

# Series 589



AVENTICS™ Series 589

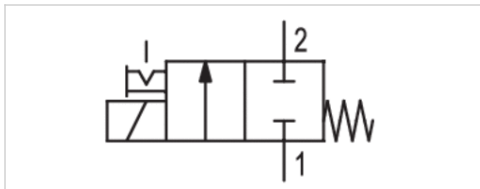


## 2/2-directional valve, Series 589


- 2/2
- $Q_n = 50$  l/min
- NC
- Pipe connection
- Compressed air connection output :  $\varnothing 6 \times 1$
- Electrical connection : Plug, ISO 15217, form C
- single valve
- Manual override : with detent
- With spring return



Version	Poppet valve
Activation	Electrically
Sealing principle	Soft sealing
Working pressure min./max.	0 ... 7 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 $\mu\text{m}$
Oil content of compressed air	0 ... 1 mg/m <sup>3</sup>
Nominal flow $Q_n$	50 l/min
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	20 ms
Typ. switch-off time	23 ms
Weight	0.079 kg



### Technical data

Part No.	MO		Compressed air connection	
			Input	Output
5894000220		NC	$\varnothing 6 \times 1$	$\varnothing 6 \times 1$

Part No.	Operational voltage	Voltage tolerance	Power consumption
5894000220	24 V	-10% / +10%	2 W

Nominal flow  $Q_n$  at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

### Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

Versions with voltage of less than 50 V DC do not have a protective ground.

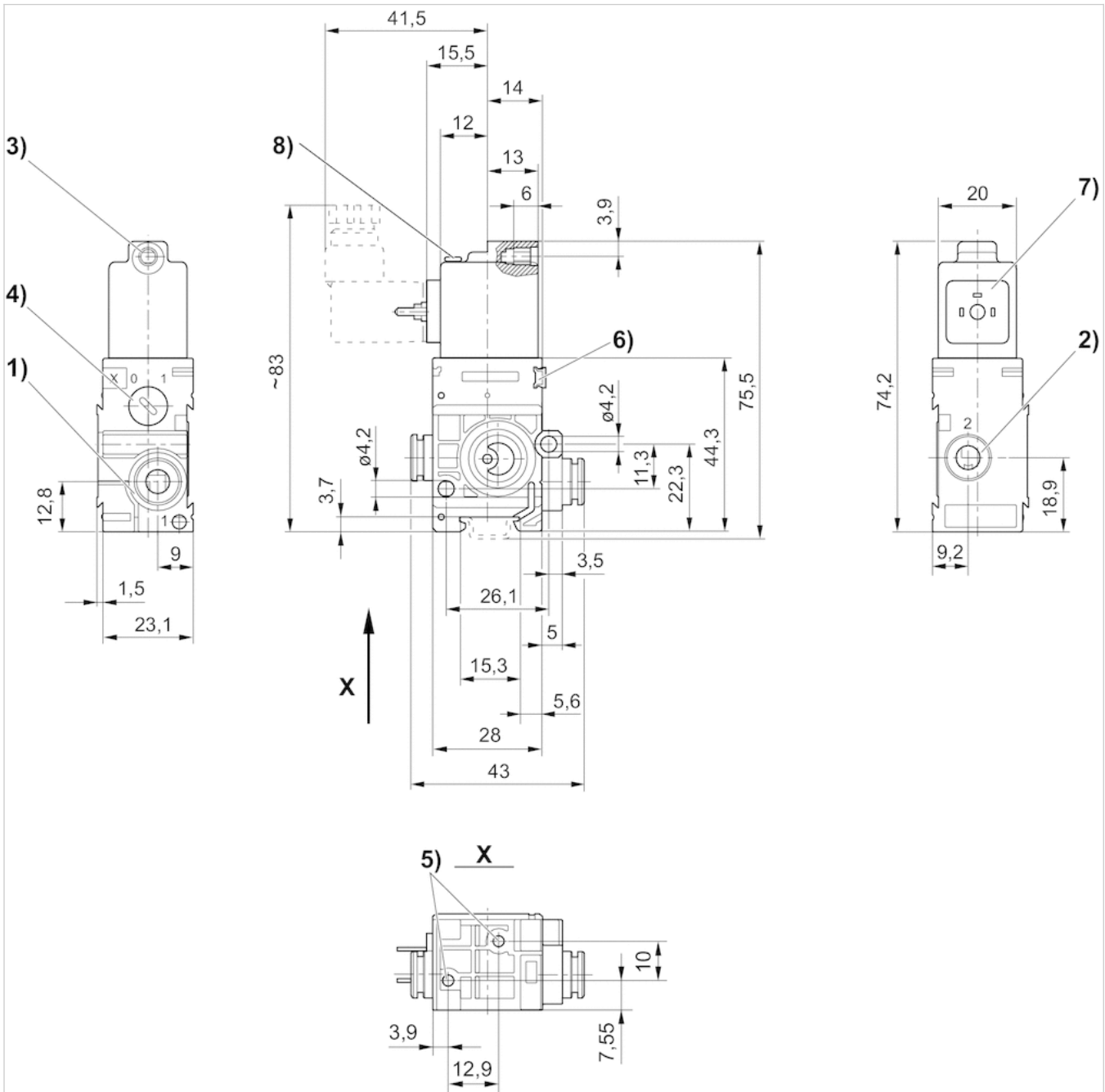
## Technical information

### Material

Housing	Polyamide
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions

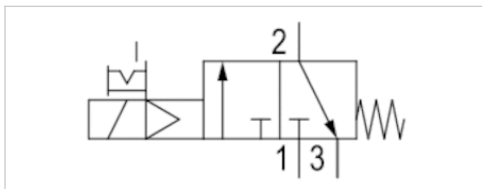


- 1) Port 1
- 2) Port 2
- 3) Port 3, core Ø for M5
- 4) Manual override
- 5) Pocket hole 6 mm deep for 3.5 self-tapping screw

- 6) Mounting space for name plate
- 7) Coil can be rotated at 180° intervals
- 8) LED















# 3/2-directional valve, Series 589

- 3/2
- Qn = 520-750 l/min
- NC
- Pipe connection
- Compressed air connection output : Ø 6x1 Ø 8x1
- Electrical connection : Plug, ISO 15217, form C
- single valve
- Manual override : with detent
- With spring return
- Pilot : Internal



Version	Poppet valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	3 ... 8 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m³
Nominal flow Qn	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Weight	0.093 kg

## Technical data

Part No.	MO		Compressed air connection	
			Input	Output
5894400210		NC	Ø 6x1	Ø 6x1
5894400220		NC	Ø 6x1	Ø 6x1
5894400620		NC	Ø 6x1	Ø 6x1
5894405220		NC	Ø 6x1	Ø 6x1
5894405270		NC	Ø 6x1	Ø 6x1
5894405280		NC	Ø 6x1	Ø 6x1
5894405680		NC	Ø 6x1	Ø 6x1
5894600210		NC	Ø 8x1	Ø 8x1
5894600220		NC	Ø 8x1	Ø 8x1
5894600620		NC	Ø 8x1	Ø 8x1
5894605220		NC	Ø 8x1	Ø 8x1
5894605270		NC	Ø 8x1	Ø 8x1
5894605280		NC	Ø 8x1	Ø 8x1
5894605680		NC	Ø 8x1	Ø 8x1

