

# Flow Control Regulators

Parker Legris flow control regulators with polymer, nickel-plated brass or aluminium bodies, external or recessed adjustment screws, offer **precise adjustment, accuracy** and **compactness** providing the solution for all applications.

## Product Advantages

### Improved Productivity

- Higher maximum flow than standard regulators
- Full flow with minimum pressure drop (model 7060)
- Optimal control of the cylinder rod speed
- 100% leak-tested in production
- Date coding to guarantee quality and traceability
- Reduce compressed air and energy consumption

### Accuracy & Performance

- Precise adjustment for accurate flow regulation from initial to maximum opening
- Constant cylinder rod displacement speed
- Long-term stability of flow
- Reduced weight (polymer version)
- Mechanical strength and corrosion resistance with nickel-plated brass version

### Ergonomics & Large Range

- External adjustment screw: easy to adjust without tooling and lockable
- Recessed adjustment screw: more compact and protects the adjustment mechanism
- Uni-directional: exhaust or inlet
- Bi-directional: adjustment of air flow in both directions
- 360° positioning
- NPT version on request



**Applications**

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

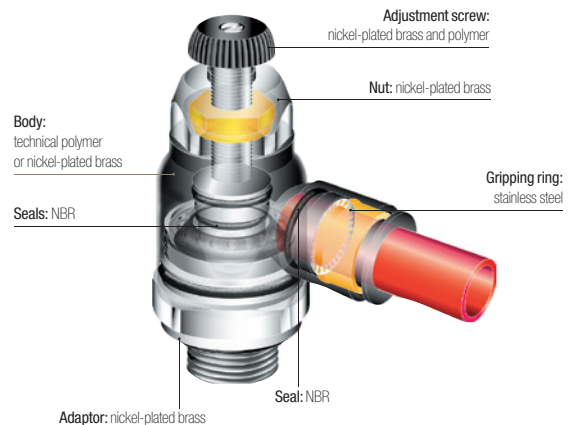
## Technical Characteristics

<b>Compatible Fluids</b>	Compressed air Other fluids: contact us
<b>Working Pressure</b>	1 to 10 bar
<b>Working Temperature</b>	0°C to +70°C

<b>Max. Tightening Torques (external adjustment screw)</b>	Threads	M3 x0.5	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	0.06	0.16	0.8	1.2	3	3.5
<b>Max. Tightening Torques (recessed adjustment screw)</b>	Threads	–	M5 x0.8	G1/8	G1/4	G3/8	G1/2
	daN.m	–	0.1	0.4	0.5	0.6	0.7

You will find all the flow rate characteristic curves (to 6 bar) for flow control regulators at the end of the chapter.

### Component Materials



**Silicone-free**

# Flow Control Regulators

## Operation

Parker Legris offers both uni-directional and bi-directional flow control regulators.

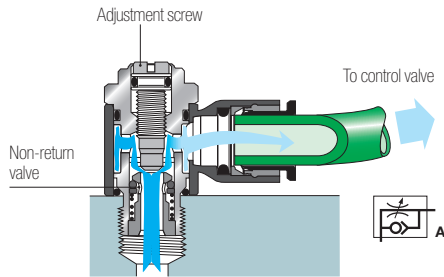
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.

The bi-directional models control the flow of air in both directions.

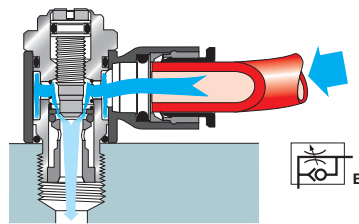
A more precise and constant flow regulation is obtained when the regulator is fitted directly onto the cylinder.

### Models with Recessed Adjustment

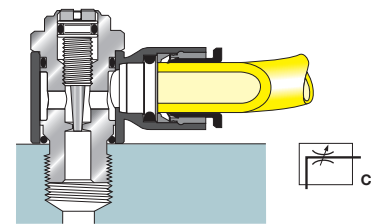
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

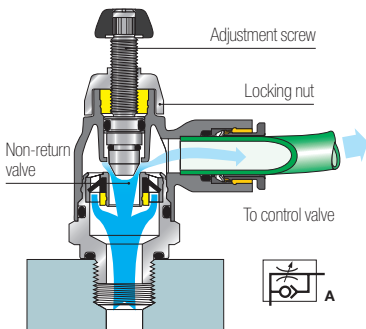


#### Bi-Directional Version

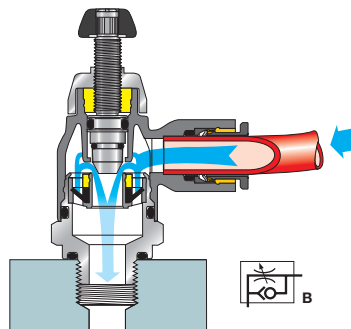


### Models with External Adjustment

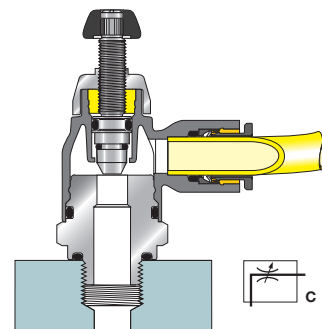
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

