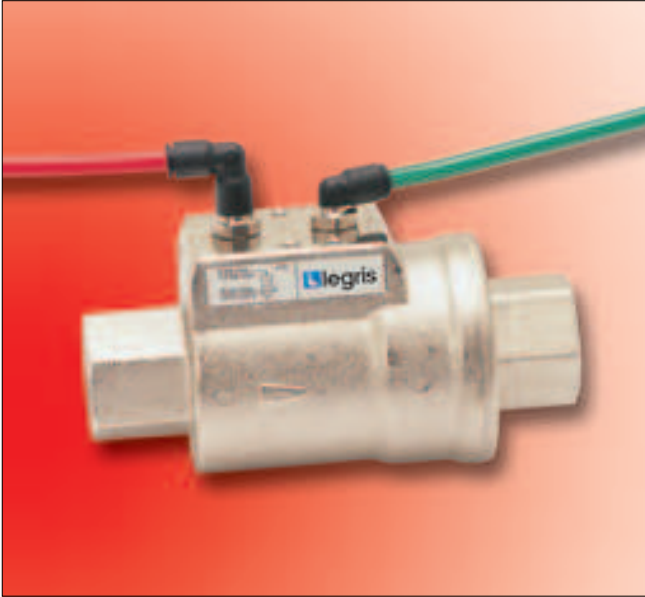


# Principle of the Axial valve



Designed with a view to overcoming 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.

### Principal advantages:

- **compactness:** the axial valve is extremely compact and requires up to 50% **less space** than an actuated valve.
- **costs less** than an actuated valve: a single unit which controls the following two functions at the same time opening/closing of circuit and actuation of this function.
- **high performance:** full flow, compatible with numerous industrial fluids
- straightforward reliable installation: **ready to fit.**

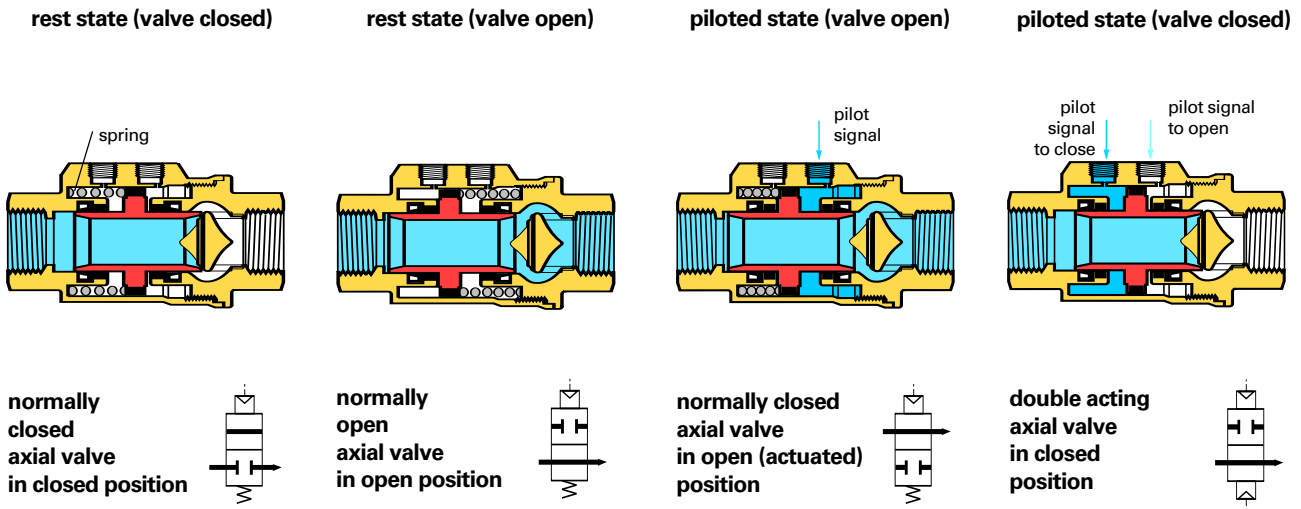
## technical specifications

<p>Labels in diagram:            silencer            solenoid valve            nickel plated sand blasted brass body            nickel plated seat            EPDM or FKM seal            anodized aluminium block            nickel plated sand blasted brass body            EPDM or FKM seal            nickel plated seat            EPDM or FKM seal            spring phosphated steel            EPDM or FKM seal            chemically nickel plated brass piston</p>	<b>transported fluid</b>	- all fluids compatible with : ● <b>FKM</b> : water, air, oils, greases... ● <b>EPDM</b> : hot water, air, steam...
	<b>maximum working pressure</b>	10 bar
	<b>maximum temperature</b>	with FKM seal + 135° C with EPDM seal + 120° C
	<b>minimum temperature</b>	- 20°C
	<b>vacuum capability</b>	740 mm Hg (97,4% vacuum).
	<b>pilot fluid</b>	filtered compressed air
	<b>pilot pressure</b>	NC and NO : 4,2 to 8 bar double acting : 3 to 8 bar

# 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.



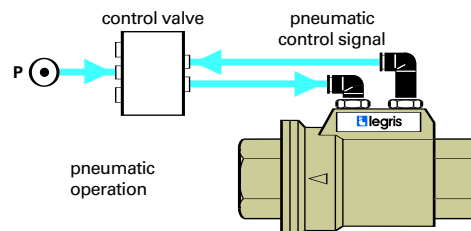
## which control method ?

