	0.005
		16	<a href="#">3126 16 00*</a>	19	57	30	0.063

\*Nickel-plated brass


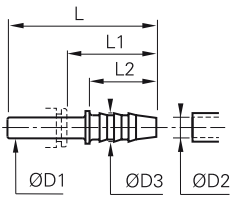

## 3126 Blanking Plug

Inch


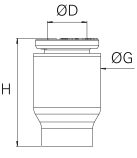

	<p>Technical polymer</p> 	<b>ØD</b>		<b>G</b>	<b>L</b>	<b>L1</b>	<b>kg</b>
		1/4	<a href="#">3126 56 00</a>	8	36.5	22	0.001
		3/8	<a href="#">3126 60 00</a>	12	42	22	0.002
		1/2	<a href="#">3126 62 00</a>	15	48.5	21.5	0.003

5/32" (4 mm) and 5/16" (8 mm) also available

## 3122 Plug-In Barb Connector

	<p>Technical polymer</p> 	<b>ØD1</b>	<b>ØD2</b>		<b>ØD3</b>	<b>L</b>	<b>L1</b>	<b>L2</b>	<b>kg</b>
		4	3.2	<a href="#">3122 04 53</a>	5	37	25	17	0.004
			5	<a href="#">3122 04 05</a>	7	37	25	17	0.005
		6	5	<a href="#">3122 06 05</a>	7	39	25	17	0.001
		8	6.3	<a href="#">3122 08 56</a>	8.5	39.5	21	17	0.001
			8	<a href="#">3122 08 08</a>	10	44.5	26	22	0.001
		10	6.3	<a href="#">3122 10 56</a>	8	45	24.5	17	0.002
			8	<a href="#">3122 10 08</a>	10	50	29.5	22	0.002
			8	<a href="#">3122 12 08</a>	10	50	26	22	0.002
		12	10	<a href="#">3122 12 10</a>	12	48.5	25.5	22.5	0.002
			12.5	<a href="#">3122 12 62</a>	14.5	57	34	22.5	0.004
		14	12.5	<a href="#">3122 14 62</a>	14.5	59.5	34.5	22.5	0.022

## 3151 End Cap

	<p>Technical polymer, NBR</p> 	<b>ØD</b>		<b>G</b>	<b>H</b>	<b>kg</b>
		4	<a href="#">3151 04 00</a>	8.5	14.7	0.001
		6	<a href="#">3151 06 00</a>	10.5	16.9	0.001
		8	<a href="#">3151 08 00</a>	13.5	21.9	0.002
		10	<a href="#">3151 10 00</a>	16	22.2	0.003
		12	<a href="#">3151 12 00</a>	19	27.7	0.006
		14	<a href="#">3151 14 00</a>	22	28	0.014

Other products are available upon request; please do not hesitate to consult us.

# Banjo Fittings

This range of fittings is ideal when access is only possible from above and **orientation of the tube** is required. This range of modular fittings includes single and multiple configurations, allowing **wide flexibility of design**.

## Product Advantages

**Compact**

- Compact design with minimum space between fittings
- Banjo bolt designed for maximum flow
- Easy access, even when fittings are close together
- Easy assembly and automatic sealing:
  - with pre-coating on taper threads
  - with an integral O-ring seal on parallel threads
- Safe operation: orientation of tube is ensured
- 100% leak-tested in production
- Date coding to guarantee quality and traceability

**Modular**

- Effortless stacking of banjo bodies to allow construction of 2 to 6 outlets
- Orientable (360°) for perfect alignment
- Modular: tube diameters may be different



**Applications**

- Robotics
- Automotive Process
- Pneumatics
- Semi-Conductors
- Textile
- Packaging

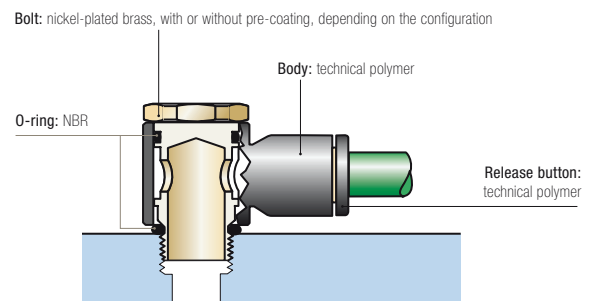
## Technical Characteristics

<b>Compatible Fluids</b>	Compressed air Other fluids: please consult us
<b>Working Pressure</b>	Vacuum to 20 bar
<b>Working Temperature</b>	-20°C to +80°C

Tightening Torque (daN.m)	Threads					
	M3 x0.5	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	0.05	0.1	0.4	0.5	0.6	0.7

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.  
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

### Component Materials



### Silicone-free

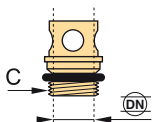
### Regulations

ISO 14743: Pneumatic fluid power, push-in connectors for thermoplastic tubes  
DI: 97/23/EC (PED)

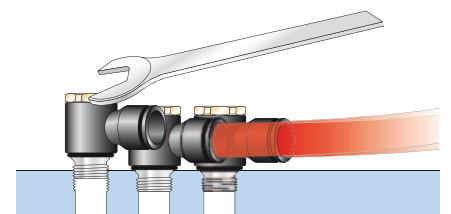
DI: 2002/95/EC (RoHS)  
2011/65/EC  
DI: 1907/2006 (REACH)