Part No.	Compressed air connection		Operational voltage	
	Exhaust		DC	AC 50 Hz
5894400210	Ø 8x1		12 V	-
5894400220	Ø 8x1		24 V	-
5894400620	Ø 8x1		24 V	-
5894405220	Ø 8x1		-	24 V
5894405270	Ø 8x1		-	110 V
5894405280	Ø 8x1		-	230 V
5894405680	Ø 8x1		-	230 V
5894600210	Ø 8x1		12 V	-
5894600220	Ø 8x1		24 V	-
5894600620	Ø 8x1		24 V	-
5894605220	Ø 8x1		-	24 V
5894605270	Ø 8x1		-	110 V
5894605280	Ø 8x1		-	230 V
5894605680	Ø 8x1		-	230 V

Part No.	Operational voltage	Voltage tolerance		Voltage tolerance	
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	
5894400210	-	-10% / +10%	-	-	
5894400220	-	-10% / +10%	-	-	
5894400620	-	-10% / +10%	-	-	
5894405220	24 V	-	-10% / +15%	-10% / +15%	
5894405270	110 V	-	-10% / +15%	-10% / +15%	
5894405280	230 V	-	-10% / +15%	-10% / +15%	
5894405680	230 V	-	-10% / +15%	-10% / +15%	
5894600210	-	-10% / +10%	-	-	
5894600220	-	-10% / +10%	-	-	
5894600620	-	-10% / +10%	-	-	
5894605220	24 V	-	-10% / +15%	-10% / +15%	

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
5894605270	110 V	-	-10% / +15%	-10% / +15%
5894605280	230 V	-	-10% / +15%	-10% / +15%
5894605680	230 V	-	-10% / +15%	-10% / +15%

Part No.	Power consumption	Holding power		Switch-on power
	DC	AC 50 Hz	AC 60 Hz	AC 50 Hz
5894400210	1.6 W	-	-	-
5894400220	1.6 W	-	-	-
5894400620	1.7 W	-	-	-
5894405220	-	2.2 VA	1.8 VA	3 VA
5894405270	-	3 VA	2.4 VA	4.2 VA
5894405280	-	2.3 VA	2 VA	3.2 VA
5894405680	-	2.5 VA	2.2 VA	3.4 VA
5894600210	1.6 W	-	-	-
5894600220	1.6 W	-	-	-
5894600620	1.7 W	-	-	-
5894605220	-	2.2 VA	1.8 VA	3 VA
5894605270	-	3 VA	2.4 VA	4.2 VA
5894605280	-	2.3 VA	2 VA	3.2 VA
5894605680	-	2.5 VA	2.2 VA	3.4 VA

Part No.	Switch-on power	Nominal flow Qn	LED status display	
	AC 60 Hz			
5894400210	-	520 l/min	-	-
5894400220	-	520 l/min	-	-
5894400620	-	520 l/min	Red	1)
5894405220	2.6 VA	520 l/min	-	-
5894405270	3.4 VA	520 l/min	-	-
5894405280	2.8 VA	520 l/min	-	-
5894405680	3 VA	520 l/min	Red	-
5894600210	-	750 l/min	-	-
5894600220	-	750 l/min	-	-
5894600620	-	750 l/min	Red	1)
5894605220	2.6 VA	750 l/min	-	-
5894605270	3.4 VA	750 l/min	-	-
5894605280	2.8 VA	750 l/min	-	-
5894605680	3 VA	750 l/min	Red	-

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

1) With LED and protective diode for reducing voltage peaks in the solenoid coil, protected against polarity reversal

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

At an ambient temperature of 40 °C the max. working pressure is 10 bar .  
Versions with voltage of less than 50 V DC do not have a protective ground.  
Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

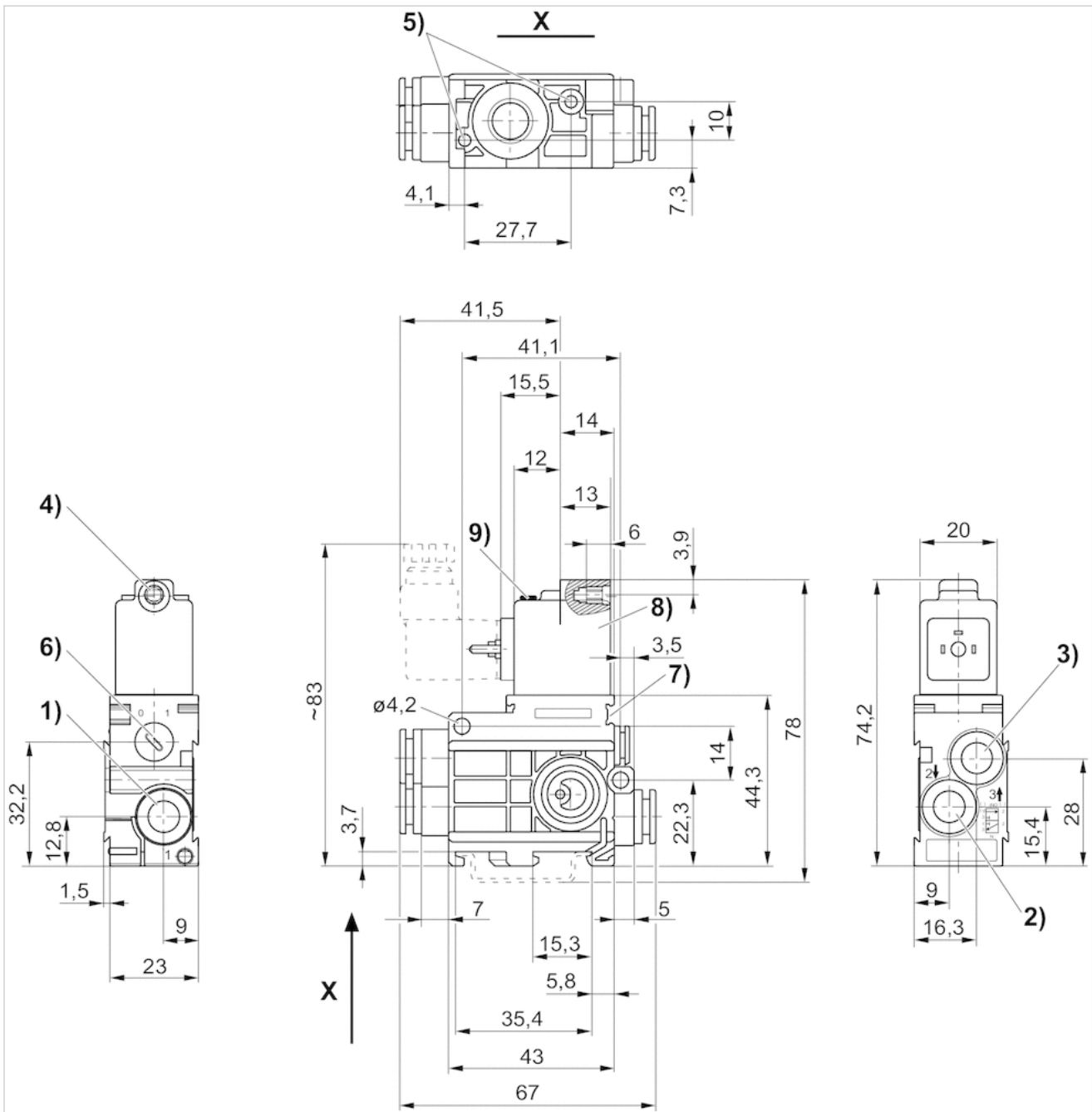
## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane



