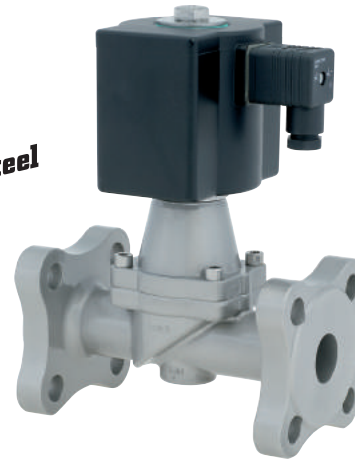


- > Port size: DN 15 ... 100, flange connection, PN 40 (PN 25)
- > Suitable for use in single-channel safety-related systems in 85780 accordance with DIN EN 61508 / 61511 up to and including SIL 2 and up to and including SIL 3 in multi-channel systems
- > High flow rate
- > For robust industry applications
- > Damped operation
- > For systems with low or fluctuating pressure
- > Valve operates without differential pressure

**Stainless Steel**



### Technical features

#### Medium:

Neutral gases and liquid fluids (air, water, gases according to DVGW data sheet G 260 with seat seal FPM – Oils and other fluids on request)  
Switching function: Normally closed  
Operation: Solenoid actuated, with forced lifting

Mounting: Optional, preferably solenoid vertical on top  
Flow direction: Determined  
Port size: DN 15, DN 20, DN 25, DN 32, DN 40, DN 50, DN 65, DN 80, DN 100  
Operating pressure: 0 ... 25 bar (0 ... 362 psi)

Fluid temperature: -10° ... +60°C (+14° ... +140°F)  
Ambient temperature: -10° ... +50°C (+14° ... +122°F)

Material: Body: up to DN 50: Stainless steel (1.4408) from DN 65: Stainless steel (1.4581)  
Seat seal: NBR  
Internal parts: Stainless steel, PTFE/Carbon

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)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	15	3,7	0 ... 25	4,2	8578200.8401.xxxxx	8578200.8404.xxxxx
	20	5,6	0 ... 25	4,6	8578300.8401.xxxxx	8578300.8404.xxxxx
	25	7,8	0 ... 25	5,1	8578400.8401.xxxxx	8578400.8404.xxxxx
	32	18	0 ... 25	9,6	8578500.8401.xxxxx	8578500.8404.xxxxx
	40	24,4	0 ... 25	10	8578600.8401.xxxxx	8578600.8404.xxxxx
	50	31,8	0 ... 25	11,5	8578700.8401.xxxxx	8578700.8404.xxxxx
	65	67	0 ... 25	36,5	8578800.9501.xxxxx	8578800.9504.xxxxx
	80	94	0 ... 25	46,5	8578900.9501.xxxxx	8578900.9504.xxxxx
	100	144	0 ... 25	70	8579000.9501.xxxxx	8579000.9504.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 60 mm²/s (cSt)

### Inspection certificate DIN EN 10204 - 3.1 (DN 15 ... 50)

Requirements AD 2000 A4 (W2 / W5 / W10)

12 57 333.0000

Material quality proof for:

- valve body, cover, body screws acc. to DIN EN 10204 - 3.1
- material quality proof for fluid contacted parts acc. to DIN EN 10204 - 2.2
- function and leak test acc. to DIN EN 10204 - 3.1, leakage A acc. to DIN EN 12266-1

### Inspection certificate DIN EN 10204 - 3.1 (DN 65 ... 100)

12 72 888.0000

Material quality proof for:

- valve body, cover, body screws acc. to DIN EN 10204 - 3.1
- material quality proof for fluid contacted parts acc. to DIN EN 10204 - 2.2
- function and leak test acc. to DIN EN 10204 - 3.1, leakage A acc. to DIN EN 12266-1

Option selector

857\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*

Port size	Substitute
15	82
20	83
25	84
32	85
40	86
50	87
65	88
80	89
100	90
Valve options	Substitute
Normally open (NO)	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +60°C (+14 ... +140°F)	03
Normally open (NO), Seat seal FPM, Fluid temperature -10 ... +60°C (+14 ... +140°F)	17
Double position indicator with safety barge and HAN® 7D-connector (metal design)	50
Double position indicator with safety barge and HAN® 7D-connector (metal design) and manual override	52