## Installation Configurations

Thread and bore diameters for part numbers 3524 - 3527 - 3528 - 3529:


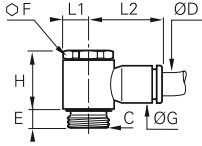



Thread (C)	M5x0.8	G1/8	G1/4	G3/8	G1/2
DN	2.5	5.5	8.5	11	13




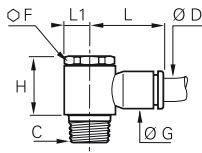

# Banjo Fittings

## 3118 Single Banjo, Male BSPP and Metric Thread

	 <p>Technical polymer, nickel-plated brass, NBR</p>	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L1</b>	<b>L2</b>	<b>kg</b>
		3	M3x0.5	<a href="#">3118 03 09*</a>	3	-	8.5	13	5	16	0.005
			M5x0.8	<a href="#">3118 03 19*</a>	4	-	8.5	13	5	16	0.005
			M5x0.8	<a href="#">3118 04 19*</a>	4	-	8.5	13	5	16.5	0.004
			G1/8	<a href="#">3118 04 10</a>	4	13	8.5	17	7	18.5	0.012
			M5x0.8	<a href="#">3118 06 19*</a>	4	-	10.5	13	7	18.5	0.004
			G1/8	<a href="#">3118 06 10</a>	4	13	10.5	17	7	20	0.013
			G1/4	<a href="#">3118 06 13</a>	5.5	17	10.5	21	9.5	22	0.023
			G1/8	<a href="#">3118 08 10</a>	4	13	13.5	16.5	7	25	0.013
			G1/4	<a href="#">3118 08 13</a>	5.5	17	13.5	21	9	27	0.024
			G3/8	<a href="#">3118 08 17</a>	5.5	20	13.5	24.5	11	29	0.038
			G1/4	<a href="#">3118 10 13</a>	5.5	17	16	21	9.5	29	0.025
			G3/8	<a href="#">3118 10 17</a>	5.5	20	16	24.5	11	31	0.039
			G1/2	<a href="#">3118 10 21</a>	8	25	19	27.5	13.5	36.5	0.083
			G3/8	<a href="#">3118 12 17</a>	5.5	20	19	24.5	11	34.5	0.044
			G1/2	<a href="#">3118 12 21</a>	8	25	19	27.5	13.5	36.5	0.074


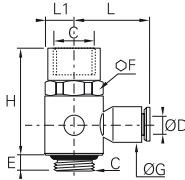

\*With screwdriver slot

## 3018 Single Banjo, Male BSPT Thread

	 <p>Technical polymer, nickel-plated brass, NBR</p>	<b>ØD</b>	<b>C</b>		<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>L1</b>	<b>kg</b>
		4	R1/8	<a href="#">3018 04 10</a>	13	8.5	18.5	18.5	7	0.015
			R1/8	<a href="#">3018 06 10</a>	13	10.5	18.5	20	7	0.015
			R1/4	<a href="#">3018 06 13</a>	17	10.5	22.5	22	9.5	0.029
			R1/8	<a href="#">3018 08 10</a>	13	13.5	18.5	25	7	0.016
			R1/4	<a href="#">3018 08 13</a>	17	13.5	22.5	27	9.5	0.030
			R3/8	<a href="#">3018 08 17</a>	21	13.5	26.5	29	11	0.047
			R1/4	<a href="#">3018 10 13</a>	17	16	22.5	29	9.5	0.032
			R3/8	<a href="#">3018 10 17</a>	21	16	26.5	31	11	0.048
			R1/4	<a href="#">3018 12 13</a>	21	19	26.5	34.5	11	0.052
			R3/8	<a href="#">3018 12 17</a>	21	19	26.5	34.5	11	0.050
			R1/2	<a href="#">3018 12 21</a>	25	19	30	37	13.5	0.086


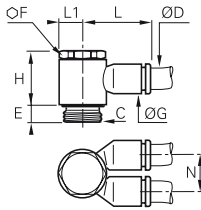

Pre-coated thread

## 3124 Single Banjo, Male/Female BSPP and Metric Thread

	 <p>Technical polymer, nickel-plated brass, NBR</p>	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>L1</b>	<b>kg</b>
		4	M5x0.8	<a href="#">3124 04 19</a>	4	8	8.5	19	16	5	0.006
			G1/8	<a href="#">3124 04 10</a>	4	13	8.5	25.5	18.5	7	0.015
			G1/4	<a href="#">3124 06 13</a>	5.5	17	10.5	33	22	9	0.030
			G3/8	<a href="#">3124 08 17</a>	5.5	20	13.5	37.5	29	11	0.056


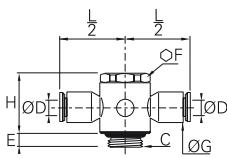

This product family was developed to allow assembly of a function fitting on a cylinder.

