





















# 3/2-directional valve, electrically operated, Series AS2-SOV

- Compressed air connection G 1/4 G 3/8
- Pipe connection
- ATEX optional



Version	Poppet valve, Can be assembled into blocks
Parts	3/2-directional valve, electrically operated
Nominal flow	See table below
Nominal flow 1 ▶ 2	2000 l/min
Nominal flow 2 ▶ 3	380 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
Protection class acc. to DIN EN 61140 with plug	See table below
Weight	0,219 kg

## Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412006264		—	G 1/4	G 1/4	G 1/4
R412006268		—	G 3/8	G 3/8	G 1/4
R412006258		—	G 1/4	G 1/4	G 1/4
R412006259		—	G 3/8	G 3/8	G 1/4
R412006265			G 1/4	G 1/4	G 1/4
R412006266			G 1/4	G 1/4	G 1/4
R412006267			G 1/4	G 1/4	G 1/4
R412006269			G 3/8	G 3/8	G 1/4
R412006270			G 3/8	G 3/8	G 1/4
R412006271			G 3/8	G 3/8	G 1/4
R412006380			G 1/4	G 1/4	G 1/4
R412006381			G 3/8	G 3/8	G 1/4

Part No.	Operationalvoltage	Operationalvoltage	Operationalvoltage	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R412006264	-	-	-	-
R412006268	-	-	-	-
R412006258	-	-	-	-
R412006259	-	-	-	-
R412006265	24 V	-	-	2 W
R412006266	-	110 V	110 V	-
R412006267	-	220 V	230 V	-
R412006269	24 V	-	-	2 W

Part No.	Operationalvoltage	Operationalvoltage	Operationalvoltage	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R412006270	-	110 V	110 V	-
R412006271	-	220 V	230 V	-
R412006380	24 V	-	-	2 W
R412006381	24 V	-	-	2 W

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Flow
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz	Qn
R412006264	-	-	-	-	2000 l/min
R412006268	-	-	-	-	2000 l/min
R412006258	-	-	-	-	2000 l/min
R412006259	-	-	-	-	2000 l/min
R412006265	-	-	-	-	2000 l/min
R412006266	1,6 VA	1,4 VA	2,2 VA	1,6 VA	2000 l/min
R412006267	1,6 VA	1,4 VA	2,2 VA	1,6 VA	2000 l/min
R412006269	-	-	-	-	2000 l/min
R412006270	1,6 VA	1,4 VA	2,2 VA	1,6 VA	2000 l/min
R412006271	1,6 VA	1,4 VA	2,2 VA	1,6 VA	2000 l/min
R412006380	-	-	-	-	2000 l/min
R412006381	-	-	-	-	-

Part No.	Protection class	Electrical connection	Connector standard
		Pilot valve	
R412006264	-	-	-
R412006268	-	-	-
R412006258	-	-	-
R412006259	-	-	-
R412006265	IP65	Plug, ISO 15217, form C	ISO 15217
R412006266	IP65	Plug, ISO 15217, form C	ISO 15217
R412006267	IP65	Plug, ISO 15217, form C	ISO 15217
R412006269	IP65	Plug, ISO 15217, form C	ISO 15217
R412006270	IP65	Plug, ISO 15217, form C	ISO 15217
R412006271	IP65	Plug, ISO 15217, form C	ISO 15217
R412006380	IP65	Plug, M12x1	-
R412006381	IP65	Plug, M12x1	-

Part No.	basic valve with electrical connector
R412006264	Basic valve without pilot valve
R412006268	Basic valve without pilot valve
R412006258	Basic valve without pilot valve, with CNOMO subbase
R412006259	Basic valve without pilot valve, with CNOMO subbase
R412006265	Basic valve with pilot valve
R412006266	Basic valve with pilot valve
R412006267	Basic valve with pilot valve
R412006269	Basic valve with pilot valve
R412006270	Basic valve with pilot valve
R412006271	Basic valve with pilot valve
R412006380	Basic valve with pilot valve
R412006381	Basic valve with pilot valve

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 6$  bar at  $\Delta p = 1$  bar

1) Suitable for use in Ex zones 1, 2, 21, 22

## Technical information

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

ATEX optional: The ATEX ID depends on the selected pilot valve.

A short silencer is required for wall mounting (see accessories e.g. R412004817).

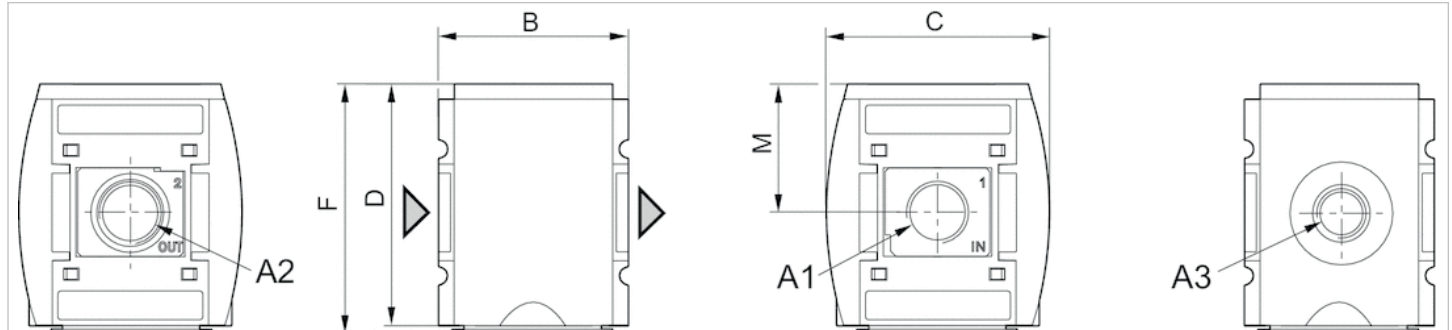
## Technical information

### 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 D016



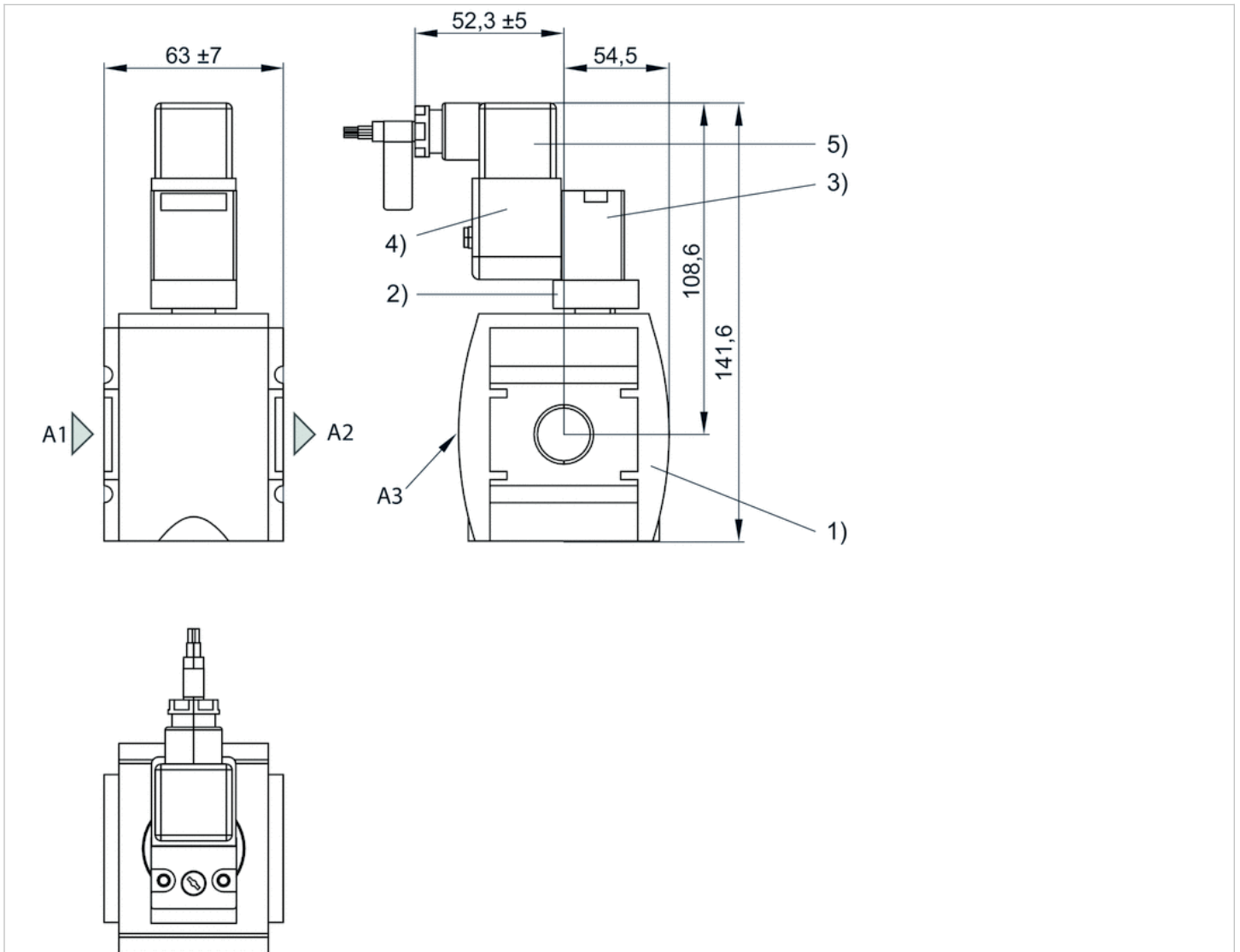
A1 = input A2 = output A3 = ventilation port

### Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 1/4	G 1/4	G 1/4	52	59	65	67	34
G 3/8	G 3/8	G 1/4	52	59	65	67	34

## Dimensions

Fig. 2: 3/2 directional valve with transition plate (suitable for ATEX)

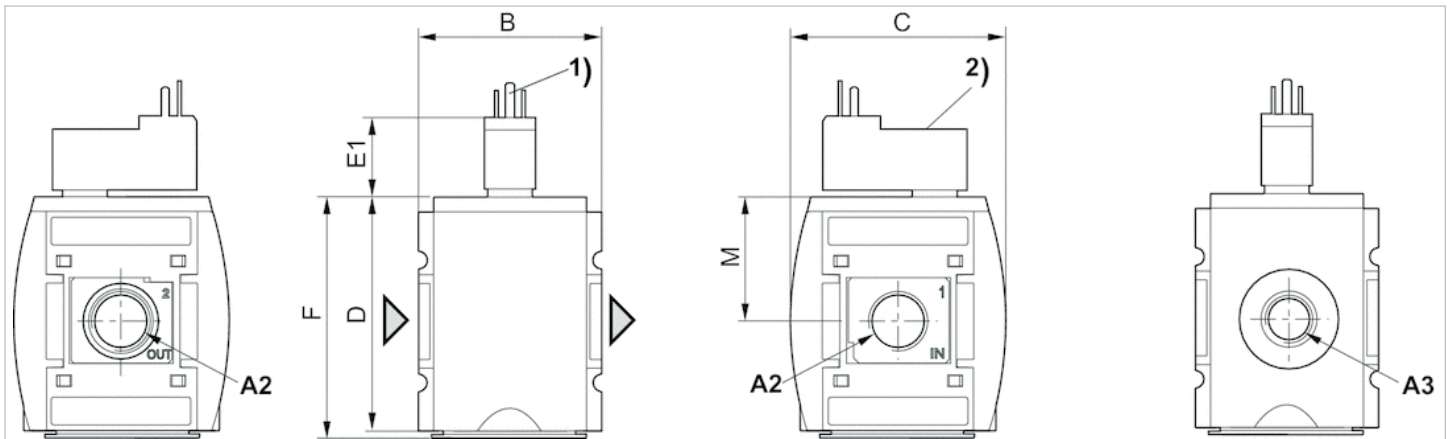


A1 = input A2 = output A3 = ventilation port

1) Shut-off valve 2) Transition plate 3) Pilot valve 4) Coil 5) Electrical connector

See accessories for pilot valve and coil

### 3/2-directional valve with pilot valve and port for electrical connector form C



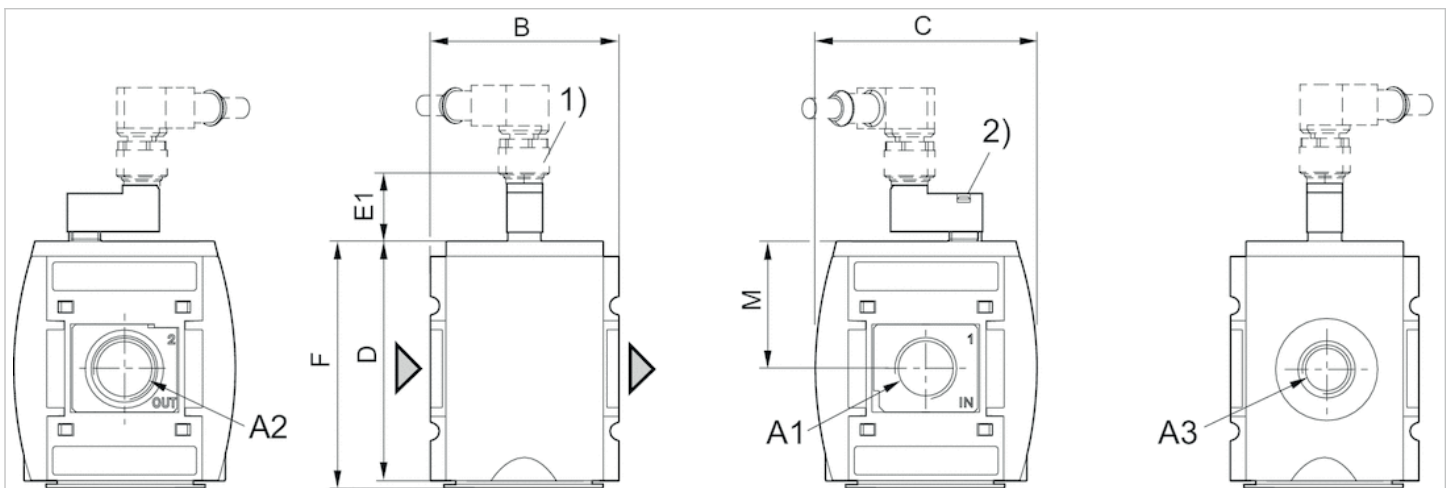
A1 = input A2 = output A3 = ventilation port  
 1) For valve plug connectors according to ISO 15217 (form C)  
 2) Manual override

