

- > **Port size: DN 15 ... 50, 1/2" ... 2" (ISO G/NPT)**
- > **Easy rebuilding into »normally open« or »double-acting« without tools**
- > **Optical position indicator is standard**
- > **Damped closing (Valves closes against flow direction)**
- > **Suitable for contaminated flow fluid**
- > **Suitable for vacuum up to max. 90%**
- > **Reversed flow direction optional**
- > **High flow rate**
- > **Option pressure actuated by external liquid fluid**



### Technical features

#### Medium:

Neutral gases and liquids

#### Pilot fluid:

Neutral gases max. +60°C (+14°F)

#### Switching function:

Normally closed

#### Operation:

Pressure actuated by external fluid

#### Mounting position:

Optional

#### Flow direction:

Determined

#### Port size:

G1/2, G3/4, G1, G1 1/4, G1 1/2, G2 1/2 NPT, 3/4 NPT, 1 NPT, 1 1/4 NPT, 1 1/2 NPT, 2 NPT

#### Pilot connection:

G1/4 or 1/4 NPT

#### Operating pressure:

See table

#### Pilot pressure:

3,5 ... 10 bar (51 ... 145 psi)

#### Fluid temperature:

-10 ... +180°C (+14 ... +356°F)

#### Ambient temperature:

-10 ... +60°C (+14 ... +140°F)

#### Material:

Process fluid characteristics:

Body: Dezincification Brass (CW617N)

Seat seal: PTFE

Internal parts: Brass, Stainless steel

Spindle sealing: PTFE / FPM, self-adjustable

Pilot fluid characteristics:

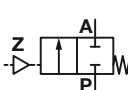
Body: Polyamid 66 with

glass fibre 30%

Seat Seals: NBR

Internal parts: Brass, Stainless steel

### Technical data - standard models

Symbol	Port size	Orifice (mm)	Flow kv value *1) (m <sup>3</sup> /h)	Operating pressure *2) (bar)	Weight (kg) *3)	Model *3)
	G1/2	15	4,8	0 ... 16 (25)	1,4	8450200.0000.00000
	1/2 NPT	15	4,8	0 ... 16 (25)	1,4	8451200.0000.00000
	G3/4	20	10	0 ... 10 (16)	1,5	8450300.0000.00000
	3/4 NPT	20	10	0 ... 10 (16)	1,5	8451300.0000.00000
	G1	25	14	0 ... 10	1,8	8450400.0000.00000
	1 NPT	25	14	0 ... 10	1,8	8451400.0000.00000
	G1 1/4	32	23	0 ... 7	2,4	8450500.0000.00000
	1 1/4 NPT	32	23	0 ... 7	2,4	8451500.0000.00000
	G1 1/2	40	30	0 ... 4,5	2,7	8450600.0000.00000
	1 1/2 NPT	40	30	0 ... 4,5	2,7	8451600.0000.00000
	G2	50	37	0 ... 3	3,9	8450700.0000.00000
	2 NPT	50	37	0 ... 3	3,9	8451700.0000.00000

\*1) Cv-value (US) ≈ kv value x 1,2

\*2) For gases and liquid fluids up to 600 mm<sup>2</sup>/s (cSt)

\*3) Without pilot valve

#### ⚠-Note:

For hazardous areas, e. g. Zone 1/2 or 21/22, the kit 1264287 is required.

It contains an additional sign, a silencer as dust shield and a conformity explanation.

The maximum fluid temperature is reduced to 85°C.

**Option selector**

845\*\*\*\*.0000.00000

Thread form	Substitute
ISO G	0
NPT	1
Port size	Substitute
1/2"	2
3/4"	3
1"	4
1 1/4"	5
1 1/2"	6
2"	7

Valve options	Substitute
Normally open (NO), closes with pilot pressure and opens with spring force (pilot pressure 1 ... 10 bar)	01
Double acting; 4/2 or 5/2-way-pilot valve required	08
Electrical position indicator with 2 micro-switches protection class IP 67, LED, 2 m cabel LifYY 2 x 0,25 qmm Type: NAMUR DIN EN 60947-5-6	23
NAMUR interface plate	50

**Notes for 3/2-way pilot valve 84660 / 84680**

<b>Material</b>	Body Aluminium
<b>Pilot fluid temperature</b>	max. +60°C
<b>Pilot pressure</b>	1 ... 10 bar
<b>Standard voltages</b>	24 V d.c., 24 V a.c., 230 V a.c.

