

3/2-directional valve, electrically operated, Series AS3-SOV-...-POS

- With position inquiry, with integrated sensor
- Compressed air connection G 1/2 G 3/8
- Pipe connection



Version

Poppet valve, Can be assembled into blocks

Parts

3/2-directional valve, electrically operated

Nominal flow

4500 l/min

Nominal flow 1 ▶ 2

4500 l/min

Nominal flow 2 ▶ 3

3200 l/min

Working pressure min./max.

2,5 ... 10 bar

Medium

Compressed air Neutral gases

Medium temperature min./max.

-10 ... 50 °C

Ambient temperature min./max.

-10 ... 50 °C

Sealing principle

Soft sealing

Max. particle size

25 µm

Weight

0,459 kg

Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412007383			G 1/2	G 1/2	G 1/2
R412007381			G 3/8	G 3/8	G 1/2
R412007387			G 1/2	G 1/2	G 1/2
R412007359			G 3/8	G 3/8	G 1/2
R412007336			G 3/8	G 3/8	G 1/2
R412007396			G 3/8	G 3/8	G 1/2
R412007377			G 3/8	G 3/8	G 1/2
R412007398			G 1/2	G 1/2	G 1/2
R412007353			G 3/8	G 3/8	G 1/2
R412007355			G 3/8	G 3/8	G 1/2
R412007360			G 1/2	G 1/2	G 1/2
R412007337			G 1/2	G 1/2	G 1/2
R412007354			G 1/2	G 1/2	G 1/2
R412007356			G 1/2	G 1/2	G 1/2

Part No.	Operational voltage	Power consumption	Electrical connection
	DC	DC	Pilot valve
R412007383	24 V	2 W	Plug, ISO 15217, form C
R412007381	-	-	-
R412007387	-	-	-
R412007359	24 V	2 W	Plug, ISO 15217, form C
R412007336	24 V	2 W	Plug, ISO 15217, form C
R412007396	24 V	2 W	Socket, M12x1
R412007377	24 V	2 W	Plug, ISO 15217, form C
R412007398	24 V	2 W	Socket, M12x1

Part No.	Operational voltage	Power consumption	Electrical connection
	DC	DC	Pilot valve
R412007353	24 V	2 W	Socket, M12x1
R412007355	24 V	2 W	Socket, M12x1
R412007360	24 V	2 W	Plug, ISO 15217, form C
R412007337	24 V	2 W	Plug, ISO 15217, form C
R412007354	24 V	2 W	Socket, M12x1
R412007356	24 V	2 W	Socket, M12x1

Part No.	Electrical connection	Cable length	Fig.	
	Sensor	Sensor		
R412007383	without wire end ferrule, tin-plated	3 m	Fig. 2	1)
R412007381	without wire end ferrule, tin-plated	3 m	Fig. 1	2)
R412007387	without wire end ferrule, tin-plated	3 m	Fig. 1	2)
R412007359	Plug, M8, 3-pin, with knurled screw	0,3 m	Fig. 2	1)
R412007336	Plug, M12, 3-pin, with knurled screw	0,3 m	Fig. 2	1)
R412007396	without wire end ferrule, tin-plated	3 m	Fig. 3	1)
R412007377	without wire end ferrule, tin-plated	3 m	Fig. 2	1)
R412007398	without wire end ferrule, tin-plated	3 m	Fig. 3	1)
R412007353	Plug, M8, 3-pin, with knurled screw	0,3 m	Fig. 3	1)
R412007355	Plug, M12, 3-pin, with knurled screw	0,3 m	Fig. 3	1)
R412007360	Plug, M8, 3-pin, with knurled screw	0,3 m	Fig. 2	1)
R412007337	Plug, M12, 3-pin, with knurled screw	0,3 m	Fig. 2	1)
R412007354	Plug, M8, 3-pin, with knurled screw	0,3 m	Fig. 3	1)
R412007356	Plug, M12, 3-pin, with knurled screw	0,3 m	Fig. 3	1)

Nominal flow Q_n with secondary pressure $p_2 = 6$ bar at $\Delta p = 1$ bar, MO = Manual override, Electronic sensor included in scope of delivery (assembled)., For sensor connection, see the selection table.

- 1) Basic valve with pilot valve
- 2) Basic valve without pilot valve

Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

Can be used in circuits with increased efficiency.

An ST6 sensor (contactless) is used to detect the switching position in the non-actuated state (position: exhaust).

