

Axial Valve Range

In-Line Normally Closed

4202..20
FKM Seal
2/2
Page 6-48



4202..30
EPDM Seal
2/2
Page 6-48



In-Line Normally Open

4212..20
FKM Seal
2/2
Page 6-48



4212..30
EPDM Seal
2/2
Page 6-48



In-Line Double-Acting

4222..20
FKM Seal
2/2
Page 6-48



4222..30
EPDM Seal
2/2
Page 6-49



Accessories

4298
Sub-Base
Page 6-49



4298
Solenoid Valve
Page 6-49



4299
Pneumatic Button
Page 6-49



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

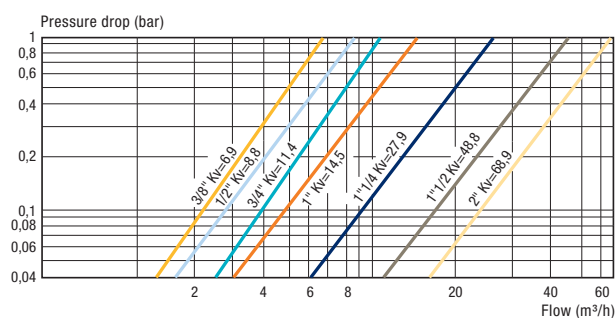
Compatible Fluids	Depending on type of seal – FKM: water, air, oils, greases, etc. – EPDM: hot water, air, steam, etc.
Working Pressure	10 bar max.
Pilot Pressure	NC and NO: 4.2 to 8 bar Double-acting: 3 to 8 bar
Working Temperature	-20°C to +135°C (suffix 20 FKM) -20°C to +120°C (suffix 30 EPDM)

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

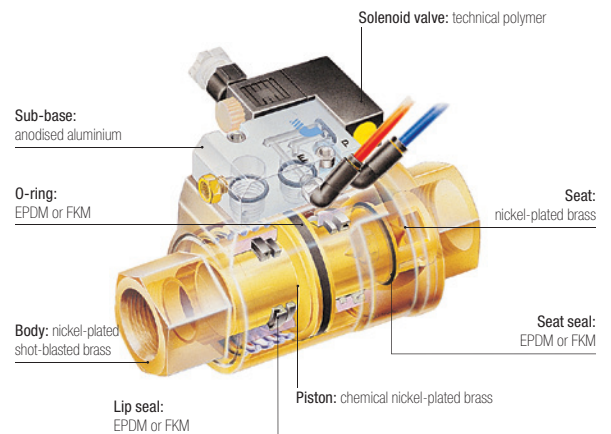
Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
Guaranteed for use with a vacuum of 740 mm Hg (97% vacuum).

Flow Curve and Pressure Drop (Kv)