#### Dimensions in mm

A1	G 1/4	A3	B	C	D	F	M
G 1/4	G 1/4	G 1/4	52	59	65	67	34
G 3/8	G 3/8	G 1/4	52	59	65	67	34

#### Dimensions

Fig. 4: 3/2-directional valve with pilot valve push-in fitting M12x1



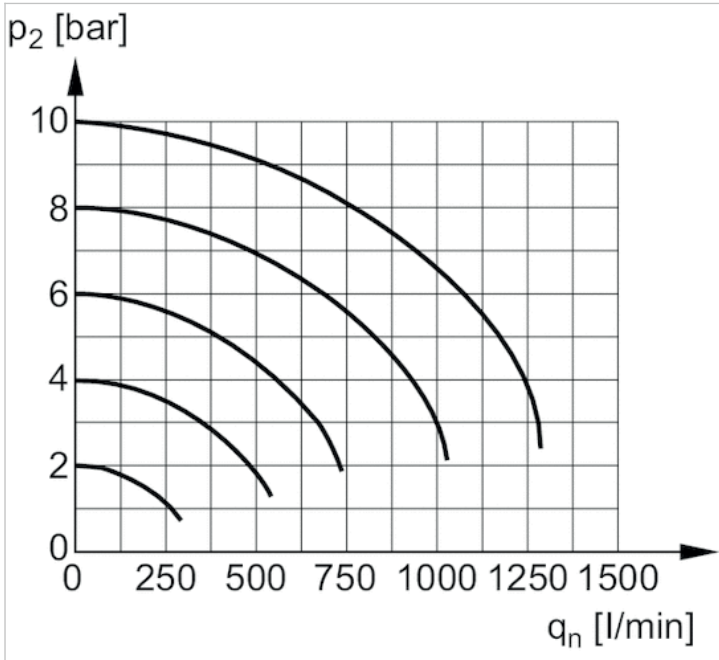
A1 = input A2 = output A3 = ventilation port  
 1) plug M12  
 2) Manual override

#### Dimensions in mm

A1	A2	A3	B	C	D	E1	F	M
G 1/4	G 1/4	G 1/4	52	59	65	39	67	34
G 3/8	G 3/8	G 1/4	52	59	65	39	67	34

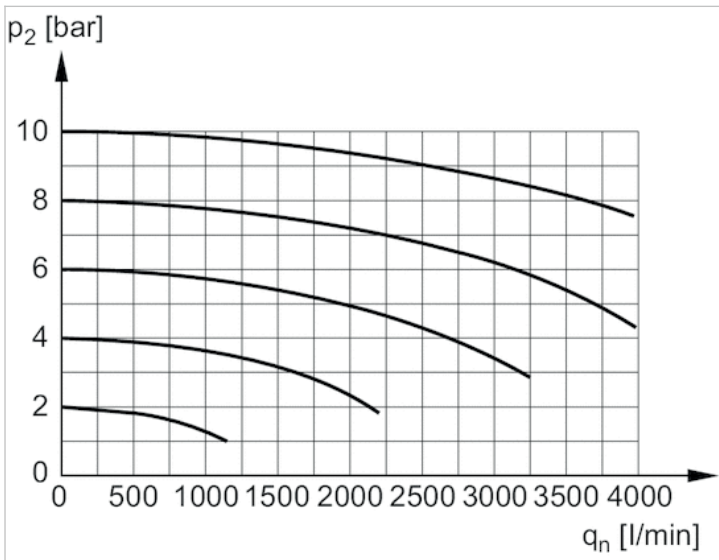
## Diagrams

### Rear exhaust



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

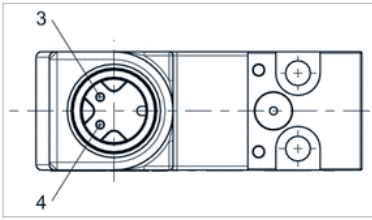
### Flow rate characteristic



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Pin assignments

### Pin assignment M12x1



3: +/-

4: +/-

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

- Compressed air connection G 3/8 G 1/2
- Pipe connection
- ATEX optional



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
Protection class acc. to DIN EN 61140 with plug	IP65
Weight	0,459 kg

## Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412007265			G 3/8	G 3/8	G 1/2
R412007266			G 3/8	G 3/8	G 1/2
R412007267			G 3/8	G 3/8	G 1/2
R412007269			G 1/2	G 1/2	G 1/2
R412007270			G 1/2	G 1/2	G 1/2
R412007397			G 3/8	G 3/8	G 1/2
R412007271			G 1/2	G 1/2	G 1/2
R412007258		—	G 3/8	G 3/8	G 1/2
R412007264		—	G 3/8	G 3/8	G 1/2
R412007259		—	G 1/2	G 1/2	G 1/2
R412007268		—	G 1/2	G 1/2	G 1/2
R412007391			G 1/2	G 1/2	G 1/2

Part No.	Operationalvoltage	Operationalvoltage	Operationalvoltage	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R412007265	24 V	-	-	2 W
R412007266	-	110 V	110 V	-
R412007267	-	220 V	230 V	-
R412007269	24 V	-	-	2 W
R412007270	-	110 V	110 V	-
R412007397	24 V	-	-	2 W
R412007271	-	220 V	230 V	-
R412007258	-	-	-	-



Part No.	Operationalvoltage	Operationalvoltage	Operationalvoltage	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R412007264	-	-	-	-
R412007259	-	-	-	-
R412007268	-	-	-	-
R412007391	24 V	-	-	2 W

Part No.	Holding power	Holding power	Switch-on power	Switch-on power
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz
R412007265	-	-	-	-
R412007266	1,6 VA	1,4 VA	2,2 VA	1,6 VA
R412007267	1,6 VA	1,4 VA	2,2 VA	1,6 VA
R412007269	-	-	-	-
R412007270	1,6 VA	1,4 VA	2,2 VA	1,6 VA
R412007397	-	-	-	-
R412007271	1,6 VA	1,4 VA	2,2 VA	1,6 VA
R412007258	-	-	-	-
R412007264	-	-	-	-
R412007259	-	-	-	-
R412007268	-	-	-	-
R412007391	-	-	-	-

Part No.	Electrical connection	Connector standard
	Pilot valve	
R412007265	Plug, ISO 15217, form C	ISO 15217
R412007266	Plug, ISO 15217, form C	ISO 15217
R412007267	Plug, ISO 15217, form C	ISO 15217
R412007269	Plug, ISO 15217, form C	ISO 15217
R412007270	Plug, ISO 15217, form C	ISO 15217
R412007397	Plug, M12x1	ISO 15217
R412007271	Plug, ISO 15217, form C	ISO 15217
R412007258	-	-
R412007264	-	-
R412007259	-	-
R412007268	-	-
R412007391	Plug, M12x1	EN 175301-803, form B

Part No.	basic valve with electrical connector
R412007265	Basic valve with pilot valve
R412007266	Basic valve with pilot valve
R412007267	Basic valve with pilot valve
R412007269	Basic valve with pilot valve
R412007270	Basic valve with pilot valve
R412007397	Basic valve with pilot valve
R412007271	Basic valve with pilot valve
R412007258	Basic valve without pilot valve, with CNOMO subbase
R412007264	Basic valve without pilot valve
R412007259	Basic valve without pilot valve, with CNOMO subbase
R412007268	Basic valve without pilot valve
R412007391	Basic valve with pilot valve

Nominal flow  $Q_n$  with secondary pressure  $p_2 = 6 \text{ bar}$  at  $\Delta p = 1 \text{ bar}$

- 1) Suitable for use in Ex zones 1, 2, 21, 22
- 2) With valve plug connector, EN 175301-803, form B

## Technical information

The pressure dew point must be at least  $15 \text{ }^\circ\text{C}$  under ambient and medium temperature and may not exceed  $3 \text{ }^\circ\text{C}$ .

ATEX optional: The ATEX ID depends on the selected pilot valve.

