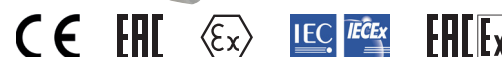


- > Port size: DN 15 ... 50, flange connection, PN 40
- > Valve operates without differential pressure (Zero delta P)
- > Valve piston with PTFE guide-ring
- > With inspection certificate DIN EN 10204 - 3.1 Requirements AD 2000 A4
- > International approvals



### Technical features

#### Medium:

Slightly aggressive gases and liquid fluids

#### 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

#### Operating pressure:

0 ... 25 bar (0 ... 362 psi)  
0 ... 40 bar (0 ... 580 psi)

#### Fluid temperature:

-20° ... +90°C (-4° ... +194°F)

#### Ambient temperature:

-20° ... +50°C (-4° ... +122°F)

#### Material:

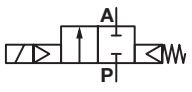
Body: Stainless steel (1.4408)

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) (psi)		Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	15	4,4	0 ... 25	0 ... 362	4,2	8658200.8401.xxxxx	8658200.8404.xxxxx
	20	7	0 ... 25	0 ... 362	4,6	8658300.8401.xxxxx	8658300.8404.xxxxx
	25	10,5	0 ... 25	0 ... 362	5,1	8658400.8401.xxxxx	8658400.8404.xxxxx
	32	25	0 ... 25	0 ... 362	9,6	8658500.8401.xxxxx	8658500.8404.xxxxx
	40	27	0 ... 25	0 ... 362	10	8658600.8401.xxxxx	8658600.8404.xxxxx
	50	43	0 ... 25	0 ... 362	11,5	8658700.8401.xxxxx	8658700.8404.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)

### Inspection certificate DIN EN 10204 - 3.1

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

## Option selector

8658★★★★.★★★★.★★★★

Port size	Substitute
15	2
20	3
25	4
32	5
40	6
50	7
Valve options	Substitute
Normally open (NO), Mounting position: Solenoid vertical on top	01
Manual override	02
Seat seal FPM, Fluid temperature -10 ... +110°C *1)	03
Seat seal PTFE, Fluid temperature -20 ... +110°C *1), Leakage rate E acc. to DIN EN 12266-1	06
Seat seal EPDM, for hot water, Fluid temperature -20 ... +110°C	14
Normally open, Fluid temperature -10 ... +110°C, Seat seal FPM, Mounting position: Solenoid vertical on top *1)	17

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx
Solenoid Options	Substitute
DN 15 ... 50 Solenoid in V d.c.	8401
DN 15 ... 50 Solenoid in V a.c.	8404
Valve options	Substitute
Max. operating pressure 40 bar	22
Electrical position indicator with two limit switches (Reed contact)	23
Seat seal FPM, with larger bleed orifices in the piston, for e.g. fuel and oil, max. viscosity 80 mm²/s (cSt), Fluid temperature -10 ... +110°C *1)	25
Flanges acc. to ASME B 16.5 150 lb/sq. In.	47
Flanges acc. to ASME B 16.5 300 lb/sq. In.	48

## Standard solenoid systems

Voltage and Frequency Solenoid 8401/8404					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	40 W	40 W
024	49	24 V a.c. *3)	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c. *3)	40 ... 60 Hz	45 VA	45 VA
120	49	120 V a.c. *3)	40 ... 60 Hz	45 VA	45 VA
230	49	230 V a.c. *3)	40 ... 60 Hz	45 VA	45 VA

\*3) 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 for hazardous areas (since April 2018)

ATEX cat-egory	ATEX protection class	IP protec-tion class	So-lenoid	Standard voltages	Old variant
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	8426 *4)	24 V d.c., 110 V a.c., / 230 V a.c.	
II 2G II 2D	Ex d IIC T4/T5 Ex tD A21 IP65 T130°C resp. T95°C	IP65	8920	24 V d.c., 110 V a.c., / 230 V a.c.	
II 2G II 2D	Ex eb mb IIC T3 Gb Ex mb tb IIIB T140°C Db	IP66	6240	24 V d.c., 110 V a.c., / 230 V a.c.	8441

