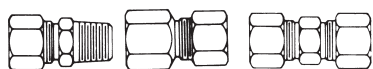


# fractional inch compression fittings

## applications



Use long nut when excessive vibration may be encountered.

## compression

Copper, brass, aluminum, and plastic tubing. Not recommended for steel tubing. Soft plastic tubing requires support inside and in line sleeve.

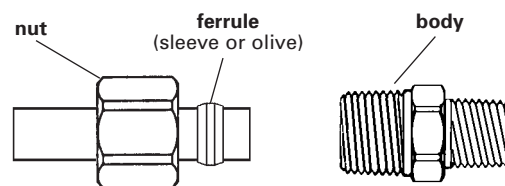
Maximum working pressure is 400 psi. Nominal working pressure is 200 psi.

-65° to +250°F.

## compression fitting components and assembly

### how are they assembled?

1. Use a tube cutter on the tubing to cut to length and assure a clean straight cut.
2. Prepare the end of the tube with a deburring tool to assure a surface free of burrs.
3. Slide the nut and then the ferrule onto the tube. The thread end of the nut must face out.
4. Insert tubing into the fitting body, making sure the tube is bottomed out on the fitting shoulder.
5. Assemble the nut to the body, hand tight.
6. Tighten the nut to the body using a wrench to the number of turns indicated in the table to the right.



tube size	additional turns from hand tight
1/8" thru 5/16"	1 1/4"
3/8" and larger	2 1/4"

**Note:** This chart applies to fractional inch sizes only.

## application parameters

### types of tubing

Designed for use with aluminum, copper and plastic tubing, not recommended for steel tube. Compression fittings are designed for medium pressure tubing where excessive vibration or tube movement is not involved. Not recommended for application using gaseous media.

### working pressures for aluminum or copper tubing

Temperature and type of tubing are important factors. However, the following table is a good guide for proper selection at ambient temperatures of 73°F.

psi	tube O.D. (in.)	tube wall (in.)
400	1/8"	.030
400	3/16"	.030
300	1/4"	.030
300	5/16"	.032
200	3/8"	.032
200	1/2"	.032
150	5/8"	.035
100	3/4"	.035
75	7/8"	.035

**Note:** For working pressures with plastic tubing, please see the tubing section of the Legris catalog. The pressure ratings will vary with the type tubing chosen. In any case **use only with nylon or polyethylene tubing.**

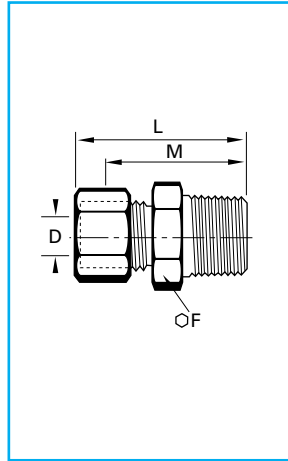
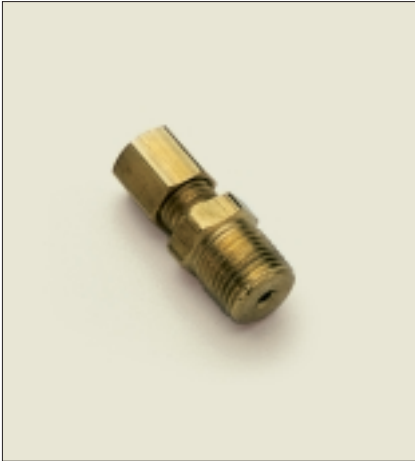
## special requirements

**plastic tubing:** For application with either nylon or polyethylene tubing, it is recommended that the standard brass ferrule be replaced with a delrin ferrule. As well a brass insert should be used to further support the tube. The insert is **Series U063L** and the delrin ferrule is **Series U060L**.

**vibration:** It is not recommended to apply compression application or applications where there may be side loading on the fitting. For low vibration or side load, it is necessary to use a long nut. In this way the tubing will be better supported. The reference for this long nut is **Series U061L**.

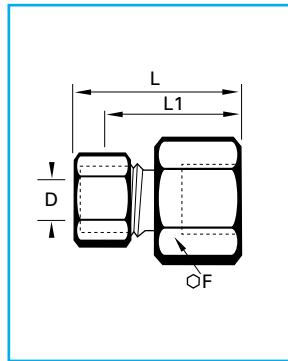
# brass compression fittings

## U068 L compression connector — fractional inch tube to male NPT



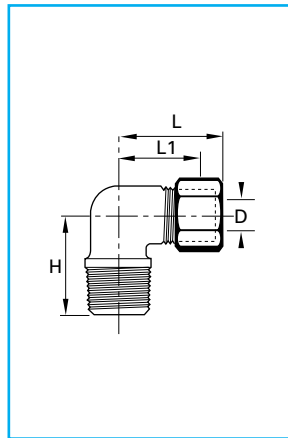
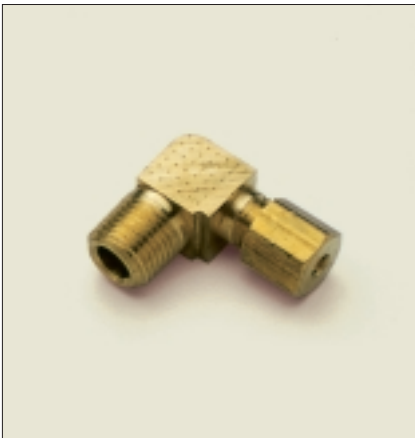
ØD in	NPT thread		F in	L in	M in	flow dia.D	
1/8	1/8	U068 L 2A	7/16	.97	.77	.094	.52
3/16	1/8	U068 L 3A	7/16	1.08	.84	.125	.53
3/16	1/4	U068 L 3B	9/16	1.27	1.03	.125	.84
1/4	1/8	U068 L 4A	7/16	1.10	.86	.188	.61
1/4	1/4	U068 L 4B	9/16	1.30	1.06	.188	.92
1/4	3/8	U068 L 4C	11/16	1.27	1.03	.188	1.20
1/4	1/2	U068 L 4D	7/8	1.55	1.31	.188	1.97
5/16	1/8	U068 L 5A	1/2	1.15	.89	.234	.73
5/16	1/4	U068 L 5B	9/16	1.33	1.07	.250	.96
3/8	1/8	U068 L 6A	9/16	1.25	.97	.250	.90
3/8	1/4	U068 L 6B	9/16	1.42	1.14	.312	1.08
3/8	3/8	U068 L 6C	11/16	1.44	1.16	.312	1.42
3/8	1/2	U068 L 6D	7/8	1.53	1.25	.312	1.88
1/2	1/4	U068 L 8B	11/16	1.62	1.22	.312	1.84
1/2	3/8	U068 L 8C	11/16	1.60	1.20	.406	1.95
1/2	1/2	U068 L 8D	7/8	1.71	1.31	.406	2.45

## U066 L compression connector — fractional inch tube to female NPT



ØD in	NPT thread		F in	L in	L1 in	flow dia.D	
1/8	1/8	U066 L 2A	9/16	.95	.75	.094	.64
3/16	1/8	U066 L 3A	9/16	1.02	.78	.125	.68
1/4	1/8	U066 L 4A	9/16	1.02	.78	.188	.46
1/4	1/4	U066 L 4B	11/16	1.24	1.00	.188	1.20
5/16	1/8	U066 L 5A	9/16	1.07	.81	.250	.80
5/16	1/4	U066 L 5B	11/16	1.29	1.03	.250	1.24
3/8	1/8	U066 L 6A	9/16	1.06	.78	.312	.88
3/8	1/4	U066 L 6B	11/16	1.34	1.06	.312	.70
3/8	3/8	U066 L 6C	13/16	1.34	1.06	.312	1.53
3/8	1/2	U066 L 6D	1	1.54	1.27	.312	.60
1/2	3/8	U066 L 8C	13/16	1.52	1.12	.406	1.66
1/2	1/2	U066 L 8D	1	1.71	1.31	.406	1.67

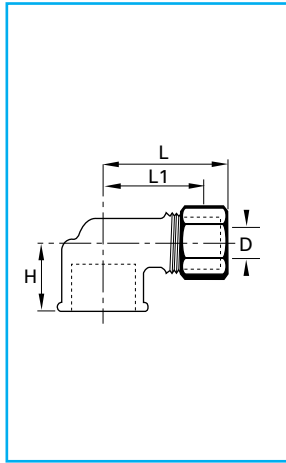
## U069 L compression elbow — fractional inch tube to male NPT



ØD in	NPT thread		L in	L1 in	H in	flow dia.D	
1/8	1/8	U069 L 2A	.80	.60	.67	.094	.73
3/16	1/8	U069 L 3A	.84	.61	.69	.125	.76
3/16	1/4	U069 L 3B	.86	.64	.93	.125	1.11
1/4	1/8	U069 L 4A	.86	.61	.74	.188	.93
1/4	1/4	U069 L 4B	.86	.62	.94	.188	1.29
1/4	3/8	U069 L 4C	.93	.68	1.00	.188	1.94
5/16	1/8	U069 L 5A	.88	.61	.74	.234	1.13
5/16	1/4	U069 L 5B	.95	.71	.93	.250	1.33
3/8	1/8	U069 L 6A	1.03	.74	.74	.234	1.42
3/8	1/4	U069 L 6B	1.03	.74	.93	.312	1.52
3/8	3/8	U069 L 6C	1.03	.75	1.00	.312	2.26
3/8	1/2	U069 L 6D	1.22	.94	1.27	.312	2.30
1/2	1/4	U069 L 8B	1.34	.94	1.00	.312	2.39
1/2	3/8	U069 L 8C	1.34	.93	1.11	.406	2.65
1/2	1/2	U069 L 8D	1.48	1.06	1.15	.406	3.00

