

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

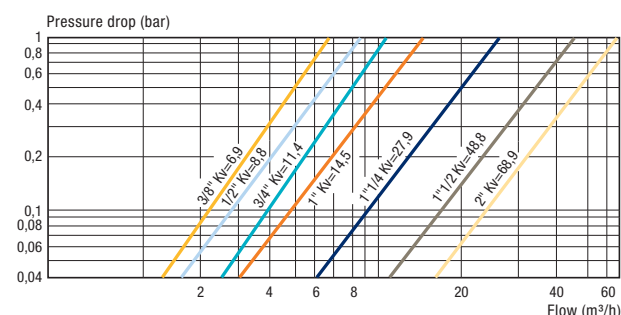
Compatible Fluids	Depending on type of seal – FKM: water, air, oils, greases, etc. – EPDM: hot water, air, steam, etc.
Working Pressure	10 bar max.
Pilot Pressure	NC and NO: 4.2 to 8 bar Double-acting: 3 to 8 bar
Working Temperature	-20°C to +135°C (suffix 20 FKM) -20°C to +120°C (suffix 30 EPDM)

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

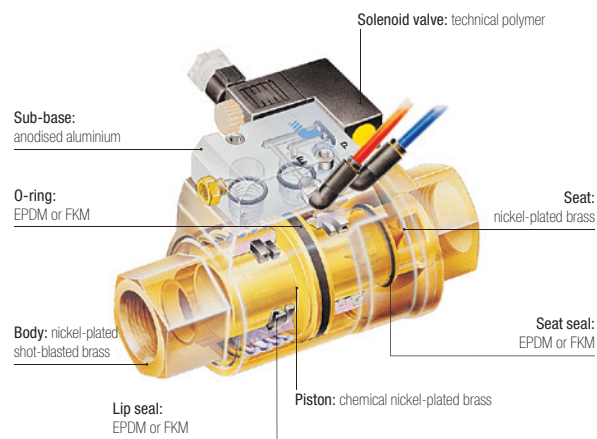
Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Guaranteed for use with a vacuum of 740 mm Hg (97% vacuum).

Flow Curve and Pressure Drop (Kv)

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



Component Materials



Silicone-free

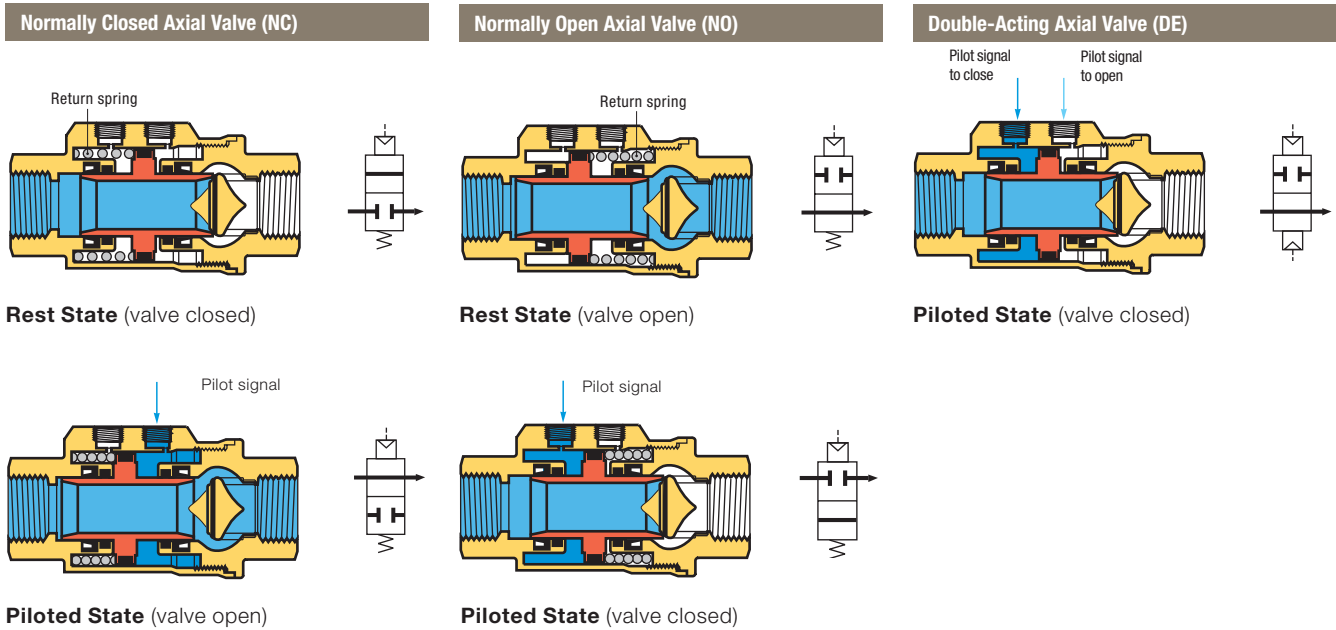
Regulations

- 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.



