
















## 2/2 Pressure operated valves

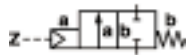
Operation	Series	Page no.	Function	Body material	Solenoids	
					IP Protection class	Explosion proof class
					IP65 (with connector)	Zones 1, 21 II 2 GD II 2 G EEx m EEx me IP67 IP54
Pressure actuated	 <b>Buschjost 82710</b> -0,9 ... 6 bar G¼ ... G½ NC ≤48,3 l/min	2	●	●		
	 <b>Buschjost 84720</b> 0 ... 16 bar G½ ... G1 NC ≤233 l/min	4	●	●		
	 <b>Buschjost 84740 / 84750</b> 0 ... 16 bar G½ ... G1, ½ ... 1 NPT NC ≤233 l/min	6	●	●		
	 <b>Buschjost 84760 / 84770</b> 0 ... 16 bar DIN / ISO NC ≤233 l/min	8	●	●		
	 <b>Buschjost 84500 / 84510</b> 0 ... 25 bar G½ ... G2, ½ ... 2 NPT NC ≤616 l/min	10	●	●		
	 <b>Buschjost 84520 / 84530</b> 0 ... 40 bar G½ ... G2, ½ ... 2 NPT NC ≤616 l/min	12	●	●		
	 <b>Buschjost 82280 / 82290</b> 0 ... 16 bar G1¼ ... G2, 1¼ ... 2 NPT NC ≤883 l/min	14	●	●		
	 <b>Buschjost 82380 / 82390 82480 / 82490</b> 0 ... 25 bar G½ ... G2, ½ ... 2 NPT NC ≤883 l/min	16	●	●		
	 <b>Buschjost 84580 / 84880 84590 / 84890</b> 0 ... 16 bar DIN / ISO NC ≤883 l/min	18	●	●		
	 <b>Buschjost 84660 / 84680</b> 0 ... 10 bar G¾, ¼ NPT NC ≤55 l/min	20	●	●	    9101, 9131 9151 9136 9191	
	 <b>Buschjost 82160</b> 0,2 ... 10 bar G¼ ... G2 NO / NC ≤766 l/min	22	●	●		

## Buschjost 82710 Series

Pressure actuated diaphragm valves

8 to 12 mm orifice (ND)

2/2, NC, G $\frac{1}{4}$  to G $\frac{1}{2}$



Suitable for contaminated flow fluids

Damped operation

Suitable for vacuum up to max. 90%

Hermetic seal between fluid and actuator

Compact design

NPT threads optional

### Technical data

Medium:

Neutral gases and liquid fluids

Viscosity:

80 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Optional

Mounting:

Optional

Fluid temperature:

+90°C max.

Ambient temperature:

+50°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Air, water, hydraulic fluid

Pilot fluid temperature:

+90°C max.

### Materials

Body: brass

Cover: plastic

Seat seal: NBR, reinforced fabric diaphragm



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)**	kv value (m <sup>3</sup> /h)*	kg	Model
8	G1/4	-0,9 ... 6	3 ... 8	1,90	0,66	8271000 0000
10	G3/8	-0,9 ... 6	3 ... 8	2,40	0,65	8271100 0000
12	G1/2	-0,9 ... 6	3 ... 8	2,90	0,61	8271200 0000

\* Cv (US) ≈ kv x 1,2

\*\* For use with vacuum, minimum pilot pressure 4 bar

For 3/2 control valves, see page 20, series 84660

### Options selector

8271X \*\* 0000

Alternative versions	Substitute
Normally open	01
Seals FPM, Tmax +110°C	03
Seals EPDM, Tmax +110°C	14
Valve body stainless steel 1.4581, Internal parts stainless steel 1.4301, Sandvik 1802*	50
Seat seal material FPM, FPM fabric diaphragm, Valve body stainless steel 1.4581, Internal parts stainless steel 1.4301, Sandvik 1802	51
Fluid temperature max. +110°C*	51
Seat seal material Kalrez Dividing diaphragm PTFE foil backed by FKM fabric diaphragm, Valve body stainless steel 1.4581 Internal parts stainless steel 1.4571 and A4, Fluid temperature max. +110°C, 0 to 6 bar*	52

\* Port sizes G3/8 and G1/2 only

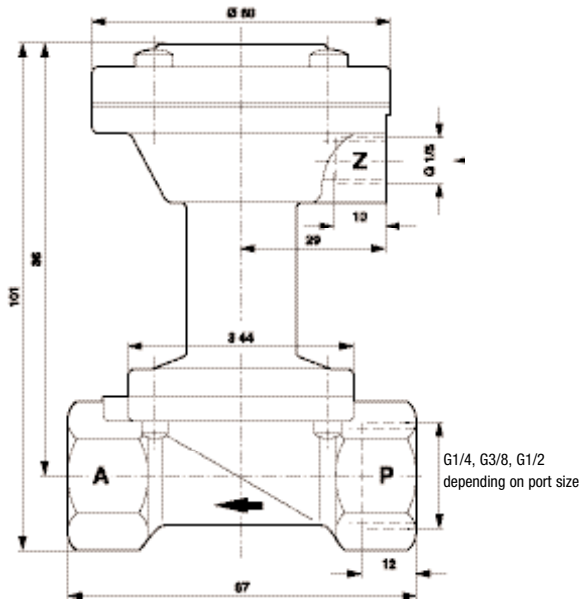
On request: combinations and other versions

## Buschjost 82710 Series

Pressure actuated diaphragm valves

**8 to 12 mm orifice (ND)**

2/2, NC, G $\frac{1}{4}$  to G $\frac{1}{2}$



Required components	Model
1 x 3/2-way-solenoid valve, 1,6 mm orifice	8466053.910X

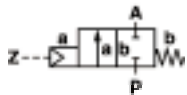


## Buschjost 84720 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, G½ to G1



- Visual position indicator as standard
- Damped closing (valve closes against flow direction)
- Suitable for contaminated flow fluids
- Suitable for vacuum up to max. 90%
- Reverse flow direction as option
- High flow rate
- Controlled by external fluid

### Technical data

Medium:

Neutral gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C

Ambient temperature:

-10°C to +60°C

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

### Materials

Valve

Body: brass CW602N

Seat seal: PTFE

Internal parts: brass, stainless steel

Seal packing: PTFE, FPM, self-adjusting

Actuator

Body: polyamide 66 with glass fibre 30%

Seals: NBR

Internal parts: brass, stainless steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	G1/2	0 ... 16	3,5 ... 10	4,80	1,3	8472200 0000
20	G3/4	0 ... 8	3,5 ... 10	10,00	1,4	8472300 0000
25	G1	0 ... 5	3,5 ... 10	14,00	1,7	8472400 0000
15	1/2 NPT	0 ... 16	3,5 ... 10	4,80	1,3	8473200 0000
20	3/4 NPT	0 ... 8	3,5 ... 10	10,00	1,4	8473300 0000
25	1 NPT	0 ... 5	3,5 ... 10	14,00	1,7	8473400 0000

\* Cv (US) ≈ kv x 1,2

For 3/2 control valves, see page 20, series 84660, and NAMUR adaptor plate in the table below.

