

# VACUUM FITTINGS AND HOSES



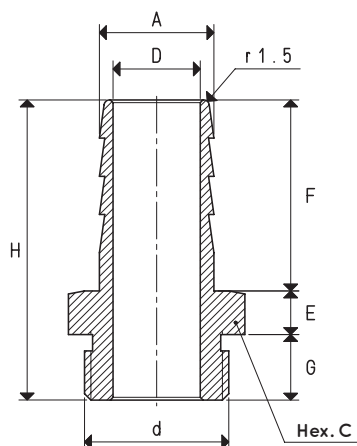
HOSE ENDS  
FITTINGS AND CAPS  
ROTATING QUICK COUPLING FITTINGS  
COMPRESSED AIR AND VACUUM FLEXIBLE HOSES AND RELATIVE FITTINGS  
TPR FLEXIBLE HOSE FITTINGS

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PG. 6.02 ÷ 6.03  
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3D drawings are available on [vuototecnica.net](http://vuototecnica.net)

## HOSE ENDS

Our hose ends are traditional barbed nickel-plated and brass fittings. They are suited for connecting smooth or reinforced flexible hoses with an internal diameter up to 76 mm.



Item	d Ø	A Ø	C	D Ø	E	F	G	H	Material	Weight g
<b>RS 1/4"</b>	G1/4"	9	17	5	5	18	12	35	nickel-plated brass	20
<b>RS 3/8"</b>	G3/8"	13	19	9	5	20	8	33	nickel-plated brass	30
<b>RS 1/2"</b>	G1/2"	16	23	12	5	25	10	40	nickel-plated brass	50
<b>RS 3/4"</b>	G3/4"	21	28	16	8	35	12	55	nickel-plated brass	90
<b>RS 1"</b>	G1"	27	36	22	8	35	12	55	nickel-plated brass	130
<b>RS 1" 1/4</b>	G1" 1/4	35	44	28	10	42	15	67	nickel-plated brass	270
<b>RS 1" 1/2</b>	G1" 1/2	40	50	33	10	45	15	70	nickel-plated brass	320
<b>RS 3"</b>	G3"	76	100	66	10	60	30	100	nickel-plated iron	1450

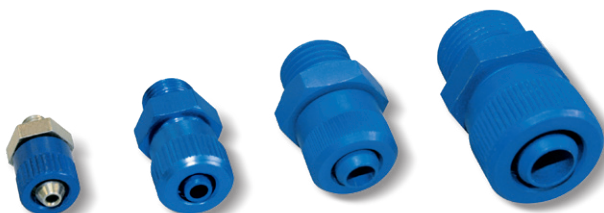
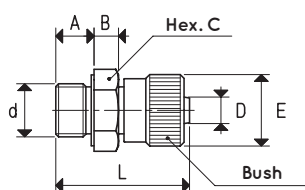


## FITTINGS AND CAPS

The fittings described on this page are particularly suitable for connecting vacuum cup holders to their manifolds and in all those cases that require a connection to vacuum sources via smooth flexible hoses with internal diameters of 4, 6 and 9 mm, which is the maximum allowed for a vacuum hose with no internal reinforcement. These are semi-rapid fittings. The hose is fixed by manually screwing the reeded bush with no need for keys.

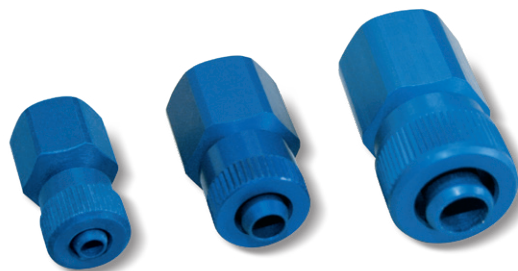
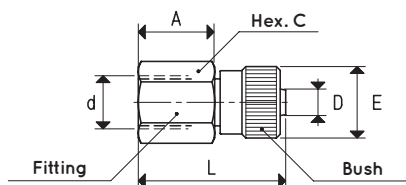
The threaded connections are male or female, according to the requirements. The range is completed by L and T-type fittings and caps with O-rings.

The fittings are available in practical 10 or 50-piece packages and are supplied with their nylon seal.



