

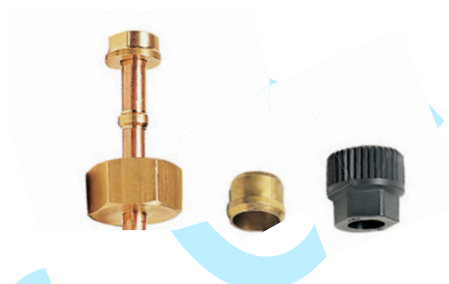
# Complementary Brass Fittings

## Reducers, Olives and Nuts

This innovative reducer system, using a full range of nuts and olives, enables **different diameters** of steel, copper, brass or polymer tubes to be fitted onto **a single Parker Legris compression fitting**.

### Product Advantages

<b>Efficient Solution</b>	<p>Reduces envelope dimensions</p> <p>Quick and easy to assemble, whatever the diameters and tube material</p> <p>Improved stock management</p> <p>Silicone-free</p>
<b>Multiple Combinations</b>	<p>A single connector for up to 4 different tube materials and sizes</p> <p>Example:</p> <ul style="list-style-type: none"> <li>• polymer tube 4 mm O.D.</li> <li>• copper tube 8 mm O.D.</li> <li>• brass tube 12 mm O.D.</li> <li>• braided PVC hose 12 mm I.D.</li> </ul> <p>A full range of olives and nuts to optimise all assembly operations</p>



**Applications**

- Pneumatics
- Cooling
- Automotive Process
- Lubrication
- Fluid Transmission
- Packaging
- Industrial Machinery

Regulations
<p><b>DI:</b> 97/23/EC (PED)</p> <p><b>RG:</b> 1907/2006 (REACH)</p> <p><b>DI:</b> 2002/95/EC (RoHS)</p> <p><b>DI:</b> 94/9/EC (ATEX)</p>

### Reducer Assembly Procedure

Operation	Assembly Sequence	Assembled Fitting
<p><b>1</b></p> <p><b>Assemble the reducer</b></p> <p>Place the reducer in the fitting body.</p>	<p><b>1</b></p>	
<p><b>2</b></p> <p><b>Assemble the nut and olive</b></p> <p>Place the nut and then the olive onto the tube.</p>	<p><b>2</b></p>	
<p><b>3</b></p> <p><b>Assemble the nut</b></p> <p>Push the tubing into the fitting until it butts against the tube reducer. Tighten the nut to the recommended torque (see opposite page).</p>	<p><b>3</b></p>	

















# Complementary Brass Fittings

## Assembly Configuration

The table and information given below illustrate the large number of options available with Parker Legris brass compression fittings. To these must be added the advantages specific to the original Parker Legris reducer shown on the previous page.



Brass Body

<b>0110 Brass</b> 			<b>0110..60 Brass</b> 		<b>0110..40 Steel</b> 	<b>0110..70* Polymer</b> 
	<b>0124 Brass</b>	<b>0111 BNA** Brass</b>	<b>0124 Brass</b>	<b>0111 BNA** Brass</b>	<b>0124...40 Steel</b>	
No olive required to assemble the plug						No olive required to assemble the tube
Brass plug: <b>0126</b>	Copper, cold-rolled brass, polymer tube and barb connectors <b>0122 and 0165</b>	Coiled annealed copper tube	Cold-rolled copper tube for vibration and side loading, etc.	Coiled annealed copper tube for vibration and side loading, etc.	Steel or copper tube: low/medium hydraulic pressure, lubricate before assembly	Polymer tube
						

### \*Assembly specifications for nut-olive 0110 ..70

This part functions as both olive and nut for flexible polymer tube assemblies:

1. Hand tighten the polymer nut-olive a few turns onto the body of the fitting; the knurling makes this easier.
2. Then introduce the polymer tube and push home into the body of the fitting.
3. Continue manually tightening the polymer nut-olive.
4. Finish tightening using a spanner until the nut body disengages and turns freely, which acts as a torque limiter.

**N.B.:** To avoid damaging the threads, do not insert the tube before hand tightening the nut-olive into the body of the fitting.

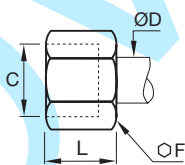
**\*\*Bureau de Normalisation de l'Automobile (French Automotive Bureau of Standards)**

### Recommended Tightening Torque

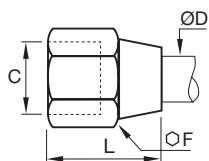
#### Tightening torque in daN.m =

maximum tightening torque of a **0110** nut and **0124** olive with copper, brass or steel tube.

