

# 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

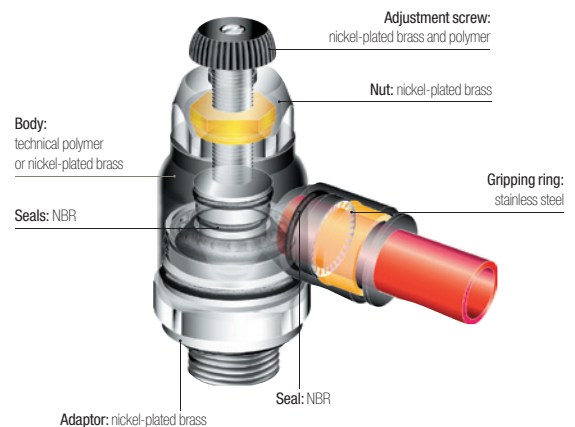
## Technical Characteristics

<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.

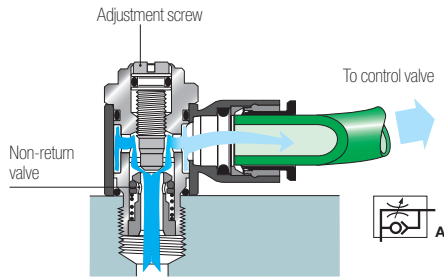
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.

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

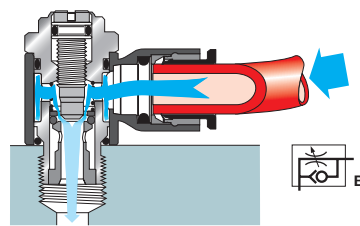
A more precise and constant flow regulation is obtained when the regulator is fitted directly onto the cylinder.

### Models with Recessed Adjustment

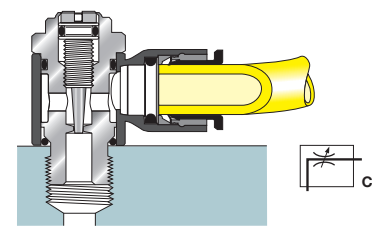
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

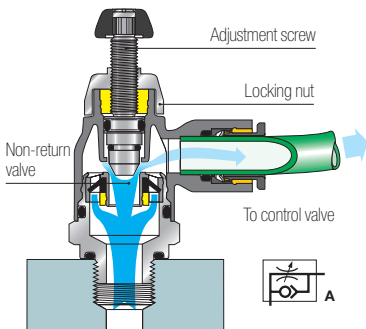


#### Bi-Directional Version

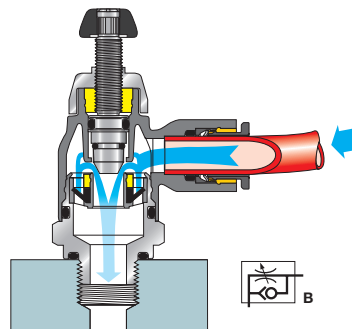


### Models with External Adjustment

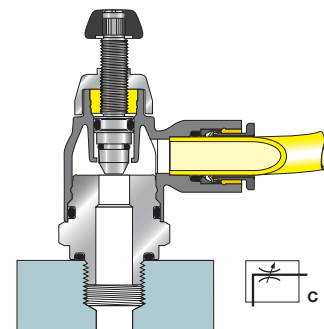
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

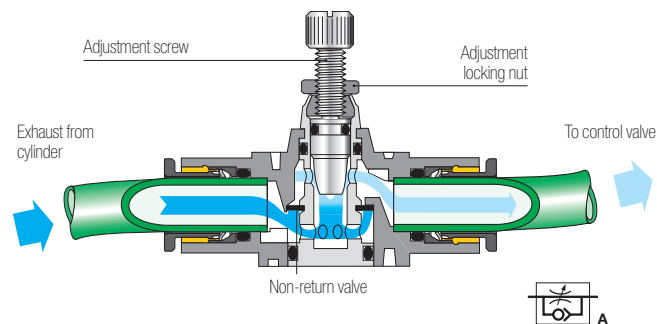


#### Bi-Directional Version

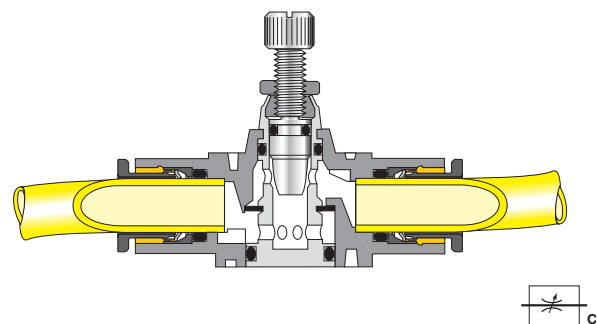


### In-Line Models

#### 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

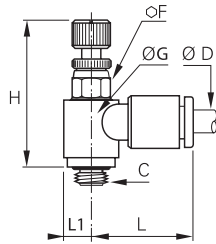
# Miniature Regulators with External Adjustment