### Options selector

847XX \*\* 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 10 bar)	01
Double acting; 4/2 or 5/2-way pilot valve required	08
Double electrical position indicators with microswitches	23
NAMUR adaptor plate	50

### NAMUR mounting accessories

Adapter plate with NAMUR hole pattern for retrofitting (part no. 1256566) consisting of:

- 1 x NAMUR adapter plate
- 2 x adapter screws
- 2 x O-ring

### On request

Seals: NBR, FPM, EPDM

Stroke limiter

Silencer

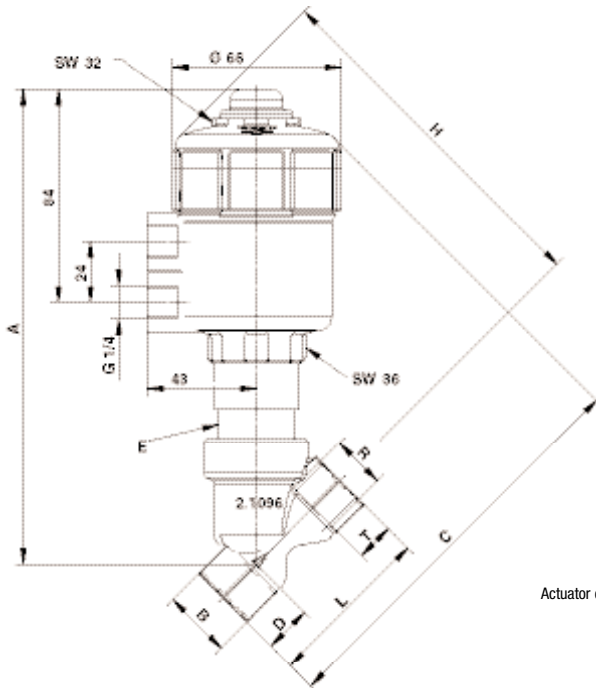
Electrical position indicator with proximity switch

## Buschjost 84720 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, G $\frac{1}{2}$  to G1



Actuator can be turned through 360°

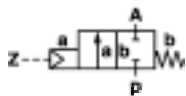
Model	A	B	C	D	E	H	L	R	T
8472200 0000	187	SW 27	159,5	18,5	SW 30	140,5	65	G1/2	15,0
8472300 0000	193	SW 32	165,5	21,0	SW 36	144,5	75	G3/4	16,5
8472400 0000	201	SW 41	175,5	25,0	SW 36	150,5	90	G1	19,0
8473200 0000	187	SW 27	159,5	18,5	SW 30	140,5	65	1/2 NPT	13,0
8473300 0000	193	SW 32	165,5	21,0	SW 36	144,5	75	3/4 NPT	14,0
8473400 0000	201	SW 41	175,5	25,0	SW 36	150,5	90	1 NPT	16,5

## Buschjost 84740 / 84750 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, G½ to G1 / ½ NPT to 1 NPT



- Visual position indicator as standard
- Damped closing (valve closes against flow direction)
- Suitable for contaminated flow fluids
- Suitable for vacuum up to max. 90%
- Reverse flow direction as option
- High flow rate
- Liquid pilot fluids possible

### Technical data

Medium:

Aggressive gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

### Materials

Valve:

Body: stainless steel

Seat seal: PTFE

Internal parts: stainless steel

Seal packing: PTFE, FPM, self-adjusting

Actuator

Body: polyamide 66 with glass fibre 30%

Seals: NBR

Internal parts: brass, stainless steel

Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	G1/2	0 ... 16	3,5 ... 10	4,8	1,3	8474200 0000
20	G3/4	0 ... 8	3,5 ... 10	10	1,4	8474300 0000
25	G1	0 ... 5	3,5 ... 10	14	1,7	8474400 0000
15	1/2 NPT	0 ... 16	3,5 ... 10	4,8	1,3	8475200 0000
20	3/4 NPT	0 ... 8	3,5 ... 10	10	1,4	8475300 0000
25	1 NPT	0 ... 5	3,5 ... 10	14	1,7	8475400 0000

\* Cv (US) ≈ kv x 1,2

For 3/2 control valves, see page 20, series 84660, and NAMUR adaptor plate in the table below.

### Options selector

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 10 bar)	01
Double acting; 4/2 or 5/2-way pilot valve required	08
Double electrical position indicators with microswitches	23
NAMUR adaptor plate	50

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### NAMUR mounting accessories

Adapter plate with NAMUR hole pattern for retrofitting (part no. 1256566) consisting of:

- 1 x NAMUR adapter plate
- 2 x adapter screws
- 2 x O-ring

### On request

Seals: NBR, FPM, EPDM

Stroke limiter

Silencer

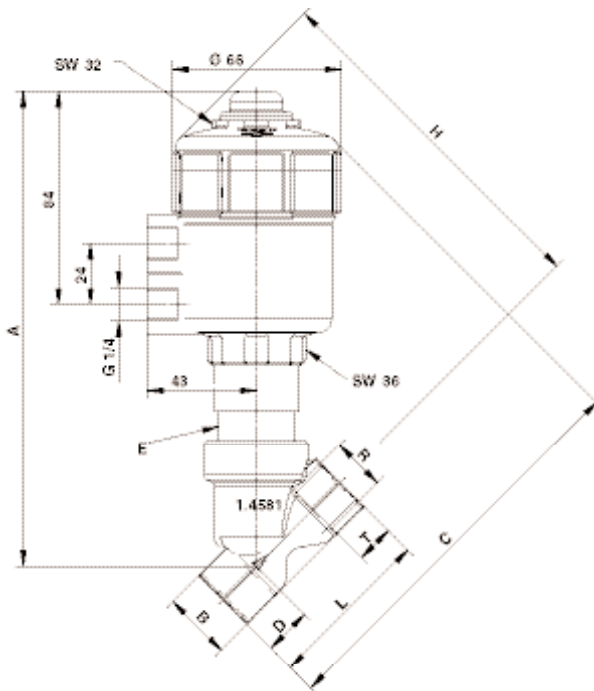
Electrical position indicator with proximity switch

## Buschjost 84740 / 84750 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, G $\frac{1}{2}$  to G1 /  $\frac{1}{2}$  NPT to 1 NPT



turned through 360°

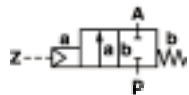
Model	A	B	C	D	E	H	L	R	T
8474200 0000	187	SW 27	159,5	18,5	SW 30	140,5	65	G1/2	15
8474300 0000	193	SW 32	165,5	21	SW 36	144,5	75	G3/4	16,5
8474400 0000	201	SW 41	175,5	25	SW 36	150,5	90	G1	19
8475200 0000	187	SW 27	159,5	18,5	SW 30	140,5	65	1/2 NPT	13
8475300 0000	193	SW 32	165,5	21	SW 36	144,5	75	3/4 NPT	14
8475400 0000	201	SW 41	175,5	25	SW 36	150,5	90	1 NPT	16,5

## Buschjost 84760 / 84770 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, DIN/ISO butt weld end



Visual position indicator as standard  
Damped closing (valve closes against flow direction)

Suitable for contaminated flow fluids

Suitable for vacuum up to max. 90%

Reverse flow direction as option

High flow rate

Liquid pilot fluids possible

### Technical data

Medium:

Aggressive gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt)

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

### Materials

Valve:

Body: stainless steel

Seat seal: PTFE

Internal parts: stainless steel

Seal packing: PTFE, FPM, self-adjusting

Actuator

Body: polyamide 66 with glass fibre 30%

Seals: NBR

Internal parts: brass, stainless steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	DIN, series 1	0 ... 16	3,5 ... 10	4,80	1,3	8476200 0000
15	ISO	0 ... 16	3,5 ... 10	4,80	1,3	8477200 0000
20	DIN, series 1	0 ... 8	3,5 ... 10	10,00	1,4	8476300 0000
20	ISO	0 ... 8	3,5 ... 10	10,00	1,4	8477300 0000
25	DIN, series 2	0 ... 5	3,5 ... 10	14,00	1,7	8476400 0000
25	ISO	0 ... 5	3,5 ... 10	14,00	1,7	8477400 0000

\* Cv (US) ≈ kv x 1,2

For 3/2 control valves, see page 20, series 84660, and NAMUR adaptor plate in the table below.

