



**Flat piston valve for steam and hot water**  
**Damped operation**  
**Valve works without minimum pressure differential**



### Technical features

**Medium:**

Hot water and steam

**Switching function:**

Normally closed

**Operation:**

 Solenoid actuated,  
 with forced lifting

**Mounting:**

Solenoid vertical on top

**Flow direction:**

Determined

**Port size:**

Flange PN 25, DN 65 ... 100

**Operating pressure:**

0 ... 16 bar

**Fluid temperature:**

0 ... +150°C

**Ambient temperature:**

0 ... +60°C

**Material:**

Body: Cast steel

 Seat seal: PTFE, leakage rate E,  
 acc. to EN 12266-1

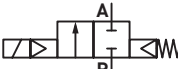
Cover: Cast steel

Valve seat: Gun metal

 Internal parts: Stainless steel,  
 gun metal

 For contaminated fluids insertion  
 of a strainer is recommended.

### Technical data - standard models

Symbol	Orifice (mm)	Flow kv value *1) (m <sup>3</sup> /h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	65	67	0 ... 16	37,2	8422800.9502.xxxxx	8422800.9506.xxxxx
	80	94	0 ... 16	46,5	8422900.9502.xxxxx	8422900.9506.xxxxx
	100	144	0 ... 16	67,5	8423000.9502.xxxxx	8423000.9506.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 mm<sup>2</sup>/s (cSt)

**Option selector**
**8422★ ★ ★ . ★ ★ ★ ★ . ★ ★ ★ ★ ★**

Port size	Substitute
DN 65	8
DN 80	9
DN 100	10
Valve options	Substitute
Normally open (NO)	01
Manual override	02
Seat seal EPDM, Fluid temperature 0 ... +130°C	14
Free of varnish disturbing substances	33
Electrical position indicator with two limit switches	41

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
DN 65 ... 100 Solenoid in V d.c.	9502
DN 65 ... 100 Solenoid in V a.c.	9506

**Standard solenoid systems**
**Voltage and Frequency Solenoid 9502/9506**

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	55 VA	55 VA
024	49	24 V a.c. *1)	40 ... 60 Hz	61 VA	61 VA
42	49	42 V a.c. *1)	40 ... 60 Hz	61 VA	61 VA
110	49	110 V a.c. *1)	40 ... 60 Hz	61 VA	61 VA
230	49	230 V a.c. *1)	40 ... 60 Hz	61 VA	61 VA

**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)

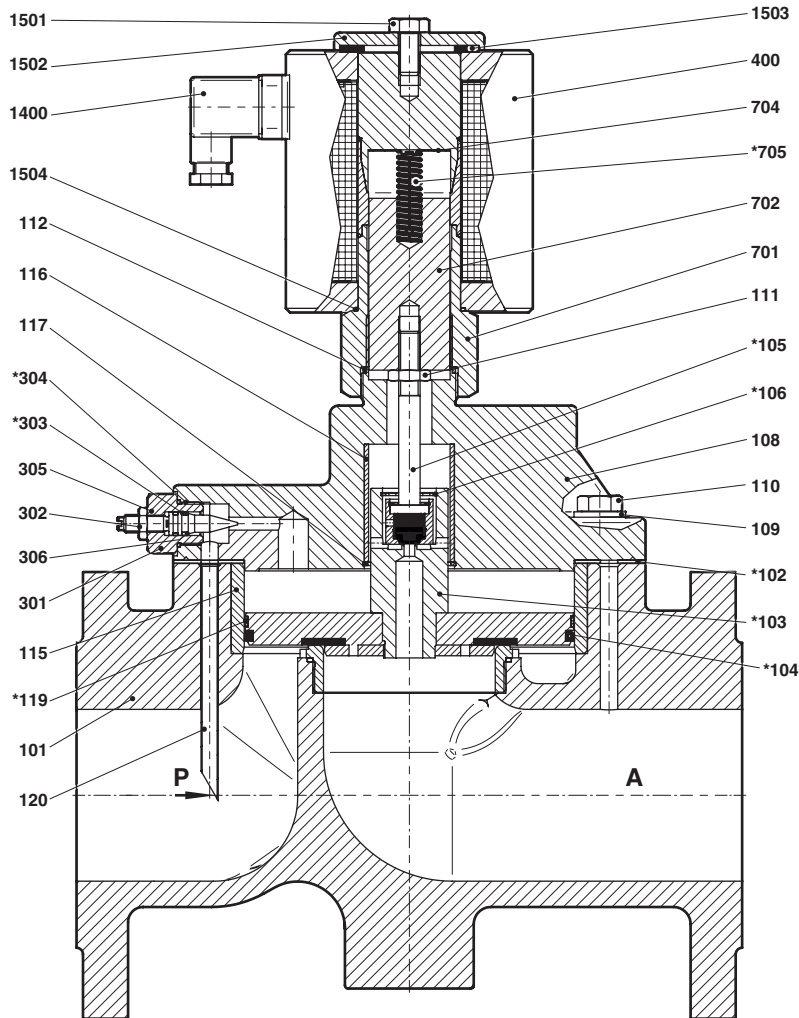
According to DIN VDE 0580 at a solenoid temperature of +20°C.  
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

**Additional solenoid systems**

Option	Solenoid	Standard voltages
Fluid temperature 0 ... +200°C; Mounting position: Solenoid downwards only	8602	24 V d.c., 110 V a.c., 230 V a.c.