# Dimensions

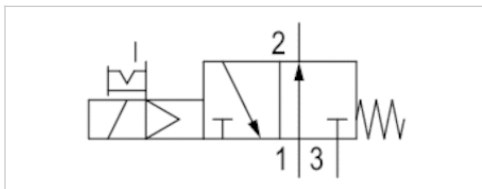
## Dimensions



1) port 1 2) port 2 3) port 3 4) core Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) manual override 7) Pilot valve 8) coil can be rotated at 180° intervals















## 3/2-directional valve, Series 589

- 3/2
- $Q_n = 520-750 \text{ l/min}$
- NO
- Pipe connection
- Compressed air connection output :  $\varnothing 6 \times 1 \varnothing 8 \times 1$
- Electrical connection : Plug, ISO 15217, form C
- single valve
- Manual override : with detent
- With spring return
- Pilot : Internal



Version	Poppet valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	3 ... 8 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 $\mu\text{m}$
Oil content of compressed air	0 ... 1 $\text{mg/m}^3$
Nominal flow $Q_n$	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Weight	0.093 kg

## Technical data

Part No.	MO		Compressed air connection	
			Input	Output
5894410210		NO	Ø 6x1	Ø 6x1
5894410220		NO	Ø 6x1	Ø 6x1
5894410620		NO	Ø 6x1	Ø 6x1
5894415220		NO	Ø 6x1	Ø 6x1
5894415270		NO	Ø 6x1	Ø 6x1
5894415280		NO	Ø 6x1	Ø 6x1
5894415680		NO	Ø 6x1	Ø 6x1
5894610210		NO	Ø 8x1	Ø 8x1
5894610220		NO	Ø 8x1	Ø 8x1
5894610620		NO	Ø 8x1	Ø 8x1
5894615220		NO	Ø 8x1	Ø 8x1
5894615270		NO	Ø 8x1	Ø 8x1
5894615280		NO	Ø 8x1	Ø 8x1
5894615680		NO	Ø 8x1	Ø 8x1

Part No.	Compressed air connection		Operational voltage	
	Exhaust		DC	AC 50 Hz
5894410210	Ø 8x1		12 V	-
5894410220	Ø 8x1		24 V	-
5894410620	Ø 8x1		24 V	-
5894415220	Ø 8x1		-	24 V
5894415270	Ø 8x1		-	110 V
5894415280	Ø 8x1		-	230 V
5894415680	Ø 8x1		-	230 V
5894610210	Ø 8x1		12 V	-
5894610220	Ø 8x1		24 V	-
5894610620	Ø 8x1		24 V	-
5894615220	Ø 8x1		-	24 V
5894615270	Ø 8x1		-	110 V
5894615280	Ø 8x1		-	230 V
5894615680	Ø 8x1		-	230 V

Part No.	Operational voltage	Voltage tolerance		Voltage tolerance	
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	
5894410210	-	-10% / +10%	-	-	
5894410220	-	-10% / +10%	-	-	
5894410620	-	-10% / +10%	-	-	
5894415220	24 V	-	-10% / +15%	-10% / +15%	
5894415270	110 V	-	-10% / +15%	-10% / +15%	
5894415280	230 V	-	-10% / +15%	-10% / +15%	
5894415680	230 V	-	-10% / +15%	-10% / +15%	
5894610210	-	-10% / +10%	-	-	
5894610220	-	-10% / +10%	-	-	
5894610620	-	-10% / +10%	-	-	
5894615220	24 V	-	-10% / +15%	-10% / +15%	

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
5894615270	110 V	-	-10% / +15%	-10% / +15%
5894615280	230 V	-	-10% / +15%	-10% / +15%
5894615680	230 V	-	-10% / +15%	-10% / +15%

Part No.	Power consumption		Holding power		Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz	AC 50 Hz
5894410210	1.6 W	-	-	-	-
5894410220	1.6 W	-	-	-	-
5894410620	1.7 W	-	-	-	-
5894415220	-	2.2 VA	1.8 VA	3 VA	3 VA
5894415270	-	3 VA	2.4 VA	4.2 VA	4.2 VA
5894415280	-	2.3 VA	2 VA	3.2 VA	3.2 VA
5894415680	-	2.5 VA	2.2 VA	3.4 VA	3.4 VA
5894610210	1.6 W	-	-	-	-
5894610220	1.6 W	-	-	-	-
5894610620	1.7 W	-	-	-	-
5894615220	-	2.2 VA	1.8 VA	3 VA	3 VA
5894615270	-	3 VA	2.4 VA	4.2 VA	4.2 VA
5894615280	-	2.3 VA	2 VA	3.2 VA	3.2 VA
5894615680	-	2.5 VA	2.2 VA	3.4 VA	3.4 VA

Part No.	Switch-on power		Nominal flow Qn	LED status display
	AC 60 Hz			
5894410210	-		520 l/min	-
5894410220	-		520 l/min	-
5894410620	-		520 l/min	Red
5894415220	2.6 VA		520 l/min	-
5894415270	3.4 VA		520 l/min	-
5894415280	2.8 VA		520 l/min	-
5894415680	3 VA		520 l/min	Red
5894610210	-		750 l/min	-
5894610220	-		750 l/min	-
5894610620	-		750 l/min	Red
5894615220	2.6 VA		750 l/min	-
5894615270	3.4 VA		750 l/min	-
5894615280	2.8 VA		750 l/min	-
5894615680	3 VA		750 l/min	Red

