

Indirect acting solenoid valves

PRODUCTS

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Fast Find Guide

2/2-way valves

82400

DN 8 ... 50
Indirectly solenoid actuated,
diaphragm valve, brass



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82470

DN 8 ... 25
Indirectly solenoid actuated,
diaphragm valve up to +150°C
(+302°F)



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82730

DN 8 ... 50
Indirectly solenoid actuated,
diaphragm valve, stainless steel



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83030

DN 15 ... 50
Indirectly solenoid actuated,
diaphragm valve, flange



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83770

DN 8
Indirectly solenoid actuated,
high pressure, 320 bar
(4641 psi)



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83790

DN 15
Indirectly solenoid actuated,
high pressure, 250 bar (3626
psi)



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84070

DN 12 ... 20
Indirectly solenoid actuated,
polymer version



Seite 61

85360

DN 8 ... 50
Indirectly solenoid actuated,
piston valve, max. 40 bar
(580 psi)



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85380

DN 8 ... 25
Indirectly solenoid actuated,
piston valve up to +200°C
(+392°F)



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85660

DN 15 ... 50
Indirectly solenoid actuated,
max. 40 bar (580 psi), flange



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82400

2/2-way valves – Indirect solenoid actuated

Port size: G1/4 ... 2

Orifice: DN 8 ... 50

Functional compact design

High flow rate

Solenoid interchangeable without tools (Click-on®)

Damped operation

*NPT connection available:
change 82400 to 82410*



Click-on®



Technical data

Medium:

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2

Operating pressure:

See table

Fluid temperature:

–10 ... +90°C (+14 ... +194°F)

Ambient temperature:

–10 ... +50°C (+14 ... +122°F)

Material:

Body: Brass (CW617N)

Seat seal: NBR

Internal parts: Stainless steel, PVDF

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1 (m³/h)	Operating pressure *2 (bar)	Operating pressure *2 (psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/4	8	60	1,9	0,1 ... 16	1,4 ... 232	0,47	8240000.9101.xxxxx
	G3/8	10	60	3	0,1 ... 16	1,4 ... 232	0,45	8240100.9101.xxxxx
	G1/2	12	67	3,8	0,1 ... 16	1,4 ... 232	0,5	8240200.9101.xxxxx
	G3/4	20	80	6,1	0,1 ... 16	1,4 ... 232	0,65	8240300.9101.xxxxx
	G1	25	95	9,5	0,1 ... 16	1,4 ... 232	0,95	8240400.9101.xxxxx
	G1 1/4	32	132	23	0,1 ... 10 (16) *3	1,4 ... 145 (232) *3	2,73	8240500.9101.xxxxx
	G1 1/2	40	132	25	0,1 ... 10 (16) *3	1,4 ... 145 (232) *3	2,53	8240600.9101.xxxxx
	G2	50	160	41	0,1 ... 10 (16) *3	1,4 ... 145 (232) *3	3,85	8240700.9101.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 25 mm²/s (cSt)

*3) With solenoid 9151

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *4)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption 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 *4)					
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



*4) c_{US} coil only

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

ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6106	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126 *5)	24 V d.c., 110 V a.c., 230 V a.c.
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	9116	24 V d.c., 110 V a.c., 230 V a.c.
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	9176	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.

*5) from G1 1/4 / 1 1/4 NPT (16 bar)

82470

2/2-way valves – Indirect solenoid actuated

Port size: G1/4 ... 1

Orifice: DN 8 ... 25

Functional compact design

High flow rate

Solenoid interchangeable without tools (Click-on®)

Damped operation

*NPT connection available:
change 82470 to 82680*



Click-on®



Technical data

Medium:

Hot water, steam

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2, G3/4, G1

Operating pressure:

0.1 ... 10 bar (1.4 ... 145 psi)

Differential pressure:

0.1 bar required (1.4 psi)

Fluid temperature:

0 ... +150°C (+32 ... +302°F)

Ambient temperature:

–10 ... +60°C (+14 ... +140°F)

Material:

Body: Brass (CW617N)

Seat seal: HNBR

Internal parts: Stainless steel, brass

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/4	8	60	1,7	0,1 ... 10	1,45 ... 145	0,47	8247000.9101.xxxxx
	G3/8	10	60	2,7	0,1 ... 10	1,45 ... 145	0,45	8247100.9101.xxxxx
	G1/2	12	67	3,4	0,1 ... 10	1,45 ... 145	0,5	8247200.9101.xxxxx
	G3/4	20	80	5,5	0,1 ... 10	1,45 ... 145	0,65	8247300.9101.xxxxx
	G1	25	95	8,5	0,1 ... 10	1,45 ... 145	0,95	8247400.9101.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 25 mm³/s (cSt)

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *3)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption 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

*3) US coil only

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 (+68°F). At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

82730

2/2-way valves – Indirect solenoid actuated

Port size: G1/4 ... 2

Orifice: DN 8 ... 50

Functional compact design

High flow rate

Solenoid interchangeable without tools (*Click-on®*)

Damped operation

*NPT connection available:
change 82730 to 82740*



Click-on®

Stainless Steel



Technical data

Medium:

Slightly aggressive gases and liquid fluids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2, G3/4, G1, G1 1/4, G1 1/2, G2

Operating pressure:

See table

Differential pressure:

0.1 bar required (1.45 psi)

Fluid temperature:

–10 ... +90°C (+14 ... +194°F)

Ambient temperature:

–10 ... +50°C (+14 ... +122°F)

Material:

Body: Stainless steel (1.4408)

Seat seal: NBR

Internal parts: Stainless steel, PVDF

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar) (psi)		Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/4	8	60	1,9	0,1 ... 16	1,45 ... 232	0,47	8273000.9101.xxxxx
	G3/8	10	60	3	0,1 ... 16	1,45 ... 232	0,45	8273100.9101.xxxxx
	G1/2	12	67	3,8	0,1 ... 16	1,45 ... 232	0,5	8273200.9101.xxxxx
	G3/4	20	80	6,1	0,1 ... 16	1,45 ... 232	0,65	8273300.9101.xxxxx
	G1	25	95	9,5	0,1 ... 16	1,45 ... 232	0,95	8273400.9101.xxxxx
	G1 1/4	32	132	23	0,1 ... 10	1,45 ... 145	2,6	8273500.9101.xxxxx
	G1 1/4	32	132	23	0,1 ... 16	1,45 ... 232	2,6	8273500.9151.xxxxx
	G1 1/2	40	132	25	0,1 ... 10	1,45 ... 145	2,84	8273600.9101.xxxxx
	G1 1/2	40	132	25	0,1 ... 16	1,45 ... 232	2,84	8273600.9151.xxxxx
	G2	50	160	41	0,1 ... 10	1,45 ... 145	3,85	8273700.9101.xxxxx
	G2	50	160	41	0,1 ... 16	1,45 ... 232	3,85	8273700.9151.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 25 mm²/s (cSt)

82730

2/2-way valves – Indirect solenoid actuated

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *3) *4)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				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 *3) *4)					
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

*3) _{US} Coil only

*4) Attention! Standard core tube with copper shading coil.
Look for fluid resistant further options

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 coil 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

ATEX category	ATEX protection class	IP protection class	So- lenoid	Standard voltages
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6106	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126 *5)	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.
*5) from G1 1/4 / 1 1/4 NPT (16 bar)

83030

2/2-way valves – Indirect solenoid actuated

Port size: PN 16

Orifice: DN 15 ... 50

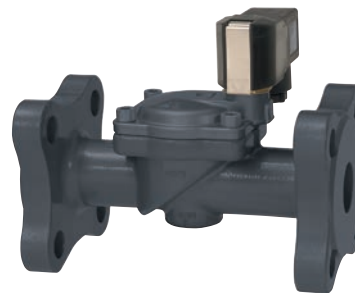
Functional compact design

High flow rate

Solenoid interchangeable without tools (*Click-on*®)