\*1) AC only with rectifier plug

Further versions on request!

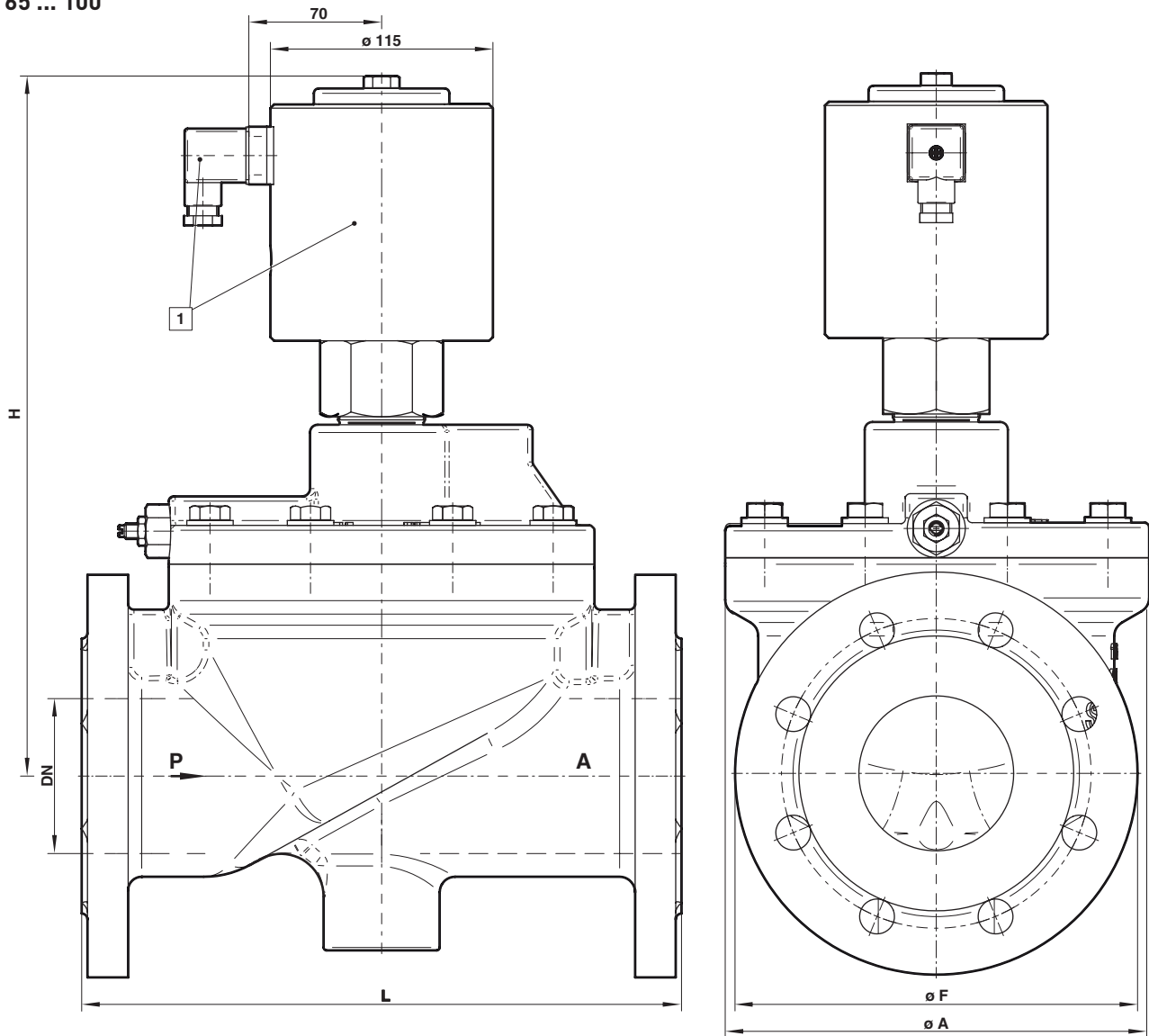
**Section view**
**DN 65 ... 100**


No.	Description
101	Valve body
*102	Gasket
*103	Valve piston
*104	Grooved ring
*105	Valve spindle
*106	Locking ring
108	Body cover
109	Spring washer
110	Hexagon screw
111	Hexagon nut
112	Seal ring
115	Bushing
116	Bushing
117	Snap ring
*119	Guide foil
120	Tube

No.	Description
301	Screw piece
302	Valve spindle
*303	O-ring
*304	O-ring
305	Hexagon nut
306	Grooved ring
400	Solenoid
701	Core tube
702	Core
704	Round plate
*705	Pressure spring
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 adjusting stem pos. 301. Turning clockwise increase restriction and slows down closing time. A totally closed restriction would result in an malfunction.

**Dimensions**
**DN 65 ... 100**


1 Solenoid rotatable 360°  
Socket turnable 4 x 90°  
[Socket included]

Orifice (mm)	ø A	ø F	H	L	Model
65	195	185	340	290	8422800.950x.xxxxx
80	220	200	360	310	8422900.950x.xxxxx
100	260	220	390	350	8423000.950x.xxxxx

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

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

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] satisfied.