### Options selector

847XX \*\* 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 10 bar)	01
Double acting; 4/2 or 5/2-way pilot valve required	08
Double electrical position indicators with microswitches	23
NAMUR adaptor plate	50

### NAMUR mounting accessories

Adapter plate with NAMUR hole pattern for retrofitting (part no. 1256566) consisting of:

- 1 x NAMUR adapter plate
- 2 x adapter screws
- 2 x O-ring

### On request

Seals: NBR, FPM, EPDM

Stroke limiter

Silencer

Electrical position indicator with proximity switch

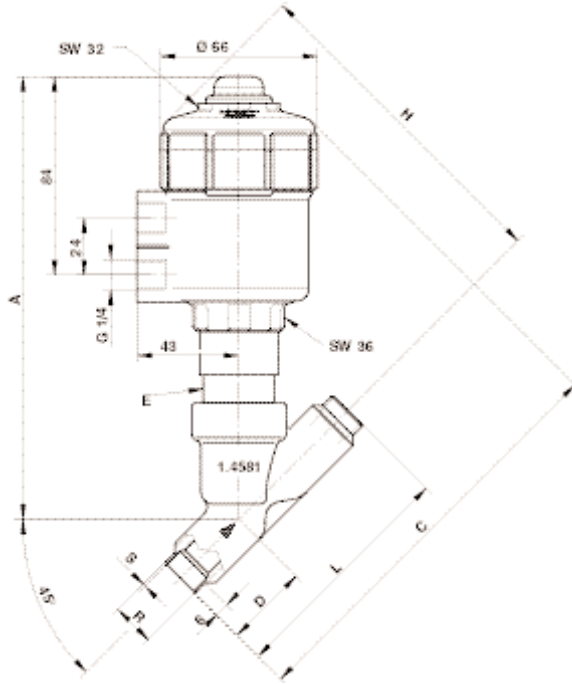


## Buschjost 84760 / 84770 Series

Pressure actuated angle seat valves

15 to 25 mm orifice (ND)

2/2, NC, DIN/ISO butt weld end



in be turned through 360°

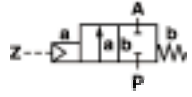
Model	Connection	R	S	DN	A	C	D	E	H	L
8476200 0000	DIN, series 1	18	1	15	187	175,5	35	SW 30	140,5	100
8477200 0000	ISO	21,3	1,6	15	187	175,5	35	SW 30	140,5	100
8476300 0000	DIN, series 1	22	1	20	193	184	39	SW 36	145	110
8477300 0000	ISO	26,9	1,6	20	193	184	39	SW 36	145	110
8476400 0000	DIN, series 2	29	1,5	25	201	190,5	40	SW 36	150,5	120
8477400 0000	ISO	33,7	2	25	201	190,5	40	SW 36	150,5	120

## Buschjost 84500 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, G½ to G2



Interchangeable for NC, NO or double acting functions

Visual position indicator is standard

Damped closing (valve closes against flow direction)

Suitable for contaminated flow fluids

Suitable for vacuum up to max. 90%

Reversed flow direction optional

High flow rate

Liquid pilot fluids possible

### Technical data

Medium:

Neutral gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

### Materials

Valve

Body: brass CW602N

Seat seal: PTFE

Internal parts: brass, stainless steel

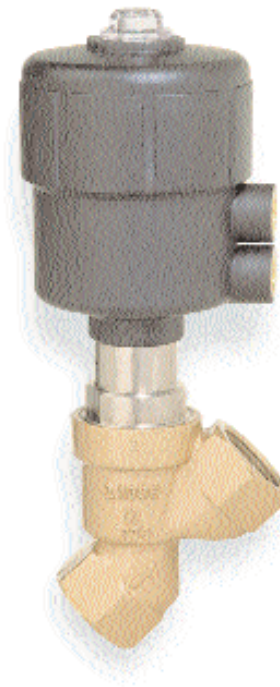
Seal packing: Teflon (PTFE)/Viton (FPM)

Actuator

Body: polyamide 66 with glass fibre 30%

Seals: NBR

Internal parts: brass, stainless steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	G1/2	0 ... 16,0 (25)	3,5 ... 10	4,8	1,4	8450200 0000
20	G3/4	0 ... 10,0 (16)	3,5 ... 10	10	1,5	8450300 0000
25	G1	0 ... 10,0	3,5 ... 10	14	1,8	8450400 0000
32	G1¼	0 ... 7,0	3,5 ... 10	23	2,4	8450500 0000
40	G1½	0 ... 4,5	3,5 ... 10	30	2,7	8450600 0000
50	G2	0 ... 3,0	3,5 ... 10	37	3,9	8450700 0000
15	1/2 NPT	0 ... 16,0 (25)	3,5 ... 10	4,8	1,4	8451200 0000
20	3/4 NPT	0 ... 10,0 (16)	3,5 ... 10	10	1,5	8451300 0000
25	1 NPT	0 ... 10,0	3,5 ... 10	14	1,8	8451400 0000
32	1¼ NPT	0 ... 7,0	3,5 ... 10	23	2,4	8451500 0000
40	1½ NPT	0 ... 4,5	3,5 ... 10	30	2,7	8451600 0000
50	2 NPT	0 ... 3,0	3,5 ... 10	37	3,9	8451700 0000

\* Cv (US) ≈ kv x 1,2

() = Higher operating pressure, see 'Alternative versions'

For 3/2 control valves, see page 20, series 84660, and NAMUR adaptor plate in the table below.

### Options selector

845XX ★★ 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 10 bar)	01
Double acting; 4/2 or 5/2-way pilot valve required	08
Higher operating pressure	22
Double electrical position indicators with microswitches	23
NAMUR adaptor plate	50

### NAMUR mounting accessories

Adapter plate with NAMUR hole pattern for retrofitting (part no. 1256566) consisting of:

- 1 x NAMUR adapter plate
- 2 x adapter screws
- 2 x O-ring

### On request

Seals: NBR, FPM, EPDM

Stroke limiter

Silencer

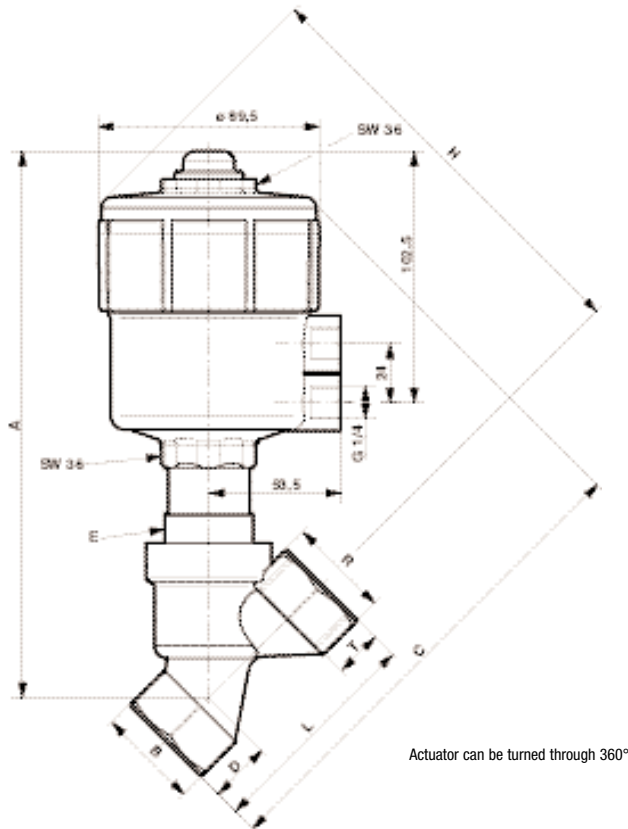
Electrical position indicator with proximity switch