The sensor signal is visible on the front of the cover

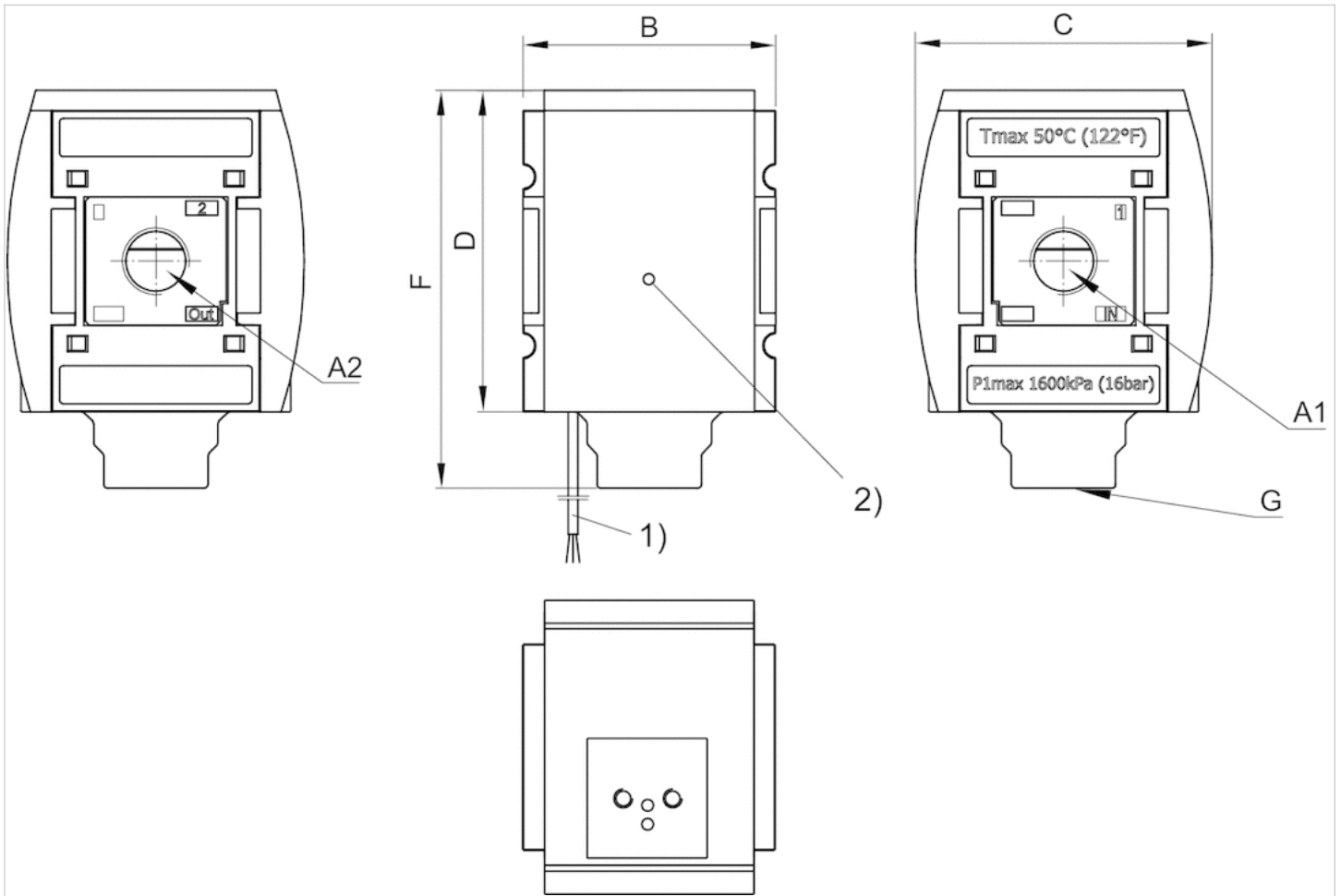
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by 180° about the vertical axis. Please see the operating instructions for further details.

Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber
Threaded bushing	Die cast zinc

Dimensions

Fig. 1: 3/2-directional valve without pilot valve with porting configuration for series DO16



