

# BUSCHJOST 82400 SERIES

2/2 - way valves DN 8 ... DN 50

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



For neutral gases and liquids  
Indirectly solenoid actuated  
Diaphragm valves  
High flow rate  
Damped operation  
Functional compact design  
Solenoid interchangeable without tools (**Click-on®**)  
Particularly suitable as a water valve according to DIN EN 60730-2-8

## TECHNICAL DATA

Solenoid valve for air, water, oil and other neutral fluids

**Switching function:**  
Normally closed

**Flow direction:**  
Determined

**Internal thread:**  
G1/4 ... G2 or 1/4 NPT ... 2 NPT

**Operating pressure:**  
0,1 ... 16 bar (see technical data)

**Differential pressure:**  
0,1 bar required (0,3 bar for EPDM)

**Temperature:**  
Fluid: -10°C ... max. +90°C  
Ambient: -10°C ... max. +50°C

**Mounting position:**  
As required, preferably with solenoid vertical on top

## MATERIALS

Body: Brass  
Seat seal: NBR  
Internal parts: Stainless steel, PVDF

For contaminated fluids the use of a strainer upstream of the valve is recommended.

Symbol	Port size	DN mm	kv-value m³/h	MODELS*	Operating pressure bar			FPM +110°C 03	EPDM +110°C 14
					NBR 00	Normally open 01	Manual override 02		
	G1/4	8	1,9	82400XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G3/8	10	3,0	82401XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1/2	12	3,8	82402XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G3/4	20	6,0	82403XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1	25	9,5	82404XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1 1/4	32	23,0	82405XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G1 1/4	32	23,0	82405XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1 1/2	40	25,0	82406XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G1 1/2	40	25,0	82406XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G2	50	41,0	82407XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G2	50	41,0	82407XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16

\* For orders please state voltage and frequency, e.g.: 8240200.9101.23050 for 230V 50Hz or 8240200.9101.02400 for 24V DC

For further information



www.norgren.com/info/en3-246

## Solenoid 9101 / 9151 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
-	230V	220V

Design according to DIN VDE 0580  
 Voltage range +/-10%, duty cycle 100%  
 Protection class according to EN 60529: IP65  
 Electrical connection Form A according to DIN EN 175301-803 (included)  
 The solenoids are UL listed and CSA approved

## Mounting bracket

Port size	Part number
G1/4, 3/8, 1/2	1258986
G3/4	1258991
G1	1258996
G1 1/4, 1 1/2	1259005
G2	1259007

## DIMENSIONS

Index	Description
101	Valve body
102	Valve cover
* 103	Diaphragm
104	Allen head screw
* 105	Pressure spring
400	Solenoid
701	Core tube
* 702	O-ring
703	Screw piece
* 704	Pressure spring
* 705	Plunger
706	Spring clip
* 707	O-ring
1400	Electrical connector (enclosed)

\* A service kit consists of these individual parts

## With solenoid 9101

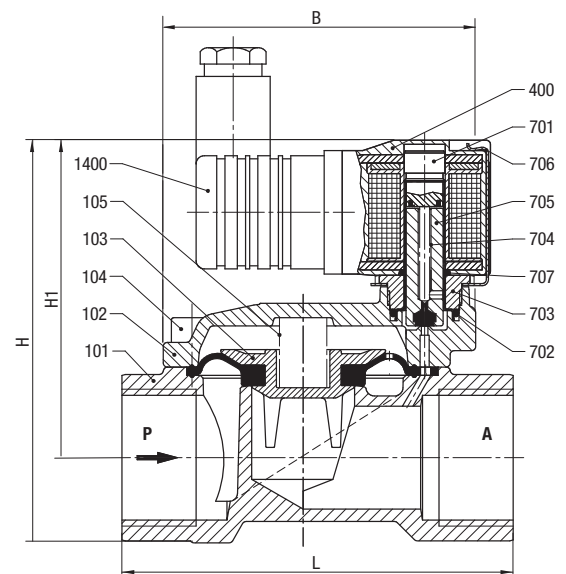
Port size	L mm	B mm	H mm	H1 mm
G1/4	60	44	78,5	67,0
G3/8	60	44	78,5	67,0
G1/2	67	44	81,0	67,0
G3/4	80	50	88,0	71,5
G1	95	62	97,5	77,0
G1 1/4	132	92	124,5	95,5
G1 1/2	132	92	124,5	95,5
G2	160	109	142,5	108,0

## Service kits

For valves with solenoid 9101	Part number
8240000, 8240100, 8240200	1256274
8240300	1256275
8240400	1256276
8240500, 8240600	1259344
8241700	1259367
For valves with solenoid 9151	Part number
8240500, 8240600	1259373
8240700	1259382

## Power consumption

Solenoid	DC	AC	
		Inrush	Holding
9101	8W	15VA	12VA
9151	18W	45VA	35VA



## With solenoid 9151

Port size	L mm	B mm	H mm	H1 mm
G1 1/4	132	92	142	113
G1 1/2	132	92	142	113
G2	160	109	160	125.5

## Further options on request

- Explosion protected version
- Flange connections
- Sealed core tube
- Pulse model in DC only
- Low power consumption 2W (only 24V DC)
- With NPT thread

## Further options (solenoids)

XXXXXX.9136 Solenoid in protection class  
 Ⓜ II 2 GD EEx m II T4 T 130°C,  
 with 3 m connection cable

# BUSCHJOST 85300 SERIES

2/2 - way valves DN 8 ... DN 50

**Click-on®**

Solenoid interchangeable without tools



For contaminated fluids the use of a strainer upstream of the valve is recommended.

- For neutral gases and liquids
- Indirectly solenoid actuated
- Piston valves
- Compact piston valve
- High flow rate
- Damped operation
- Functional compact design
- Solenoid in *Click-on®* design
- Stainless steel piston bushing

- Operating pressure:**  
0,5 ... 40 bar (see technical data)
- Differential pressure:**  
0,5 bar required
- Temperature:**  
Fluid: -20°C ... max. +90°C  
Ambient: -20°C ... max. +50°C
- Mounting position:**  
As required, preferably with solenoid vertical on top

## TECHNICAL DATA

- Solenoid valve for air, water, and other neutral fluids
- Switching function:**  
Normally closed
- Flow direction:**  
Determined
- Internal thread:**  
G1/4 ... G2 or 1/4 NPT ... 2 NPT

## MATERIALS

- Body: Brass
- Seat seal: NBR
- Internal parts: Stainless steel, Brass, PTFE

Symbol	Port size	DN mm	kv-value m³/h	MODELS*	Operating pressure bar					
					NBR 00	Normally open 01	Manual override 02	FPM +110°C 03	EPDM +110°C 14	Sealed core tube 99**
	G1/4	8	2,2	85300XX.9151.00000	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G3/8	10	3,4	85301XX.9151.00000	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G1/2	12	4,4	85302XX.9151.00000	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G3/4	20	7,0	85303XX.9151.00000	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G1	25	10,5	85304XX.9151.00000	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G1 1/4	32	25,0	85305XX.9151.00000	0,5 - 40	0,5 - 30	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G1/2	40	27,0	85306XX.9151.00000	0,5 - 40	0,5 - 30	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8
	G2	50	43,0	85307XX.9151.00000	0,5 - 40	0,5 - 30	0,5 - 40	0,5 - 40	0,5 - 40	0,5 - 8

\* For orders please state voltage and frequency, e.g.: 8530000.9151.23050 for 230V 50Hz or 8530000.9151.02400 for 24V DC  
 \*\* With solenoid DC 9152 / AC 9156

## Solenoid 9151 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
	230V	220V

Design according to DIN VDE 0580  
 Voltage range +/-10%, duty cycle 100%  
 Protection class according to EN 60529: IP65

## Power consumption

Solenoid	DC	AC	
		Inrush	Holding
9151	18W	45VA	35VA

Electrical connection Form A according to DIN EN 175301-803 (included)  
 The solenoids are UL listed and CSA approved  
 AC with rectifier plug only

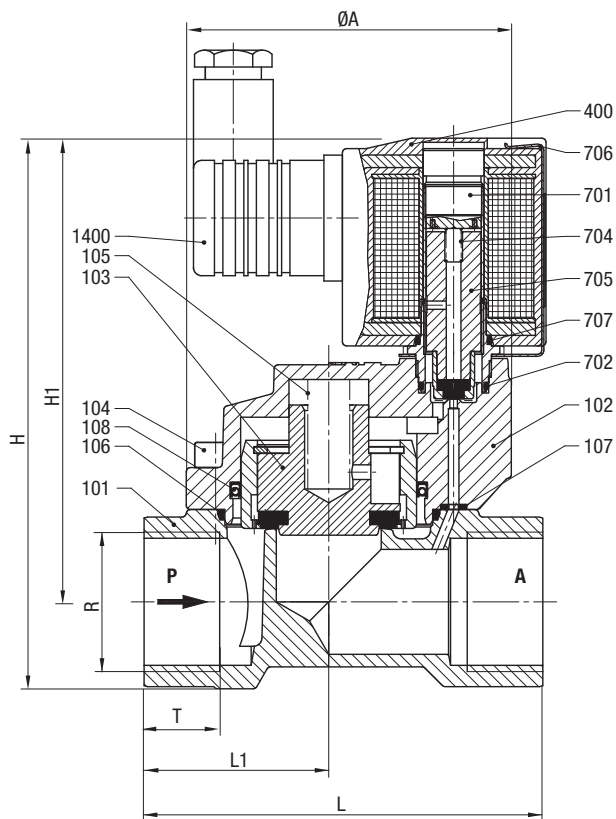
## Mounting bracket\*

Content: 1 stainless steel mounting bracket and 2 screws

Port size	MODELS
G1/4, G3/8, G1/2	1258988
G3/4	1258993
G1	1258998
G1 1/4, G1 1/2	1259006
G2	1259008

