

82960/82970

2/2-way valves, solenoid pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm
- Also available for solenoid version low temperature to -40°C (-40°F)!

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Operating pressure:
0,4 ... 7/8 bar

Port size:
G3/4, G1, G1 1/2, G2, G2 1/2, G3, 3/4 NPT, 1 NPT, 1 1/2 NPT, 2 NPT, 2 1/2 NPT

Pilot connection:
G1/8 resp. 1/8 NPT

Dusty gas temperature:
-20...+85°C (-4 ... +185°F)

Cleaning gas temperature:
-40...+85°C (-40 ... +185°F)

Ambient temperature:
-20...+85°C (-4 ... +185°F)

Materials

Body:
Aluminium

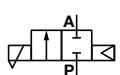
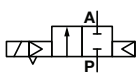
Seat seal:
TPE

Internal parts:
TPU

Twist-on®



● Technical data - standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar)	Weight (kg)	Model
	G3/4	20	95	18	0,4 ... 8	0,50	8296300.8171.xxxxx
	3/4 NPT	20	95	18	0,4 ... 8	0,50	8297300.8171.xxxxx
	G1	25	95	22	0,4 ... 8	0,47	8296400.8171.xxxxx
	1 NPT	25	95	22	0,4 ... 8	0,47	8297400.8171.xxxxx
	G1 1/2	40	135	59	0,4 ... 8	1,18	8296600.8171.xxxxx
	1 1/2 NPT	40	135	59	0,4 ... 8	1,18	8297600.8171.xxxxx
	G2	50	170	80	0,4 ... 8	2,02	8296700.8171.xxxxx
	2 NPT	50	170	80	0,4 ... 8	2,02	8297700.8171.xxxxx
	G2 1/2	65	170	93	0,4 ... 8	2,30	8296800.8171.xxxxx
	2 1/2 NPT	65	170	93	0,4 ... 8	2,30	8297800.8171.xxxxx
	G3	80	239,5	172	0,4 ... 7	3,93	8296900.8171.xxxxx

xxxxx Please insert voltage and frequency codes, see page 18

*1) Cv-value (US) ≈ kv value x 1,2

82960/82970

2/2-way valves, solenoid pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

Option selector

829★★★★.8171.★★★★

Thread form	Substitute
ISO G	6
NPT	7

Port size	Substitute
3/4	3
1	4
1 1/2	6
2	7
2 1/2	8
3 (only ISO G)	9

Valve options	Substitute
Flange version without valve body	54
Dusty gas temperature version -20...+100°C (-4 ... +212°F), Seat seal TPE, Ambient temperature -40...+85°C (-40 ... +185°F), Cleaning gas temperature -20...+85°C (-4 ... +185°F)	62

Frequency	Substitute
See table frequency codes	xx

Voltage	Substitute
See table voltage codes	xxx

Valve options	Substitute
Dusty gas temperature version -20...+140°C (-4 ... +284°F), Seat seal TPE, Ambient temperature -40 ...+85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	63
Low temperature version -40 ...+85°C (-40 ... +185°F) Seat seal TPE, Ambient temperature -40 ...+85°C (-40 ... +185°F), Cleaning gas temperature -40 ...+85°C (-40 ... +185°F)	71

Standard solenoid systems

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  coil only

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.

ATEX category	ATEX-Protection class	IP protection class	Solenoid	Standard voltages
II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/ T95°C Db 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 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	8176	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 T135°C Db	IP66	6176	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.

Option	Solenoid	Standard voltages
Solenoid version for low temperature -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.
Pulse solenoid	8821	24 V d.c., 110 V a.c., 230 V a.c.
Solenoid version for low temperature -40°C	8001	24 V d.c., 110 V a.c., 230 V a.c.

