

stainless steel function fittings



stainless steel function fittings

In the field of industrial automation, many functions can be controlled by purpose designed fittings. Legris **stainless steel pneumatic function fittings** have been developed to perform such functions. They are also designed for excellent resistance to **aggressive / corrosive** environments and fluids.

allowing fluid to pass in one direction whilst preventing flow in the other direction



non-return valves



Allow fluid to pass in one direction whilst preventing flow in the other. Robust and extremely compact these units are suitable for use as a safety item in all fluids circuits. Ideal for use in severe conditions and aggressive environments.

Models for **all fluid** applications.

regulating flow



flow control regulators



Control the speed of a pneumatic cylinder. Designed without retention zones this flow regulator provides excellent resistance to detergents and enables easy cleaning in a wide variety of application areas.

Models for **pneumatic, food, pharmaceutical** and **all fluids applications**.

allowing direct exhaust of fluid



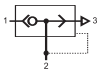
technical tubes

Perfectly suited to stainless steel functions:

- fluoropolymer FEP 140 tubing
- polyethylene tubing
- semi-rigid nylon tubing
- flexible polyurethane tubing



quick exhaust valves



They enable to increase the cylinder rod displacement speed, allowing direct exhaust of compressed air.

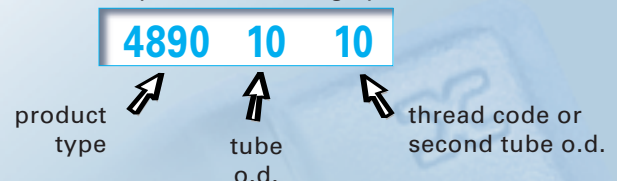
Models for **pneumatic** applications.

Identification

Part numbers have been chosen by a method of mnemonics. Each fitting is identified by:

- product type
- the outside diameter of the tube
- the thread code or second tube o.d.

Example of numbering system



Standard range of stainless steel pneumatic function fittings



flow control regulators

7810-7812

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7820-7822

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non-return valves

4890

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4895

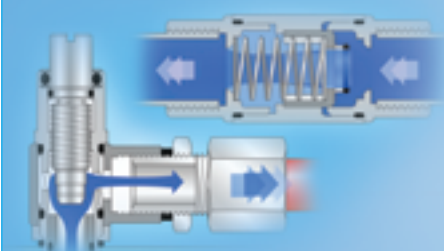
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quick exhaust valves

7899

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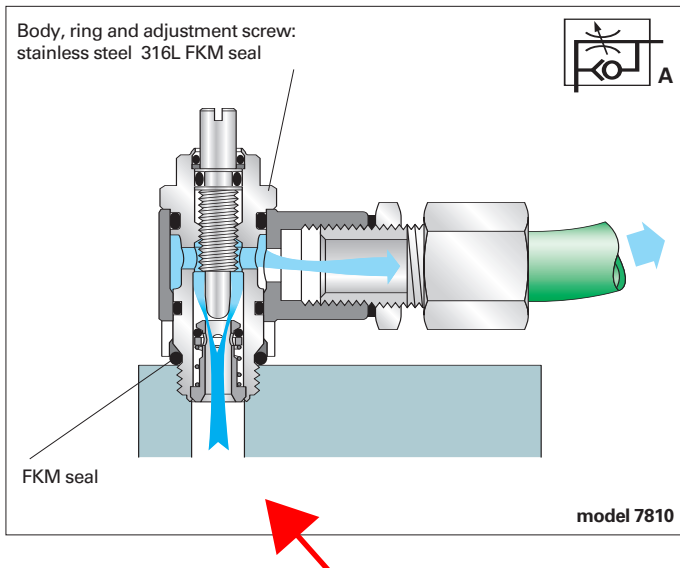
You will find stainless function fittings on [legris.com](http://www.legris.com)

- the online catalogue regularly updated, features the complete range and you can request a quotation from our distributors.
- in the **learning space**, you will find **animated presentations** of these fittings: innovating technology and their **functions**.