\* For image of valve with mounting bracket, see 82400 series

## DIMENSIONS



Index	Description
101	Valve body
102	Valve cover
*103	Valve plate
104	Allen head screw
*105	Pressure spring
*106	Gasket
*107	O-ring
*108	Lip seal
400	Solenoid
701	Core tube
*702	O-ring
*704	Pressure spring
*705	Plunger
706	Spring clip
707	O-ring
1400	Electrical connector

\* A service kit consists of these individual parts

Port size	Ø A mm	H mm	H1 mm	L mm	L1 mm	T mm
G1/4	44	105,0	93,5	60	27,5	12,0
G3/8	44	105,0	93,5	60	27,5	12,0
G1/2	44	107,5	93,5	67	31,0	14,0
G3/4	50	119,0	102,5	80	36,5	16,0
G1	62	131,5	110,5	95	44,0	18,0
G1 1/4	92	166,0	137,0	132	60,0	22,0
G1 1/2	92	166,0	137,0	132	60,0	22,0
G2	109	186,0	151,5	160	74,0	24,0

## Service kits

For valves with solenoid 9151	MODELS
8530000	1257998
8530100	1257998
8530200	1257998
8530300	1258002
8530400	1258006
8530500	1258589
8530600	1258589
8530700	1259152

# BUSCHJOST 82730 SERIES

2/2 - way valves DN 8 ... DN 50

**Click-on®**

Solenoid interchangeable without tools



For contaminated fluids the use of a strainer upstream of the valve is recommended.

For slightly aggressive gases and liquids

Indirectly solenoid actuated

Diaphragm valves

High flow rate

Damped operation

Functional compact design

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

## TECHNICAL DATA

Solenoid valve for slightly aggressive gases and liquids

**Switching function:**

Normally closed

**Flow direction:**

Determined

**Internal thread:**

G1/4 ... G2 or 1/4 NPT ... 2 NPT

**Operating pressure:**

0,1 ... 16 bar (see technical data)

**Differential pressure:**

0,1 bar required (0,3 bar for EPDM)

**Temperature:**

Fluid: -10°C ... max. +90°C

Ambient: -10°C ... max. +50°C

**Mounting position:**

As required, preferably with solenoid vertical on top

## MATERIALS

Body: Stainless steel

Seat seal: NBR

Internal parts: Stainless steel, PVDF

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS*	Operating pressure bar				
					NBR 00	Normally open 01	Manual override 02	FPM +110°C 03	EPDM +110°C 14
	G1/4	8	1,9	82730XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G3/8	10	3,0	82731XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1/2	12	3,8	82732XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G3/4	20	6,0	82733XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1	25	9,5	82734XX.9101.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1 1/4	32	23,0	82735XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G1 1/4	32	23,0	82735XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G1 1/2	40	25,0	82736XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G1 1/2	40	25,0	82736XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16
	G2	50	41,0	82737XX.9101.00000	0,1 - 10	-	0,1 - 10	0,1 - 10	0,3 - 10
	G2	50	41,0	82737XX.9151.00000	0,1 - 16	0,1 - 16	0,1 - 16	0,1 - 16	0,3 - 16

\* For orders please state voltage and frequency, e.g.: 8273200.9101.23050 for 230V 50Hz or 8273200.9101.02400 for 24V DC

## Solenoid 9101 / 9151 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
	230V	220V

Design according to DIN VDE 0580.  
Voltage range +/-10%, duty cycle 100%.  
Protection class according to EN 60529: IP65.  
Electrical connection Form A according to DIN EN 175301-803 (included).  
The solenoids are UL listed and CSA approved.

## Power consumption

Solenoid	DC	AC	
		Inrush	Holding
9101	8W	15VA	12VA
9151	18W	45VA	35VA

For further information



www.norgren.com/info/en3-250

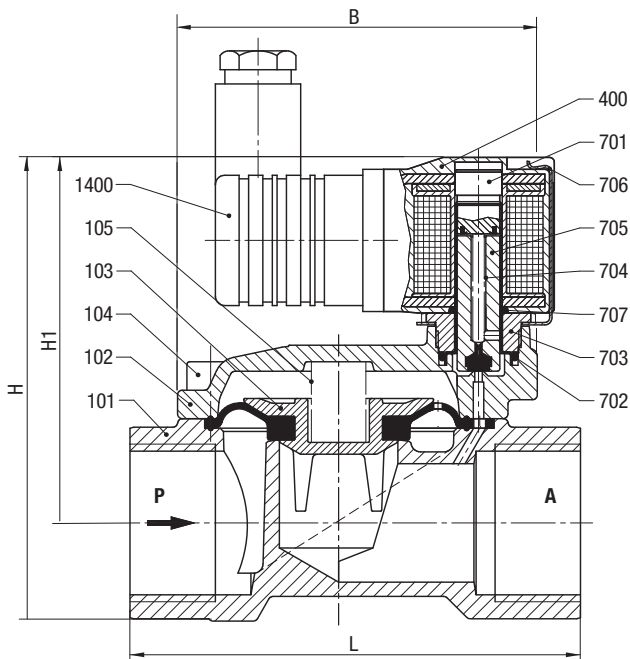
## Mounting bracket\*

Content: 1 stainless steel mounting bracket and 2 screws

Port size	MODELS
G1/4, G3/8, G1/2	1258986
G3/4	1258991
G1	1258996
G1 1/4, G1 1/2	1259005
G2	1259007

\* For image of valve with mounting bracket, see 82400 series

## DIMENSIONS



Index	Description
101	Valve body
102	Valve cover
*103	Diaphragm
104	Allen head screw
*105	Pressure spring
400	Solenoid
701	Core tube
*702	O-ring
703	Screw piece
*704	Pressure spring
*705	Plunger
706	Spring clip
*707	O-ring
1400	Electrical connector (enclosed)

\* A service kit consists of these individual parts

### With solenoid 9101

Port size	L mm	B mm	H mm	H1 mm
G 1/4	60	44	78,5	67,0
G3/8	60	44	78,5	67,0
G1/2	67	44	81,0	67,0
G3/4	80	50	88,0	71,5
G1	95	62	97,5	77,0
G1 1/4	132	92	124,5	95,5
G1 1/2	132	92	124,5	95,5
G2	160	109	142,5	108,0

### With solenoid 9151

Port size	L mm	B mm	H mm	H1 mm
G1 1/4	132	92	142	113
G1 1/2	132	92	142	113
G2	160	109	160	125,5

## Service kits

For valves with solenoid 9101	MODELS
8273000, 8273100, 8273200	1256274
8273300	1256275
8273400	1256276
8273500, 8273600	1259344
8273700	1259367

For valves with solenoid 9151	MODELS
8273500, 8273600	1269065
8273700	1269066

## Further options (valves)

Explosion protected version  
 Flange connections  
 Sealed core tube  
 Latching version in DC only  
 Low power consumption 2W (only 24VDC)  
 With NPT thread

## Further options (solenoids)

XXXXXX.9136 Solenoid in protection class  $\text{Ex II 2 GD EEx m II T4 T 130}^\circ\text{C}$ , with 3 m connection cable

## Further options on request

# BUSCHJOST 82710 SERIES

2/2 - way valves DN 8 ... DN 50



For neutral gases and liquids  
 Pressure actuated by external fluid  
 Diaphragm valves  
 Spindle seal with diaphragm  
 Suitable for contaminated process fluids  
 Optical position indicator is standard

## TECHNICAL DATA

Valve for neutral gases and liquids up to max. 80 mm<sup>2</sup>/s (cSt)  
**Switching function:**  
 Normally closed  
**Flow direction:**  
 As required  
**Internal thread:**  
 G1/4 ... G2  
**Operating pressure:**  
 -0,9 ... 6 bar  
**Mounting position:**  
 As required

## Process fluid characteristics / Valve material

Range of process fluid  
**Temperature:**  
 Fluid: max. +90°C  
 Ambient: max. +50°C

**Material body:**  
 Brass

**Seat seal:**  
 Fabric reinforced NBR diaphragm

## Pilot fluid characteristics / Actuator material


**Pilot fluid:**  
 Air, water, hydraulic oil

**Fluid temperature:**  
 max. +90°C

**Material body:**  
 Brass, PPO (cover)

**Seat seal:**  
 Fabric reinforced NBR diaphragm

**Pilot connection:**  
 G1/8

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar			
					NBR	Normally open	FPM +110°C	EPDM +110°C
	G1/4	8	1,9	82710XX.0000.00000	-0,9 - 6	-0,9 - 6	-0,9 - 6	-0,9 - 6
	G3/8	10	2,4	82711XX.0000.00000	-0,9 - 6	-0,9 - 6	-0,9 - 6	-0,9 - 6
	G1/2	12	2,9	82712XX.0000.00000	-0,9 - 6	-0,9 - 6	-0,9 - 6	-0,9 - 6

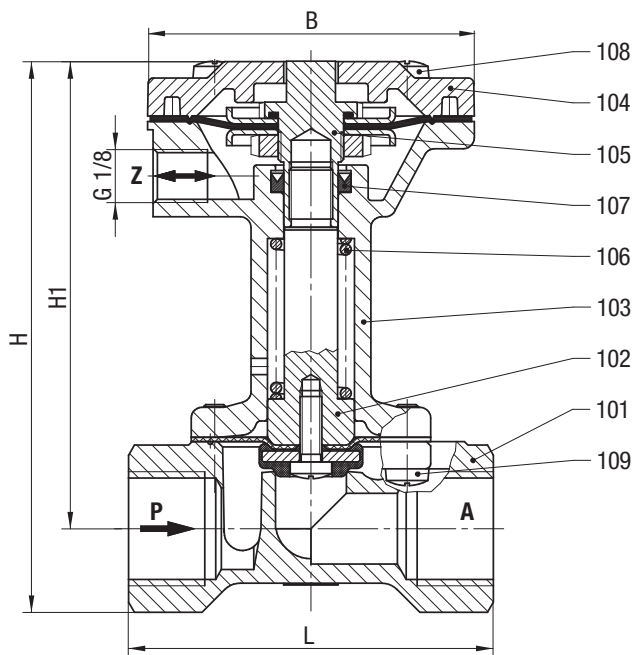
Pilot pressure 3 - 8 bar, minimum 4 bar under vacuum conditions