## 3149 Twin Banjo, Male BSPP and Metric Thread

	 <p>Technical polymer, nickel-plated brass, NBR</p>	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>L1</b>	<b>N</b>	<b>kg</b>
		4	M5x0.8	<a href="#">3149 04 19*</a>	4	-	8.5	13	16	4.5	9	0.005
			G1/8	<a href="#">3149 04 10</a>	4	13	10.5	16.5	18.5	7	11.5	0.018
			G1/8	<a href="#">3149 06 10</a>	4	13	10.5	16.5	18.5	7	11.5	0.014
			G1/4	<a href="#">3149 06 13</a>	5.5	17	13.5	21	27	9.5	14.5	0.035
			G1/4	<a href="#">3149 08 13</a>	5.5	17	13.5	21	27	9.5	14.5	0.026
			G3/8	<a href="#">3149 08 17</a>	5.5	20	16	24.5	31	11	17	0.053
			G3/8	<a href="#">3149 10 17</a>	5.5	20	16	24.5	31	11	17	0.042

\*With screwdriver slot

## 3119 Double Banjo, BSPP and Metric Thread

	 <p>Technical polymer, nickel-plated brass, NBR</p>	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L/2</b>	<b>kg</b>
		4	M5x0.8	<a href="#">3119 04 19*</a>	4	-	8.5	13	8	0.005
			G1/8	<a href="#">3119 04 10</a>	4	13	11	17	20	0.021
			G1/8	<a href="#">3119 06 10</a>	4	13	11	17	20	0.024
			G1/4	<a href="#">3119 06 13</a>	5.5	17	13.5	21	26.5	0.031
			G1/4	<a href="#">3119 08 13</a>	5.5	17	13.5	21	27	0.033
			G3/8	<a href="#">3119 08 17</a>	5.5	20	16	24.5	30.5	0.053
			G3/8	<a href="#">3119 10 17</a>	5.5	20	16	24.5	31	0.045

\*With screwdriver slot



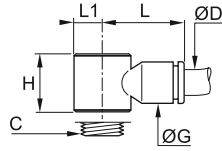
# Banjo Fittings

**3538**

## Single Banjo Bodies



Technical polymer, NBR



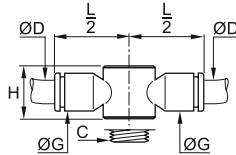
ØD	C		G	H	L	L1	kg
3	M5x0.8	<a href="#">3538 03 19</a>	8.5	13	16	5	0.003
	M5x0.8	<a href="#">3538 04 19</a>	8.5	13	16	5	0.001
4	G1/8	<a href="#">3538 04 10</a>	10.5	14.5	18.5	7	0.002
	M5x0.8	<a href="#">3538 06 19</a>	11	13	18.5	5	0.001
6	G1/8	<a href="#">3538 06 10</a>	10.5	14.5	20	7	0.002
	G1/4	<a href="#">3538 06 13</a>	13.5	18	22	9.5	0.003
8	G1/8	<a href="#">3538 08 10</a>	13.5	14.5	25	7	0.003
	G1/4	<a href="#">3538 08 13</a>	13.5	18	27	9.5	0.004
	G3/8	<a href="#">3538 08 17</a>	13.5	21.5	29	11.5	0.009
10	G1/4	<a href="#">3538 10 13</a>	16	18	29	9.5	0.005
	G3/8	<a href="#">3538 10 17</a>	16	21.5	31	11.5	0.006
	G1/2	<a href="#">3538 10 21</a>	19	22.5	36.5	13.5	0.019
12	G3/8	<a href="#">3538 12 17</a>	19	21.5	34.5	11.5	0.011
	G1/2	<a href="#">3538 12 21</a>	19	22.5	36.5	13.5	0.015

**3539**

## Double Banjo Bodies



Technical polymer, NBR



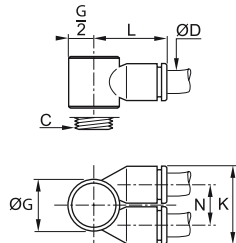
ØD	C		G	H	L/2	kg
4	M5x0.8	<a href="#">3539 04 19</a>	8.5	13	16	0.002
	G1/8	<a href="#">3539 04 10</a>	10.5	14.4	20	0.008
6	G1/8	<a href="#">3539 06 10</a>	10.5	14.4	20	0.011
	G1/4	<a href="#">3539 06 13</a>	13.5	18	26	0.014
8	G1/4	<a href="#">3539 08 13</a>	13.5	18	27	0.013
	G3/8	<a href="#">3539 08 17</a>	16	21.5	30.5	0.020
10	G3/8	<a href="#">3539 10 17</a>	16	21.5	31	0.016

**3549**

## Twin Banjo Bodies




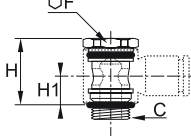

Technical polymer, NBR



ØD	C		G	K	L	N	kg
4	M5x0.8	<a href="#">3549 04 19</a>	10	17.5	15.5	9	0.003
	G1/8	<a href="#">3549 04 10</a>	14	22.5	20	12	0.007
	G1/4	<a href="#">3549 04 13</a>	18.5	28	25	14.5	0.019
6	G1/8	<a href="#">3549 06 10</a>	14	22.5	20.5	12	0.003
	G1/4	<a href="#">3549 06 13</a>	18.5	28	25	14.5	0.017
8	G3/8	<a href="#">3549 06 17</a>	22.5	33	28.5	17	0.013
	G1/4	<a href="#">3549 08 13</a>	18.5	28	26	14.5	0.010
10	G3/8	<a href="#">3549 08 17</a>	22.5	33	29.5	17	0.020
	G3/8	<a href="#">3549 10 17</a>	22.5	33	29.5	17	0.016