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



Component Materials



Silicone-free

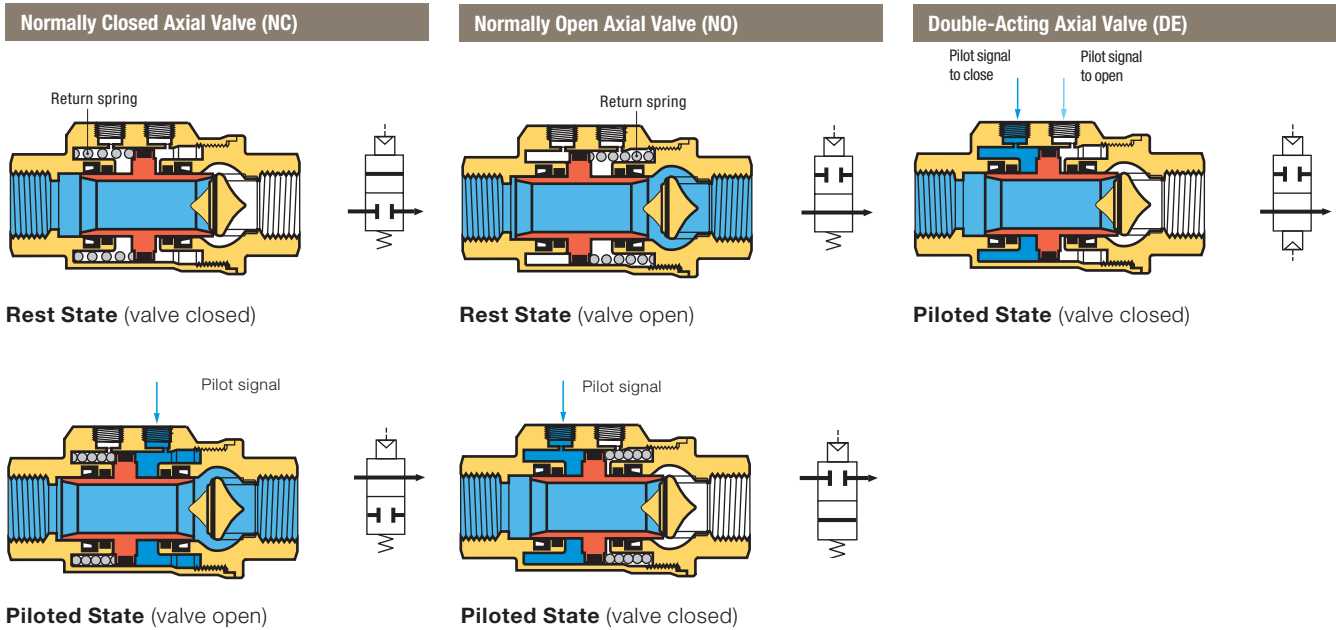
Regulations

- 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.



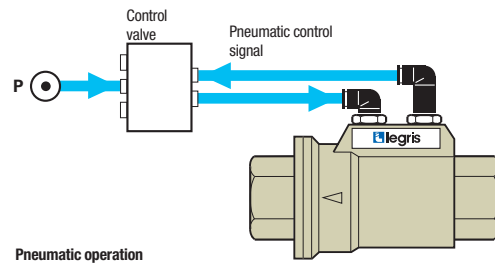
Installation Options

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

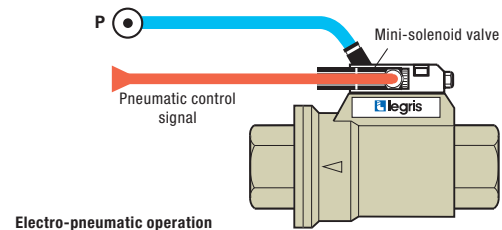
- local compressed air control
- for repetitive on/off cycles
- remote control where access to the machine is difficult
- for explosive or explosion prevention areas



Electro-Pneumatic Control

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

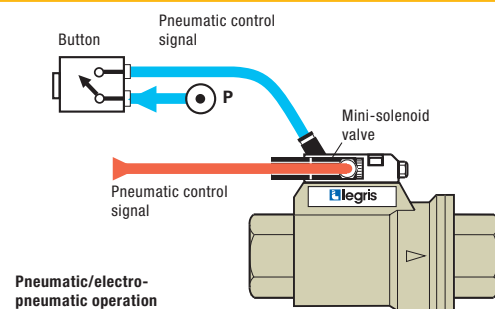
- for automated industrial systems requiring remote control
- Namur seating plane solenoid valve



Dual Pneumatic and Electro-Pneumatic Control


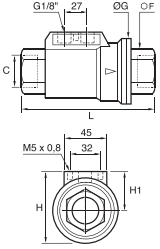

Example: Normally open axial valve 4212 + sub-base and Mini-solenoid valve 4298 + Pneumatic push-button 4299

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


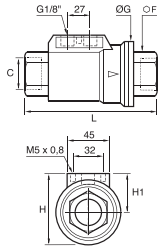



Axial Valves


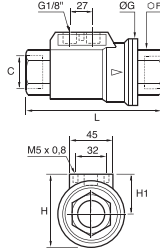

4202..20 Normally Closed Axial Valve with FKM Seal, Female BSPP Thread

	<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>									


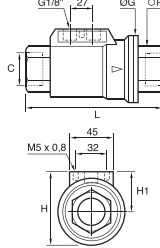

4202..30 Normally Closed Axial Valve with EPDM Seal, Female BSPP Thread

	<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>									


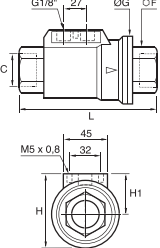

4212..20 Normally Open Axial Valve with FKM Seal, Female BSPP Thread

	<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


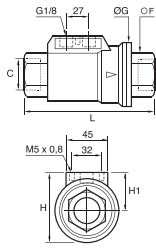

	<p>Nickel-plated brass, EPDM</p> 	C		F	G	H	H1	L	kg
		G3/8	4212 10 17 30	22	46	54	31	98	0.827
		G1/2	4212 15 21 30	27	52	60	35	112	1.152
		G3/4	4212 20 27 30	33	64	70	38	135	1.575
		G1	4212 25 34 30	41	69	76	41.5	143	2.055
		G1¼	4212 32 42 30*	50	86	91	48	165	3.301
		G1½	4212 40 49 30*	60	96	102	54	180	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