For further information



[www.norgren.com/info/en3-252](http://www.norgren.com/info/en3-252)

## DIMENSIONS



Index	Description
101	Valve body
102	Valve cover
103	Control head housing
104	Control head housing cover
*105	Diaphragm
*106	Pressure spring
*107	Lip seal
*108	Oval head cap screw

\* A service kit consists of these individual parts

Port size	L mm	B mm	H mm	H1 mm
G1/4	67	60	101	86
G3/8	67	60	101	86
G1/2	67	60	101	86

## Service kits

For valves	MODELS
8271000	1250546
8271100	1250546
8271200	1250546

## Further options (valves)

XXXXX50.XXXX For G3/8 and G1/2 only:  
valve body manufactured from 1.4581 stainless steel, internal parts in contact with fluid from 1.4301 stainless steel, Sandvik 1802 stainless steel

XXXXX51.XXXX Only for G3/8 and G1/2:  
seat seal: FPM,  
FPM-diaphragm (Number 102), body manufactured from 1.4581 stainless steel, internal parts with contact to fluids manufactured from 1.4301 stainless steel, Sandvik 1802 stainless steel, maximum fluid temperature +110°C

XXXXX52.XXXX Seat seal: FFPM, separating diaphragm PTFE-foil with FPM-diaphragm, body manufactured from 1.4581 stainless steel, internal parts with contact to fluids manufactured from 1.4571 stainless steel and A4 stainless steel, maximum fluid temperature +110°C, 0 to 6 bar

## Further options on request

### Accessories

3/2-way pilot valve 8466053.9101 AC / DC\*

\* Specify voltage and frequency when ordering.



# BUSCHJOST 84180 SERIES

2/2 - way valves DN 2 ... DN 10



For neutral gases and liquids up to 600 mm<sup>2</sup>/s  
 Pressure actuated by external fluid  
 Piston seat valves  
 Small, compact 30 mm miniature actuator  
 Actuator can be swiveled 360°  
 Suitable for contaminated process fluids  
 Suitable for vacuum up to max. 90%  
 Reversed flow direction optional  
 High flow rate  
 Valve operates without pressure differential  
 Body with M5 fastening thread as standard

## Process fluid characteristics / Valve material

**Temperature:**  
 Fluid: -10°C ... max. +90°C  
 Ambient: -10°C ... max. +60°C

**Material body:**  
 Brass

**Seat seal:**  
 PTFE

**Internal parts:**  
 Stainless steel / Brass

**Spindle sealing:**  
 PTFE / NBR self-adjusting

## TECHNICAL DATA

**Switching function:**  
 Normally closed

**Flow direction:**  
 Determined

**Internal thread:**  
 G1/8 ... G1/2

**Operating pressure:**  
 max. 25 bar (see technical data)

**Mounting position:**  
 As required

## Pilot fluid characteristics / Actuator material

**Pilot fluid:**  
 Neutral gases

**Fluid temperature:**  
 max. +60°C

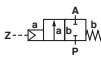
**Material body:**  
 Brass

**Seat seal:**  
 NBR

**Internal parts:**  
 Stainless steel, Brass

**Pilot connection:**  
 M5

**Pilot pressure:**  
 4-10 bar

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar PTFE*
	G1/8	2,0	0,12	8418800.0000.00000	0 - 25
	G1/4	4,0	0,35	8418020.0000.00000	0 - 25
	G3/8	6,0	0,60	8418140.0000.00000	0 - 20
	G1/2	10,0	1,80	8418260.0000.00000	0 - 8

\* Pilot pressure 4 - 10 bar

For further information

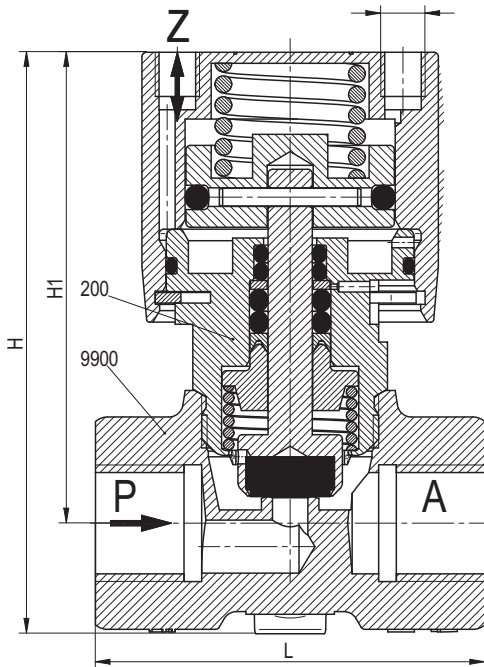


[www.norgren.com/info/en3-254](http://www.norgren.com/info/en3-254)

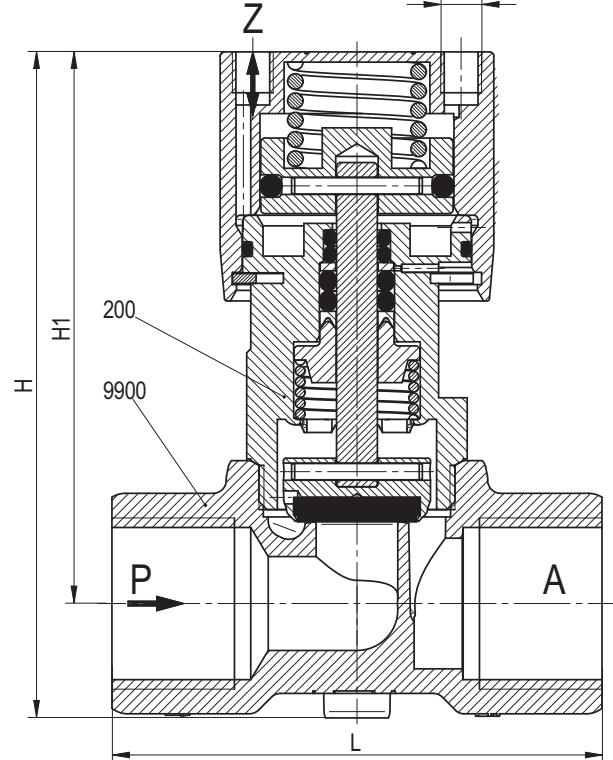
## DIMENSIONS

Index	Description
200	Actuator
9900	Valve body

### G1/8 - G3/8



### G1/2



Port size	L mm	H mm	H1 mm	B* mm
G1/8	44	65	53	33
G1/4	44	65	53	33
G3/8	44	65	53	33
G1/2	60	81	67	33

\* B = maximum width

### Further options on request

- Normally open
- Seat seal: FPM
- Seat seal: EPDM
- Double acting actuation
- Oxygen version
- Higher operating pressure

# BUSCHJOST 84500 SERIES

2/2 - way valves DN 15 ... DN 80



For neutral gases and liquids  
Pressure actuated by external fluid  
Seat valves

Easy conversion into "normally open" or "double-acting" without tools (actuator Ø 70 mm only)

Optical position indicator is standard

Damped closing (valve closes against flow direction)

Suitable for contaminated process fluids

Suitable for vacuum up to max. 90% (actuator Ø 70 mm only)

Reversed flow direction optional  
High flow rate

Optional pressure actuation with liquid pilot fluids

## TECHNICAL DATA

**Switching function:**

Normally closed

**Flow direction:**

Determined

**Internal thread:**

G1/2 ... G3 or 1/2 NPT ... 3 NPT

**Operating pressure:**

See technical data

**Mounting position:**

As required

**Process fluid characteristics / Valve material**

**Temperature:**

Fluid: -10°C ... max. +180°C

Ambient: -10°C ... max. +60°C

**Material body:**

Dezincification resistant brass

**Seat seal:**

PTFE

**Internal parts:**

Stainless steel, Brass

**Spindle sealing:**

PTFE / NBR self-adjusting

**Pilot fluid characteristics / Actuator material**

**Pilot fluid:**

Neutral gases

**Fluid temperature:**

max. +60°C

**Material body:**

Polyamid 66 with 30% fibre glass

**Seat seal:**

NBR

**Internal parts:**

Stainless steel, Brass

**Pilot connection:**

G1/4 or 1/4 NPT, respectively

## Actuator Ø 70 mm

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar**				
					PTFE	Normally open*	Position indicator: on/off with micro switches	NAMUR adapter plate	Position indicator to NAMUR EN 50227
					00	01	23	53	58
	G1/2	15	4,8	84502XX.0000.00000	0 - 16	0 - 16	0 - 16	0 - 16	0 - 16
	G3/4	20	10,0	84503XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10
	G1	25	14,0	84504XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10
	G1 1/4	32	23,0	84505XX.0000.00000	0 - 7	0 - 7	0 - 7	0 - 7	0 - 7
	G1 1/2	40	30,0	84506XX.0000.00000	0 - 4,5	0 - 4,5	0 - 4,5	0 - 4,5	0 - 4,5
	G2	50	37,0	84507XX.0000.00000	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3