Damped operation

Click-on®



Technical data

Medium:

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

Flange PN 16,
DN 15, DN 20, DN 25,
DN 32, DN 40, DN 50

Operating pressure:

0,1 ... 10/16 bar
(1,45 ... 145/232 psi)

Fluid temperature:

–10 ... +90°C (+14 ... +194°F)

Ambient temperature:

–10 ... +50°C (+14 ... +194°F)

Material:

Body: Cast steel, brass

Seat seal: NBR

Internal parts: Stainless steel,
PVDF resp. brass from DN 32

For contaminated fluids insertion
of a strainer is recommended.

Standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	15	3,8	0,1 ... 16	1,45 ... 232	2,6	8303200.9101.xxxxx
	20	6,1	0,1 ... 16	1,45 ... 232	2,8	8303300.9101.xxxxx
	25	9,5	0,1 ... 16	1,45 ... 232	3,2	8303400.9101.xxxxx
	32	23	0,1 ... 10	1,45 ... 145	5,8	8303500.9101.xxxxx
	32	23	0,1 ... 16	1,45 ... 232	5,9	8303500.9151.xxxxx
	40	25	0,1 ... 10	1,45 ... 145	6,1	8303600.9101.xxxxx
	40	25	0,1 ... 16	1,45 ... 232	6,2	8303600.9151.xxxxx
	50	41	0,1 ... 10	1,45 ... 145	8,4	8303700.9101.xxxxx
	50	41	0,1 ... 16	1,45 ... 232	8,5	8303700.9151.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) $\approx$ kv value $\times$ 1,2

*2) For gases and liquid fluids up to 25 mm²/s (cSt)

83030

2/2-way valves – Indirect solenoid actuated

Acc. to ATEX 2014/34/EU!

Standard solenoid systems

Voltage and Frequency Solenoid 9841					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption Holding
024	00	24 V d.c.	-	10,1 W	10,1 W
230	59	230 V a.c.	50 ... 60 Hz	9,2 VA	9,2 VA
Voltage and Frequency Solenoid 6126					
024	00	24 V d.c.	-	14 W	14 W
230	49	230 V a.c.	40 ... 60 Hz	16 VA	16 VA
Voltage and Frequency Solenoid 428x					
024	00	24 V d.c.	-	11,4 W	11,4 W
230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA
Voltage and Frequency Solenoid 468x					
024	00	24 V d.c.	-	11,4 W	11,4 W
230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA
Voltage and Frequency Solenoid 382x					
024	00	24 V d.c.	-	14 W	14 W
230	49	230 V a.c.	40 ... 60 Hz	16 VA	16 VA

Electrical details for all solenoid systems

Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65

According to DIN VDE 0580 at a solenoid temperature of +20°C (+68°F). 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

Solenoid	ATEX category	Ex-protection class
428x	II 2G	Ex eb mb IIC T4/T5 Gb
	II 2D	Ex tb IIIC T 130 °C D IP66
468x	II 2G	Ex d mb IIC T4/T5 Gb
	II 2D	Ex tb IIIC T130°C/T95°C Db
984x	II 2G	Ex mb IIC T4 Gb
	II 2D	Ex mb tb IIIC T130°C Db
6126	II 2G	Ex eb mb IIC T4 Gb
	II 2D	Ex mb tb IIIB T125°C Db IP66

Solenoid systems with FM approval (USA)

Solenoid	FM approval	
382x	1,3,4,4X,6,6P,7 und 9	FM approved (File Nr. 2Z2A6.AE)

Admissible Ex areas (USA)

Solenoid 382x	Class	Divison	Groups
Gases + fumes	I	1 and 2	A ... D
Dusts	II	1 and 2	E ... G
Fibres + fluffs	III	1 and 2	–