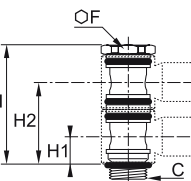

# Modular Banjo Fittings

## 3527 Single Banjo Bolts, Male BSPP and Metric Thread

	Nickel-plated brass, NBR 	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>kg</b>
		M5x0.8	<a href="#">3527 00 19*</a>	-	17	7.5	0.003
		G1/8	<a href="#">3527 00 10</a>	13	17	7.5	0.011
		G1/4	<a href="#">3527 00 13</a>	17	21	9.5	0.020
		G3/8	<a href="#">3527 00 17</a>	20	24.5	11	0.033
		G1/2	<a href="#">3527 00 21</a>	25	27.5	11.5	0.063


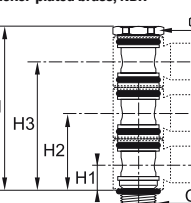

\*With screwdriver slot  
Full bore

## 3528 Stacking Banjo for 2 Body High Modules, Male BSPP and Metric Thread

	Nickel-plated brass, NBR 	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>kg</b>
		M5x0.8	<a href="#">3528 00 19*</a>	-	24.5	7.5	18.5	0.005
		G1/8	<a href="#">3528 00 10</a>	13	31	7.5	22	0.017
		G1/4	<a href="#">3528 00 13</a>	17	39	9.5	27.5	0.031
		G3/8	<a href="#">3528 00 17</a>	20	46	11	32.5	0.053


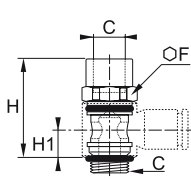

\*With screwdriver slot  
Full bore  
Designed for use with 2 banjo bodies

## 3529 Stacking Banjo for 3 Body High Modules, Male BSPP Thread

	Nickel-plated brass, NBR 	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>H3</b>	<b>kg</b>
		G1/8	<a href="#">3529 00 10</a>	13	45.5	7.5	22	36	0.023
		G1/4	<a href="#">3529 00 13</a>	17	54	9.5	27.5	45.5	0.042
		G3/8	<a href="#">3529 00 17</a>	20	67.5	11	32.5	54	0.069

Full bore  
Designed for use with 3 banjo bodies


## 3524 Threaded Banjo Bolts, Male/Female BSPP and Metric Thread

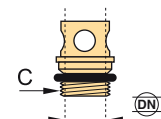
	Nickel-plated brass, NBR 	<b>C</b>		<b>F</b>	<b>H</b>	<b>H1</b>	<b>kg</b>
		M5x0.8	<a href="#">3524 00 19</a>	8	17	7.5	0.005
		G1/8	<a href="#">3524 00 10</a>	13	24.5	7.5	0.013
		G1/4	<a href="#">3524 00 13</a>	17	33	9.5	0.027
		G3/8	<a href="#">3524 00 17</a>	20	37.5	11	0.038
		G1/2	<a href="#">3524 00 21</a>	26	42	11.5	0.067

Full bore

Banjo bolts 3527, 3528, 3529 and 3524 are only usable in association with the corresponding bodies for modular construction 3538, 3539 and 3549.

Thread and passage size for part numbers 3527, 3528, 3529 and 3524.

Thread	M5x0.8	G1/8	G1/4	G3/8	G1/2
	2.5	5.5	8.5	11	13



# Modular Plug-In Connectors

These connectors allow a **maximum number of tube connections** in a **minimum of space**. Parker Legris offers an **ergonomic solution** to enable quick connection for the most complex installations.

## Product Advantages

**Panel-Mounted** | Panel mounted to a machine or bulkhead  
 Reduced risk of incorrect assembly  
 Possible to connect in-line  
 Plated metal joiners and clips for reinforcement

**In-Line** | Locating pin prevents incorrect assembly  
 Cap guides the tubes and protects connections  
 Aluminium and technical polymer components  
 Bulkhead mountable  
 Customised multi-connectors upon request

**DIN Rail** | Used alongside electrical connectors  
 Pressure indication  
 Can be clipped side-by-side into a DIN rail profile [ or  $\Omega$   
 Channels or slots for labels for tube identification



Robotics  
 Automotive Process  
 Pneumatics  
 Semi-Conductors  
 Textile  
 Packaging

Applications

## Technical Characteristics

<b>Compatible Fluids</b>	Compressed air Other fluids: please consult us
<b>Working Pressure</b>	Vacuum to 10 bar
<b>Working Temperature</b>	-20°C to +80°C

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used. Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

### Component Materials

- Multi-connectors:**
- panel-mounted: zinc-plated steel, technical polymer
  - in-line: aluminium, technical polymer
  - DIN rail: technical polymer

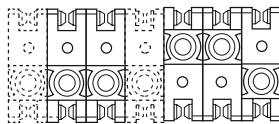
Connections: LF 3000®



**Silicone-free**

## Installation Configurations

### Panel-Mounted



Standard assembly      Customised assembly

A box contains:

- 10 units
- 20 joining clips and 4 end pins
- 4 mounting brackets
- 4 coupling clips
- 1 dismantling tool

The module is constructed from a number of symmetrical components connected by joining clips. A coupling clip locks the module closed. A dismantling tool allows disconnection.