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

### pneumatic control

example : 4222 axial valve, double acting

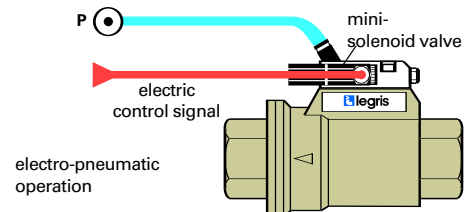
- on-site control.
- for **repetitive** on/off cycles.
- remote control in case of **difficulty of access** to a machine.



### electro-pneumatic control

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

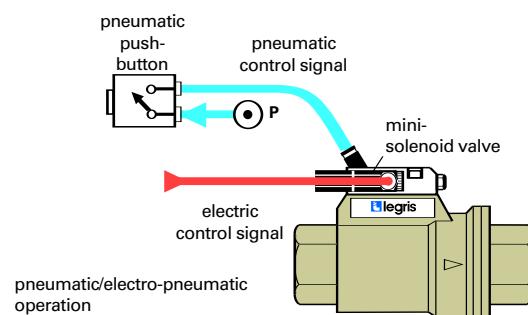
- for industrial automation requiring **remote control**.



### 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.

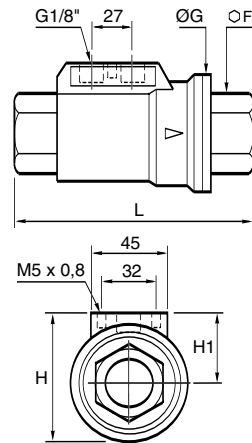


# axial valve

## 4202 normally closed, double female, BSP parallel



sand blasted nickel plated brass body



C	DN	FKM seal	F	G	H	H1	L	kg
G3/8	10	4202 10 17 20	22	46	54	31	98	0,814
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

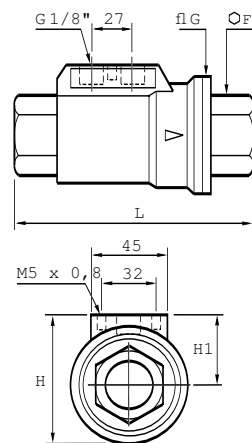
C	DN	EPDM seal	F	G	H	H1	L	kg
G3/8	10	4202 10 17 30	22	46	54	31	98	0,814
G1/2	15	4202 15 21 30	27	52	60	35	112	1,085
G3/4	20	4202 20 27 30	33	64	70	38	135	1,634
G1"	25	4202 25 34 30	41	69	76	41,5	143	2,024
G1"1/4	32	4202 32 42 30*	50	86	91	48	165	3,301
G1"1/2	40	4202 40 49 30*	60	96	102	54	180	4,180
G2"	50	4202 50 48 30*	75	109	115	60,5	207	6,360

Pilot port : 1/8" BSP parallel  
Complete with M5 silencer

## 4212 normally open, double female, BSP parallel



sand blasted nickel plated brass body



C	DN	FKM seal	F	G	H	H1	L	kg
G3/8	10	4212 10 17 20	22	46	54	31	98	0,814
G1/2	15	4212 15 21 20	27	52	60	35	112	1,085
G3/4	20	4212 20 27 20	33	64	70	38	135	1,634
G1"	25	4212 25 34 20	41	69	76	41,5	143	2,024
G1"1/4	32	4212 32 42 20*	50	86	91	48	165	3,301
G1"1/2	40	4212 40 49 20*	60	96	102	54	180	4,180
G2"	50	4212 50 48 20*	75	109	115	60,5	207	6,360

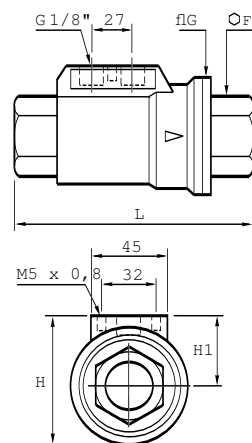
C	DN	EPDM seal	F	G	H	H1	L	kg
G3/8	10	4212 10 17 30	22	46	54	31	98	0,814
G1/2	15	4212 15 21 30	27	52	60	35	112	1,085
G3/4	20	4212 20 27 30	33	64	70	38	135	1,634
G1"	25	4212 25 34 30	41	69	76	41,5	143	2,024
G1"1/4	32	4212 32 42 30*	50	86	91	48	165	3,301
G1"1/2	40	4212 40 49 30*	60	96	102	54	180	4,180
G2"	50	4212 50 48 30*	75	109	115	60,5	207	6,360