Port size: G1/4 ... 1/2**Orifice: DN 8****High pressure solenoid valves****Acc. to PED 2014/68 EU****Solenoid interchangeable without tools (Click-on®)****Further customized solutions on request for example:**

- with integrated check valve
- Block solutions
- Stainless steel housing

Click-on®

8590178.6126



8590178.428x



8590185.9841

**Technical data****Medium:**

For compressed natural gas (CNG)

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2

Operating pressure:

10 ... 320 bar (145 ... 4641 psi)

Leakage rate:

Internal Leakage acc. to DIN EN

12266-1 Leakage "C"

External Leakage acc. to DIN EN

12266-1 Leakage "A"

Fluid temperature:

Solenoid 984x: -20 ... +60°C

(-4 ... +140°F)

Solenoid 612x: -20 ... +60°C

(-4 ... +140°F)

Solenoid 428x: -40 ... +50°C

(-40 ... +122°F)

Solenoid 468x: -40 ... +50°C

(-40 ... +122°F)

Solenoid 382x: -20 ... +60°C

(-4 ... +140°F)

Ambient temperature:

Solenoid 984x: -20 ... +50°C

(-4 ... +122°F)

Solenoid 612x: -20 ... +40°C

(-4 ... +104°F)

Solenoid 428x: -40 ... +50°C

(-40 ... +122°F) T4; T5 siehe S.2

Solenoid 468x: -40 ... +50°C

(-40 ... +122°F) T4; T5 siehe S.2

Solenoid 382x: -20 ... +60°C

(-4 ... +140°F)

Material:

Body: Brass

Seat seal: Polymer

Internal parts: Brass, stainless steel, polymer

Installation of a 40 µm filter in front of the valve is required!

Standard models

Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) *3) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
G1/4	8	1,2	10 ... 320	145 ... 4641	2,2	8590371.984x.xxxxx
G1/4	8	1,2	10 ... 320	145 ... 4641	2,3	8590371.612x.xxxxx
G1/4	8	1,2	10 ... 320	145 ... 4641	-	8590371.428x.xxxxx
G1/4	8	1,2	10 ... 320	145 ... 4641	-	8590371.468x.xxxxx
G1/4	8	1,2	10 ... 320	145 ... 4641	-	8590371.382x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 4641	2,2	8590185.984x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 4641	2,3	8590178.6126.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 4641	2,3	8590178.428x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 4641	2,5	8590178.468x.xxxxx
G3/8	8	1,2	10 ... 320	145 ... 4641	2,2	8590178.382x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 4641	2,2	8590337.984x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 4641	2,3	8590337.612x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 4641	2,5	8590337.428x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 4641	-	8590337.468x.xxxxx
G1/2	8	1,2	10 ... 320	145 ... 4641	-	8590337.382x.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

*2) Static test pressure PT = 480 bar (6961 psi)

*3) Max. Operating pressure = 320 bar (4641 psi)

83770

2/2-way valves – Indirect solenoid actuated

Acc. to ATEX 2014/34/EU!

Standard solenoid systems

Voltage and Frequency Solenoid 9841					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption Holding
024	00	24 V d.c.	-	10,1 W	10,1 W
230	59	230 V a.c.	50 ... 60 Hz	9,2 VA	9,2 VA
Voltage and Frequency Solenoid 6126					
024	00	24 V d.c.	-	14 W	14 W
230	49	230 V a.c.	40 ... 60 Hz	16 VA	16 VA
Voltage and Frequency Solenoid 428x					
024	00	24 V d.c.	-	11,4 W	11,4 W
230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA
Voltage and Frequency Solenoid 468x					
024	00	24 V d.c.	-	11,4 W	11,4 W
230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA
Voltage and Frequency Solenoid 382x					
024	00	24 V d.c.	-	14 W	14 W
230	49	230 V a.c.	40 ... 60 Hz	16 VA	16 VA

Electrical details for all solenoid systems

Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65

According to DIN VDE 0580 at a solenoid temperature of +20°C (+68°F). 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

