

# Pilot valve type PV94/95 3/2-ways



Type PV94

Type PV95

## **Product description**

The PV94/PV95 pilot valve is a direct-acting plunger valve. The 3/2-way solenoid valve is used to activate single-acting pneumatic actuators. The PV94 is designed for dimensions up to DN50, the PV95 for DN65-DN150. It is mounted directly on the actuator via a banjo bolt. A 6% connection is available as an air connection, for the PV94 as well as an additional 6 mm hose connector.

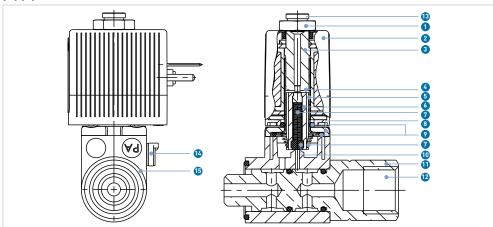
The PV94 is available in nominal size DN1.2, the PV95 in DN2, each with different voltages.

#### Benefits/features

- · Direct acting and compact small valve
- Easy direct attachment to a pneumatic Actuator
- Service-friendly manual operation
- PV94: Push-over coil system
- PV95: Vibration-proof, bolted coil system

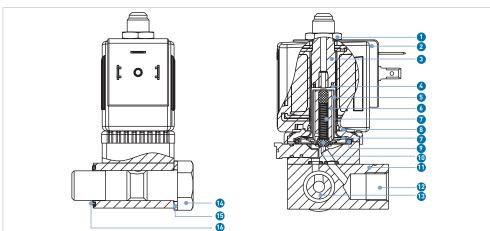
## Technical data

#### **PV94**



- 1 Locknut (Steel)
- Coil (PA)
- 3 Stopper (Stainless steel)
- 4 Shading ring (Copper)
- (5) Guide tube (Stainless steel)
- 6 Magnetic core (Stainless steel)
- Spring (Stainless steel)
- 8 Sub-base (Stahl)
- O-ring (FKM)
- (10) Armature seal (FKM)
- 11) Banjo bold (Brass Nickel plated)
- Presure inlet P (Circuit function C)
- (3) Pressure inlet P (Circuit function D)
- Hand lever (Durethane)
- (FA) Valve body (PA)

#### PV95



- 1 Locknut (Steel)
- 2 Coil (PA)
- Stopper (Stainless steel)
- Shading ring (Copper)
- (5) Guide tube (Stainless steel)
- 6 Magnetic core (Stainless steel)
- Spring (Stainless steel)
- 8 Sub-base (Steel)
- 9 0-ring (FKM)
- Armature seal (FKM)
- (1) Valve body (Aluminum)
- 12 Pressure inlet P
- (13) Pressure inlet A
- (4) Screw (Brass Nickel plated)
- (15) Seal (Aluminum, NBR)
- 6 O-ring (NBR)

Specification	PV94	PV95		
Nominal diameter	DN1.2	DN2		
Housing material	Polyamide	Brass (flange housing) Aluminum anodized (Connector housing)		
Coil material	Polyamide	Polyamide		
Hollow screw	Nickel-plated brass	Nickel-plated brass		
Sealing material	NBR	FKM		
Media	Neutral gases and fluids			
Medium temperature	-10 °C to +60°C	-10 °C to +100 °C		
Ambient temperature	-10 °C to +40°C	max. + 55 °C		
Viscosity	Max.	Max. 21 mm <sup>2</sup> /S		
Port connection	G%"	G1⁄8", G1⁄4"		
Air connection	G1/8", NPT 1/8", tube fitting Ø6mm	G¼", NPT 1/8"		
Supply voltage	24 V DC			
	24 V, 50 – 60 Hz			
		115 V, 50 – 60 Hz		
	230 V	230 V, 50 – 60 Hz		
Voltage tolerance	+/-10 %			

- QNn value for air [l/min] at +20 °C, 6 bar valve inlet, pressure difference 1 bar
- \*\* Pressure data [bar] gauge pressure
- \*\*\* Response time [ms]: Measured at the valve outlet at 6 bar and +20 °C open: pressure buildup 0 90 %, close: pressure release 100 0 %



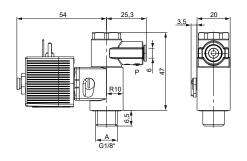
Rated duty

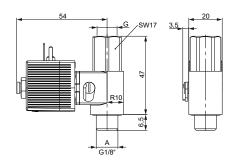
Continuous duty 100 % ED, intermittent duty 40% ED (30min)

Specification	PV94	PV95		
Electrical connections	Per DIN EN 175301-803*	Per DIN EN 175301-803*		
	Form C	Form A		
Manual override	Standard			
Mounting position	User-defined, preferably actuator on top			
Weight	135 g	420 g		
Protection rating	IP 65 with cable plug			
Coil insulation class	В	В		
Circuit function	C (normally closed)	C (normally closed)		
QNn value air*	48 l/min	120 l/min		
Pressure range**	0-10 bar (AC) / 0-6 bar (DC)	0 – 10 bar		
Coil output	4W (AC, DC)	8 W (AC, DC)		
Electrical power startup	9 VA (AC); 4 W (DC)	24 VA (AC), 8 W (DC)		
Electrical power operation	6 VA (AC), 4 W (DC)	17 VA (AC), 8 W (DC)		
Response time open***	7-10 ms (AC) /7-12 ms (DC)	10-15 ms		
Response time close***	9-12 ms (AC)/7-12 ms (DC)	15-20 ms		

- QNn value for air [l/min] at +20 °C, 6 bar valve inlet, pressure difference 1 bar
- \*\* Pressure data [bar] gauge pressure
- \*\*\* Response time [ms]: Measured at the valve outlet at 6 bar and +20 °C open: pressure buildup 0 90 %, close: pressure release 100 0 %

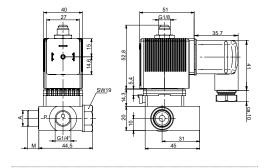
## **Dimensions**





Type PV94 with hose coupling

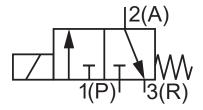
Type PV94 with G1/8" threaded connection



Typ PV95 A = G1/8": M = 6.5 mm A = G1/4": M = 8.0 mm

## **Switching functions**

#### **Circuit function C**



3/2 way direct-acting solenoid valve, normally closed

#### Valve selection guide (metric) / NPT







≤DN65 >DN65



PV94 PV95





Actuator connection G1/8" with adapter union to G1/4"		Actuator connection  G1/8" with adapter union to G1/4"  Compressed air connection			
					Compressed air connection
Metric					NPT
G1/8"	6 mm hose coupling	NPT1/8"	G¼"	NPT1/8"	
			10 bar max.	10 bar max.	
24 V DC	24 V DC	24 V DC	24 V DC	24 V DC	
24 V AC	24 V AC	115 V AC	24 V AC	110 V AC	
110 V AC	110 V AC		110 V AC		
230 V AC	230 V AC		230 V AC		

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.

10/2021-A

© Georg Fischer Piping Systems Ltd, 8201 Schaffhausen/Switzerland Tel. +41 52 631 11 11 • www.gfps.com • E-Mail: info.ps@georgfischer.com

