

TYPE 91K



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 ISO 4200
Installation	Actuator upright
Pressure	0 - 16 bar (see table on page 2)
Medium	Clean, neutral gaseous and liquid media
Max. viscosity	22 mm ² /s
Temperature range	Medium: -196 °C / +80 °C Environment: -55 °C / +50 °C
Body material	Brass 2.0402 Stainless steel 1.4581
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	S802 = 24 Watt S322 = 30 Watt S242 = 46 Watt
Protection class	IP65 according to DIN 60529
Duty factor	100% ED-VDE 0580
Connection type	Terminal box

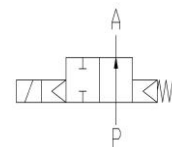
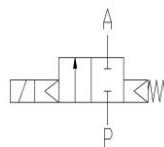
VALVE FEATURES

- 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

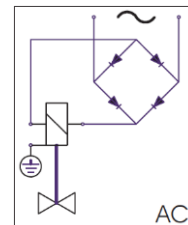
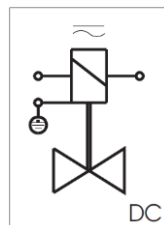
NO – non-energized open



CONNECTION DIAGRAM

For AC/DC coils

For DC coils
w/ integr. rectifier



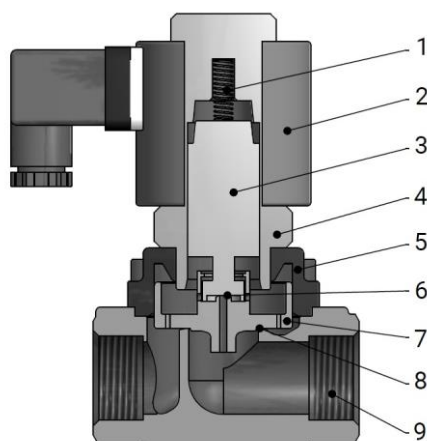
CERTIFICATES



TECHNICAL FEATURES

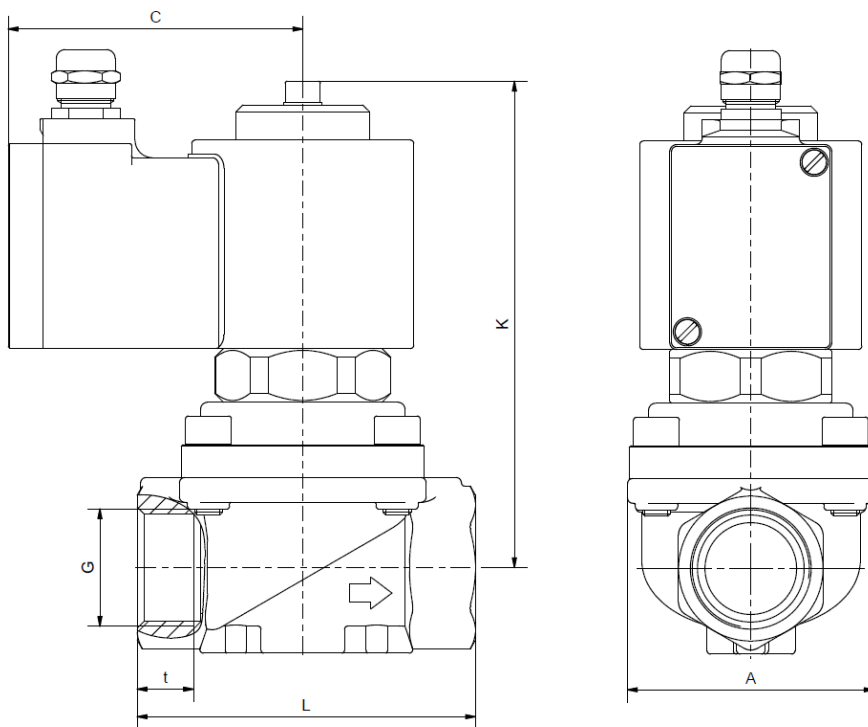
G	Seat Ø mm	Kv-value m³/h	Standard type	max. pressure for coils		
				S802	S322	S242
1/4	13,5	1,8	K9121/..04/	0-16	-	-
3/8	13,5	4,0	K9122/..04/	0-16	-	-
1/2	13,5	4,5	K9123/..04/	0-16	-	-
3/4	27,5	11,5	K9124/..04/	-	0-16	-
1	27,5	13,0	K9125/..04/	-	0-16	-
1 1/4	40	29,0	K9126/..04/	-	0-10	0-16
1 1/2	40	33,0	K9127/..04/	-	0-10	0-16
2	50	49,0	K9128/..04/	-	0-6	0-16