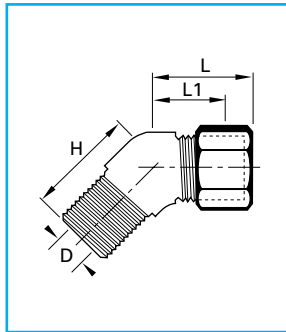
# brass compression fittings

## U070 L compression elbow — fractional inch tube to female NPT



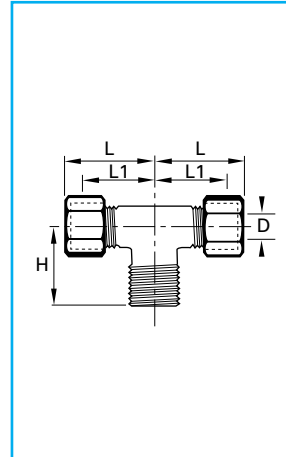
ØD in	NPT thread		L in	L1 in	H in	flow dia.D	
1/8	1/8	U070 L 2A	.89	.69	.56	.094	.83
3/16	1/8	U070 L 3A	.98	.73	.56	.125	.94
1/4	1/8	U070 L 4A	.93	.69	.56	.188	.94
1/4	1/4	U070 L 4B	1.02	.78	.70	.188	1.35
3/8	1/4	U070 L 6B	1.06	.79	.73	.312	2.34
3/8	3/8	U070 L 6C	1.22	.94	.69	.312	1.89
1/2	3/8	U070 L 8C	1.34	1.00	.69	.406	3.70

## U079 L 45 degree elbow — fractional inch tube to male NPT



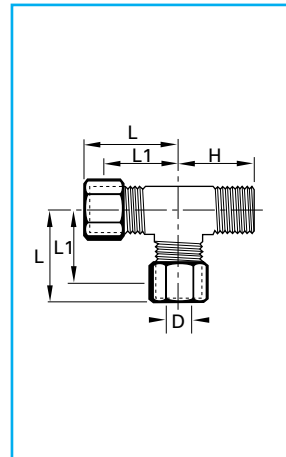
ØD in	NPT thread		L in	L1 in	H in	flow dia.D	
1/4	1/8	U079 L 4A	.90	.66	.56	.188	.75
1/4	1/4	U079 L 4B	.80	.56	.84	.188	1.45
3/8	1/4	U079 L 6B	.90	.63	.84	.312	1.56
3/8	3/8	U079 L 6C	.97	.75	.95	.312	2.00
1/2	3/8	U079 L 8C	1.15	.81	.95	.406	2.50

## U072 L compression tee — fractional inch tube to male NPT



ØD in	NPT thread		L in	L1 in	H in	flow dia.D	
1/8	1/8	U072 L 2A	.82	.61	.71	.094	.99
3/16	1/8	U072 L 3A	.86	.61	.71	.125	1.10
1/4	1/8	U072 L 4A	.86	.61	.74	.188	1.24
1/4	1/4	U072 L 4B	.93	.69	.92	.188	1.46
3/8	1/8	U072 L 6A	1.03	.75	.75	.234	1.87
3/8	1/4	U072 L 6B	1.09	.77	1.03	.312	1.87
3/8	3/8	U072 L 6C	1.09	.81	1.00	.312	2.35
1/2	3/8	U072 L 8C	1.34	.93	1.10	.406	3.94

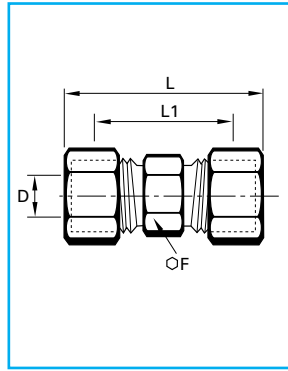
## U071 L compression tee — fractional inch tube to male NPT



ØD in	NPT thread		L in	L1 in	H in	flow dia.D	
1/8	1/8	U071 L 2A	.82	.61	.71	.094	.90
3/16	1/8	U071 L 3A	.86	.61	.71	.125	1.05
1/4	1/8	U071 L 4A	.90	.64	.75	.188	1.27
1/4	1/4	U071 L 4B	.93	.69	.92	.188	1.45
3/8	1/4	U071 L 6B	1.09	.81	1.03	.312	2.06

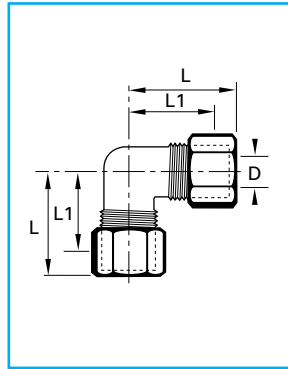
# brass compression fittings

## U062 L compression union — fractional inch tube to tube



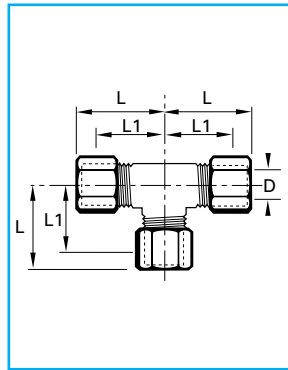
ØD in		F in	L in	L1 in	flow dia.D	
1/8	U062 L 2	5/16	1.05	.64	.094	.44
3/16	U062 L 3	3/8	1.21	.72	.125	.65
1/4	U062 L 4	7/16	1.33	.79	.188	.84
5/16	U062 L 5	1/2	1.39	.85	.250	1.01
3/8	U062 L 6	9/16	1.52	.97	.312	2.61
1/2	U062 L 8	11/16	1.90	1.08	.406	2.55

## U065 L compression elbow — fractional inch tube to tube



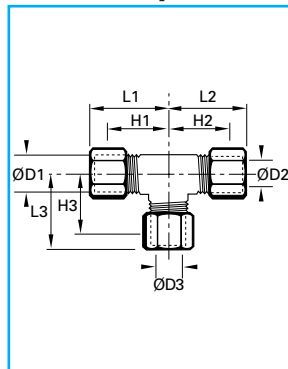
ØD in		L in	L1 in	flow dia.D	
1/8	U065 L 2	.82	.61	.094	.66
3/16	U065 L 3	.87	.61	.125	.92
1/4	U065 L 4	.88	.61	.188	1.04
5/16	U065 L 5	.95	.71	.250	1.32
3/8	U065 L 6	1.03	.74	.312	1.40
1/2	U065 L 8	1.34	.93	.406	2.97

## U064 L compression tee — fractional inch tube to tube to tube



ØD in		L in	L1 in	flow dia.D	
1/8	U064 L 2	.82	.61	.094	1.09
3/16	U064 L 3	.84	.60	.125	1.20
1/4	U064 L 4	.86	.61	.188	1.51
5/16	U064 L 5	.98	.71	.250	2.10
3/8	U064 L 6	1.03	.74	.312	2.54
1/2	U064 L 8	1.34	.93	.406	4.49

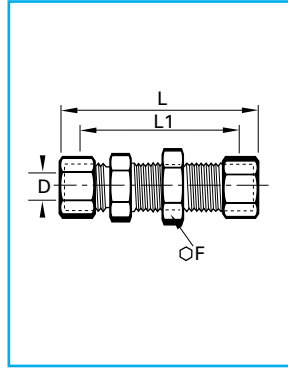
## U064 L compression tee — unequal — fractional inch tube to tube to tube



ØD1 in	ØD2 in	ØD3 in		L1 in	L2 in	L3 in	H1 in	H2 in	H3 in	flow dia.D	
3/8	3/8	1/4	U064 L 6CB	1.03	.96	.96	.75	.75	.72	.188	2.54
1/2	1/2	3/8	U064 L 8DC	1.34	1.16	1.16	.94	.94	.88	.312	4.49

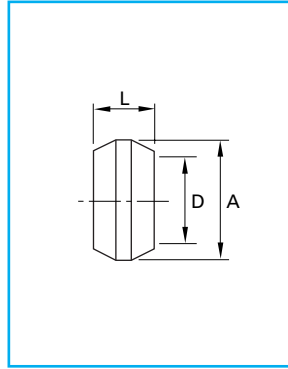
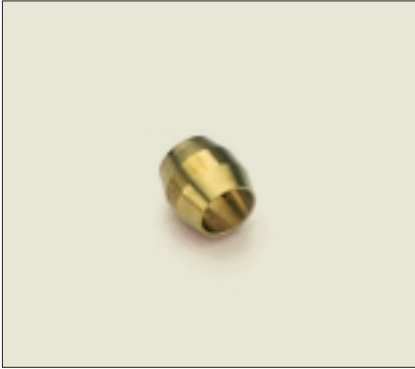
# brass compression fittings

## U077 L compression bulkhead union — fractional inch tube to tube



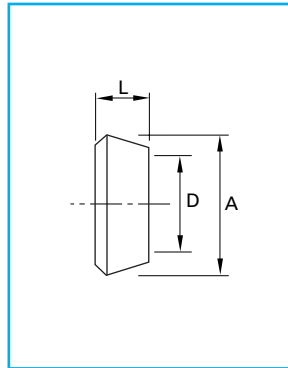
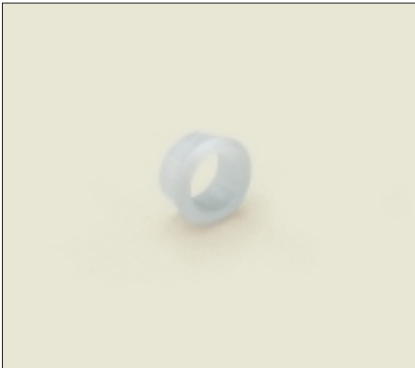
ØD in		F in	L in	L1 in	flow dia.D	
1/4	U077 L 4	9/16	2.29	1.75	.188	2.00
3/8	U077 L 6	11/16	2.42	1.88	.312	2.40