\* Pilot pressure 1 - 10 bar, pilot connection Z1

\*\* Pilot pressure 3,5 - 10 bar, pilot connection Z2

For further information



www.norgren.com/info/en3-256

## Actuator Ø 120 mm

Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	PTFE	Normally open*	Operating pressure bar	
						Position indicator: 2 switches, IP 65	Position indicator to NAMUR EN 50227
				<b>80</b>	<b>81</b>	<b>83</b>	<b>88</b>
G1 1/4	32	23,0	84505XX.0000.00000	0 - 16	0 - 16	0 - 16	0 - 16
G1 1/2	40	41,0	84506XX.0000.00000	0 - 12	0 - 12	0 - 12	0 - 12
G2	50	70,0	84507XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10
G2 1/2	65	107,0	84508XX.0000.00000	0 - 7	0 - 7	0 - 7	0 - 7
G3	80	157,0	84509XX.0000.00000	0 - 5	0 - 5	0 - 5	0 - 5

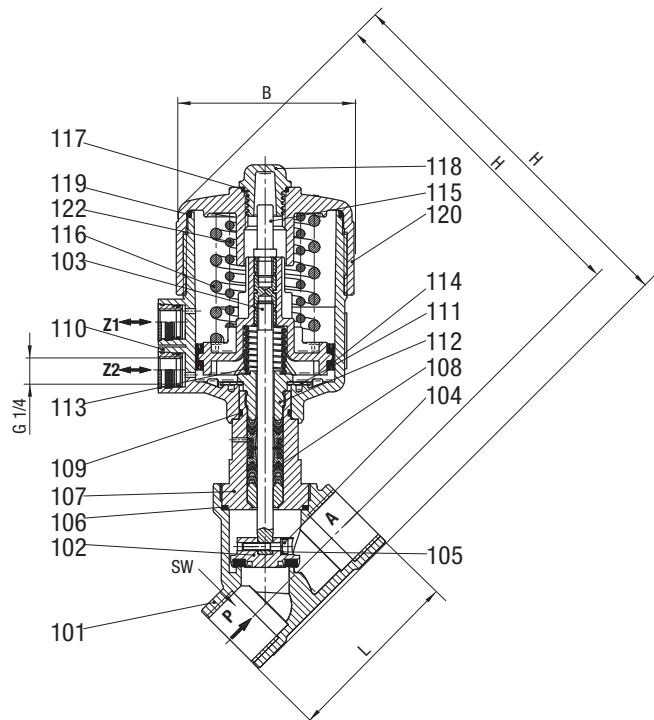
\* 8X = Pilot pressure 5,0 - 7 bar  
81 = Pilot pressure 1,0 - 7 bar

## DIMENSIONS

Index	Description
101	Valve body
*102	Valve plate
103	Valve spindle assembly
104	Allen head screw
105	Spring washer
*106	Gasket
107	Screw piece
*108	Spindle sealing
*109	O-ring
110	Bottom of control head housing
*111	Cup spring
112	Screw piece
*113	Pressure spring
*114	Piston seal
115	Signal pin
*116	Pressure spring
*117	O-ring
118	End cap
*119	O-ring
120	Control head housing cover
*122	Pressure spring

\* A service kit consists of these individual parts

## Actuator Ø 70 mm



Port size	L mm	B* mm	H mm	H1 mm	SW mm
G1/2	65	89,5	177,5	164,0	27
G3/4	75	89,5	184,0	168,0	32
G1	90	89,5	194,5	174,0	41
G1 1/4	110	89,5	209,5	184,5	50
G1 1/2	120	89,5	208,5	186,0	55
G2	150	89,5	229,5	194,5	70

\* B = maximum width

# BUSCHJOST 84500 SERIES

2/2 - way valves DN 15 ... DN 80

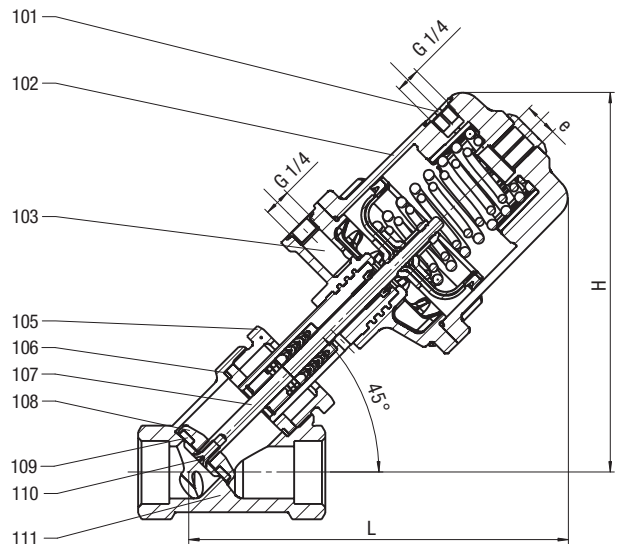
Index	Description
101	Connection 4 / Exhaust port (NC)
102	Actuator
103	Connection 2/ pilot pressure port (NC)
105	Nut
106	Gasket
107	Spindle
108	Valve plate
109	Seat seal
110	Nut
111	Valve body

Port size	L mm	H mm
G1 1/4	287	287
G1 1/2	293	293
G2	9301	301
G2 1/2	313	313
G3	330	330

## Service kits for actuator Ø 70 mm

For valves	MODELS
8450200	1256694
8450300	1256695
8450400	1256696
8450500	1256697
8450600	1256698
8450700	1256699

## Actuator Ø 120 mm



## Further options (valves)

XXXXX08.XXXX Double acting; 4/2 or 5/2-way pilot valve required  
 XXXXX22.XXXX Higher operating pressure (actuator Ø 70 mm only)

## Further options on request

Seal materials: NBR, FPM, EPDM  
 Stroke limiter  
 Silencer  
 Electrical position indicator with electromagnetic induction sensors

## Accessories

3/2-way pilot valve 84660 / 84680 (page 3-270)

## Note:

Order service kit 1264287 if these valves are to be used in Zone 1/2 or 21/22 hazardous areas. This kit includes an additional instruction plate, a declaration of conformity and a silencer. The maximum permissible fluid temperature is reduced to +85°C (for actuator Ø 70 mm only).

# “Norgren is at the forefront of helping medical device manufacturers”

Unrivalled products, resources and expertise

Medical device manufacturers use Norgren miniature valves, pressure regulators, media isolation valves and proportional technology to enhance their products.

In addition to products, manufacturers also use Norgren’s knowledge and experience of the industry together with engineering skills to achieve competitive edge by:

- » Reducing the size of instruments
- » Enhancing fluid control performance
- » Reducing the overall cost of ownership



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ANTI BACK SIPHONING DEVICE

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FAS, KIP, Buschjost, Kloehn

Complete solutions are supplied fully tested to help OEM’s become more successful through reducing the number of components in a system, reducing internal volume, minimising the footprint and simplifying final customer assembly.

**Norgren’s diverse pneumatic & fluidic solutions are highly regarded by leading medical device manufacturers worldwide.**

# BUSCHJOST 84720 SERIES

2/2 - way valves DN 15 ... DN 25



For neutral gases and liquids  
 Pressure actuated by external fluid  
 Seat valves  
 Optical position indicator is standard  
 Damped closing (valve closes against flow direction)  
 Suitable for contaminated process fluids  
 Suitable for vacuum up to max. 90%  
 Reversed flow direction optional  
 High flow rate  
 Optional pressure actuation by liquid pilot fluids

## TECHNICAL DATA

**Switching function:**  
Normally closed

**Flow direction:**  
Determined

**Internal thread:**  
G1/2 ... G1 or 1/2 NPT ... 1 NPT

**Operating pressure:**  
See technical data

**Mounting position:**  
As required

## Process fluid characteristics / Valve material

**Temperature:**  
 Fluid: -10°C ... max. +180°C  
 Ambient: -10°C ... max. +60°C

**Material body:**  
Dezincification resistant brass

**Seat seal:**  
PTFE

**Internal parts:**  
Stainless steel, Brass

**Spindle sealing:**  
PTFE / FPM self-adjusting

## Pilot fluid characteristics / Actuator material

**Pilot fluid:**  
Neutral gases

**Fluid temperature:**  
max. +60°C

**Material body:**  
Polyamid 66 with 30% fibre glass

**Seat seal:**  
NBR

**Internal parts:**  
Stainless steel, Brass

**Pilot connection:**  
G1/4 or 1/4 NPT, respectively

### Actuator Ø 50 mm

Symbol	Port size	DN mm	kv-value m³/h	MODELS	Operating pressure bar**		Position indicator: on/off with micro switches	NAMUR adapter plate	Position indicator to NAMUR EN 50227
					PTFE	Normally open*			
					00		23	50	58
	G1/2	15	4,8	84722XX.0000.00000	0 - 16	0 - 16	0 - 16	0 - 16	0 - 16
	G3/4	20	10,0	84723XX.0000.00000	0 - 8	0 - 8	0 - 8	0 - 8	0 - 8
	G1	25	14,0	84724XX.0000.00000	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5

\* Pilot pressure 3,5 - 10 bar, pilot connection Z2  
 \*\* Pilot pressure 1 - 10 bar, pilot connection Z1

For further information



[www.norgren.com/info/en3-260](http://www.norgren.com/info/en3-260)