## Buschjost 84500 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, G $\frac{1}{2}$  to G2



Actuator can be turned through 360°

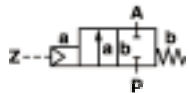
Model	A	B	C	D	E	H	L	R	T
8450200 0000	204,5	SW 27	183	18,5	SW 30	164	65	G1/2	15
8450300 0000	213,5	SW 32	189	21	SW 36	168	75	G3/4	16,5
8450400 0000	221,5	SW 41	199	25	SW 36	174	90	G1	19
8450500 0000	236,5	SW 50	212,5	28,5	SW 41	184,5	110	G1¼	21,5
8450600 0000	238,5	SW 55	217	31	SW 41	186	120	G1½	21,5
8450700 0000	250,5	SW 70	234,5	40	SW 41	194,5	150	G2	26
8451200 0000	204,5	SW 27	183	18,5	SW 30	164	65	1/2 NPT	13
8451300 0000	213,5	SW 32	189	21	SW 36	168	75	3/4 NPT	14
8451400 0000	221,5	SW 41	199	25	SW 36	174	90	1 NPT	16,5
8451500 0000	236,5	SW 50	212,5	28,5	SW 41	184,5	110	1¼ NPT	17
8451600 0000	238,5	SW 55	217	31	SW 41	186	120	1½ NPT	17
8451700 0000	250,5	SW 70	234,5	40	SW 41	194,5	150	2 NPT	17,5

## Buschjost 84520 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, G½ to G2



Interchangeable for NC, NO or double acting functions

Visual position indicator as standard

Damped closing (valve closes against flow direction)

Suitable for contaminated flow fluids

Suitable for vacuum up to max. 90%

Reversed flow direction optional

High flow rate

Liquid pilot fluids possible

### Technical data

Medium:

Aggressive gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

### Materials

Valve

Body: stainless steel

Seat seal: PTFE

Internal parts: stainless steel

Seal packing: Teflon (PTFE)/Viton (FPM), self-adjusting

Actuator

Body: polyamide 66 with glass fibre 30%

Seals: NBR (Perbunan)

Internal parts: brass, stainless steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	G1/2	0 ... 16,0 (40)	3,5 ... 10	4,8	1,4	8452200 0000
20	G3/4	0 ... 10,0 (16)	3,5 ... 10	10	1,5	8452300 0000
25	G1	0 ... 10,0	3,5 ... 10	14	1,8	8452400 0000
32	G1¼	0 ... 7,0	3,5 ... 10	23	2,4	8452500 0000
40	G1½	0 ... 4,5	3,5 ... 10	30	2,7	8452600 0000
50	G2	0 ... 3,0	3,5 ... 10	37	3,9	8452700 0000
15	1/2 NPT	0 ... 16,0 (40)	3,5 ... 10	4,8	1,4	8453200 0000
20	3/4 NPT	0 ... 10,0 (16)	3,5 ... 10	10	1,5	8453300 0000
25	1 NPT	0 ... 10,0	3,5 ... 10	14	1,8	8453400 0000
32	1¼ NPT	0 ... 7,0	3,5 ... 10	23	2,4	8453500 0000
40	1½ NPT	0 ... 4,5	3,5 ... 10	30	2,7	8453600 0000
50	2 NPT	0 ... 3,0	3,5 ... 10	37	3,9	8453700 0000

\* Cv (US) ≈ kv x 1,2

( ) = Higher operating pressure, see 'Alternative versions'

For 3/2 control valves, see page 20, series 84660, and NAMUR adaptor plate in the table below.

### Options selector

822XX ★★ 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 10 bar)	01
Double acting; 4/2 or 5/2-way pilot valve required	08
Higher operating pressure	22
Double electrical position indicators with microswitches	23
NAMUR adaptor plate	50

### NAMUR mounting accessories

Adapter plate with NAMUR hole pattern for retrofitting (part no. 1256566) consisting of:

- 1 x NAMUR adapter plate
- 2 x adapter screws
- 2 x O-ring

### On request

Seal variants: NBR, FPM, EPDM

Stroke limitation

Silencer

Electrical position indicator with proximity sensors

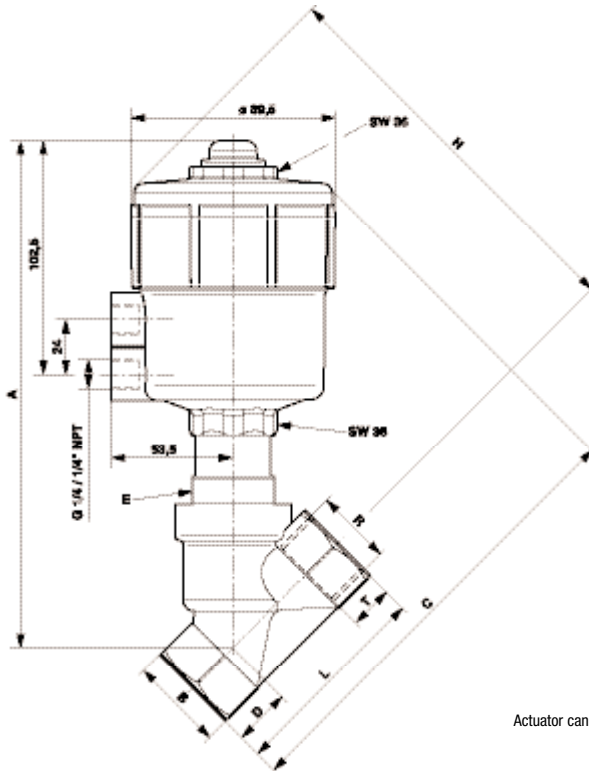
Welding ends as per DIN and ISO

## Buschjost 84520 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, G $\frac{1}{2}$  to G2



Actuator can be turned through 360°

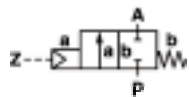
Model	A	B	C	D	E	H	L	R	T
8452200 0000	204,5	SW 27	183	18,5	SW 30	164	65	G1/2	15
8452300 0000	213,5	SW 32	189	21	SW 36	168	75	G3/4	16,5
8452400 0000	221,5	SW 41	199	25	SW 36	174	90	G1	19
8452500 0000	236,5	SW 50	212,5	28,5	SW 41	184,5	110	G1¼	21,5
8452600 0000	238,5	SW 55	217	31	SW 41	186	120	G1½	21,5
8452700 0000	250,5	SW 70	234,5	40	SW 41	194,5	150	G2	26
8453200 0000	204,5	SW 27	183	18,5	SW 30	164	65	1/2 NPT	13
8453300 0000	213,5	SW 32	189	21	SW 36	168	75	3/4 NPT	14
8453400 0000	221,5	SW 41	199	25	SW 36	174	90	1 NPT	16,5
8453500 0000	236,5	SW 50	212,5	28,5	SW 41	184,5	110	1¼ NPT	17
8453600 0000	238,5	SW 55	217	31	SW 41	186	120	1½ NPT	17
8453700 0000	250,5	SW 70	234,5	40	SW 41	194,5	150	2 NPT	17,5

## Buschjost 82280 / 82290 Series

Pressure actuated angle seat valves

32 to 50 mm orifice (ND)

2/2, NC, G1¼ to G2 / 1¼ NPT to 2 NPT



For highly contaminated areas

Damped operation

For heavy-duty industrial applications

Suitable for vacuum

### Technical data

Medium:

Neutral gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+80°C max.

