

- > Port size: DN 65 ... 100, Flange connection, Pressure rating PN 16
- > Valve operates without differential pressure (Zero delta P)
- > Valve piston with PTFE guide-ring
- > Suitable for vacuum
- > Adjustable: Damped operation
- > International approvals



Technical features

Medium:
Neutral gases and fluids

Switching function:
Normally closed

Operation:
Solenoid actuated, with forced lifting

Mounting:
Solenoid vertical on top

Flow direction:
Determined

Port size:
DN 65, DN 80, DN 100

Operating pressure:
0 ... 16 bar (0 ... 232 psi)

Fluid temperature:
-20 ... +90°C (-4 ... +194°F)

Ambient temperature:
-20 ... +50°C (-4 ... +122°F)

Material:
Body: Spheroidal graphite iron, brass
Seat seal: NBR
Cover: Brass
Internal parts: Stainless steel, PTFE/coal

For contaminated fluids insertion of a strainer is recommended.

Technical data – standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar) (psi)		Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	65	72	0 ... 16	0 ... 232	30	8648800.9501.xxxxx	8648800.9504.xxxxx
	80	110	0 ... 16	0 ... 232	49	8648900.9501.xxxxx	8648900.9504.xxxxx
	100	125	0 ... 16	0 ... 232	60	8649000.9501.xxxxx	8649000.9504.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

*2) For gases and liquid fluids up to 40 mm²/s (cSt)

Option selector

864*****.*****.*****

Port size	Substitute
DN 65	88
DN 80	89
DN 100	90
Valve options	Substitute
Normally open (NO)	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +110°C (+14 ... 230°F)	03
Seat seal PTFE, Fluid temperature -20 ... +110°C (-4 ... 230°F), Leakage rate E acc. to EN 12266-1	06
Seat seal EPDM, Fluid temperature -20 ... +110°C (-4 ... 230°F)	14
Normally open (NO), Seat seal FPM, Fluid temperature -10 ... +110°C (+14 ... 230°F)	17
Electrical position indicator	23
Flanges acc. to ASME B 16.5 150 lb/sq. in.	47

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage frequency codes	xxx
Solenoid options	Substitute
DN 65 ... 100 Solenoid in V d.c.	9501
DN 65 ... 100 Solenoid in V a.c.	9504

Standard solenoid systems

Voltage and Frequency Solenoid 9501 / 9504					
Code	Code	Voltage	Frequency	Power consumption	
Voltage	Frequency			Inrush	Holding
024	00	24 V d.c.	-	80 W	80 W
024	49	24 V a.c. *3)	40 ... 60 Hz	89 VA	89 VA
042	49	42 V a.c. *3)	40 ... 60 Hz	89 VA	89 VA
110	49	110 V a.c. *3)	40 ... 60 Hz	89 VA	89 VA
230	49	230 V a.c. *3)	40 ... 60 Hz	89 VA	89 VA

*3) AC only with rectifier plug

Further versions on request!

Electrical details for all solenoid systems

Design	DIN VDE 0580
Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP 65
Socket	Form A acc. to DIN EN 175301-803 (included)

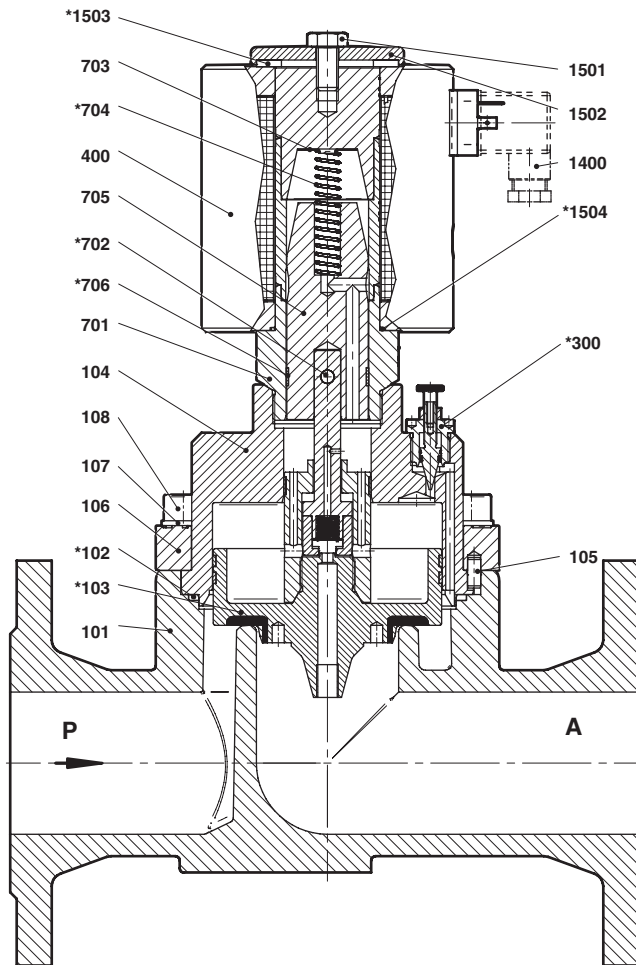
According to DIN VDE 0580 at a solenoid temperature of +20°C (+68°F).
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

Additional solenoid systems for hazardous areas

ATEX category	Protection class	Solenoid	Standard voltages
II 2G	Ex e mb II T3/T4	9540	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex tD A21 IP 65 T140°C		

Attention!