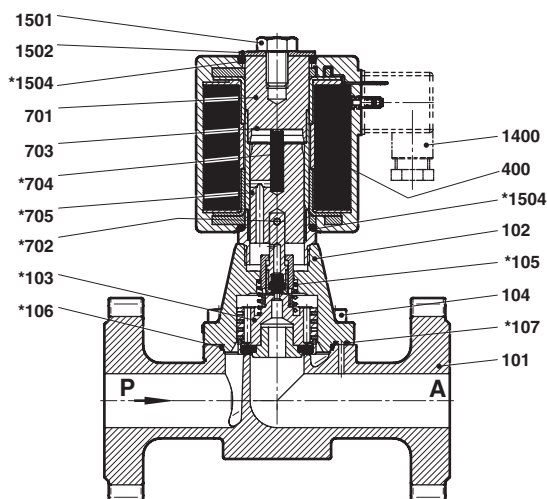
### Attention!

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

\*4) d.c. only, for a.c. solenoids with design inspection certificate acc. to category 2, e. g. 6240 oder 8920

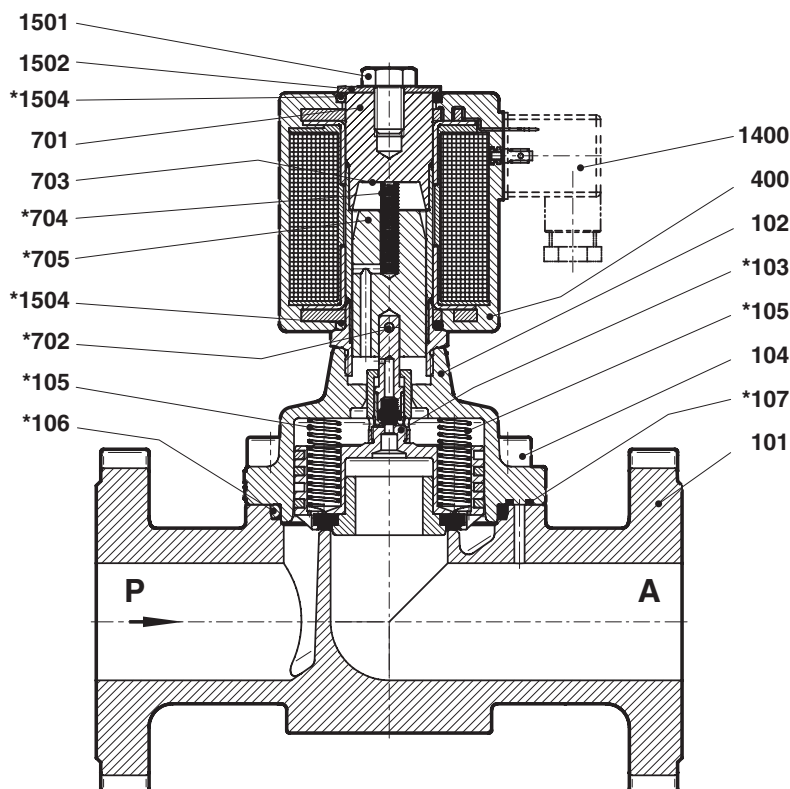
## Section View

DN 15 ... 25



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

DN 32 ... 50

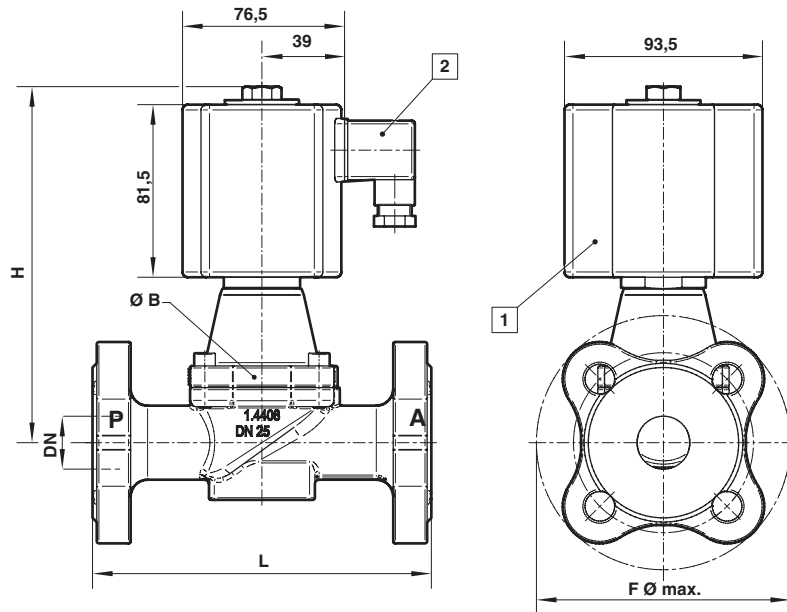


No.	Description
101	Valve body
102	Valve cover
*103	Valve piston
104	Straight pin
*105	Pressure spring (2x)
*106	Seal ring
*107	Seal ring
400	Solenoid
701	Core tube
*702	Straight pin
703	Round plate
*704	Pressure spring
*705	Core
1400	Socket (included)
1501	Hexagon screw
1502	Round plate
*1504	O-ring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

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

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

Dimensions in mm  
Projection/First angle



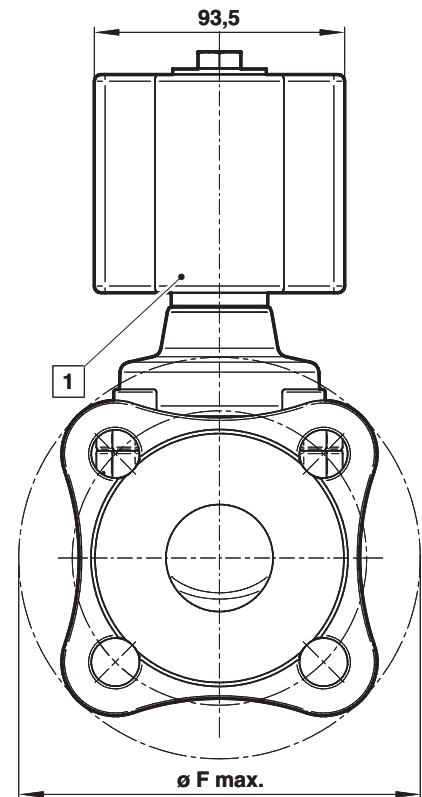
