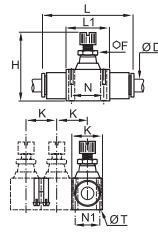


# In-Line Regulators with External Adjustment

## 7770 In-Line One-Way Flow Regulator



Technical polymer, NBR



| ØD |                            | F  | H <sub>min</sub> | H <sub>max</sub> | K    | L  | L1 | N    | N1   | ØT  | kg    |
|----|----------------------------|----|------------------|------------------|------|----|----|------|------|-----|-------|
| 4  | <a href="#">7770 04 00</a> | 5  | 29.5             | 33.5             | 12   | 36 | 15 | 11   | 8    | 2.2 | 0.010 |
| 6  | <a href="#">7770 06 00</a> | 8  | 40.5             | 44.5             | 17   | 51 | 23 | 17   | 11   | 3.2 | 0.028 |
| 8  | <a href="#">7770 08 00</a> | 11 | 46.5             | 52.5             | 18.5 | 58 | 26 | 20   | 12.5 | 3.2 | 0.048 |
| 10 | <a href="#">7770 10 00</a> | 14 | 53               | 61               | 24   | 73 | 33 | 26   | 16   | 4.2 | 0.097 |
| 12 | <a href="#">7770 12 00</a> | 14 | 59               | 67.5             | 28   | 85 | 35 | 27.5 | 20   | 4.2 | 0.132 |

# 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

|                            |  |
|----------------------------|--|
| <b>Compatible Fluids</b>   | Compressed air<br>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.

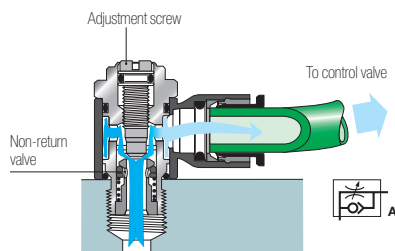
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.

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)

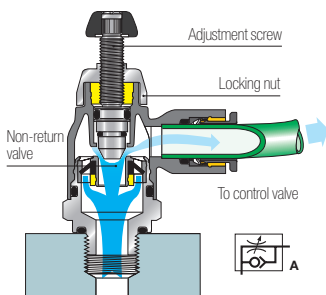


#### Bi-Directional Version

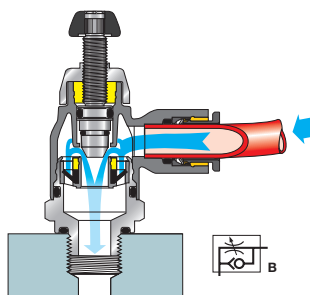


### Models with External Adjustment

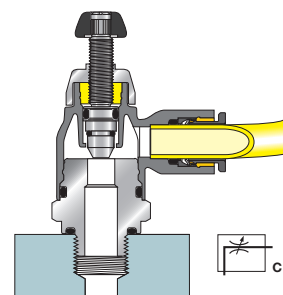
#### Uni-Directional (Exhaust Version)