### Materials

Valve:

Body: brass CW602N

Seat seal: PTFE

Internal parts: brass, stainless steel

Seat packing: PTFE, FPM, self-adjusting

Actuator:

Body: stainless steel

Seals: NBR

Internal parts: coated steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
32	G1¼	0 ... 16	3,5 ... 8	27,00	5,3	8228500 0000
40	G1½	0 ... 10 (16)	3,5 ... 8	37,00	5,5	8228600 0000
50	G2	0 ... 10	3,5 ... 8	53,00	7,0	8228700 0000
32	1¼ NPT	0 ... 16	3,5 ... 8	27,00	5,3	8229500 0000
40	1½ NPT	0 ... 10 (16)	3,5 ... 8	37,00	5,5	8229600 0000
50	2 NPT	0 ... 10	3,5 ... 8	53,00	7,0	8229700 0000

\* Cv (US) ≈ kv x 1,2

() = Higher operating pressure, see 'Alternative versions'

For 3/2 control valves, see page 20, series 84660

### Options selector

822XX★ 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 6 bar)	01
Higher operating pressure to 16 bar, only with G1½	22
Double electrical position indicators with microswitches	23
Fluid temperature 200°C max.	59

### On request

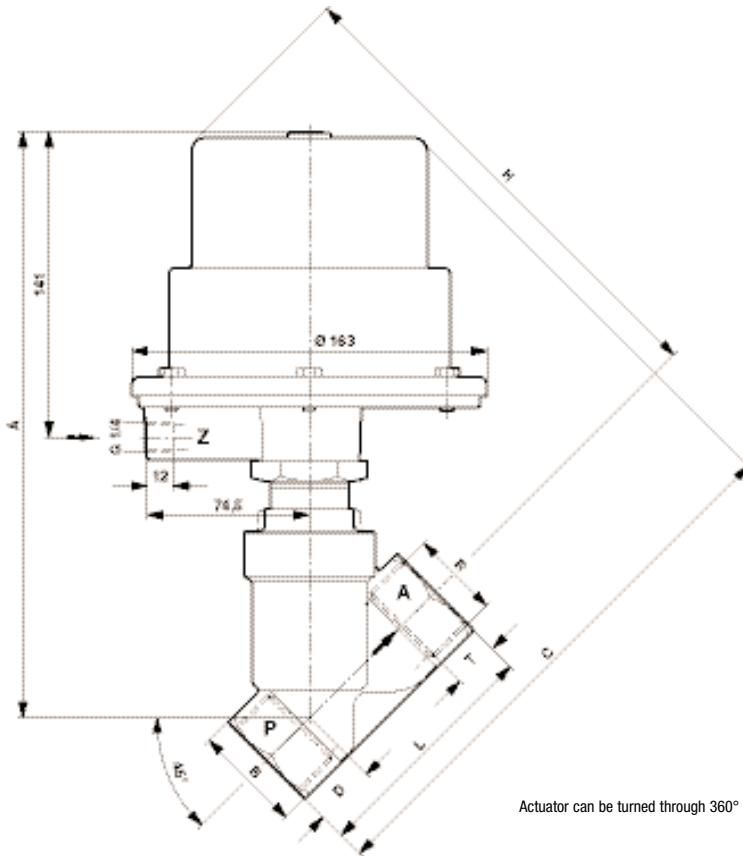
Visual position indicator

## Buschjost 82280 / 82290 Series

Pressure actuated angle seat valves

**32 to 50 mm orifice (ND)**

2/2, NC, G1¼ to G2 / 1¼ NPT to 2 NPT



Actuator can be turned through 360°

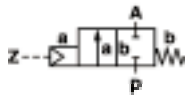
Model	A	B	C	D	H	L	R	T
8228500 0000	270	SW 50	253	28	225	110	G1¼	21,5
8228600 0000	272	SW 55	257	31	227,5	120	G1½	21,5
8228700 0000	284	SW 70	275	40	235	150	G2	26
8229500 0000	270	SW 50	253	28	225	110	1¼ NPT	17
8229600 0000	272	SW 55	257	31	227,5	120	1½ NPT	17
8229700 0000	284	SW 70	275	40	235	150	2 NPT	17,5

# Buschjost 82380 / 82390 82480 / 82490 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, NC, G½ to G2 / ½ NPT to 2 NPT



For highly contaminated areas

Good resistance to aggressive fluids

For heavy-duty industrial applications

Damped operation

Suitable for vacuum

## Technical data

Medium:

Aggressive gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +180°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+60°C max.

## Materials

Valve:

Body: stainless steel

Seat seal: PTFE

Internal parts: stainless steel

Seat packing: PTFE, FPM

Actuator:

Body: stainless steel, aluminium

WEMA, anti-corrosion coated

Seals: NBR

Internal parts: coated steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	G1/2	0 ... 16 (25)	3,5 ... 8	4,8	1,3	8238200 0000
20	G3/4	0 ... 10 (16)	3,5 ... 8	10,0	1,4	8238300 0000
25	G1	0 ... 10	3,5 ... 8	14,0	1,7	8238400 0000
32	G1¼	0 ... 7	3,5 ... 8	23,0	2,4	8238500 0000
40	G1½	0 ... 4,5	3,5 ... 8	30,0	2,6	8238600 0000
50	G2	0 ... 3	3,5 ... 8	37,0	3,8	8238700 0000
32	G1¼	0 ... 16	3,5 ... 8	27,0	5,1	8248500 0000
40	G1½	0 ... 10	3,5 ... 8	37,0	5,5	8248600 0000
50	G2	0 ... 10	3,5 ... 8	53,0	7,0	8248700 0000
15	1/2 NPT	0 ... 16 (25)	3,5 ... 8	4,8	1,3	8239200 0000
20	3/4 NPT	0 ... 10 (16)	3,5 ... 8	10,0	1,4	8239300 0000
25	1 NPT	0 ... 10	3,5 ... 8	14,0	1,7	8239400 0000
32	1¼ NPT	0 ... 7	3,5 ... 8	23,0	2,4	8239500 0000
40	1½ NPT	0 ... 4,5	3,5 ... 8	30,0	2,6	8239600 0000
50	2 NPT	0 ... 3	3,5 ... 8	37,0	3,8	8239700 0000
32	1¼ NPT	0 ... 16	3,5 ... 8	27,0	5,1	8249500 0000
40	1½ NPT	0 ... 10	3,5 ... 8	37,0	5,5	8249600 0000
50	2 NPT	0 ... 10	3,5 ... 8	53,0	7,0	8249700 0000

\* Cv (US) ≈ kv x 1,2

( ) = Higher operating pressure, see 'Alternative versions'

For 3/2 control valves, see page 20, series 84660

## Options selector

823XX \*\* 0000

Alternative versions	Substitute
Normally open, closed under pilot pressure and opens under spring force (pilot pressure 1 to 6 bar)	01
Seals FPM Tmax. +180°C	03
Operating pressure G1/2: 25 bar, G3/4: 16 bar	22
Double electrical position indicators with magnetic switches	23
Visual position indicator	52
Electrical position indicator EEx	58
Tmax. +200°C	59
Stainless steel actuator	60
Spindle sealed by stainless steel bellows	80

