

# 2/2-way valves DN 15 to DN 50

for neutral gases and liquids

pressure actuated by external fluid

Seat valves

Internal threads G 1/2 to G 2 or 1/2" NPT to 2" NPT

Operating pressure see table page 2

84 500

84 510

## Description (standard valve)

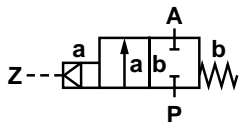
Flow direction:	fixed
Mounting position:	optional
Flow fluid range	
Fluid temperature:	-10 °C up to max. +180 °C
Ambient temperature:	-10 °C up to max. +60 °C
Material body:	Gunmetal Rg5 (2.1096) nickel-plated brass
Seat seal:	PTFE
Internal parts:	Brass (2.0402), Sandvik 1802, Stainless Steel (1.4571)
Seal packing:	PTFE FPM self-adjustable
Pilot fluid range	
Pilot fluid:	neutral gaseous fluids
Fluid temperature:	max. +60 °C
Material body:	Polyamid 66 with glass fibre 30%
Seat seals:	NBR
Internal parts:	Brass (2.0402), Sandvik 1802, 1.4310, 1.8159, 1.1200



## Features

- 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
- With or without mounted pilot valve
- Option pressure actuated by external liquid fluid

## Symbol



## Ordering information

To order, quote model number from table overleaf, e.g. 84 502 00.0000 for a G 1/2 valve without pilot valve.

Characteristic data See page 2 valve and solenoid informations.

Characteristic data

Valves

Part Number ◊	Nominal Diameter (mm)	Port size	Pilot pressure		Operating pressure *		kv-value † (Base m <sup>3</sup> /h)	Weight ** (kg)
			min.	max. (bar)	min	max (bar)		
84 502 00.0000 84 512 00.0000	15	G 1/2 1/2" NPT	3,5	10	0	16,0 (25)	4,80	1,4
84 503 00.0000 84 513 00.0000	20	G 3/4 3/4" NPT	3,5	10	0	10,0 (16)	10,00	1,5
84 504 00.0000 84 514 00.0000	25	G 1 1" NPT	3,5	10	0	10,0	14,00	1,8
84 505 00.0000 84 515 00.0000	32	G 1 1/4 1 1/4" NPT	3,5	10	0	7,0	23,00	2,4
84 506 00.0000 84 516 00.0000	40	G 1 1/2 1 1/2" NPT	3,5	10	0	4,5	30,00	2,7
84 507 00.0000 84 517 00.0000	50	G 2 2" NPT	3,5	10	0	3,0	37,00	3,9

◊ note: 0000 without pilot valve  
0164 with pilot valve for DC  
0165 with pilot valve for AC

State voltage [V] and frequency [Hz]

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

\*\* without pilot valve

† C<sub>V</sub>-value (US) ≈ kv-value x 1,2

Notes for 3/2-way pilot valve

Material body brass 2.0402  
Pilot fluid temperature max. +60 °C  
Pilot pressure: p<sub>max</sub> = 8 bar  
Standard voltages: 24 V =, 24 V ~, 230 V ~

Data for 3/2-way pilot valve

Technical data see publication D107901  
Design acc. to VDE 0580  
Voltage range ±10%  
Duty cycle (ED) 100%  
Protection class to EN 60529 IP 65 (formerly DIN 40050)  
Socket acc. to DIN 43650

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

Material body aluminium elox  
Pilot fluid temperature -10 °C bis +60 °C  
Pilot pressure p<sub>max</sub> = 10 bar  
Standard voltages 24 V =, 24 V ~, 230 V ~  
Design acc. to VDE 0580  
Voltage range ±10%  
Duty cycle (ED) 100%  
Protection class to EN 60529 IP 65 (formerly DIN 40050)  
Socket acc. to DIN 43650

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

Technical data see publication 7503035.XX.XX.XXXX  
Design acc. to VDE 0580  
Voltage range ±10%  
Duty cycle (ED) 100%  
Protection class to EN 60529 IP 65 (formerly DIN 40050)  
Socket acc. to DIN 43650

Options

available at extra cost

XX XXX 01 .XXXX Normally open, closes with pilot pressure and opens with spring force (pilot pressure 1 – 10 bar)  
XX XXX 08 .XXXX Double acting; 4/2 or 5/2-way-pilot valve required  
XX XXX 22 .XXXX Higher operating pressure  
XX XXX 23 .XXXX Double electrical position indicator  
XX XXX 50 .XXXX NAMUR interface plate