## U060 L compression sleeve — fractional inch



ØD in		A in	D in	L in	
1/8	U060 L 2	.187	.130	.19	.01
3/16	U060 L 3	.266	.192	.22	.02
1/4	U060 L 4	.344	.255	.25	.01
5/16	U060 L 5	.406	.318	.25	.04
3/8	U060 L 6	.469	.382	.25	.04
1/2	U060 L 8	.594	.507	.38	.04

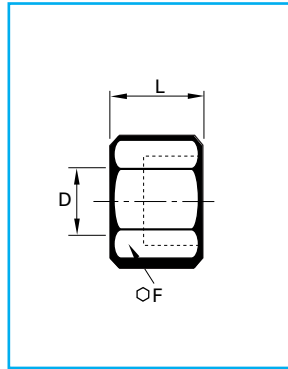
## U060 L delrin compression sleeve — fractional inch



plastic tube well	tube wall		A in	D in	L in	
1/4	.040	U060 L 4A	.375	.254	.19	.01
5/16	.062	U060 L 5A	.438	.317	.19	.01
3/8	.062	U060 L 6A	.500	.379	.19	.01
1/2	.062	U060 L 8A	.631	.507	.25	.01

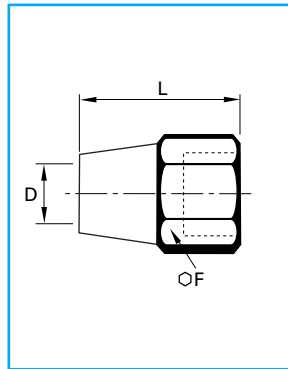
# brass compression fittings

## U061 L compression nut — fractional inch



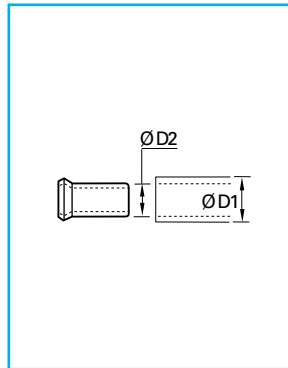
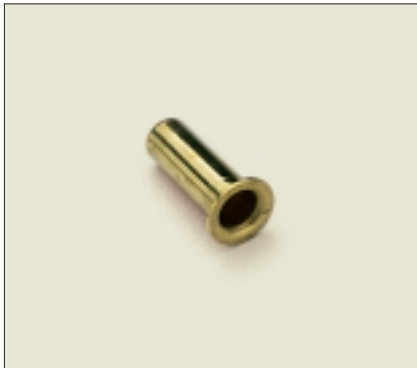
ØD in		F in	D in	L in	
1/8	<a href="#">U061 L 2</a>	3/8	.130	.38	.16
3/16	<a href="#">U061 L 3</a>	7/16	.192	.41	.21
1/4	<a href="#">U061 L 4</a>	1/2	.255	.44	.26
5/16	<a href="#">U061 L 5</a>	9/16	.318	.44	.27
3/8	<a href="#">U061 L 6</a>	5/8	.382	.47	.34
1/2	<a href="#">U061 L 8</a>	13/16	.507	.62	.36

## U061 L compression nut — long — fractional inch



ØD in		F in	D in	L in	
1/4	<a href="#">U061 L 4A</a>	1/2	.255	.75	.41
5/16	<a href="#">U061 L 5A</a>	6/16	.318	.84	.48
3/8	<a href="#">U061 L 6A</a>	5/8	.382	.97	.69
1/2	<a href="#">U061 L 8A</a>	13/16	.507	1.06	1.20

## U063 L tube support — fractional inch



ØD1 in	ØD2 in	tube wall		L in	
.163	1/4	.040	<a href="#">U063 L 4</a>	.50	.02
.187	5/16	.040	<a href="#">U063 L 5</a>	.53	.04
.250	3/8	.062	<a href="#">U063 L 6</a>	.56	.04
.370	1/2	.062	<a href="#">U063 L 8</a>	.72	.08

At high temperature and pressure or during oscillating movements, the use of tube supports prevents distortion of the tube and guarantees effective gripping and sealing.

# technical specifications

To enable the user to obtain the best results from Legris brass compression fittings due regard to the application and tube used is necessary. As a guide the table below details the service pressures of the fitting assembly

together with the service and burst pressures of various tubes. The pressures are expressed in **psi** and are provided in good faith – however they should be taken only as a guide and are not guaranteed.

type of tube		<b>copper tube</b> 'cold drawn' from straight bars				<b>steel tube</b> 'thin wall' unwelded cold drawn from annealed straight bars				
type of assembly		with brass nut and olive				with treated steel olive and nut ( <b>suffix 40</b> )				
metric tube designation	tube dimensions		maximum pressure of fitting assembly	maximum service pressure of tube	burst pressure of tubes	continuous maximum service pressure	service pressure with intermittent surge	maximum intermittent surge pressure	maximum service pressure of tube	burst pressure of tube
	O.D.	wall thickness								
2 x 4	4	1	3,330	6,380	31,900	8,000	6,670	14,000	8,410	26,830
3 x 5	5	1	2,755	4,060	20,300	6,800	5,365	12,475	7,100	20,300
4 x 6	6	1	2,175	3,190	16,000	5,800	4,200	11,170	6,090	17,840
6 x 8	8	1	1,450	2,100	10,600	4,500	3,260	8,560	4,640	13,345
8 x 10	10	1	1,090	1,600	8,000	3,480	2,680	6,960	3,625	10,730
10 x 12	12	1	800	1,230	6,380	2,900	2,100	5,800	3,045	8,935
12 x 14	14	1	650	1,060	5,220	2,320	1,810	4,900	2,610	7,690
13 x 15	15	1	610	960	4,785	2,175	1,660	4,500	2,390	7,100
14 x 16	16	1	580	900	4,500	2,030	1,600	4,060	2,250	6,670
16 x 18	18	1	535	800	3,900	1,740	1,230	3,335	1,885	5,800
15.6 x 18	18	1.2	800	970	6,500					
18 x 20	20	1	510	650	3,480	1,450	1,015	2,755	1,600	4,930
17.6 x 20	20	1.2	725	870	4,350					
20 x 22	22	1	435	465	3,045	1,305	870	2,320	1,305	4,200
18.8 x 22	22	1.6	870	1,070	5,365					
23 x 25	25	1	290	435	2,610	1,015	580	1,665	1,015	3,480
21.8 x 25	25	1.6	800	930	4,640					
26 x 28	28	1	360	480	2,390					
24.8 x 28	28	1.6	580	810	4,060					
24 x 28	28	2	725	1,060	5,295					

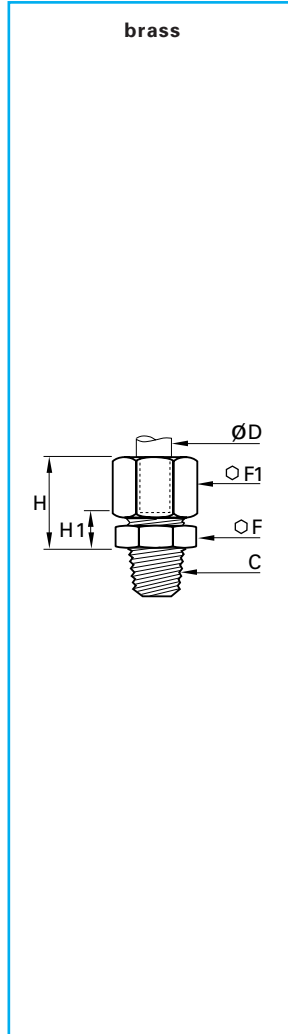
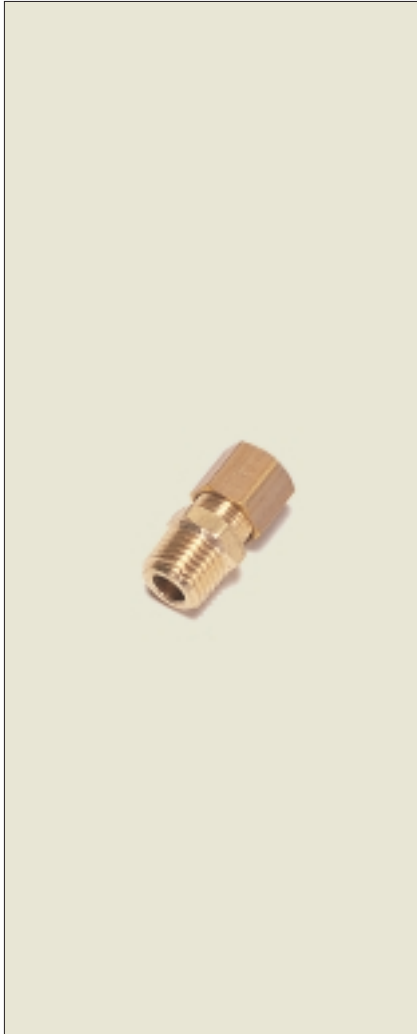
  

<p>brass tube: supplied in straight lengths: figures as above  copper tube: supplied in coils: <b>reduce the above service pressures by 35%.</b>  <b>Do not use in areas of vibration.</b></p>	<p><b>IMPORTANT:</b> for use only on thin wall tubing from O.D. 6mm to O.D. 16mm - maximum wall thickness 1mm.  Above 16mm maximum wall thickness 1.5mm.</p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------

The above recommendations are given in good faith. However, since each application is different it is advisable to undertake tests in actual working conditions.