#### Uni-Directional (Supply Version)

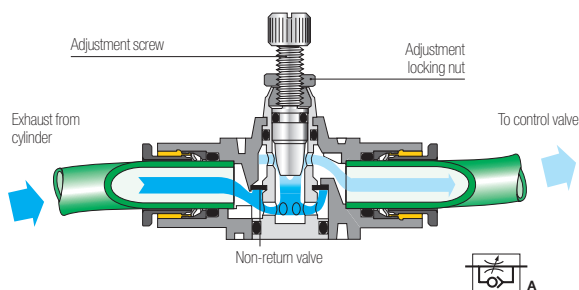


#### Bi-Directional Version

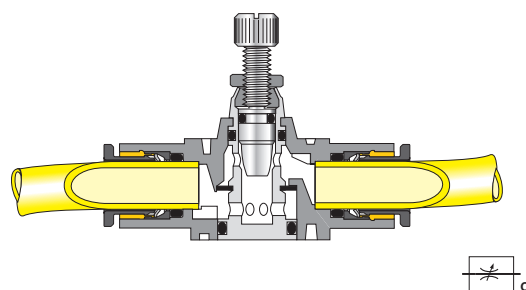


### In-Line Models

#### 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:

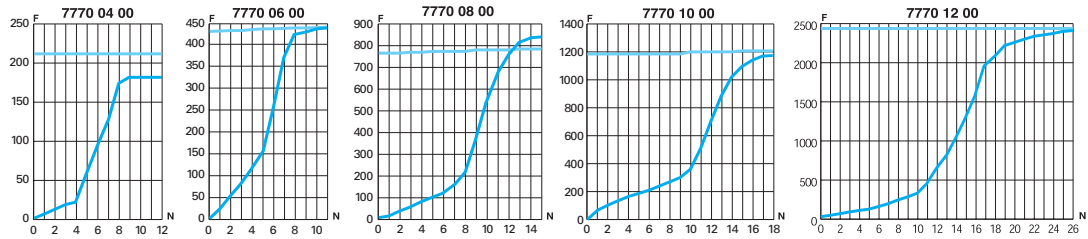
- uni-directional regulation on exhaust: letter A
- uni-directional regulation on supply: letter B
- bi-directional regulation: letter C

# Flow Characteristics (at 6 bar)

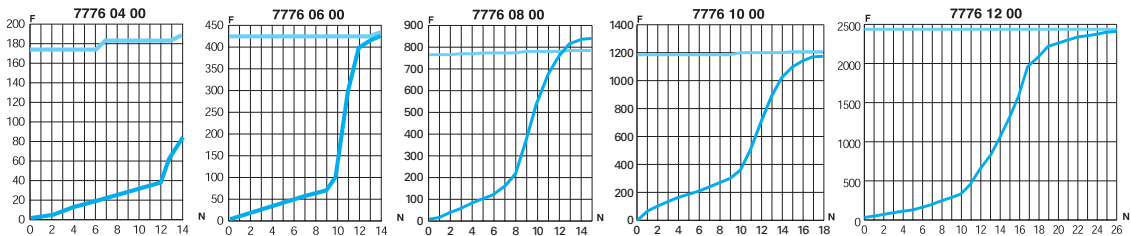
## for Flow Control Regulators



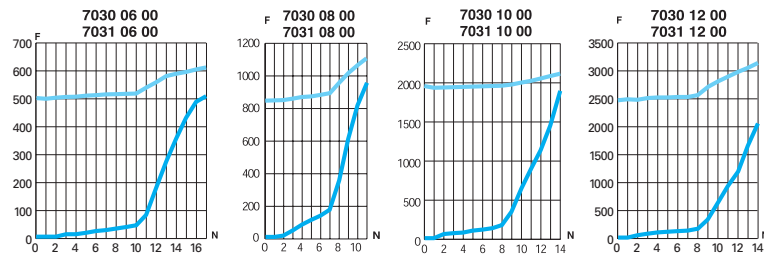
**7770**



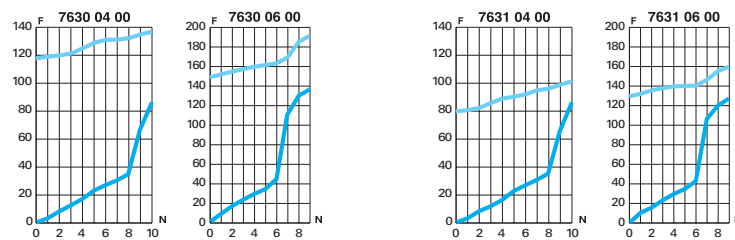
**7776**



**7030**  
**7031**



**7630**  
**7631**



6 bar  
 Direction of adjustment  
 Return  
**F:** Flow in NI/min  
**N:** Number of turns