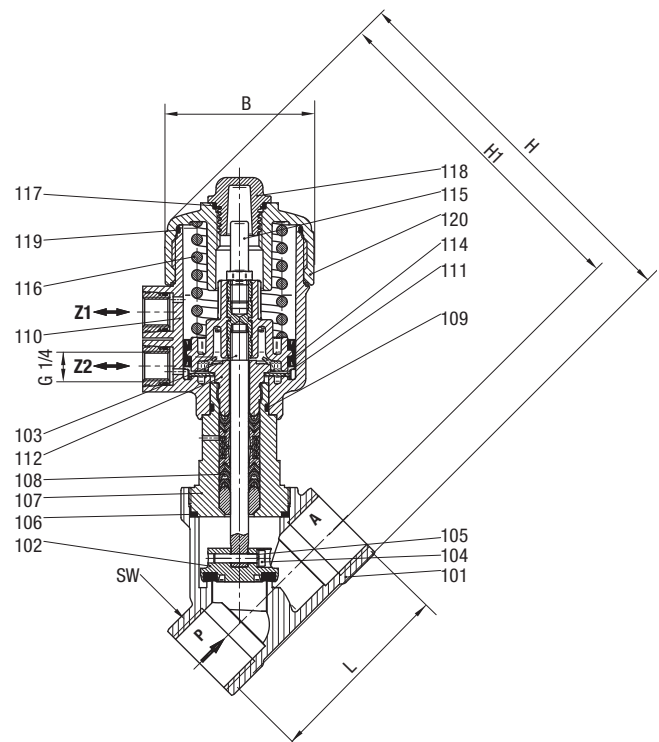
## DIMENSIONS

Index	Description
101	Valve body
*102	Valve plate
103	Valve spindle assembly
104	Allen head screw
105	Spring washer
*106	Gasket
107	Screw piece
*108	Spindle sealing
*109	O-ring
110	Bottom of control head housing
*111	Cup spring
112	Screw piece
*114	Piston seal
115	Signal pin
*116	Pressure spring
*117	O-ring
118	End cap
*119	O-ring
120	Control head housing cover

\* A service kit consists of these individual parts

Port size	L mm	B mm	H mm	H1 mm	SW mm
G1/2	65	66	154	140,5	27
G3/4	75	66	160	144,5	32
G1	90	66	171	150,5	41

## Actuator Ø 50 mm



## Service kits

For valves with solenoid 9151	MODELS
8472200	1260318
8272300	1260566
8272400	1260568

## Further options (valves)

XXXX08.XXXX Double acting; 4/2 or 5/2-way pilot valve required

## Further options on request

Seal materials: NBR, FPM, EPDM

Stroke limiter

Silencer

Electrical position indicator with electromagnetic induction sensors

## Accessories

3/2-way pilot valve 84660 / 84680 (page 3-270)

## Note:

Order service kit 1264287 if these valves are to be used in Zone 1/2 or 21/22 hazardous areas. This kit includes an additional instruction plate, a declaration of conformity and a dust filter. The maximum permissible fluid temperature is reduced to +85°C.



# BUSCHJOST 84190 SERIES

2/2 - way valves DN 2 ... DN 10



For aggressive gases and liquids to 600 mm<sup>2</sup>/s (cSt)  
 Pressure actuated by external fluid  
 Seat valves  
 Small, compact 30 mm miniature actuator  
 Actuator can be swiveled 360°  
 Suitable for contaminated process fluids  
 Suitable for vacuum up to max. 90%  
 Reversed flow direction optional  
 High flow rate  
 Valve operates without pressure differential  
 M5 mounting thread as standard

## Process fluid characteristics / Valve material

**Temperature:**  
 Fluid: -10°C ... max. +90°C  
 Ambient: -10°C ... max. +60°C

**Material body:**  
 Stainless steel (1.4408)

**Seat seal:**  
 PTFE

**Internal parts:**  
 Stainless steel

**Spindle sealing:**  
 PTFE / NBR, self-adjusting

## TECHNICAL DATA

**Switching function:**  
 Normally closed

**Flow direction:**  
 Determined

**Internal thread:**  
 G1/8 ... G1/2

**Operating pressure:**  
 Maximum 25 bar (see technical data)

**Mounting position:**  
 As required

## Pilot fluid characteristics / Actuator material

**Pilot fluid:**  
 Neutral gases

**Fluid temperature:**  
 max. +60°C

**Material body:**  
 Stainless steel

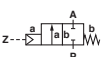
**Seat seal:**  
 NBR

**Internal parts:**  
 Stainless steel, Brass

**Pilot connection:**  
 M5

**Pilot pressure:**  
 4-10 bar

### Actuator Ø 70 mm

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar PTFE*
	G1/8	2,0	0,12	8419800.0000.00000	0 - 25
	G1/4	4,0	0,35	8419020.0000.00000	0 - 25
	G3/8	6,0	0,60	8419140.0000.00000	0 - 20
	G1/2	10,0	1,80	8419260.0000.00000	0 - 8

\* Pilot pressure 4 - 10 bar

For further information

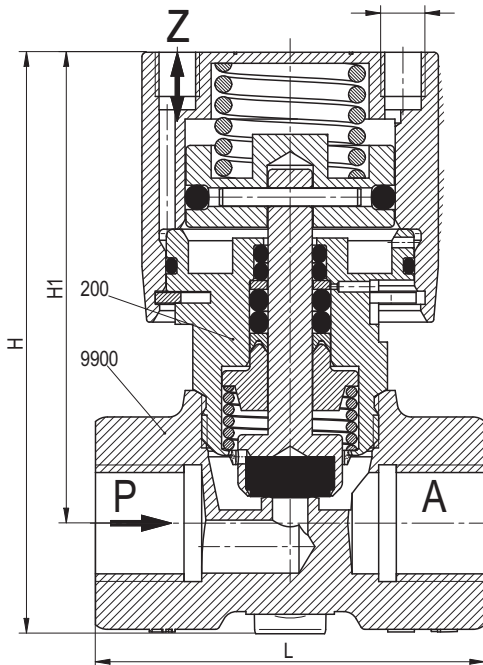


[www.norgren.com/info/en3-262](http://www.norgren.com/info/en3-262)

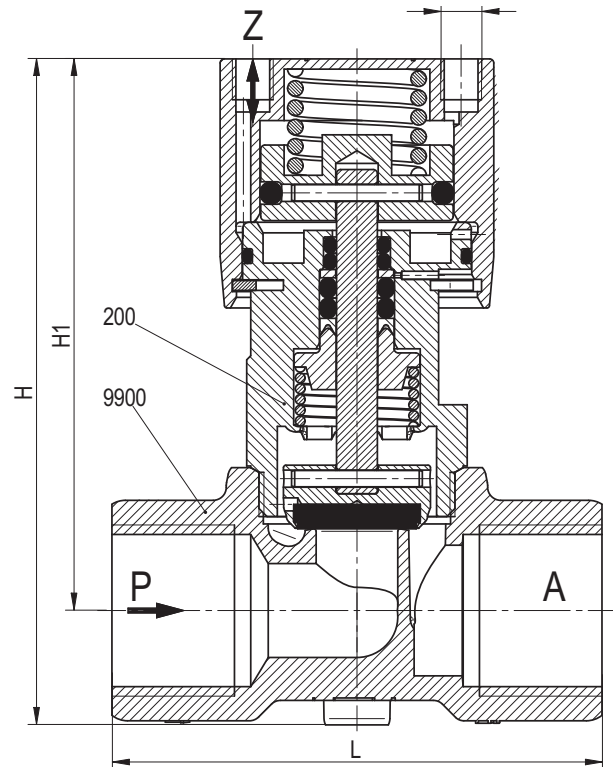
## DIMENSIONS

Index	Description
200	Actuator
9900	Valve body

### G1/8 - G3/8



### G1/2



Port size	L mm	H mm	H1 mm	B* mm
G1/8	44	65	53	33
G1/4	44	65	53	33
G3/8	44	65	53	33
G1/2	60	81	67	33

### Further options on request

- Normally open
- Seat seal: FPM
- Seat seal: EPDM
- Double acting actuation
- Oxygen version
- Higher operating pressure

# BUSCHJOST 84520 SERIES

2/2 - way valves DN 15 ... DN 80



For aggressive gases and liquids  
Pressure actuated by external fluid  
Seat valves

Easy conversion into "normally open" or "double-acting" without tool (actuator Ø 70 mm only)

Optical position indicator is standard

Damped closing (valve closes against flow direction)

Suitable for contaminated process fluids

Suitable for vacuum up to max. 90% (actuator Ø 70 mm only)

Reversed flow direction optional  
High flow rate

Optional pressure actuation by liquid pilot fluids

## TECHNICAL DATA

**Switching function:**

Normally closed

**Flow direction:**

Determined

**Internal thread:**

G1/2 ... G3 or 1/2 NPT ... 3 NPT

**Operating pressure:**

0 - 20 bar (see technical data)

**Mounting position:**

As required

## Process fluid characteristics / Valve material

**Temperature:**

Fluid: -10°C ... max. +180°C

Ambient: -10°C ... max. +60°C

**Material body:**

Stainless steel

**Seat seal:**

PTFE

**Internal parts:**

Stainless steel

**Spindle sealing:**

PTFE / FPM, self-adjusting

## Pilot fluid characteristics / Actuator material

**Pilot fluid:**

Neutral gases

**Fluid temperature:**

max. +60°C

**Material body:**

Polyamid 66 with 30% fibre glass

**Seat seal:**

NBR

**Internal parts:**

Stainless steel, Brass

## Actuator Ø 70 mm

Symbol	Port size	DN mm	kv-value m³/h	MODELS	Operating pressure bar**			NAMUR adapter plate	Position indicator to NAMUR EN 50227
					PTFE	Normally open*	Position indicator: on/off with micro switches		
					00	01	23	50	58
	G1/2	15	4,8	84522XX.0000.00000	0 - 16	0 - 16	0 - 16	0 - 16	0 - 16
	G3/4	20	10,0	84523XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10
	G1	25	14,0	84524XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10
	G1 1/4	32	23,0	84525XX.0000.00000	0 - 7	0 - 7	0 - 7	0 - 7	0 - 7
	G1 1/2	40	30,0	84526XX.0000.00000	0 - 4,5	0 - 4,5	0 - 4,5	0 - 4,5	0 - 4,5
	G2	50	37,0	84527XX.0000.00000	0 - 3	0 - 3	0 - 3	0 - 3	0 - 3

