

3/2 WAY-PLASTIC-PILOT-VALVE

TYPE 602/603

Description

The solenoid valves are electromagnetic, direct actuated pilot valves to control pneumatically operated valve actuators. Applicable media are filtered, lubricated or non lubricated air and neutral gaseous fluids.

Type 602 is equipped with a hollow screw and made for direct mounting on the user.

Type 603 is designed for manifold mounting, where a variable amount of single pilot valves are assembled together and connected to the pneumatically operated valve actuators by pneumatic lines.



Type 602
Banjo with push-in connection
for tube Ø 6mm

Features

- Compact design
- Identical position of all ports for version normally open and normally closed (except connection M5)
- Plastic wrapped electromagnet
- Interchangeable solenoid system
- 360° adjustable position of electromagnet
- Also suitable for coarse vacuum
- Silenced exhaust port
- Manual override (depending on version)
- Any installation position possible
- Cable plug can be mounted turned by 180°
- Combined exhaust optional
- Optional
 - ATEX-Version for explosion-risk areas
 - UL-approval
- Mounting rail for manifold mounting
- Type 603 available as option



Type 602
Banjo with threaded socket G1/8"



Type 603
Manifold assembly

Technical data

Size	DN 1,2 mm
Available control functions (Cf.)	normally closed (NC), Cf.1 normally open (NO), Cf.2
Installation position	any
Manual override	for version normally closed and normally open, (only connection M5) depending on version: rotatable banjo with threaded socket G1/8" or push-in connection for tube Ø 6 mm, thread M5 (Plunger), threaded socket G1/4"
Connection control air supply	depending on version: G1/8" or G1/4" hollow screw (adaption G1/4" within scope of delivery) or threaded socket G1/8"
Connection user	
Housing material	PA
Seal material	FPM
Weight	90g to 160g, depending on version
Working media	filtered, lubricated or non-lubricated air and neutral, gaseous fluids dust content acc. class 4, oil concentration acc. class 4
Ambient temperature	-10°C to +55°C
Media temperature	-10°C to +55°C
Working pressure	0 to 10 bar
Flow rate	60 NL
Switching frequency	max. 5 Hz
Switching time	On 11 ms, Off 20 ms
Available operating voltages	230V / 50 Hz, 110V / 50 Hz, 24V / 50 Hz, 48V DC, 24V DC, 12V DC
Max. voltage tolerance	+/- 10%
Power consumption	Cf.1 and Cf.2 connection M5 3W, Cf.2 4,8W
Waviness	max. 20%
Electrical connection	cable plug type B acc. to DIN43650, pin allocation see operating manual
Protection class	IP65
UL-approval	UL-approval optional
Explosion protection	Ex II 2G EEx m II T4 Ex II 2D IP65 T135 °C

Part list

Nr.	Description	602	602	602	602	602	603	603
		Banjo push-in connection	Banjo socket G1/8"	Banjo push-in connection	Banjo socket G1/8"	Banjo socket G1/8"	Threaded socket G1/4"	Threaded socket G1/4"
	Control function	1	1	2	2	2, P1=M5	1	2
	Figure	1	1	1	1	2	3	3
1	Electromagnet	1	1			1	1	
2	Electromagnet			1	1			1
3	Cable plug	1	1	1	1	1	1	1
4	Cover	1	1	1	1		1	1
5	Space washer			1	1			1
6	Cover for connection M5					1		
7	Valve body + plunger	1	1	1	1	1	1	1
8	Manual override	1	1			1	1	
9	Hollow Screw	1	1	1	1	1		
10.1	Banjo with threaded socket G1/8"		1		1	1		
10.2	Sealing shim for banjo G1/8"		1		1	1		
11	Banjo with push-in connection for tube Ø 6mm	1		1				
12	Flat seal G1/8" for assembly to P2 with hollow screw G1/8"	1	1	1	1	1		
13.1	Adapter for hollow screw G1/8" up to G1/4"	1	1	1	1	1		
13.2	Flat seal G1/4" for assembly to P2 with adapter G1/4"	1	1	1	1	1		
14	Silencer					1		
15	Mounting brackets						2	2
16	O-Ring						1	1