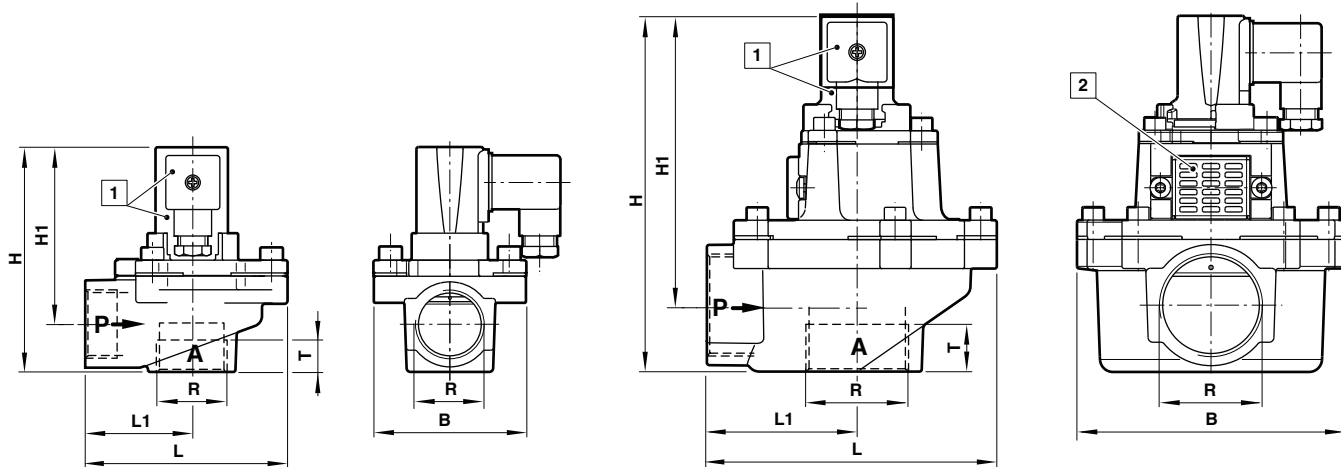
82960/82970

2/2-way valves, solenoid pilot operated
DN 20 ... 80, G3/4 ... 3, 3/4 ... 2 1/2 NPT

● Dimensions

G3/4 ... 1
3/4 ... 1 NPT

G1 1/2 ... 3
1 1/2 ... 2 1/2 NPT



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

Port size R	B	H	H1	L	L1	T	Model
G3/4	80	105,5	83	95	50	16	8296300.8171.xxxxx
3/4 NPT	80	105,5	83	95	50	14	8297300.8171.xxxxx
G1	80	105,5	83	95	50	18	8296400.8171.xxxxx
1 NPT	80	105,5	83	95	50	17	8297400.8171.xxxxx
G1 1/2	124,5	166	136	135	70	22	8296600.8171.xxxxx
1 1/2 NPT	124,5	166	136	135	70	18	8297600.8171.xxxxx
G2	140	190,5	149	170	96,5	25	8296700.8171.xxxxx
2 NPT	140	190,5	149	170	96,5	18	8297700.8171.xxxxx
G2 1/2	140	205,5	160	170	96,5	25	8296800.8171.xxxxx
2 1/2 NPT	140	205,5	160	170	96,5	24	8297800.8171.xxxxx
G3	196	221	169	239,5	143	33	8296900.8171.xxxxx

82960/82970, single stage

2/2-way valves, solenoid pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Port size:
G1 1/2, G2, G2 1/2, G3,
1 1/2 NPT, 2 NPT, 2 1/2 NPT

Operating pressure:
0,4 ... 7/8 bar

Pilot connection:
G1/8 resp. 1/8 NPT

Dusty gas temperature:
-20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature:
-40 ... +85°C (-40 ... +185°F)

Ambient temperature:
-20...+85°C (-4 ... +185°F)

Materials

Body:
Aluminium

Seat seal:
TPE

Internal parts:
TPU



● Technical data - standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar)	Operating pressure (psi)	Weight (kg)	Model
	G1 1/2	40	135	59	0,4 ... 8	5,8 ... 116	1,18	8296690.8171.xxxxx
	1 1/2 NPT	40	135	59	0,4 ... 8	5,8 ... 116	1,18	8297690.8171.xxxxx
	G2	50	169	80	0,4 ... 8	5,8 ... 116	2,02	8296790.8171.xxxxx
	2 NPT	50	169	80	0,4 ... 8	5,8 ... 116	2,02	8297790.8171.xxxxx
	G2 1/2	65	169	93	0,4 ... 8	5,8 ... 116	2,30	8296890.8171.xxxxx
	2 1/2 NPT	65	169	93	0,4 ... 8	5,8 ... 116	2,30	8297890.8171.xxxxx
	G3	80	239,5	172	0,4 ... 7	5,8 ... 101	3,50	8296990.8171.xxxxx

xxxxx Please insert voltage and frequency codes, see page 23

*1) Cv-value (US) ≈ kv value x 1,2

82960/82970, single stage

2/2-way valves, solenoid pilot operated
DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

Option selector

829★ ★ ★ ★ .8171.★ ★ ★ ★ ★

Thread form	Substitute
ISO G	6
NPT	7

Port size	Substitute
1 1/2	6
2	7
2 1/2	8
3 (only ISO G)	9

Frequency	Substitute
See table frequency codes	xx

Voltage	Substitute
See table voltage codes	xxx

Valve options	Substitute
Flange version without valve body	xx
Dusty gas temperature version -20 ... +100°C (-4 ... +212°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	xx
Dusty gas temperature version -20 ... +140°C (-4 ... +284°F), Seat seal TPE, Ambient temperature -40 ... +85°C, (-40 ... +185°F) Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	91

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  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.
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	8176	IP65	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 T135°C Db	6186	IP66	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.