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

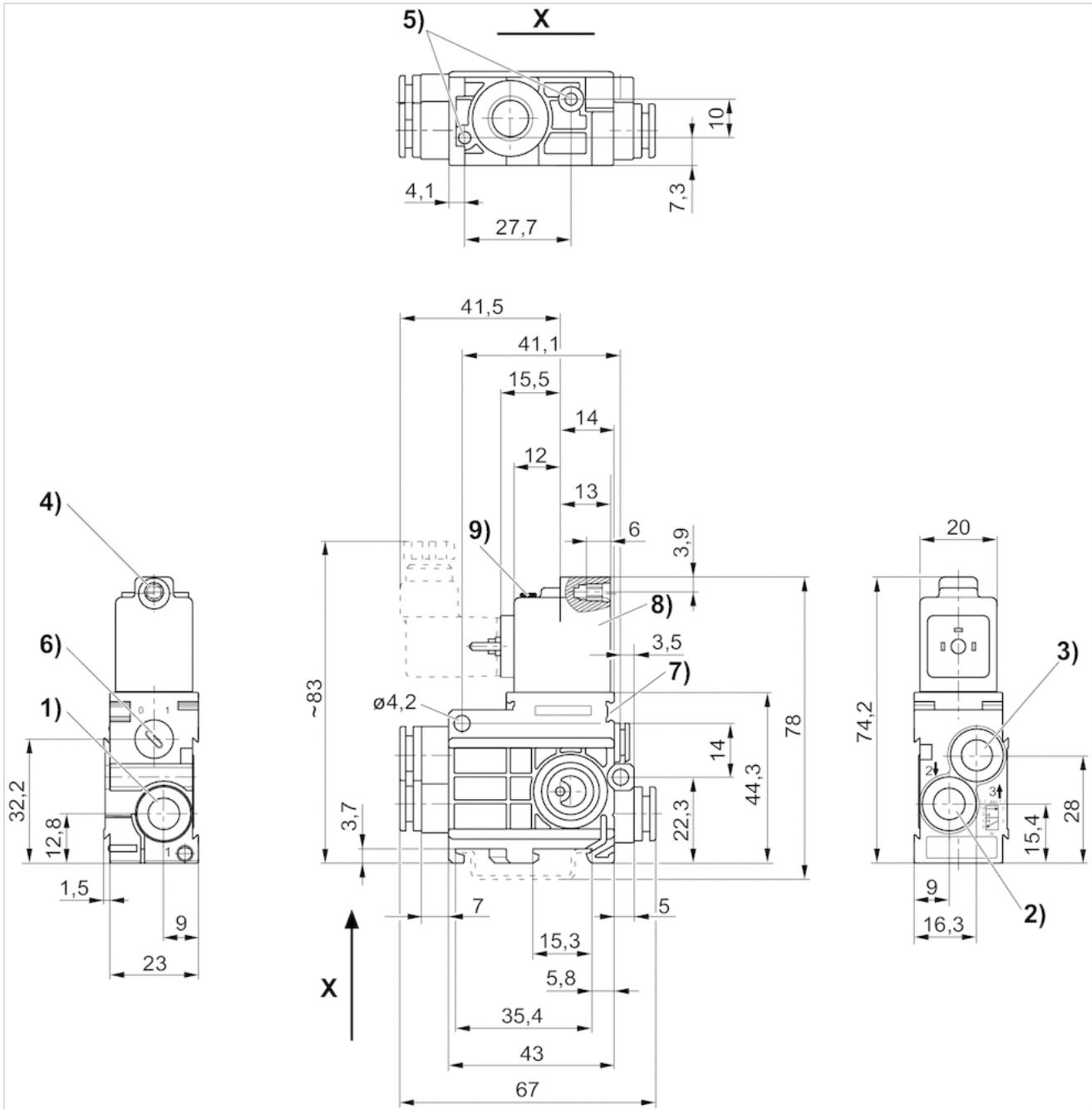
At an ambient temperature of 40 °C the max. working pressure is 10 bar .  
Versions with voltage of less than 50 V DC do not have a protective ground.  
Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane

# Dimensions

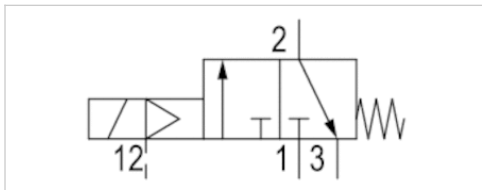
## Dimensions



1) port 1 2) port 2 3) port 3 4) core  $\varnothing$  for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) manual override 7) Pilot valve 8) coil can be rotated at 180° intervals

## 3/2-directional valve, Series 589

- 3/2
- $Q_n = 520-750 \text{ l/min}$
- NC
- Pipe connection
- Compressed air connection output :  $\varnothing 6 \times 1 \varnothing 8 \times 1$
- Electrical connection : Plug, ISO 15217, form C
- single valve
- With spring return
- Pilot : External



Version	Poppet valve
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Working pressure min./max.	0.5 ... 8 bar
Control pressure min./max.	3 ... 10 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 $\mu\text{m}$
Oil content of compressed air	0 ... 1 $\text{mg/m}^3$
Nominal flow $Q_n$	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Weight	0.093 kg

## Technical data

Part No.		Compressed air connection	
		Input	Output
5894470210	NC	Ø 6x1	Ø 6x1
5894470220	NC	Ø 6x1	Ø 6x1
5894470620	NC	Ø 6x1	Ø 6x1
5894475220	NC	Ø 6x1	Ø 6x1
5894475270	NC	Ø 6x1	Ø 6x1
5894475280	NC	Ø 6x1	Ø 6x1
5894475680	NC	Ø 6x1	Ø 6x1
5894670210	NC	Ø 8x1	Ø 8x1
5894670220	NC	Ø 8x1	Ø 8x1
5894670620	NC	Ø 8x1	Ø 8x1
5894675220	NC	Ø 8x1	Ø 8x1
5894675270	NC	Ø 8x1	Ø 8x1
5894675280	NC	Ø 8x1	Ø 8x1
5894675680	NC	Ø 8x1	Ø 8x1

Part No.	Compressed air connection	
	Exhaust	Pilot Input
5894470210	Ø 8x1	Ø 4
5894470220	Ø 8x1	Ø 4
5894470620	Ø 8x1	Ø 4
5894475220	Ø 8x1	Ø 4
5894475270	Ø 8x1	Ø 4
5894475280	Ø 8x1	Ø 4
5894475680	Ø 8x1	Ø 4
5894670210	Ø 8x1	Ø 4
5894670220	Ø 8x1	Ø 4
5894670620	Ø 8x1	Ø 4
5894675220	Ø 8x1	Ø 4
5894675270	Ø 8x1	Ø 4
5894675280	Ø 8x1	Ø 4
5894675680	Ø 8x1	Ø 4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
5894470210	12 V	-	-
5894470220	24 V	-	-
5894470620	24 V	-	-
5894475220	-	24 V	24 V
5894475270	-	110 V	110 V
5894475280	-	230 V	230 V
5894475680	-	230 V	230 V
5894670210	12 V	-	-
5894670220	24 V	-	-
5894670620	24 V	-	-
5894675220	-	24 V	24 V



Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
5894675270	-	110 V	110 V
5894675280	-	230 V	230 V
5894675680	-	230 V	230 V

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
5894470210	-10% / +10%	-	-	1.6 W
5894470220	-10% / +10%	-	-	1.6 W
5894470620	-10% / +10%	-	-	1.7 W
5894475220	-	-10% / +15%	-10% / +15%	-
5894475270	-	-10% / +15%	-10% / +15%	-
5894475280	-	-10% / +15%	-10% / +15%	-
5894475680	-	-10% / +15%	-10% / +15%	-
5894670210	-10% / +10%	-	-	1.6 W
5894670220	-10% / +10%	-	-	1.6 W
5894670620	-10% / +10%	-	-	1.7 W
5894675220	-	-10% / +15%	-10% / +15%	-
5894675270	-	-10% / +15%	-10% / +15%	-
5894675280	-	-10% / +15%	-10% / +15%	-
5894675680	-	-10% / +15%	-10% / +15%	-