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
DN 15 ... 50 Solenoid in V d.c.	8401
DN 50 ... 100 Solenoid in V d.c.	9501
DN 15 ... 50 Solenoid in V a.c.	8404
DN 50 ... 100 Solenoid in V a.c.	9504

Standard solenoid systems

Voltage and Frequency Solenoid 8401/8404					
Code Voltage	Code Frequency	Voltage	Frequency	Inrush Power consumption	Holding Power consumption
024	00	24 V d.c.	-	40 W	40 W
024	49	24 V a.c. *1)	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c. *1)	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c. *1)	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c. *1)	40 ... 60 Hz	45 VA	45 VA
Voltage and Frequency Solenoid 9501/9504					
024	00	24 V d.c.	-	80 W	80 W
024	49	24 V a.c. *1)	40 ... 60 Hz	89 VA	89 VA
110	49	110 V a.c. *1)	40 ... 60 Hz	89 VA	89 VA
120	49	120 V a.c. *1)	40 ... 60 Hz	89 VA	89 VA
230	49	230 V a.c. *1)	40 ... 60 Hz	89 VA	89 VA

\*1) A.c. 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 IP65
Socket	Form A acc. to DIN EN 175301-803 (included)

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

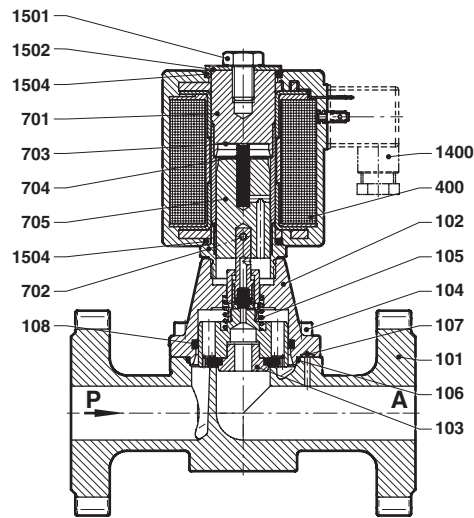


Additional solenoid systems

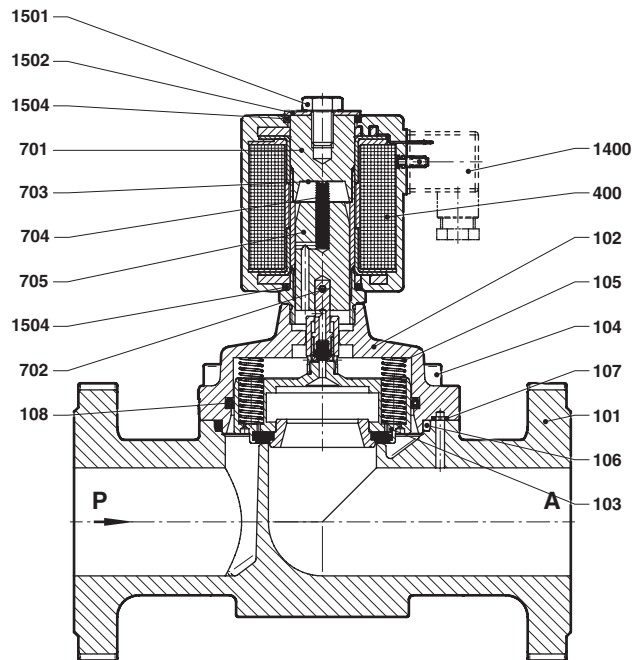
ATEX category	Protection class	Solenoid	Standard Voltages
II2GD	EEx me II T3 T 140°C	8441	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex de IIC T4/T5 Ex tD A21 IP65 T 130°C resp. T 95°C	8900	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex d IIC T4/T5 Ex tD A21 IP65 T 130°C resp. T 95°C	8920	24 V d.c., 110 V a.c., 230 V a.c.
II3GD	Ex nA II T4 Ex tD A22 IP65 T 135°C	8426	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	Ex e mb II T3/T4 Ex tD A21 IP65 T 140°C	9540	24 V d.c., 110 V a.c., 230 V a.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 15 ... 25**


No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Cheese head screw
*105	Pressure spring
*106	Gasket
*107	O-ring
*108	Lip seal
400	Solenoid
701	Core tube
*702	Dowel pin
703	Round plate
*704	Pressure spring
*705	Plunger
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
1504	O-ring (2x)