Additional solenoid systems		
Option	Solenoid	Standard voltages
Solenoid version for low temperature -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.
Pulse solenoid	8821	24 V d.c., 110 V a.c., 230 V a.c.
Solenoid version for low temperature -40°C	8001	24 V d.c., 110 V a.c., 230 V a.c.

82960/82970, single stage

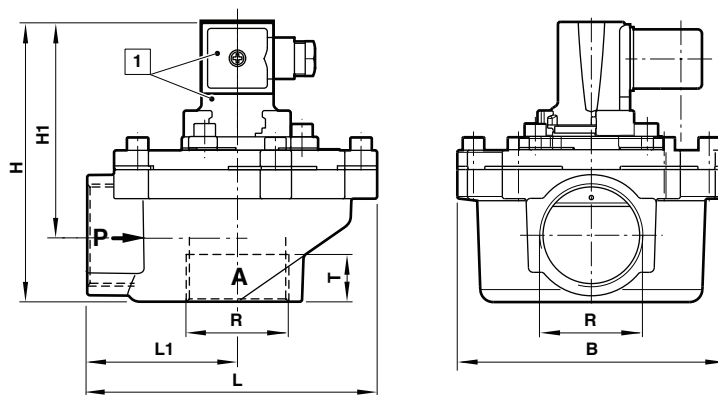
2/2-way valves, solenoid pilot operated

DN 40 ... 80, G1 1/2 ... 3, 1 1/2 ... 2 1/2 NPT

● Dimensions

G1 1/2 ... 3

1 1/2 ... 2 1/2 NPT



1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)

Port size R	B	H	H1	L	L1	T	Model
G1 1/2	124,5	136	105	135	70	22	8296690.8171.xxxxx
1 1/2 NPT	124,5	136	105	135	70	18	8297690.8171.xxxxx
G2	140	156	118,5	170	95	25	8296790.8171.xxxxx
2 NPT	140	156	118,5	170	95	18	8297790.8171.xxxxx
G2 1/2	140	177	129	170	95	25	8296890.8171.xxxxx
2 1/2 NPT	140	177	129	170	95	24	8297890.8171.xxxxx
G3	196	186,5	134	239,5	143	33	8296990.8171.xxxxx

83320

2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer
- One-piece diaphragm

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Port size:
G3/4, G1, G1 1/2

Operating pressure:
0,4 ... 8 bar

Pilot connection:
G1/8 resp. 1/8 NPT

Dusty gas temperature:
-20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature:
-40 ... +85°C (-40 ... +185°F)

Ambient temperature:
-20 ... +85°C (-4 ... +185°F)

Materials

Body:
Stainless steel 1.4408

Seat seal:
TPE

Internal parts:
TPU

Twist-on®
Stainless Steel



● Technical data - standard models

Symbol	Port size	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar)	Weight (kg)	Model
	G3/4	20	95	18	0,4 ... 8	5,8 ... 116	8332300.8171.xxxxx
	G1	25	95	22	0,4 ... 8	5,8 ... 116	8332400.8171.xxxxx
	G1 1/2	40	135	59	0,4 ... 8	5,8 ... 116	8332600.8171.xxxxx

xxxx Please insert voltage and frequency codes, see page 28

*1) Cv-value (US) ≈ kv value x 1,2

83320

2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

● Option selector

8332***.8171.***

Port size	Substitute
3/4	3
1	4
1 1/2	6

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx
Valve options	Substitute
Flange version without valve body	54
Dusty gas temperature version -20 ... +100°C (-4 ... +212°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	62
Dusty gas temperature version -20 ... +140°C (-4 ... +284°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	63
Low temperature version -40 ... +85°C (-40 ... +185°F) Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -40 ... +85°C (-40 ... +185°F)	71

● Standard solenoid systems

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption Inrush	Power consumption Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  coil only

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.

ATEX category	ATEX-Protection class	IP protection class	Solenoid	Standard voltages
II 2G II 2D	Ex d mb IIC T4/T5 Gb Ex tb IIIC T130°C/ T95°C Db 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 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C DC	IP65	8176	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 T135°C Db	IP66	6176	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.

Option	Solenoid	Standard voltages
Solenoid version for low temperature -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.