Pilot port : 1/8" BSP parallel  
Complete with M5 silencer

## 4222 double acting, double female, BSP parallel



sand blasted nickel plated brass body



C	DN	FKM seal	F	G	H	H1	L	kg
G3/8	10	4222 10 17 20	22	46	54	31	98	0,814
G1/2	15	4222 15 21 20	27	52	60	35	112	1,085
G3/4	20	4222 20 27 20	33	64	70	38	135	1,634
G1"	25	4222 25 34 20	41	69	76	41,5	143	2,024
G1"1/4	32	4222 32 42 20*	50	86	91	48	165	3,301
G1"1/2	40	4222 40 49 20*	60	96	102	54	180	4,180
G2"	50	4222 50 48 20*	75	109	115	60,5	207	6,360

C	DN	EPDM seal	F	G	H	H1	L	kg
G3/8	10	4222 10 17 30	22	46	54	31	98	0,814
G1/2	15	4222 15 21 30	27	52	60	35	112	1,085
G3/4	20	4222 20 27 30	33	64	70	38	135	1,634
G1"	25	4222 25 34 30	41	69	76	41,5	143	2,024
G1"1/4	32	4222 32 42 30*	50	86	91	48	165	3,301
G1"1/2	40	4222 40 49 30*	60	96	102	54	180	4,180
G2"	50	4222 50 48 30*	75	109	115	60,5	207	6,360

Pilot port : 1/8" BSP parallel

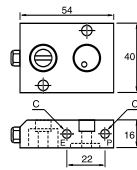
Face plate in accordance with recommendations in force (NAMUR). \*Models with CE marking

# axial valve

## 4298 subbase for solenoid pilot valve



anodized aluminium

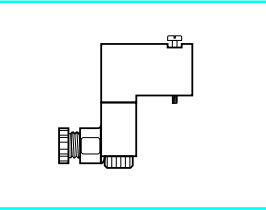


C		
M5x0,8	4298 00 01	0,094

The subbase is fitted directly to the axial valve and permits the mounting of a 15x15 solenoid valve.

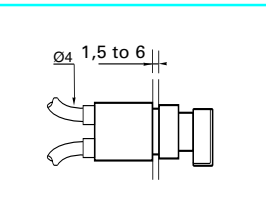
Supplied with 2 fixing bolts, silencer and seals

## 4298 mini-solenoid valve 1W/1,2VA

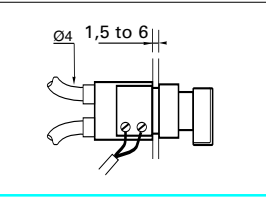


voltage	
24V ---	4298 01 01
24V ~	4298 01 02
110V ~	4298 02 01
220V ~	4298 02 02

## 4299 pneumatic button/electro-pneumatic

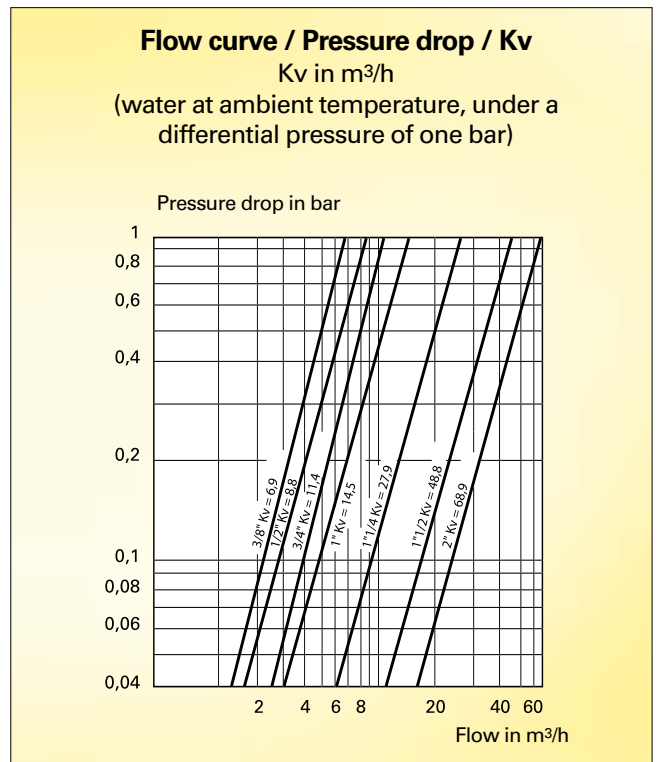


1 pneumatic contact	
standard	4299 01 01
with key	4299 01 02



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

Bulkhead fixing hole diameter : 22 mm



Upon special request, we can supply

- 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

Please, do not hesitate to consult us.