# threaded connectors

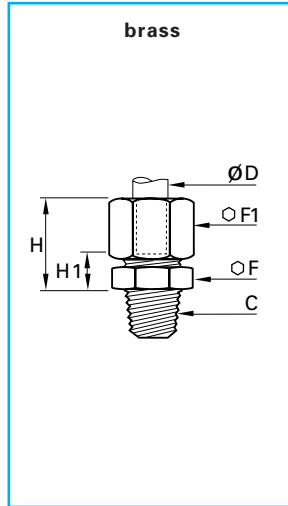
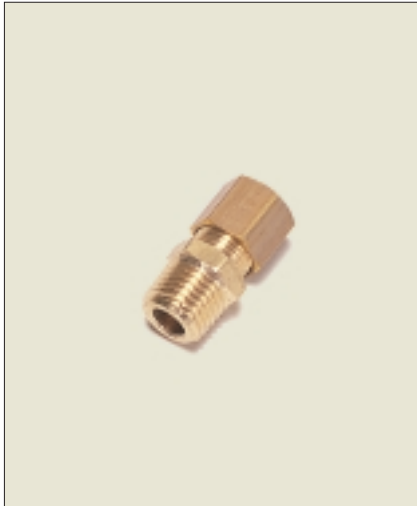
## 0105 male connector — BSPT



ØD mm	C BSPT		F mm	F1 mm	H max mm	H1 mm	kg
4	R1/8	0105 04 10	10	10	17	7	.013
5	R1/8	0105 05 10	11	12	17.5	7.5	.017
5	R1/4	0105 05 13	14	12	17.5	7.5	.022
6	R1/8	0105 06 10	11	13	18	7.5	.017
6	R1/4	0105 06 13	14	13	18	7.5	.024
6	R3/8	0105 06 17	17	13	19	8.5	.031
8	R1/8	0105 08 10	13	14	19.5	7	.021
8	R1/4	0105 08 13	14	14	19.5	7	.026
8	R3/8	0105 08 17	17	14	20.5	8	.032
10	R1/8	0105 10 10	17	19	24	9	.043
10	R1/4	0105 10 13	17	19	24	9	.047
10	R3/8	0105 10 17	17	19	24	9	.048
10	R1/2	0105 10 21	22	19	25	10	.067
12	R1/4	0105 12 13	19	22	24	9	.059
12	R3/8	0105 12 17	19	22	24	9	.061
12	R1/2	0105 12 21	22	22	25	10	.076
14	R1/4	0105 14 13	22	24	25	8	.067
14	R3/8	0105 14 17	22	24	25	8	.069
14	R1/2	0105 14 21	22	24	26	9	.079
14	R3/4	0105 14 27	27	24	27	10	.105
15	R3/8	0105 15 17	22	24	25	8	.064
15	R1/2	0105 15 21	22	24	26	9	.075
16	R1/4	0105 16 13	24	27	27	9.5	.091
16	R3/8	0105 16 17	24	27	27	9.5	.092
16	R1/2	0105 16 21	24	27	27	9.5	.100
16	R3/4	0105 16 27	27	27	28	10.5	.120
18	R1/2	0105 18 21	27	30	30	10.5	.130
18	R3/4	0105 18 27	27	30	30	10.5	.140
20	R1/2	0105 20 21	30	32	32	11	.148
20	R3/4	0105 20 27	30	32	32	11	.156
22	R1/2	0105 22 21	32	36	33	11	.180
22	R3/4	0105 22 27	32	36	33	11	.193
22	R1"	0105 22 34	36	36	33	11	.226
25	R3/4	0105 25 27	36	41	36	11	.263
25	R1"	0105 25 34	36	41	36	11	.277
28	R3/4	0105 28 27	41	42	36	11	.272
28	R1"	0105 28 34	41	42	36	11	.287

Metric taper threads or Briggs NPT threads are available by special order, subject to minimum quantities.

## 0105 male connector — NPT

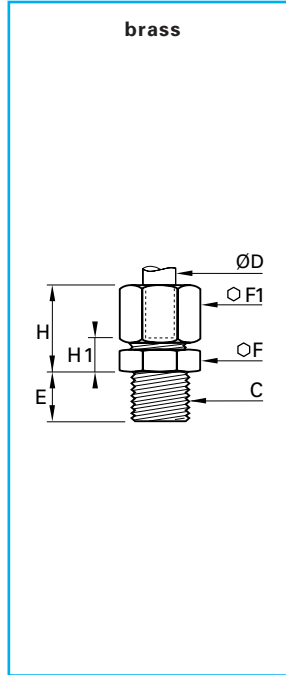
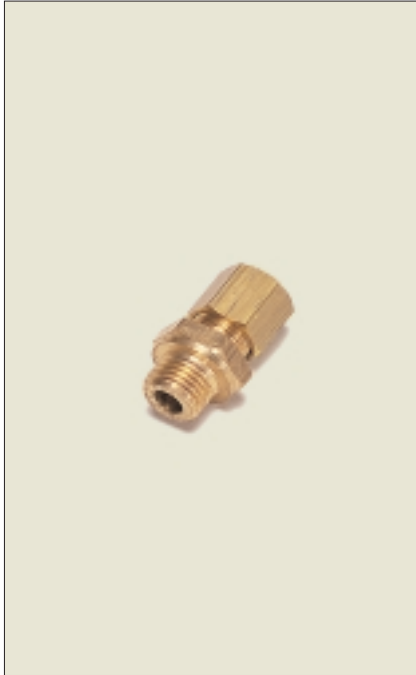


ØD mm	C NPT		F mm	F1 mm	H max mm	H1 mm	kg
6	1/8	0105 06 11	11	13	18	7.5	.018
6	1/4	0105 06 14	14	13	18	7.5	.028
8	1/8	0105 08 11	13	14	21	7	.021
8	1/4	0105 08 14	14	14	18.5	7	.026
10	1/4	0105 10 14	17	19	24	9	.047
10	3/8	0105 10 18	17	19	24	9	.048
10	1/2	0105 10 22	22	19	25	10	.067



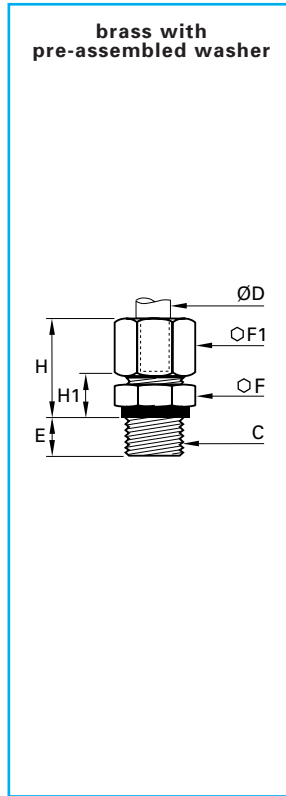
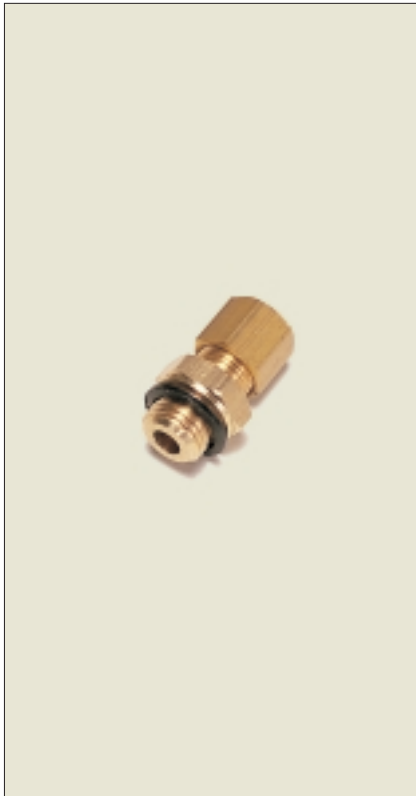
# threaded connectors

## 0101 male connector — parallel metric thread



ØD mm	C metric		E mm	F mm	F1 mm	H max mm	H1 mm	
4	M7x1	0101 04 55	6.5	10	10	16.5	7.5	.013
4	M8x1	0101 04 56	6.5	11	10	16.5	7.5	.013
5	M8x1	0101 05 56	6.5	11	12	17.5	8	.016
5	M10x1	0101 05 60	6.5	14	12	17.5	8.5	.021
6	M10x1	0101 06 60	6.5	14	13	18	8.5	.022
6	M10x1.5	0101 06 62	6.5	14	13	18	8.5	.021
8	M12x1	0101 08 65	8	17	14	19.5	9	.031
8	M12x1.25	0101 08 66	8	17	14	19.5	9	.031
8	M13x1.25	0101 08 68	8	17	14	19.5	9	.032
10	M14x1.25	0101 10 70	8	17	19	24	11	.047
10	M14x1.5	0101 10 71	8	17	19	24	11	.047
10	M16x1.25	0101 10 74	9	19	19	24	11	.052
10	M16x1.5	0101 10 75	9	19	19	24	11	.054
10	M18x1.5	0101 10 78	9	22	19	24	11.5	.060
12	M16x1.25	0101 12 74	9	19	22	24	11	.062
12	M16x1.5	0101 12 75	9	19	22	24	11	.060
12	M18x1.5	0101 12 78	9	22	22	24	11.5	.070
14	M18x1.5	0101 14 78	9	22	24	25	10.5	.075
14	M20x1.5	0101 14 80	10	24	24	25	11	.085
15	M18x1.5	0101 15 78	9	22	24	25	10.5	.072
16	M20x1.5	0101 16 80	10	24	27	27	12.5	.104
16	M22x1.5	0101 16 82	10	27	27	27	12.5	.113
18	M22x1.5	0101 18 82	10	27	30	29.5	12.5	.131
18	M24x1.5	0101 18 83	11	30	30	29.5	13	.142