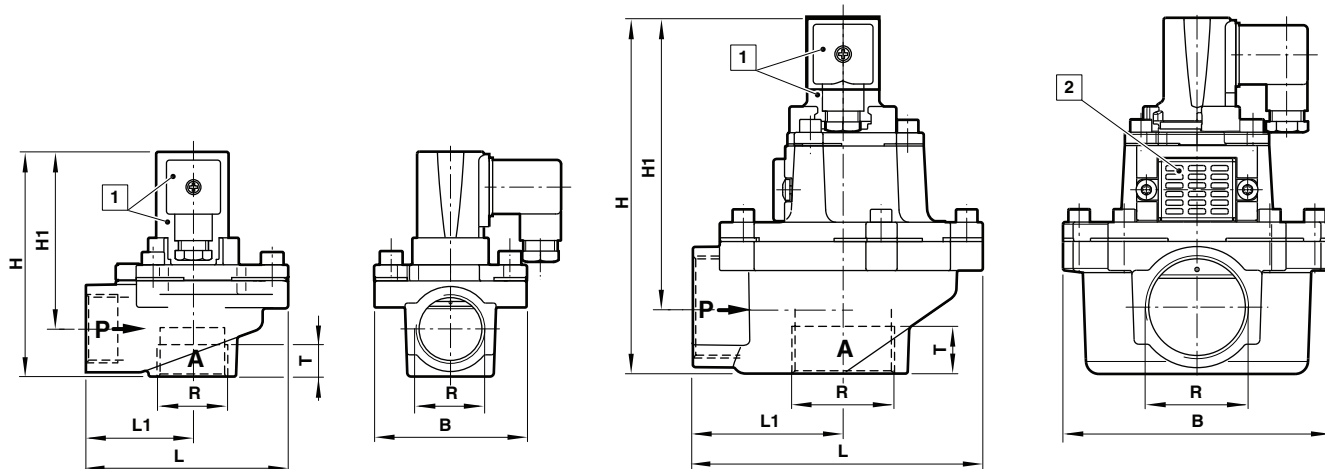
83320

2/2-way valves, solenoid pilot operated
DN 20 ... 40, G3/4 ... 1 1/2

● Dimensions

G3/4 ... 1
3/4 ... 1 NPT

G1 1/2
1 1/2 NPT



- 1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
- 2 Silencer

Port size R	B	H	H1	L	L1	T	Model
G3/4	80	105,5	83	95	50	18	8332300.8171.xxxxx
G1	80	105,5	83	95	50	18	8332400.8171.xxxxx
G1 1/2	124,5	166	136	135	70	22	8332600.8171.xxxxx

83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer

Technical Data

Medium:
Neutral gases

Type:
Diaphragm valve requiring differential pressure

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Operating pressure:
0,4 ... 8 bar (5,8 ... 116 psi)

Port size:
DN 25, DN 40, DN 50, DN 65

Differential pressure:
0,4 bar (5,8 psi) required

Control port:
G1/8

Dusty gas temperature:
-20...+85°C (-4 ... +185°F)

Cleaning gas temperature:
-40...+85°C (-40 ... +185°F)

Ambient temperature:
-20...+85°C (-4 ... +185°F)

Materials

Body:
Aluminium

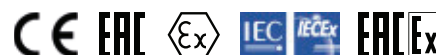
Seat seal:
TPE

Seals:
TPU

Blow tube:
Aluminium

Adapter:
Aluminium

Twist-on®



● Technical data - standard models

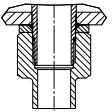
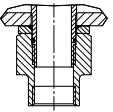
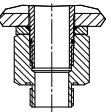
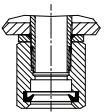
Symbol	Orifice (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar) (psi)		Weight (kg)	Model
	25	28	0,4 ... 8	5,8 ... 116	0,47	8392400.8171.xxxxx
	40	74	0,4 ... 8	5,8 ... 116	1,10	8392600.8171.xxxxx
	50	104	0,4 ... 8	5,8 ... 116	1,60	8392700.8171.xxxxx
	65	121	0,4 ... 8	5,8 ... 116	2	8392800.8171.xxxxx

xxxx Please insert voltage and frequency codes, see page 33

*1) Cv-value (US) ≈ kv value x 1,2

83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

Outside dim. of tank/profile (mm)	Model		Plus	Connection kit			
	DN 25	DN 40		Hose connector	Female thread	Male thread	Push-in sleeve
70							
100				1263648	1263641	1263634	1263628
120				1263649	1263642	1263635	1263629
140	8392400.8171.xxxxx	-	+	1263652	1263643	1263636	1263630
160				1263655	1263645	1263638	1263631
180				1263656	1263646	1263639	1263632
200				1263657	1263647	1263640	1263633
70				1263682	1263674	1263666	1263658
100				1263683	1263675	1263667	1263659
120				1263684	1263676	1263668	1263660
140	-	8392600.8171.xxxxx	+	1263685	1263677	1263669	1263661
160				1263686	1263678	1263670	1263662
180				1263687	1263679	1263671	1263663
200				1263688	1263680	1263672	1263664