Maximum 5 modules recommended for the mating module; the fixed module is not limited.

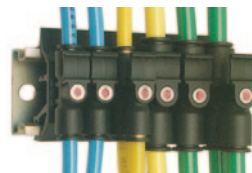
### In-Line



### Regulations


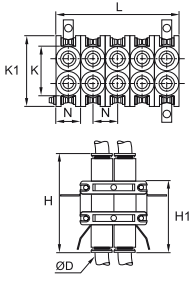

ISO 14743: Pneumatic fluid power, push-in connectors for thermoplastic tubes  
 DI: 97/23/EC (PED)  
 DI: 2002/95/EC (RoHS), 2011/65/EC  
 DI: 1907/2006 (REACH)

### DIN Rail Connector




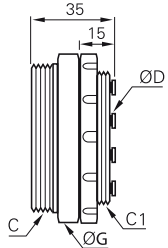

# Modular Plug-In Connectors

## 3300 Modular Plug-In Connector

	Technical polymer, NBR 	$\text{ØD}$		<b>B</b>	<b>H</b>	<b>H1</b>	<b>K</b>	<b>K1</b>	<b>L</b>	<b>L1</b>	<b>L2</b>	<b>N</b>	<b>kg</b>
		4	<a href="#">3300 04 00</a>	21	40.5	29.5	32	20	55	22	6	11	0.078
		6	<a href="#">3300 06 00</a>	28	48	38.5	39	27.5	70	28	7.5	14	0.213
		8	<a href="#">3300 08 00</a>	28	50	39	39	27.5	70	28	7.5	14	0.025


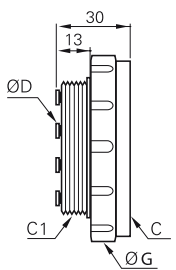

Clearance hole for Ø3 mm screw

## 3320 Multi-Connector Male Screw Body

	Technical polymer, NBR 	$\text{ØD}$	<b>C</b>	<b>C1</b>		<b>Number of Outlets</b>	<b>G</b>	<b>kg</b>
		4	M38x1.5	M32x1.5	<a href="#">3320 04 00 02</a>	2	42	0.046
			M46x1.5	M40x1.5	<a href="#">3320 04 00 04</a>	4	50	0.070
			M46x1.5	M40x1.5	<a href="#">3320 04 00 07</a>	7	50	0.072
			M65x1.5	M58x1.5	<a href="#">3320 04 00 12</a>	12	70	0.136
		6	M38x1.5	M32x1.5	<a href="#">3320 06 00 02</a>	2	42	0.050
			M46x1.5	M40x1.5	<a href="#">3320 06 00 04</a>	4	50	0.070
			M46x1.5	M40x1.5	<a href="#">3320 06 00 07</a>	7	50	0.070
			M38x1.5	M32x1.5	<a href="#">3320 08 00 02</a>	2	45	0.050


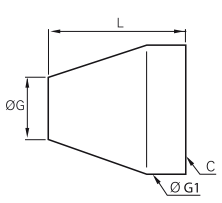

The number of male body outlets must correspond to the same number of outlets on the female body.

## 3321 Multi-Connector Female Screw Body

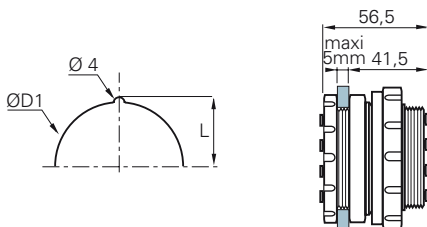
	Technical polymer, NBR 	$\text{ØD}$	<b>C</b>	<b>C1</b>		<b>Number of Outlets</b>	<b>G</b>	<b>kg</b>
		4	M38x1.5	M32x1.5	<a href="#">3321 04 00 02</a>	2	45	0.040
			M46x1.5	M40x1.5	<a href="#">3321 04 00 04</a>	4	55	0.065
			M46x1.5	M40x1.5	<a href="#">3321 04 00 07</a>	7	55	0.063
			M65x1.5	M58x1.5	<a href="#">3321 04 00 12</a>	12	75	0.124
		6	M38x1.5	M32x1.5	<a href="#">3321 06 00 02</a>	2	45	0.043
			M46x1.5	M40x1.5	<a href="#">3321 06 00 04</a>	4	55	0.066
			M46x1.5	M40x1.5	<a href="#">3321 06 00 07</a>	7	55	0.064
			M38x1.5	M32x1.5	<a href="#">3321 08 00 02</a>	2	45	0.039

The number of female body outlets must correspond to the same number of outlets on the male body.