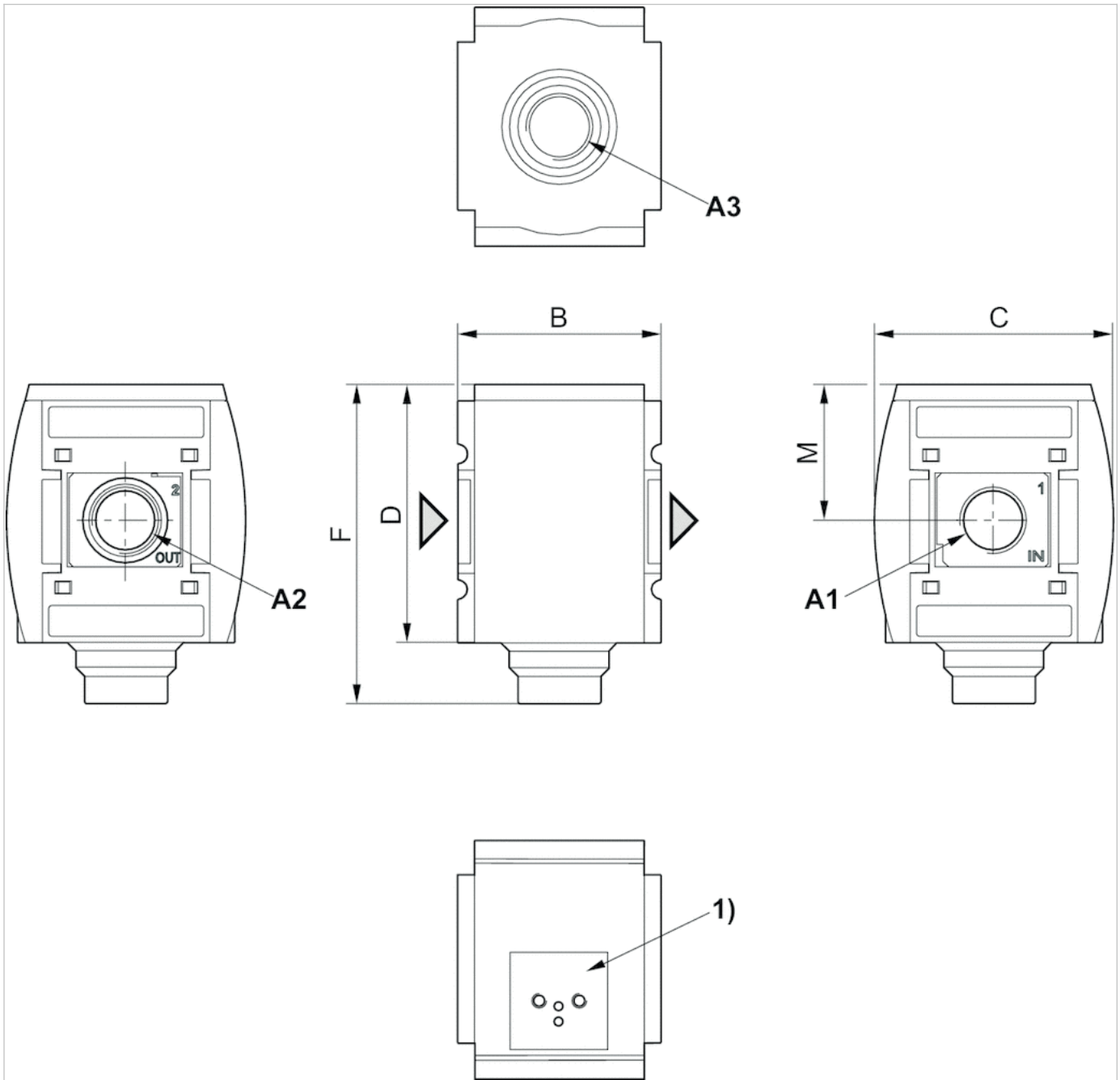
A change in the flow direction (from air supply on the left to air supply on the right) occurs by rotating installation by  $180^\circ$  about the vertical axis. Please see the operating instructions for further details.

## 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



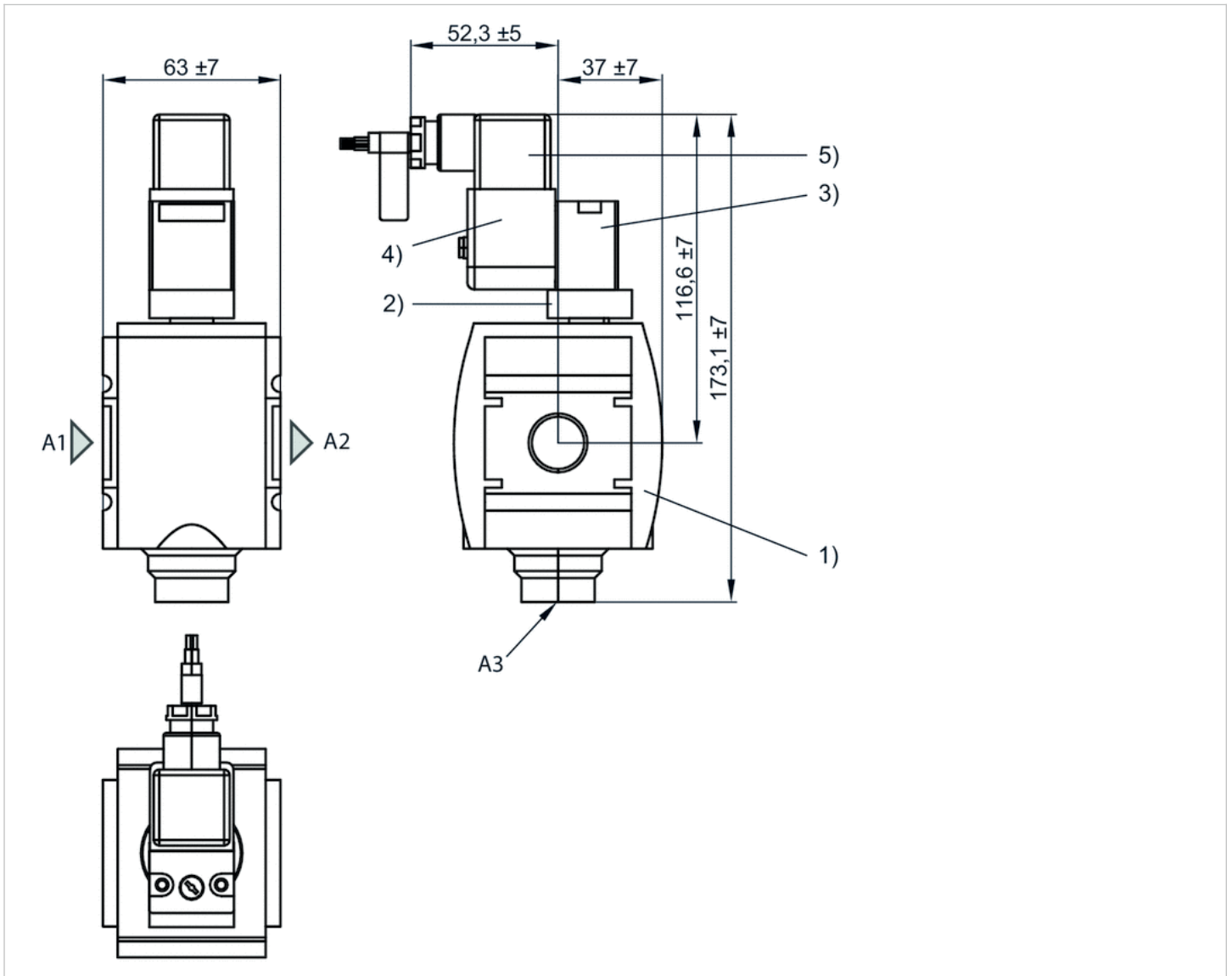
A1 = input  
 A2 = output  
 A3 = ventilation port  
 1) For pilot valve series DO16

## Dimensions in mm

A1	A2	A3	B	C	D	F	M
G 3/8	G 3/8	G 1/2	63	74	80	99	42.5
G 1/2	G 1/2	G 1/2	63	74	80	99	42.5

## Dimensions

Fig. 2: 3/2 directional valve with transition plate (suitable for ATEX)



