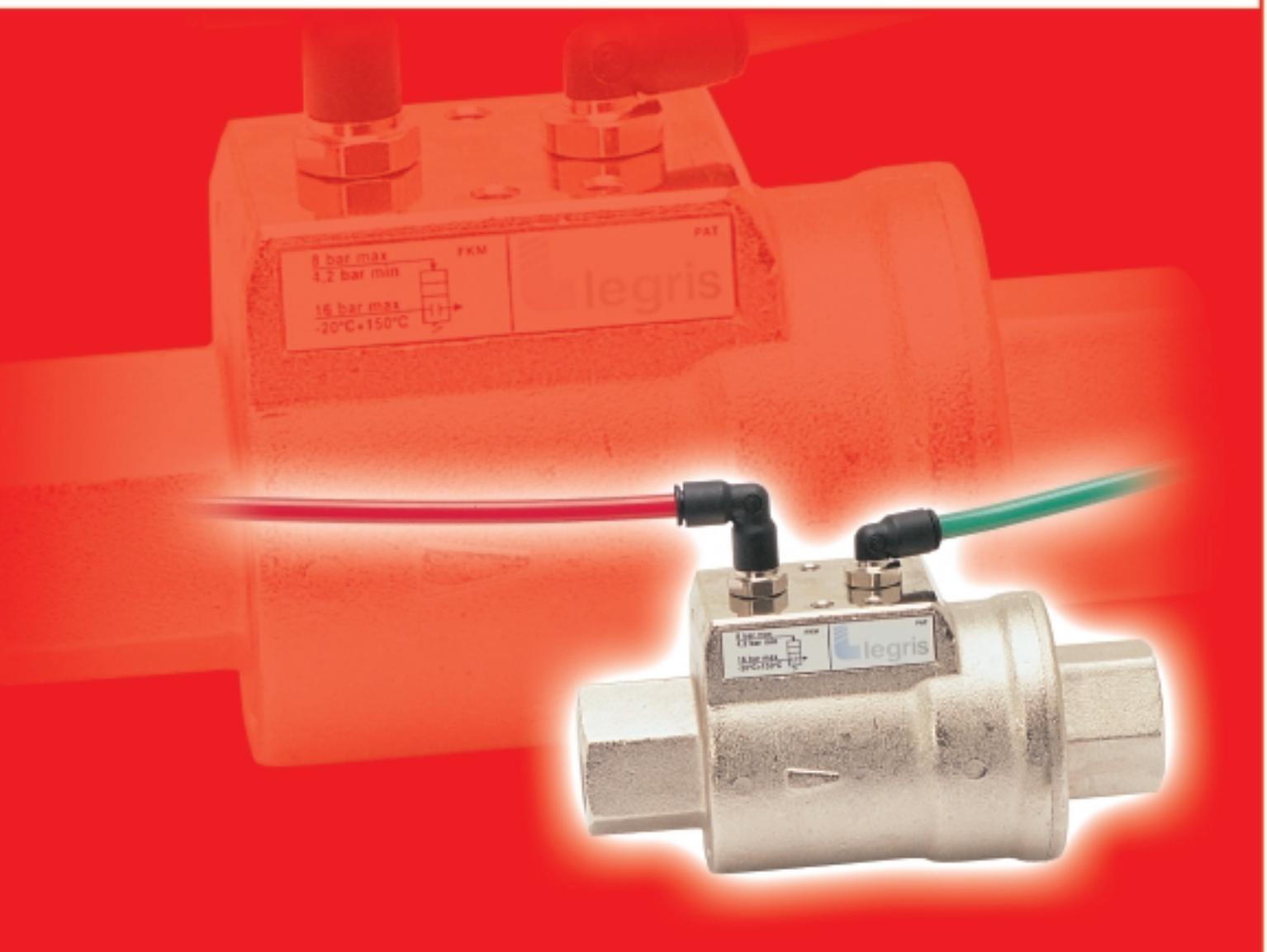


piloted axial valve



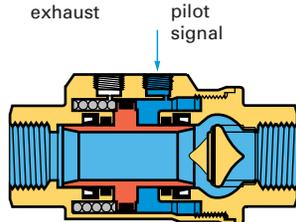
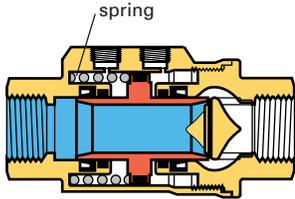
principle of the Legris axial valve

operation

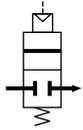
Depending upon the operational requirement, air is passed into the actuation chamber, as shown below, in order to open or close the valve.

