TYPE 91

2/2-way solenoid valve
NC - Valve normally closed (as standard)
NO - Valve normally open (as option)

Force-pilot operated piston valve
No differential pressure is necessary for operation.
In standard (NC) the valve closes with spring power.

- **Solenoid valve for cryogenic fluids**

TECHNICAL SPECIFICATIONS

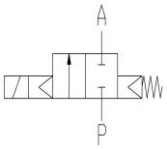
Type of control	Force-pilot operated, no pressure difference necessary
Design	Piston design
Connection	Sleeve connection G 1/4 - G 2 weld-on Further connections like NPT on request
Installation	Actuator upright
Pressure	0 - 16 bar / 0 - 40 bar (see table on page 2)
Medium	Clean, neutral gaseous and liquid media
Max. viscosity	22 mm²/s
Temperature range	Medium: -196 °C / +60 °C Environment: -40 °C / +50 °C Taking into account other influencing parameters
Body material	PN16: Brass 2.0402 PN16: Stainless steel 1.4581 PN50: Stainless steel 1.4404
Metallic inner parts	Brass and st. steel
Sealing	PTFE
Supply voltage	AC~ 24V, 110V, 230V DC= 12V, 24V Other supply voltages on request
Voltage tolerance	-10% / +10%
Power consumption	.322 = 30 Watt .328 = 24 Watt Ex .242 = 46 Watt .248 = 30 Watt Ex .272 = 100 Watt .278 = 47 Watt Ex
Protection class	IP65 according to DIN 60529
Duty factor	100% ED-VDE 0580
Connection type	Device plug DIN 43650, terminal box
Ex-proof	acc. to 2014/34/EU (ATEX)

VALVE FEATURES

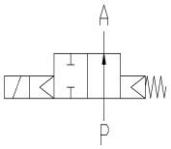
- For cryogenic media to -196 °C
- No pressure difference is required
- High life time
- High-quality materials
- Reliable and sturdy sealing elements

FUNCTION

NC – non energized closed

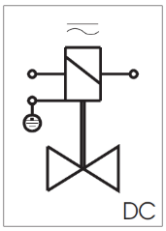


NO – non-energized open

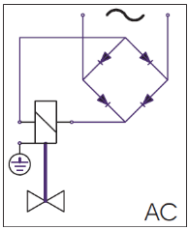


CONNECTION DIAGRAM

For AC/DC coils



For DC coils
w/ integr. rectifier



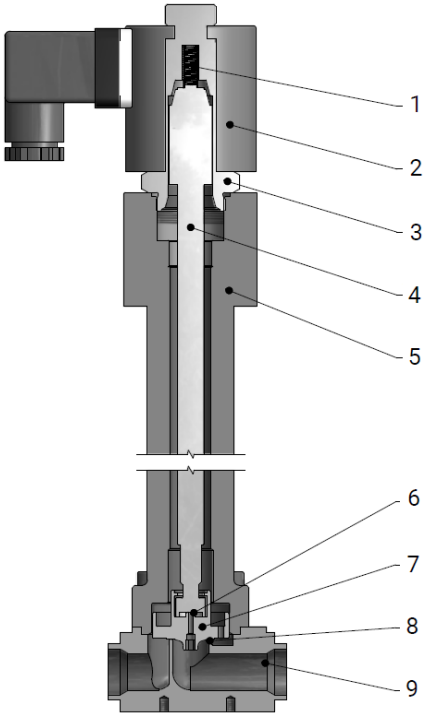
CERTIFICATES

LDA Solutions for Life
Hoge Buizen 53 -1980 EPPEGEM (BE)
www.LDA.be - LDA@LDA.be
+32(0) 2 266 13 13

TECHNICAL FEATURES

PN16				max. pressure for coils				
G	Seat Ø mm	Kv-value m³/h	Standard type	.322	.242	.328	.248	.278
1/4	13,5	1,7	A9121/..04/..	0-16	-	0-16	-	-
3/8	13,5	3,8	A9122/..04/..	0-16	-	0-16	-	-
1/2	13,5	4,4	A9123/..04/..	0-16	-	0-16	-	-
3/4	27,5	11,2	A9124/..04/..	0-16	-	0-16	-	-
1	27,5	13,0	A9125/..04/..	0-16	-	0-16	-	-
1 1/4	40,0	28,5	A9126/..04/..	0-16	-	-	0-16	-
1 1/2	40,0	32,0	A9127/..04/..	0-16	-	-	0-16	-
2	50,0	47,0	A9128/..04/..	-	0-16	-	-	0-16
The Kv values in the table apply to the larger drive								