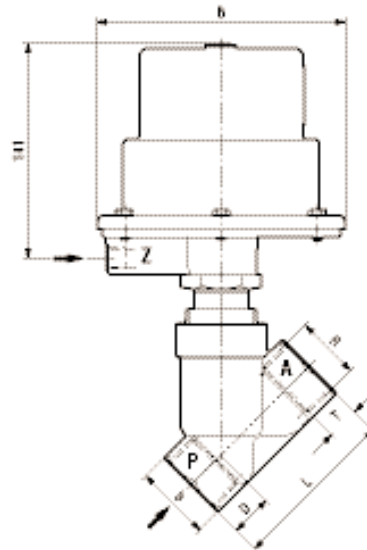
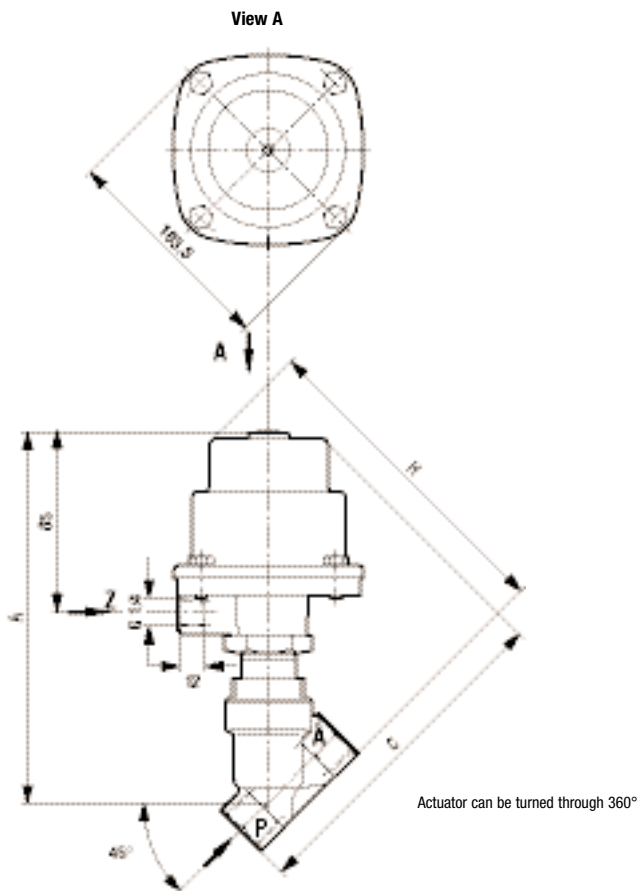


# Buschjost 82380 / 82390 82480 / 82490 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, NC, G $\frac{1}{2}$  to G2 /  $\frac{1}{2}$  NPT to 2 NPT



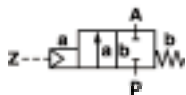
Model	Connection R	A	b	D	C	H	L	T	B
8238200 0000	G1/2	175	SW 27	18,5	159	154	65	15	89,5
8239200 0000	1/2 NPT	175	SW 27	18,5	159	154	65	15	89,5
8238300 0000	G3/4	182	SW 32	21	165	160	75	16,5	89,5
8239300 0000	3/4 NPT	182	SW 32	21	165	160	75	16,5	89,5
8238400 0000	G1	190	SW 41	25	175	171	90	19	89,5
8239400 0000	1 NPT	190	SW 41	25	175	171	90	19	89,5
8238500 0000	G1 $\frac{1}{4}$	205	SW 50	28	189	186	110	21,5	89,5
8239500 0000	1 $\frac{1}{4}$ NPT	205	SW 50	28	189	186	110	21,5	89,5
8238600 0000	G1 $\frac{1}{2}$	207	SW 55	31	193	190	120	21,5	89,5
8239600 0000	1 $\frac{1}{2}$ NPT	207	SW 55	31	193	190	120	21,5	89,5
8238700 0000	G2	219	SW 70	40	211	206	150	26	89,5
8239700 0000	2 NPT	219	SW 70	40	211	206	150	26	89,5
8248500 0000	G1 $\frac{1}{4}$	270	SW 50	28	253	250	110	21,5	163
8249500 0000	1 $\frac{1}{4}$ NPT	270	SW 50	28	253	250	110	21,5	163
8248600 0000	G1 $\frac{1}{2}$	272	SW 55	31	257	255	120	21,5	163
8249600 0000	1 $\frac{1}{2}$ NPT	272	SW 55	31	257	255	120	21,5	163
8248700 0000	G2	284	SW 70	40	275	270	150	26	163
8249700 0000	2 NPT	284	SW 70	40	275	270	150	26	163

## Buschjost 84580 / 84880 84590 / 84890 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, NC, DIN / ISO welding ends



- For highly contaminated areas
- Good resistance to aggressive fluids
- For heavy-duty industrial applications
- Damped operation
- Suitable for vacuum

### Technical data

Medium:

Aggressive gases and liquid fluids

Viscosity:

600 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

0°C to +180°C max.

Ambient temperature:

0°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Neutral gases

Pilot fluid temperature:

+80°C max.

### Materials

Valve:

Body: stainless steel (1.4581)

Seat seal: PTFE

Internal parts: Sandvik 1802,  
stainless steel

Seal packing: PTFE, FPM,  
self-adjusting

Actuator:

Body: stainless steel, aluminium  
WEMA-Kor, anti-corrosion coated

Seals: NBR

Internal parts: coated steel



Orifice (mm)	Port size	Operating pressure (bar)	Pilot pressure (bar)	kv value (m <sup>3</sup> /h)*	kg	Model
15	DIN, Series 1	0 ... 16	3,5 ... 8	4,8	1,3	8458200 0000
15	ISO	1 ... 16	3,5 ... 8	4,8	1,3	8459200 0000
20	DIN, Series 1	0 ... 10	3,5 ... 8	10	1,4	8458300 0000
20	ISO	0 ... 10	3,5 ... 8	10	1,4	8459300 0000
25	DIN, Series 2	0 ... 10	3,5 ... 8	14	1,7	8458400 0000
25	ISO	1 ... 10	3,5 ... 8	14	1,7	8459400 0000
32	DIN, Series 2	0 ... 7	3,5 ... 8	23	2,4	8458500 0000
32	ISO	1 ... 7	3,5 ... 8	23	2,4	8459500 0000
40	DIN, Series 2	0 ... 4,5	3,5 ... 8	30	2,6	8458600 0000
40	ISO	1 ... 4,5	3,5 ... 8	30	2,6	8459600 0000
50	DIN, Series 3	0 ... 3	3,5 ... 8	37	3,8	8458700 0000
50	ISO	1 ... 3	3,5 ... 8	37	3,8	8459700 0000
32	DIN, Series 2	0 ... 10	3,5 ... 8	27	5,1	8488500 0000
32	ISO	0 ... 10	3,5 ... 8	27	5,1	8489500 0000
40	DIN, Series 2	0 ... 10	3,5 ... 8	37	5,5	8488600 0000
40	ISO	0 ... 10	3,5 ... 8	37	5,5	8489600 0000
50	DIN, Series 3	0 ... 10	3,5 ... 8	53	7	8488700 0000
50	ISO	0 ... 10	3,5 ... 8	53	7	8489700 0000

\* Cv (US) = kv x 1,2

For 3/2 control valves, see page 20, series 84660

### Options selector

845XX ★★ 0000

Alternative versions	Substitute
Normally open, closes under pilot pressure and opens under spring force (pilot pressure 1 to 6 bar)	01
Double electrical position indicators with magnetic switches	23
Stainless steel actuator; maximum fluid temperature 200°C	60

