2/2 - way solenoid valve - combined operated
series SL104, SL110, SL111, SL148

TECHNICAL SPECIFICATIONS

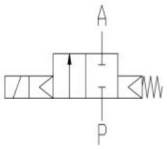
Type of control	Force-pilot operated, no pressure difference necessary
Design	Piston design
Connection	Flanges acc. to EN 1092-1 Form B1/B2 Other flange connections like ASME on request
Installation	With actuator upright
Pressure	0-40 bar (see table page 2)
Medium	Clean, neutral, liquid or gaseous media
max. viscosity	22 mm²/s
Temperature range	Medium: -40 °C bis +80 °C Ambient: -40 °C bis +50 °C In consideration of the restrictions described on page 4
Body material	Cast iron EN-GJL-250 Cast steel GP240 GH Stainless steel 1.4581
Metallic inner parts	Brass and stainless steel
Sealing	PTFE
Supply voltage	AC~ 24V, 110V, 230V DC= 12V, 24V Other supply voltages on request
Voltage tolerance	-10% / +10%
Power consumption	1 = 24 Watt 5 = 24 Watt 2 = 30 Watt 6 = 24 Watt 3 = 46 Watt 7 = 30 Watt 4 = 100Watt 8 = 47 Watt
Protection class	IP65 nach DIN 60529
Duty factor	100% ED-VDE 0580
Connection type	Plug, Terminal box
Ex-proof	acc. to 2014/34/EU (ATEX) Further Ex-proof on request

VALVE FEATURES

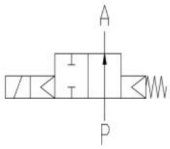
- No pressure difference required
- High life time
- Simple compact valve design
- Reliable and sturdy sealing elements
- Long-term availability of spare parts

FUNCTION

NC – non energized closed



NO – non-energized open



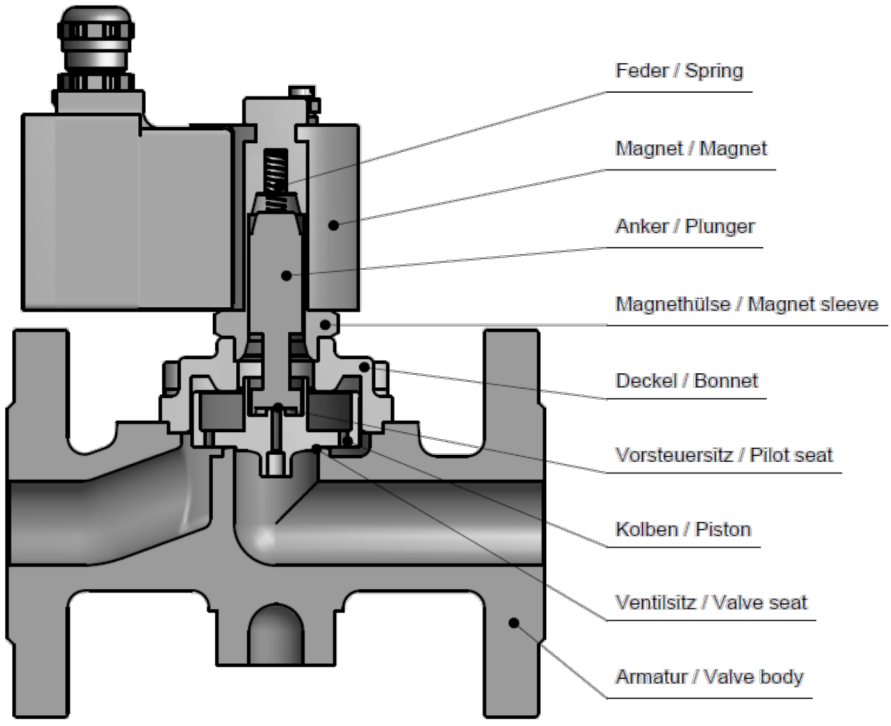
CERTIFICATES

Special design for extended temperature ranges
-60 °C up to +300 °C available.
Specification and drawings on request

