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

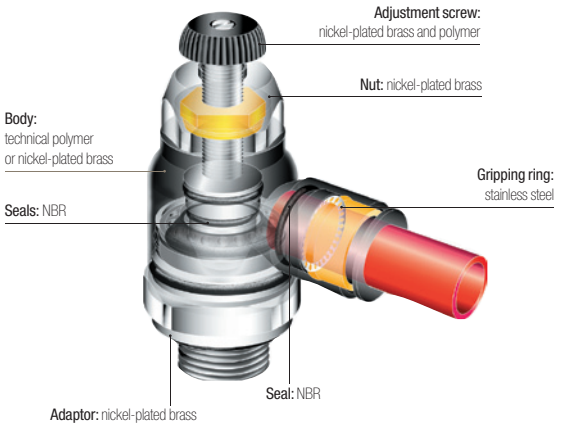
Technical Characteristics

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

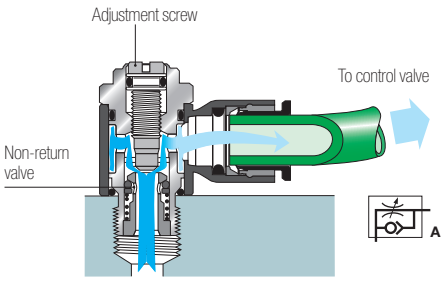
Flow Control Regulators

Operation

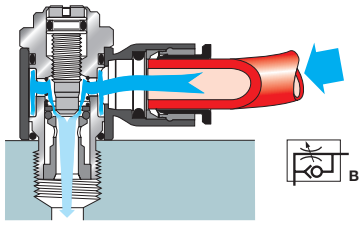
Parker Legris offers both uni-directional and bi-directional flow control regulators.
The uni-directional models control the flow of air in one direction through an adjustable restrictor, while allowing full flow in the opposite direction.
The bi-directional models control the flow of air in both directions.
A more precise and constant flow regulation is obtained when the regulator is fitted directly onto the cylinder.

Models with Recessed Adjustment

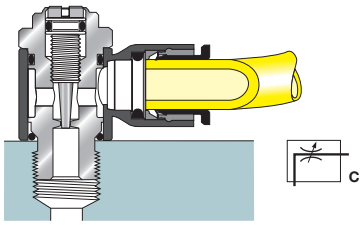
Uni-Directional (Exhaust Version)



Uni-Directional (Supply Version)

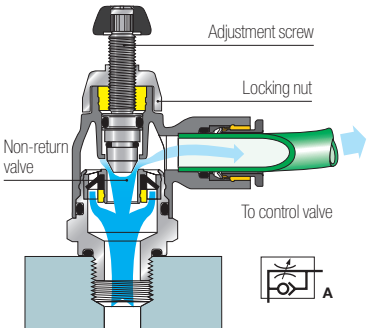


Bi-Directional Version

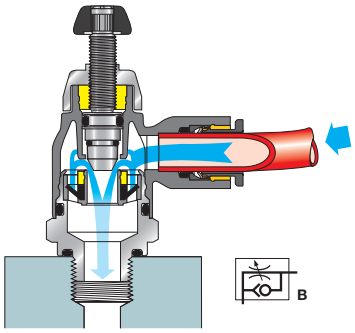


Models with External Adjustment

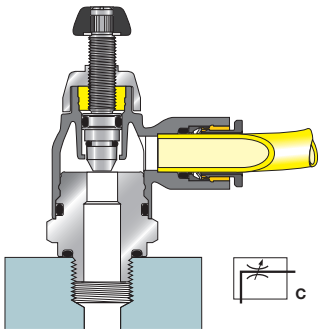
Uni-Directional (Exhaust Version)



Uni-Directional (Supply Version)

