

Needle and Butterfly Valve Range

Brass Needle Valves

In-Line

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Right-Angled

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Drain Valve

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BSPP/Metric
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NPT
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Venting Pressure Gauge Valve

0627
BSPP
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Pressure Relief Valve

0630
BSPP
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Stainless Steel Needle Valve

In-Line

0591
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Butterfly Valve

In-Line

4602
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Needle Valves

Parker Legris compact needle valves can be installed in any system and are designed for applications requiring accurate **leak-free fluid control** and **excellent service life**.

Product Advantages

- Robust and Easy-to-Use**
 - Accurate flow control
 - Forged brass for improved long-term mechanical strength
 - Robust stem for good operational reliability
 - Corrosion resistance
- Wide Range**
 - Two materials (nickel-plated brass and stainless steel) suitable for many applications
 - Numerous valve and safety accessory configurations



Pneumatics
Water Circuits
Machine Tools
Rubber Industry
Packaging
Textile

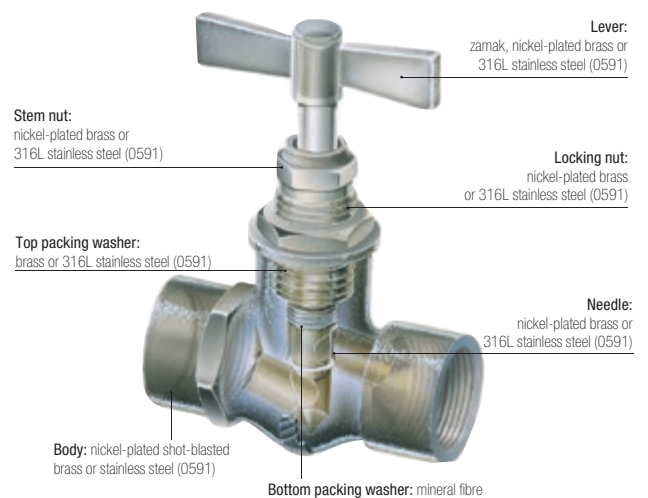
Applications

Technical Characteristics

	Brass	Stainless Steel			
Compatible Fluids	Compressed air, water, industrial fluids, etc. Other fluids: contact us	Many fluids			
Working Pressure	0 to 120 bar	0 to 400 bar			
Working Temperature	-20°C to +100°C (except model 0510)	-20°C to +180°C			
Tightening Torques	Threads	G1/8	G1/4	G3/8	G1/2
	daN.m	0.10 to 0.20	0.10 to 0.20	0.15 to 0.25	0.20 to 0.35

Reliable performance is dependent upon the type of fluid conveyed.

Component Materials



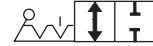
Silicone-free

Regulations

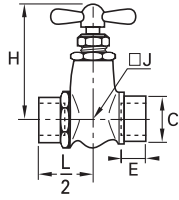
- DI: 97/23/EC (module PED A - diameters greater than 25 mm)
- DI: 2006/42/EC (Machinery Directive)
- DI: 2002/95/EC (RoHS)
- RG: 1907/2006 (REACH)

Brass Needle Valves

0502 In-Line Needle Valve, Female BSPP Thread



Nickel-plated brass

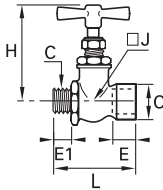


DN	C		E	H	H _{max}	J	L/2	Kg
4	G1/8	0502 04 10	9	56	50	17	23	0.133
	G1/4	0502 04 13	11	56	50	17	23	0.118
6	G3/8	0502 06 17	12	67	60	-	26	0.171
9	G3/8	0502 09 17	12	82	70	-	33	0.426

0501 In-Line Needle Valve, Male/Female BSPP Thread

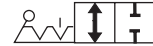


Nickel-plated brass

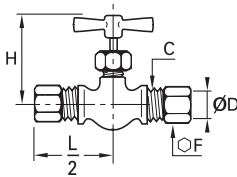


DN	C		E	E1	H	H _{max}	J	L	Kg
4	G1/8	0501 04 10	9	7	56	50	17	44	0.118
	G1/4	0501 04 13	11	9.5	56	50	17	46	0.115
6	G3/8	0501 06 17	12	9.5	67	60	-	48	0.158