Nut **0110** and **0110..40**



Nut **0110..60**



Ø D (mm)	ØF 0110	ØF 0110..60	max. daN.m copper or brass	ØF 0110..40	max. daN.m steel
4	10	11	0.7	10	1.5
5	12	13	0.7	12	1.5
6	13	13	1.5	13	2.5
8	14	16	1.5	14	2.5
10	19	20	1.8	19	3
12	22	22	3	22	4.5
14	24	24	3.5	24	5.5
15	24	24	4	24	6
16	27	27	5	27	7
18	30	30	6	30	9
20	32	32	6	32	10
22	36	36	7	36	12
25	41	41	8	41	13
28	42		9		

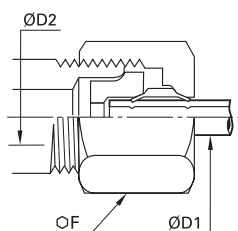
# Complementary Brass Compression Fittings

**0166**

**3-Piece Reducer**



Brass



ØD1	ØD2		F	kg
4	5	0166 04 05	13	0.011
	6	0166 04 06	13	0.011
	8	0166 04 08	14	0.012
	10	0166 04 10	19	0.031
	12	0166 04 12	22	0.044
	14	0166 04 14	24	0.054
5	15	0166 04 15	24	0.056
	6	0166 05 06	13	0.010
	8	0166 05 08	14	0.012
	10	0166 05 10	19	0.030
	12	0166 05 12	22	0.044
	14	0166 05 14	24	0.053
6	16	0166 05 16	27	0.078
	8	0166 06 08	14	0.012
	10	0166 06 10	19	0.030
	12	0166 06 12	22	0.043
	14	0166 06 14	24	0.052
	15	0166 06 15	24	0.054
8	16	0166 06 16	27	0.077
	10	0166 08 10	19	0.027
	12	0166 08 12	22	0.040
	14	0166 08 14	24	0.051
	15	0166 08 15	24	0.053
	16	0166 08 16	27	0.076
10	18	0166 08 18	30	0.100
	12	0166 10 12	22	0.037
	14	0166 10 14	24	0.045
	15	0166 10 15	24	0.047
	16	0166 10 16	27	0.068
	18	0166 10 18	30	0.095
12	20	0166 10 20	32	0.107
	22	0166 10 22	36	0.144
	25	0166 10 25	41	0.209
	14	0166 12 14	24	0.043
	15	0166 12 15	24	0.043
	16	0166 12 16	27	0.066
14	18	0166 12 18	30	0.092
	20	0166 12 20	32	0.102
	22	0166 12 22	36	0.140
	25	0166 12 25	41	0.200
	16	0166 14 16	27	0.060
	18	0166 14 18	30	0.084
15	20	0166 14 20	32	0.095
	22	0166 14 22	36	0.133
	25	0166 14 25	41	0.189
	18	0166 15 18	30	0.081
16	22	0166 15 22	36	0.130
	18	0166 16 18	30	0.078
	20	0166 16 20	32	0.088
	22	0166 16 22	36	0.126
18	25	0166 16 25	41	0.185
	20	0166 18 20	32	0.082
	22	0166 18 22	36	0.118
	25	0166 18 25	41	0.180
20	28	0166 18 28	42	0.176
	25	0166 20 25	41	0.168
	22	0166 22 28	42	0.168

ØD1: tube to be fitted


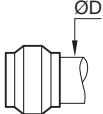

ØD2: for an x mm Ø fitting

Each of the above part numbers comprises:


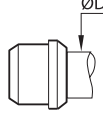

- a reduction piece
- an olive, PN 0124
- a sleeve nut

# Complementary Brass Compression Fittings


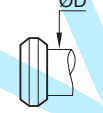

## 0124 Brass Olive

	Brass		ØD		kg
					
			4	0124 04 00	0.001
			5	0124 05 00	0.001
			6	0124 06 00	0.001
			8	0124 08 00	0.001
			10	0124 10 00	0.003
			12	0124 12 00	0.004
			14	0124 14 00	0.005
			15	0124 15 00	0.004
			16	0124 16 00	0.006
			18	0124 18 00	0.007
			20	0124 20 00	0.009
			22	0124 22 00	0.012
			25	0124 25 00	0.017
			28	0124 28 00	0.017

## 0124..40 Steel Olive

	Zinc-plated steel		ØD		kg
					
			4	0124 04 00 40	0.001
			6	0124 06 00 40	0.001
			8	0124 08 00 40	0.001
			10	0124 10 00 40	0.003
			12	0124 12 00 40	0.003
			14	0124 14 00 40	0.005
			15	0124 15 00 40	0.004
			16	0124 16 00 40	0.006
			18	0124 18 00 40	0.007
			20	0124 20 00 40	0.007
			22	0124 22 00 40	0.010
			25	0124 25 00 40	0.014