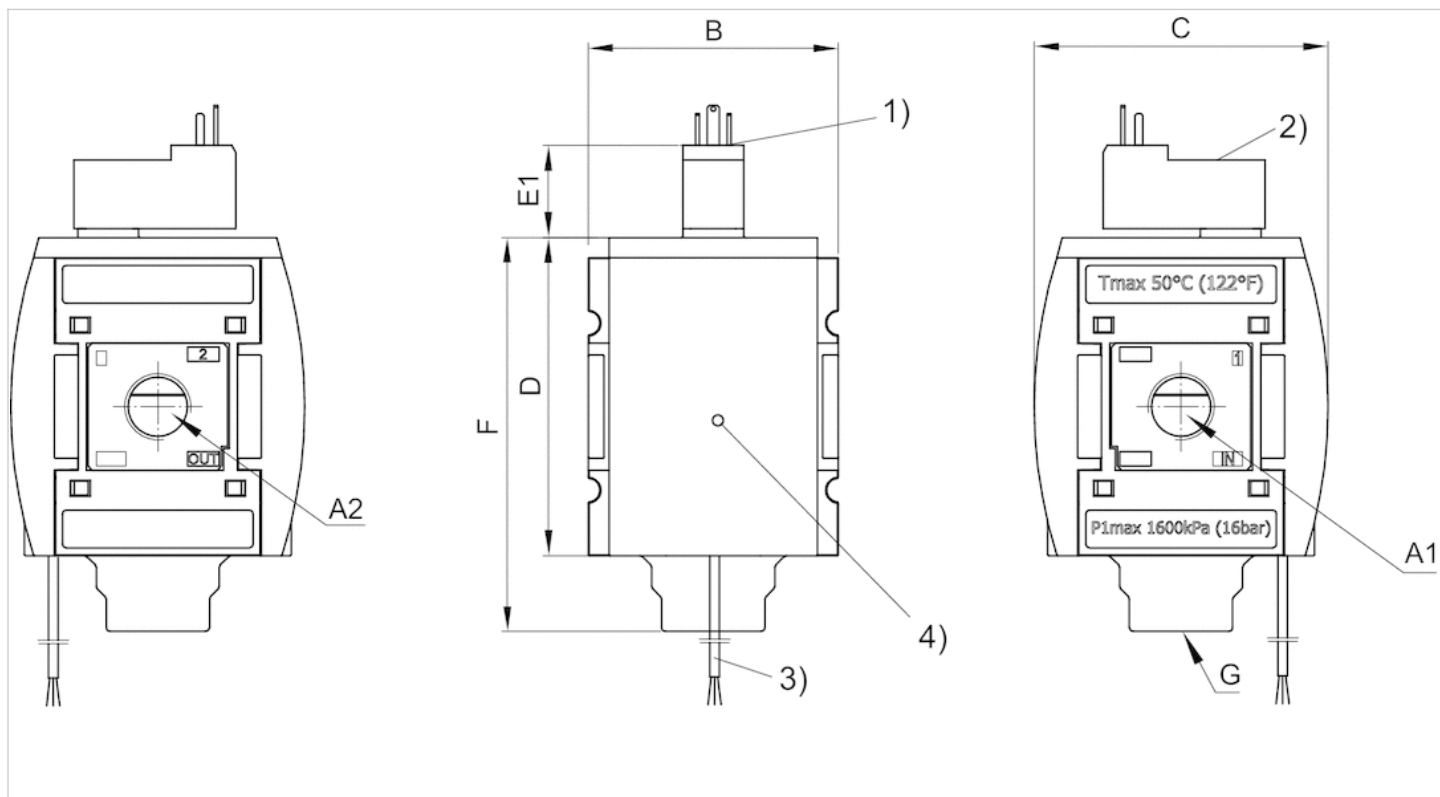
- A1 = input
- A2 = output
- 1) Connection cable
- 2) Optical switch status indicator

Dimensions in mm

A1	A2	B	C	D	F	G
G 3/8	G3/8	63	74	80	99	G1/2
G 1/2	G1/2	63	74	80	99	G1/2

Dimensions

Fig. 2: 3/2 directional valve with pilot valve and connection for valve plug connector form C