0510 In-Line Needle Valve with Compression Connections



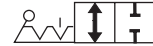
Nickel-plated brass



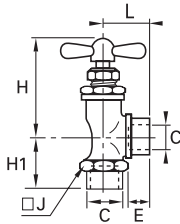
DN	ØD	C		F	H _{min}	H _{max}	L/2	Kg
4	6	M10x1	0510 04 06	13	42	46	29	0.083
8	8	M12x1	0510 05 08	14	42	46	30	0.083
5	10	M16x1.5	0510 05 10	19	42	46	31	0.111

The needle is sealed by an O-ring.
 Maximum operating pressure: Ø4: 100 bar, Ø5: 60 bar
 Working temperature: -15°C to +70°C
 Tightening torques: please refer to the Compression Fittings chapter of this catalogue.

0532 Right-Angle Needle Valve, Female BSPP Thread



Nickel-plated brass

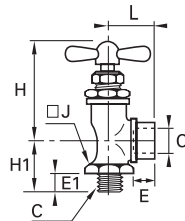


DN	C		E	H _{min}	H _{max}	H1	J	L	Kg
4	G1/8	0532 04 10	9	46	52	19	17	19	0.093
	G1/4	0532 04 13	11	46	52	21	17	21	0.087
6	G1/4	0532 06 13	11	55	63	26	22	26	0.171

0531 Right-Angle Needle Valve, Male/Female BSPP Thread



Nickel-plated brass

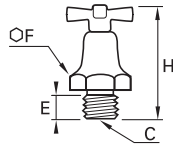



DN	C		E	E1	H _{min}	H _{max}	H1	J	L	Kg
4	G1/8	0531 04 10	7	9	46	52	19	17	19	0.082
	G1/4	0531 04 13	9.5	11	46	52	21	17	21	0.090
6	G1/4	0531 06 13	9.5	11	55	63	25	22	26	0.155
	G3/8	0531 06 17	9.5	12	55	63	25	22	27	0.153
10	G1/2	0531 10 21	13	16	62	72	34	26	33	0.329

Brass Needle Valves

0562 Needle Drain Valve, Male BSPP and Metric Thread

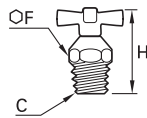
Brass



DN	C		E	F	H min	H max	Kg
5	M10x1	0562 05 60	8	16	37.5	40	0.031
	G1/8	0562 05 10	8	16	36	40	0.032
	G1/4	0562 05 13	10	19	38.5	42.5	0.040

0563 Needle Drain Valve, Male NPT Thread

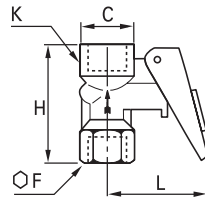
Brass




DN	C		F	H min	H max	Kg
5	G1/4	0563 05 14	14	28.5	32.5	0.021

0627 Automatic Vent Pressure Gauge Valve, Female BSPP Thread

Nickel-plated brass, NBR



C		F	H	K	L	Kg
G1/4	0627 00 13	19	43.5	20	40	0.097

Pressure: 10 bar

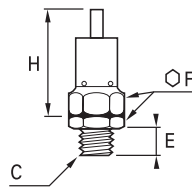
This isolating valve is used to connect a pressure gauge to a circuit.

Resetting the lever isolates and vents the gauge.

A locking pin can be used to enable the gauge to be fitted permanently.

0630 Pressure Relief Valve, Male BSPP Thread

Brass



C		E	F	H	Kg
G1/4	0630 06 13	9	17	42.5	0.050

This valve is delivered without calibration, but can be adjusted by inserting metal washers into the hexagon (F).

Maximum working pressure: 10 bar

Calibration from 1 to 10 bar (not below)

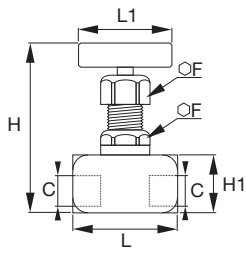
Stainless Steel Needle Valves


0591

Needle Valve, Female BSPP Thread



Stainless steel 316L, PTFE



DN	C		F	H min	H max	H1	L	L1	Kg
3	G1/8	0591 03 10	22	90	99	25	45	48	0.345
4	G1/4	0591 04 13	22	90	99	25	50	48	0.355
5	G3/8	0591 05 17	22	90	104	30	56	48	0.430
6	G1/2	0591 06 21	22	90	104	30	62	48	0.483

Butterfly Valves

In these robust valves, the internal component used to shut off the flow is a segment of a sphere. This allows **frequent operation with very low torque, no fluid retention areas** and therefore excellent mechanical performance.