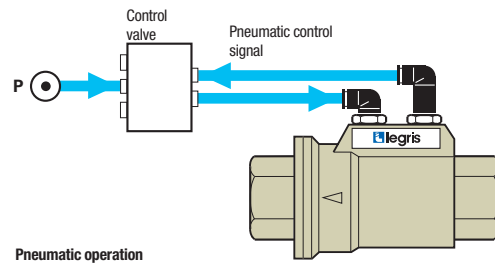
Installation Options

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

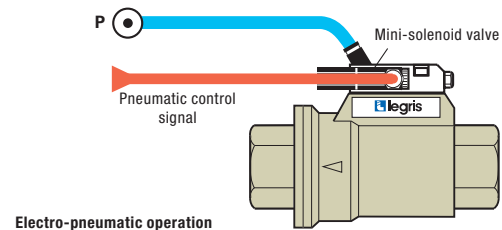
- local compressed air control
- for repetitive on/off cycles
- remote control where access to the machine is difficult
- for explosive or explosion prevention areas



Electro-Pneumatic Control

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

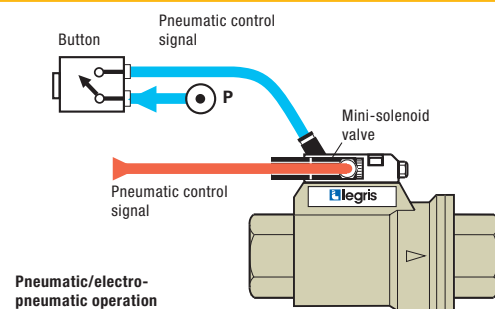
- for automated industrial systems requiring remote control
- Namur seating plane solenoid valve



Dual Pneumatic and Electro-Pneumatic Control


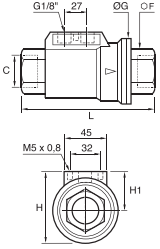

Example: Normally open axial valve 4212 + sub-base and Mini-solenoid valve 4298 + Pneumatic push-button 4299

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


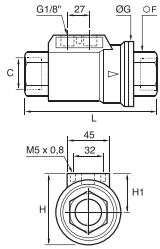



Axial Valves


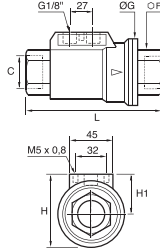

4202..20 Normally Closed Axial Valve with FKM Seal, Female BSPP Thread

	<p>Nickel-plated brass, FKM</p> 	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
<p>Pilot port: G1/8 - Delivered with a silencer *Models with CE marking</p>									


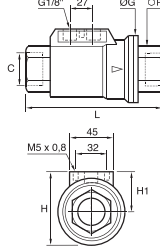

4202..30 Normally Closed Axial Valve with EPDM Seal, Female BSPP Thread

	<p>Nickel-plated brass, EPDM</p> 	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
<p>Pilot port: G1/8 - Delivered with a silencer *Models with CE marking</p>									


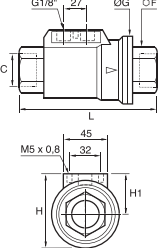

4212..20 Normally Open Axial Valve with FKM Seal, Female BSPP Thread

	<p>Nickel-plated brass, FKM</p> 	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
<p>Pilot port: G1/8 - Delivered with a silencer *Models with CE marking</p>									

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


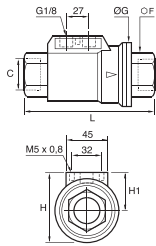

	<p>Nickel-plated brass, EPDM</p> 	C		F	G	H	H1	L	kg
		G3/8	4212 10 17 30	22	46	54	31	98	0.827
		G1/2	4212 15 21 30	27	52	60	35	112	1.152
		G3/4	4212 20 27 30	33	64	70	38	135	1.575
		G1	4212 25 34 30	41	69	76	41.5	143	2.055
		G1¼	4212 32 42 30*	50	86	91	48	165	3.301
		G1½	4212 40 49 30*	60	96	102	54	180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

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

	<p>Nickel-plated brass, FKM</p> 	C		F	G	H	H1	L	kg
		G3/8	4222 10 17 20	22	46	54	31	98	0.802
		G1/2	4222 15 21 20	27	52	60	35	112	1.063
		G3/4	4222 20 27 20	33	64	70	38	135	1.572
		G1	4222 25 34 20	41	69	76	41.5	143	1.942
		G1¼	4222 32 42 20*	50	86	91	48	165	3.058
		G1½	4222 40 49 20*	60	96	102	54	180	3.995
		G2	4222 50 48 20*	75	109	115	60.5	207	6.275
<p>Pilot port: G1/8 *Models with CE marking</p>									


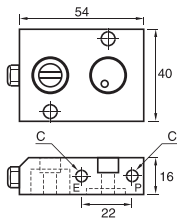

Axial Valves

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

	<p>Nickel-plated brass, EPDM</p> 	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		


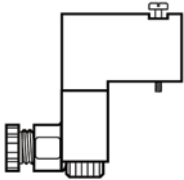

Pilot port: G1/8
 Delivered with a silencer
 *Models with CE marking

4298 Sub-Base for Solenoid Pilot Valve

	<p>Treated aluminium, NBR</p> 	C		kg
		M5x0.8	4298 00 01	0.095


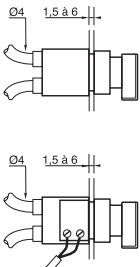

The sub-base is fitted directly to the axial valve and allows the mounting of a 15x15 solenoid valve.
 Supplied with 2 fixing bolts, silencer and seals.

4298 Mini-Solenoid Valve 1W/12VA

	<p>Anodised aluminium</p> 	Voltage		kg
		24V $\overline{\text{---}}$ CC*	4298 01 01	0.052
24V \sim CA**	4298 01 02	0.058		
110V \sim CA**	4298 02 01	0.051		
220V \sim CA**	4298 02 02	0.054		

*Direct current
 **Alternating current

4299 Pneumatic Button/Electro-Pneumatic

	<p>Nickel-plated brass</p> 	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