Kit not required for use without connection pipe. Please then just give order-no. for DN 25 or 40 connection.
DN 50 and DN 65 - tube and connection on request

Option selector

8392★00.8171.★★★★★

Port size	Substitute
25	4
40	6
50	7
60	8

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx

Standard solenoid systems

Voltage and frequency solenoids 8171 *2)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  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. 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 T6...T4 Gb Ex tb IIIC T130°C Db	IP66	42xx	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 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 3G II 3D	Ex ec IIC T4 Gc Ex tc IIIC T130°C Dc	IP65	8176	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 T135°C Db	IP66	6176	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.

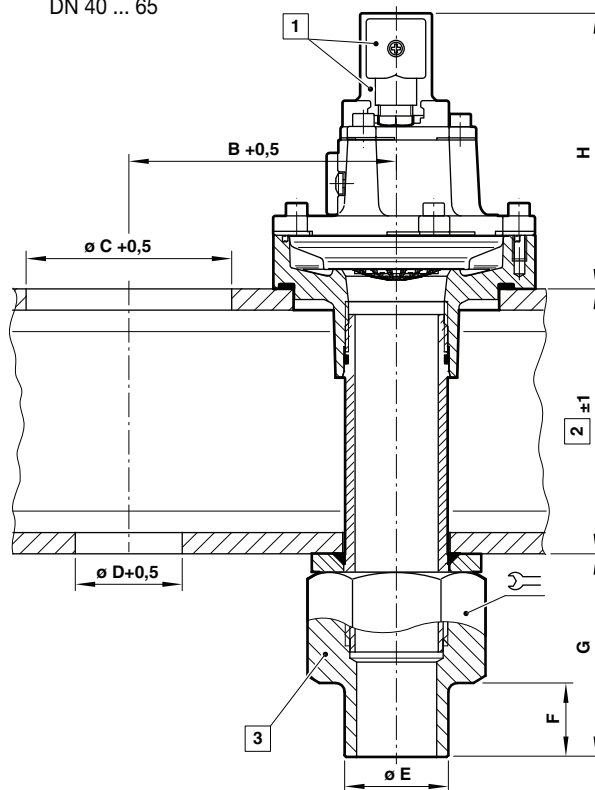
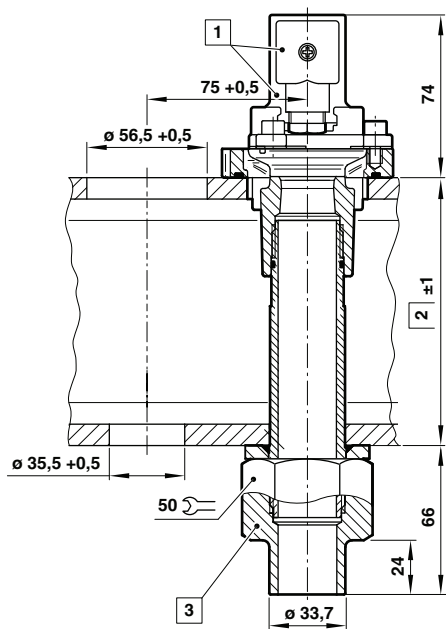
83920

2/2-way valves, solenoid pilot operated valve for cleaning dust filters. For tank mounting with blow tube DN 25 ... 65

● Dimensions

DN 25

DN 40 ... 65



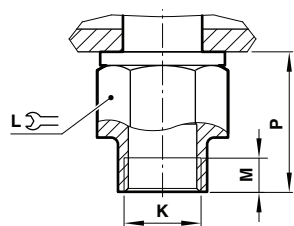
- 1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
- 2 Profile
- 3 Hose connector

Orifice (mm)	B	ø C	ø D	ø E	F	G	H		Model
25					See drawing				8392400.8171.xxxxx
40	125	96,5	50,5	48,6	30	81	129	65	8392600.8171.xxxxx
50	200	116	61	60,3	60	118	135	80	8392700.8171.xxxxx
65	200	116	77	76	70	145	145	95	8392800.8171.xxxxx

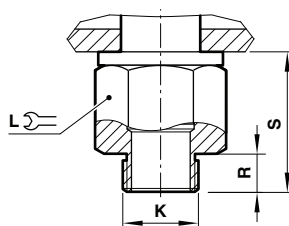
Maximum torque 50 Nm for DN 25 adapter; maximum torque 100 Nm for DN 40 adapter