## 0101 male connector — BSPP or M5

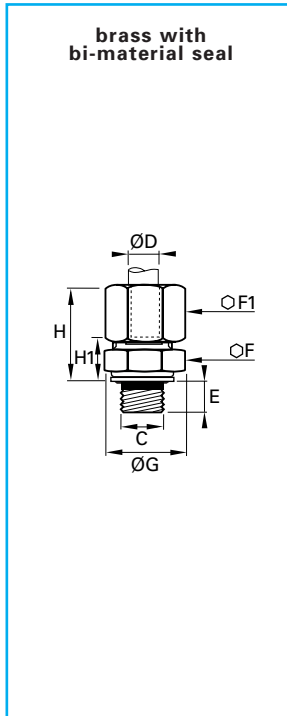
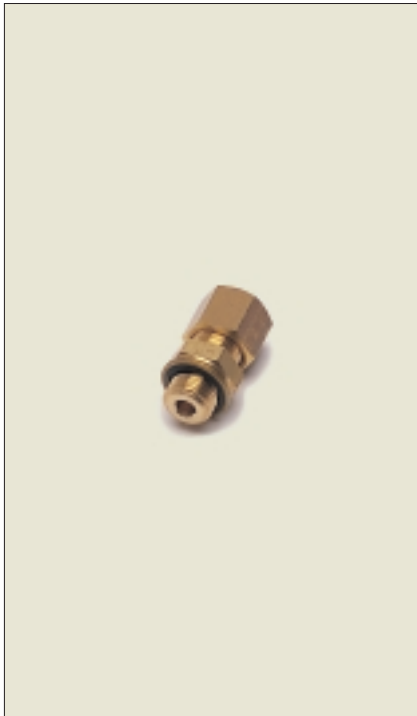


ØD mm	C BSPP/M5		E mm	F mm	F1 mm	H max mm	H1 mm	
4	M5X.8	0101 04 19	5	10	10	16.5	8	.012
4	G1/8	0101 04 10	6.5	13	10	16.5	8	.017
5	G1/8	0101 05 10	6.5	13	12	17.5	8.5	.019
6	G1/8	0101 06 10	6.5	13	13	18	8.5	.022
6	G1/4	0101 06 13	8	17	13	18	9.5	.034
8	G1/8	0101 08 10	6.5	13	14	19	8.5	.023
8	G1/4	0101 08 13	8	17	14	19.5	9	.034
8	G3/8	0101 08 17	11	22	14	20	10.5	.046
10	G1/4	0101 10 13	8	17	19	24	11	.049
10	G3/8	0101 10 17	11	22	19	24	11.5	.061
12	G1/4	0101 12 13	8	19	22	24	11	.062
12	G3/8	0101 12 17	11	22	22	24	11.5	.072
12	G1/2	0101 12 21	12	27	22	24	12	.090
14	G3/8	0101 14 17	11	22	24	25	10.5	.074
14	G1/2	0101 14 21	12	27	24	25	11	.097
15	G3/8	0101 15 17	11	22	24	25	10.5	.071
15	G1/2	0101 15 21	12	27	24	25	11	.112
16	G3/8	0101 16 17	11	22	27	27	12	.090
16	G1/2	0101 16 21	12	27	27	27	12.5	.110
18	G1/2	0101 18 21	12	27	30	29.5	12.5	.136
18	G3/4	0101 18 27	13	32	30	29.5	13	.153
20	G3/4	0101 20 27	13	32	32	31	13	.163
22	G3/4	0101 22 27	13	32	36	32	13	.195
22	G1"	0101 22 34	15	41	36	31	13.5	.260
25	G3/4	0101 25 27	13	36	41	35.5	13	.262
25	G1"	0101 25 34	15	41	41	35.5	13	.306
28	G1"	0101 28 34	15	41	42	35.5	13.5	.398

The captive sealing washers 0602 are shown on page H23.

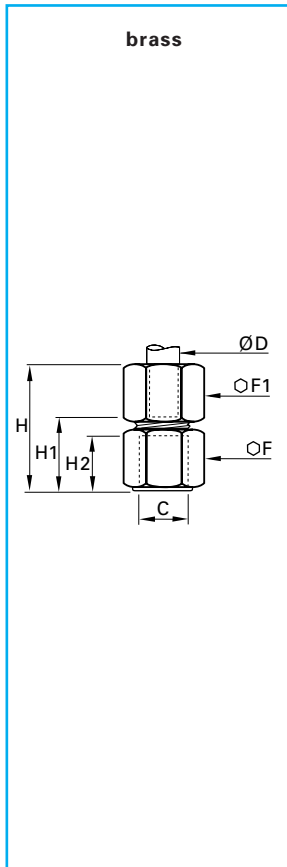
# threaded connectors

## 0101...39 male connector — BSPP



ØD mm	C BSPP		E mm	F mm	F1 mm	G mm	H mm	H1 mm	
4	G1/8	0101 04 10 39	5.5	13	10	14	17.5	9	.017
5	G1/8	0101 05 10 39	5.5	13	12	14	18.5	9.5	.019
6	G1/8	0101 06 10 39	5.5	13	13	14	19	9.5	.022
6	G1/4	0101 06 13 39	7	17	13	17	19	10.5	.034
8	G1/8	0101 08 10 39	5.5	13	14	14	20	9.5	.023
8	G1/4	0101 08 13 39	7	17	14	17	20.5	10	.034
8	G3/8	0101 08 17 39	9.5	22	14	22	21.5	12	.046
10	G1/4	0101 10 13 39	7	17	19	17	25	12	.049
10	G3/8	0101 10 17 39	9.5	22	19	22	25.5	13	.061
12	G1/4	0101 12 13 39	7	19	22	17	25	12	.062
12	G3/8	0101 12 17 39	9.5	22	22	22	25	13	.072
12	G1/2	0101 12 21 39	10.5	27	22	26	25	13.5	.090
14	G3/8	0101 14 17 39	9.5	22	24	22	26.5	12	.074
14	G1/2	0101 14 21 39	10.5	27	24	26	26.5	12.5	.097
15	G3/8	0101 15 17 39	9.5	22	24	22	26.5	12	.071
15	G1/2	0101 15 21 39	10.5	27	24	26	26.5	12.5	.112
16	G3/8	0101 16 17 39	9.5	22	27	22	28.5	13.5	.090
16	G1/2	0101 16 21 39	10.5	27	27	26	28.5	14	.110
18	G1/2	0101 18 21 39	10.5	27	30	26	31	14	.136
18	G3/4	0101 18 27 39	11.5	32	30	32	31	14.5	.153
20	G3/4	0101 20 27 39	11.5	32	32	32	32.5	14.5	.163
22	G3/4	0101 22 27 39	11.5	32	36	32	33.5	14.5	.195
22	G1"	0101 22 34 39	13	41	36	39.5	33	15.5	.260
25	G3/4	0101 25 27 39	11.5	36	41	32	37	14.5	.262
25	G1"	0101 25 34 39	13	41	41	39.5	37.5	15.5	.306
28	G1"	0101 28 34 39	13	41	42	39.5	37.5	15.5	.398

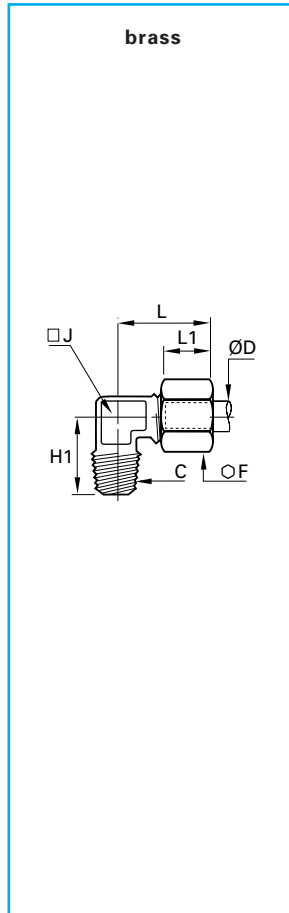
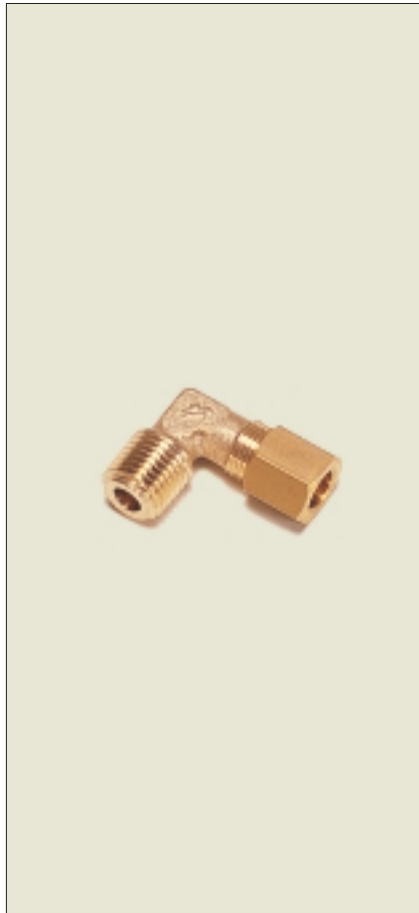
## 0114 female connector — BSPP