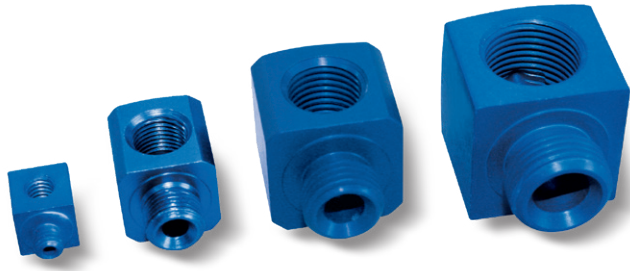
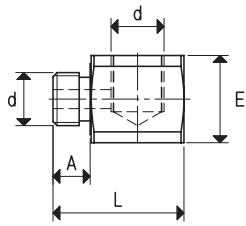
### MALE FITTING

Item	d Ø	A	B	C	D Ø int. hose	E Ø	L	Fitting material	Bush material	Weight g
<b>RM M5</b>	M5	5.0	3.5	10	4	10	19.5	tropicalised iron	anodised aluminium	6
<b>RM 1/8"</b>	G1/8"	7.0	4.5	14	4	13	24.5	anodised aluminium	anodised aluminium	6
<b>RM 1/4"</b>	G1/4"	8.5	5.0	17	6	15	27.0	anodised aluminium	anodised aluminium	10
<b>RM 3/8"</b>	G3/8"	10.5	5.0	19	9	20	32.5	anodised aluminium	anodised aluminium	18



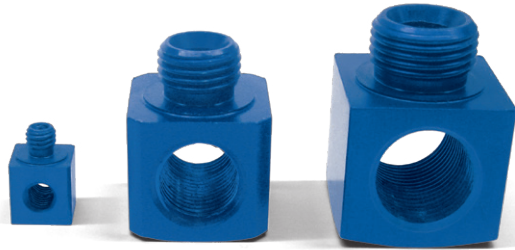
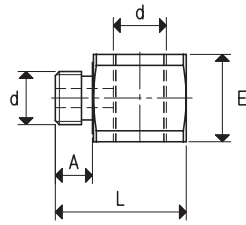
### FEMALE FITTING

Item	d Ø	A	C	D Ø int. hose	E Ø	L	Fitting material	Bush material	Weight g
<b>RF 1/8"</b>	G1/8"	14	14	4	13	27.0	anodised aluminium	anodised aluminium	8
<b>RF 1/4"</b>	G1/4"	16	17	6	15	30.0	anodised aluminium	anodised aluminium	12
<b>RF 3/8"</b>	G3/8"	20	19	9	20	32.5	anodised aluminium	anodised aluminium	16



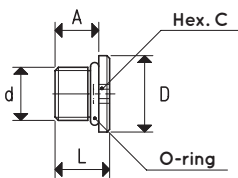
L-FITTING

Item	d Ø	A	E	L	Fitting material	Weight g
<b>RL M5</b>	M5	4.5	10	15.0	anodised aluminium	2
<b>RL 1/8"</b>	G1/8"	7.0	16	24.0	anodised aluminium	10
<b>RL 1/4"</b>	G1/4"	9.0	22	30.0	anodised aluminium	22
<b>RL 3/8"</b>	G3/8"	11.0	25	32.5	anodised aluminium	30



T-FITTING

Item	d Ø	A	E	L	Fitting material	Weight g
<b>RT M5</b>	M5	4.5	10	15.0	anodised aluminium	1
<b>RT 1/8"</b>	G1/8"	7.0	16	24.0	anodised aluminium	9
<b>RT 1/4"</b>	G1/4"	9.0	22	30.0	anodised aluminium	21
<b>RT 3/8"</b>	G3/8"	11.0	25	32.5	anodised aluminium	29



CAP WITH O-RING

Item	d Ø	A	C	D Ø	L	Fitting material	Weight g
<b>00 15 291</b>	M5	4	2.5	8	6.5	nickel-plated brass	1
<b>00 11 44</b>	G1/8"	7	3.0	15	9.5	nickel-plated brass	6
<b>00 11 06</b>	G1/4"	8	6.0	18	11.0	nickel-plated brass	10
<b>00 18 33</b>	G3/8"	9	8.0	21	12.5	nickel-plated brass	18
<b>00 15 273</b>	G1/2"	11	10.0	26	14.5	nickel-plated brass	21