Other adapters

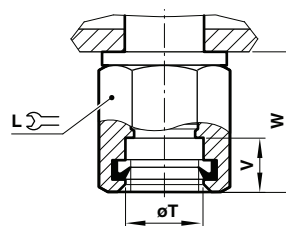
Female thread



Male thread



Hose connection



Orifice (mm)	K	L	M	P	R	S	ø T	V	W
Female thread 25	G1	6kt, 65	15	62	-	-	-	-	-
Female thread 40	G1 1/2	6kt, 65	23	81	-	-	-	-	-
Male thread 25	G1	6kt, 65	-	-	17	62	-	-	-
Male thread 40	G1 1/2	6kt, 65	-	-	25	81	-	-	-
Hose connection 25	-	6kt, 65	-	-	-	-	33,7	24	66
Hose connection 40	-	6kt, 65	-	-	-	-	48,3	40	91

83920 flange version

2/2-way valves, solenoid pilot operated
DN 80

- High flow rate
- All internal components captive
- Clear, compact design
- Solenoid interchangeable without tools (Twist-on®)
- Integrated silencer

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Operating pressure:
0,4 ... 8 bar (5,8 ... 116 psi)

Port size:
DN 80

Differential pressure:
0,4 bar required

Dusty gas temperature:
-20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature:
-40 ... +85°C (-40 ... +185°F)

Ambient temperature:
-20 ... +85°C (-4 ... +185°F)

Materials

Body:
Aluminium

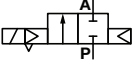
Seat seal:
TPE

Seals:
TPU

Twist-on®



● Technical data - standard models

Symbol	Orifice (mm)	Valve length (mm)	Flow kv value *1) (m³/h)	Operating pressure (bar)	Operating pressure (psi)	Weight (kg)	Model
	80	239,5	218	0,4 ... 8	5,8 ... 116	3,40	8392900.8171.xxxxx

xxxxx Please insert voltage and frequency codes, see below
*1) Cv-value (US) ≈ kv value x 1,2

● Option selector

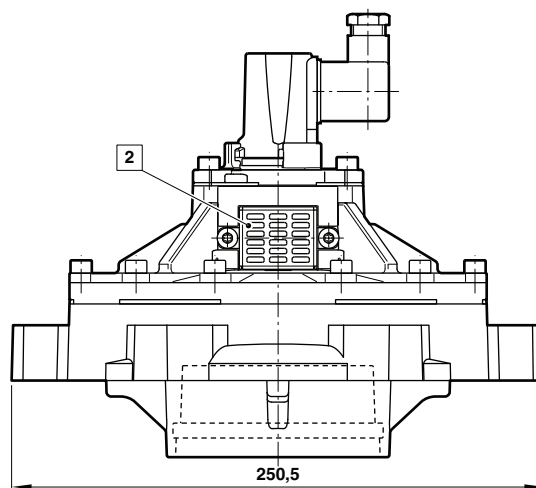
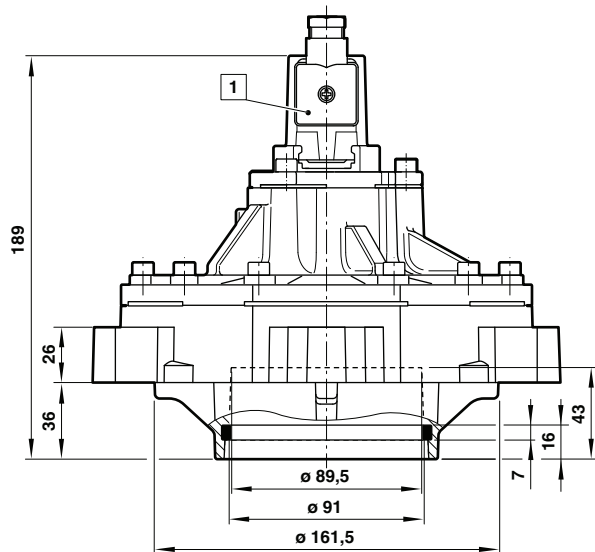
8392★★★.8171.★★★★★

Thread form	Substitute	Frequency	Substitute
ISO G	6	See table frequency codes	xx
Valve options	Substitute	Voltage	Substitute
Dusty gas temperature version -20 ...+100°C (-4 ... +212°F), Seat seal TPE, Ambient temperature -40 ...+85°C (-40 ... +185°F), Cleaning gas temperature -20 ...+85°C (-4 ... +185°F)	62	See table voltage codes	xxx
		Valve options	Substitute
		Dusty gas temperature version -20 ...+140°C (-4 ... +284°F), Seat seal TPE, Ambient temperature -40 ...+85°C (-40 ... +185°F), Cleaning gas temperature -20 ...+85°C (-4 ... +185°F)	63
		Low temperature version -40 ...+85°C (-40 ... +185°F) Seat seal TPE, Ambient temperature -40 ...+85°C (-40 ... +185°F), Cleaning gas temperature -40 ...+85°C (-40 ... +185°F)	71