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flow control regulators



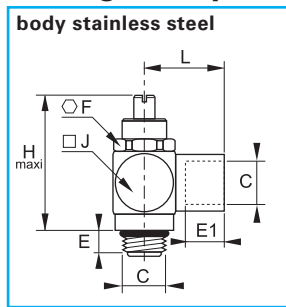
Stainless steel flow control regulators control the speed of a pneumatic cylinder (models 7810-7812- 7820-7822) or the speed of a chemical or food fluid carried (model 7822: for fluids compatible with FKM and PTFE seals) in aggressive environments or submitted to high mechanical or chemical constraints.

Designed without retention zones, these models are perfectly suitable for food applications or requiring frequent washing of installations.

Technical specifications :

- Working pressure :
 - 7810 – 7812 : 1 to 10 bar
 - 7820 : 1 to 16 bar
 - 7822 : 1 to 40 bar
- Working temperature :
 - 7810 – 7812 : 0°C to + 70°C
 - 7820 – 7822 : -15° to + 120°C

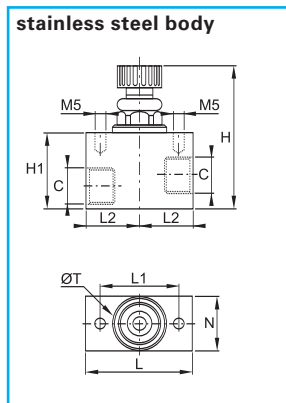
7810-7812 with threaded fitting, BSP parallel and metric



C	exhaust (A)	bi-directional (C)	E	E1	F	H	J	L	Δ kg
M5x0,8	7810 19 19	7812 19 19	4	4	8	24	10	11	0,027
G1/8	7810 10 10	7812 10 10	5	8	13	38	15	17	0,035
G1/4	7810 13 13	7812 13 13	8	12	17	40	18	24	0,048
G3/8	7810 17 17	7812 17 17	7	12	20	53	22	2	0,059
G1/2	7810 21 21	7812 21 21	8	15	23	69	28	31	0,076

for pneumatic applications

7820-7822 in-line, BSP parallel



C	one way adjustment (A)	H mini	H maxi	H1	L	L1	L2	N	ØT	Δ kg
G1/8	7 7820 00 10	47	52,5	30	40	15	20	20	20	0,178
G1/4	7 7820 00 13	47	52,5	30	40	15	20	20	20	0,168
G3/8	9 7820 00 17	56	65	35	50	18	25	25	25	0,300
G1/2	12 7820 00 21	56	65	35	50	18	25	25	25	0,276

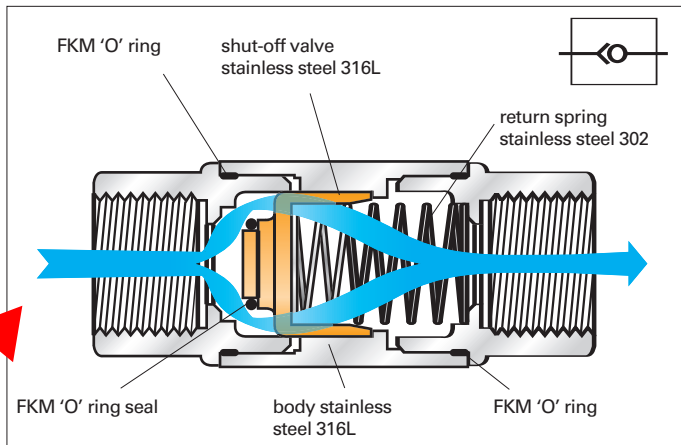
for pneumatic applications

C	bi-directional (C)	H mini	H maxi	H1	L	L1	L2	N	ØT	Δ kg
G1/8	7 7822 00 10	48	52,5	30	40	15	20	20	20	0,180
G1/4	7 7822 00 13	48	52,5	30	40	15	20	20	20	0,170
G3/8	9 7822 00 17	58	65	35	50	18	25	25	20	0,304
G1/2	12 7822 00 21	58	65	35	50	18	25	25	20	0,280

for pneumatic and all fluid applications compatible with the material of seals (FKM and PTFE)