## 3329 Multi-Connector Screw Cap

	Technical polymer 	<b>C</b>		<b>Number of Outlets</b>	<b>G</b>	<b>G1</b>	<b>L</b>	<b>kg</b>
		M32x1.5	<a href="#">3329 00 01</a>	2	32	42	50	0.043
		M40x1.5	<a href="#">3329 00 02</a>	4-7	35	50	55	0.058
		M58x1.5	<a href="#">3329 00 03</a>	12	34	70	70	0.139

### Overall Dimensions for Bulkhead Mounting



Number of Outlets	L	ØD1
2	17	32.5
4-7	21	40.5
12	30.3	58.5

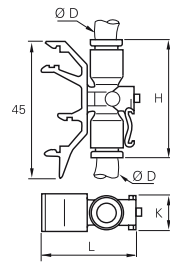
# Modular Plug-In Connectors

**3379**

## DIN Rail Connector for 2 Tubes



Technical polymer, NBR



ØD



H K L kg

4	<a href="#">3379 04 00</a>	34.5	11	39.5	0.016
6	<a href="#">3379 06 00</a>	34.5	11	39.5	0.026
8	<a href="#">3379 08 00</a>	46	13	44.5	0.034

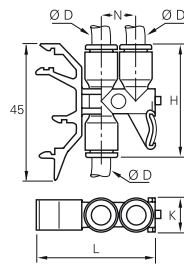
Start pressure test point on the system

**3381**

## DIN Rail Connector for 3 Tubes



Technical polymer, NBR



ØD



H K L N kg

4	<a href="#">3381 04 00</a>	36.5	11	39.5	11.5	0.012
6	<a href="#">3381 06 00</a>	36.5	11	39.5	11.5	0.008
8	<a href="#">3381 08 00</a>	46	13	44.5	14.5	0.013

Start pressure test point on the system



IP 65  
24 V DC  
R 480 007 195  
Pe max = 10 bar

# Self-Sealing and Oscillating Fittings

Parker Legris has developed these two **innovative** push-in fittings in order to integrate various functions and allow **quick installation** on pneumatic circuits.

## Product Advantages

### Self-Sealing Fittings

Prevents fluid flow when there is no tube connected  
Circuits may remain pressurised when being checked and maintained  
When connected, the compressed air flow is restored in both directions

### Oscillating Fittings

Rotation matched to cylinder rod stroke  
Prevents tube wear due to excessive flexing  
Optimum reliability and durability  
Simplifies circuit assembly



Robotics  
Automotive Process  
Pneumatics  
Semi-Conductors  
Textile  
Packaging

Applications

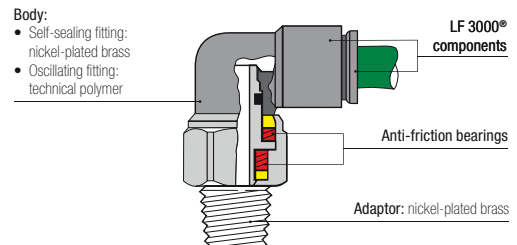
## Technical Characteristics

<b>Compatible Fluids</b>	Compressed air Other fluids: please consult us
<b>Working Pressure</b>	Vacuum to 20 bar (10 bar: self-sealing fitting)
<b>Working Temperature</b>	-20°C to +80°C

Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.  
Use is guaranteed with a vacuum of 755 mm Hg (99% vacuum).

### Component Materials

#### Swivel Fitting



#### Silicone-free

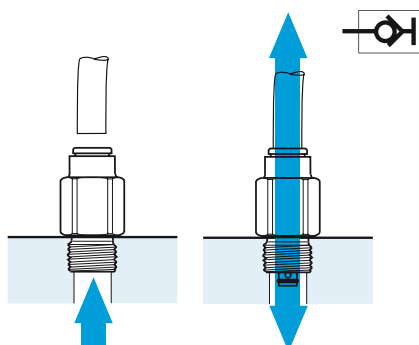
### Regulations

ISO 14743: Pneumatic fluid power, push-in connectors for thermoplastic tubes  
DI: 97/23/EC (PED)

DI: 2002/95/EC (RoHS),  
2011/65/EC  
DI: 1907/2006 (REACH)

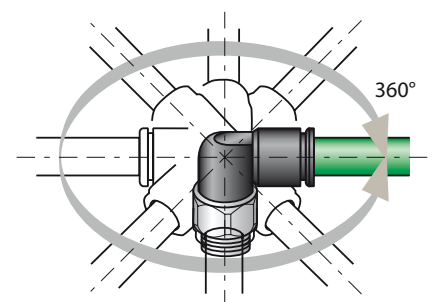
## Installation Configurations

### Self-Sealing Fitting




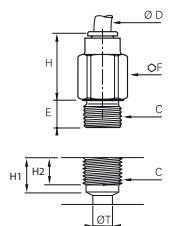

### Oscillating Fitting

Tube O.D. (mm)	Torque (daN.m)	Max. Rotation Speed (turn/min.)
4	<math>2.5 \cdot 10^{-3}</math>	190
6	<math>4 \cdot 10^{-3}</math>	160
8	<math>7 \cdot 10^{-3}</math>	120
10	<math>11 \cdot 10^{-3}</math>	90
12	<math>16 \cdot 10^{-3}</math>	80


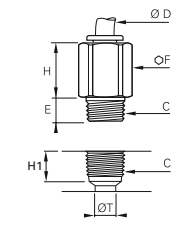



# Self-Sealing and Oscillating Fittings


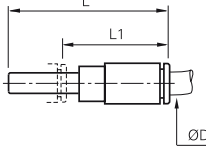

## 3391 Self-Sealing Stud Fitting, Male BSPP Thread

	Nickel-plated brass, NBR 	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>H</b>	<b>H1</b>	<b>H2</b>	<b>ØT</b>	<b>kg</b>
		4	G1/8	<a href="#">3391 04 10</a>	5	13	18	7.5	6	5	0.017
		6	G1/8	<a href="#">3391 06 10</a>	5	14	19.5	9	6	7.5	0.019
		8	G1/8	<a href="#">3391 08 10</a>	5	14	29.5	10	6	7.5	0.025
			G1/4	<a href="#">3391 08 13</a>	5.5	16	25.5	11	8	9	0.032
10	G3/8	<a href="#">3391 10 17</a>	5.5	20	27.5	13	11	10	0.055		
Maximum working pressure: 10 bar											