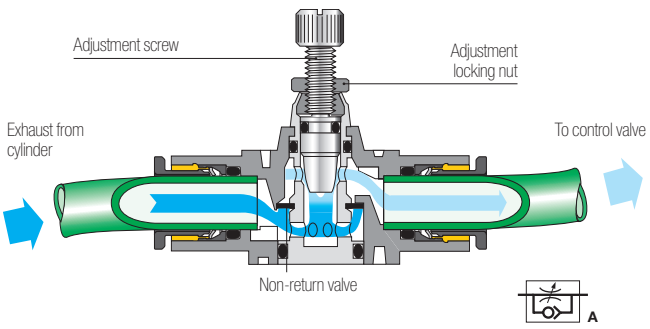


Bi-Directional Version

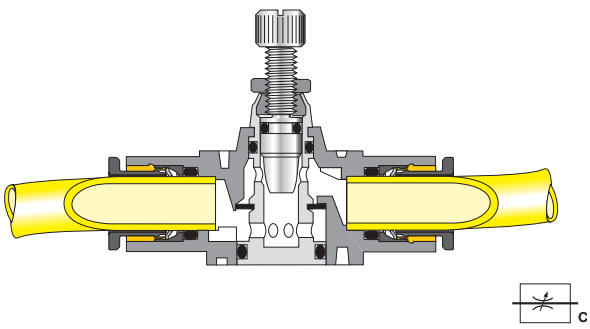


In-Line Models

Uni-Directional Version



Bi-Directional Version



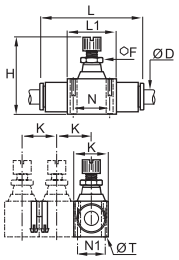
For instant visual identification, each Parker Legris flow control regulator version is identified by the related pneumatic symbol and by a letter:

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

In-Line Regulators with External Adjustment

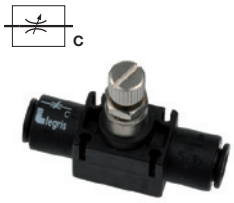
7770 In-Line One-Way Flow Regulator

Technical polymer, NBR

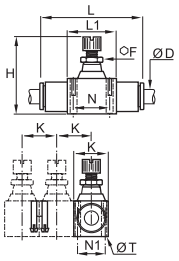


ØD		F	H min	H max	K	L	L1	N	N1	ØT	kg
4	7770 04 00	5	29.5	33.5	12	36	15	11	8	2.2	0.010
6	7770 06 00	8	40.5	44.5	17	51	23	17	11	3.2	0.028
8	7770 08 00	11	46.5	52.5	18.5	58	26	20	12.5	3.2	0.048
10	7770 10 00	14	53	61	24	73	33	26	16	4.2	0.097
12	7770 12 00	14	59	67.5	28	85	35	27.5	20	4.2	0.132

7772 Bi-Directional In-Line Flow Regulator



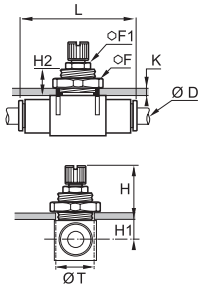
Technical polymer, NBR



ØD		F	H min	H max	K	L	L1	N	N1	ØT	kg
4	7772 04 00	5	29.5	33.5	12	36	15	11	8	2.2	0.011
6	7772 06 00	8	40	44.5	17	51	23	17	11	3.2	0.032
8	7772 08 00	11	46.5	52.5	18.5	58	26	20	12.5	3.2	0.054

7776 Panel-Mountable In-Line One-Way Flow Regulator

Technical polymer, NBR

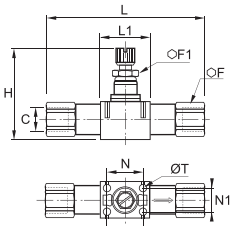


ØD		F	F1	H	H max	H1	H2	K	L	ØT	kg
4	7776 04 00*	14	-	21.5	25.5	6.5	11	6	36	10.5	0.017
6	7776 06 00*	19	-	27.5	32.5	7.5	13.5	7	51	16.5	0.042
8	7776 08 00	24	11	28.5	34.5	9	13.5	7	58	18.5	0.069
10	7776 10 00	30	14	29.5	38.5	11.5	13.5	7	73	24.5	0.136
12	7776 12 00	32	14	32	42	12.5	15.5	8	85	27.5	0.185

*Ultrafine adjustment

7771 In-Line One-Way Flow Regulator, Female BSPP Thread

Technical polymer, nickel-plated brass, NBR



C		F	F1	H min	H max	L	L1	N	N1	ØT	kg
G1/8	7771 10 10	13	8	39.5	44.5	68.5	23	17	11	3.2	0.043
G1/4	7771 13 13	16	11	44	50	83	26	20	12.5	3.2	0.103
G3/8	7771 17 17	19	14	52	61	97	33	26	16	4.2	0.160
G1/2	7771 21 21	24	14	57.5	67.5	121	35	27.5	20	4.2	0.260

7000 Joining Clips

Technical polymer

ØD		kg
4	7000 00 05	0,004
6	7000 00 05	0,004
8	7000 00 05	0,004
10	7000 00 06	0,009
12	7000 00 06	0,009