= suitable for food applications

non-return valves, all fluids and stainless steel



Legris stainless steel non-return valves allow fluids to pass in one direction whilst blocking flow in the other direction. Robust and extremely compact, they are suitable for use as a safety item in all fluids circuits. They are ideal for use in severe conditions and in aggressive environments.

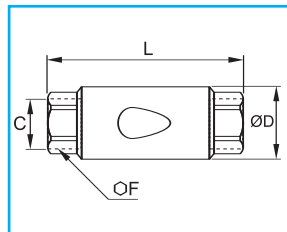
Operation : a stainless steel valve blocks the fluid passage, when the pressure differential is lower than 0,25 bar.

technical specifications :

- working pressure: 0,5 to 40 bar
- working temperature: - 20° to + 180°C

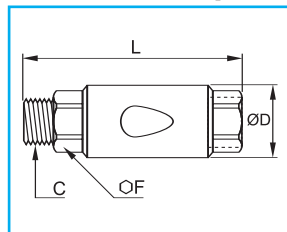
model	water flow at 6 bar	Kv
1/8	18,88 NI/min	1,60
1/4	19,91 NI/min	1,69
3/8	35,54 NI/min	3,01
1/2	36,50 NI/min	3,10
3/4	65,86 NI/min	5,59
1"	92,60 NI/min	7,86

4890 unidirectional, female-female, BSP parallel



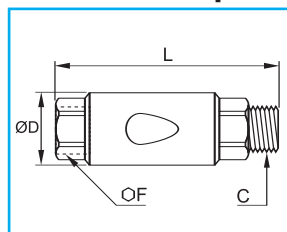
C	DN		ØD	F	L	kg
G1/8	10	4890 10 10	22	17	50	0,084
G1/4	10	4890 13 13	22	17	50	0,074
G3/8	15	4890 17 17	30	22	67	0,182
G1/2	15	4890 21 21	30	24	71	0,196
G3/4	20	4890 27 27	35	32	78	0,288
G1"	25	4890 34 34	42	38	90	0,416

4891 unidirectional, male-female, BSP parallel



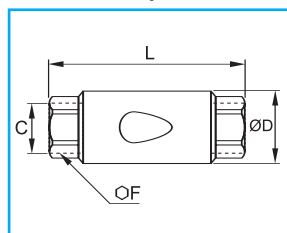
C	DN		ØD	F	L	kg
G1/8	10	4891 10 10	22	17	56	0,086
G1/4	10	4891 13 13	22	17	58	0,082
G3/8	15	4891 17 17	30	22	75	0,190
G1/2	15	4891 21 21	30	24	79	0,280
G3/4	20	4891 27 27	35	32	87	0,302
G1"	25	4891 34 34	42	38	102	0,424

4892 unidirectional, female-male, BSP parallel



C	DN		ØD	F	L	kg
G1/8	10	4892 10 10	22	17	56	0,086
G1/4	10	4892 13 13	22	17	58	0,082
G3/8	15	4892 17 17	30	22	75	0,190
G1/2	15	4892 21 21	30	24	79	0,280
G3/4	20	4892 27 27	35	32	87	0,302
G1"	25	4892 34 34	42	38	102	0,424