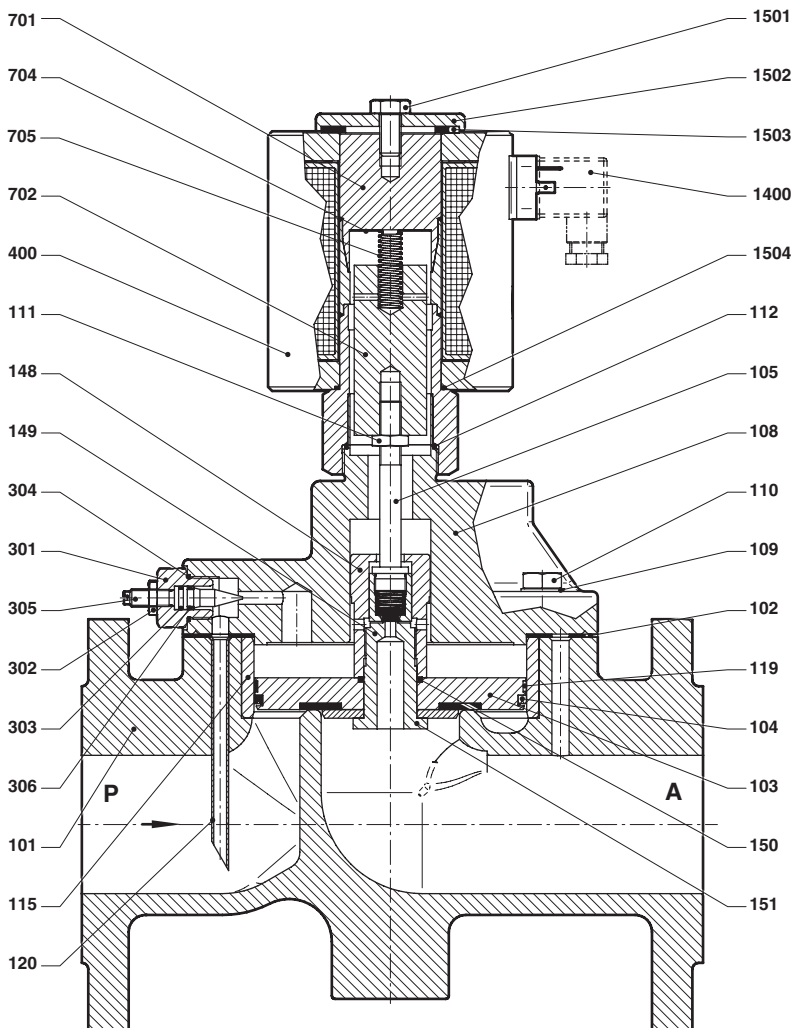
**DN 32 ... 50**


No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Cheese head screw
*105	Pressure spring (2x)
*106	Gasket
*107	O-ring
*108	Lip seal
400	Solenoid
701	Core tube
*702	Dowel pin
703	Round plate
*704	Pressure spring
*705	Plunger
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
*1504	O-ring (2x)