Solenoid	ATEX category	Ex-protection class
428x	II 2G	Ex eb mb IIC T4/T5 Gb
	II 2D	Ex tb IIIC T 130 °C D IP66
468x	II 2G	Ex d mb IIC T4/T5 Gb
	II 2D	Ex tb IIIC T130°C/T95°C Db
984x	II 2G	Ex mb IIC T4 Gb
	II 2D	Ex mb tb IIIC T130°C Db
6126	II 2G	Ex eb mb IIC T4 Gb
	II 2D	Ex mb tb IIIB T125°C Db IP66

Solenoid systems with FM approval (USA)

Solenoid	FM approval	
382x	1,3,4,4X,6,6P,7 und 9	FM approved (File Nr. 2Z2A6.AE)

Admissible Ex areas (USA)

Solenoid 382x	Class	Divison	Groups
Gases + fumes	I	1 and 2	A ... D
Dusts	II	1 and 2	E ... G
Fibres + fluffs	III	1 and 2	–

83790

2/2-way valves – Indirect solenoid actuated

Port size: G3/4 ...1

Orifice: DN 15

High pressure solenoid valves

Acc. to PED 2014/68 EU

Further customized solutions available upon request:

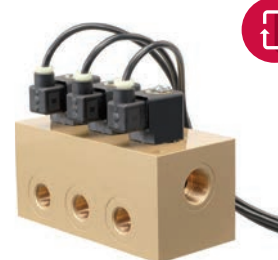
- 350 bar version
- Pressure sensor connections
- with integrated check valve
- Pressure sensor connections
- Stainless steel version



8590649.9841



8590556.9841



8590365.9841



Technical data

Medium:

For compressed natural gas (CNG)

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/4, G1

Operating pressure:

10 ... 250 bar (14,5 ... 3620 psi)

Leakage:

Internal Leakage acc. to DIN EN 12266-1 Leakage "E"
External Leakage acc. to DIN EN 12266-1 Leakage "A"

Fluid temperature:

Solenoid 984x: -20° ... +60°C (-4° ... +140°F)

Solenoid 6126: -20° ... +60°C (-4° ... +140°F)

Solenoid 428x: -40° ... +50°C (-40° ... +122°F)

Solenoid 468x: -40° ... +50°C (-40° ... +122°F)

Solenoid 382x: -20° ... +60°C (-4° ... +140°F)

Ambient temperature:

Solenoid 984x: -20° ... +50°C (-4° ... +122°F)

Solenoid 6126: -20° ... +40°C (-4° ... +104°F)

Solenoid 428x: -40° ... +50°C (-40° ... +122°F) T4; T5 see page 2

Solenoid 468x: -40° ... +50°C (-40° ... +122°F) T4; T5 see page 2

Solenoid 382x: -20° ... +60°C (-4° ... +140°F)

Material:

Body: Brass

Seat seal: Polymer

Internal parts: Brass, Stainless steel, Polymer

Installation of a 40 µm filter in front of the valve is required!

Standard models

Execution	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in V d.c./a.c.
Single valve	G3/4	13	3,0	10 ... 250	145 ... 3626	4,8 8590649.984x.xxxxx
Single valve	G3/4	15	4,5	10 ... 250	145 ... 3626	5,0 5,1 4,7 8590649.382x.xxxxx 8590649.428x.xxxxx 8590649.468x.xxxxx 8590649.6126.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Inlet 2 x G3/4 Outlet 2 x G1/4 for Pressure transmitter *3)	13		10 ... 250	145 ... 3626	12,5 8590556.984x.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Inlet 2 x G3/4 Outlet 2 x G1/4 for Pressure transmitter *3)	15		10 ... 250	145 ... 3626	8590556.382x.xxxxx 8590556.428x.xxxxx 8590556.468x.xxxxx 8590556.6126.xxxxx
3-station manifold with integrated no return pressure valves for the 3-bank control	1 x G1 Inlet 3 x G3/4 Outlet 3 x G1/4 for Pressure transmitter *3)	13		10 ... 250	145 ... 3626	17,3 8590365.984x.xxxxx
2-station manifold with integrated non return pressure valves for the 2-bank control	1 x G1 Inlet 2 x G3/4 Outlet 2 x G1/4 for Pressure transmitter *3)	15		10 ... 250	145 ... 3626	8590365.382x.xxxxx 8590365.428x.xxxxx 8590365.468x.xxxxx 8590365.6126.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Cv-value (US) ≈ kv value x 1,2