The Kv values in the table apply to the larger drive



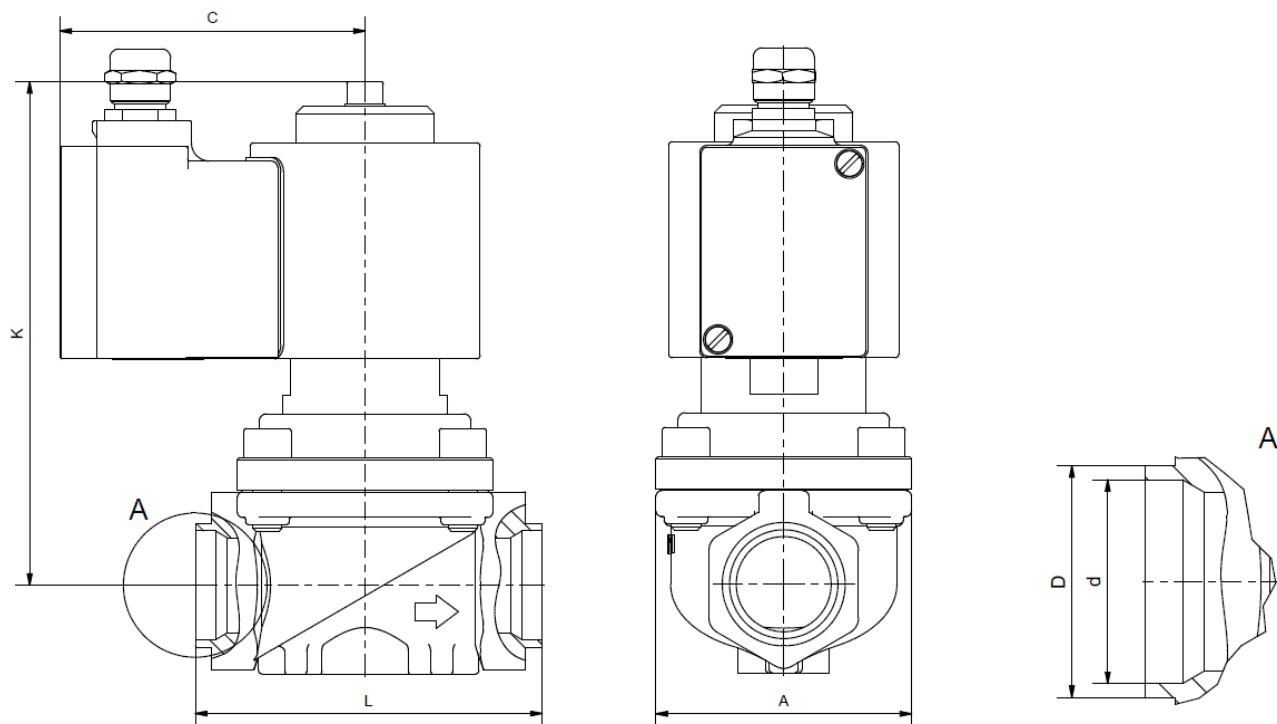
Description	
1	Spring
2	Solenoid coil
3	Plunger
4	Tube
5	Bonnet
6	Pilot seat
7	Piston
8	Valve seat
9	Valve body

DIMENSIONS



Coil	S802		S322		S242	
Type	K9121-23	.K9124-25	K9126-27	K9128	K9126-27	K9128
G	1/4 - 1/2	3/4 - 1	1 1/4 - 1 1/2	2	1 1/4 - 1 1/2	2
A	48	70	96	112	96	112
C	70	77	77	77	93	107
K	104	138	148	183	189	240
L	67	96	140	168	140	168
t	12	16	22	22	22	22
kg	1,3	3,0	5,0	6,5	6,5	12,0

DIMENSIONS



Coil	S802			S322			S242		
Type	K9123	K9124	K9125	K9126	K9127	K9128	K9126	K9127	K9128
G	1/2	3/4	1	1 1/4	1 1/2	2	1 1/4	1 1/2	2
A	48	70	70	96	96	112	96	96	112
C	70	77	77	77	77	77	93	93	107
K	104	138	138	148	148	183	189	188	240
L	67	96	96	140	140	168	140	140	168
D	21,3	26,9	33,7	42,4	48,3	60,3	42,4	48,3	60,3
d	18,1	23,7	29,7	38,4	44,3	55,1	38,4	44,3	55,1
kg	1,3	3,0	3,0	5,0	4,5	6,5	6,5	6,5	7,5

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			
K91	2 3	0 8	0 4	S 8 0	2 - X X			
21	G 1/4	08	St.steel 1.4581	S	terminal box	2	Standard IP65	
22	G 3/8	10	Brass 2.0402					
23	G 1/2			80	24 W		AS	weld-on
24	G 3/4		04	PTFE	32	30 W	NO	normally open
25	G 1				24	46 W		
26	G 5/4							
27	G 6/4							
28	G 2							