

SL Pneumatic 90 Degree Elbow Speed Control Valve

L type adjustable throttle valve for airflow and cylinder speed control



Product Overview

The HOMIPNEU SL series is a 90 degree elbow speed control valve designed to regulate airflow and control pneumatic cylinder speed. An integrated adjustable throttle mechanism provides controlled airflow, while the elbow body combines directional routing with compact installation. The push-to-connect tube port simplifies assembly, and the male threaded connection allows direct installation on cylinders, valves and pneumatic equipment. Models are available for 4-12 mm tubing with M5 and multiple pipe-thread options.

Item	Specification	Item	Specification
Structure	90 degree elbow / L type	Operating Fluid	Air
Tube O.D.	4-12 mm	Proof Pressure	1.32 MPa
Thread Options	M5, R1/8, R1/4, R3/8, R1/2	Operating Pressure	0-0.9 MPa
Applicable Tube	PU tube / nylon tube	Temperature	0-60 C

Key Features

- Adjustable airflow regulation for precise pneumatic cylinder speed control.
- 90 degree elbow structure supports compact installation and directional routing.
- Push-to-connect tube port enables quick installation and removal.
- Locking adjustment hardware helps maintain a stable flow setting.

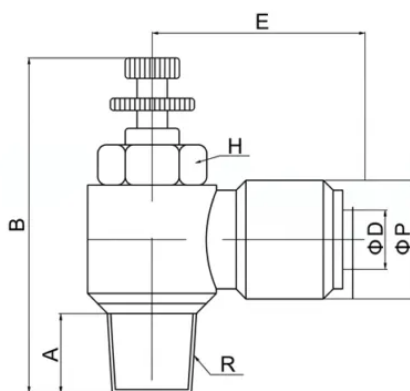
Typical Applications

- Pneumatic cylinder speed and cushioning control.
- Industrial automation systems and production equipment.
- Robotics, assembly lines and handling mechanisms.
- Packaging machinery and compact air-control circuits.

Technical Specifications

Parameter	Specification
Operating Fluid	Air
Product Type	90 degree elbow speed control valve
Flow Control	Integrated adjustable throttle / needle mechanism
Proof Pressure	1.32 MPa (13.5 kgf/cm ²)
Maximum Operating Pressure	0-0.9 MPa (0-9.2 kgf/cm ²)
Ambient and Fluid Temperature	0-60 C
Applicable Tubing	PU tube and nylon tube
Connection	Push-to-connect tube port + male thread

Dimension Drawing



Symbols: D = tube outside diameter; E = horizontal projection; B = overall height; P = port outside diameter; A = threaded-end length; R = male thread; H = hexagon width.

Model Selection and Dimensions

Model	D	E	B	P	A	R	H
SL4-M5	4	20.5	29	11	3.8	M5	8
SL4-01	4	24	37	13	7.5	R1/8	11
SL4-02	4	25	39	13	9.5	R1/4	15
SL6-M5	6	22.5	29	13	3.8	M5	8
SL6-01	6	24	37	13	7.5	R1/8	11
SL6-02	6	25.5	39	13	9.5	R1/4	15
SL6-03	6	29.5	46	13	10	R3/8	19
SL6-04	6	31	50	13	11	R1/2	22
SL8-01	8	26	37	15	7.5	R1/8	11
SL8-02	8	28	39	15	9.5	R1/4	15
SL8-03	8	30	46	15	10	R3/8	19
SL8-04	8	32	50	15	11	R1/2	22
SL10-01	10	31	37	21	7.5	R1/8	11
SL10-02	10	31.5	39	18.5	9.5	R1/4	15
SL10-03	10	33	46	18.5	10	R3/8	19
SL10-04	10	35	50	21	11	R1/2	22
SL12-01	12	31	37	21	7.5	R1/8	11
SL12-02	12	33	39	21	9.5	R1/4	15
SL12-03	12	33.5	46	21	10	R3/8	19
SL12-04	12	35	50	21	11	R1/2	22

All dimensional values are in millimetres unless otherwise stated.

Installation and Operating Guidance

- Confirm the tube outside diameter and male thread match the selected SL model.
- Cut tubing squarely and remove burrs, dust and surface damage before insertion.
- Push the tube fully into the release ring until it reaches the internal stop.
- Apply suitable thread sealant when required and keep sealant outside the airflow passage.
- Tighten the male thread by the hexagonal section; do not rotate the plastic elbow body directly.
- Start with a conservative throttle opening, then adjust airflow gradually while observing actuator speed.
- Secure the adjustment lock after the required speed is reached and check all connections for leakage.

Ordering Information

Specify the SL model, tube outside diameter, male thread and quantity. OEM and ODM options may include alternative thread standards, tube sizes, color options, adjustment characteristics, packaging and branding, subject to production confirmation.

Source note: Product images, core specifications, model data and the dimension drawing are based on the HOMIPNEU SL product page. The information is provided as a general technical reference. Final dimensions, materials, thread standards, adjustment characteristics and production details should be confirmed before ordering.

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