\* Pilot pressure 1 - 10 bar, pilot connection Z1

\*\* Pilot pressure 3,5 - 10 bar, pilot connection Z2

For further information



[www.norgren.com/info/en3-264](http://www.norgren.com/info/en3-264)

## Actuator Ø 120 mm

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	PTFE	Normally open*	Operating pressure bar			
							Position indicator: 2 switches, IP 65	Position indicator to NAMUR EN 50227		
							80	81	83	88
	G1 1/4	32	23,0	84525XX.0000.00000	0 - 20	0 - 20	0 - 20	0 - 20	0 - 20	0 - 20
	G1 1/2	40	41,0	84526XX.0000.00000	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	G2	50	70,0	84527XX.0000.00000	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10	0 - 10
	G2 1/2	65	107,0	84528XX.0000.00000	0 - 7	0 - 7	0 - 7	0 - 7	0 - 7	0 - 7
	G3	80	157,0	84529XX.0000.00000	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5	0 - 5

\* 8X = Pilot pressure 5,0 - 7 bar  
81 = Pilot pressure 1,0 - 7 bar

## DIMENSIONS

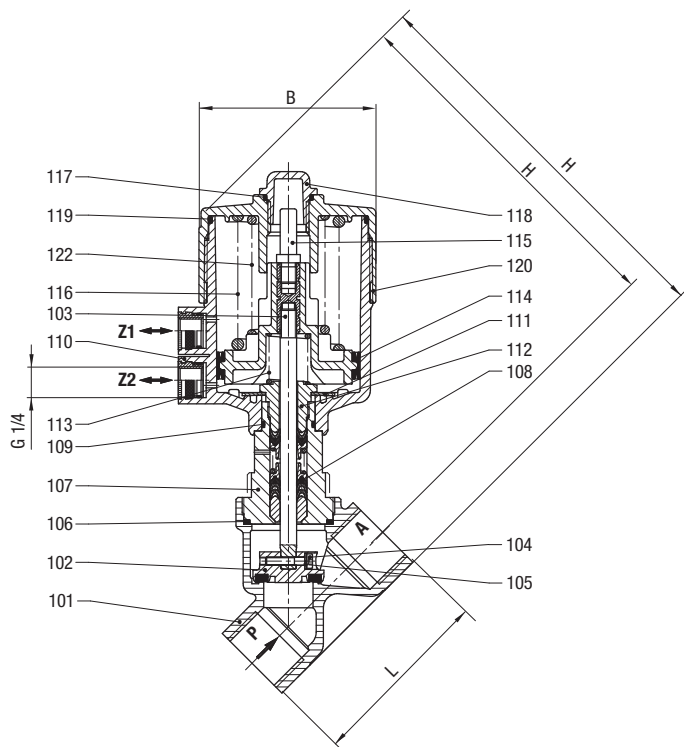
Index	Description
101	Valve body
*102	Valve plate
103	Valve spindle assembly
104	Allen head screw
105	Spring washer
*106	Gasket
107	Screw piece
*108	Spindle sealing
*109	O-ring
110	Bottom of control head housing
*111	Cup spring
112	Screw piece
*113	Pressure spring
*114	Piston seal
115	Signal pin
*116	Pressure spring
*117	O-ring
118	End cap
*119	O-ring
120	Control head housing cover
*122	Pressure spring

\* A service kit consists of these individual parts

Port size	L mm	B* mm	H mm	H1 mm
G1/2	65	89,5	177,5	164,0
G3/4	75	89,5	184,0	168,0
G1	90	89,5	194,5	174,0
G1 1/4	110	89,5	209,5	184,5
G1 1/2	120	89,5	208,5	186,0
G2	150	89,5	229,5	194,5

\* B = maximum width

## Actuator Ø 70 mm



# BUSCHJOST 84520 SERIES

2/2 - way valves DN 15 ... DN 80

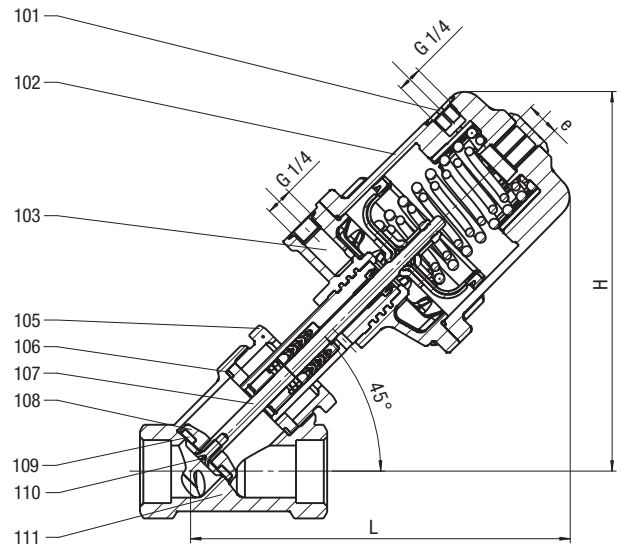
Index	Description
101	Valve body
102	Actuator
103	Valve spindle assembly
105	Nut
106	Gasket
108	Valve plate
109	Seat seal
110	Nut
111	Valve body

Port size	L mm	H mm
G1 1/4	287	287
G1 1/2	293	293
G2	9301	301
G2 1/2	313	313
G3	330	330

## Service kits for actuator Ø 70 mm

For valves	MODELS
8452200	1256700
8452300	1256701
8452400	1256702
8452500	1256703
8452600	1256704
8452700	1256705

## Actuator Ø 120 mm



## Further options (valves)

XXXX08.XXXX Double acting; 4/2 or 5/2-way pilot valve required  
 XXXX22.XXXX Higher operating pressure (actuator Ø 70 mm only)

## Further options on request

Seal materials: NBR, FPM, EPDM  
 Stroke limiter  
 Silencer  
 Electrical position indicator with proximity switch  
 DIN or ISO welded ends

## Accessories

3/2-way pilot valve 84660 / 84680 (page 3-270)

## Note:

Order service kit 1264287 if these valves are to be used in Zone 1/2 or 21/22 hazardous areas. This kit includes an additional instruction plate, a declaration of conformity and a dust filter. The maximum permissible fluid temperature is reduced to +85°C.

# “Creating Engineering Advantage for the Global Commercial Vehicle Industry”

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- » Braking System Controls compliant with DOT regulations with a lower leakage, higher flow and faster response time

**Norgren exploits the potential of on-board pneumatic, hydraulic and electronic technologies for commercial vehicles. For more information visit [norgren.com/gvt](http://norgren.com/gvt)**

# BUSCHJOST 84740 SERIES

2/2 - way valves DN 15 ... DN 25



For aggressive gases and liquids  
 Pressure actuated by external fluid  
 Seat valves  
 Optical position indicator is standard  
 Damped closing (valve closes against flow direction)  
 Suitable for contaminated process fluids  
 Suitable for vacuum up to max. 90%  
 Reversed flow direction optional  
 High flow rate  
 Optional pressure actuation by liquid pilot fluids

## TECHNICAL DATA

**Switching function:**  
Normally closed

**Flow direction:**  
Determined

**Internal thread:**  
G1/2 ... G1 or 1/2 NPT ... 1 NPT

**Operating pressure:**  
0 - 16 bar [see technical data]

**Mounting position:**  
As required

## Process fluid characteristics / Valve material

**Temperature:**  
 Fluid: -10°C ... max. +180°C  
 Ambient: -10°C ... max. +60°C

**Material body:**  
Stainless steel

**Seat seal:**  
PTFE

**Internal parts:**  
Stainless steel

**Spindle sealing:**  
PTFE / FPM, self-adjusting

## Pilot fluid characteristics / Actuator material

**Pilot fluid:**  
Neutral gases


**Fluid temperature:**  
max. +60°C

**Material body:**  
Polyamid 66 with 30% fibre glass

**Seat seal:**  
NBR

**Internal parts:**  
Stainless steel, Brass

## Actuator Ø 50 mm

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar**		Position indicator: on/off with micro switches	NAMUR adapter plate	Position indicator to NAMUR EN 50227
					PTFE	Normally open*			
	G1/2	15	4,8	84742XX.0000.00000	00	01	23	50	58
	G3/4	20	10,0	84743XX.0000.00000	0 - 16	0 - 16	0 - 16	0 - 16	0 - 16
	G1	25	14,0	84744XX.0000.00000	0 - 8	0 - 8	0 - 8	0 - 8	0 - 8
					0 - 5	0 - 5	0 - 5	0 - 5	0 - 5

\* Pilot pressure 1 - 10 bar, pilot connection Z1

\*\* Pilot pressure 3,5 - 10 bar, pilot connection Z2

For further information



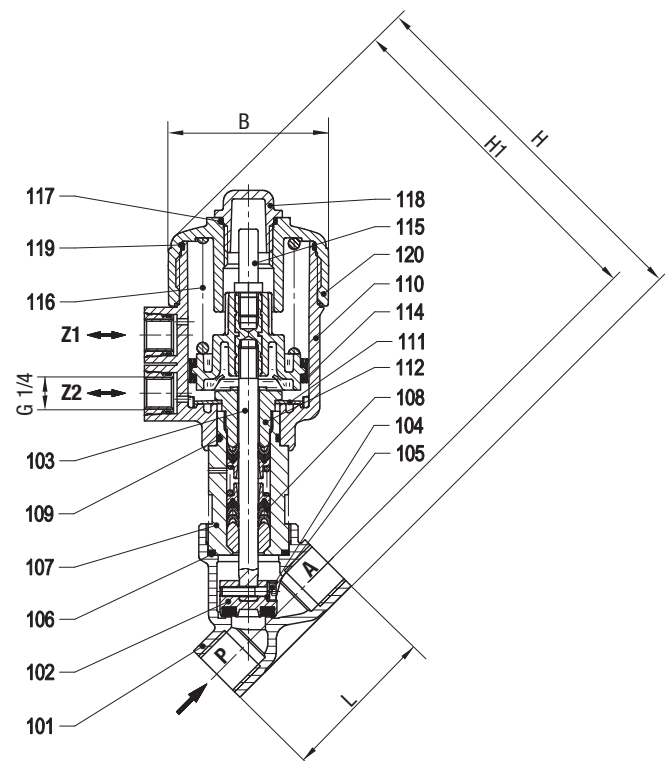
[www.norgren.com/info/en3-268](http://www.norgren.com/info/en3-268)