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Nominal flow Qn
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz	
5894470210	-	-	-	-	520 l/min
5894470220	-	-	-	-	520 l/min
5894470620	-	-	-	-	520 l/min
5894475220	2.2 VA	1.8 VA	3 VA	2.6 VA	520 l/min
5894475270	3 VA	2.4 VA	4.2 VA	3.4 VA	520 l/min
5894475280	2.3 VA	2 VA	3.2 VA	2.8 VA	520 l/min
5894475680	2.5 VA	2.2 VA	3.4 VA	3 VA	520 l/min
5894670210	-	-	-	-	750 l/min
5894670220	-	-	-	-	750 l/min
5894670620	-	-	-	-	750 l/min
5894675220	2.2 VA	1.8 VA	3 VA	2.6 VA	750 l/min
5894675270	3 VA	2.4 VA	4.2 VA	3.4 VA	750 l/min
5894675280	2.3 VA	2 VA	3.2 VA	2.8 VA	750 l/min
5894675680	2.5 VA	2.2 VA	3.4 VA	3 VA	750 l/min

Part No.	LED status display	
5894470210	-	-
5894470220	-	-
5894470620	Red	1)
5894475220	-	-
5894475270	-	-
5894475280	-	-
5894475680	Red	-
5894670210	-	-

Part No.	LED status display	
5894670220	-	-
5894670620	Red	1)
5894675220	-	-
5894675270	-	-
5894675280	-	-
5894675680	Red	-

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

1) With LED and protective diode for reducing voltage peaks in the solenoid coil, protected against polarity reversal

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

At an ambient temperature of 40 °C the max. working pressure is 10 bar .

Versions with voltage of less than 50 V DC do not have a protective ground.

Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

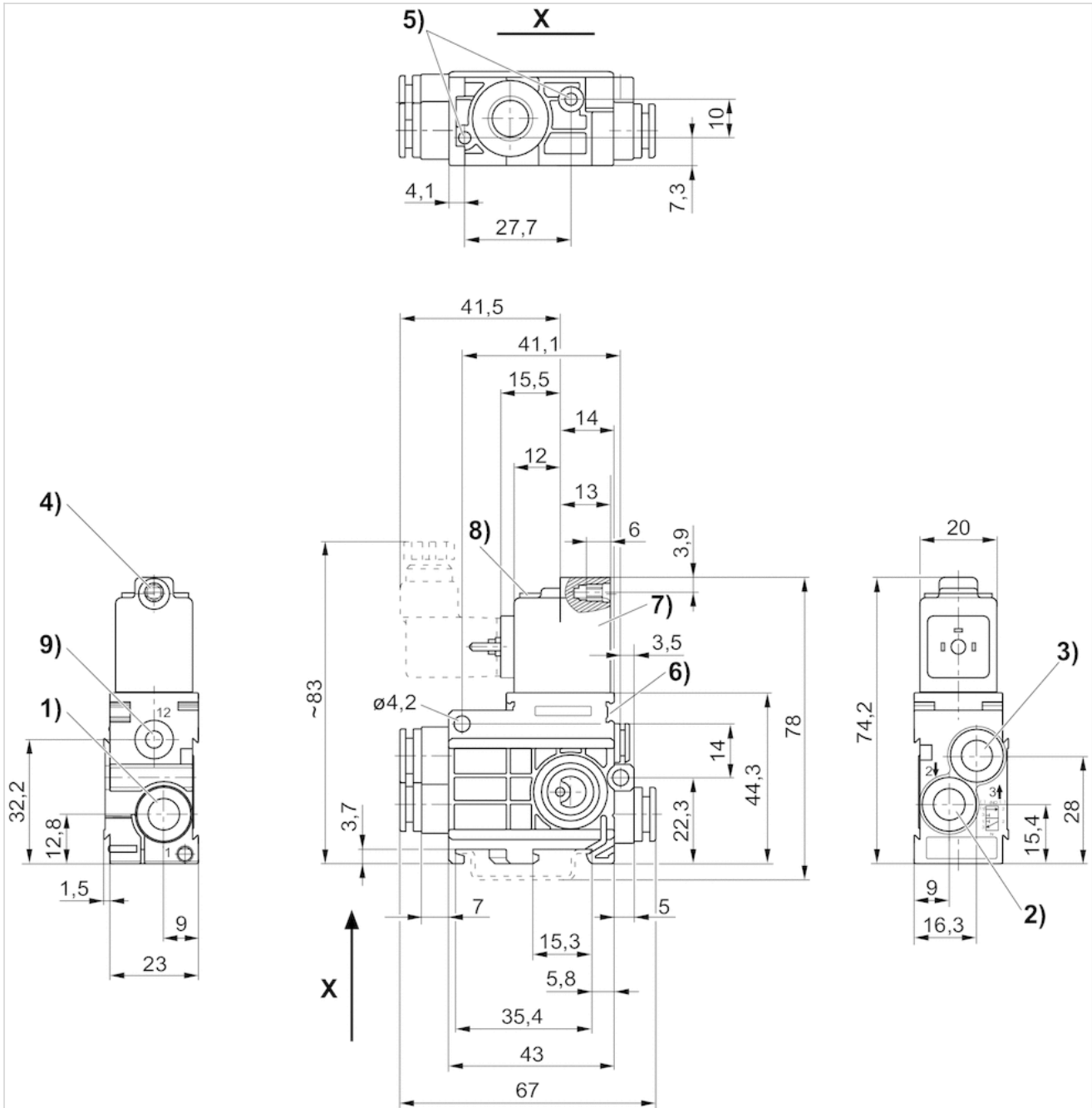
The control pressure must be at least as high as the working pressure.

## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane

# Dimensions

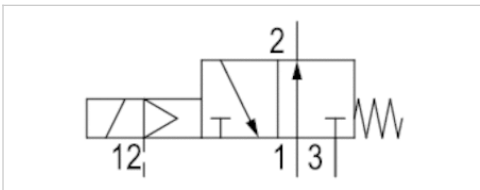
## Dimensions



1) port 1 2) port 2 3) port 3 4) core Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) mounting space for name plate 7) coil can be rotated at 180° intervals 8) LED 9) port 12

# 3/2-directional valve, Series 589

- 3/2
- Qn = 520-750 l/min
- NO
- Pipe connection
- Compressed air connection output : Ø 8x1 Ø 6x1
- Electrical connection : Plug, ISO 15217, form C
- single valve
- With spring return
- Pilot : External



Version	Poppet valve
Activation	Electrically
Pilot	External
Sealing principle	Soft sealing
Working pressure min./max.	0.5 ... 8 bar
Control pressure min./max.	3 ... 10 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m <sup>3</sup>
Nominal flow Qn	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	18 ms
Typ. switch-off time	16 ms
Weight	0.093 kg