**7660**

Miniature Flow Regulator Exhaust, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



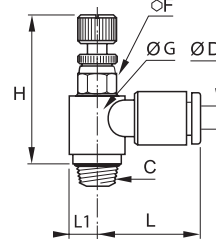
ØD	C		F	G	H min	H max	L	L1	kg
3	M3x0.5	<a href="#">7660 03 09</a>	6	9	23.5	26	17	4.5	0.007
	M5x0.8	<a href="#">7660 03 19</a>	6	9	23.5	26	17	4.5	0.006
4	M3x0.5	<a href="#">7660 04 09</a>	6	9	23.5	26	16.5	4.5	0.007
	M5x0.8	<a href="#">7660 04 19</a>	6	9	23.5	26	17	4.5	0.006
6	G1/8	<a href="#">7660 06 10</a>	7	11.5	27	29.5	18	6	0.012
	M5x0.8	<a href="#">7660 06 19</a>	6	9	23.5	26	18	4.5	0.007
8	G1/4	<a href="#">7660 08 13</a>	8	12	30	32.5	19	6	0.019
	G1/8	<a href="#">7660 08 10</a>	13	14	26.5	31	26	7	0.021
	G3/8	<a href="#">7660 08 17</a>	20	23	36	42	29	11.5	0.062

**7665**

Miniature Flow Regulator Exhaust, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H min	H max	L	L1	kg
4	R1/8	<a href="#">7665 04 10</a>	7	11.5	25	27.5	18	6	0.012
	R1/8	<a href="#">7665 06 10</a>	7	11.5	25	27.5	18.5	6	0.012
6	R1/4	<a href="#">7665 06 13</a>	8	13.5	27.5	30	19	7	0.019
	R3/8	<a href="#">7665 06 17</a>	17	13.5	31.5	34	19	7	0.025
8	R1/8	<a href="#">7665 08 10</a>	13	14	24	28.5	26	7	0.021
	R3/8	<a href="#">7665 08 17</a>	16	19	25	29	27.5	9.5	0.033

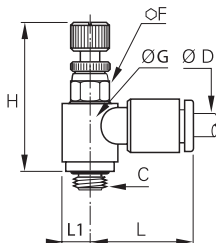
Pre-coated thread

**7669**

Miniature Flow Regulator Supply, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



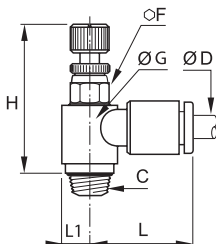
ØD	C		F	G	H min	H max	L	L1	kg
3	M3x0.5	<a href="#">7669 03 09</a>	6	9	23.5	26	17	4.5	0.008
	M5x0.8	<a href="#">7669 03 19</a>	6	9	23.5	26	17	4.5	0.007
4	M5x0.8	<a href="#">7669 04 19</a>	6	9	23.5	26	17	4.5	0.006
	G1/8	<a href="#">7669 04 10</a>	7	11.5	27	29.5	18	6	0.012
6	M5x0.8	<a href="#">7669 06 19</a>	6	9	23.5	26	18	4.5	0.007
	G1/8	<a href="#">7669 06 10</a>	7	11.5	27	29.5	18.5	6	0.013
	G1/4	<a href="#">7669 06 13</a>	8	12	30	32.5	19	6	0.019
8	G1/8	<a href="#">7669 08 10</a>	13	14	26.5	31	26	7	0.021
	G1/4	<a href="#">7669 08 13</a>	16	19	29	34	27.5	9.5	0.033
	G3/8	<a href="#">7669 08 17</a>	20	23	36	42	29	11.5	0.063

**7668**

Miniature Flow Regulator Supply, Male BSPT Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H min	H max	L	L1	kg
4	R1/8	<a href="#">7668 04 10</a>	7	11.5	25	27.5	18	6	0.011
	R1/8	<a href="#">7668 06 10</a>	7	11.5	25	27.5	18.5	6	0.012
6	R1/4	<a href="#">7668 06 13</a>	8	13.5	27.5	30	19	7	0.019
	R1/8	<a href="#">7668 08 10</a>	13	14	24	28.5	26	7	0.020
8	R1/4	<a href="#">7668 08 13</a>	16	19	25	29	27.5	9.5	0.032
	R3/8	<a href="#">7668 08 17</a>	20	23	30	36	29	11.5	0.061

Pre-coated thread