**Electrical Data for 3/2-way pilot valve 84660 / 84680**

<b>Design acc. to</b>	DIN VDE 0580
<b>Voltage range</b>	±10%
<b>Duty cycle</b>	100% ED
<b>Protection class</b>	EN 60529 IP65 with mounted socket
<b>Socket</b>	Form A acc. to DIN EN 175301-803 (included)
<b>Technical data</b>	See publication N/en 5.8.640

Further versions on request!

**Notes for 3/2-way pilot valve 97100 hole pattern NAMUR**

<b>Material</b>	Body Aluminium elox
<b>Pilot fluid temperature</b>	-10 ... +50°C (+14 ... +122°F)
<b>Pilot pressure</b>	2 ... 8 bar
<b>Standard voltages</b>	24 V d.c., 24 V a.c., 230 V a.c.

**Electrical Data for 3/2-way pilot valve 97100 hole pattern NAMUR**

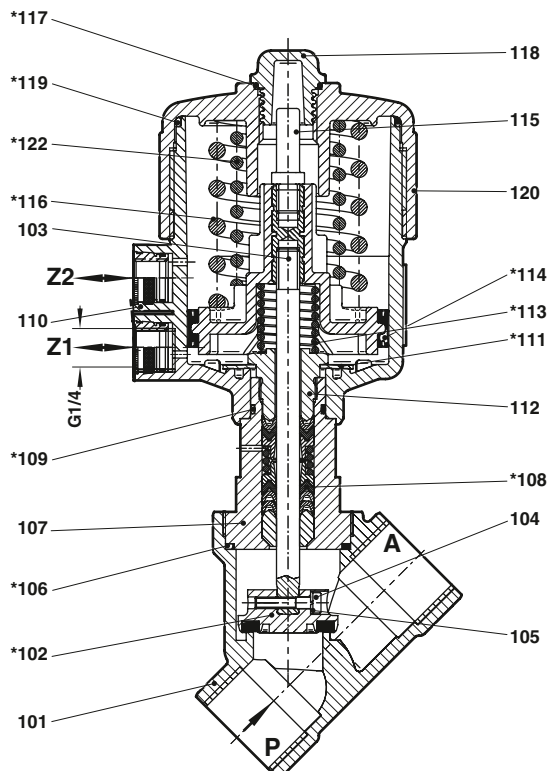
<b>Design acc. to</b>	DIN VDE 0580
<b>Voltage range</b>	±10%
<b>Duty cycle</b>	100% ED
<b>Protection class</b>	EN 60529 IP65 with mounted socket
<b>Socket</b>	Form A acc. to DIN EN 175301-803 (included)
<b>Technical data</b>	See publication N/en 5.4.372

**Mounting accessories (NAMUR)**

Interface plate NAMUR hole pattern for retrofit (Part-Number 1256566) consist of:  
1x NAMUR-interface plate; 2x Adapter screw; 2x O-ring

