

- > Port size: DN 65 ...
100, flange connection
PN 16
- > Flat piston valve
- > High flow rate
- > Damped operation

**OBSOLETE
DOCUMENT**
 Technical
 Reference
 Only



Technical features

Medium:

Air, water, oil

Switching function:

Normally closed

Operation:

Indirectly solenoid actuated

Mounting:

Solenoid vertical on top

Flow direction:

Determined

Port size:

Flange PN 16, DN 65 ... DN 100

Operating pressure:

0,5 ... 16 bar (7 ... 232 psi)

Fluid temperature:

−10 ... +90°C (+14 ... +194°F)

Ambient temperature:

−10 ... +50°C (+14 ... +122°F)

Materials:

Body: Grey cast iron

Seat seal: NBR

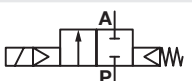
Cover: Grey cast iron

Internal parts: Red brass,

Stainless steel

For contaminated fluids insertion
of a strainer upstream is recom-
mended.

Technical data - standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar) *3)	Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
	65	70	0,5 ... 16	28	8432800.8401.xxxxx	8432800.8404.xxxxx
	80	98	0,5 ... 16	35	8432900.8401.xxxxx	8432900.8404.xxxxx
	100	157	0,5 ... 16	53	8433000.8401.xxxxx	8433000.8404.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)

*3) Minimum pressure differential P > A 0.5 bar

Option selector

8432★★★★.★★★★.★★★★

Port size	Substitute
DN 65	8
DN 80	9
DN 100	10
Valve options	Substitute
Normally open (NO)	01
Manual override	02
Seat seal FPM, Fluid temperature 0 ... +110°C	03
Seat seal PTFE, Fluid temperatur 0 ... +110°C, Leakage rate E acc. to EN 12266-1	06

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
DN 65 ... 100 Solenoid in V d.c.	8401
DN 65 ... 100 Solenoid in V a.c.	8404

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. *1)	40 ... 60 Hz	45 VA	45 VA
110	49	110 V a.c. *1)	40 ... 60 Hz	45 VA	45 VA
205	49	205 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

*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

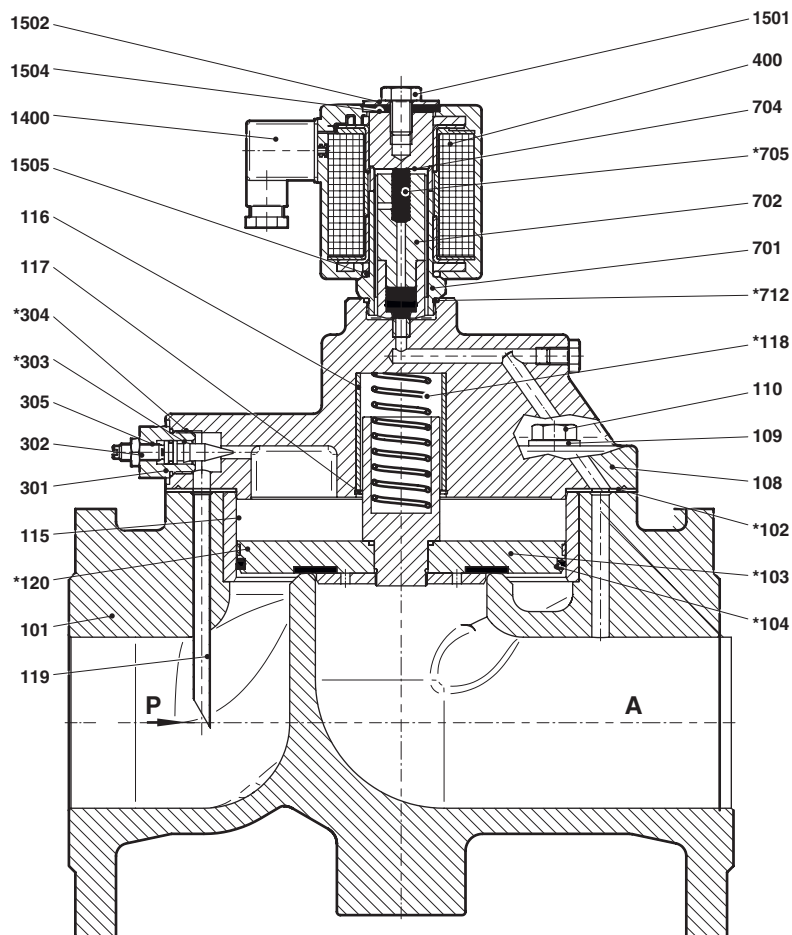
ATEX category	Protection class	Solenoid	Standard voltage
II2GD	EEx me II T4 T 140°C	8436	24 V d.c., 110 V a.c., 230 V a.c.
II2GD	EEx me II T3 T 140°C	8441	24 V d.c., 110 V a.c., 230 V a.c.
II2G II2D	Ex de IIC T4/T5 Ex tD A21 IP65 T 130°C bzw. T 95°C	8900	24 V d.c., 110 V a.c., 230 V a.c.
II2G II2D	Ex d IIC T4/T5 Ex tD A21 IP65 T 130°C bzw. T 95°C	8920	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 65 ... 100



No.	Description
101	Valve body
*102	Gasket
*103	Valve piston
*104	Grooved ring
108	Body cover
109	Spring washer
110	Hexagon screw
115	Bushing
116	Bushing
117	Snap ring
*118	Pressure spring
119	Tube
*120	Guide foil
301	Screw piece
302	Valve spindle
*303	O-ring
*304	O-ring
305	Hexagon nut
400	Solenoid
701	Core tube
702	Core
704	Round plate
*705	Pressure spring
*712	O-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.

