

Axial Valve Range

In-Line Normally Closed

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FKM Seal
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EPDM Seal
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In-Line Normally Open

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In-Line Double-Acting

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Accessories

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Sub-Base
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Axial Valves

The Parker Legris axial valve is the only valve to incorporate both the **valve and actuation function**. With pneumatic or electro-pneumatic control, it avoids many of the restrictions associated with traditional actuators.

Product Advantages

Optimisation & Safety

Very compact: up to 50% smaller than valves with separate actuators
Simple to install: ready-to-use
Common sub-base for solenoid control
Automation of the open/close function
Operation independent of the upstream and downstream pressure in the circuit

Comprehensive Offer

Two seal materials for a wider chemical and temperature range
Pneumatic, electro-pneumatic or dual actuation control
Three versions: normally closed, normally open and double-acting

Performance

Full flow: low pressure drop
Excellent pressure/temperature performance
Compatible with many industrial fluids



Applications

- Flow Control
- Plastic Injection Moulding
- Rubber Industry
- Pneumatics
- Textile
- Printing
- Packaging
- Robotics

Technical Characteristics

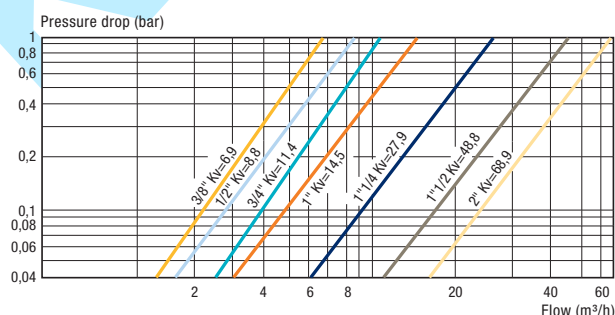
Compatible Fluids	Depending on type of seal – FKM: water, air, oils, greases, etc. – EPDM: hot water, air, steam, etc.
Working Pressure	10 bar max.
Pilot Pressure	NC and NO: 4.2 to 8 bar Double-acting: 3 to 8 bar
Working Temperature	-20°C to +135°C (suffix 20 FKM) -20°C to +120°C (suffix 30 EPDM)

Tightening Torques	Threads	G3/8	G1/2	G3/4	G1	G1¼	G1½	G2
	daN.m	0.15 to 0.25	0.20 to 0.35	0.50 to 0.70	0.50 to 0.70	0.40 to 0.60	0.80 to 1.20	0.80 to 1.20

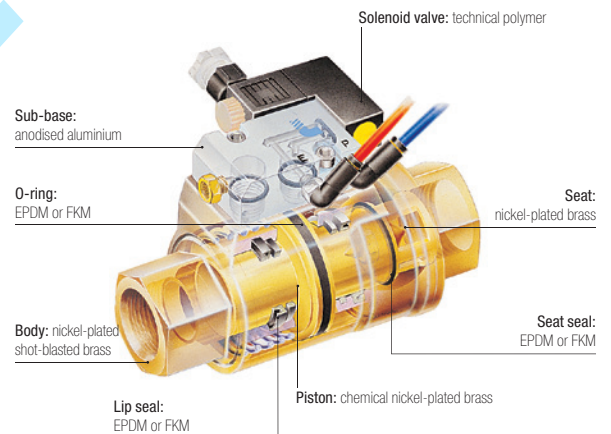
Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
Guaranteed for use with a vacuum of 740 mm Hg (97% vacuum).

Flow Curve and Pressure Drop (Kv)

Kv in m³/h (ambient water temperature, under a differential pressure of 1 bar)



