

- > Port size: DN 1,6 and 3
- > Compact design
- > Complete with connector and gasket
- > Solenoid interchangeable without tools (*Click-on®*)
- > Noiseless exhaust
- > Low power consumption
- > International approvals



Technical features

Medium:

Filtered, lubricated resp. non-lubricated air or neutral liquid fluids

Switching function:

Normally closed

Operation:

Indirectly solenoid actuated

Mounting:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

DN 1,6, DN 3

Operating pressure:

1 ... 10 bar (14,5 ... 145 psi)

Fluid temperature:

-10° ... +60°C (+14° ... +140°F)

Ambient temperature:

-10° ... +60°C (+14° ... +140°F)

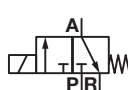
Material:

Body: Aluminium

Seat seal: TPU

Internal parts: Stainless steel, PPS

Technical datas - standard models

Symbol	Orifice (mm)	Port size			Flow *2) (l/min)	Operating pressure (bar)	Switching time (ms) *3)		Weight (kg)	Model Solenoid in V d.c.	Model Solenoid in V a.c.
		Internal	External R	A			On	Off			
	1,6	G1/4	*1)	G1/4	1,2	1 ... 10	8,5	30,4	0,47	8466000.9101.xxxxx	8466000.9101.xxxxx
	1,6	1/4 NPT	*1)	1/4 NPT	1,2	1 ... 10	8,5	30,4	0,47	8467000.9101.xxxxx	8467000.9101.xxxxx
	3	G1/4	*1)	G1/4	3,3	1 ... 10	15	81,9	0,45	8468000.9151.xxxxx	8468000.9151.xxxxx
	3	1/4 NPT	*1)	1/4 NPT	3,2	1 ... 10	15	81,9	0,45	8469000.9151.xxxxx	8469000.9151.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Noiseless exhaust

*2) Cv-value (US) ≈ kv-value x 1,2

*3) At 6 bar acc. to DIN VDI 3290 with solenoid in d.c.

Option selector

846*0*★*★*★*★*★*★*★*★*★*★*★*

Thread form/Port size	Substitute
ISO G (DN 1,6)	6
NPT (DN 1,6)	7
ISO G (DN 3)	8
NPT (DN 3,0)	9
Valve options	Substitute
Manual override	02
Connection P female thread G1/8	53
Connection A male thread G1/8	

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See Voltage codes	xxx
Solenoid options	Substitute
DN 1,6	9101
DN 3	9151

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *1)					
Code Voltage	Code Frequency	Voltage	Frequency	Inrush	Holding
024	00	24 V d.c.	-	8 W	8 W
024	50	24 V a.c.	50 Hz	15 VA	12 VA
110	50	110 V a.c.	50 Hz	15 VA	12 VA
120	60	120 V a.c.	60 Hz	15 VA	12 VA
230	50	230 V a.c.	50 Hz	15 VA	12 VA

Voltage and Frequency Solenoid 9151 *1)					
Code Voltage	Code Frequency	Voltage	Frequency	Inrush	Holding
024	00	24 V d.c.	-	18 W	18 W
024	50	24 V a.c.	50 Hz	45 VA	35 VA
110	50	110 V a.c.	50 Hz	45 VA	35 VA
120	60	120 V a.c.	60 Hz	45 VA	35 VA
230	50	230 V a.c.	50 Hz	45 VA	35 VA

*1) coil only maintaining the ambient temperature of +50°C

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)