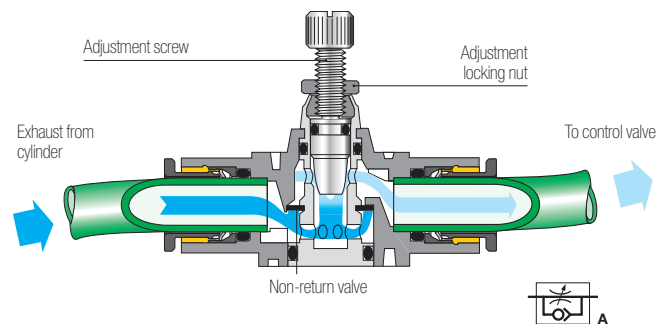


#### Bi-Directional Version

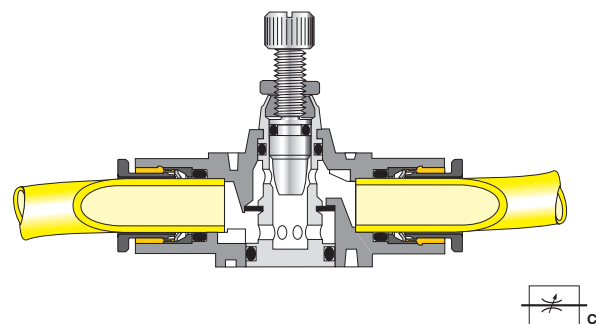


### In-Line Models

#### Uni-Directional Version



#### Bi-Directional Version



For instant visual identification, each Parker Legris flow control regulator version is identified by the related pneumatic symbol and by a letter:

- uni-directional regulation on exhaust: letter A
- uni-directional regulation on supply: letter B
- bi-directional regulation: letter C

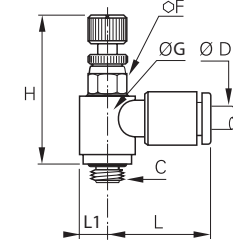
# Regulators with External Adjustment

**7662**

Bi-Directional Miniature Flow Regulator, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



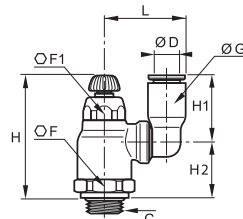
ØD	C		F	G	H <sub>min</sub>	H <sub>max</sub>	L	L1	kg
4	M5x0.8	<a href="#">7662 04 19</a>	6	9	23.5	26	17	4.5	0.007
	G1/8	<a href="#">7662 04 10</a>	7	11.5	27	29.5	18	6	0.013
6	M5x0.8	<a href="#">7662 06 19</a>	6	9	23.5	26	18	4.5	0.010
	G1/8	<a href="#">7662 06 10</a>	7	11.5	27	29.5	18.5	6	0.013
	G1/4	<a href="#">7662 06 13</a>	8	12	30	32.5	19	6	0.019

**7040**

Compact Flow Regulator Swivel Outlet Exhaust, Male BSPP Thread



Technical polymer, nickel-plated brass, NBR



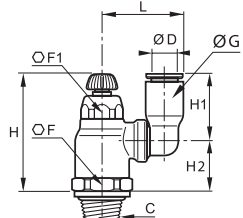
ØD	C		F	F1	G	H <sub>min</sub>	H <sub>max</sub>	H1	H2	L	kg
6	G1/8	<a href="#">7040 06 10</a>	16	10	10.5	38	44	16	18	23.5	0.024
	G1/4	<a href="#">7040 06 13</a>	16	10	10.5	36.5	42.5	16	16.5	23.5	0.025
8	G1/8	<a href="#">7040 08 10</a>	19	14	13.5	41.5	48	23	19	28	0.037
	G1/4	<a href="#">7040 08 13</a>	19	14	13.5	41.5	48	23	19.5	28	0.039
10	G3/8	<a href="#">7040 08 17</a>	19	14	13.5	41.5	48	23	17.5	28	0.020
	G1/4	<a href="#">7040 10 13</a>	23	17	16	45.5	53.5	26.5	21	35	0.051
12	G3/8	<a href="#">7040 10 17</a>	23	17	16	45.5	54	26.5	21.5	35	0.063
	G1/2	<a href="#">7040 12 21</a>	23	17	19	45.5	54	30.5	21.5	38	0.066
	G1/2	<a href="#">7040 12 21</a>	24	17	19	45.5	54	30.5	21	38	0.071

**7045**

Compact Flow Regulator Swivel Outlet Exhaust, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	F1	G	H <sub>min</sub>	H <sub>max</sub>	H1	H2	L	kg
6	R1/4	<a href="#">7045 06 13</a>	16	10	10.5	36.5	42.5	16	16.5	23.5	0.030
	R1/8	<a href="#">7045 08 10</a>	19	14	13.5	40	46	23	17	28	0.014
8	R1/4	<a href="#">7045 08 13</a>	19	14	13.5	40	46	23	17	28	0.043
	R3/8	<a href="#">7045 08 17</a>	19	14	13.5	40	46	23	17	28	0.044
10	R1/4	<a href="#">7045 10 13</a>	23	17	16	43.5	51.5	26.5	19	35	0.062
	R3/8	<a href="#">7045 10 17</a>	23	17	16	43.5	51.5	26.5	19	35	0.065
12	R3/8	<a href="#">7045 12 17</a>	23	17	19	43.5	51.5	31	19	38	0.065
	R1/2	<a href="#">7045 12 21</a>	23	17	19	43.5	51.5	31	19	38	0.070

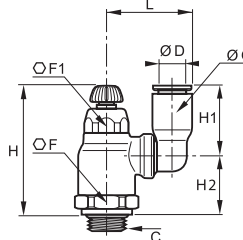
Pre-coated thread

**7041**

Compact Flow Regulator Swivel Outlet Supply, Male BSPP Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	F1	G	H <sub>min</sub>	H <sub>max</sub>	H1	H2	L	kg
6	G1/4	<a href="#">7041 06 13</a>	16	10	10.5	36.5	42.5	16	16.5	23.5	0.024
8	G1/8	<a href="#">7041 08 10</a>	19	14	13.5	41.5	48	23	19	28	0.037
	G1/4	<a href="#">7041 08 13</a>	19	14	13.5	41.5	48	23	19.5	28	0.039