Type 602, Rotatable banjo, Connection code 35 & S5

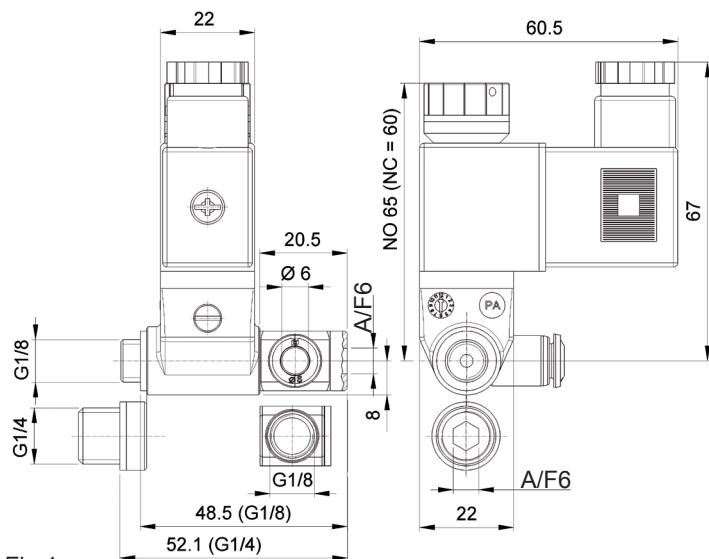
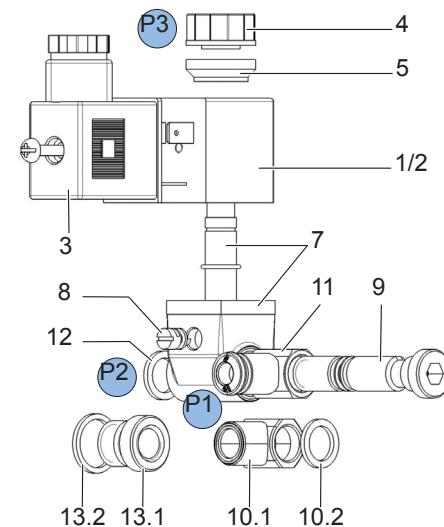


Fig.1



to 8: Manual override for control function 1
to 5: Space washer for control function 2

Type 602, Rotatable banjo, Connection code M5

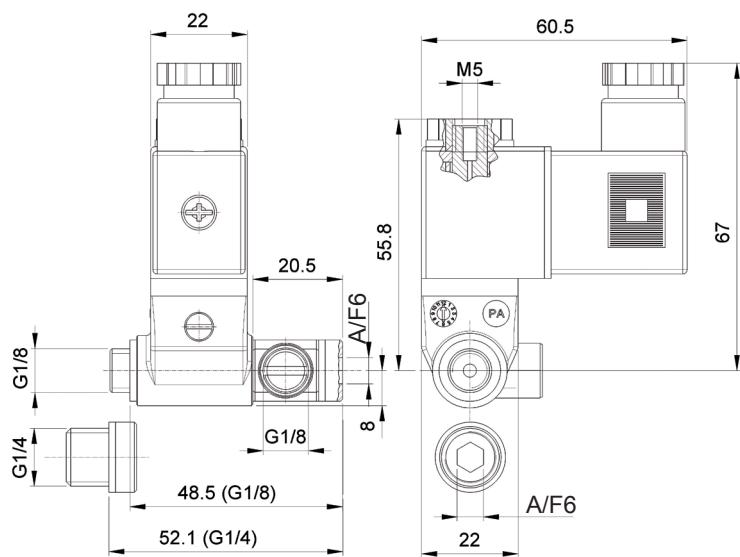
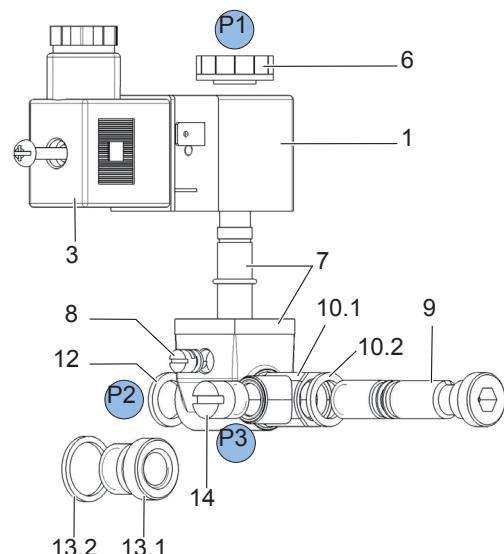