**Section View**

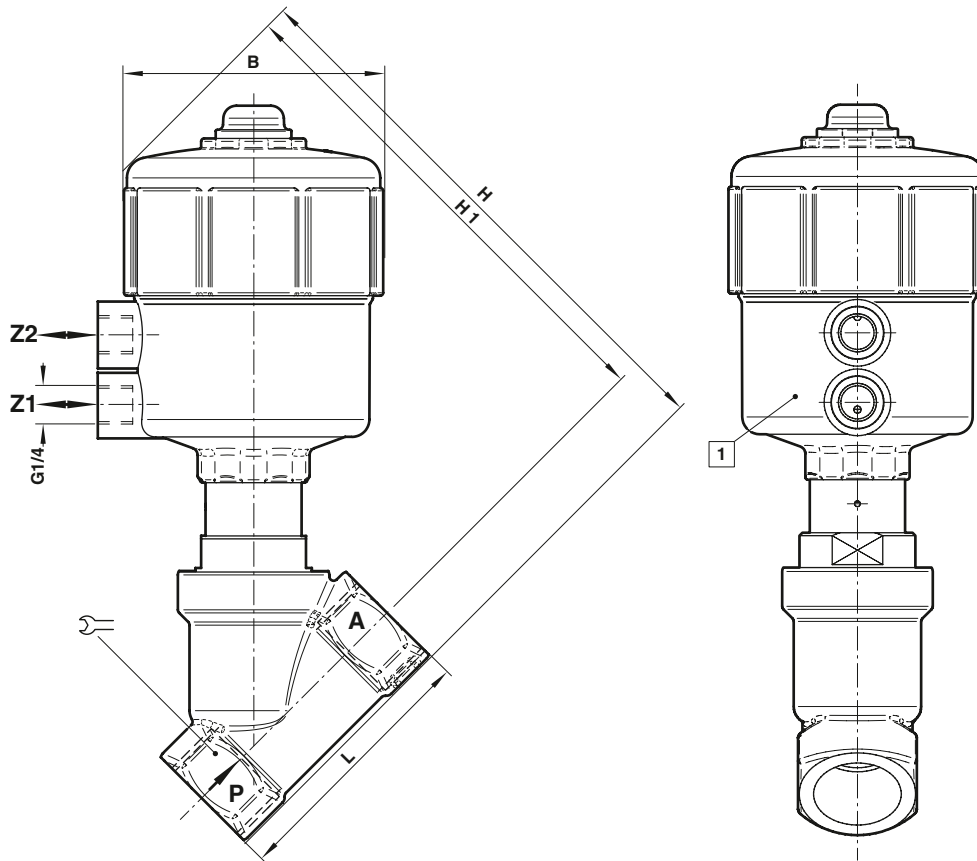
G1/2 ... 2  
1/2 ... 2 NPT




No.	Description
101	Valve body
*102	Valve plate
103	Valve spindle, complete
104	Cheese head cap screw
105	Spring washer
*106	Seal ring
107	Screw piece
*108	Seal packing
*109	O-ring
110	Control head housing cover, bottom part
*111	Cup spring
112	Screw piece
*113	Pressure spring
*114	Cylinder packing
115	Signal pin
*116	Pressure spring
*117	O-ring
118	Cover cap
*119	O-ring
120	Control head housing cover
*122	Pressure spring

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

**Dimensions**
**G1/2 ... 2**  
**1/2 ... 2 NPT**

 Abmessungen in mm  
 Projection/First angle


1 Actuator may be rotated 360°

Port size	B	H	H1	L		Model
G1/2	89,5	177,5	164	65	27	8450200.0000.00000
1/2 NPT	89,5	177,5	164	65	27	8451200.0000.00000
G3/4	89,5	184	168	75	32	8450300.0000.00000
3/4 NPT	89,5	184	168	75	32	8451300.0000.00000
G1	89,5	194,5	174	90	41	8450400.0000.00000
1 NPT	89,5	194,5	174	90	41	8451400.0000.00000
G1 1/4	89,5	209,5	184,5	110	50	8450500.0000.00000
1 1/4 NPT	89,5	209,5	184,5	110	50	8451500.0000.00000
G1 1/2	89,5	208,5	186	120	55	8450600.0000.00000
1 1/2 NPT	89,5	208,5	186	120	55	8451600.0000.00000
G2	89,5	229,5	194,5	150	70	8450700.0000.00000
2 NPT	89,5	229,5	194,5	150	70	8451700.0000.00000

**Note to Pressure Equipment Directive (PED):**

The valves of this series, including the connection size DN 25 (G1), are according to Art. 4 § 3 of the Pressure Equipment Directive (PED) 2014/68/EU (97/23/EG). This means interpretation and production are in accordance to engineers practice wellknown in the member countries. The CE-sign at the valve refers not to the PED. Thus the declaration of conformity is not longer applicable for this directive.

**For valves > DN 25 (G1) Art. 3 § (1) No.1.4 applies:**

The basic requirements of the Enclosure I of the PED must be fulfilled. The CE-sign at the valve includes the PED. A certificate of conformity of this directive will be available on request.

**Note to Electromagnetic Compatibility Guideline (EMC):**

The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 61000-6-3 and EN 61000-6-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline 2014/30/EU (2004/108/EG) satisfied.