

# 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

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

### Performance

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

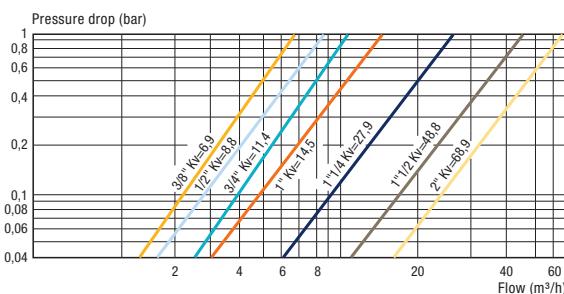
## Technical Characteristics

<b>Compatible Fluids</b>	Depending on type of seal – FKM: water, air, oils, greases, etc. – EPDM: hot water, air, steam, etc.						
<b>Working Pressure</b>	10 bar max.						
<b>Pilot Pressure</b>	NC and NO: 4.2 to 8 bar Double-acting: 3 to 8 bar						
<b>Working Temperature</b>	-20°C to +135°C (suffix 20 FKM) -20°C to +120°C (suffix 30 EPDM)						
<b>Tightening Torques</b>	Threads	G3/8	G1/2	G3/4	G1	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

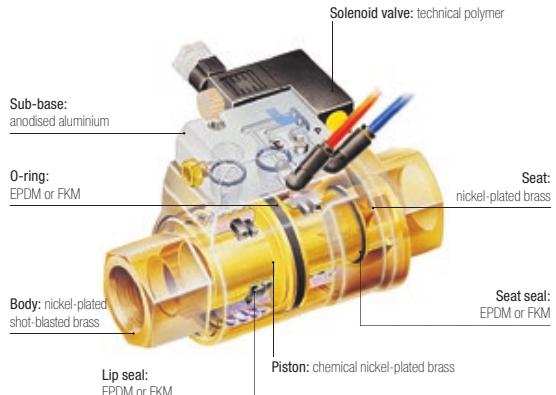
Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.  
Guaranteed for use with a vacuum of 740 mm Hg (97% vacuum).

### Flow Curve and Pressure Drop (Kv)

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



### Component Materials



### Silicone-free

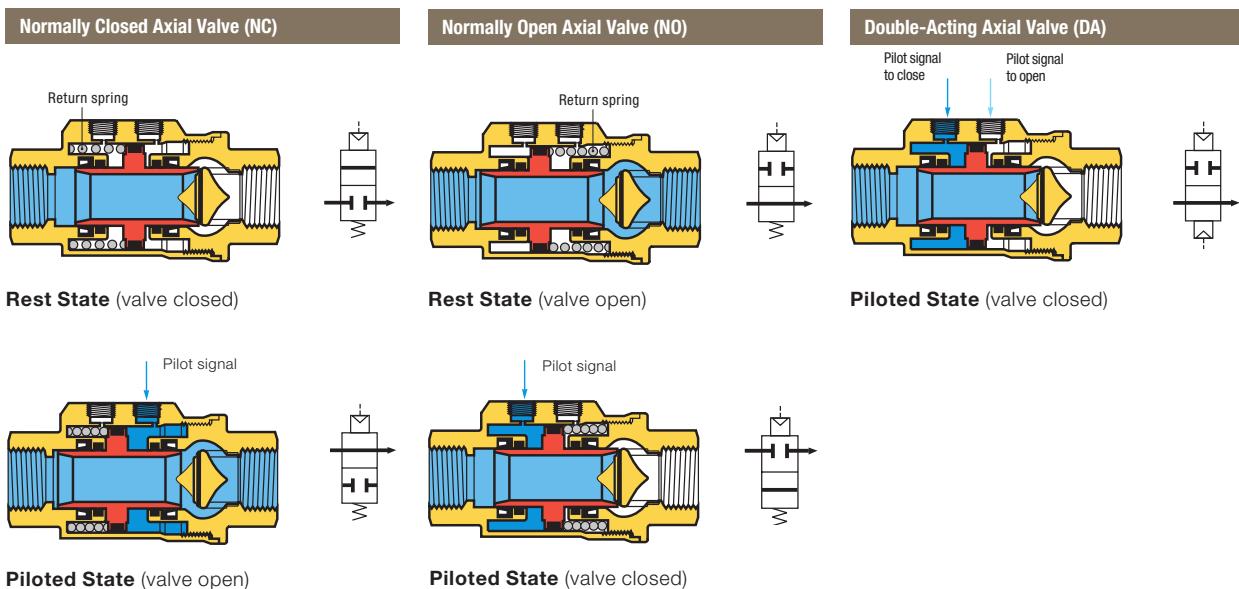
### Regulations

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.