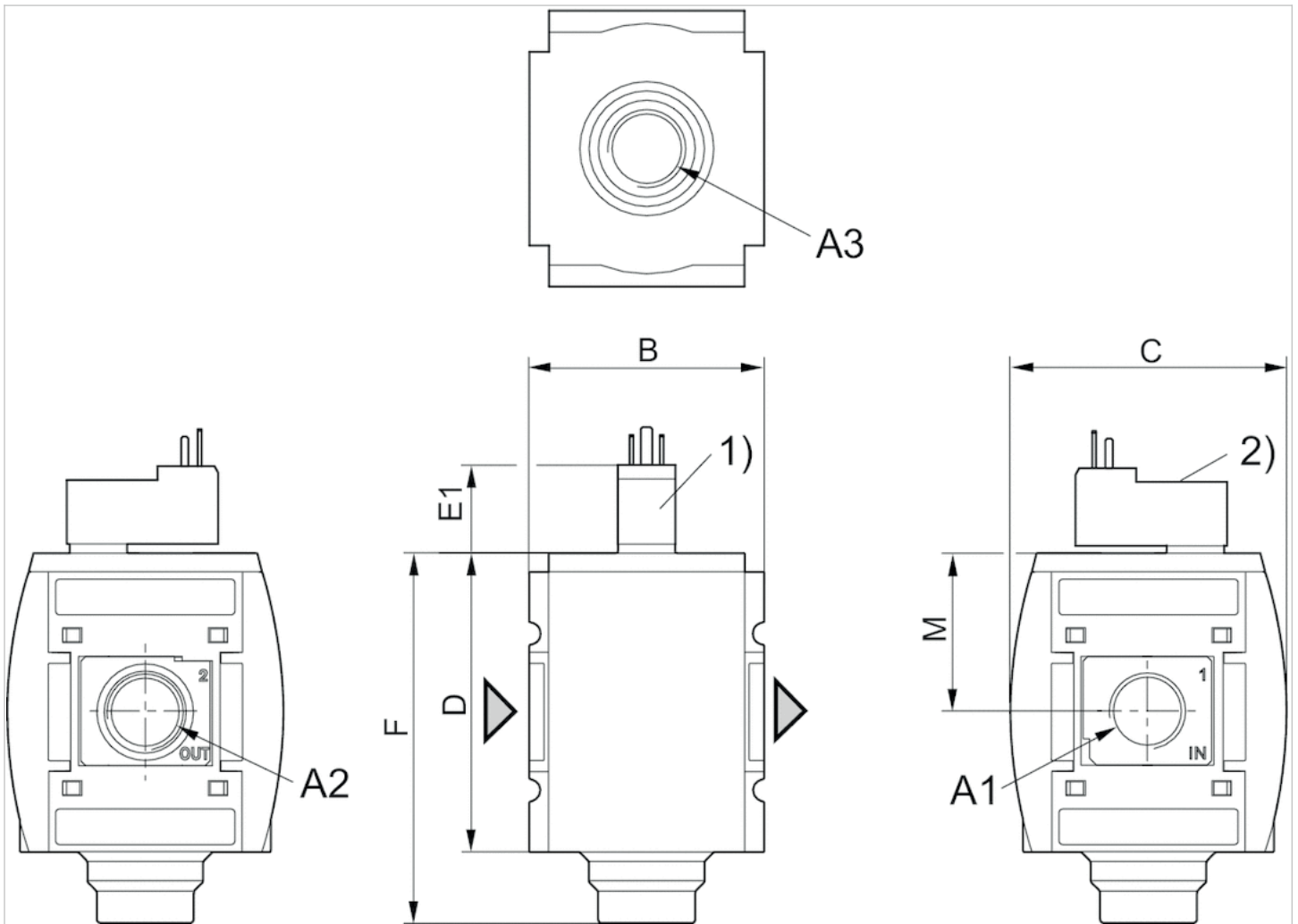
A1 = input A2 = output

A3 = ventilation port

1) Shut-off valve 2) Transition plate 3) Pilot valve 4) Coil 5) Electrical connector

See accessories for pilot valve and coil

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



A1 = input A2 = output

A3 = ventilation port

1) Connection for valve plug connector according to ISO 15217 (form C)