### On request

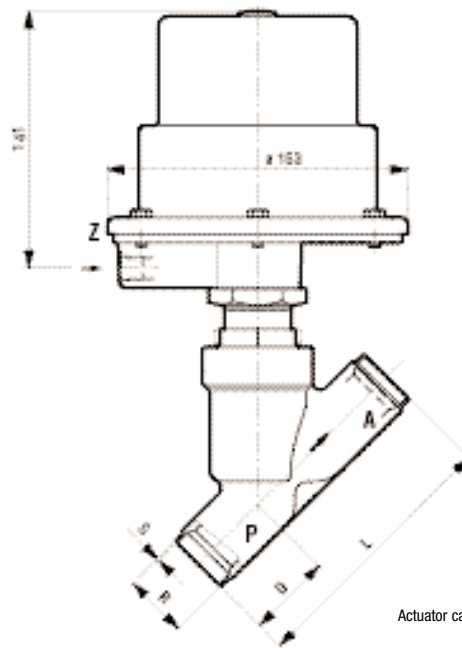
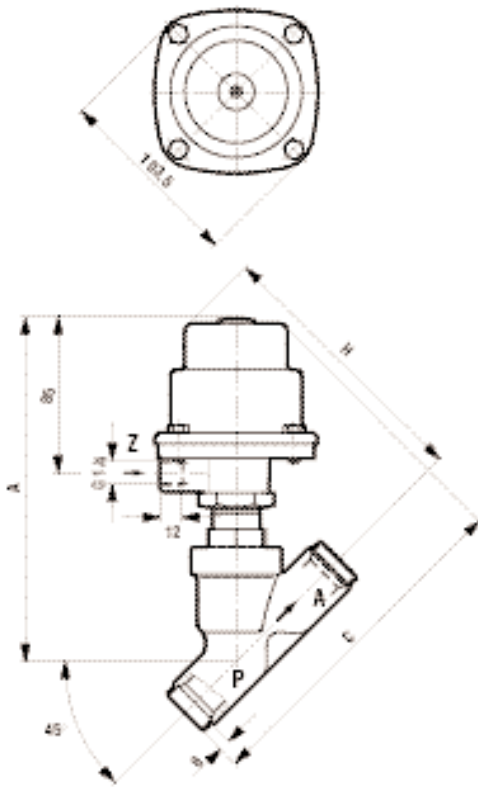
Visual position indicator

## Buschjost 84580 / 84880 84590 / 84890 Series

Pressure actuated angle seat valves

15 to 50 mm orifice (ND)

2/2, NC, DIN / ISO welding ends



Actuator can be turned through 360°

Model	Connection	R	S	DN	A	C	D	H	L
8458200 0000	DIN, Series 1	18	1	15	176	175	35	140	100
8459200 0000	ISO	21,3	1,6	15	176	175	35	140	100
8458300 0000	DIN, Series 1	22	1	20	182	184	39	145	110
8459300 0000	ISO	26,9	1,6	20	182	184	39	145	110
8458400 0000	DIN, Series 2	29	1,5	25	190	190	40	150,5	120
8459400 0000	ISO	33,7	2	25	190	190	40	150,5	120
8458500 0000	DIN, Series 2	35	1,5	32	205	207	46	161	143
8459500 0000	ISO	42,4	2	32	205	207	46	161	143
8458600 0000	DIN, Series 2	41	1,5	40	207	213	51	162	160
8459600 0000	ISO	48,3	2	40	207	213	51	162	160
8458700 0000	DIN, Series 3	54	2	50	219	226	55,5	171	181
8459700 0000	ISO	60,3	2	50	219	226	55,5	171	181
8488500 0000	DIN, Series 2	35	1,5	32	270	271	46	221	143
8489500 0000	ISO	42,4	2	32	270	271	46	221	143
8488600 0000	DIN, Series 2	41	1,5	40	272	277	51	223	160
8489600 0000	ISO	48,3	2	40	272	277	51	223	160
8488700 0000	DIN, Series 3	54	2	50	284	290	55,5	231	181
8489700 0000	ISO	60,3	2	50	284	290	55,5	231	181

## Buschjost 84660 / 84680 Pilot valve series

Solenoid-type directly actuated angle seat valves

1,6 and 3,0 mm orifice (ND)

3/2, NC, G1/4 / 1/4 NPT

Port P female thread, port A male thread



Compact design

Complete with connector nut and seal

Interchangeable solenoid system

Silenced exhaust

Low power consumption

### Technical data

Medium:

Filtered compressed air, lubricated or unlubricated, or neutral gases

Flow direction:

Fixed

Mounting:

Optional, preferably with solenoid vertical

Fluid temperature:

-10°C to +60°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

### Materials

Body: brass

Seat seal: TPU

Internal parts: stainless steel, PPS



Orifice (mm)	Port size**	Operating pressure (bar)	kv value (m <sup>3</sup> /h)**	kg	Model
1,6	G1/4	1 ... 10	1,2	0,4	8466000xxxx*****
1,6	1/4 NPT	1 ... 10	1,2	0,4	8467000xxxx*****
3,0	G1/4	1 ... 10	3,3	0,6	8468000xxxx*****
3,0	1/4 NPT	1 ... 10	3,3	0,6	8469000xxxx*****

xxxx Insert solenoid codes from table below. \*\*\*\*\* Insert voltage codes from table below

\* Cv (US) ≈ kv x 1,2

\*\* Discharge to atmosphere via silencer

### Options selector

846XX ★ ★ ★ ★ ★ ★ ★ ★

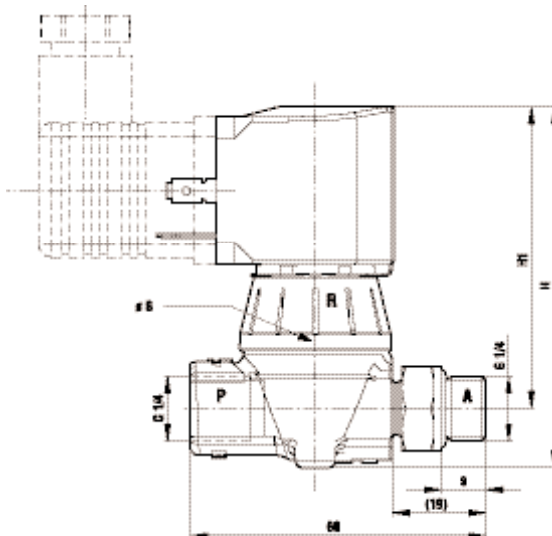
Alternative versions	Substitute
Normally open	01
Manual override	02
Connection P female thread G1/8,	
Connection A male thread G1/8	53*

Solenoid	Substitute
d.c./a.c. for 1,6 mm ND	9101
EEx m II T4, IP 65 for 1,6 mm ND	9131
EEx m II T4, IP 54 for 1,6 mm ND	9136
d.c./a.c. for 3,0 mm ND	9151
EEx me II T3, IP 54 for 3,0 mm ND	9191

\* ND 1,6 mm only

Voltage	Substitute
24 V d.c.	02400
24 V a.c.	02450
110 V a.c. 50 Hz	11050
230 V a.c. 50 Hz	23050

Other voltages on request



Solenoid	H	H1	ØB
9101, 9131, 9136	73,6	61,5	31,0
9151, 9191	91,0	79,0	31,0

Solenoid can be turned through 360°  
Socket can be turned through 4 x 90°

# Buschjost 84660 / 84680 Pilot valve series

Solenoid-type directly actuated angle seat valves

1,6 and 3,0 mm orifice (ND)

3/2, NC, G $\frac{1}{4}$  /  $\frac{1}{4}$  NPT

Port P female thread, port A male thread

## Electrical details for solenoid operators

	Power consumption		Voltage		Protection category	Protection class	Temperatures °C		Electrical connection	kg	Solenoid drawing no.	Circuit diagram		Model
	24 V d.c. (W)	230 V a.c. (VA)	24 V d.c. (mA)	230 V a.c. (mA)			Fluid*	Ambient**				d.c.	a.c.	
	8	15/12	333	52	–	IP 65	+110 max.	-25 ... +50	DIN EN 175301-803	0,15	17	1	1	9101
	6,5	15/12	271	52	–	IP 65	+110 max.	-40 ... +40	DIN EN 175301-803	0,15	17	1	1	9131
	8	9 VA/8 W	333	39	II 2 GD	EEx m II T4, IP67	+80 max.	-20 ... +40	3 m cable	0,40	27	2	6	9136
	18	45/35	750	152	–	IP 65	+110 max.	-25 ... +50	DIN EN 175301-803	0,40	24	1	1	9151
	18	20 VA/18 W	750	88	II 2 G	EEx me II T3, IP54	+80 max.	-20 ... +40	Connector body	0,25	26	2	6	9191