## Technical data

Part No.		Compressed air connection	
		Input	Output
5894620210	NO	Ø 8x1	Ø 8x1
5894620220	NO	Ø 8x1	Ø 8x1
5894620620	NO	Ø 8x1	Ø 8x1
5894625220	NO	Ø 8x1	Ø 8x1
5894625270	NO	Ø 8x1	Ø 8x1
5894625280	NO	Ø 8x1	Ø 8x1
5894625680	NO	Ø 8x1	Ø 8x1
5894420210	NO	Ø 6x1	Ø 6x1
5894420220	NO	Ø 6x1	Ø 6x1
5894420620	NO	Ø 6x1	Ø 6x1
5894425220	NO	Ø 6x1	Ø 6x1
5894425270	NO	Ø 6x1	Ø 6x1
5894425280	NO	Ø 6x1	Ø 6x1
5894425680	NO	Ø 6x1	Ø 6x1

Part No.	Compressed air connection	
	Exhaust	Pilot Input
5894620210	Ø 8x1	Ø 4
5894620220	Ø 8x1	Ø 4
5894620620	Ø 8x1	Ø 4
5894625220	Ø 8x1	Ø 4
5894625270	Ø 8x1	Ø 4
5894625280	Ø 8x1	Ø 4
5894625680	Ø 8x1	Ø 4
5894420210	Ø 8x1	Ø 4
5894420220	Ø 8x1	Ø 4
5894420620	Ø 8x1	Ø 4
5894425220	Ø 8x1	Ø 4
5894425270	Ø 8x1	Ø 4
5894425280	Ø 8x1	Ø 4
5894425680	Ø 8x1	Ø 4

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
5894620210	12 V	-	-
5894620220	24 V	-	-
5894620620	24 V	-	-
5894625220	-	24 V	24 V
5894625270	-	110 V	110 V
5894625280	-	230 V	230 V
5894625680	-	230 V	230 V
5894420210	12 V	-	-
5894420220	24 V	-	-
5894420620	24 V	-	-
5894425220	-	24 V	24 V

Part No.	Operational voltage	Operational voltage	Operational voltage
	DC	AC 50 Hz	AC 60 Hz
5894425270	-	110 V	110 V
5894425280	-	230 V	230 V
5894425680	-	230 V	230 V

Part No.	Voltage tolerance	Voltage tolerance	Voltage tolerance	Power consumption
	DC	AC 50 Hz	AC 60 Hz	DC
5894620210	-10% / +10%	-	-	1.6 W
5894620220	-10% / +10%	-	-	1.6 W
5894620620	-10% / +10%	-	-	1.7 W
5894625220	-	-10% / +15%	-10% / +15%	-
5894625270	-	-10% / +15%	-10% / +15%	-
5894625280	-	-10% / +15%	-10% / +15%	-
5894625680	-	-10% / +15%	-10% / +15%	-
5894420210	-10% / +10%	-	-	1.6 W
5894420220	-10% / +10%	-	-	1.6 W
5894420620	-10% / +10%	-	-	1.7 W
5894425220	-	-10% / +15%	-10% / +15%	-
5894425270	-	-10% / +15%	-10% / +15%	-
5894425280	-	-10% / +15%	-10% / +15%	-
5894425680	-	-10% / +15%	-10% / +15%	-

Part No.	Holding power	Holding power	Switch-on power	Switch-on power	Nominal flow Qn
	AC 50 Hz	AC 60 Hz	AC 50 Hz	AC 60 Hz	
5894620210	-	-	-	-	750 l/min
5894620220	-	-	-	-	750 l/min
5894620620	-	-	-	-	750 l/min
5894625220	2.2 VA	1.8 VA	3 VA	2.6 VA	750 l/min
5894625270	3 VA	2.4 VA	4.2 VA	3.4 VA	750 l/min
5894625280	2.3 VA	2 VA	3.2 VA	2.8 VA	750 l/min
5894625680	2.5 VA	2.2 VA	3.4 VA	3 VA	750 l/min
5894420210	-	-	-	-	520 l/min
5894420220	-	-	-	-	520 l/min
5894420620	-	-	-	-	520 l/min
5894425220	2.2 VA	1.8 VA	3 VA	2.6 VA	520 l/min
5894425270	3 VA	2.4 VA	4.2 VA	3.4 VA	520 l/min
5894425280	2.3 VA	2 VA	3.2 VA	2.8 VA	520 l/min
5894425680	2.5 VA	2.2 VA	3.4 VA	3 VA	520 l/min

Part No.	LED status display	
5894620210	-	-
5894620220	-	-
5894620620	Red	1)
5894625220	-	-
5894625270	-	-
5894625280	-	-
5894625680	Red	-
5894420210	-	-

Part No.	LED status display	
5894420220	-	-
5894420620	Red	1)
5894425220	-	-
5894425270	-	-
5894425280	-	-
5894425680	Red	-

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

1) With LED and protective diode for reducing voltage peaks in the solenoid coil, protected against polarity reversal

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

At an ambient temperature of 40 °C the max. working pressure is 10 bar .

Versions with voltage of less than 50 V DC do not have a protective ground.

Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

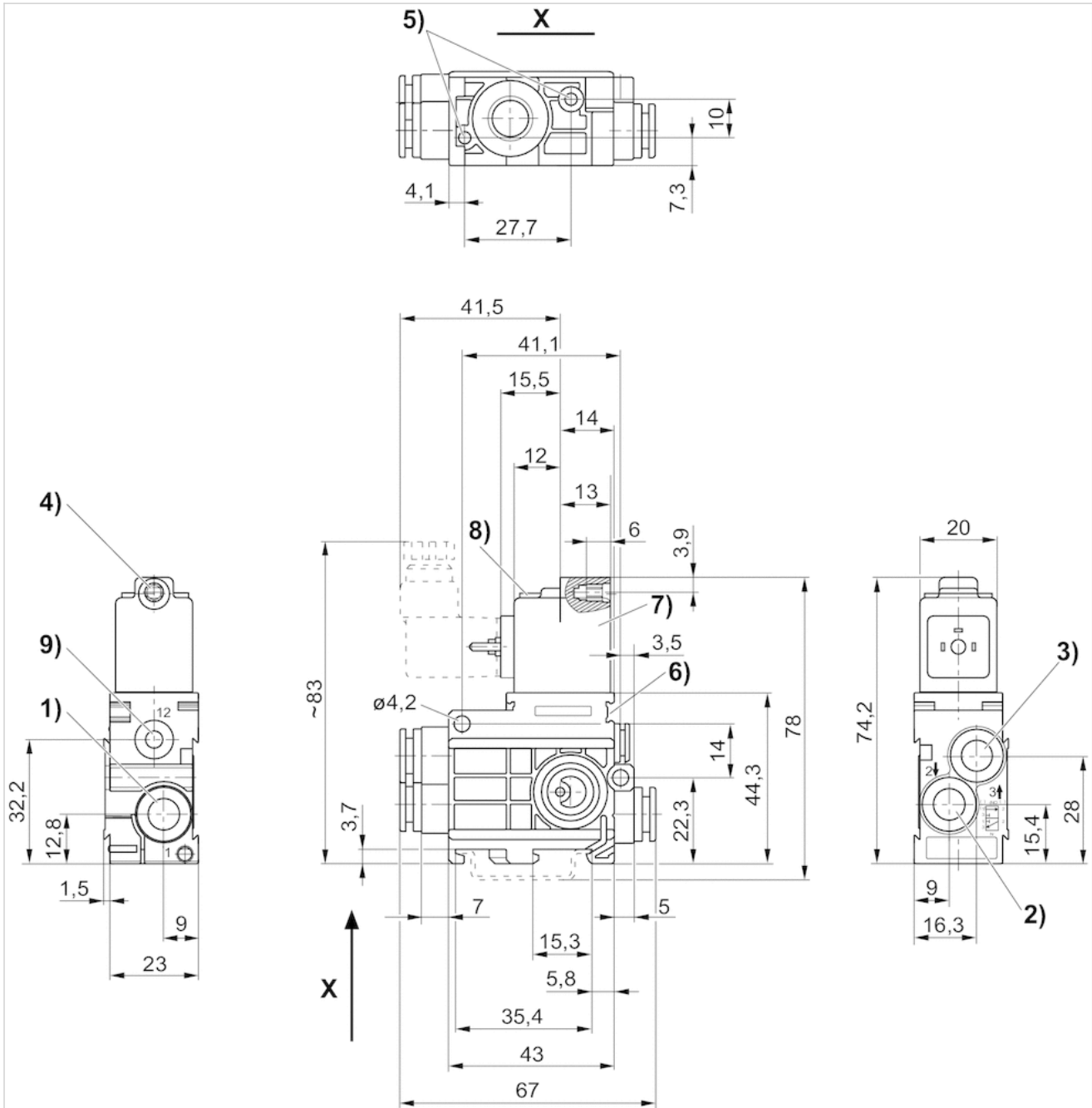
The control pressure must be at least as high as the working pressure.

## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane

# Dimensions

## Dimensions

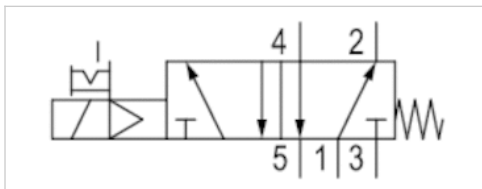


1) port 1 2) port 2 3) port 3 4) Ø for M 5 5) pocket hole 6 mm deep for 3.5 self-tapping screw 6) mounting space for name plate 7) coil can be rotated at 180° intervals 8) LED 9) port 12

















# 5/2-directional valve, Series 589

- 5/2
- Qn = 520-600 l/min
- NO
- Pipe connection
- Compressed air connection output : Ø 6x1 Ø 8x1
- Electrical connection : Plug, ISO 15217, form C
- single valve
- Manual override : with detent
- With spring return
- Pilot : Internal



Version	Poppet valve
Activation	Electrically
Pilot	Internal
Sealing principle	Soft sealing
Working pressure min./max.	3 ... 8 bar
Ambient temperature min./max.	-15 ... 50 °C
Medium temperature min./max.	-15 ... 50 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m <sup>3</sup>
Nominal flow Qn	See table below
Protection class with connection	IP65
Reverse polarity protection	Protected against polarity reversal
Duty cycle	100 %
Typ. switch-on time	27 ms
Typ. switch-off time	28 ms
Weight	0.133 kg

## Technical data

Part No.	MO		Compressed air connection	
			Input	Output
5894700210		NO	Ø 6x1	Ø 6x1
5894700220		NO	Ø 6x1	Ø 6x1
5894700620		NO	Ø 6x1	Ø 6x1
5894705220		NO	Ø 6x1	Ø 6x1
5894705270		NO	Ø 6x1	Ø 6x1
5894705280		NO	Ø 6x1	Ø 6x1
5894705680		NO	Ø 6x1	Ø 6x1
5894900210		NO	Ø 8x1	Ø 8x1
5894900220		NO	Ø 8x1	Ø 8x1
5894900620		NO	Ø 8x1	Ø 8x1
5894905220		NO	Ø 8x1	Ø 8x1
5894905270		NO	Ø 8x1	Ø 8x1
5894905280		NO	Ø 8x1	Ø 8x1
5894905680		NO	Ø 8x1	Ø 8x1

Part No.	Compressed air connection		Operational voltage	
	Exhaust		DC	AC 50 Hz
5894700210	Ø 8x1		12 V	-
5894700220	Ø 8x1		24 V	-
5894700620	Ø 8x1		24 V	-
5894705220	Ø 8x1		-	24 V
5894705270	Ø 8x1		-	110 V
5894705280	Ø 8x1		-	230 V
5894705680	Ø 8x1		-	230 V
5894900210	Ø 8x1		12 V	-
5894900220	Ø 8x1		24 V	-
5894900620	Ø 8x1		24 V	-
5894905220	Ø 8x1		-	24 V
5894905270	Ø 8x1		-	110 V
5894905280	Ø 8x1		-	230 V
5894905680	Ø 8x1		-	230 V

Part No.	Operational voltage	Voltage tolerance		Voltage tolerance	
	AC 60 Hz	DC	AC 50 Hz	AC 60 Hz	
5894700210	-	-10% / +10%	-	-	
5894700220	-	-10% / +10%	-	-	
5894700620	-	-10% / +10%	-	-	
5894705220	24 V	-	-10% / +15%	-10% / +15%	
5894705270	110 V	-	-10% / +15%	-10% / +15%	
5894705280	230 V	-	-10% / +15%	-10% / +15%	
5894705680	230 V	-	-10% / +15%	-10% / +15%	
5894900210	-	-10% / +10%	-	-	
5894900220	-	-10% / +10%	-	-	
5894900620	-	-10% / +10%	-	-	
5894905220	24 V	-	-10% / +15%	-10% / +15%	

Part No.	Operational voltage	Voltage tolerance		
		DC	AC 50 Hz	AC 60 Hz
5894905270	110 V	-	-10% / +15%	-10% / +15%
5894905280	230 V	-	-10% / +15%	-10% / +15%
5894905680	230 V	-	-10% / +15%	-10% / +15%

Part No.	Power consumption		Holding power		Switch-on power
	DC	AC 50 Hz	AC 50 Hz	AC 60 Hz	AC 50 Hz
5894700210	1.6 W	-	-	-	-
5894700220	1.6 W	-	-	-	-
5894700620	1.7 W	-	-	-	-
5894705220	-	2.2 VA	1.8 VA	3 VA	3 VA
5894705270	-	3 VA	2.4 VA	4.2 VA	4.2 VA
5894705280	-	2.3 VA	2 VA	3.2 VA	3.2 VA
5894705680	-	2.5 VA	2.2 VA	3.4 VA	3.4 VA
5894900210	1.6 W	-	-	-	-
5894900220	1.6 W	-	-	-	-
5894900620	1.7 W	-	-	-	-
5894905220	-	2.2 VA	1.8 VA	3 VA	3 VA
5894905270	-	3 VA	2.4 VA	4.2 VA	4.2 VA
5894905280	-	2.3 VA	2 VA	3.2 VA	3.2 VA
5894905680	-	2.5 VA	2.2 VA	3.4 VA	3.4 VA