## DIMENSIONS

Index	Description
101	Valve body
*102	Valve plate
103	Valve spindle assembly
104	Allen head screw
105	Spring washer
*106	Gasket
107	Screw piece
*108	Spindle sealing
*109	O-ring
110	Bottom of control head housing
*111	Cup spring
112	Screw piece
*113	Pressure spring
*114	Piston seal
115	Signal pin
*116	Pressure spring
*117	O-ring
118	End cap
*119	O-ring
120	Control head housing cover

\* A service kit consists of these individual parts

Port size	L mm	B* mm	H mm	H1 mm
G1/2	65	66	154	140,5
G3/4	75	66	160	144,5
G1	90	66	171	150,5



## Service kits

For valves	MODELS
8474200	1260581
8274300	1260583
8274400	1260585

## Further options (valves)

XXXXX08.XXXX Double acting; 4/2 or 5/2-way pilot valve required

## Further options on request

Seal materials: NBR, FPM, EPDM

Stroke limiter

Silencer

## Accessories

3/2-way pilot valve 84660 / 84680 (page 3-270)

## Note:

Order service kit 1264287 if these valves are to be used in Zone 1/2 or 21/22 hazardous areas. This kit includes an additional instruction plate, a declaration of conformity and a dust filter. The maximum permissible fluid temperature is reduced to +85°C.



# BUSCHJOST 84660 SERIES

3/2 - way valves DN 1,6 & DN 3,0

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



- Pilot valve for pressure actuated valves
- Indirectly solenoid actuated
- Seat valve
- Compact design
- Complete with connector and gasket
- Interchangeable solenoid system
- Silenced exhaust
- Low power consumption

## TECHNICAL DATA

Solenoid valve for filtered, lubricated or non-lubricated compressed air or neutral liquids

### Switching function:

Normally closed

### Flow direction:

Determined

### Connection P female thread:

G1/4; connection A male thread G1/4

### Operating pressure:

1 ... 10 bar

### Temperature:

Fluid: -10°C ... max. +60°C

Ambient: -10°C ... max. +60°C

### Mounting position:

As required, preferably with solenoid vertical on top

## MATERIALS

Body: Brass

Seat seal: TPU

Internal parts: Stainless steel, PPS

Symbol	Port size*	DN mm	Flow l/min	Switching time** ms		MODELS***	Operating pressure bar		
				On	Off		TPU	Normally open	Manual override
	G1/4	1,6	1,2	8,5	30,4	84660XX.9101.00000	1 - 10	-	1 - 10

\* P = G1/4 internal

A = G1/4 external

R = Silenced exhaust to atmosphere

\*\* For 6 bar according to DIN VDI 3290 with solenoid for DC

\*\*\* For orders please state voltage and frequency, e.g.: 8466000.9101.23050 for 230V 50Hz or 8466000.9101.02400 for 24V DC

For further information



[www.norgren.com/info/en3-270](http://www.norgren.com/info/en3-270)

### Solenoid 9101 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
	230V	220V

Design according to DIN VDE 0580  
 Voltage range +/-10%, duty cycle 100%  
 Protection class according to EN 60529: IP65  
 Electrical connection Form A according to DIN EN 175301-803 (included)  
 The solenoids are UL listed and CSA approved

### Power consumption

Solenoid	DC	AC	
		Inrush	Holding
9101	8W	15VA	12VA

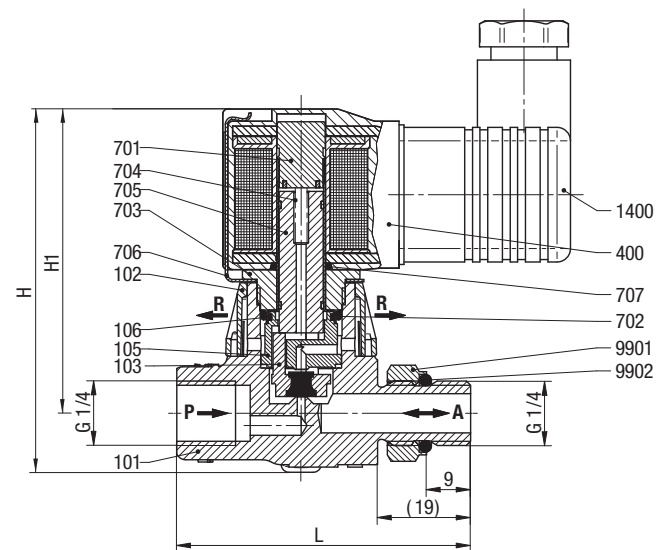
### DIMENSIONS

Index	Description
101	Valve body
102	Protective cap
*103	Valve plate
105	O-ring
*106	O-ring
400	Solenoid
701	Core tube
702	O-ring
703	Screw piece
*704	Pressure spring
*705	Plunger
706	Spring clip
707	O-ring
1400	Electrical connector
9901	Hexagon nut
9902	Gasket

\* A service kit consists of these individual parts

Port size	L mm	H mm	H1 mm
G1/4	60	73,6	61,5

### With solenoid 9101



### Service kits

For valves	MODELS
8466000	1260613
8468000	1260615

### Further options (valves)

XXXX53.XXXX Connection P female thread G1/8,  
 connection A male thread G1/8

### Further options (solenoids)

XXXXXX.9136 Solenoid in protection class  $\text{Ex}$  II 2 GD EEx m  
 II T4 T 130°C,  
 with 3 m connection cable

### Further options on request

# BUSCHJOST 84680 SERIES

3/2 - way valves DN 1,6 & DN 3,0

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



- Pilot valve for pressure actuated valves
- Indirectly solenoid actuated
- Seat valve
- Compact design
- Complete with connector and gasket
- Interchangeable solenoid system
- Silenced exhaust
- Low power consumption

## TECHNICAL DATA

Solenoid valve for filtered, lubricated or non-lubricated compressed air or neutral liquids

### Switching function:

Normally closed

### Flow direction:

Determined

### Connection P female thread:

G1/4; connection A male thread G1/4

### Operating pressure:

1 ... 10 bar

### Temperature:

Fluid: -10°C ... max. +60°C

Ambient: -10°C ... max. +60°C

### Mounting position:

As required, preferably with solenoid vertical on top

## MATERIALS

Body: Brass

Seat seal: TPU

Internal parts: Stainless steel, PPS

Symbol	Port size*	DN mm	Flow l/min	Switching time** ms		MODELS***	Operating pressure bar		
				On	Off		TPU	Normally open	Manual override
	G1/4	3,0	3,3	15,0	81,9	84680XX.9151.00000	1 - 10	1 - 10	1 - 10

\* P = G1/4 internal

A = G1/4 external

R = Silenced exhaust to atmosphere

\*\* For 6 bar according to DIN VDI 3290 with solenoid for DC

\*\*\* For orders please state voltage and frequency, e.g.: 8466000.9101.23050 for 230V 50Hz or 8466000.9101.02400 for 24V DC

For further information



[www.norgren.com/info/en3-272](http://www.norgren.com/info/en3-272)

### Solenoid 9151 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
	230V	220V

### Power consumption

Solenoid	DC	AC	
		Inrush	Holding
9151	18W	45VA	35VA

Design according to DIN VDE 0580  
 Voltage range +/-10%, duty cycle 100%  
 Protection class according to EN 60529: IP65  
 Electrical connection Form A according to DIN EN 175301-803 (included)  
 The solenoids are UL listed and CSA approved

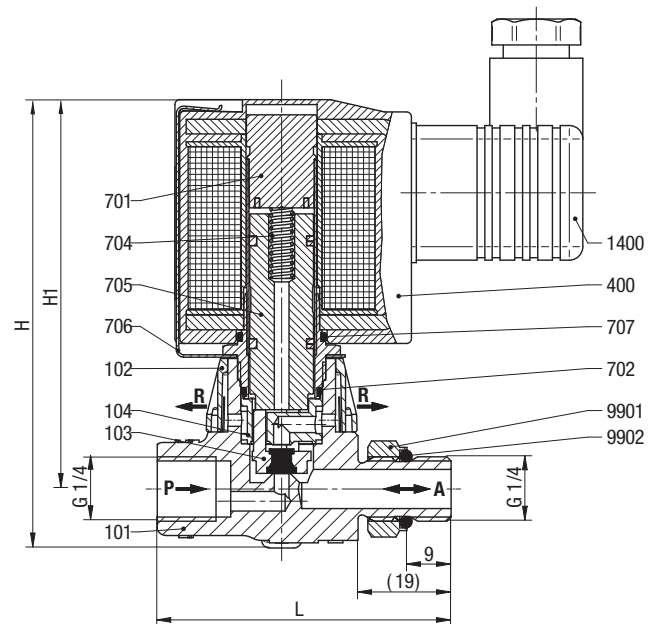
### DIMENSIONS

Index	Description
101	Valve body
102	Protective cap
*103	Valve plate
104	Valve seat
400	Solenoid
701	Core tube
702	O-ring
*704	Pressure spring
706	Spring clip
707	O-ring
1400	Electrical connector
9901	Hexagon nut
9902	Gasket