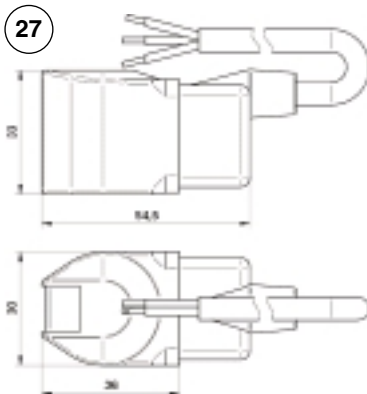
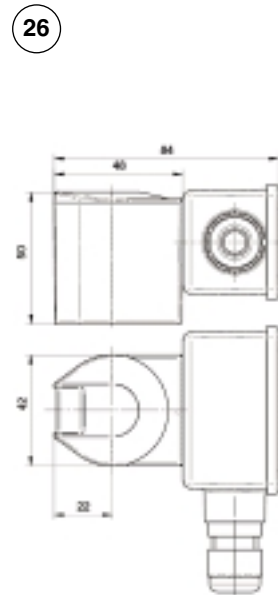
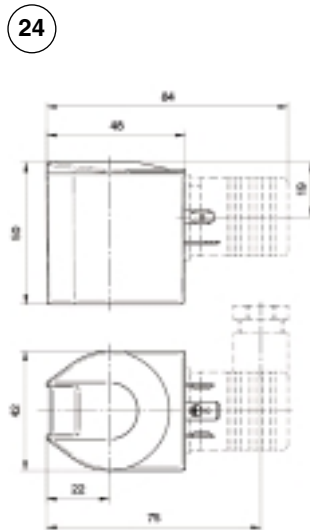
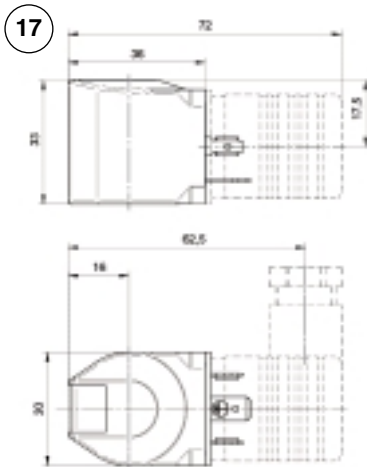
\* The maximum temperature depends on the valve type

\*\* The maximum temperature may be higher, depending on the application.

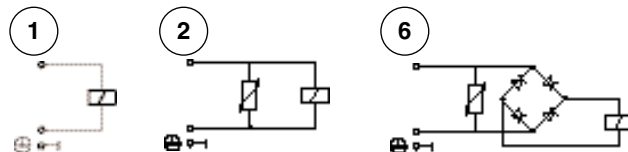
According to VDE 0580, 100% rated

Power consumption calculated with coil at +20°C, for d.c. coils at operating temperature, power consumption is up to 30% lower

Cable clamping range 5 to 10 mm



## Circuit diagrams

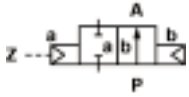


## Buschjost 82160 Series

Externally piloted straight seat valves

8 to 50 mm orifice (ND)

2/2, G¼ to G2



For medium to high contamination areas

Hermetic seal between fluid and actuator

Weight- and space-saving design

Special vacuum version on request

Compact valve for industrial applications

NPT threads optional

### Technical data

Medium:

Neutral gases and liquid fluids

Viscosity:

80 mm<sup>2</sup>/s (cSt) max.

Flow direction:

Fixed

Mounting:

Optional

Fluid temperature:

-10°C to +90°C max.

Ambient temperature:

-10°C to +60°C max.

Consult our Technical Service for use below +2°C

Pilot fluid:

Air

Pilot fluid temperature:

+60°C max.

### Materials

Body and cover: brass

Internal parts: brass, stainless steel

Seat seal: brass

Main seal: fibre-reinforced NBR diaphragm

Seals: NBR



Orifice (mm)	Port size	Operating pressure (bar)**	Pilot pressure (bar)#	kv value (m <sup>3</sup> /h)*	kg	Model
8	G1/4	0,2 ... 16	0,2 ... 16	1,7	0,5	8216000 0000
10	G3/8	0,2 ... 16	0,2 ... 16	3,4	0,45	8216100 0000
12	G1/2	0,2 ... 16	0,2 ... 16	4	0,4	8216200 0000
20	G3/4	0,2 ... 16	0,2 ... 16	11	1,15	8216300 0000
25	G1	0,2 ... 16	0,2 ... 16	13	1	8216400 0000
32	G1¼	0,2 ... 16	0,2 ... 16	28	2,35	8216500 0000
40	G1½	0,2 ... 16	0,2 ... 16	31	2,1	8216600 0000
50	G2	0,2 ... 16	0,2 ... 16	46	3,35	8216700 0000

\* Cv (US) ≈ kv x 1,2

\*\* Min. pressure difference from P to A 0,2 bar

# Pilot pressure = Operating pressure (G1/4 to G1/2) max. 6 bar, max. 1 bar over operating pressure (G3/4 to G2)

### Options selector

8216X ★★ 0000

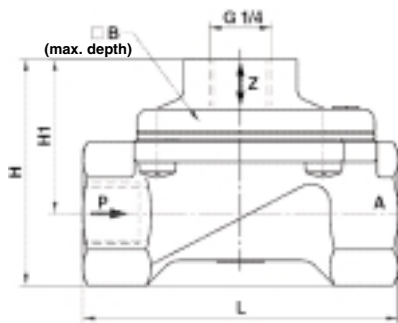
Alternative versions	Substitute	Alternative versions	Substitute
Fibre-reinforced FPM diaphragm with valve disk, Tmax. +110°C, Pressure range 0,2 to 16 bar, Pilot pressure = Operating pressure. G1/4 to G1/2: Max. pilot pressure 6 bar over operating pressure, max. pilot pressure 16 bar. G3/4 to G2: Max. pilot pressure 1 bar over operating pressure, max. pilot pressure 16 bar.	03	Vacuum version Pressure spring under fabric-reinforced FPM diaphragm Tmax. +110°C, Pressure range -0,9 to 16 bar, Pilot pressure 2 to 16 bar Max. pilot pressure 6 bar over operating pressure.	53
Fibre-reinforced FPM diaphragm with valve disk, Tmax. +90°C, Pilot pressure = Operating pressure. G3/4 to G2: Max. pilot pressure 6 bar over operating pressure, max. pilot pressure 16 bar.	51	Vacuum version Pressure spring under fabric-reinforced NBR diaphragm Tmax. +90°C, Pressure range -0,9 to 16 bar, Pilot pressure 2 to 16 bar, Max. pilot pressure 6 bar over operating pressure.	54
Fibre-reinforced FPM diaphragm with valve disk, Tmax. +110°C, Pilot pressure = Operating pressure. G3/4 to G2: Max. pilot pressure 6 bar over operating pressure, max. pilot pressure 16 bar.	52		

## Buschjost 82160 Series

Externally piloted straight seat valves

8 to 50 mm orifice (ND)

2/2, G $\frac{1}{4}$  to G2



Model	L	□ B	H	H1
8216000 0000	67	44	48	33
8216100 0000	67	44	48	33
8216200 0000	67	44	48	33
8216300 0000	95	70	81	57
8216400 0000	95	70	81	57
8216500 0000	132	96	103	70
8216600 0000	132	96	103	70
8216700 0000	160	112	121	81