The conditions imposed on the Ex approvals lead to reduction of the permissible standard temperature ranges in the cases of explosion protected solenoids.

**Section View
DN 65 ... 100**


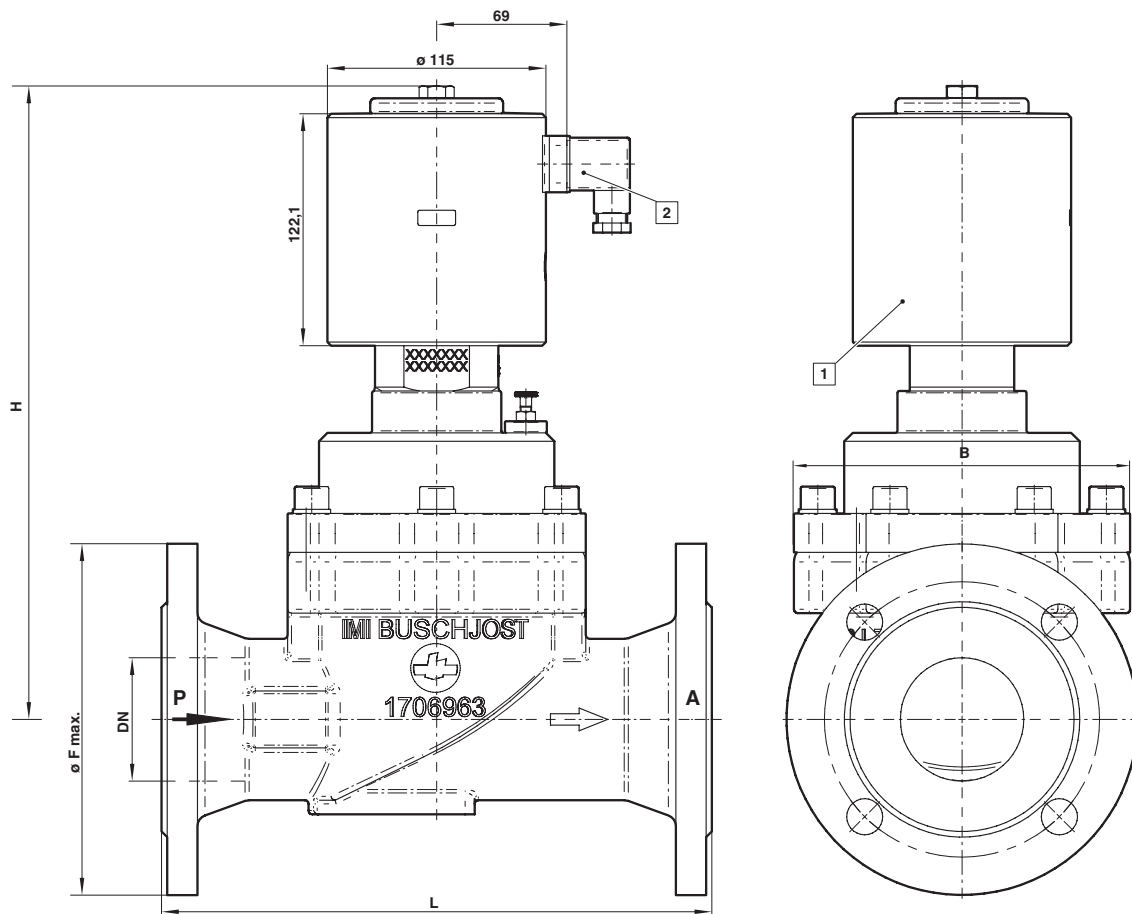
No.	Description
101	Valve body
*102	Cover seal
*103	Valve piston
104	Valve cover
105	Grooved pin
106	Valve cover
107	Washer
108	Socket head cap screw
*300	Throttle
400	Solenoid
701	Core tube
*702	Core
703	Round plate
*704	Pressure spring
705	Core
*706	Guide ring
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
*1503	Gasket
*1504	O-Ring

* These individual parts form a complete wearing unit. When ordering spare parts please state Model No. and Series No.

To avoid high shock pressure, you can control the closing time with the Knurled screw pos. 306.
Turning clockwise increase restriction and slows down closing time. A totally closed restriction would result in an malfunction.

Dimensions
DN 65 ... 100

Dimensions in mm
Projection/First angle



1 Solenoid rotatable 360°
Socket turnable 4 x 90°
(Socket included)

Orifice (mm)	ø B	H	ø F	L	Model
65	195	340	185	290	8648800.950x.xxxxx
80	220	360	200	310	8648900.950x.xxxxx
100	260	390	220	350	8649000.950x.xxxxx

Contact face acc. to DIN EN 1092-2/B

For valves > DN 25 (G1) Art. 4 § (1) Letter d) applies:

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

Note to Electromagnetic Compatibility Guideline (EEC):

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (2014/30/EU) satisfied.

Note to EAC marking:

The EAC-marked products comply with the applicable requirements stated in the technical regulations of the Eurasian Economic Union.