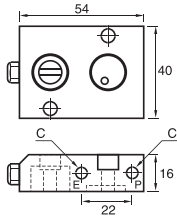

	<p>Nickel-plated brass, FKM</p> 	C		F	G	H	H1	L	kg
		G3/8	4222 10 17 20	22	46	54	31	98	0.802
		G1/2	4222 15 21 20	27	52	60	35	112	1.063
		G3/4	4222 20 27 20	33	64	70	38	135	1.572
		G1	4222 25 34 20	41	69	76	41.5	143	1.942
		G1¼	4222 32 42 20*	50	86	91	48	165	3.058
		G1½	4222 40 49 20*	60	96	102	54	180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


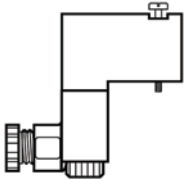

4222..30 Double Acting Axial Valve with EPDM seal, Female BSPP Thread

	<p>Nickel-plated brass, EPDM</p> 	<p>C </p>	F	G	H	H1	L	kg																																																					
		<table border="1"> <tr> <td>G3/8</td> <td>4222 10 17 30</td> <td>22</td> <td>46</td> <td>54</td> <td>31</td> <td>98</td> <td>0.832</td> </tr> <tr> <td>G1/2</td> <td>4222 15 21 30</td> <td>27</td> <td>52</td> <td>60</td> <td>35</td> <td>112</td> <td>1.046</td> </tr> <tr> <td>G3/4</td> <td>4222 20 27 30</td> <td>33</td> <td>64</td> <td>70</td> <td>38</td> <td>135</td> <td>1.662</td> </tr> <tr> <td>G1</td> <td>4222 25 34 30</td> <td>41</td> <td>69</td> <td>76</td> <td>41.5</td> <td>143</td> <td>1.938</td> </tr> <tr> <td>G1¼</td> <td>4222 32 42 30*</td> <td>50</td> <td>86</td> <td>91</td> <td>48</td> <td>165</td> <td>3.301</td> </tr> <tr> <td>G1½</td> <td>4222 40 49 30*</td> <td>60</td> <td>96</td> <td>102</td> <td>54</td> <td>180</td> <td>4.260</td> </tr> <tr> <td>G2</td> <td>4222 50 48 30*</td> <td>75</td> <td>109</td> <td>115</td> <td>60.5</td> <td>207</td> <td>6.520</td> </tr> </table>	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			
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		<p>Pilot port: G1/8 Delivered with a silencer *Models with CE marking</p>																																																											


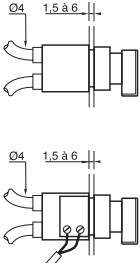

4298 Sub-Base for Solenoid Pilot Valve

	<p>Treated aluminium, NBR</p> 	<p>C </p>	kg	
		<table border="1"> <tr> <td>M5x0.8</td> <td>4298 00 01</td> <td>0.095</td> </tr> </table>	M5x0.8	4298 00 01
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

	<p>Anodised aluminium</p> 	<p>Voltage </p>	kg										
		<table border="1"> <tr> <td>24V $\overline{\text{---}}$ CC*</td> <td>4298 01 01</td> <td>0.052</td> </tr> <tr> <td>24V \sim CA**</td> <td>4298 01 02</td> <td>0.058</td> </tr> <tr> <td>110V \sim CA**</td> <td>4298 02 01</td> <td>0.051</td> </tr> <tr> <td>220V \sim CA**</td> <td>4298 02 02</td> <td>0.054</td> </tr> </table>	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
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											
<p>*Direct current **Alternating current</p>													

4299 Pneumatic Button/Electro-Pneumatic

	<p>Nickel-plated brass</p> 	<p>Contact </p>	kg										
		<table border="1"> <tr> <td>Standard*</td> <td>4299 01 01</td> <td>0.085</td> </tr> <tr> <td>With key*</td> <td>4299 01 02</td> <td>0.110</td> </tr> <tr> <td>Standard**</td> <td>4299 02 01</td> <td>0.102</td> </tr> <tr> <td>With key**</td> <td>4299 02 02</td> <td>0.124</td> </tr> </table>	Standard*	4299 01 01	0.085	With key*	4299 01 02	0.110	Standard**	4299 02 01	0.102	With key**	4299 02 02
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											
<p>Bulkhead fixing hole diameter: Ø22 mm *1 pneumatic contact **1 electro-pneumatic contact Available upon request only</p>													