On Request several seals: NBR, FKM, EPDM  
stroke limiter  
silencer  
electrical position indicator with proximity switch

Mounting accessories

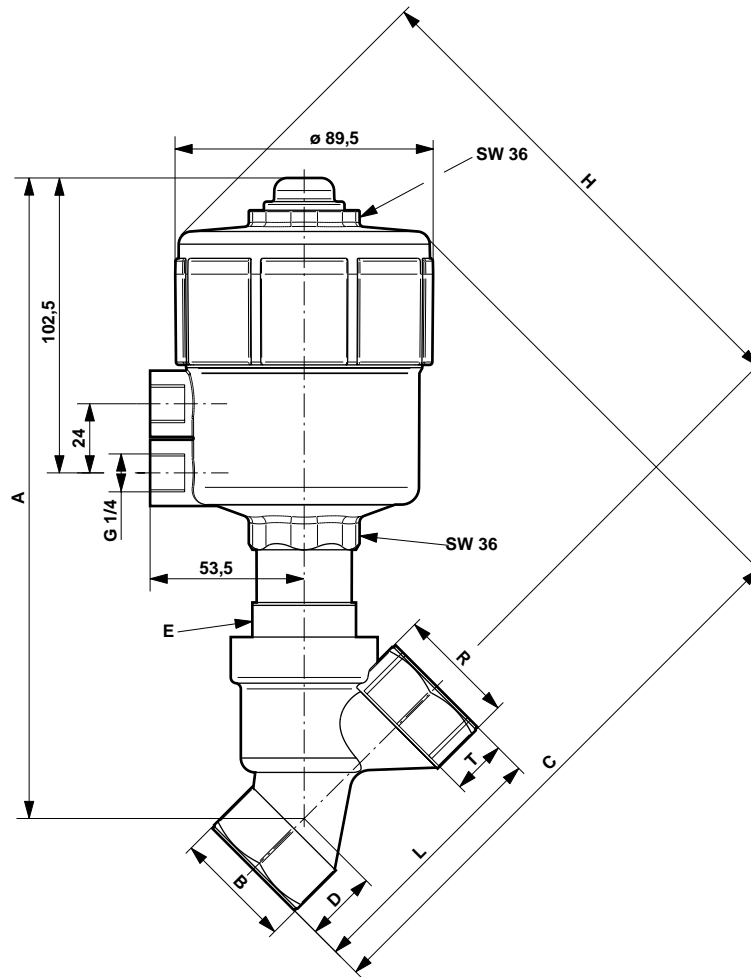
NAMUR

Interface plate NAMUR hole pattern for retrofit, (part number 12 565 66) consist of:  
1x NAMUR interface plate  
2x Adapter screw  
2x O-ring



General Dimensions

Actuator may be rotated 360°



Part Number	A	B	C	D	E	H	L	R	T
84 502 00.0000	204,5	SW 27	183,0	18,5	SW 30	164,0	65	G 1/2	15,0
84 512 00.0000								1/2" NPT	13,0
84 503 00.0000	213,5	SW 32	189,0	21,0	SW 36	168,0	75	G 3/4	16,5
84 513 00.0000								3/4" NPT	14,0
84 504 00.0000	221,5	SW 41	199,0	25,0	SW 36	174,0	90	G 1	19,0
84 514 00.0000								1" NPT	16,5
84 505 00.0000	236,5	SW 50	212,5	28,5	SW 41	184,5	110	G 1 1/4	21,5
84 515 00.0000								1 1/4" NPT	17,0
84 506 00.0000	238,5	SW 55	217,0	31,0	SW 41	186,0	120	G 1 1/2	21,5
84 516 00.0000								1 1/2" NPT	17,0
84 507 00.0000	250,5	SW 70	234,5	40,0	SW 41	194,5	150	G 2	26,0
84 517 00.0000								2" NPT	17,5

EU Manufacturer's Declaration  
as defined in EU Machinery Guideline 89/392/EEC, Appendix II B  
We hereby declare that the pressure actuated valves were developed and designed using the following harmonised standards:

- EN 292 Machine Safety
- EN 983 Pneumatic Systems
- EN 60204-1 Electrical Equipment for Machinery

Note  
These pressure actuated valves are intended for fitting in a machine. They must not be commissioned until it has been established that the machine as a whole conforms to the EU guideline.

Note on EU guideline  
The valves shall be provided with an electrical circuit which ensures the limits of the harmonised standards EN 50081-1 and EN 50082-1 are observed, and hence the requirements of the Electromagnetic Compatibility Guideline (89/336/EEC) satisfied.