*2) Static test pressure PT = 375 bar

*3) Not included

More multi station variants (with or without integrated non return pressure valves, integrated filter, ...) on request.

Orifices and solenoid types may be combined in one block if necessary.

According to PED 2014/68/EU and ATEX 2014/34/EU!

83790

2/2-way valves – Indirect solenoid actuated

Actuation solenoids – Technical data and connection type

Solenoid	Code Voltage	Code Frequency	Voltage	Frequency	Power consumption		Connection
					Inrush	Holding	
3826	024	00	24 V d.c.	-	13,6 VA	13,6 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
3827	230	49	230 V a.c.	40 ... 60 Hz	15,4 VA	15,4 VA	1/2" Conduit 3 connection strands, length 460 mm cable gland 1/2-14 NPT
4280	024	00	24 V d.c.	-	11,4 W	11,4 W	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4281	230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA	cable gland M20 x 1,5 Note: A cable gland made from plastic must be chosen during order.
4680	024	00	24 V d.c.	-	11,4 W	11,4 W	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4681	230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 7,5-11,9 mm cable gland 1/2-14 NPT
4682	024	00	24 V d.c.	-	11,4 W	11,4 W	connection housing for cables 10-14 mm cable gland M20 x 1,5
4683	230	49	230 V a.c.	40 ... 60 Hz	15,2 VA	15,2 VA	connection housing for cables 10-14 mm cable gland M20 x 1,5
6126	024	00	24 V d.c.	-	14 W	14 W	connection housing for cables 7-9 mm cable gland M16 x 1,5
6126	230	49	230 V a.c.	40 ... 60 Hz	16 VA	16 VA	connection housing for cables 7-9 mm cable gland M16 x 1,5
9841	024	00	24 V d.c.	-	10,1 W	10,1 W	with 3 m connection cable
9844	024	00	24 V d.c.	-	10,1 W	10,1 W	with 5 m connection cable
9845	024	00	24 V d.c.	-	10,1 W	10,1 W	with 10 m connection cable
9845	230	59	230 V a.c.	50 ... 60 Hz	9,2 VA	9,2 VA	with 10 m connection cable

Electrical details for all solenoid systems

Voltage range	±10%
Duty cycle	100% ED
Protection class	EN 60529 IP65 (exception 428x: IP66)

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..

ATEX-Identification for solenoid systems

Solenoid	ATEX category	Ex-protection class
428x	II 2G II 2D	Ex eb mb IIC T4/T5 Gb Ex tb IIIC T 130 °C D IP66
468x	II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/T95°C Db
984x	II 2G II 2D	Ex mb IIC T4 Gb Ex mb tb IIIC T130°C Db
6126	II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db IP66

Solenoid systems with FM approval (USA)

Solenoid	FM approval
382x	1,3,4,4X,6,6P,7 und 9 FM approved (File Nr. 2Z2A6.AE)

Admissible Ex areas (USA)

Solenoid 382x	Class	Divison	Groups
Gases + fumes	I	1 and 2	A ... D
Dusts	II	1 and 2	E ... G
Fibres + fluffs	III	1 and 2	–

84070

2/2-way valves – Indirect solenoid actuated

Port size: G1/2 ... 3/4

Orifice: DN 12 ... 20

Functional compact design

High flow rate

International approvals

Solenoid interchangeable without tools (Click-on®)

Damped operation



Click-on®



Technical data

Medium:

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

G1/2, G3/4

Operating pressure:

0.3 ... 10.5 bar (4.35 ... 152 psi)

Fluid temperature:

+5 ... +50°C (+41 ... +122°F)

Ambient temperature:

0 ... +50°C (+32 ... +122°F)

Material:

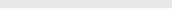
Body: Polymer (PA12-GF50)

Seat seal: EPDM

Internal parts: Stainless steel, PVDF

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/2	12	3	0,3 ... 10,5	4,35 ... 152	0,28	8407214.9101.xxxxx
	G3/4	20	5	0,3 ... 10,5	4,35 ... 152	0,3	8407314.9101.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 25 mm³/s (cSt)

Standard solenoid systems

Voltage and Frequency Solenoid 9101 *3)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption 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

*3) US coil only

Further versions on request!

Specific NSF listed voltages for this valve can be found on: www.nsf.org.

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 (+68°F). At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

85360

2/2-way valves – Indirect solenoid actuated

Port size: G1/4 ... 2**Orifice: DN 8 ... 50****High flow rate****Long lifetime****Compact build piston valve****Solenoid interchangeable without tools (Click-on®)****Piston guided in PTFE rings***NPT connection available:
change 85360 to 85370***Click-on®****Technical data****Medium:**

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:Optional, preferably solenoid
vertical on top**Flow direction:**

Determined

Port size:G1/4, G3/8, G1/2, G3/4, G1,
G1 1/4, G1 1/2, G2**Operating pressure:**

0,5 ... 40 bar (7,25 ... 580 psi)

Fluid temperature:

-20 ... +90°C (-4 ... +194°F)

Ambient temperature:

-20 ... +50°C (-4 ... +122°F)

Material:

Body: Brass (CW617N)

Seat seal: NBR

Internal parts: Stainless steel,
brass, PTFE / carbonFor contaminated fluids insertion
of a strainer is recommended.**Standard models**

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	(psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/4	8	2,2	0,5 ... 40	7,25 ... 580	0,83	8536000.9151.xxxxx
	G3/8	10	3,4	0,5 ... 40	7,25 ... 580	0,82	8536100.9151.xxxxx
	G1/2	12	4,4	0,5 ... 40	7,25 ... 580	0,85	8536200.9151.xxxxx
	G3/4	20	7	0,5 ... 40	7,25 ... 580	1,25	8536300.9151.xxxxx
	G1	25	10,5	0,5 ... 40	7,25 ... 580	1,7	8536400.9151.xxxxx
	G1 1/4	32	25	0,5 ... 40	7,25 ... 580	4,1	8536500.9151.xxxxx
	G1 1/2	40	27	0,5 ... 40	7,25 ... 580	3,85	8536600.9151.xxxxx
	G2	50	43	0,5 ... 40	7,25 ... 580	5,6	8536700.9151.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 25 mm³/s (cSt)

Standard solenoid systems

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

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**

ATEX category	ATEX protection class	IP protection class	So- lenoid	Standard voltages
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	9176	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/T95°C Db up to DN 25: Operating pressure 0,5 ... 16 bar from DN 32: Operating pressure 0,5 ... 10 bar	IP65	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126	24 V d.c., 110 V a.c., 230 V a.c.

*1) US coil only

Further versions on request!

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

85380

2/2-way valves – Indirect solenoid actuated

Port size: G1/4 ... 1

Orifice: DN 8 ... 25

High flow rate

Long lifetime

Compact build piston valve

Solenoid interchangeable without tools (Click-on®)

Piston guided in PTFE rings

*NPT connection available:
change 85380 to 85390*



Click-on®



Technical data

Medium:

Neutral steam and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, solenoid preferably vertical on top

Flow direction:

Determined

Port size:

G1/4, G3/8, G1/2, G3/4, G1

Operating pressure:

1 ... 25 bar (14,5 ... 363 psi)

Fluid temperature:

0 ... +200°C (+32 ... +392°F) *1)