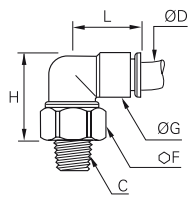

## 3091 Self-Sealing Stud Fitting, Male BSPT Thread

	Nickel-plated brass, NBR 	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>H</b>	<b>H1</b>	<b>ØT</b>	<b>kg</b>	
		4	R1/8	<a href="#">3091 04 10</a>	7.5	12	18	9.5	5	0.015	
		6	R1/8	<a href="#">3091 06 10</a>	7.5	13	19.5	9.5	7.5	0.015	
		8	R1/8	<a href="#">3091 08 10</a>	6.5	14	25	10.5	7.5	0.024	
			R1/4	<a href="#">3091 08 13</a>	11	14	25.5	13.5	9	0.021	
10	R3/8	<a href="#">3091 10 17</a>	11.5	17	27.5	14	10	0.035			
Maximum working pressure: 10 bar Pre-coated thread											


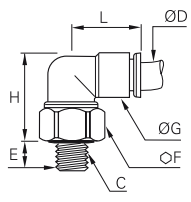

## 3160 Self-Sealing Plug-In Fitting

	Technical polymer, NBR 	<b>ØD</b>		<b>L</b>	<b>L1</b>	<b>kg</b>
		4	<a href="#">3160 04 00</a>	46	33.5	0.006
		6	<a href="#">3160 06 00</a>	53.5	31	0.009
		8	<a href="#">3160 08 00</a>	58	31	0.014

## 3159 Oscillating Elbow, Male BSPT Thread

	Technical polymer, nickel-plated brass, NBR 	<b>ØD</b>	<b>C</b>		<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>kg</b>
		4	R1/8	<a href="#">3159 04 10</a>	12	11	22	17.5	0.012
			R1/8	<a href="#">3159 06 10</a>	14	14	26.5	20.5	0.014
		6	R1/4	<a href="#">3159 06 13</a>	14	14	23.5	20.5	0.022
			R1/8	<a href="#">3159 08 10</a>	17	16	32	23.5	0.036
		8	R1/4	<a href="#">3159 08 13</a>	17	16	29	23.5	0.037
			R3/8	<a href="#">3159 08 17</a>	17	16	25	23.5	0.033
		10	R1/4	<a href="#">3159 10 13</a>	19	19.5	37.5	29	0.053
			R3/8	<a href="#">3159 10 17</a>	19	19.5	33.5	29	0.045
		12	R1/4	<a href="#">3159 12 13</a>	21	22	44.5	33.5	0.080
			R3/8	<a href="#">3159 12 17</a>	21	22	41	33.5	0.070
		Pre-coated thread							

## 3189 Oscillating Elbow, Male BSPP and Metric Thread

	Technical polymer, nickel-plated brass, NBR 	<b>ØD</b>	<b>C</b>		<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>L</b>	<b>kg</b>
		4	M5x0.8	<a href="#">3189 04 19</a>	3	12	11	24.5	17.5	0.012
			G1/8	<a href="#">3189 04 10</a>	5	13	11	23	17.5	0.013
			M5x0.8	<a href="#">3189 06 19</a>	3	12	14	27.5	20.5	0.017
		6	G1/8	<a href="#">3189 06 10</a>	5	14	14	27	20.5	0.019
			G1/4	<a href="#">3189 06 13</a>	5.5	16	14	25.5	20.5	0.023
		8	G1/8	<a href="#">3189 08 10</a>	5	17	16	31.5	23.5	0.034
			G1/4	<a href="#">3189 08 13</a>	5.5	17	16	31	23.5	0.034
		8	G3/8	<a href="#">3189 08 17</a>	5.5	20	16	29.5	23.5	0.042
			G1/4	<a href="#">3189 10 13</a>	5.5	19	19.5	39	29	0.058
		10	G3/8	<a href="#">3189 10 17</a>	5.5	20	19.5	37	29	0.050
			G1/4	<a href="#">3189 12 13</a>	5.5	21	22	46.5	33.5	0.074
		12	G3/8	<a href="#">3189 12 17</a>	5.5	21	22	45.5	33.5	0.072



# Accessories for Push-In Fittings

Parker Legris has designed these different accessories to improve **safety** and circuit **identification**.

## Product Advantages

**Safety**

- Protection of operators and equipment
- Prevents accidental disconnection
- Disconnection only possible with tooling
- Resistance to grease and cleaning agents

**Ergonomic**

- Colour-coding for fluid circuit identification (6 colours)
- Setting and fixing of your circuits thanks to clips and release button covers
- Easy disconnection with tool where access is difficult
- Adapted to meet all installation configurations



Robotics  
Automotive Process  
Pneumatics  
Semi-Conductors  
Textile  
Water Treatment  
Beverage Dispensers

Applications

## Technical Characteristics

<b>Compatible Ranges</b>	LF 3000®, LIQUIfit®
<b>Working Temperature</b>	-20°C to +95°C
<b>Materials</b>	Tamper-proof safety clip, release button cover, clip: technical polymer Reducer and plug: nickel-plated brass

## Installation Process

### Tamper-Proof Safety Clip



### Coloured Release Button Covers

Coloured release button covers can be mounted on LF 3000® and LIQUIfit® fittings, supplied fitted with manual release buttons.