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

Section View

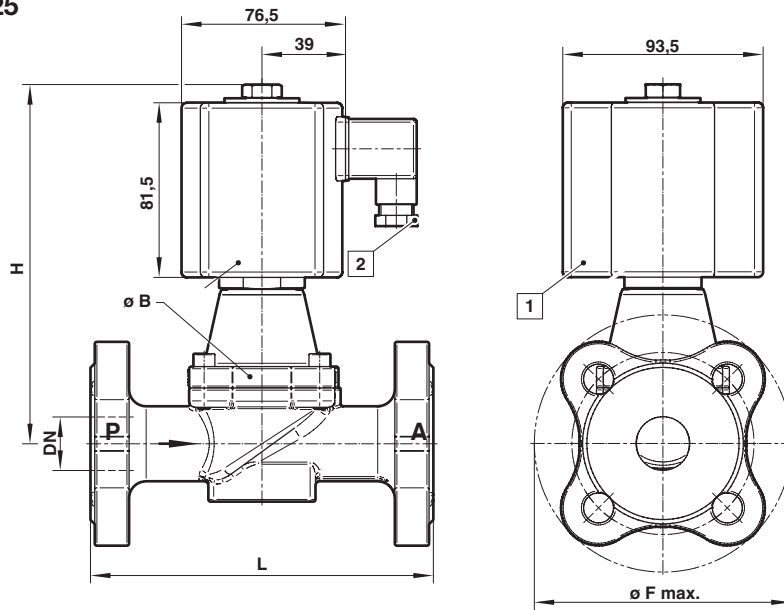
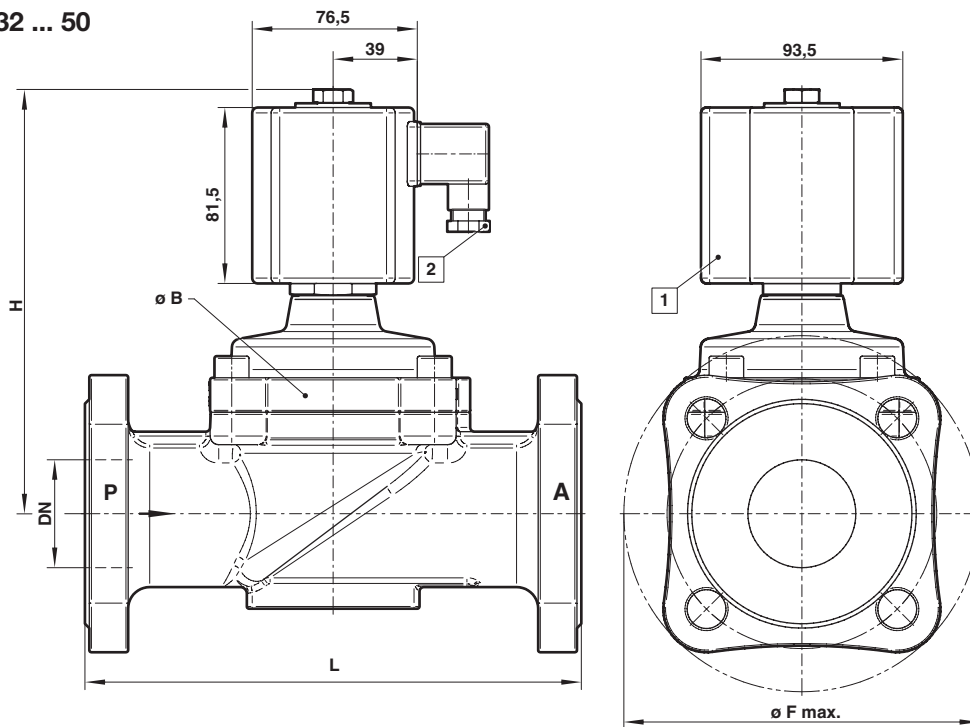
DN 65 ... 100



No.	Description
101	Valve body
*102	Gasket
*103	Valve disk
*104	Lip seal
*105	Valve spindle
108	Valve cover
109	Spring washer
110	Hexagon screw
111	Hexagon nut
*112	Gasket
115	Bushing
*119	Guide lamination
120	Tube
148	Screw piece
149	Screw piece
*150	Spacer
151	Round plate
400	Solenoid
301	Screw piece
302	Valve spindle
*303	O-ring
*304	O-ring
305	Hexagon nut
*306	Lip seal
701	Core tube
702	Plunger
704	Round plate
*705	Pressure spring
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
1503	Flange gasket
1504	O-ring