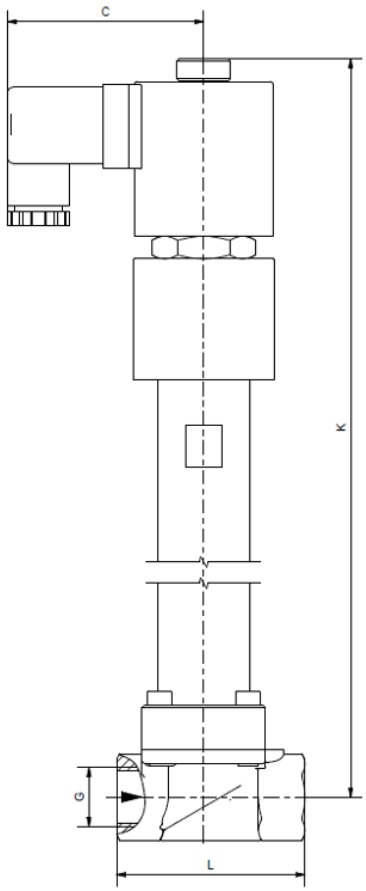
PN50				max. pressure for coils				
G	Seat Ø mm	Kv-value m³/h	Standard type	.322	.242	.272	.248	.278
1/4	13,5	1,8	B9121/..04/..	0-40	-	-	0-40	-
3/8	13,5	4,0	B9122/..04/..	0-40	-	-	0-40	-
1/2	13,5	4,5	B9123/..04/..	0-40	-	-	0-40	-
3/4	27,5	11,5	B9124/..04/..	0-40	-	-	0-25	0-40
1	27,5	13,0	B9125/..04/..	0-40	-	-	0-25	0-40
1 1/4	40,0	29,0	B9126/..04/..	-	0-25	0-40	0-25	0-40
1 1/2	40,0	33,0	B9127/..04/..	-	0-25	0-40	0-25	0-40
2	50,0	47,0	B9128/..04/..	-	-	0-40	-	0-40
The Kv values in the table apply to the larger drive								

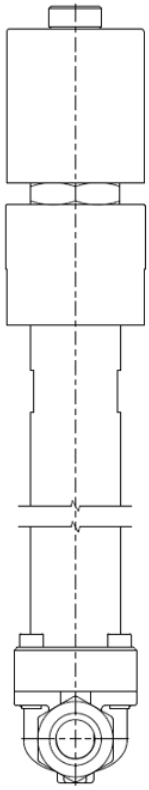


Description	
1	Spring
2	Solenoid coil
3	Core tube
4	Plunger
5	Distancing
6	Pilot seat
7	Piston
8	Valve seat
9	Valve body

LDA Solutions for Life
Hoge Buizen 53 -1980 EPPEGEM (BE)
www.LDA.be - LDA@LDA.be
☎ +32(0) 2 266 13 13

DIMENSIONS





PN16

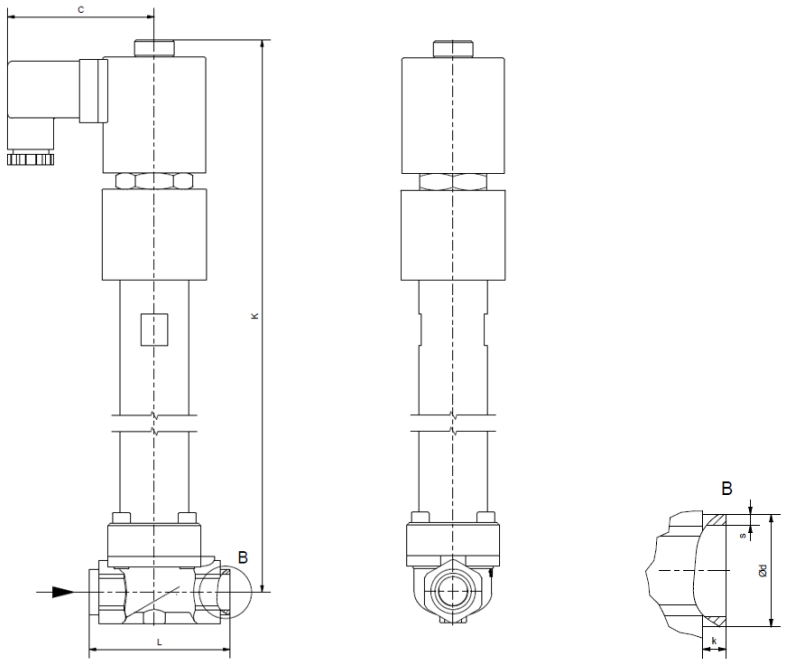
Coil	.322			.242	
Type	A9121-23	A9124-25	A9126-27	A9126-27	A9128
G	1/4 - 1/2	3/4 - 1	1 1/4 - 1 1/2	1 1/4 - 1 1/2	2
C	70	70	77	93	93
K	365	400	475	500	510
L	67	96	140	140	168
kg	2,2	4,4	8,8	9,7	10,3