rest state (valve closed)

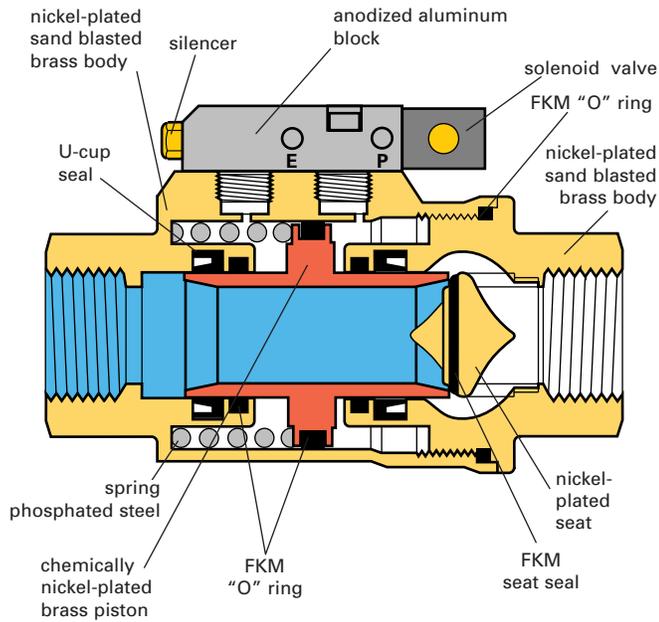
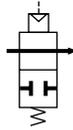
piloted state (valve open)



normally closed axial valve in closed position



normally closed axial valve in open (actuated) position



Designed to overcome the limitations of traditional actuators, the **Legris** axial valve offers the functions of a valve fitted with an actuator. A pneumatic automation device is fitted directly into the valve.

Its operation is not affected by the up/downstream pressures of the transported fluids, which guarantees the user total safety and a vastly simplified choice. This innovative concept is a logical extension of the **Legris** hand actuated ball valve range.

The range consists of the following models to suit different applications:

- normally closed axial valves
- normally open axial valves (on special request)
- double acting axial valves (on special request)
- all are available with FKM (EPDM seals on special request).

technical characteristics

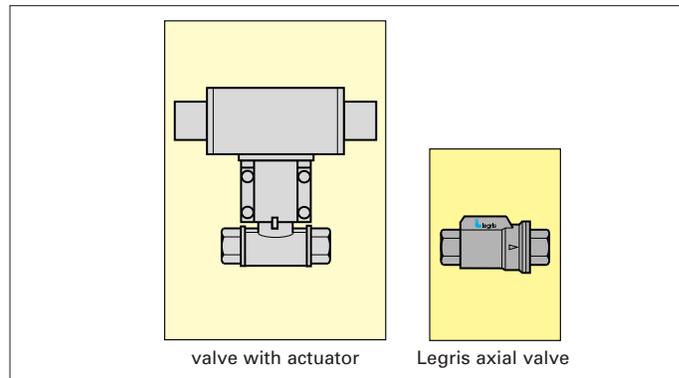
transported fluid	- all fluids compatible with: • FKM : water, air, oils, greases...
maximum working pressure	150 psi
maximum temperature	with FKM seal +275°F
minimum temperature	-4°F
vacuum capability	740mm Hg (97.4% vacuum)
pilot fluid	filtered compressed air
pilot pressure	NC: 60 to 115 psi

principal advantages of the axial valve



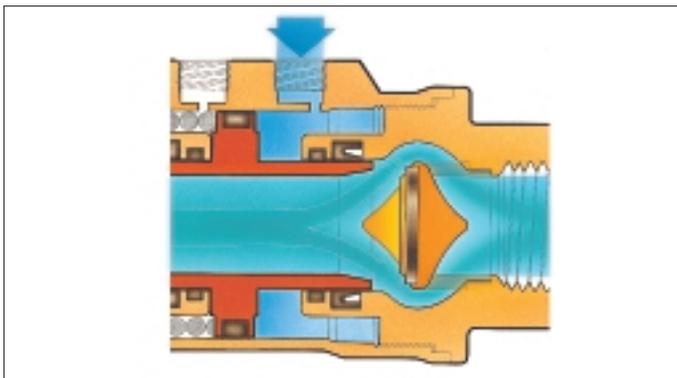
compactness

- the axial valve is **extremely compact** and needs up to 50% less space than an actuated valve.
- no external moving parts



costs less than an actuated valve

- a **single unit** which controls the following two functions at the same time:
 - opening/closing of circuit.
 - actuation of this function.
- reduced air consumption



high performance

- full flow
- compatible with numerous industrial fluids
- **operates** independently of the up/downstream pressures of the fluids transported.