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

**Dimensions**
**DN 15 ... 25**

 Dimensions in mm  
 Projection/First angle

**DN 32 ... 50**


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

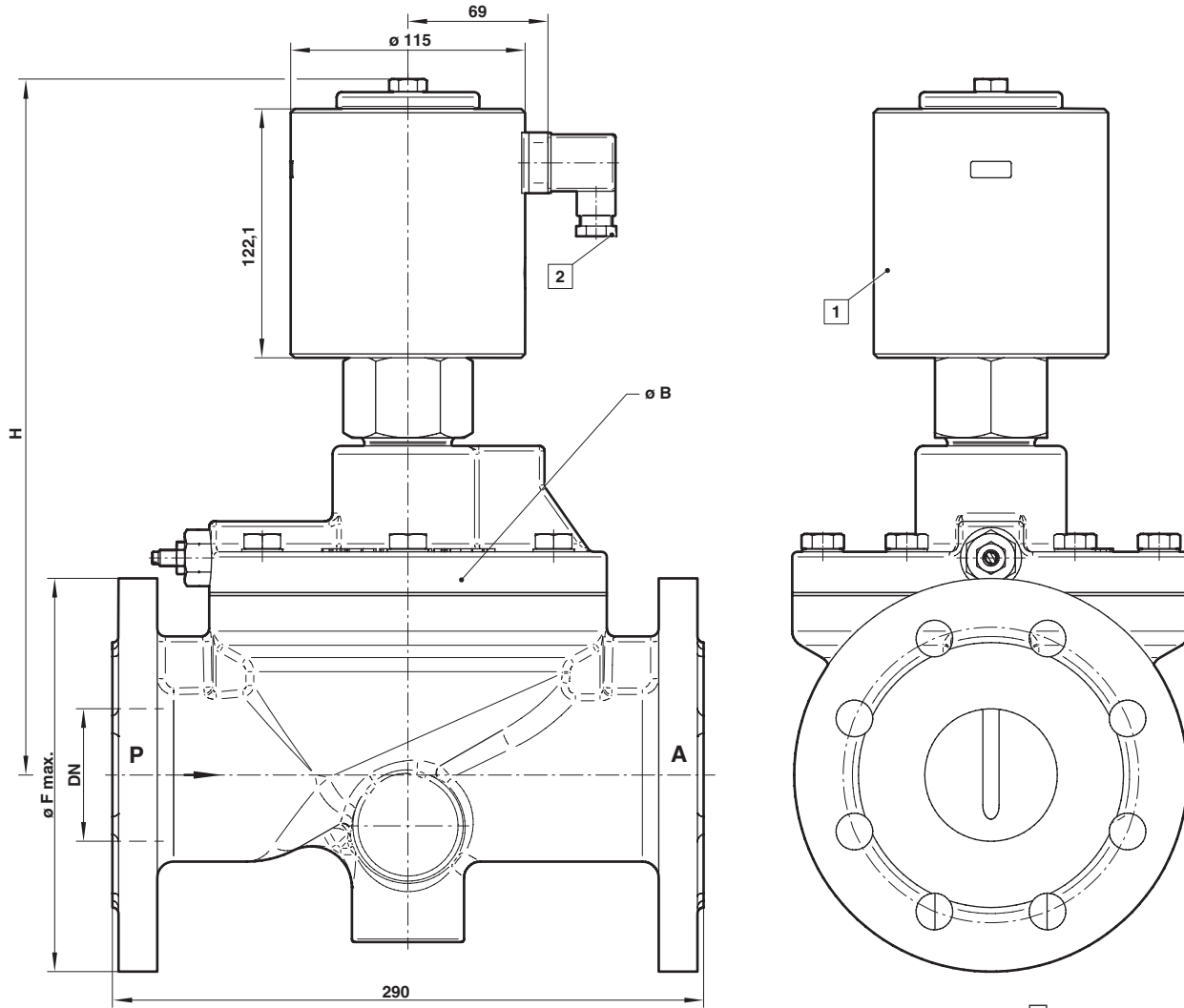
Orifice (mm)	ø B	ø F max.	H	L	Model
15	44	96	154	130	8558200.940.xxxxx
20	50	110	163	150	8558300.940.xxxxx
25	62	115	168	160	8558400.940.xxxxx
32	92	140	184	180	8558500.840.xxxxx
40	92	150	190	200	8558600.840.xxxxx
50	109	165	197	230	8558700.840.xxxxx

Contact face acc. to DIN EN 1092-1/B

**Dimensions**

**DN 65 ... 100**

Abmessungen in mm  
Projection/First angle



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

Orifice (mm)	$\phi B$	$\phi F \text{ max.}$	H	L	Model
65	195	185	327	290	8578800.950x.xxxxx
80	220	200	347	310	8578900.950x.xxxxx
100	265	235	376	350	8579000.950x.xxxxx

Contact face acc. to DIN EN 1092-1/B

**Note to Pressure Equipment Directive (PED):**

The valves of this series are according to Art. 3 § 3 of the Pressure Equipment Directive (PED) 97/23/EG. This means interpretation and production are in accordance to engineers practice wellknown in the member countries.

The CE-sign at the valve refers not to the PED. Thus the declaration of conformity is not longer applicable for this directive.

**For valves > DN 25 (G 1) Art. 3 § (1) No.1.4 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 (2004/108/EG) satisfield.

**Functional safty according to DIN EN 61508 (VDE0803) SIL:**

Suitable for certain applications can only be evaluated through examination of each safety-related overall system with regard to the requirements of IEC 61508 / 61511.