

2 WAY (2/2) Y-BODY VALVE



Brass with Polymer Actuator

US 5302

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

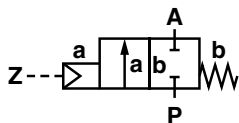
Pilot fluid: neutral gaseous fluids
Fluid temperature: max. +60 °C
Material body: Polyamid 66 with glass fibre 30%
Seat seals: NBR
Internal parts: Brass (2.0402), Sandvik 1802, 1.4310, 1.8159, 1.1200



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

Valves

Part Number ¹	Nominal Diameter (mm)	Port size	Pilot pressure		Operating pressure *		kv-value † (Base m ³ /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		G 3/4 3/4" NPT						
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		G 1 1/4 1 1/4" NPT						
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		G 2 2" NPT						

¹ 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 mm²/s (cSt)

** without pilot valve

† C_V-value (US) ² 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_{max} = 8 bar
Standard voltages: 24 V 1, 24 V 3; 230 V 3

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_{max} = 10 bar
Standard voltages 24 V 1, 24 V 3, 230 V 3
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, FPM, EPDM
stroke limiter
silencer
electrical position indicator with proximity switch

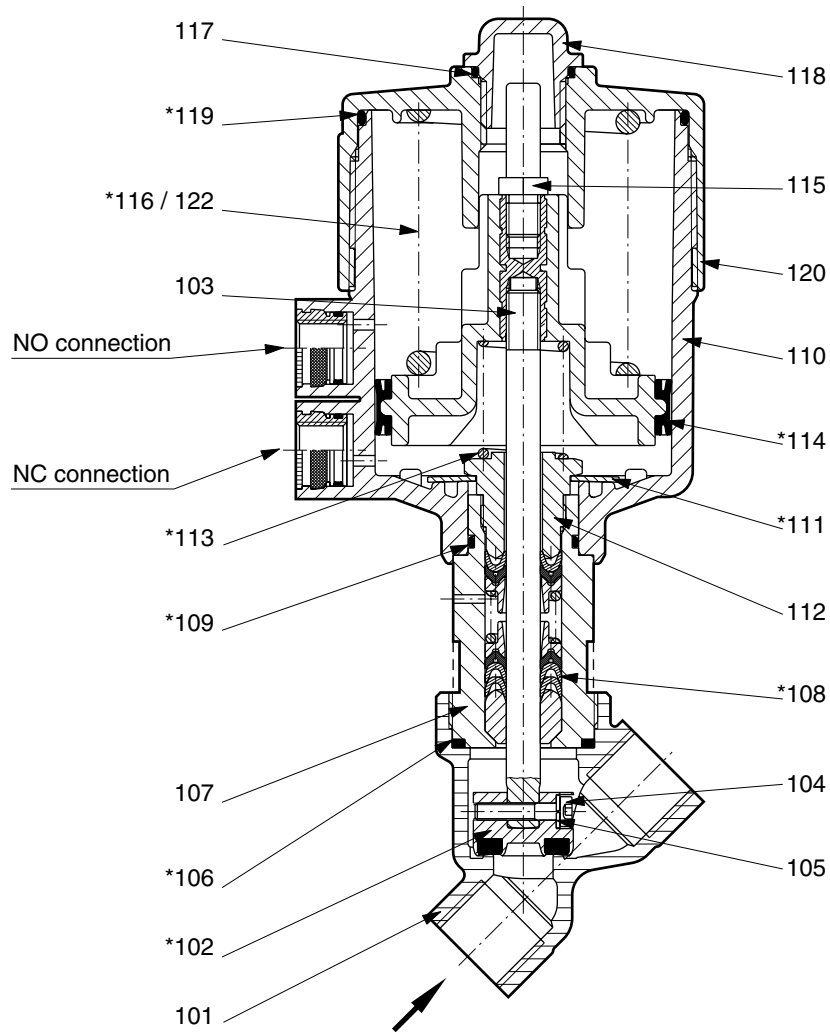
Mounting accessories

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

Section view



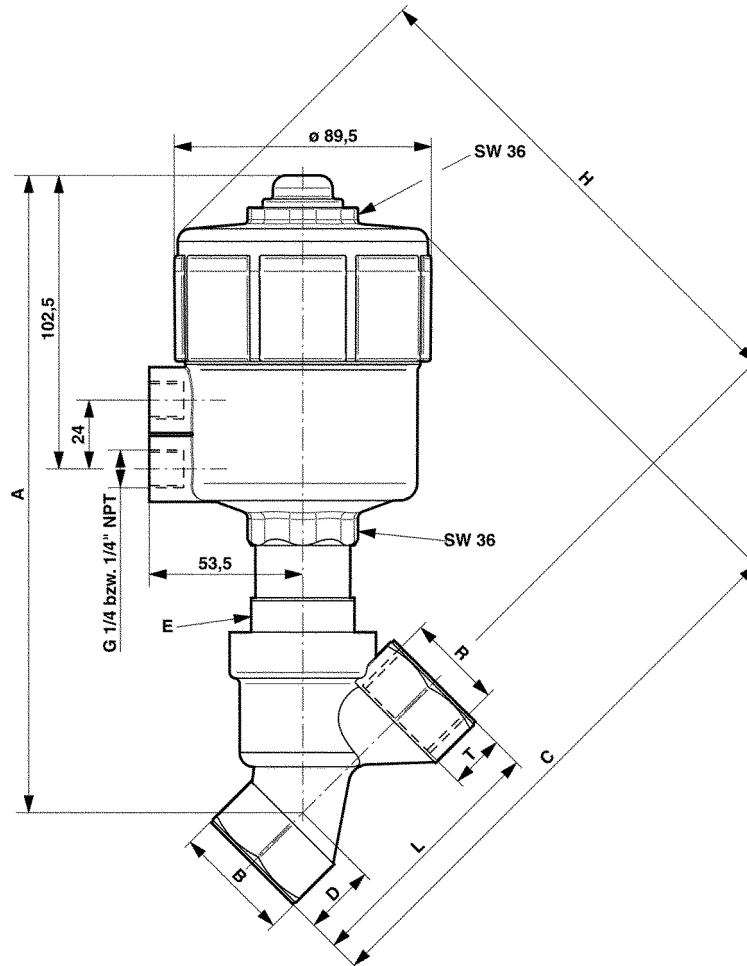
- 101 Valve body
- * 102 Valve plate
- 103 Valve spindle, complete
- 104 Cheese head cap screw
- 105 Spring washer
- * 106 Seal ring
- 107 Screw piece
- * 108 Seal packing
- * 109 O-ring
- 110 Control head housing cover, bottom part
- * 111 Cup spring
- 112 Screw piece
- * 113 Pressure spring

- * 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 Cat no and series no.

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.

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