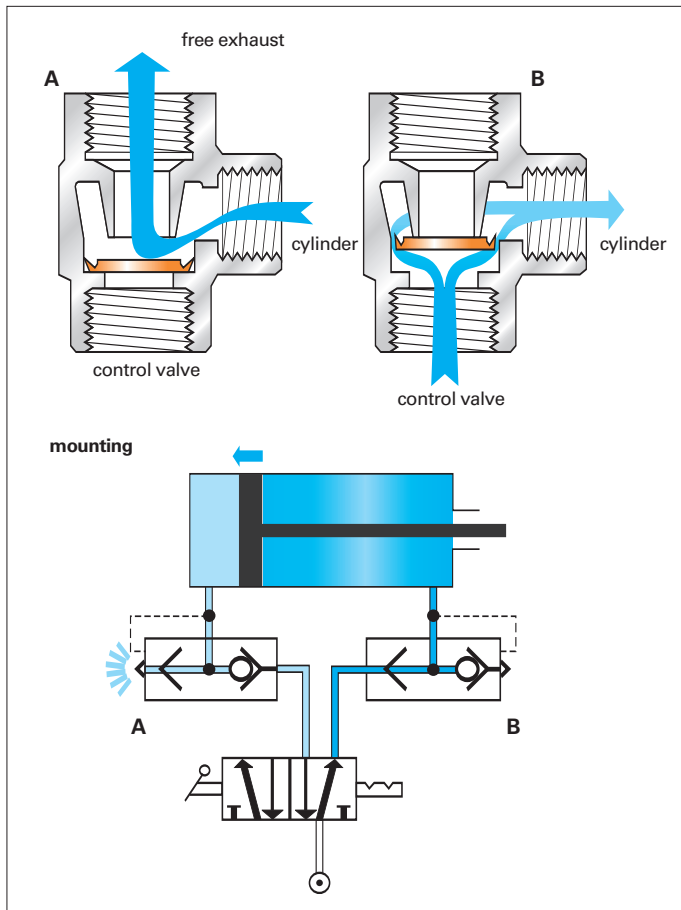
4895 unidirectional, female-female, NPT



C	DN		ØD	F	L	kg
1/8	10	4895 11 11	22	17	50	0,084
1/4	10	4895 14 14	22	17	54	0,080
3/8	15	4895 18 18	30	22	73	0,198
1/2	15	4895 22 22	30	24	77	0,213

On request, we can provide male/female models with NPT threads and other types of seal (nitrile, EPDM, FDA).

quick exhaust valves

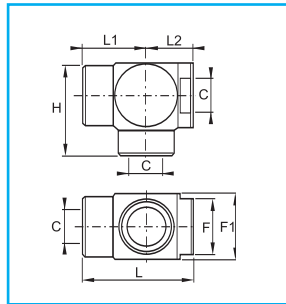


Stainless steel quick exhaust valves enable the increase of cylinder rod displacement speed, allowing **direct exhaust** of compressed air. Thus, they contribute to the reduction of cycle time.

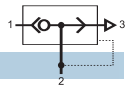
technical specifications :

- working pressure :
2 to 10 bar
- working temperature :
models G1/8 and G1/4 : - 10° to + 120°C
models G3/8 to G1" : - 20° to + 80°C
- material of seal
G1/8 and G1/4 : FKM
G3/8 to G1" : polyurethane

7899 double female, BSP parallel



C	DN		F	F1	H	L	L1	L2	Δkg
G1/8	7	7899 00 10	17	22	31,5	37,5	21	16,5	0,098
G1/4	7	7899 00 13	17	22	31,5	37,5	21	16,5	0,082
G3/8	9	7899 00 17	22	26	37	44,5	25,5	19	0,138
G1/2	12	7899 00 21	27	32	46	54	31	23	0,236
G3/4	18	7899 00 27	38	46	65	79	44	35	0,812
G1"	18	7899 00 34	38	46	65	79	44	35	0,674



Stainless steel function fittings are designed for use with various types of tubing found in this catalogue, see chapter **Technical tubes and hoses**

- fluoropolymer FEP 140 tubing from: 4 to 12 o.d.
- polyethylene tubing from: 4 to 14 o.d.
- semi-rigid nylon tubing and flexible polyurethane tubing from: 4 to 16 o.d. (semi-rigid nylon)
4 to 14 o.d. (flexible polyurethane)