PN16

Coil	.328			.248	.278
Type	A9121-23	A9124-25	A9126-27	A9126-27	A9128
G	1/4 - 1/2	3/4 - 1	1 1/4 - 1 1/2	1 1/4 - 1 1/2	2
C	83	83	83	93	106
K	370	405	475	500	560
L	67	96	140	140	168
kg	3,3	5,4	9,0	9,8	13,0

LDA Solutions for Life
Hoge Buizen 53 -1980 EPPEGEM (BE)
www.LDA.be - LDA@LDA.be
+32(0) 2 266 13 13

DIMENSIONS



PN50

Coil	.322		.242	.272	
Type	A9121-23	A9124-25	A9126-27	A9126-27	A9128
DN	13,5	25-27,5	40	40	50
C	77	77	93	107	107
K	408	424	505	55	560
L	80	104	148	148	178
d	24	30-36	45-52	45-52	65
s	3,5	4	5-5,5	5-5,5	5,5
k	2	4	4	4	4
kg	3,3	5,4	9,8	12,3	13,0

PN50

Coil	.248		.278	
Type	A9121-23	A9124-25	A9126-27	A9128
DN	13,5	25-27,5	40	50
C	93	93	106	106
K	418	434	353	560
L	80	104	148	178
L	24	30-36	45-52	65
L	3,5	4	5-5,5	5,5
L	2	4	4	4
kg	4,5	6,6	12,2	13,0

LDA Solutions for Life
Hoge Buizen 53 -1980 EPPEGEM (BE)
www.LDA.be - LDA@LDA.be
+32(0) 2 266 13 13

INFORMATION

- It is imperative to observe the installation and safety instructions in our operating and service manuals.
- Required ordering information: valve type, function NC/NO, pressure range, connection, nominal width, medium, flow rate, medium and ambient temperatures, connection voltage.
- **For information on the heating and performance of solenoid coils, refer to the corresponding "Coils" data sheet.**
- **Detailed production-specific drawings and other technical information will be made available when an order is placed.**

PLEASE NOTE

Each individual application decides which valve type is required, the main factor being the resistance of the materials to the operating medium. The correct selection of materials requires knowledge of the concentration, temperature and degree of contamination of the medium. Other criteria include the operating pressure and max. volumetric flow, since, in addition to high temperatures, high pressures and high flow rates must also be taken into account when selecting the materials.

All materials used for our valves, be it housing, seals or magnets, will be carefully selected in view of the different application areas. Any information given is non-binding and serves for orientation only. No claims under warranty can be derived therefrom.

ORDERING CODE

Type	Connection		Body	Sealing		Coil		Option
A 91	2 3	/	0 8	0 4	/	. 3 2	2	- x x

A	PN16	21	G 1/4	08	St.steel	32	30 W	2	Standard IP65
B	PN50	22	G 3/8	10	Brass 2.0402	24	46 W	8	2014/34/EU (ATEX)
		23	G 1/2			27	100 W		
		24	G 3/4	04	PTFE			NO	normally open
		25	G 1					AS	weld-on
		26	G 5/4						
		27	G 6/4						
		28	G 2						

LDA Solutions for Life

Hoge Buizen 53 -1980 EPPEGEM (BE)
www.LDA.be - LDA@LDA.be
☎ +32(0) 2 266 13 13