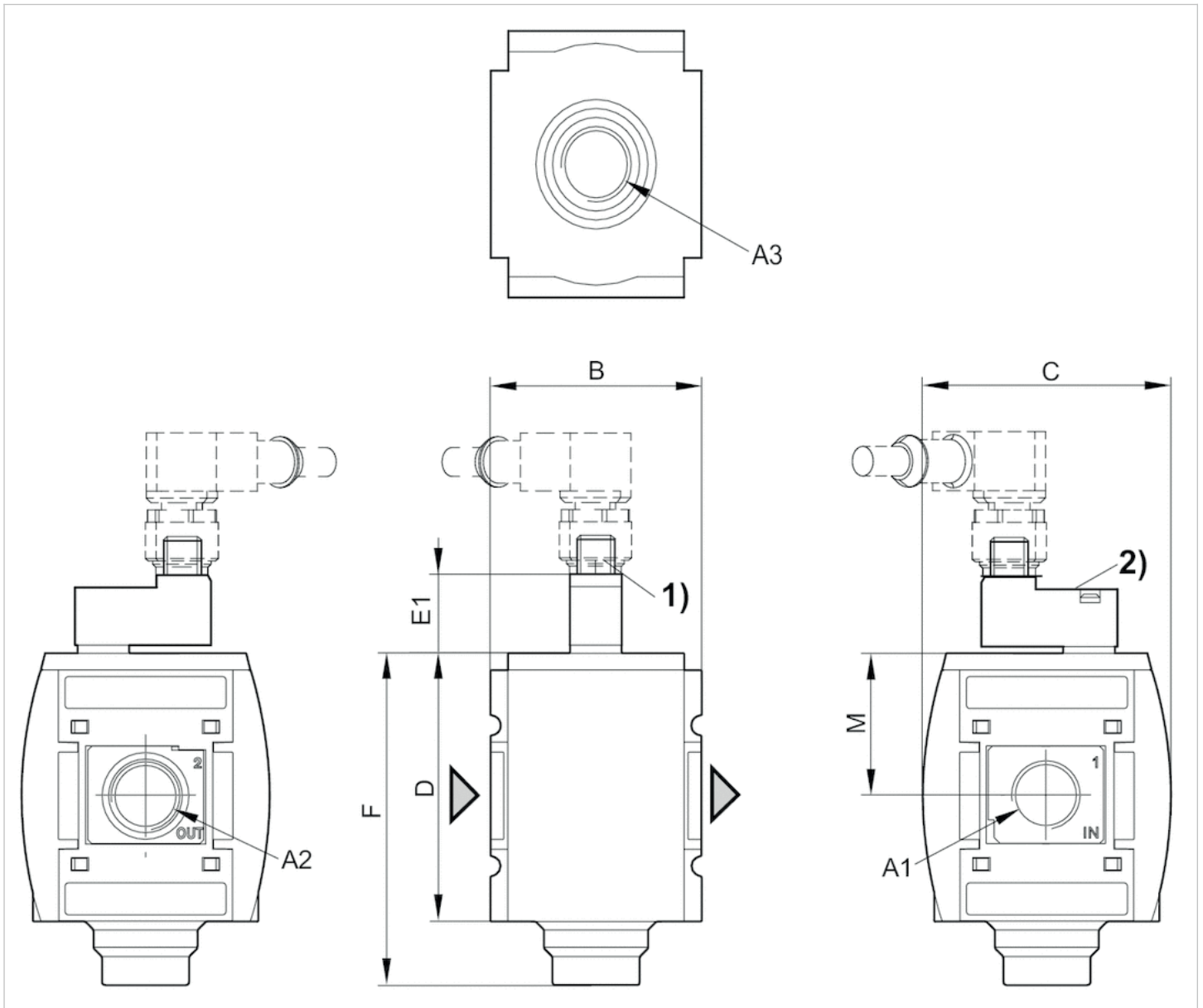
2) Manual override

Dimensions in mm

A1	A2	A3	B	C	D	E1	F	M
G 3/8	G 3/8	G 1/2	63	74	80	23.2	99	42.5
G 1/2	G 1/2	G 1/2	63	74	80	23.2	99	42.5

## Dimensions

Fig. 4: 3/2 directional valve with pilot valve and valve plug connector for plug



A1 = input A2 = output A3 = ventilation port

1) plug M12

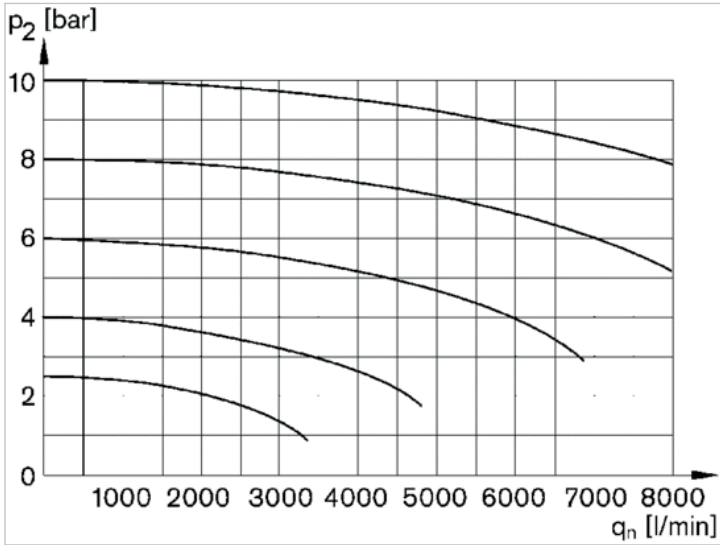
2) Manual override

## Dimensions in mm

A2	A3	B	C	D	E1	F	M
G 3/8	G 1/2	63	74	80	23.2	99	42.5
G 1/2	G 1/2	63	74	80	23.2	99	42.5

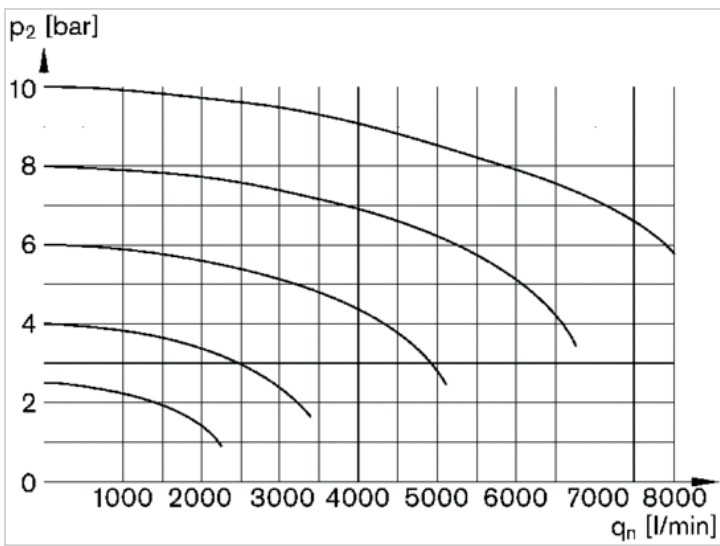
# Diagrams

## Flow rate characteristic



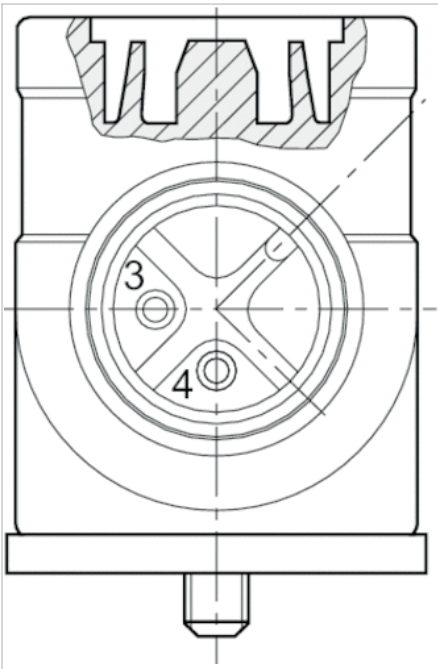
p<sub>2</sub> = secondary pressure  
q<sub>n</sub> = nominal flow

## Rear exhaust



p<sub>2</sub> = secondary pressure  
q<sub>n</sub> = nominal flow

## Pin assignment M12x1

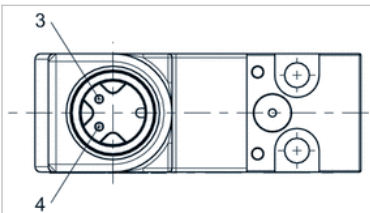


(3) ▶ (1)

(4) ▶ (2)

## Pin assignments

### Pin assignment M12x1



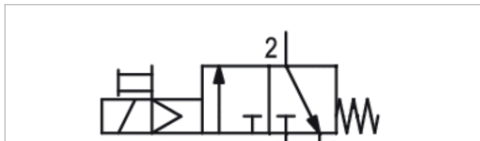
3: +/-

4: +/-











# 3/2-directional valve, electrically operated, Series AS1-SOV

- Compressed air connection G 1/4
- Air supply left
- Pipe connection
- NC
- Electrical connection: Plug, M12



Version	Poppet valve, Can be assembled into blocks
Parts	3/2-directional valve, electrically operated
Nominal flow 1 ▶ 2	2000 l/min
Nominal flow 2 ▶ 3	380 l/min
Working pressure min./max.	2 ... 10 bar
Medium	Compressed air Neutral gases
Medium temperature min./max.	-10 ... 50 °C
Ambient temperature min./max.	-10 ... 50 °C
Pilot	internal
Sealing principle	Soft sealing
Max. particle size	25 µm
Oil content of compressed air	0 ... 5 mg/m <sup>3</sup>
Protection class acc. to DIN EN 61140 with plug	IP65
Weight	See table

## Technical data

Part No.			Compressed air connection input	Compressed air connection output	Exhaust
R412014669		—	G 1/4	G 1/4	G 1/4
R412014670		—	G 1/4	G 1/4	G 1/4
R412014666			G 1/4	G 1/4	G 1/4
R412014668			G 1/4	G 1/4	G 1/4
R412010680			G 1/4	G 1/4	G 1/4

Part No.	Operationalvoltage	Operationalvoltage	Operationalvoltage	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
R412014669	-	-	-	-
R412014670	-	-	-	-
R412014666	24 V	-	-	2 W
R412014668	-	230 V	230 V	-
R412010680	24 V	-	-	2 W

Part No.	Holding power	Switch-on power	Switch-on power	Electrical connection
	AC 50 Hz	AC 50 Hz	AC 60 Hz	Pilot valve
R412014669	-	-	-	-
R412014670	-	-	-	-
R412014666	-	-	-	Plug, ISO 15217, form C
R412014668	1,6 VA	3 VA	3 VA	Plug, ISO 15217, form C
R412010680	-	-	-	Plug, M12

Part No.	Connector standard	basic valve with electrical connector
R412014669	-	Basic valve without pilot valve
R412014670	-	Basic valve without pilot valve, with CNOMO subbase
R412014666	EN 175301-803, form C	Basic valve with pilot valve
R412014668	EN 175301-803, form C	Basic valve with pilot valve
R412010680	-	Basic valve with pilot valve

Part No.	Weight	Fig.
R412014669	0,196 kg	Fig. 1
R412014670	0,21 kg	Fig. 1
R412014666	0,215 kg	Fig. 2
R412014668	0,214 kg	Fig. 2
R412010680	0,232 kg	Fig. 3

