Technical Data Sheet Type K37

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

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

- **Solenoid valve for extended temperature range**

Type K37

TECHNICAL SPECIFICATIONS

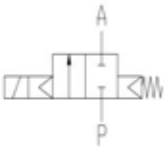
Type of control	Force-pilot operated
Design	Piston design
Connection	Flanges DN15 - DN50 EN 1092-1 Form B1/B2
Installation	With actuator upright
Pressure	0 - 40 bar (see table on page 2)
Medium	Clean, neutral, gaseous and liquid media
max. viscosity	22 mm²/s
Temperature range	Medium: -60°C up to +80°C Ambient: -55°C up to +50°C In consideration of the restrictions described on page 4 ATEX: -55°C up to +40°C / +60°C (depends on ATEX-coil)
Body material	Stainless steel 1.4581
Metallic inner parts	Stainless steel
Sealing	PTFE
Supply voltage	AC~ 24V, 110V, 230V DC= 12V, 24V Other supply voltages on request
Voltage tolerance	-10% / +10%
Power consumption	W802 = 18 Watt .808 = 24 Watt W322 = 21 Watt .328 = 24 Watt .242 = 26 Watt .248 = 30 Watt .272 = 60 Watt .278 = 30 Watt .352 = 80 Watt .358 = 75 Watt
Protection class	IP65 acc. to DIN 60529
Duty factor	100% ED-VDE 0580
Connection type	Terminal box
Ex-proof	acc. to 2014/34/EU (ATEX) Further Ex-proof on request

VALVE FEATURES

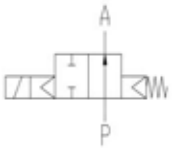
- For cold media to -60 °C
- No pressure difference is required
- High life time
- High-quality materials
- Reliable and sturdy sealing elements

FUNCTION

NC – non energized closed



NO – non-energized open



CERTIFICATES

ORDERING SYSTEM

Type					Conn.		Housing		Seal		Coil				Option
K	3	7	0	1	/	0	8	0	4	/	W	8	0	2	-

Conn.	Housing	Seal	Coil	Option
01 DN15 02 DN20 03 DN25 04 DN32 05 DN40 06 DN50	08 St.steel 1.4581	04 PTFE	2 Standard IP65 8 Explosion proof acc. to directive 2014/34/EU (ATEX)	

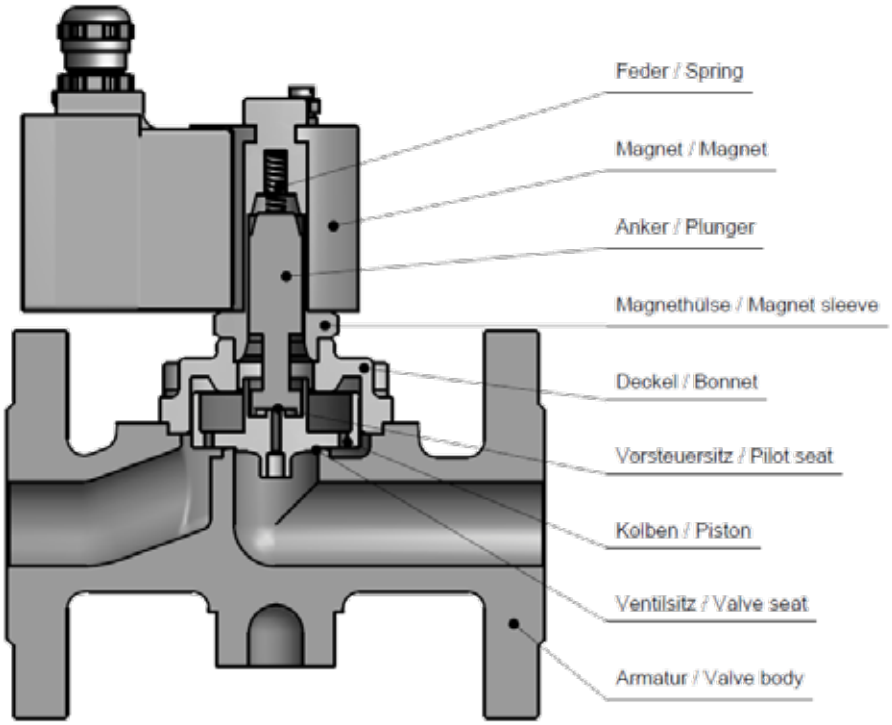
TECHNICAL FEATURES

				max. pressure for coils				
DN	Seat Ø mm	Kv-value m³/h	Standard type	W802	W322*	.242	.272	.352
15	15	5,0	K3701/0804/	0-40	0-40	-	-	-
20	20	11,0	K3702/0804/	0-16	0-40	0-40	-	-
25	25	13,0	K3703/0804/	0-16	0-40	0-40	-	-
32	32	28,0	K3704/0804/	-	0-25	0-40	0-40	-
40	40	30,0	K3705/0804/	-	0-25	0-40	0-40	-
50	50	46,0	K3706/0804/	-	0-6	0-16	0-40	0-40