## 0111 BNA\* Brass Olive

	Brass		ØD		kg
					
			4	0111 04 00	0.001
			5	0111 05 00	0.001
			6	0111 06 00	0.001
			8	0111 08 00	0.001
			10	0111 10 00	0.002
			12	0111 12 00	0.002
			14	0111 14 00	0.003
			15	0111 15 00	0.003
			16	0111 16 00	0.003

\*BNA: Bureau de Normalisation de l'Automobile (standards organization in the field of Automotive Process)

# Complementary Brass Compression Fittings

## 0110 Brass Nut

	Brass	ØD	C		F	L	kg
		4	M8x1	<a href="#">0110 04 00</a>	10	11	0.005
		5	M10x1	<a href="#">0110 05 00</a>	12	11	0.006
		6	M10x1	<a href="#">0110 06 00</a>	13	11	0.008
		8	M12x1	<a href="#">0110 08 00</a>	14	13	0.008
		10	M16x1.5	<a href="#">0110 10 00</a>	19	15	0.019
		12	M18x1.5	<a href="#">0110 12 00</a>	22	15	0.026
		14	M20x1.5	<a href="#">0110 14 00</a>	24	15	0.029
		15	M20x1.5	<a href="#">0110 15 00</a>	24	15	0.028
		16	M22x1.5	<a href="#">0110 16 00</a>	27	17	0.042
		18	M24x1.5	<a href="#">0110 18 00</a>	30	18	0.057
		20	M27x1.5	<a href="#">0110 20 00</a>	32	18	0.057
		22	M30x1.5	<a href="#">0110 22 00</a>	36	19	0.078
		25	M33x1.5	<a href="#">0110 25 00</a>	41	21	0.121
		28	M36x1.5	<a href="#">0110 28 00</a>	42	21	0.110

## 0110..40 Steel Nut

	Zinc-plated steel	ØD	C		F	L	kg
		4	M8x1	<a href="#">0110 04 00 40</a>	10	11	0.004
		5	M10x1	<a href="#">0110 05 00 40</a>	12	11.5	0.005
		6	M10x1	<a href="#">0110 06 00 40</a>	13	12	0.008
		8	M12x1	<a href="#">0110 08 00 40</a>	14	13.5	0.008
		10	M16x1.5	<a href="#">0110 10 00 40</a>	19	16	0.018
		12	M18x1.5	<a href="#">0110 12 00 40</a>	22	16.5	0.027
		14	M20x1.5	<a href="#">0110 14 00 40</a>	24	17	0.030
		15	M20x1.5	<a href="#">0110 15 00 40</a>	24	17	0.029
		16	M22x1.5	<a href="#">0110 16 00 40</a>	27	18	0.042
		18	M24x1.5	<a href="#">0110 18 00 40</a>	30	19	0.056
		20	M27x1.5	<a href="#">0110 20 00 40</a>	32	20.5	0.061
		22	M30x1.5	<a href="#">0110 22 00 40</a>	36	21.5	0.085

## 0110..60 Brass Long Nut

	Brass	ØD	C		F	L	kg
		4	M8x1	<a href="#">0110 04 00 60</a>	11	14.5	0.007
		5	M10x1	<a href="#">0110 05 00 60</a>	13	17	0.008
		6	M10x1	<a href="#">0110 06 00 60</a>	13	17.5	0.011
		8	M12x1	<a href="#">0110 08 00 60</a>	16	20	0.019
		10	M16x1.5	<a href="#">0110 10 00 60</a>	20	23	0.032
		12	M18x1.5	<a href="#">0110 12 00 60</a>	22	25	0.039
		14	M20x1.5	<a href="#">0110 14 00 60</a>	24	30	0.051
		15	M20x1.5	<a href="#">0110 15 00 60</a>	24	30	0.049
		16	M22x1.5	<a href="#">0110 16 00 60</a>	27	32	0.070
		18	M24x1.5	<a href="#">0110 18 00 60</a>	30	35	0.098
		20	M27x1.5	<a href="#">0110 20 00 60</a>	32	35	0.102
		22	M30x1.5	<a href="#">0110 22 00 60</a>	36	36	0.129

## 0110..70 Technical Polymer Nut-Olive

	Technical polymer	ØD	C		F	L	kg
		4	M8x1	<a href="#">0110 04 00 70</a>	8	13	0.008
		6	M10x1	<a href="#">0110 06 00 70</a>	11	15	0.002
		8	M12x1	<a href="#">0110 08 00 70</a>	13	16	0.002
		10	M16x1.5	<a href="#">0110 10 00 70</a>	17	19	0.004
		12	M18x1.5	<a href="#">0110 12 00 70</a>	19	19	0.005
		14	M20x1.5	<a href="#">0110 14 00 70</a>	22	20	0.005
		16	M22x1.5	<a href="#">0110 16 00 70</a>	24	21	0.008

NB: polymer nut-olives should not be used on metal tubing.