

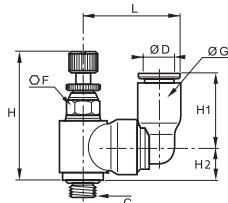
# Miniature Regulators with Swivel Outlet and External Adjustment

**7649**

Miniature Swivel Outlet Flow Regulator Supply, Male BSPP and Metric Thread



Technical polymer, nickel-plated brass, NBR



ØD	C		F	G	H min	H max	H1	H2	L	kg
4	M5x0.8	<a href="#">7649 04 19</a>	6	8.5	23.5	26	14	6.5	19	0.015
	G1/8	<a href="#">7649 04 10</a>	7	8.5	27	29.5	14	8.5	19.5	0.014
6	M5x0.8	<a href="#">7649 06 19</a>	6	10.5	23.5	26	16	6.5	21	0.008
	G1/8	<a href="#">7649 06 10</a>	7	10.5	27	29.5	16	8.5	21.5	0.015

Flow Control Regulators

Function Fittings

## Associated Products

All our flow control regulators are compatible with the range of polyamide and polyurethane tubing shown in Chapter 3.

# 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



Pneumatics  
Robotics  
Semi-Conductors  
Textile  
Automotive Process  
Packaging

Applications

## Technical Characteristics

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

Max. Tightening Torques (external adjustment screw)	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
Max. Tightening Torques (recessed adjustment screw)	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.

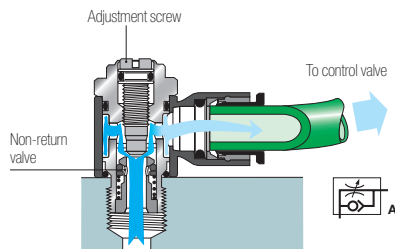
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.

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)

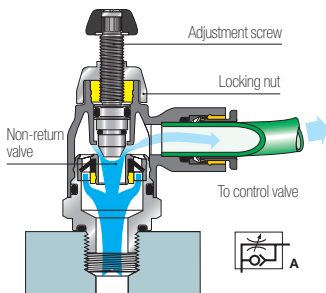


#### Bi-Directional Version

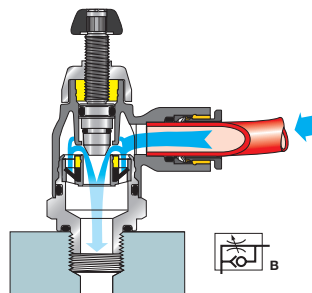


### Models with External Adjustment

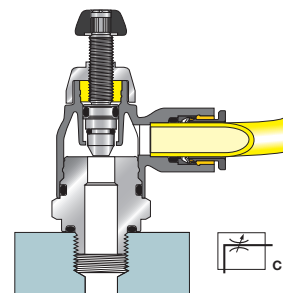
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

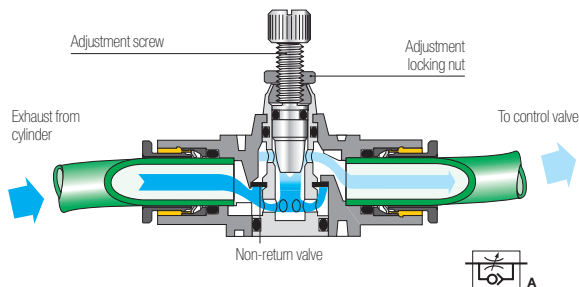


#### Bi-Directional Version

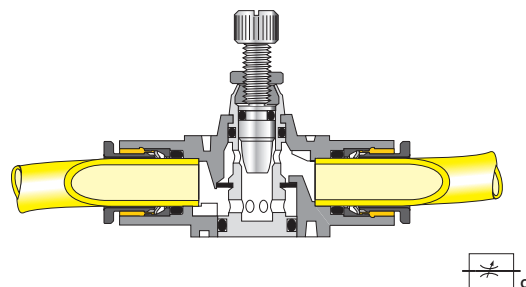


### In-Line Models

#### 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

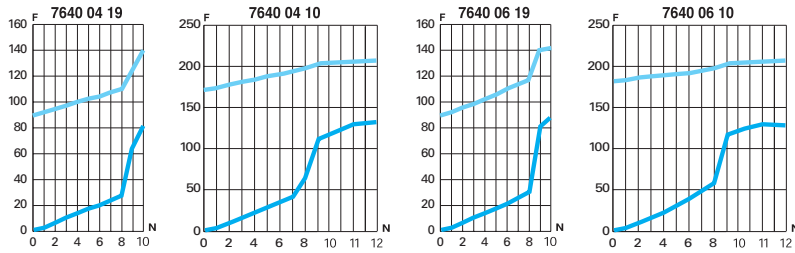
# Flow Characteristics (at 6 bar)

## for Flow Control Regulators

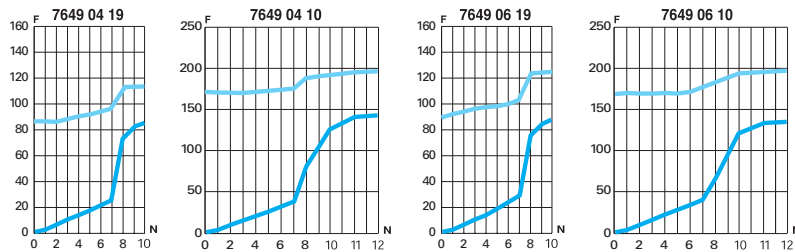


**7640**  
**7649**

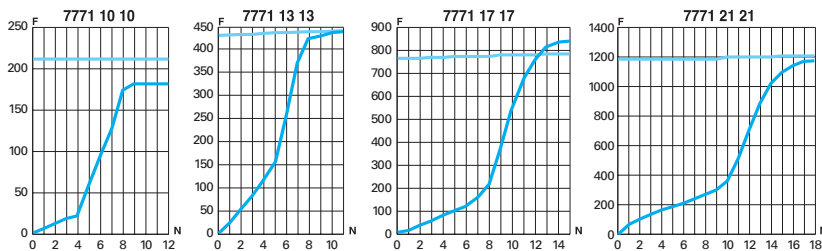
### 7640



### 7649



**7771**



**7020**