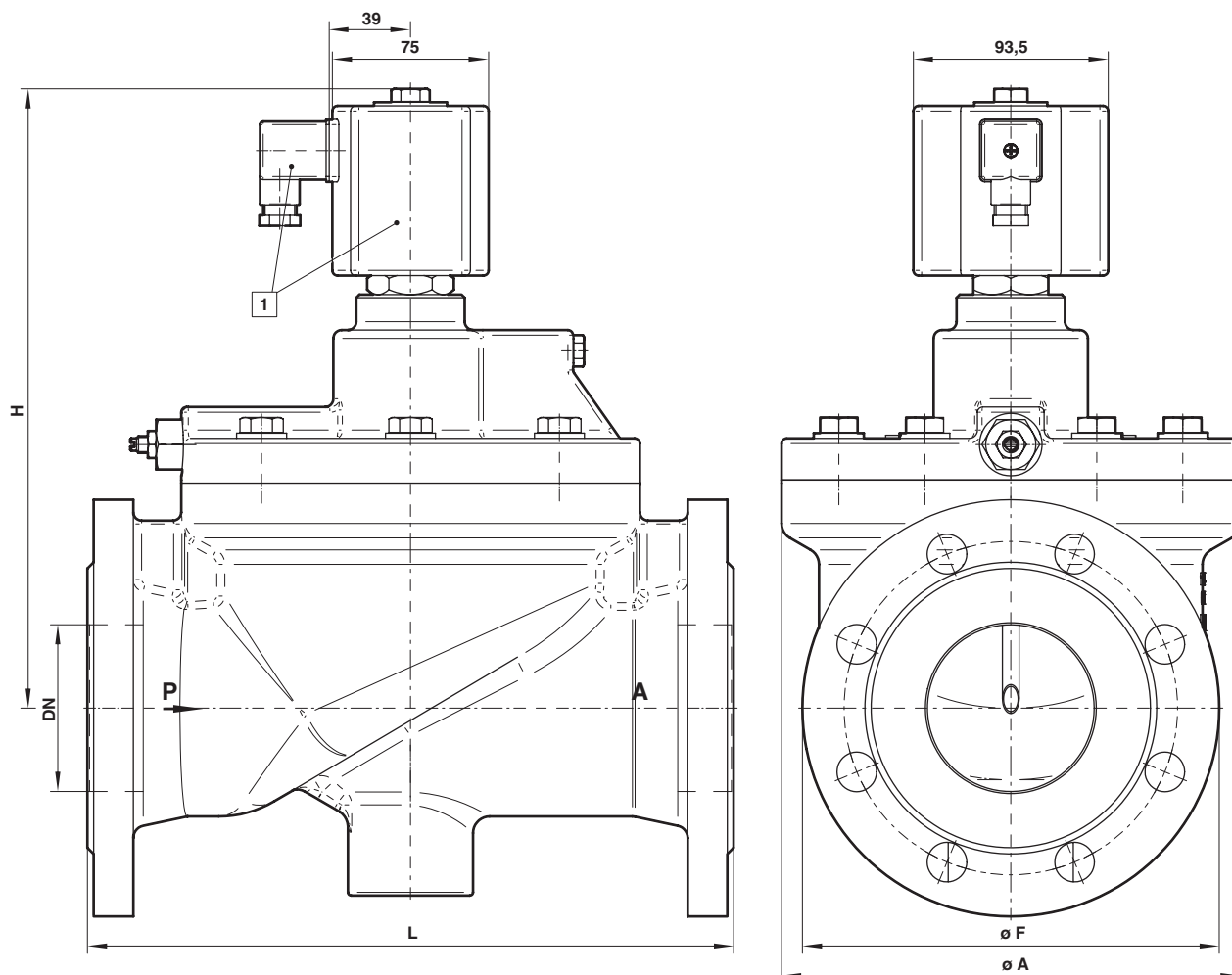
To avoid high shock pressure, you can control the closing time with the adjusting stem pos. 301.

Turning clockwise increase restriction and slows down closing time. A totally closed restriction would result in a 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 A	ø F	H	L	Model
65	195	185	280	290	8432800.840x.xxxx
80	220	200	300	310	8432900.840x.xxxx
100	260	220	330	350	8433000.840x.xxxx

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

Note to Pressure Equipment Directive (PED)

For valves > DN 25 [31] Art. 2 § (7) No.1.4 applies

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

Note to Electromagnetic Compatibility Guideline (EMC)

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/EC) satisfied.