Component Materials



Silicone-free

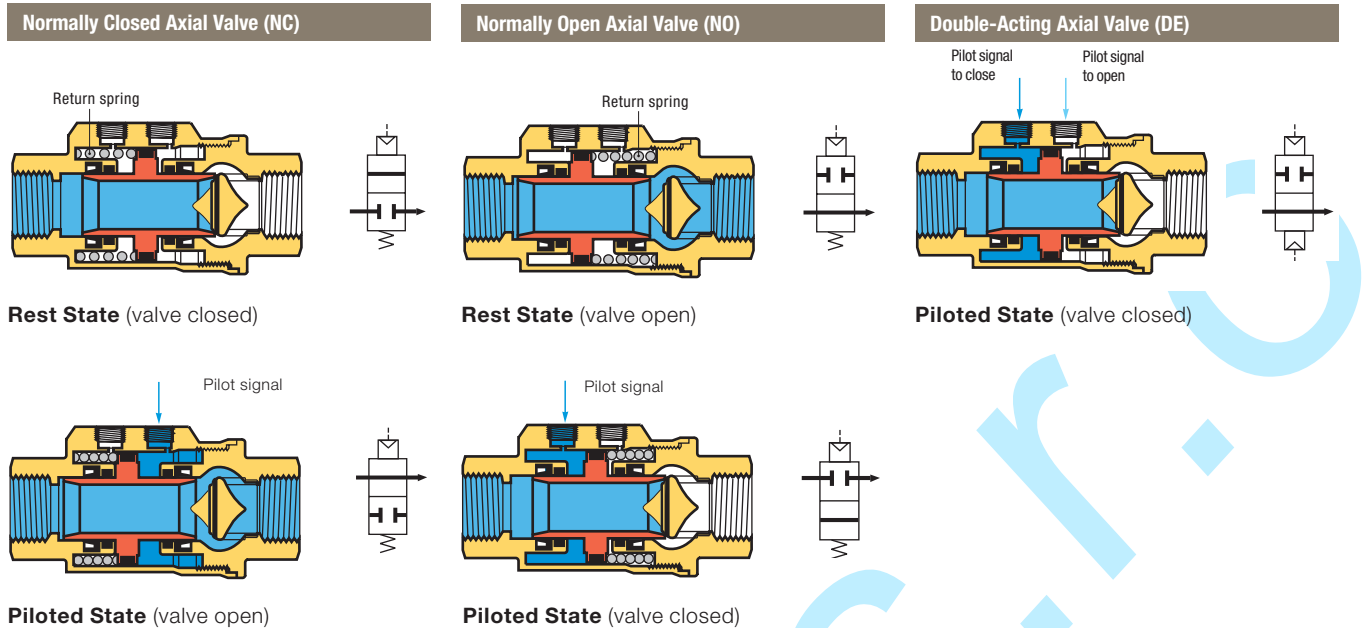
Regulations

DI: 97/23/EC (module PED A - diameters greater than 25 mm)
DI: 2006/42/EC (Machinery Directive)
DI: 2002/95/EC (RoHS)
RG: 1907/2006 (REACH)
DI: 94/9/EC (ATEX) - for pneumatic operation versions

Axial Valves

Operation

Depending on operational requirement, air is passed into the actuation chamber to open or close the valve.



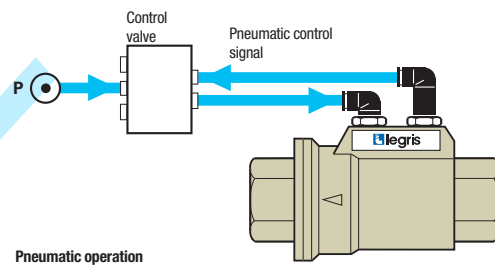
Installation Options

The **Parker Legris** axial valve offers 3 different control methods dependant on the requirements of the installation:

Pneumatic Control

Example: Double-acting axial valve 4222

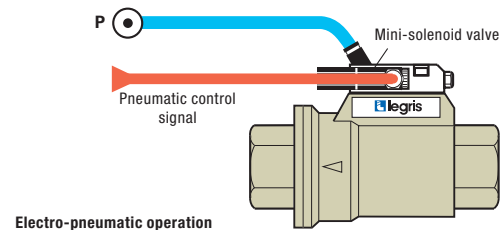
- local compressed air control
- for repetitive on/off cycles
- remote control where access to the machine is difficult
- for explosive or explosion prevention areas



Electro-Pneumatic Control

Example: Normally closed axial valve 4202 + sub-base and Mini-solenoid valve 4298

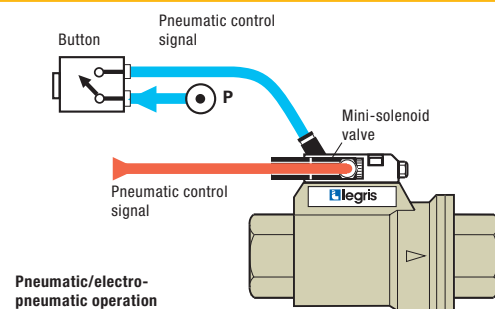
- for automated industrial systems requiring remote control
- Namur seating plane solenoid valve



Dual Pneumatic and Electro-Pneumatic Control


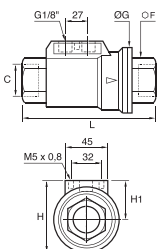

Example: Normally open axial valve 4212 + sub-base and Mini-solenoid valve 4298 + Pneumatic push-button 4299

- dual control structure
- for increased safety: prevents localised operating errors
- Namur seating plane solenoid valve



Axial Valves

4202..20 Normally Closed Axial Valve with FKM Seal, Female BSPP Thread

		C		F	G	H	H1	L	kg
		G3/8	4202 10 17 20	22	46	54	31	98	0.815
		G1/2	4202 15 21 20	27	52	60	35	112	1.092
		G3/4	4202 20 27 20	33	64	70	38	135	1.624
		G1	4202 25 34 20	41	69	76	41.5	143	2.033
		G1¼	4202 32 42 20*	50	86	91	48	165	3.266
		G1½	4202 40 49 20*	60	96	102	54	180	4.195
		G2	4202 50 48 20*	75	109	115	60.5	207	6.465
Pilot port: G1/8 - Delivered with a silencer *Models with CE marking									

4202..30 Normally Closed Axial Valve with EPDM Seal, Female BSPP Thread

Nickel-plated brass, EPDM

Technical drawing of the 4202..30 valve showing side and front views with dimensions:

- Side view dimensions: G1/8", 27, ØG, OF, C, L.
- Front view dimensions: 45, 32, M5 x 0.8, H, H1.