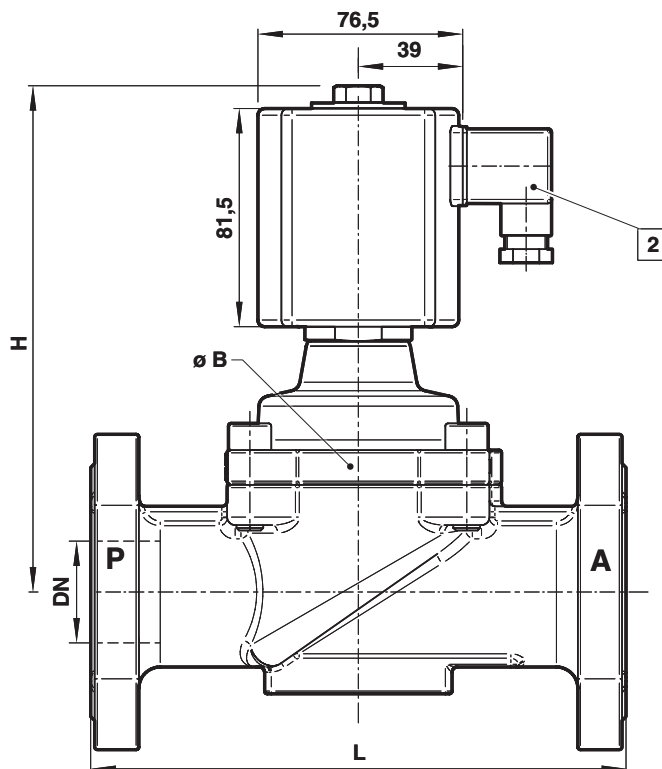
- 1 Socket rotatable 360°
- 2 Socket turnable 4 x 90°  
(Socket included)

Orifice (mm)	ø B	ø F max.	H	L	Model
15	44	96	142	130	8658200.840x.xxxx
20	50	110	150	150	8658300.840x.xxxx
25	62	115	155	160	8658400.840x.xxxx

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



## DN 32 ... 50



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

Orifice (mm)	ø A	ø F max.	H	L	Model
32	92	140	184	180	8658500.840x.xxxxx
40	92	150	189	200	8658600.840x.xxxxx
50	109	165	197	230	8658700.840x.xxxxx

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

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

The valves of this series up to and including DN 25 (G1) are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU. This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve does not refer to the PED. Thus the declaration of conformity is not longer applicable for this directive.

**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.