The flow rate mentioned in the table applies to the strongest coil.
*** Pressure ratings with options like manual override or position indicator may be lower.**

				max. pressure for coils ATEX				
DN	Seat Ø mm	Kv-value m³/h	Standard type	.808	.328*	.248	.278	.358
15	15	5,0	K3701/0804/	0-30	0-40	-	-	-
20	20	11,0	K3702/0804/	0-12	0-25	0-40	-	-
25	25	13,0	K3703/0804/	0-12	0-25	0-40	-	-
32	32	28,0	K3704/0804/	-	0-16	0-25	0-40	-
40	40	30,0	K3705/0804/	-	0-16	0-25	0-40	-
50	50	46,0	K3706/0804/	-	0-2	0-10	0-16	0-40

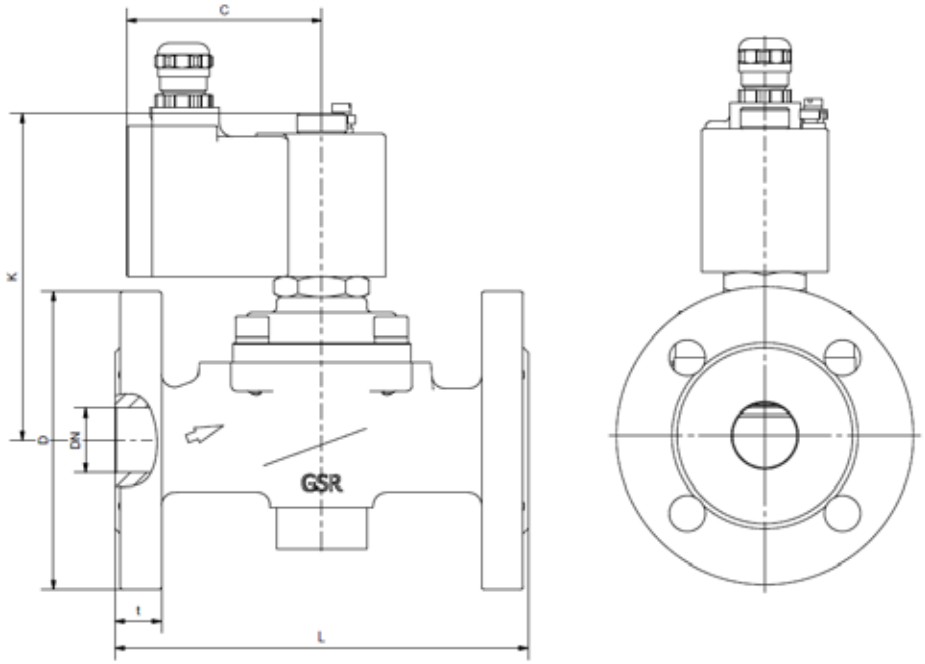
The flow rate mentioned in the table applies to the strongest coil.
*** Pressure ratings with options like manual override or position indicator may be lower.**



GSR Ventiltechnik

Type K37

DIMENSIONS



Coil	W802 / .808			W322 / .328					
Type	K3701	K3702	K3703	K3701	K3702	K3703	K3704	K3705	K3706
DN	15	20	25	15	20	25	32	40	50
C	75	75	75	77	77	77	77	77	77
D	95	105	115	95	105	115	140	150	165
K	104	122	122	148	138	131	148	148	168
L	130	150	160	130	150	160	180	200	230
t	16	18	18	16	18	18	18	18	20
kg	2,9	4,4	4,4	3,6	4,8	5,3	7,9	8,4	11,0

Coil	.242 /.248					.272 / 278			.352 / .358
Type	K3702	K3703	K3704	K3705	K3706	K3704	K3705	K3706	K3706
DN	20	25	32	40	50	32	40	50	50
C	93	93	93	93	93	106	106	106	126
D	105	115	140	150	165	140	150	165	165
K	194	178	188	188	186	218	230	240	319
L	150	160	180	200	230	180	200	230	230
t	16	18	18	18	20	18	18	20	20
kg	7,0	7,2	9,8	10,2	12,9	13,4	14,3	16,9	29,0

INFORMATION

- It is imperative to observe the installation and safety instructions in our operating and service manuals.
- For information on our GSR ordering code, please refer to our catalogs. If you have any questions, we will be glad to assist you.
- Required ordering information: valve type, function NC/NO, pressure range, connection, nominal width, medium, flow rate, medium and ambient temperatures, connection voltage.
- **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.

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.

Stand: 03.18, MK-MG, Version 1.