straightforward reliable installation

- **ready to fit** and does away with the valve + connector + actuator fitting time
- easy to assemble, in any position
- designed for use with **Legris LF3000** instant fittings when piping up

axial valve

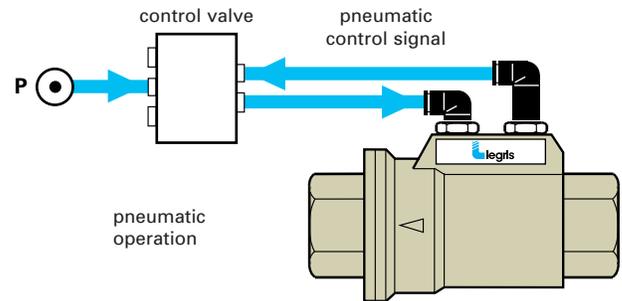
which control method?

The Legris axial valve offers three different control methods dependent on the type of installation:

pneumatic control

example: 4222 axial valve, double acting

- on-site control
- for repetitive on/off cycles
- remote control in case of difficulty of access to the machine

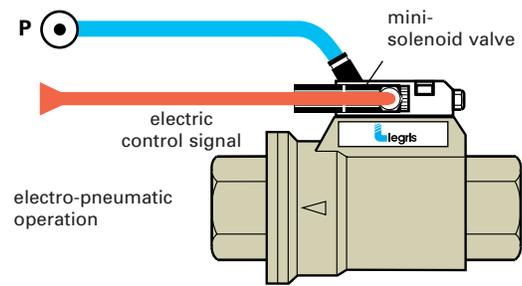


electro-pneumatic control

example:

**4202 axial valve, normally closed
+ 4298 mini-solenoid valve and subbase**

- for industrial automation requiring remote control

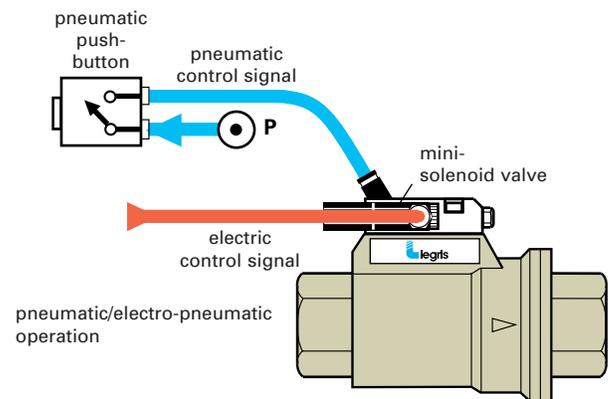


pneumatic/electro-pneumatic dual control

example:

**4212 axial valve, normally open
+ 4298 mini-solenoid valve and subbase
+ 4299 switch**

- dual control structure
- for increased safety:
prevents all localized operating errors



the complete range of axial valves

4203
N.C. version – NPT
Page T6



4202
N.C. version – BSPP
Page T6

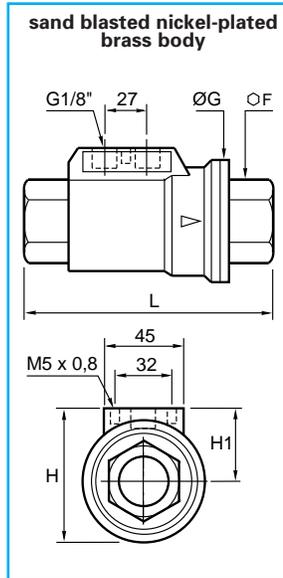


4298
subbase
Page T7



4299
Page T7

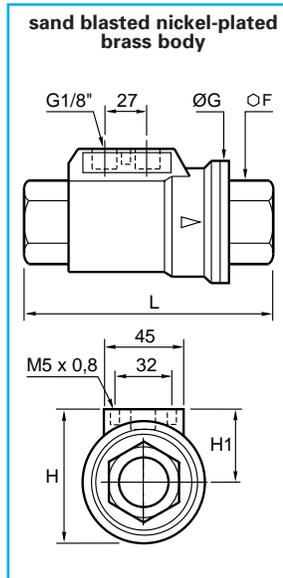
4203 normally closed, double female — NPT