Product Advantages

Compact & Abrasion-Resistant

- Excellent with abrasive fluids (including solid particles)
- Fluid flow direction marked for greater safety (uni-directional)
- Smooth operation
- Can be easily adapted for use with auxiliary actuators
- More compact than a ball valve with equivalent nominal diameter
- Simple and efficient design for a long service life

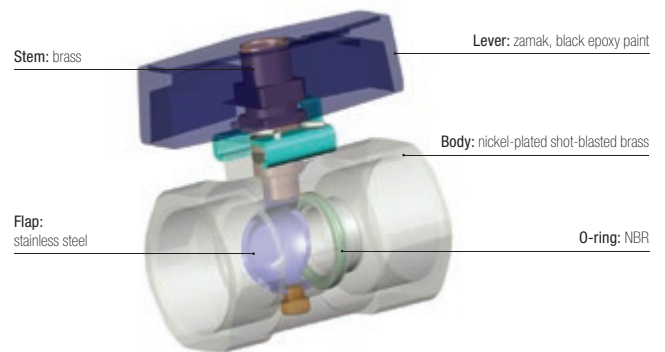
- ### Applications
- Painting & Printing
 - Machine Tools
 - Pneumatics
 - Powder Conveyance
 - Plumbing
 - Rubber Industry
 - Petrochemical

Technical Characteristics

Compatible Fluids	Compressed air, industrial gases, water, cutting oils, hydraulic oils, fuel oil, fuel, etc.
Working Pressure	0 to 16 bar
Working Temperature	-20°C to +80°C

Reliable performance is dependent upon the type of fluid conveyed.

Component Materials



Silicone-free

Regulations

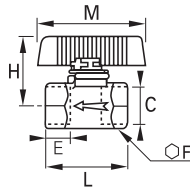
- DI: 97/23/EC (module PED A - diameters greater than 25 mm)
- DI: 2006/42/EC (Machinery Directive)
- DI: 2002/95/EC (RoHS)
- RG: 1907/2006 (REACH)


Butterfly Valves

4602 2/2 Butterfly Shut-Off Valve, Female BSPP Thread



Nickel-plated brass, NBR



DN	C		E	F	H	L	M	Kg
6	G1/4	4602 06 13	9	17	35	34	54	0.102
7	G3/8	4602 07 17	11	22	35	39	54	0.136
10	G1/2	4602 10 21	12	24	37	42	54	0.140
13	G3/4	4602 13 27	14	30	40	49	54	0.208
18	G1	4602 18 34	15	41	46	55	54	0.412

Black epoxy-coated zamak handle



Axial Valve Range

In-Line Normally Closed

4202..20
FKM Seal
2/2
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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

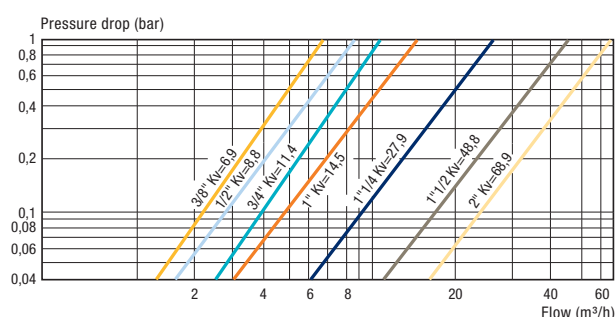
Compatible Fluids	Depending on type of seal – FKM: water, air, oils, greases, etc. – EPDM: hot water, air, steam, etc.
Working Pressure	10 bar max.
Pilot Pressure	NC and NO: 4.2 to 8 bar Double-acting: 3 to 8 bar
Working Temperature	-20°C to +135°C (suffix 20 FKM) -20°C to +120°C (suffix 30 EPDM)