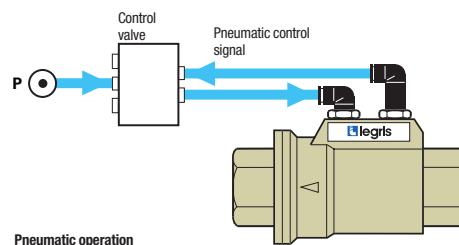
## Installation Options

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

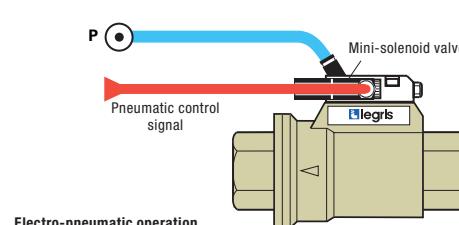


### Electro-Pneumatic Control

#### 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



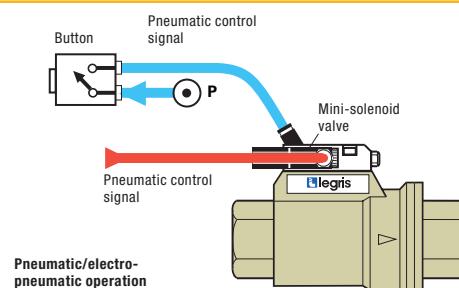
### Dual Pneumatic and Electro-Pneumatic Control

#### 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

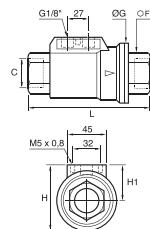


# Axial Valves

## 4202..20

Normally Closed Axial Valve with FKM Seal, Female BSPP Thread

Nickel-plated brass, FKM



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	1.093
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
G1 1/4	4202 32 42 20*	50	86	91	48	165	3.266
G1 1/2	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

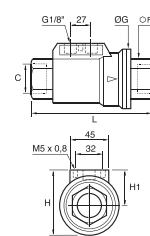
Complete with M5 silencer

\*Models with EC marking

## 4202..30

Normally Closed Axial Valve with EPDM seal, Female BSPP Thread

Nickel-plated brass, EPDM



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	1.097
G3/4	4202 20 27 30	33	64	70	38	135	1.606
G1	4202 25 34 30	41	69	76	41.5	143	2.013
G1 1/4	4202 32 42 30*	50	86	91	48	165	3.315
G1 1/2	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

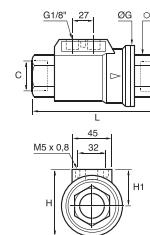
Delivered with a silencer

\*Models with EC marking

## 4212..20

Normally Open Axial Valve with FKM Seal, Female BSPP Thread

Nickel-plated brass, FKM



C		F	G	H	H1	L	Kg
G3/8	4212 10 17 20	22	46	54	31	98	0.828
G1/2	4212 15 21 20	27	52	60	35	112	1.096
G3/4	4212 20 27 20	33	64	70	38	135	1.637
G1	4212 25 34 20	41	69	76	41.5	143	2.025
G1 1/4	4212 32 42 20*	50	86	91	48	165	3.301
G1 1/2	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

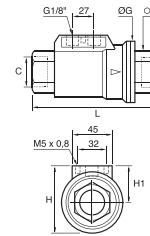
Complete with M5 silencer

\*Models with EC 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	1.595
G1	4212 25 34 30	41	69	76	41.5	143	1.993
G1 1/4	4212 32 42 30*	50	86	91	48	165	3.301
G1 1/2	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

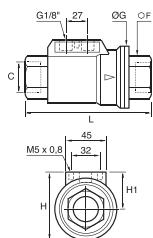
Delivered with a silencer

\*Models with EC marking

# Axial Valves

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

Nickel-plated brass, FKM



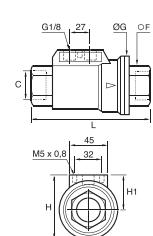
C		F	G	H	H1	L	Kg
G3/8	4222 10 17 20	22	46	54	31	98	0.802
G1/2	4222 15 21 20	27	52	60	35	112	1.050
G3/4	4222 20 27 20	33	64	70	38	135	1.571
G1	4222 25 34 20	41	69	76	41.5	143	1.942
G1 1/4	4222 32 42 20*	50	86	91	48	165	3.058
G1 1/2	4222 40 49 20*	60	96	102	54	180	3.995
G2	4222 50 48 20*	75	109	115	60.5	207	6.275

Pilot port: G1/8

\*Models with EC marking

## 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	1.943
G1 1/4	4222 32 42 30*	50	86	91	48	165	3.301
G1 1/2	4222 40 49 30*	60	96	102	54	180	4.260
G2	4222 50 48 30*	75	109	115	60.5	207	6.520

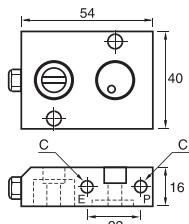
Pilot port: G1/8

Delivered with a silencer

\*Models with EC marking

## 4298 Sub-Base for Solenoid Pilot Valve

Treated aluminium, NBR



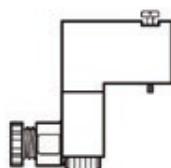
C		Kg
M5x0.8	4298 00 01	0.095

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 seats.

## 4298 Mini-Solenoid Valve 1W/12VA

Anodised aluminium



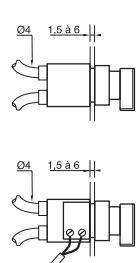
Voltage		Kg
24V - CC*	4298 01 01	0.051
24V ~ CA**	4298 01 02	0.058
110V ~ CA**	4298 02 01	0.051
220V ~ CA**	4298 02 02	0.054

\*Direct current

\*\*Alternating current

## 4299 Pneumatic Button/Electro-Pneumatic

Nickel-plated brass, technical polymer



Contact		Kg
Standard*	4299 01 01	0.090
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