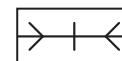
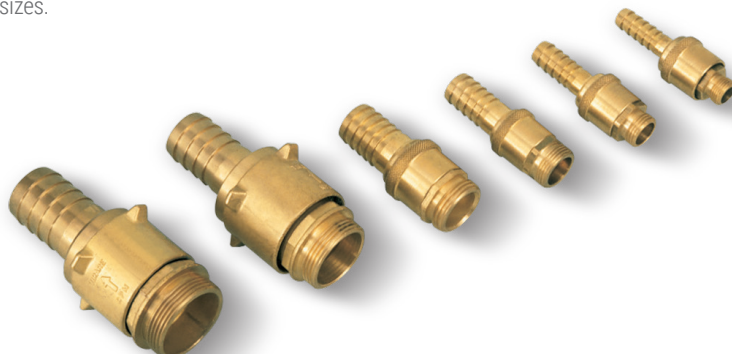
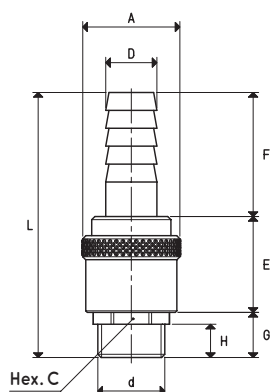
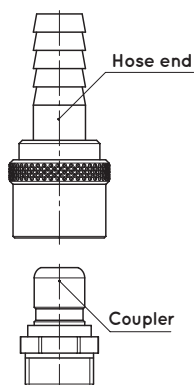


## ROTATING QUICK COUPLING FITTINGS

Quick coupling fittings are composed of a jack with hose end connector and a threaded male coupler which connects itself to the jack. They are fixed by a ball ring pushed by a spring. A nitrile rubber seal guarantees a perfect vacuum seal.

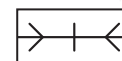
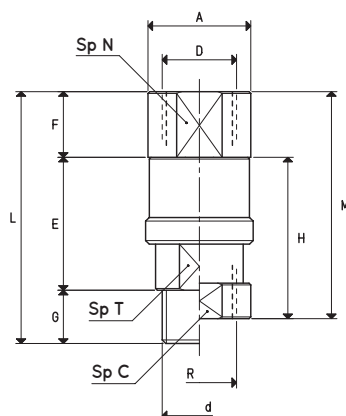
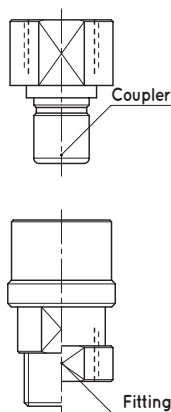
The structure of this type of fitting allows the two components to rotate freely at a low speed and to rapidly couple and disconnect by manually acting on the jack reeded ring nut. These fittings are fully made with brass and are available in various sizes.

The two components of the fittings are quick coupling and are not self-retaining. These fittings are made entirely of brass and are available in various sizes.



Item	d	A	C	D	E	F	G	H	L	Material	Hose end	Hose end weight	Coupling	Coupling weight
	Ø		Ø	Ø							item	g	item	g
RR 3/8"	G3/8"	30	21	13	29.5	39.5	14	10.5	83.0	brass	00 RR 3/8 02	100	00 RR 3/8 01	38
RR 1/2"	G1/2"	30	21	16	30.5	38.5	14	10.5	83.0	brass	00 RR 1/2 02	104	00 RR 1/2 01	34
RR 3/4"	G3/4"	30	26	20	29.0	38.5	15	10.5	82.5	brass	00 RR 3/4 02	118	00 RR 3/4 01	50
RR 1"	G1"	38	34	25	30.0	40.0	17	12.0	87.0	brass	00 RR 1 02	166	00 RR 1 01	92
RR 1" 1/4	G1" 1/4	68	42	35	49.5	49.5	24	13.5	123.0	brass	00 RR 1 1/4 02	568	00 RR 1 1/4 01	210
RR 1" 1/2	G1" 1/2	68	48	40	49.0	54.0	25	17.0	128.0	brass	00 RR 1 1/2 02	710	00 RR 1 1/2 01	250