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

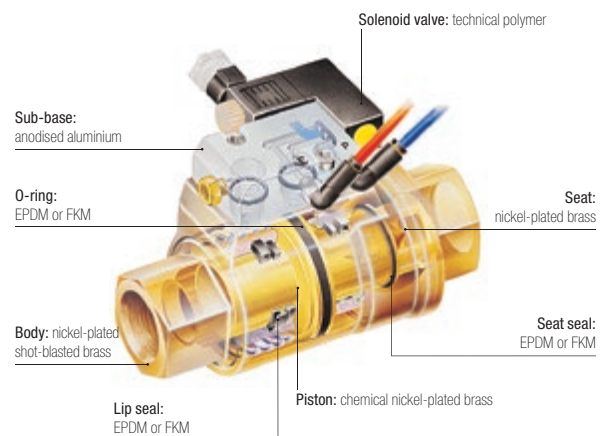
Reliable performance is dependent upon the type of fluid conveyed, component materials and tubing being used.
 Guaranteed for use with a vacuum of 740 mm Hg (97% vacuum).

Flow Curve and Pressure Drop (Kv)

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



Component Materials



Silicone-free

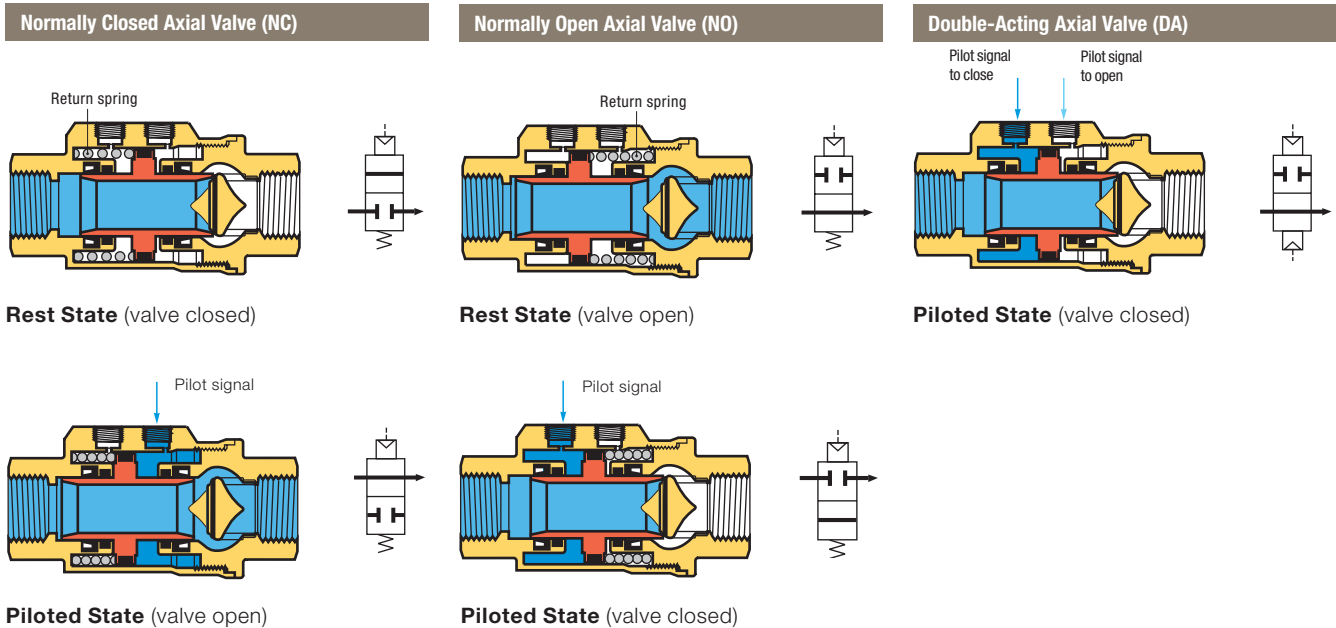
Regulations

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.