Fig.2



Type 603, Manifold assembly

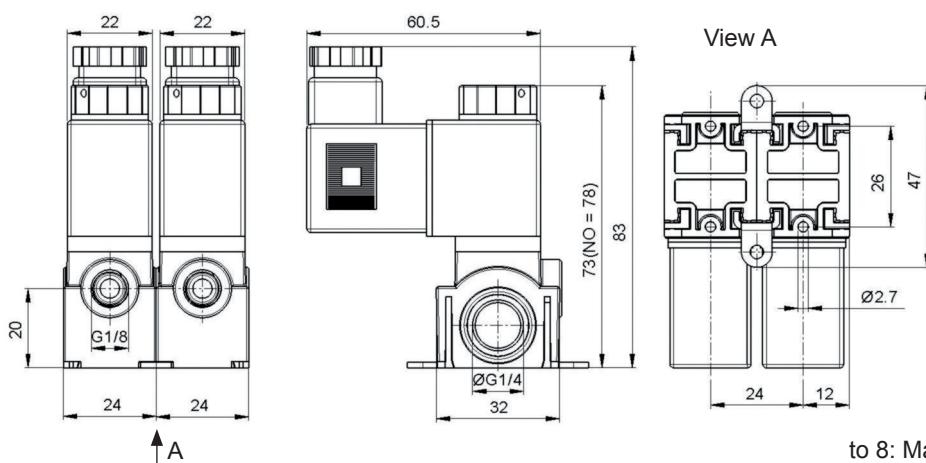
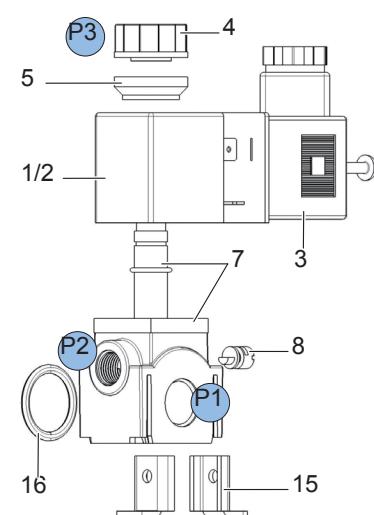


Fig.3

Note:  = Port



to 8: Manual override for control function 1
to 5: Space washer for control function 2

Ordering Key

1	2	3	4	5	6	7	8	9
Type	Size	Connections & switch positions	Valve body material	Seat seal material	Control function	Connection	Cable plug	Operating voltage
Pos.	Description		Code	Code	Specification			
1	Type		602	603				
2	Size		1,2	1,2	DN 1,2 mm			
3	Connections & switch positions		32	32	3/2 Way			
4	Valve body material		24	24	Polyamide			
5	Seat seal material		2	2	FPM			
6	Control function (Cf.)		1 2	1 2	normally closed, NC normally open, NO			
7	Connection		43 35 S5 M5	43 35 S5 M5	Air supply G1/4" User G1/8" For control function 1 and 2 Air supply rotatable G1/8" User G1/8" or G1/4" hollow screw For control function 1 and 2 Air supply rotatable push-in connection for tube Ø 6mm User G1/8" or G1/4" hollow screw For control function 1 and 2 Air supply thread M5 at plunger User G1/8" or G1/4" hollow screw For control function 2			
8	Cable plug		1	1	Cable plug Type B, DIN 43650			
9	Operating voltage		12D 24D 48D 24A 110A 230A	12D 24D 48D 24A 110A 230A	12V DC 24V DC 48V DC 24V / 50 Hz 110V / 50 Hz 230V / 50 Hz			
10	Additional: ATEX Version Ex II 2G EEx m II T4 Ex II 2D IP65 T135 °C		A01 A02	A01	For control function 1, all connections except M5, operating voltage 24V DC + 230V AC For control function 2 with connection 35 + S5 and operating voltage 24V DC			

Standard versions

Type	Cf.	Version	Connection			Manual-override	Fig.
			P1	P2	P3		
602.1.2.32.24.2.1.S5.1.xx*	1	Direct mounting, Banjo	Push-in connection f. tube Ø 6mm	G1/8" or G1/4"	Plunger	Yes	1
602.1.2.32.24.2.1.35.1.xx*	1	Direct mounting, Banjo	Threaded socket G1/8"	G1/8" or G1/4"	Plunger	Yes	1
602.1.2.32.24.2.2.S5.1.xx*	2	Direct mounting, Banjo	Push-in connection f. tube Ø 6mm	G1/8" or G1/4"	Plunger	No	1
602.1.2.32.24.2.2.35.1.xx*	2	Direct mounting, Banjo	Threaded socket G1/8"	G1/8" or G1/4"	Plunger	No	1
602.1.2.32.24.2.2.M5.1.xx*	2	Direct mounting, Banjo	Thread M5 at plunger	G1/8" or G1/4"	G1/8"	Yes	2
603.1.2.32.24.2.1.43.1.xx*	1	Manifold mounting	Threaded socket G1/4"	G1/8"	Plunger	Yes	3
603.1.2.32.24.2.2.43.1.xx*	2	Manifold mounting	Threaded socket G1/4"	G1/8"	Plunger	No	3

*: xx equals for operating voltage. See page 2 "available operating voltages" or page 4 "Ordering Key"!

Accessories:

Filler plug G1/4" for Type 603 for single use / end of manifold

Code 00304.605.G1/4 vni

Mounting rail for manifold mounting Type 603

Code 024.15.530.xx (xx - amount of valves)