\* A service kit consists of these individual parts

Port size	L mm	H mm	H1 mm
G1/4	60	91,0	79,0

### With solenoid 9151



### Service kits

For valves	MODELS
8466000	1260613
8468000	1260615

### Further options (valves)

XXXXX53.XXXX Connection P female thread G1/8,  
 connection A male thread G1/8

### Further options (solenoids)

XXXXXX.9191 Solenoid in protection class II 2 GD EEx m  
 II T4 T 140°C

### Further options on request

# BUSCHJOST 82900 SERIES

2/2 - way valves DN 20 ... DN 65



For air  
Pneumatically actuated  
Diaphragm valves  
High flow rate  
Functional compact design  
One-piece diaphragm for longer life

## TECHNICAL DATA

Control via separate pilot valve or control unit

Switching function:  
Normally closed

Flow direction:  
Determined

Internal thread:  
G 3/4 ... G2 1/2 or 3/4 NPT ... 2 1/2 NPT

Operating pressure:  
0,4 ... 8 bar

Temperature:  
Fluid: -40°C ... max. +85°C  
Ambient: -20°C ... max. +85°C

Mounting position:  
As required

Pilot connection:  
G1/8 or 1/8 NPT, respectively

## MATERIALS

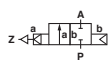
Body: Aluminium  
Seat seal: TPE

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS	Operating pressure bar	
					TPE	ECO/FPM *
				→	00	60
	G3/4	20	18	82903XX.0000.00000	0,4 - 8	0,4 - 8
	G1	25	22	82904XX.0000.00000	0,4 - 8	0,4 - 8
	G1 1/2	40	59	82906XX.0000.00000	0,4 - 8	0,4 - 8
	G2	50	80	82907XX.0000.00000	0,4 - 8	-
	G2 1/2	65	93	82908XX.0000.00000	0,4 - 8	-

\* Process gas temperature: -10°C ... +140°C

\* Ambient temperature: -10°C ... +85°C

\* Backflushing gas temperature: -10°C ... +85°C



For further information



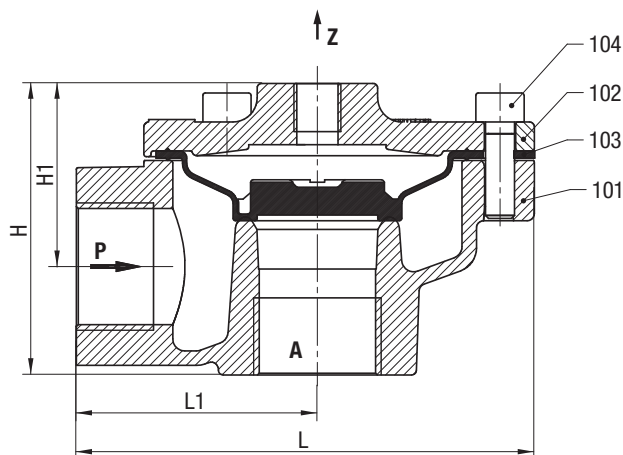
[www.norgren.com/info/en3-274](http://www.norgren.com/info/en3-274)

## DIMENSIONS

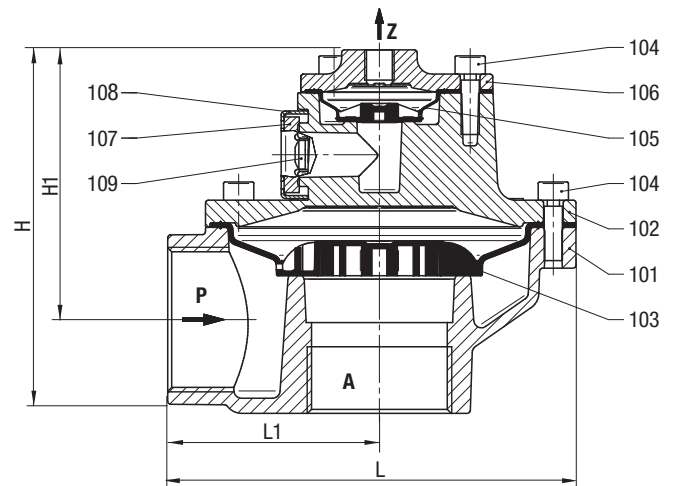
Index	Description
101	Valve body
102	Valve cover
*103	Diaphragm
104	Allen head screw
*105	Diaphragm
106	Valve cover
*107	Silencer
108	Silencer housing
109	Allen head screw

\* A service kit consists of these individual parts

### G3/4 - G1



### G1 1/2 - G2 1/2



Port size	H mm	H1 mm	L mm	L1 mm
G3/4	61,5	39	95	50
G1	61,5	39	95	50
G1 1/2	122	91	135	70
G2	145	104	170	95
G2 1/2	160	115	170	95

## Service kits

For valves with seal TPE	MODELS
8290300 (only diaphragm)	1261253
8290400 (only diaphragm)	1261253
8290600 (both diaphragm + silencer)	1261402
8290700 (both diaphragm + silencer)	1268274
8290800 (both diaphragm + silencer)	1268274

## Further options (valves)

XXXX90.XXXX Single-level; up to 4,5 bar [DN 40 only]

## Further options on request

# BUSCHJOST 82960 SERIES

2/2 - way valves DN 20 ... DN 65



For air  
Indirectly solenoid actuated  
Diaphragm valves  
High flow rate  
All internal components captive  
Functional compact design  
Solenoid interchangeable without tools  
Integrated silencer  
One-piece diaphragm for longer life

## TECHNICAL DATA

**Switching function:**  
Normally closed

**Flow direction:**  
Determined

**Internal thread:**  
G 3/4 ... G2 1/2 or 3/4 NPT ... 2 1/2 NPT


**Operating pressure:**  
0,4 ... 8 bar

**Temperature:**  
Fluid: -40°C ... max. +85°C  
Ambient: -20°C ... max. +85°C

**Mounting position:**  
As required, preferably with solenoid vertical on top

## MATERIALS

Body: Aluminium  
Seat seal: TPE  
Internal parts: TPU

Symbol	Port size	DN mm	kv-value m <sup>3</sup> /h	MODELS*	Operating pressure bar	
					TPE	ECO/FPM **
				→	00	60
	G3/4	20	18	82963XX.8171.00000	0,4 - 8	0,4 - 8
	G1	25	22	82964XX.8171.00000	0,4 - 8	0,4 - 8
	G1 1/2	40	59	82966XX.8171.00000	0,4 - 8	0,4 - 8
	G2	50	80	82967XX.8171.00000	0,4 - 8	-
	G2 1/2	65	93	82968XX.8171.00000	0,4 - 8	-

\* For orders please state voltage and frequency, e.g.: 8296400.8171.23050 for 230V 50Hz or 8296400.8171.02400 for 24V DC

\*\* Process gas temperature: -10°C ... +140°C

Ambient temperature: -10°C ... +85°C

Backflushing gas temperature: -10°C ... +85°C

For further information



[www.norgren.com/info/en3-276](http://www.norgren.com/info/en3-276)

## Solenoid 8171 (standard voltages)

DC	AC	
	50Hz	60Hz
24V	24V	-
-	110V	120V
-	230V	220V

Design according to DIN VDE 0580  
 Voltage range +/-10%, duty cycle 100%  
 Protection class according to EN 60529: IP65  
 Electrical connection Form A according to DIN EN 175301-803 (included)  
 The solenoids are UL listed and CSA approved

## Power consumption

Solenoid	DC	AC	
		Inrush	Holding
8171	12W	-	-
8171	-	23VA	16VA

## DIMENSIONS

Index	Description
101	Valve body
102	Valve cover
* 103	Diaphragm
104	Allen head screw
* 105	Diaphragm
106	Valve cover
* 107	Silencer
108	Silencer housing
109	Allen head screw
** 400	Solenoid
** 702	Plunger
** 705	Pressure spring
** 706	Pressure spring
** 707	Silencer
1400	Electrical connector (included)

\* A service kit consists of these individual parts

\*\* Pilot service kit including solenoid

Port size	H mm	H1 mm	L mm	L1 mm
G3/4	105,5	83	95	50
G1	105,5	83	95	50
G1 1/2	166,0	136	135	70
G2	190,5	149	170	95
G2 1/2	205,5	160	170	95

## Service kits\*

For valves with solenoid 8171 and seal TPE	MODELS
8296300	1261253
8296400	1261253
8296600	1261402
8296700	1268274
8296800	1268274

Pilot service kit\*\*

8298000.8170.XXXXX\*\*

\*\*\* Specify voltage and frequency

## Further options (valves)

XXXXX90.XXXX Single-level; up to 4,5 bar (DN 40 only)

## Further options (solenoids)

XXXXXX.8176 Solenoid in protection class

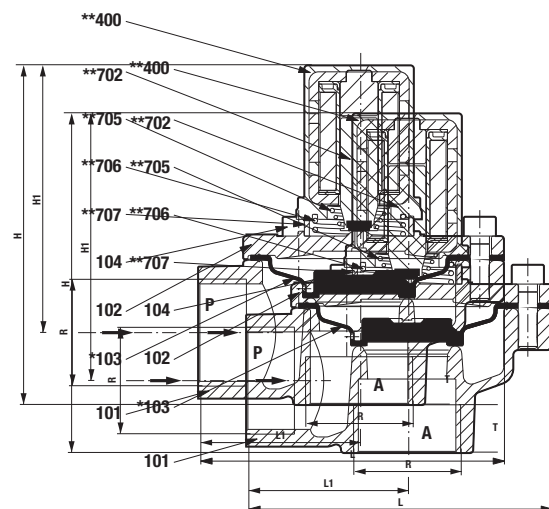
⊕ II 3 GD T 135°C EEx nA II T4

XXXXXX.8186 Solenoid in protection class

⊕ II 2 GD EEx me II T4 T 140°C

## Further options on request

## G3/4 - G1



## G1 1/2 - G2 1/2