A1 = input
A2 = output

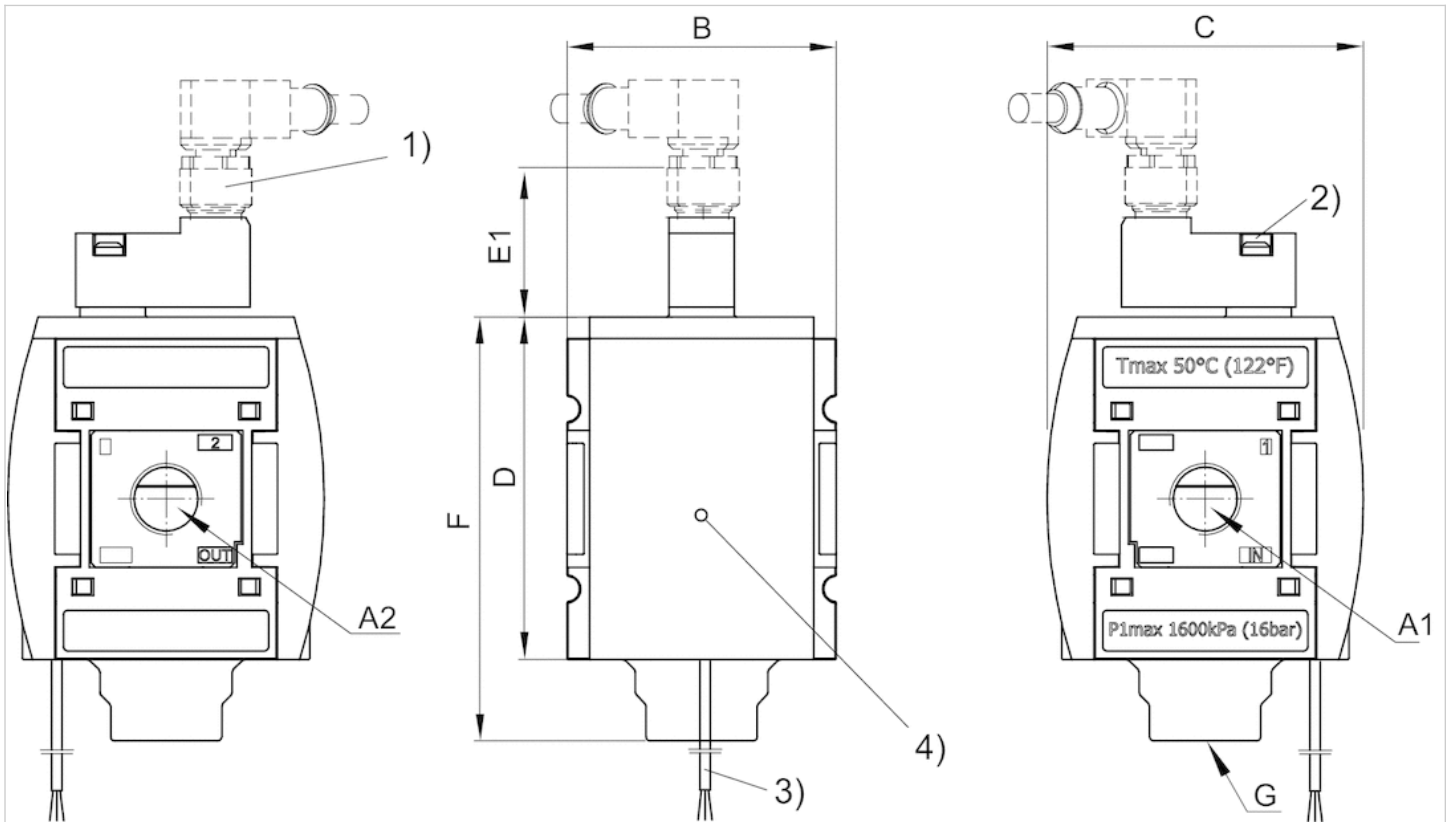
- 1) Electr. connection: valve plug connector form C, ISO 15217
- 2) Manual override
- 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

A1	A2	B	C	D	E1	F	G
G 1/2	G1/2	63	74	80	23.2	99	G1/2
G 3/8	G3/8	63	74	80	23.2	99	G1/2
G 1/2	G1/2	63	74	80	23.2	99	G1/2

Dimensions

Fig. 3: 3/2-directional valve with pilot valve push-in fitting M12x1



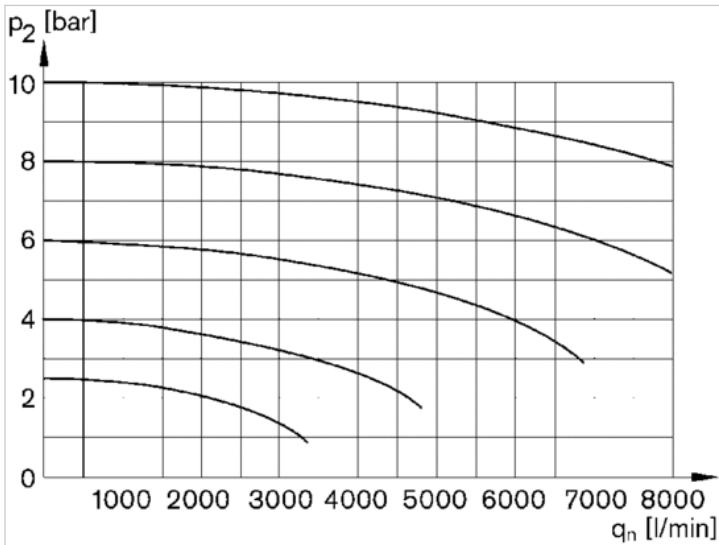
- A1 = input A2 = output
- 1) plug M12
- 2) Manual override
- 3) Connection cable
- 4) Optical switch status indicator