5 colours are available and allows colour coding to be used throughout circuits.



### Disconnection Tool

In cases where access is difficult, this tool can be particularly useful.



### Clip Strips

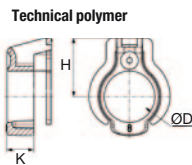
Clips are also designed to fix LF 3000® fittings in series within a minimum of space.





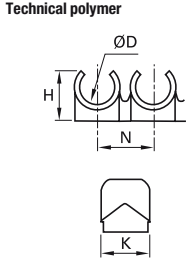
The complete range of accessories can be found in Chapter 9.

# Accessories for Push-In Fittings

## 3130 Tamper-Proof Safety Clip


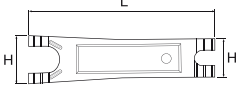
Technical polymer	ØD							H	K	kg
	4	3130 04 01	3130 04 02	3130 04 03	3130 04 04	3130 04 05	3130 04 10	6.6	3	0.001
	6	3130 06 01	3130 06 02	3130 06 03	3130 06 04	3130 06 05	3130 06 10	7.8	3.1	0.001
	8	3130 08 01	3130 08 02	3130 08 03	3130 08 04	3130 08 05	3130 08 10	9.5	4.3	0.001
	10	3130 10 01	3130 10 02	3130 10 03	3130 10 04	3130 10 05	3130 10 10	10.8	4.2	0.002
	12	3130 12 01	3130 12 02	3130 12 03	3130 12 04	3130 12 05	3130 12 10	12.5	5.1	0.003
	14	3130 14 01	3130 14 02	3130 14 03	3130 14 04	3130 14 05	3130 14 10	15	6	0.004

## CLIP Clip Strip for Tubes and Fittings

Technical polymer	ØD		H	K	N	kg
	4	CLIP 04 00	9	13.5	10.5	0.007
	6	CLIP 06 00	10.5	13	10.5	0.004
	8	CLIP 08 00	12.5	10.5	12	0.007
	10	CLIP 10 00	14	12	15	0.005
	12	CLIP 12 00	16.5	14	16.5	0.009
	14	CLIP 14 00	18	16	20.5	0.008







Delivered in boxes of 10 strips of the same diameter (complete with selftapping screws of 95 mm length)

## 3000 Disconnection Tool



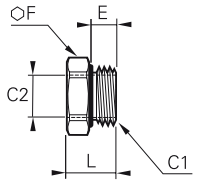
Treated steel	H	H1	L	kg
	25	20	96	0.021
	3000 70 00			

For disconnecting LF 3000® tubing/fittings where access is difficult, we recommend the use of this disconnection tool.

## 3110 Coloured Release Button Covers



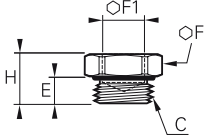
Technical polymer	ØD						kg
	4	3110 04 00	3110 04 02	3110 04 03	3110 04 04	3110 04 05	0.001
	6	3110 06 00	3110 06 02	3110 06 03	3110 06 04	3110 06 05	0.001
	8	3110 08 00	3110 08 02	3110 08 03	3110 08 04	3110 08 05	0.001
	10	3110 10 00	3110 10 02	3110 10 03	3110 10 04	3110 10 05	0.001
	12	3110 12 00	3110 12 02	3110 12 03	3110 12 04	3110 12 05	0.001
	14	3110 14 00	3110 14 02	3110 14 03	3110 14 04	3110 14 05	0.002

## 0178 Reducer, Male/Female BSPP and Metric Thread

Nickel-plated brass, NBR	C1	C2		E	F	L	kg
	M7x1	M5x0.8	0178 55 19	5	10	12	0.005
	G1/8	M5x0.8	0178 10 19	5	13	9	0.006
	G1/4	G1/8	0178 13 10	5.5	16	9.5	0.006
	G3/8	G1/8	0178 17 10	5.5	20	10.5	0.016
	G1/2	G1/4	0178 21 13	5.5	20	10.5	0.011
	G1/2	G3/8	0178 21 17	7.5	24	12.5	0.024
	G3/4	G1/2	0178 27 21	7.5	24	12.5	0.016
	G3/4	G1/2	0178 27 21	7.5	32	13.5	0.035

With integrated O-ring seal

## 0222 Internal Hex Plug, Male BSPP and Metric Thread

Nickel-plated brass, NBR	C		E	F	F1	H	kg
	M5x0.8	0222 19 00	3.5	8	2.5	7	0.002
	M7x1	0222 55 00	5	10	3	8.5	0.003
	G1/8	0222 10 00	5	13	5	8.5	0.006
	G1/4	0222 13 00	5.5	16	6	9.5	0.010
	G3/8	0222 17 00	5.5	20	8	10.5	0.019
	G1/2	0222 21 00	7.5	24	10	12	0.030

With integrated O-ring seal