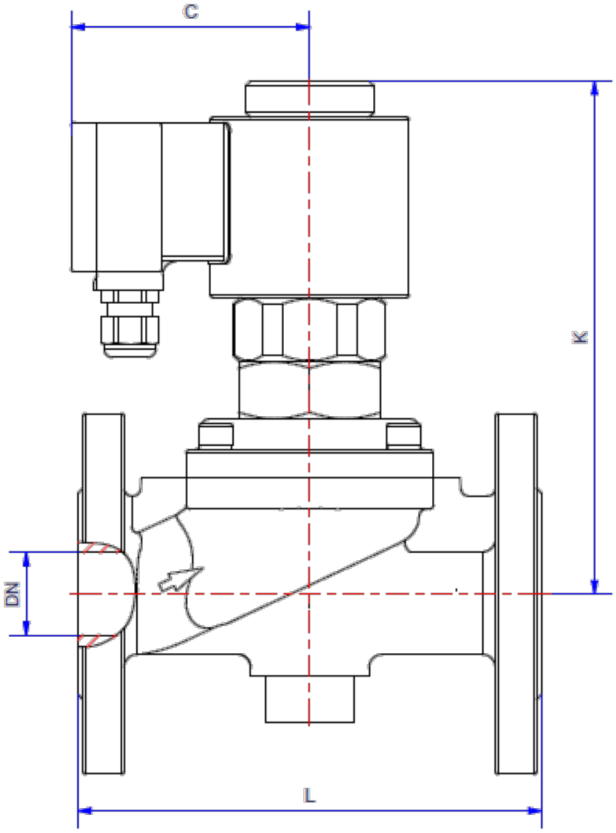
TECHNICAL FEATURES

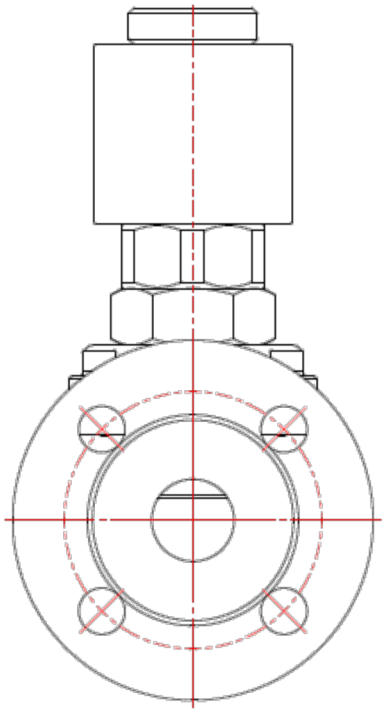
			max. pressure with coil							
DN	Seat mm	Kv-value m³/h	1	5	2 *	6 *	3	7	4	8
15	15	5,0	0-40	0-30	0-40	0-40	-	-	-	-
20	20	11,0	0-16	0-16	0-40	0-25	0-40	0-40	-	-
25	25	13,0	0-16	0-16	0-40	0-25	0-40	0-40	-	-
32	32	24,0	-	-	0-25	0-16	0-40	0-25	0-40	0-40
40	40	27,0	-	-	0-25	0-16	0-40	0-25	0-40	0-40
50	50	42,0	-	-	0-6	0-2	0-16	0-10	0-40	0-16

The mentioned Kv-values are valid for the more stronger solenoid
Max. pressure 16 bar with EN-GJL-250 body PN16.
* Pressure ratings with options like manual override or position indicator may be lower.



DIMENSIONS





Coil	1/ 5			2/6					3/7			4/8		
DN	15	20	25	20	25	32	40	50	32	40	50	32	40	50
C	66	66	66	76	76	76	76	76	93	93	93	105	105	105
K	104	128	128	181	181	156	156	165	200	200	200	250	250	260
L	130	150	160	150	160	180	200	230	180	200	230	180	200	230
kg	5,0	5,5	6,0	5,5	6,0	7,5	7,5	9,5	8,5	9,0	11,5	10,5	11,0	13,5

*Different dimension "C" with ATEX-coils

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.

Heating and power of solenoid coils

The GSR default solenoid valves are designed for continuous operation (100% ED = power-on time) under normal operating conditions. The pulling force of a solenoid coil is basically influenced by three elements:

- The self-heating of the magnetic coil
- The medium temperature
- The ambient temperature

GSR solenoid coils are by default designed for a maximum ambient temperature of +35 °C. This specification applies for the maximum allowable operating pressure specified in the data sheet of the corresponding valve, 100% duty cycle and a medium temperature of +80 °C.

A higher ambient temperature is possible, when lower values are applied for the other influencing parameters. When the max. operation pressure and max. ambient temperature of +50 °C is given the medium temperature is not allowed to be higher than max. +50 °C. In addition to that, deviations from the default design temperature range are possible, e.g. when temperature coils or other constructive measures are used. Please contact the GSR headquarters to discuss the specific application.

More precise specifications and technical data with regard to the operating conditions can be found in the data sheets of the solenoid coils and the solenoid valve regarded. Please observe that the surface temperature of a permanently loaded coil can amount up to +120 °C, solely by the self-heating of the coil. The power consumption of our default solenoid valves was calculated to DIN VDE 05820 for a coil temperature of +20 °C.