## Technical information

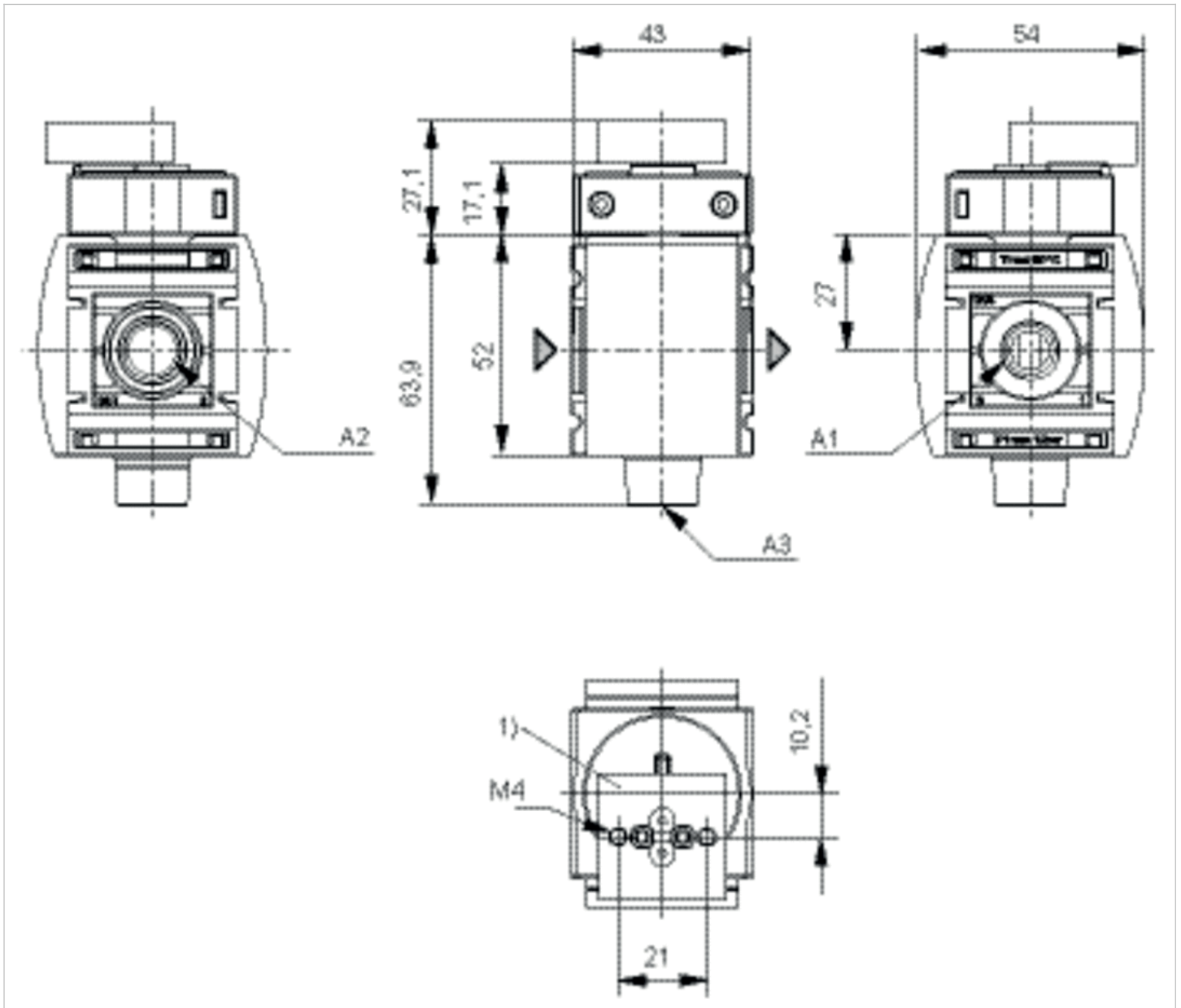
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

## Technical information

Material	
Housing	Polyamide
Front plate	Acrylonitrile butadiene styrene
Seals	Acrylonitrile butadiene rubber