C	DN	FKM seal	F	G	H	H1	L	kg
NPT			mm	in	in	in	in	
3/8	10	4203 10 18 20	22	1.81	2.13	1.22	3.86	1.79
1/2	15	4203 15 22 20	27	2.05	2.36	1.38	4.41	2.39
3/4	20	4203 20 28 20	33	2.52	2.76	1.50	5.31	3.60
1	25	4203 25 35 20	41	2.72	2.99	1.63	5.63	4.46
1 1/4	32	4203 32 43 20	50	3.39	3.58	1.89	6.50	7.28
1 1/2	40	4203 40 50 20	60	3.78	4.02	2.13	7.09	9.22
2	50	4203 50 44 20	75	4.29	4.53	2.38	8.15	14.02

Pilot port: 1/8" BSPP
Complete with 1/8" BSPT silencer

4202 normally closed, double female — BSPP



C	DN	FKM seal	F	G	H	H1	L	kg
BSPP			mm	mm	mm	mm	mm	
G3/8	10	4202 10 17 20	22	46	54	31	98	.814
G1/2	15	4202 15 21 20	27	52	60	35	112	1.085
G3/4	20	4202 20 27 20	33	64	70	38	135	1.634
G1	25	4202 25 34 20	41	69	76	41.5	143	2.024
G1 1/4	32	4202 32 42 20	50	86	91	48	165	3.301
G1 1/2	40	4202 40 49 20	60	96	102	54	180	4.180
G2	50	4202 50 48 20	75	109	115	60.5	207	6.360

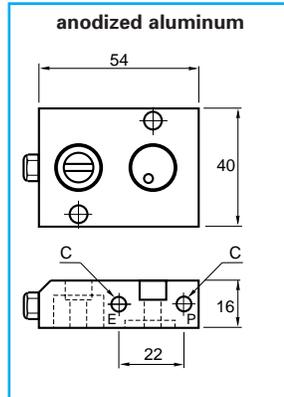
Pilot port: 1/8" BSPP
Complete with 1/8" BSPT silencer

Upon special request, we can supply

- normally open and double acting valves
- replacement seal kits (all types i.e. FKM, EPDM, Nitrile)
- axial valves equipped with magnetic sensors to indicate their state (open and/or closed)
- chemically nickel-plated axial valves

axial valve

4298 subbase for solenoid pilot valve — M5



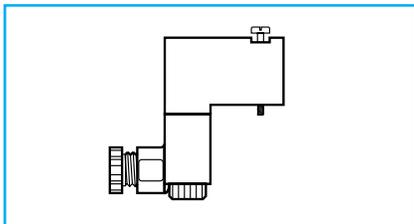
C		
M5x0.8	4298 00 01	.094

Subbase conforms to NAMUR specifications.

The subbase is fitted directly to the axial valve and permits the mounting of a mini solenoid valve.

Supplied with 2 fixing bolts and silencer

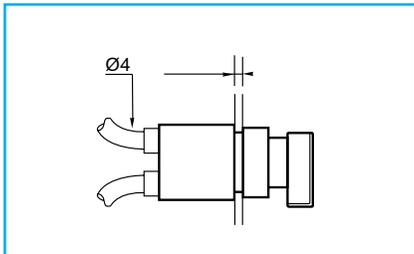
4298 mini-solenoid valve 1W/1.2VA



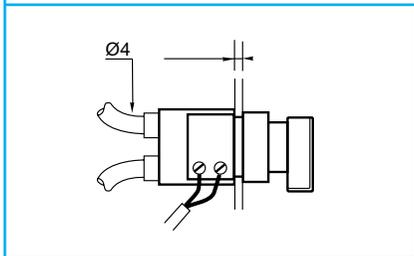
voltage	
24V = DC	4298 01 01
24V ~ AC	4298 01 02
110V ~ AC	4298 02 01
220V ~ AC	4298 02 02

type of coil	voltage		power class	insulation degree	protection	cable entry
size 15	~	24-110-220V - 50/60 Hz	2W	F	IP 65	plug size 15 rotatable through 90° - CM 6
	=	24V	1W			

4299 pneumatic button/electro-pneumatic



1 pneumatic contact	
standard	4299 01 01
with key	4299 01 02



1 electro-pneumatic contact	
standard	4299 02 01
with key	4299 02 02

Bulkhead fixing hole diameter: 22mm

Flow curve / Pressure drop / Kv

Kv in l/min

(water at ambient temperature, under a differential pressure of one bar)