C

F

G

H

H1

L

kg

G3/8

4202 10 17 30

22

46

54

31

98

0.828

G1/2

4202 15 21 30

27

52

60

35

112

1.098

G3/4

4202 20 27 30

33

64

70

38

135

1.624

G1

4202 25 34 30

41

69

76

41.5

143

1.998

G1¼

4202 32 42 30*

50

86

91

48

165

3.315

G1½

4202 40 49 30*

60

96

102

54

180

4.195

G2

4202 50 48 30*

75

109

115

60.5

207

6.360

Pilot port: G1/8 - Delivered with a silencer

*Models with CE marking

4212..20 Normally Open Axial Valve with FKM Seal, Female BSPP Thread

Nickel-plated brass, FKM

Technical drawing of the 4212..20 valve. The side view shows dimensions: G1/8" (pilot port), 27 (height), ØG (body diameter), ØF (flange diameter), C (width), and L (length). The front view shows dimensions: 45 (total width), 32 (port width), M5 x 0.8 (mounting hole), H (height), and H1 (port height).

C

F

G

H

H1

L


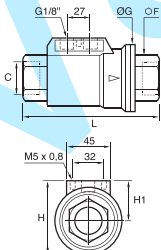

kg

G3/8	4212 10 17 20	22	46	54	31	98	0.829
G1/2	4212 15 21 20	27	52	60	35	112	1.100
G3/4	4212 20 27 20	33	64	70	38	135	1.637
G1	4212 25 34 20	41	69	76	41.5	143	2.037
G1¼	4212 32 42 20*	50	86	91	48	165	0.030
G1½	4212 40 49 20*	60	96	102	54	180	4.188
G2	4212 50 48 20*	75	109	115	60.5	207	6.555

Pilot port: G1/8 - Delivered with a silencer

*Models with CE marking

4212..30 Normally Open Axial Valve with EPDM seal, Female BSPP Thread

	Nickel-plated brass, EPDM			C		F	G	H	H1	L	kg
	G3/8	4212 10 17 30		22	46	54	31	98	0.827		
	G1/2	4212 15 21 30		27	52	60	35	112	1.152		
	G3/4	4212 20 27 30		33	64	70	38	135	1.575		
	G1	4212 25 34 30		41	69	76	41.5	143	2.055		
	G1¼	4212 32 42 30*		50	86	91	48	165	3.301		
	G1½	4212 40 49 30*		60	96	102	54	180	4.775		
	G2	4212 50 48 30*		75	109	115	60.5	207	6.360		
Pilot port: G1/8 - Delivered with a silencer											
*Models with CE marking											

4222..20 Double-Acting Axial Valve with FKM Seal, Female BSPP Thread

Nickel-plated brass, FKM

Axial Valves

4222..30 Double Acting Axial Valve with EPDM seal, Female BSPP Thread

Nickel-plated brass, EPDM

C

F

G

H

H1

L

kg

G3/8

4222 10 17 30

22

46

54

31

98

0.832

G1/2

4222 15 21 30

27

52

60

35

112

1.046

G3/4

4222 20 27 30

33

64

70

38

135

1.662

G1

4222 25 34 30

41

69

76

41.5

143

1.938

G1¼

4222 32 42 30*

50

86

91

48

165

3.301

G1½

4222 40 49 30*

60

96

102

54

180

4.260

G2

4222 50 48 30*

75

109

115

60.5

207


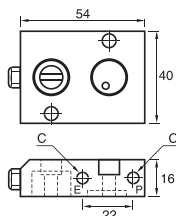

6.520

Pilot port: G1/8


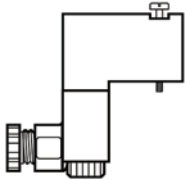

Delivered with a silencer

*Models with CE marking


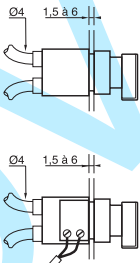

4298 Sub-Base for Solenoid Pilot Valve

	<p>Treated aluminium, NBR</p> 	C		kg
		M5x0.8	4298 00 01	0.095
		<p>The sub-base is fitted directly to the axial valve and allows the mounting of a 15x15 solenoid valve. Supplied with 2 fixing bolts, silencer and seals.</p>		

4298 Mini-Solenoid Valve 1W/12VA

	Anodised aluminium 	Voltage		kg
		24V = CC*	4298 01 01	0.052
		24V ~ CA**	4298 01 02	0.058
		110V ~ CA**	4298 02 01	0.051
		220V ~ CA**	4298 02 02	0.054
		*Direct current **Alternating current		

4299 Pneumatic Button/Electro-Pneumatic

	Nickel-plated brass 	Contact		kg
		Standard*	4299 01 01	0.085
		With key*	4299 01 02	0.110
		Standard**	4299 02 01	0.102
		With key**	4299 02 02	0.124
		Bulkhead fixing hole diameter: Ø22 mm *1 pneumatic contact **1 electro-pneumatic contact Available upon request only		