83920

2/2-way valves, solenoid pilot operated
DN 80

● Dimensions



- 1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
- 2 Silencer

● Standard solenoid systems

Voltage and frequency solenoids 8171 *2)					
Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  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.
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	Ex eb mb IIC T6...T4 Gb	IP66	42xx	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex tb IIIC T130°C Db			
II 2G	Ex d mb IIC T4/T5 Gb	IP66	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex tb IIIC T130°C/ T95°C Db 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)			
II 3G	Ex ec IIC T4 Gc	IP65	8176	24 V d.c., 110 V a.c., 230 V a.c.
II 3D	Ex tc IIIC T130°C Dc			
II 2G	Ex eb mb IIC T4 Gb	IP66	6186	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex mb tb IIIB T135°C Db			

Attention!

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

Additional solenoid systems		
Option	Solenoid	Standard voltages
Solenoid version for low temperature min. -40°C	8001	24 V d.c., 110 V a.c., 230 V a.c.
Solenoid version for low temperature min. -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.

83670

2/2-way valves, solenoid pilot operated
DN 25 ... 40

- High flow rate
- Clear, compact design
- One-piece diaphragm

Technical Data

Medium:
Air

Switching function:
Normally closed

Flow direction:
Determined

Mounting position:
Optional, preferably solenoid vertical on top

Operating pressure:
0,4 ... 8 bar (5,08 ... 116 psi)

Port size:
DN 25, DN 40

Pilot connection:
G1/8

Dusty gas temperature:
-20 ... +85°C (-4 ... +185°F)

Cleaning gas temperature:
-40 ... +85°C (-40 ... +185°F)

Ambient temperature:
-20 ... +85°C (-4 ... +185°F)

Materials

Body:
Aluminium

Seat seal:
TPE

Internal parts:
TPU



● Technical data - standard models

Symbol	Orifice (mm)	Flow kv value *1) (m ³ /h)	Operating pressure (bar) (psi)		Weight (kg)	Model
	25	22	0,4 ... 8	5,8 ... 116	0,90	8367400.8171.xxxxx
	40	59	0,4 ... 8	5,8 ... 116	2,10	8367600.8171.xxxxx

xxxxx Please insert voltage and frequency codes, see page 41

*1) Cv-value (US) ≈ kv value x 1,2

83670

2/2-way valves, solenoid pilot operated
DN 25 ... 40

Option selector

8367***.8171.***

Port size	Substitute
25	4
40	6

Frequency	Substitute
See table frequency codes	xx
Voltage	Substitute
See table voltage codes	xxx
Valve options	Substitute
Dusty gas temperature version -20 ... +100°C (-4 ... +212°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	62
Dusty gas temperature version -20 ... +140°C (-4 ... +284°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -20 ... +85°C (-4 ... +185°F)	63
Low temperature version -40 ... +85°C (-40 ... +185°F), Seat seal TPE, Ambient temperature -40 ... +85°C (-40 ... +185°F), Cleaning gas temperature -40 ... +85°C (-40 ... +185°F)	71

Standard solenoid systems

Code Voltage	Code Frequency	Voltage	Frequency	Power consumption	
				Inrush	Holding
024	00	24 V d.c.	-	12 W	12 W
024	50	24 V a.c.	50 Hz	23 VA	16 VA
110	50	110 V a.c.	50 Hz	23 VA	16 VA
120	60	120 V a.c.	60 Hz	23 VA	16 VA
230	50	230 V a.c.	50 Hz	23 VA	16 VA

*2)  coil only

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.

ATEX category	ATEX-protection class	IP-protection class	Solenoid	Standard voltages
II 2G	Ex eb mb IIC T6...T4 Gb	IP66	42xx	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex tb IIIC T130°C Db			
II 2G	Ex d mb IIC T4/T5 Gb	IP66	468x	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex tb IIIC T130°C/T95°C Db 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)			
II 3G	Ex ec IIC T4 Gc	IP65	8176	24 V d.c., 110 V a.c., 230 V a.c.
II 3D	Ex tc IIIC T130°C DC			
II 2G	Ex eb mb IIC T4 Gb	IP66	6176	24 V d.c., 110 V a.c., 230 V a.c.
II 2D	Ex mb tb IIIB T135°C Db			