Max rotation speed - 38 rpm



Item	A	C	D	d	E	F	G	H	L	M	N	R	T	Material	Fitting	Fitting weight	Coupling	Coupling weight
	Ø		Ø	Ø								Ø			item	g	item	g
RRF 3/8"	24.5	--	G3/8"	G3/8"	37	19.0	15	--	71.0	--	22	--	22	brass	00 RRF 3/8 02	77	00 RRF 3/8 01	58
RRF 1/2"	27.5	--	G1/2"	G1/2"	37	18.0	15	--	70.0	--	26	--	24	brass	00 RRF 1/2 02	79	00 RRF 1/2 01	72
RRF 3/4"	32.0	--	G3/4"	G3/4"	37	19.0	15	--	71.0	--	30	--	28	brass	00 RRF 3/4 02	149	00 RRF 3/4 01	132
RRF 1"	40.0	--	G1"	G1"	36	22.5	15	--	73.5	--	38	--	32	brass	00 RRF 1 02	369	00 RRF 1 01	355
RRFF 3/8"	24.5	22	G3/8"	--	--	20.0	--	42	--	62.0	22	G3/8"	--	brass	00 RRFF 3/8 02	82	00 RRF 3/8 01	58
RRFF 1/2"	27.5	24	G1/2"	--	--	18.0	--	42	--	60.0	26	G1/2"	--	brass	00 RRFF 1/2 02	80	00 RRF 1/2 01	72
RRFF 3/4"	32.0	30	G3/4"	--	--	20.0	--	42	--	62.0	30	G3/4"	--	brass	00 RRFF 3/4 02	199	00 RRF 3/4 01	132
RRFF 1"	40.0	38	G1"	--	--	22.5	--	56	--	78.5	38	G1"	--	brass	00 RRFF 1 02	409	00 RRF 1 01	355

Note: Add the letter V to the item for fittings supplied with a Viton seal (Example: RRF 1"V).

Max rotation speed - 38 rpm

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130

TPL flexible hoses are made with Polyamide 11 of vegetable derivation and are suited for compressed air and vacuum for internal diameters up to 9 mm, as well as for compressed air only.

They feature a good flexibility and are lightweight, very low water absorption and excellent mechanical performance. They also feature an excellent resistance to low and high temperatures, chemical agents, pneumatic pressure and ageing.

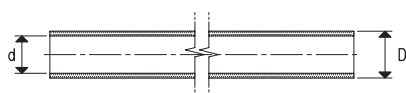
Our TPR flexible hoses have been specially designed for vacuum and are composed of a single piece with plastic insulation and self-extinguishing materials, including the hose reinforcement core. Their excellent flexibility ensures minimal bending radius and are very light in relation to their great resistance to crushing.

Their smooth inside allows reducing harmful load losses to the minimum.

The excellent functionality of these flexible hoses is associated with a high resistance to abrasion, to weather agents and most chemical products.

TPL flexible hose connection is ensured by the previously described fittings, while we have created a completely new line of RTPR fittings for TPR hoses. RTPR fittings from 3/8" to 1" are made of self-extinguishing PVC. The larger ones are made of nickel-plated metal.

The fittings are all extremely sturdy and offer a provide vacuum seal. The use of these fittings eliminates unsightly hose clamps and make the connection much faster and safer. They are available in various sizes, depending on the diameter of the hose to be connected.

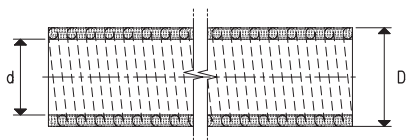


TPL HOSE

Item	d Ø int.	D Ø ext.	Bending radius	Weight g/m	Package m	Material	Standard colour
<b>TPL 2</b>	2.5	4	20	8.0	100	polyamide 11	light blue
<b>TPL 4</b>	4.0	6	30	19.5	100	polyamide 11	light blue
<b>TPL 6</b>	6.0	8	40	20.5	100	polyamide 11	light blue
<b>TPL 8</b>	8.0	10	60	24.0	100	polyamide 11	light blue
<b>TPL 9</b>	9.0	12	70	28.0	50	polyamide 11	light blue
<b>TPL 12</b>	12.0	15	95	67.0	50	polyamide 11	light blue
<b>TPL 16</b>	16.0	18	130	56.0	50	polyamide 11	light blue
<b>TPL 18</b>	18.0	22	300	133.0	50	polyamide 11	light blue