ØD mm	C BSPP		F mm	F1 mm	H max mm	H1 mm	H2 mm	
4	G1/8	0114 04 10	14	10	26	16.5	9.5	.021
4	G1/4	0114 04 13	17	10	30	20.5	13.5	.029
5	G1/8	0114 05 10	14	12	28	17	9.5	.024
5	G1/4	0114 05 13	17	12	31	21	13.5	.033
6	G1/8	0114 06 10	14	13	28	17	9.5	.025
6	G1/4	0114 06 13	17	13	32	21	13.5	.034
6	G3/8	0114 06 17	22	13	32	21.5	14	.051
8	G1/8	0114 08 10	14	14	29	16.5	9.5	.027
8	G1/4	0114 08 13	17	14	33	20.5	13.5	.035
8	G3/8	0114 08 17	22	14	34	21	14	.052
10	G1/4	0114 10 13	17	19	37	21.5	13.5	.051
10	G3/8	0114 10 17	22	19	37	22	14	.069
10	G1/2	0114 10 21	27	19	42	26.5	18.5	.100
12	G1/4	0114 12 13	19	22	36	20.5	13.5	.069
12	G3/8	0114 12 17	22	22	37	22	14	.077
12	G1/2	0114 12 21	27	22	42	26.5	18.5	.109
14	G1/4	0114 14 13	22	24	36	18.5	13.5	.084
14	G3/8	0114 14 17	22	24	38	21	14	.081
14	G1/2	0114 14 21	27	24	43	25.5	18.5	.112
15	G3/8	0114 15 17	22	24	38	21	14	.077
15	G1/2	0114 15 21	27	24	43	25.5	18.5	.109
16	G1/4	0114 16 13	24	27	36	18	13.5	.110
16	G3/8	0114 16 17	24	27	38	20.5	14	.106
16	G1/2	0114 16 21	27	27	44	26	18.5	.129
18	G3/8	0114 18 17	27	30	39	19.5	14	.141
18	G1/2	0114 18 21	27	30	45	26	18.5	.146
18	G3/4	0114 18 27	32	30	46	27	19.5	.168
20	G3/8	0114 20 17	30	32	38	18	14	.162
20	G1/2	0114 20 21	30	32	44.5	24	18.5	.174
20	G3/4	0114 20 27	32	32	47	26.5	19.5	.171
22	G3/4	0114 22 27	32	36	48	26.5	19.5	.201
25	G3/4	0114 25 27	36	41	50.5	26	19.5	.298

# threaded connectors

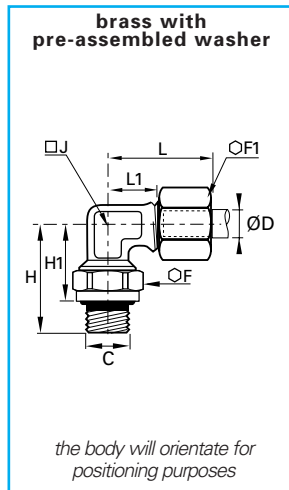
## 0109 male elbow — BSPT



ØD mm	C BSPT		F mm	H1 mm	J mm	L max mm	L1 mm	kg
4	R1/8	0109 04 10	10	17	8	19	9.5	.017
4	R1/4	0109 04 13	10	20	10	19	11	.024
5	R1/8	0109 05 10	12	17.5	8	21	11	.019
5	R1/4	0109 05 13	12	21.5	10	22	12	.029
6	R1/8	0109 06 10	13	18	8	22	11	.021
6	R1/4	0109 06 13	13	21.5	10	22	12	.030
8	R1/8	0109 08 10	14	18.5	10	28	15	.028
8	R1/4	0109 08 13	14	22	10	28	15	.033
8	R3/8	0109 08 17	14	24	12	28	15	.044
10	R1/4	0109 10 13	19	25	12	30	14.5	.052
10	R3/8	0109 10 17	19	25.5	12	30	14.5	.061
10	R1/2	0109 10 21	19	32	19	36	21	.105
12	R1/4	0109 12 13	22	26	15	30	15	.074
12	R3/8	0109 12 17	22	27	15	30	15	.077
12	R1/2	0109 12 21	22	32	19	36	21	.117
14	R3/8	0109 14 17	24	30	19	35	18	.103
14	R1/2	0109 14 21	24	32	19	35	18	.107
15	R3/8	0109 15 17	24	30	19	35	18	.104
15	R1/2	0109 15 21	24	32	19	35	18	.104
16	R3/8	0109 16 17	27	30	19	39	21	.118
16	R1/2	0109 16 21	27	33.5	19	39	21	.134
16	R3/4	0109 16 27	27	36.5	23	41	23	.186
18	R1/2	0109 18 21	30	35.5	23	41	21.5	.175
18	R3/4	0109 18 27	30	36.5	23	41	21.5	.201
20	R1/2	0109 20 21	32	36.5	23	42	21.5	.174
20	R3/4	0109 20 27	32	38	23	42	21.5	.274
22	R3/4	0109 22 27	36	40	27	50	30	.294
22	R1"	0109 22 34	36	44	27	50	30	.322
25	R3/4	0109 25 27	41	43	27	54	30	.330
25	R1"	0109 25 34	41	44	27	54	30	.360
28	R3/4	0109 28 27	42	46	32	54	30	.364
28	R1"	0109 28 34	42	48	32	54	30	.380

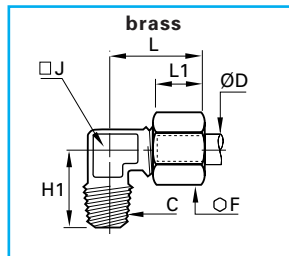
Metric taper threads or Briggs NPT threads are available to special order, subject to minimum quantities.

## 0199 male orientable elbow — BSPP



ØD mm	C BSPP		F mm	G mm	F1 mm	H mm	H1 min mm	H1 max mm	J mm	L mm	L1 mm	kg
4	G1/8	0199 04 10	14	15	10	23	16	17	8	19	9.5	.017
4	G1/4	0199 04 13	19	21	10	30.5	22	23.5	10	19	11	.024
6	G1/8	0199 06 10	14	15	13	23	16	17	8	22	11	.021
6	G1/4	0199 06 13	19	21	13	30.5	22	23.5	10	22	12	.030
8	G1/8	0199 08 10	14	15	14	24	17	18	10	28	15	.028
8	G1/4	0199 08 13	19	21	14	30.5	22	23.5	10	28	15	.033
8	G3/8	0199 08 17	22	24	14	33.5	24	25.5	12	28	15	.044
10	G1/4	0199 10 13	19	21	19	31	22.5	24	12	30	14.5	.052
10	G3/8	0199 10 17	22	24	19	33.5	24	25.5	12	30	14.5	.061
10	G1/2	0199 10 21	27	29.5	19	40	39.5	31	19	37	22	.105
14	G3/8	0199 14 17	22	24	24	35.5	26	27.5	19	35	18	.103
14	G1/2	0199 14 21	27	29.5	24	40	29.5	31	19	35	18	.107
18	G1/2	0199 18 21	27	29.5	30	40	29	30.5	23	41	21.5	.175
18	G3/4	0199 18 27	32	35	30	43.5	32	33.5	23	41	21.5	.201
22	G3/4	0199 22 27	32	35	36	45.5	34	36	32	51	31	.294
22	G1"	0199 22 34	41	45	36	54	40.5	43	32	51	31	.322
28	G1"	0199 28 34	41	45	42	54	40.5	43	32	54	30	.380

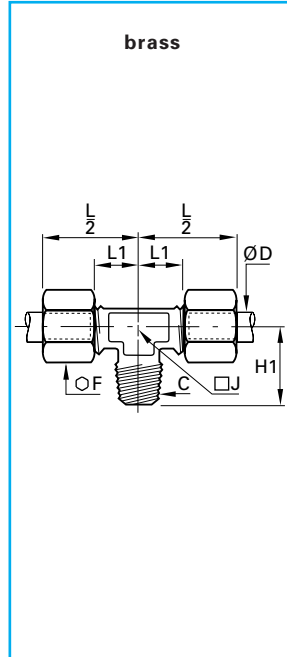
## 0109 male elbow — NPT



ØD mm	C NPT		F mm	H1 mm	J mm	L max mm	L1 mm	kg
6	1/8	0109 06 11	13	18	8	22	11	.021
6	1/4	0109 06 14	13	21.5	10	22	12	.030
8	1/8	0109 08 11	14	18.5	10	28	15	.028
8	1/4	0109 08 14	14	22	10	28	15	.033
10	1/4	0109 10 14	19	25	12	30	14.5	.052

# threaded connectors

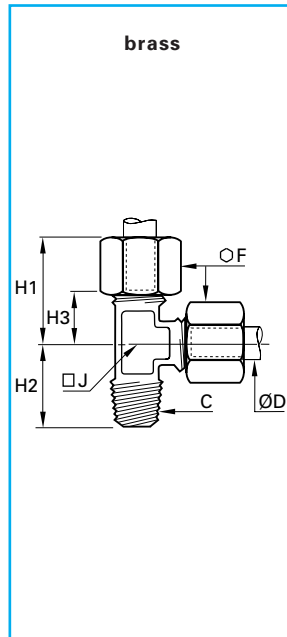
## 0108 male branch tee — BSPT



ØD mm	C BSPT		F mm	H1 mm	J mm	$\frac{L}{2}$ mm	L1 mm	
4	R1/8	0108 04 10	10	17	8	19	9.5	.026
5	R1/8	0108 05 10	12	17.5	8	21	11	.031
6	R1/8	0108 06 10	13	18	8	22	11	.033
6	R1/4	0108 06 13	13	21.5	10	27	16	.050
8	R1/8	0108 08 10	14	18.5	10	28	15	.046
8	R1/4	0108 08 13	14	22	10	28	15	.049
8	R3/8	0108 08 17	14	24	12	28	15	.063
10	R1/4	0108 10 13	19	25	12	30	14.5	.085
10	R3/8	0108 10 17	19	25.5	12	30	14.5	.093
12	R1/4	0108 12 13	22	26	15	30	15	.115
12	R3/8	0108 12 17	22	27	15	30	15	.118
14	R3/8	0108 14 17	24	30	19	35	18	.156
14	R1/2	0108 14 21	24	32	19	35	18	.193
15	R3/8	0108 15 17	24	30	19	35	18	.145
15	R1/2	0108 15 21	24	32	19	35	18	.156
16	R3/8	0108 16 17	27	30	19	39	21	.190
16	R1/2	0108 16 21	27	33.5	19	39	21	.200
18	R1/2	0108 18 21	30	35.5	23	41	21.5	.264
18	R3/4	0108 18 27	30	36.5	23	41	21.5	.270
20	R3/4	0108 20 27	32	38	23	42	21.5	.280
22	R3/4	0108 22 27	36	40	27	50	29	.440
22	R1"	0108 22 34	36	44	27	50	29	.477

Metric taper threads or Briggs NPT threads are available to special order, subject to minimum quantities.