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

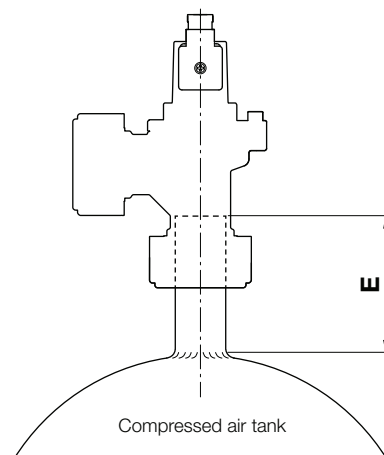
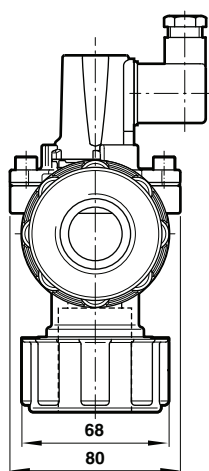
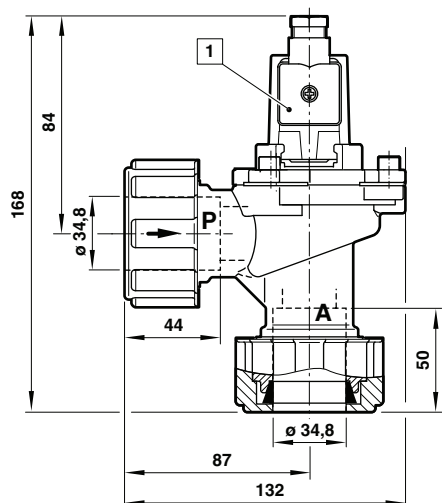
Option	Solenoid	Standard voltages
Solenoid version for low temperature min. -40°C	8001	24 V d.c., 110 V a.c., 230 V a.c.
Solenoid version for low temperature min. -40°C	9151	24 V d.c., 110 V a.c., 230 V a.c.

83670

2/2-way valves, solenoid pilot operated
DN 25 ... 40

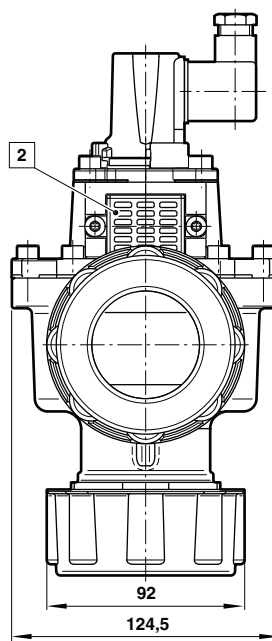
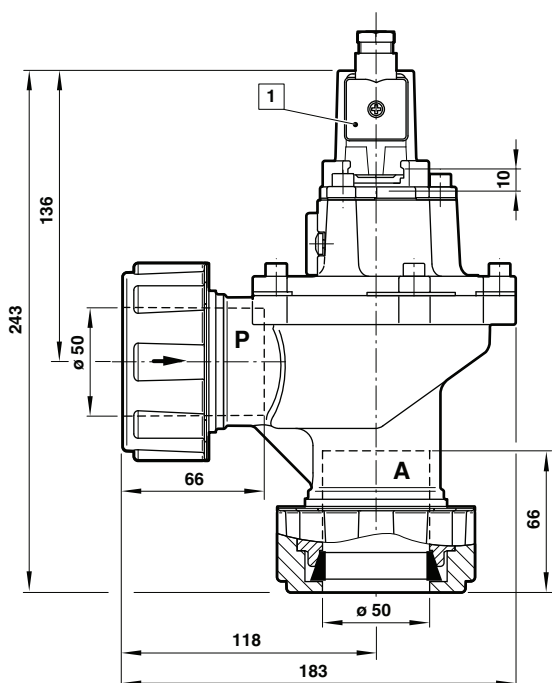
● Dimensions

DN 25



Orifice (mm)	E
25	59
40	83

DN 40



- 1 Solenoid rotatable 3 x 120°
Socket turnable 4 x 90°
(Socket included)
- 2 Silencer

2/2-way valve 8499484.8171.xxxxx

- > Special dust collector valve with flange connection and o-ring seal at the valve inlet
- > Valve outlet designed as a 75-mm hose connection
- > Simple assembly and dismantling of the dust collector valve
- > Optimised flow characteristics

2/2-way valve 8491445.8001.xxxxx

- > Special dust collector valve with flange connection and o-ring seal at the valve inlet
- > Valve outlet designed as plug-in connector for 45.3 mm pipe diameter
- > Simple assembly and dismantling of the dust collector valve
- > Optimised flow characteristics
- > Incl. TPE diaphragm



8499484 series



8491445 series



Engineering
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the world's most demanding
engineering challenges