Ambient temperature:

0 ... +50°C (+32 ... +122°F) *1)
with solenoid mounted vertical underneath max. +60°C (+140°F) *2)

Material:

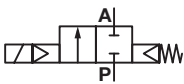
Body: Brass (CW617N)

Seat seal: PTFE

Internal parts: Stainless steel, FPM, PTFE

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Port size	Orifice (mm)	Flow kv value *3) (m³/h)	Operating pressure *4) (bar)	Operating pressure *4) (psi)	Weight (kg)	Model Solenoid in V d.c./a.c.
	G1/4	8	2,2	1 ... 25	14,5 ... 363	0,83	8538000.9152.xxxxx
	G3/8	10	3,4	1 ... 25	14,5 ... 363	0,82	8538100.9152.xxxxx
	G1/2	12	4,4	1 ... 25	14,5 ... 363	0,85	8538200.9152.xxxxx
	G3/4	20	7	1 ... 25	14,5 ... 363	1,25	8538300.9152.xxxxx
	G1	25	10,5	1 ... 25	14,5 ... 363	1,7	8538400.9152.xxxxx

xxxxx Please insert voltage and frequency codes

*1) Temperature < 0°C (+14°F) on request

*2) Temperature max. +55°C (+131°F) within the scope of 

*3) Cv-value (US) ≈ kv value x 1,2

*4) For gases and liquid fluids up to 40 mm²/s (cSt)

Leakage rate E acc. to DIN EN 12266-1

Standard solenoid systems

Voltage and Frequency Solenoid 9152 *5)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	10 W	10 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

*5)  US coil only up to +55°C ambient temperature
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 (+68°F).
At operating state temperature the input power of a coil decreases by up to ca. 30% due to physical reasons.

85660

2/2-way valves – Indirect solenoid actuated

Port size: Flange PN 40

Orifice: DN 15 ... 50

High flow rate

Long lifetime

Compact build piston valve

Solenoid interchangeable without tools (Click-on®)

Piston guided in PTFE rings



Click-on®



Technical data

Medium:

Neutral gases and liquids

Switching function:

Normally closed

Operation:

Indirect solenoid actuated

Mounting position:

Optional, preferably solenoid vertical on top

Flow direction:

Determined

Port size:

Flange PN 40,
DN 15, DN 20, DN 25,
DN 32, DN 40, DN 50

Operating pressure:

0.5 ... 40 bar (7.25 ... 580 psi)

Fluid temperature:

–20 ... +90°C (–4 ... +194°F)

Ambient temperature:

–20 ... +50°C (–4 ... +122°F)

Material:

Body: Cast steel (1.0619), brass (CW617N)

Seat seal: NBR

Internal parts: Stainless steel, brass, PTFE

For contaminated fluids insertion of a strainer is recommended.

Standard models

Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure *2) (bar)	Weight (kg)	Model Solenoid in d.c./a.c.
	15	4,4	0,5 ... 40	3,2	8566200.9151.xxxxx
	20	7	0,5 ... 40	3,6	8566300.9151.xxxxx
	25	10,5	0,5 ... 40	4,2	8566400.9151.xxxxx
	32	25	0,5 ... 40	7,2	8566500.9151.xxxxx
	40	27	0,5 ... 40	7,6	8566600.9151.xxxxx
	50	43	0,5 ... 40	8,8	8566700.9151.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)

Standard solenoid systems

Voltage and Frequency Solenoid 9151 *1)

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	17 W	17 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)  _{US} coil only

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

ATEX category	ATEX protection class	IP protection class	Solenoid	Standard voltages
II 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	9176	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/T95°C Db up to DN 25: Operating pressure 0,5 ... 16 bar (7,25 ... 232 psi) from DN 32: Operating pressure 0,5 ... 10 bar (7,25 ... 145 psi)	IP66	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 2G II 2D	Ex eb mb IIC T4 Gb Ex mb tb IIIB T125°C Db	IP66	6126	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.