Operating temperature: -40° / +70°C

Other colours upon request



TPR HOSE

Item	d Ø int.	D Ø ext.	Bending radius	Weight g/m	Package m	Material	Standard colour
<b>TPR 3/8"</b>	12.7	17.8	60	150	30	pvc	grey
<b>TPR 1/2"</b>	16.2	21.1	80	170	30	pvc	grey
<b>TPR 3/4"</b>	21.3	26.4	105	230	30	pvc	grey
<b>TPR 1"</b>	27.0	33.1	135	370	30	pvc	grey
<b>TPR 1" 1/4</b>	35.7	41.8	175	500	30	pvc	grey
<b>TPR 1" 1/2</b>	40.6	47.8	200	630	30	pvc	grey
<b>TPR 2"</b>	51.9	59.8	260	900	30	pvc	grey

Operating temperature: -10° / +60 °C

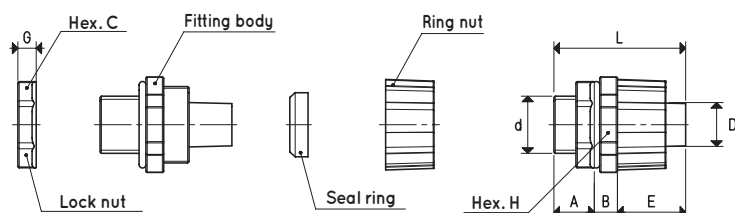
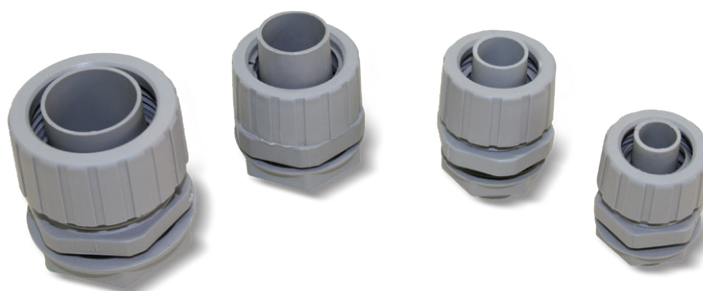
Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$



## TPR FLEXIBLE HOSE FITTINGS

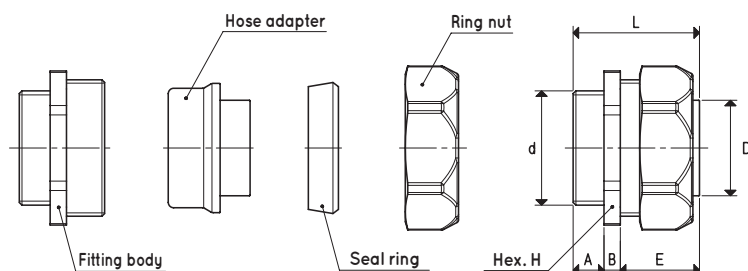
3D drawings are available on [vuototecnica.net](http://vuototecnica.net)



### RTPR FITTINGS

Item	d Ø	A	B	C	D Ø	E	G	H	L	Material	Colour	Weight g
<b>RTPR 3/8"</b>	G3/8"	14.5	8.5	26	12.0	23.5	6	28	46.5	pvc	grey	12
<b>RTPR 1/2"</b>	G1/2"	14.5	9.0	28	15.5	26.5	7	33	50.0	pvc	grey	18
<b>RTPR 3/4"</b>	G3/4"	14.0	10.5	35	20.8	26.5	9	38	51.0	pvc	grey	26
<b>RTPR 1"</b>	G1"	16.0	9.0	41	26.5	32.5	10	44	57.5	pvc	grey	36

Operating temperature: -10° / +60 °C



### RTPR FITTINGS

Item	d Ø	A	B	D Ø	E	H	L	Material	Weight g
<b>RTPR 1" 1/4</b>	G1" 1/4	11	6	34.5	28.5	52	45.5	nickel-plated brass	340
<b>RTPR 1" 1/2</b>	G1" 1/2	14	7	39.5	34.0	60	55.0	nickel-plated brass	530
<b>RTPR 2"</b>	G2"	14	7	50.0	33.0	74	54.0	nickel-plated brass	596

Operating temperature: -20° / +60 °C

Transformation ratio: N (newton) = Kg x 9.81 (force of gravity)

inch =  $\frac{\text{mm}}{25.4}$  ; pounds =  $\frac{\text{g}}{453.6} = \frac{\text{Kg}}{0.4536}$

Adapters for GAS - NPT threading available on page 1.130