## 0103 male run tee — BSPT

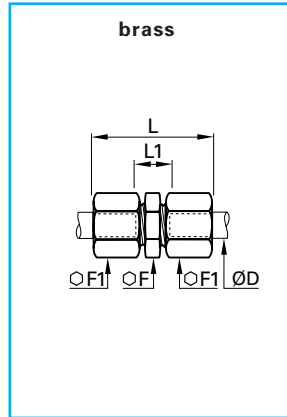


ØD mm	C BSPT		F mm	H1 max mm	H2 mm	H3 mm	J mm	
4	R1/8	0103 04 10	10	19	17	9.5	8	.026
5	R1/8	0103 05 10	12	21	17.5	11	8	.031
6	R1/8	0103 06 10	13	22	18	11	8	.031
6	R1/4	0103 06 13	13	27	21.5	16	10	.049
8	R1/8	0103 08 10	14	28	18.5	15	10	.044
8	R1/4	0103 08 13	14	28	22	15	10	.050
8	R3/8	0103 08 17	14	28	24	15	12	.062
10	R1/4	0103 10 13	19	30	25	14.5	12	.085
10	R3/8	0103 10 17	19	30	25.5	14.5	12	.092
12	R1/4	0103 12 13	22	30	26	15	15	.113
12	R3/8	0103 12 17	22	30	27	15	15	.120
14	R3/8	0103 14 17	24	35	30	18	19	.156
14	R1/2	0103 14 21	24	35	32	18	19	.166
15	R3/8	0103 15 17	24	35	30	18	19	.141
15	R1/2	0103 15 21	24	35	32	18	19	.151
16	R3/8	0103 16 17	27	39	30	21	19	.189
16	R1/2	0103 16 21	27	39	33.5	21	19	.199
18	R1/2	0103 18 21	30	41	35.5	21.5	23	.263
18	R3/4	0103 18 27	30	41	36.5	21.5	23	.281
20	R3/4	0103 20 27	32	42	38	21.5	23	.295
22	R3/4	0103 22 27	36	50	40	29	27	.428

Metric taper threads or Briggs NPT threads are available to special order, subject to minimum quantities.

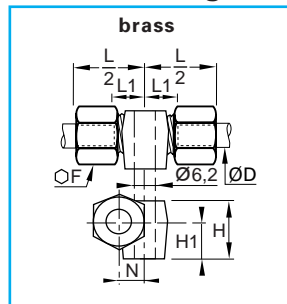
# tube-to-tube connectors

## 0106 straight union



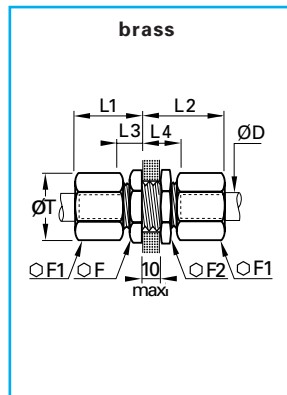
ØD mm		F mm	F1 mm	L max mm	L1 mm	
4	0106 04 00	10	10	28	10	.017
5	0106 05 00	11	12	31	11	.024
6	0106 06 00	11	13	32	11	.026
8	0106 08 00	13	14	36	10	.031
10	0106 10 00	17	19	42	13	.070
12	0106 12 00	19	22	42	13	.092
14	0106 14 00	22	24	45	11	.096
15	0106 15 00	22	24	45	11	.104
16	0106 16 00	24	27	48	13	.142
18	0106 18 00	27	30	53	14	.191
20	0106 20 00	30	32	56	14	.216
22	0106 22 00	32	36	60	14	.280
25	0106 25 00	36	41	64	14	.398
28	0106 28 00	42	41	64	14	.400

## 0113 union connector with mounting hole



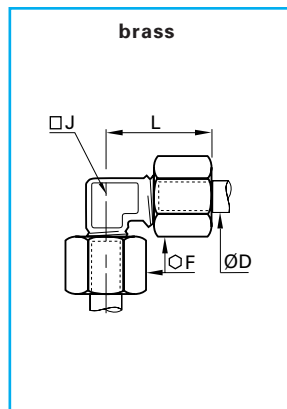
ØD mm		F mm	H mm	H1 mm	H1 mm	L mm	N mm	
4	0113 04 00	10	10.5	7	19	9.5	6	.022
6	0113 06 00	13	13	9	20.5	10	7	.033
8	0113 08 00	14	14.5	9.5	23.5	11	8	.040
10	0113 10 00	19	19.5	12.5	26	11	9	.081
12	0113 12 00	22	22	14	26.5	12	11	.109
14	0113 14 00	24	25	16	28	11	12	.122

## 0116 bulkhead union



ØD mm		F mm	F1 mm	F2 mm	L1 max mm	L2 min mm	L3 mm	L4 mm	T min mm	
4	0116 04 00	10	10	13	17	27	7	17	8.3	.024
5	0116 05 00	13	12	14	18	28	7.5	17.5	10.3	.035
6	0116 06 00	13	13	14	19	28	7.5	17.5	10.3	.037
8	0116 08 00	14	14	17	20	29	7	17	12.3	.047
10	0116 10 00	19	19	22	25	33	9	19	16.5	.101
12	0116 12 00	22	22	22	25	33	9	19	18.5	.125
14	0116 14 00	24	24	24	25	35	8	18	20.5	.143
15	0116 15 00	24	24	24	25	35	8	18	20.5	.133
16	0116 16 00	27	27	27	28	36	9.5	19.5	22.5	.191
18	0116 18 00	27	30	30	30	40	10.5	20.5	24.5	.244
20	0116 20 00	32	30	32	31	41	11	21	27.5	.268
22	0116 22 00	36	36	36	32	42	11	21	30.5	.372
25	0116 25 00	36	41	38	36	46	11	21	33.5	.475

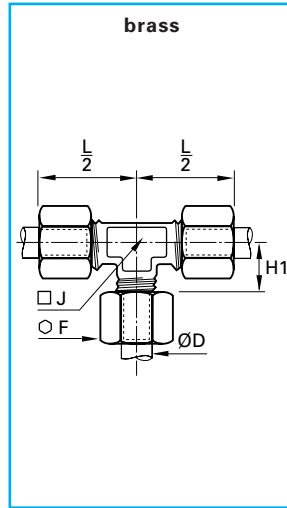
## 0102 equal elbow



ØD mm		F mm	J mm	L max mm	
4	0102 04 00	10	5	19	.017
5	0102 05 00	12	8	21	.024
6	0102 06 00	13	8	22	.027
8	0102 08 00	14	10	28	.038
10	0102 10 00	19	12	30	.072
12	0102 12 00	22	15	30	.097
14	0102 14 00	24	19	35	.131
15	0102 15 00	24	19	35	.119
16	0102 16 00	27	19	39	.164
18	0102 18 00	30	23	41	.230
20	0102 20 00	32	23	42	.236
22	0102 22 00	36	27	50	.376
25	0102 25 00	41	27	54	.464
28	0102 28 00	42	32	54.5	.460

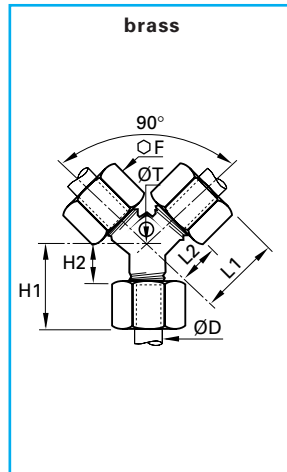
# tube to tube connectors

## 0104 equal tee



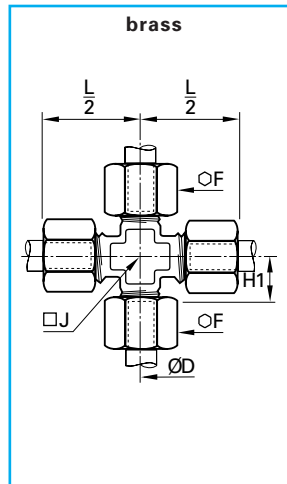
ØD mm		F mm	H1 mm	J mm	$\frac{L}{2}$ mm	$\Delta$ kg
4	0104 04 00	10	9.5	8	19	.029
5	0104 05 00	12	11	8	21	.035
6	0104 06 00	13	11	8	22	.040
8	0104 08 00	14	15	10	28	.055
10	0104 10 00	19	14.5	12	30	.103
12	0104 12 00	22	15	15	30	.139
14	0104 14 00	24	18	19	35	.188
15	0104 15 00	24	18	19	35	.168
16	0104 16 00	27	21	19	39	.236
18	0104 18 00	30	21.5	23	41	.322
20	0104 20 00	32	21.5	23	42	.324
22	0104 22 00	36	29	27	50	.518
25	0104 25 00	41	29	27	54	.646
28	0104 28 00	42	30	32	55	.650

## 0142 equal "Y" connector



ØD mm		F mm	H1 max mm	H2 mm	L1 max mm	L2 mm	T mm	$\Delta$ kg
4	0142 04 00	10	16.5	7	26.5	17	4.2	.032
5	0142 05 00	12	18.5	8.5	27	17	4.2	.046
6	0142 06 00	13	19.5	8.5	28	17	4.2	.050
8	0142 08 00	14	21	8	30	17	6.2	.062
10	0142 10 00	19	24.5	9	37.5	22	6.2	.130
12	0142 12 00	22	26	11	38	23	6.2	.171
14	0142 14 00	24	28	11	41.5	24.5	6.2	.199
15	0142 15 00	24	28	11	41.5	24.5	6.2	.177
16	0142 16 00	27	30	12	43	25	6.2	.257
18	0142 18 00	30	31.5	12	50.5	31	10.2	.350
20	0142 20 00	32	33.5	13	51.5	31	10.2	.410
22	0142 22 00	36	34	13	53	32	10.2	.543
25	0142 25 00	41	39	14	59	34	10.2	.728