Dimensions in mm

A1	A2	B	C	D	E1	F	G
G 3/8	G3/8	63	74	80	39	99	G1/2
G 1/2	G1/2	63	74	80	39	99	G1/2
G 3/8	G3/8	63	74	80	39	99	G1/2
G 1/2	G1/2	63	74	80	39	99	G1/2

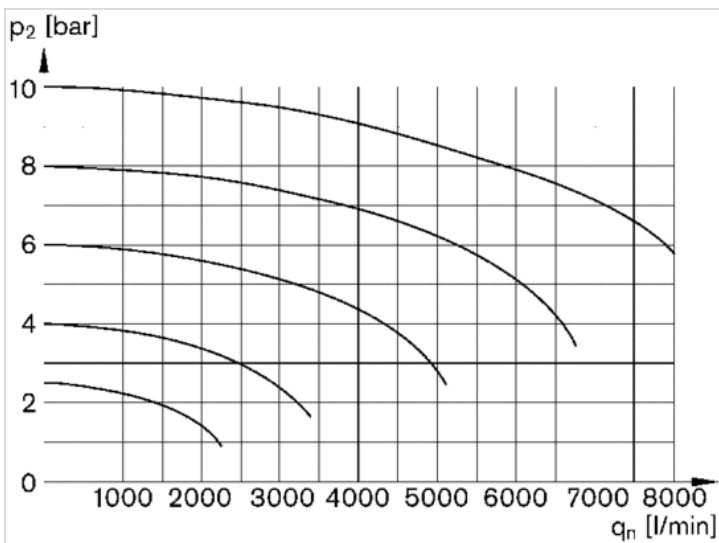
Diagrams

Flow rate characteristic



p2 = secondary pressure
qn = nominal flow

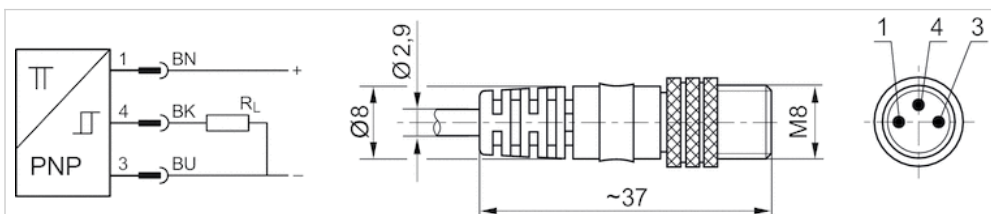
Rear exhaust



p2 = secondary pressure
qn = nominal flow

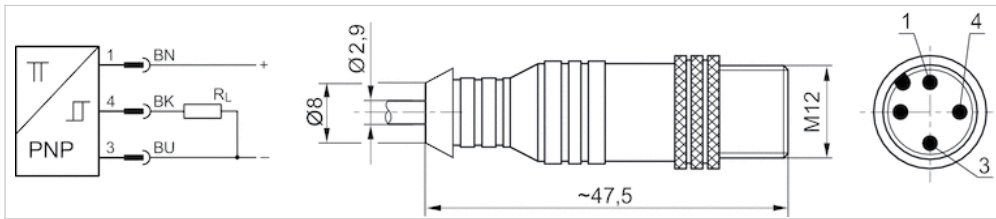
Pin assignments

PIN assignment sensor plug M8



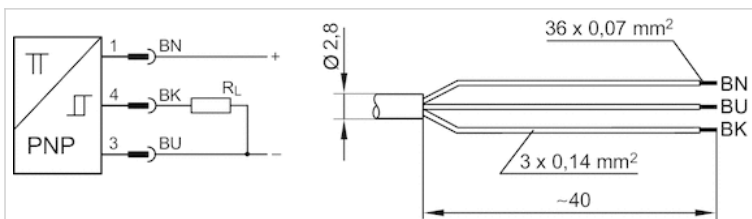
Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)

PIN assignment sensor plug M12



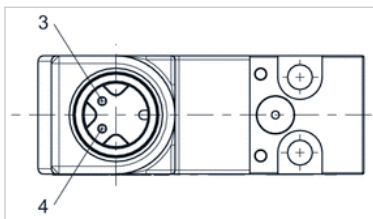
Pin assignment: 1 = (+) 3 = (-) 4 = (OUT)

Sensor pin assignment tin-plated wire ends



BN = brown BK = black BU = blue

Pin assignment M12x1



3: +/-

4: +/-