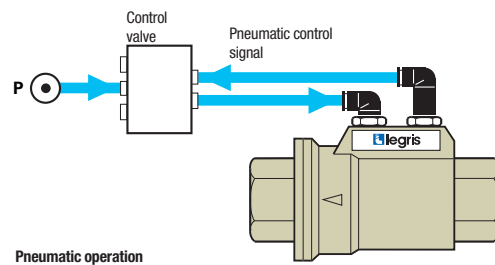
Installation Options

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

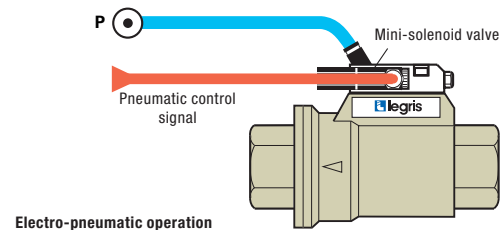
- local compressed air control
- for repetitive on/off cycles
- remote control where access to the machine is difficult
- for explosive or explosion prevention areas



Electro-Pneumatic Control

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

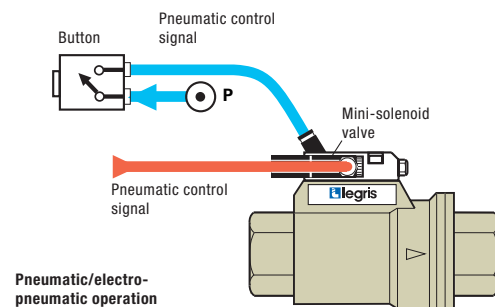
- for automated industrial systems requiring remote control
- Namur seating plane solenoid valve



Dual Pneumatic and Electro-Pneumatic Control

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

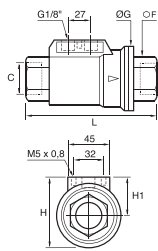
- dual control structure
- for increased safety: prevents localised operating errors
- Namur seating plane solenoid valve



Axial Valves

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

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

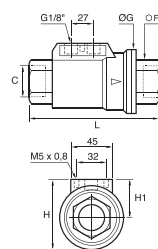
Pilot port: G1/8

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

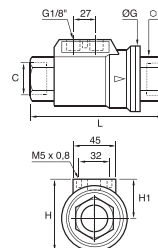
Pilot port: G1/8

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

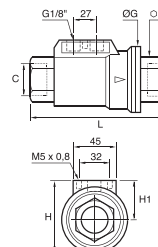
Pilot port: G1/8

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

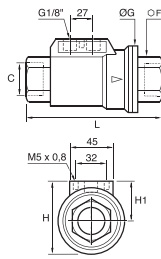
Delivered with a silencer

*Models with EC marking

Axial Valves

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

Nickel-plated brass, FKM



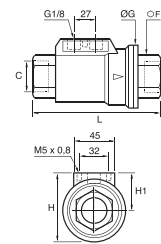
C		F	G	H	H1	L	Kg
G3/8	4222 10 17 20	22	46	54	31	98	0.802
G1/2	4222 15 21 20	27	52	60	35	112	1.050
G3/4	4222 20 27 20	33	64	70	38	135	1.571
G1	4222 25 34 20	41	69	76	41.5	143	1.942
G1 1/4	4222 32 42 20*	50	86	91	48	165	3.058
G1 1/2	4222 40 49 20*	60	96	102	54	180	3.995
G2	4222 50 48 20*	75	109	115	60.5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

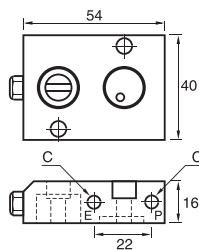
Pilot port: G1/8

Delivered with a silencer

*Models with EC marking

4298 Sub-Base for Solenoid Pilot Valve

Treated aluminium, NBR

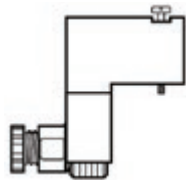


C		Kg
M5x0.8	4298 00 01	0.095

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



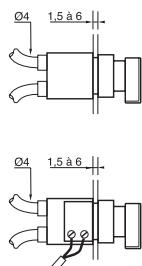
Voltage		Kg
24V = CC*	4298 01 01	0.051
24V ~ CA**	4298 01 02	0.058
110V ~ CA**	4298 02 01	0.051
220V ~ CA**	4298 02 02	0.054

*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