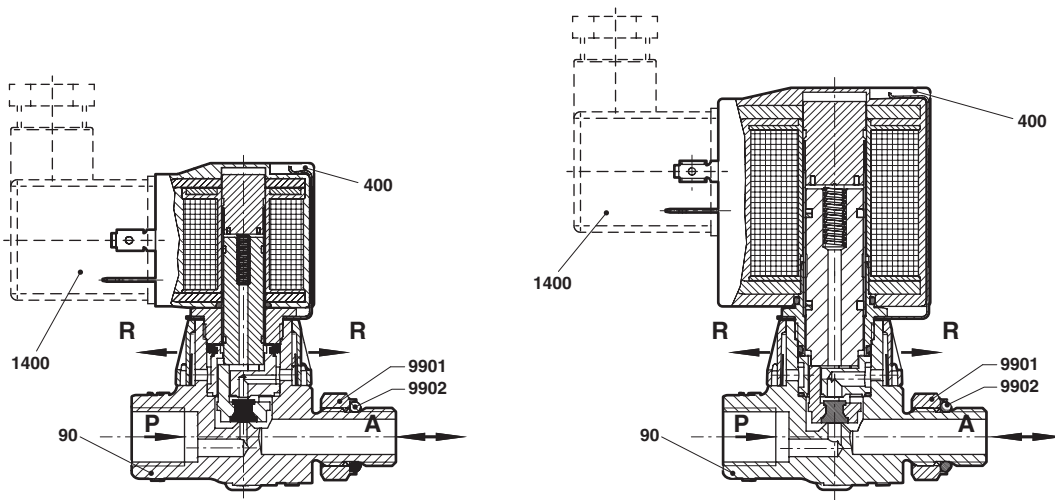
ATEX category	ATEX protection class	IP protection class	So- lenoid	Standard voltages	Old variant
II 2G	Ex eb mb IIC T4 Gb	IP66	6106	24 V d.c., 110 V a.c., 230 V a.c.	9136
II 2D	Ex mb tb IIIB T125°C Db				
II 2G	Ex eb mb IIC T3 Gb	IP66	6120	24 V d.c., 110 V a.c., 230 V a.c.	9191
II 2D	Ex mb tb IIIB T140°C Db				
II 3G	Ex ec IIC T4 Gc	IP65	9116	24 V d.c., 110 V a.c., 230 V a.c.	
II 3D	Ex tc IIIC T130°C Dc				
II 3G	Ex ec IIC T4 Gc	IP65	9176	24 V d.c., 110 V a.c., 230 V a.c.	
II 3D	Ex tc IIIC T130°C Dc				

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

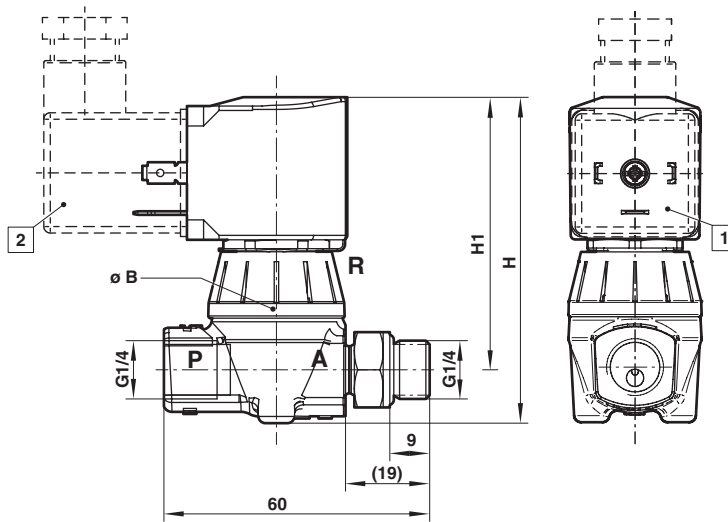
DN 1,6 ... 3



Nr.	Description
90	3/2-way valve without solenoid incl. pos. 9901 special hexagon nut and pos. 9902 O-ring
400	Solenoid
1400	Socket (included)
9901	Special hexagon nut
9902	O-ring

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

Dimensions
DN 1,6 ... 3

 Dimensions in mm
 Projection/First angle


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

Orifice (mm)	ϕB	H	H1	Model
1,6	31	73,6	61,5	8466000.9101.xxxxx
1,6	31	73,6	61,5	8467000.9101.xxxxx
3	31	91	79	8468000.9151.xxxxx
3	31	91	79	8469000.9151.xxxxx

Note to Pressure Equipment Directive (PED):

The valves of this series 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.

Note to Electromagnetic Compatibility Guideline (EEC):
Note to EAC marking:

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