## Dimensions

Fig. 1: 3/2-directional valve with transition plate for pilot valve series DO30



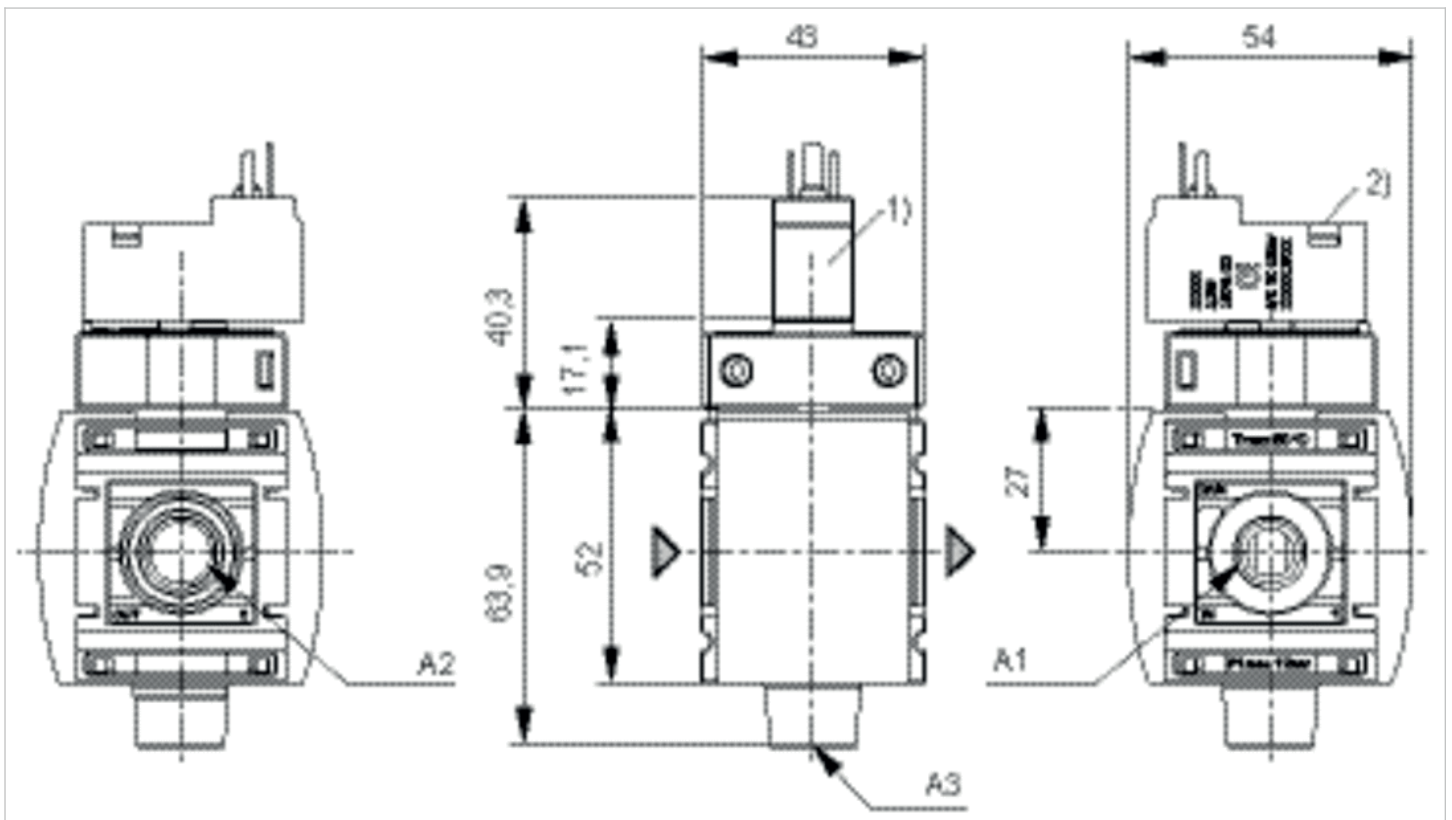
A1 = input

A2 = output

A3 = ventilation port

1) Transition plate with CNOMO porting configuration for pilot valve DO30

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



A1 = input

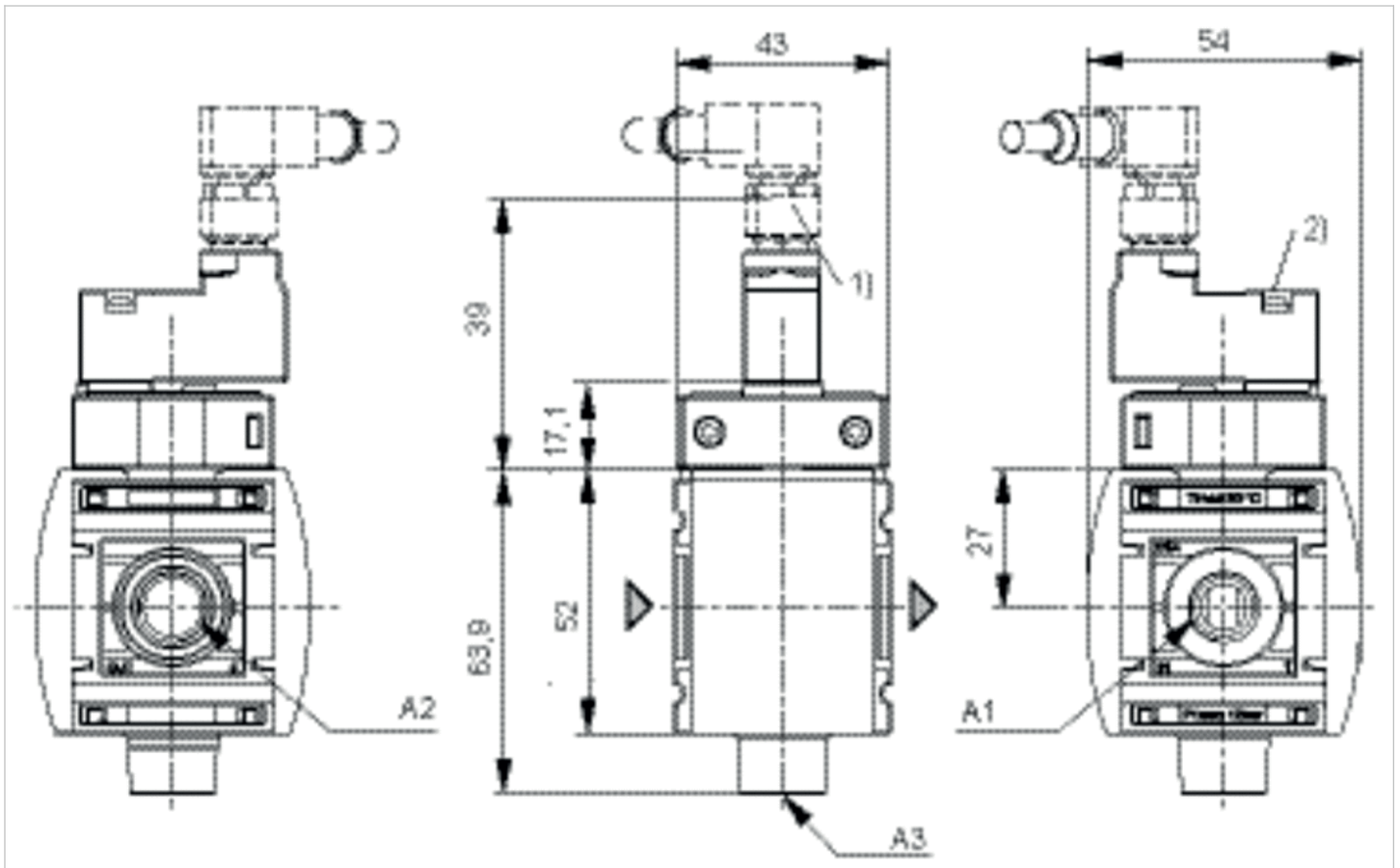
A2 = output

A3 = ventilation port

1) For valve plug connectors according to ISO 15217 (form C)

2) Manual override

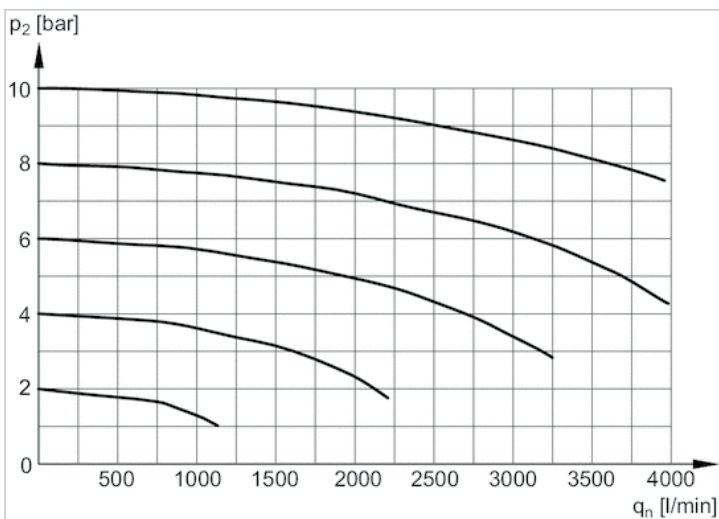
Fig. 3: 3/2-directional valve with pilot valve push-in fitting M12x1



- A1 = input
- A2 = output
- A3 = ventilation port
- 1) plug M12
- 2) Manual override

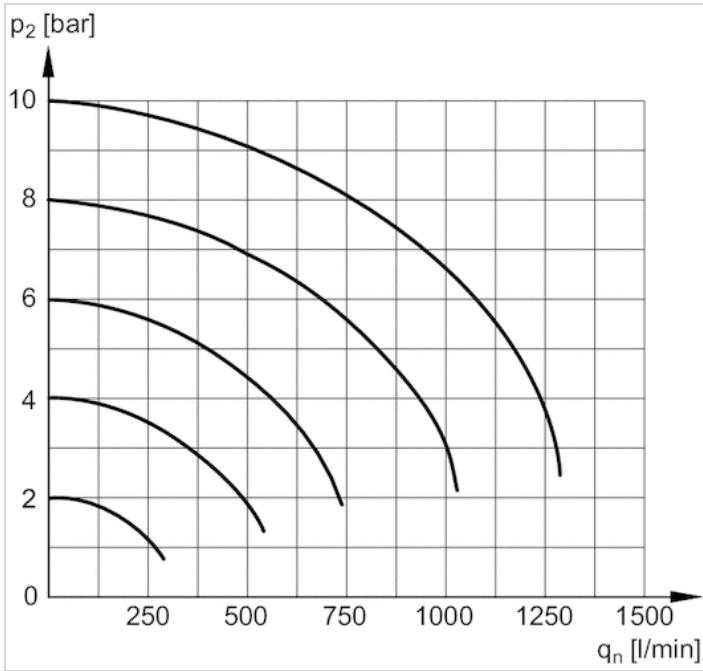
## Diagrams

### Flow rate characteristic



p2 = secondary pressure  
qn = nominal flow

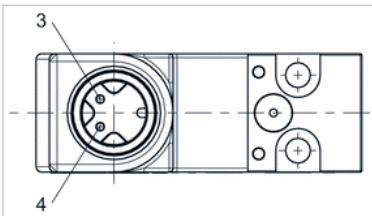
## Rear exhaust



$p_2$  = secondary pressure  
 $q_n$  = nominal flow

## Pin assignments

### Pin assignment M12x1



3: +/-

4: +/-