## 0107 equal cross





















ØD mm		F mm	H1 mm	J mm	$\frac{L}{2}$ mm	$\Delta$ kg
4	0107 04 00	10	9.5	8	19	.037
5	0107 05 00	12	11	8	21	.048
6	0107 06 00	13	11	8	22	.053
8	0107 08 00	14	15	11	28	.074
10	0107 10 00	19	14.5	14	30	.143
12	0107 12 00	22	15	15	30	.185
14	0107 14 00	24	18	20	35	.241
15	0107 15 00	24	18	20	35	.223
16	0107 16 00	27	21	20	39	.311
18	0107 18 00	30	21.5	25	41	.431
20	0107 20 00	32	21.5	25	42	.442
22	0107 22 00	36	29	27	50	.682
25	0107 25 00	41	29	27	50	.811

# brass sleeves and nuts

The table below illustrates the wide number of possible combinations available when using the Legris brass

compression range. In addition the advantages of the Legris reduction assembly are shown on page G25.

brass fitting body					
					
<p>0110</p>  <p>brass</p>		<p>0110... 60</p>  <p>brass</p>		<p>0110... 40</p>  <p>steel</p>	<p>0110... 70</p>  <p>plastic</p>
<p>0124</p>  <p>brass</p>	<p>0111</p>  <p>brass BNA</p>	<p>0124</p>  <p>brass</p>	<p>0111</p>  <p>brass BNA</p>	<p>0124... 40</p>  <p>steel</p>	
 <p>brass tube</p>  <p>plastic tube</p>  <p>copper tube</p>	 <p>copper tube</p>	 <p>soft copper tube subjected to vibration and lateral forces</p>	 <p>half hard copper tube subjected to vibration and lateral forces</p>	 <p>steel tube: low and medium pressure hydraulics</p>	 <p>plastic tubes</p>



## 0124

This type of brass sleeve is supplied as standard and is for use with nut **0110**. This 'nut and sleeve' assembly is suitable for connecting copper, brass, thin walled steel, and plastic tube as well as **0122** and **0165** tube adapters.



## 0124... 40

This steel sleeve is for use with hydraulic fluids. It is used with the nut reference **0110...suffix 40**. This 'nut and sleeve' assembly is suitable for medium pressure hydraulics (see page G11)



## 0111

This brass sleeve conforms to BNA 34-E-29601. It is assembled with a nut **0110** and is suitable for copper tube.



## 0110/0110... 40

Brass nut **0110** is used with brass sleeve **0124**, or **0111** or blanking plug **0126**. Steel nut **0110...suffix 40** is used with steel sleeve **0124...suffix 40**. It is recommended to lubricate threads and components.



## 0110... 60

The use of this nut improves the grip on soft copper tube and on all fittings which may be subjected to relatively large vibrations or abnormal lateral forces. Nut **0110...suffix 60** should be used with olives **0124** or **0111**.



## 0110... 70

This product acts as both nut and sleeve when used with soft plastic tubing

- 1 - manually tighten the **0110...70** several times on to the fitting
- 2 - push home the plastic tube through the nut/sleeve
- 3 - manually fully tighten the plastic nut/sleeve

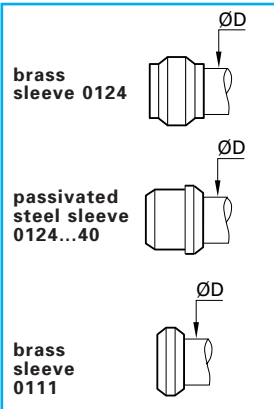
The above recommendations are given in good faith. However, since each application is different it is advisable to undertake tests in actual working conditions.

# complementary fittings

## 0124, 0124 suffix

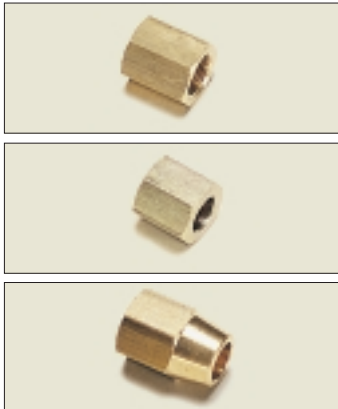


## 40, 0111 sleeves

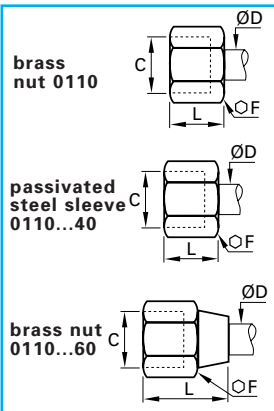


ØD mm		kg		kg		kg
4	0124 04 00	.001	0124 04 00 40	.001	0111 04 00	.001
5	0124 05 00	.001	0124 05 00 40	.001	0111 05 00	.001
6	0124 06 00	.001	0124 06 00 40	.001	0111 06 00	.001
8	0124 08 00	.002	0124 08 00 40	.002	0111 08 00	.002
10	0124 10 00	.003	0124 10 00 40	.003	0111 10 00	.002
12	0124 12 00	.004	0124 12 00 40	.004	0111 12 00	.003
14	0124 14 00	.004	0124 14 00 40	.005	0111 14 00	.003
15	0124 15 00	.004	0124 15 00 40	.005	0111 15 00	.003
16	0124 16 00	.006	0124 16 00 40	.006	0111 16 00	.004
18	0124 18 00	.007	0124 18 00 40	.008		
20	0124 20 00	.009	0124 20 00 40	.008		
22	0124 22 00	.012	0124 22 00 40	.010		
25	0124 25 00	.017	0124 25 00 40	.015		
28	0124 28 00	.017				

## 0110, 0110 suffix



## 40, 0110 suffix



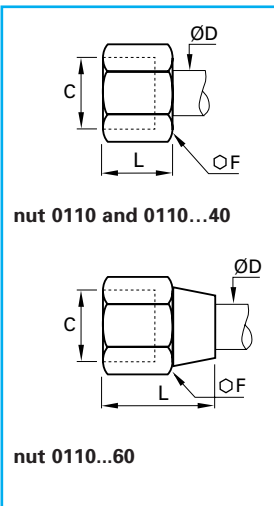
## 60 nuts

ØD mm	C metric		kg		kg		kg
4	M8x1	0110 04 00	.005	0110 04 00 40	.004	0110 04 00 60	.006
5	M10x1	0110 05 00	.006	0110 05 00 40	.006	0110 05 00 60	.009
6	M10x1	0110 06 00	.008	0110 06 00 40	.008	0110 06 00 60	.011
8	M12x1	0110 08 00	.008	0110 08 00 40	.009	0110 08 00 60	.012
10	M16x1.5	0110 10 00	.019	0110 10 00 40	.019	0110 10 00 60	.027
12	M18x1.5	0110 12 00	.026	0110 12 00 40	.027	0110 12 00 60	.041
14	M20x1.5	0110 14 00	.029	0110 14 00 40	.030	0110 14 00 60	.051
15	M20x1.5	0110 15 00	.028	0110 15 00 40	.030	0110 15 00 60	.050
16	M22x1.5	0110 16 00	.043	0110 16 00 40	.043	0110 16 00 60	.072
18	M24x1.5	0110 18 00	.059	0110 18 00 40	.057	0110 18 00 60	.097
20	M27x1.5	0110 20 00	.057	0110 20 00 40	.062	0110 20 00 60	.102
22	M30x1.5	0110 22 00	.079	0110 22 00 40	.084	0110 22 00 60	.129
25	M33x1.5	0110 25 00	.121	0110 25 00 40	.130	0110 25 00 60	.194
28	M36x1.5	0110 28 00	.109				

### Technical specification of nuts

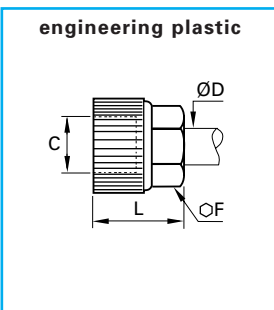
#### tightening torque:

Max kg = tightening torque for nut 0110 and sleeve 0124 on copper, brass or steel tube



ØD mm	F 0110	L 0110	F 0110...60	L 0110...60	max kg torque copper or brass	F 0110...40	L 0110...40	max kg torque steel
4	10	11	11	14.5	.7	10	11	1.5
5	12	11	13	17	.7	12	11.5	1.5
6	13	11	13	17.5	1.5	13	12	2.5
8	14	13	16	20	1.5	14	13.5	2.5
10	19	15	20	23	1.8	19	16	3
12	22	15	22	25	3	22	16.5	4.5
14	24	15	24	30	3.5	24	17	5.5
15	24	15	24	30	4	24	17	6
16	27	17	27	32	5	27	18	7
18	30	18	30	35	6	30	19	9
20	32	18	32	35	6	32	20.5	10
22	36	19	36	36	7	36	21.5	12
25	41	21	41	40	8	41	24	13
28	42	21			9			

## 0110 suffix 70 nut-sleeve



ØD mm	C		F mm	L mm	kg
4	M8x1	0110 04 00 70	8	13	.001
6	M10x1	0110 06 00 70	11	15	.002
8	M12x1	0110 08 00 70	13	16	.002
10	M16x1.5	0110 10 00 70	17	19	.004
12	M18x1.5	0110 12 00 70	19	19	.005
14	M20x1.5	0110 14 00 70	22	20	.007
16	M22x1.5	0110 16 00 70	24	21	.009

NB. plastic nut-olives should not be used on metal tubes.