Part No.	Switch-on power		Nominal flow Qn	LED status display	
	AC 60 Hz				
5894700210	-	-	520 l/min	-	-
5894700220	-	-	520 l/min	-	-
5894700620	-	-	520 l/min	Red	1)
5894705220	2.6 VA	-	520 l/min	-	-
5894705270	3.4 VA	-	520 l/min	-	-
5894705280	2.8 VA	-	520 l/min	-	-
5894705680	3 VA	-	520 l/min	Red	-
5894900210	-	-	600 l/min	-	-
5894900220	-	-	600 l/min	-	-
5894900620	-	-	600 l/min	Red	1)
5894905220	2.6 VA	-	600 l/min	-	-
5894905270	3.4 VA	-	600 l/min	-	-
5894905280	2.8 VA	-	600 l/min	-	-
5894905680	3 VA	-	600 l/min	Red	-

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, MO = Manual override

1) With LED and protective diode for reducing voltage peaks in the solenoid coil, protected against polarity reversal

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

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

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

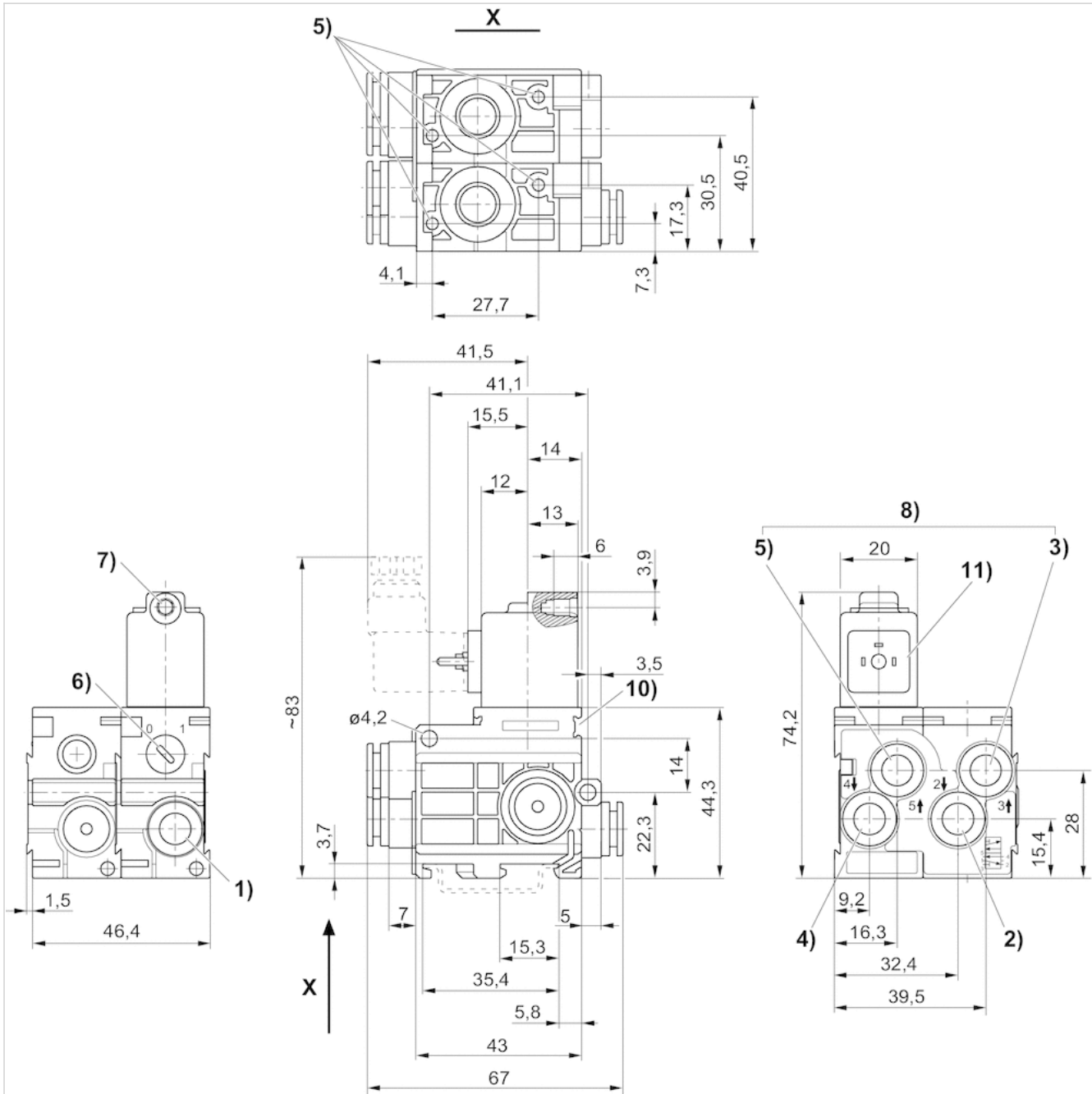
At an ambient temperature of 40 °C the max. working pressure is 10 bar .  
Versions with voltage of less than 50 V DC do not have a protective ground.  
Working pressure with vacuum operation, connection 1: min. 3 bar , connection 3: min. - 0.95 bar

## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber Polyurethane

# Dimensions

## Dimensions



1) port 1 2) port 2 3) port 3 4) port 4 5) port 5 6) manual override 7) core Ø for M 5 8) exhaust air must not be throttled 9) pocket hole 6 mm deep for 3.5 self-tapping screw 10) mounting space for name plate 11) coil can be rotated at 180° intervals






# 3/2-directional valve, Series 589

- Qn = 520-750 l/min
- Compressed air connection output Ø 6x1 Ø 8x1
- Single air pilot
- Pipe connection
- single valve



Version	Poppet valve
Activation	pneumatically
Sealing principle	Soft sealing
Working pressure min./max.	0.5 ... 8 bar
Control pressure min./max.	3 bar
Ambient temperature min./max.	-15 ... 60 °C
Medium temperature min./max.	-15 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m <sup>3</sup>
Weight	See table below

## Technical data

Part No.		NC	Compressed air connection	
			Input	Output
5894400000		NC	Ø 6x1	Ø 6x1
5894600000		NC	Ø 8x1	Ø 8x1
5894400010		NO	Ø 6x1	Ø 6x1
5894600010		NO	Ø 8x1	Ø 8x1

Part No.	Compressed air connection		Flow Qn	Weight
	Exhaust	Pilot control exhaust		
5894400000	Ø 8x1	Ø 4	520 l/min	0.066 kg
5894600000	Ø 8x1	Ø 4	750 l/min	0.064 kg
5894400010	Ø 8x1	Ø 4	520 l/min	0.067 kg
5894600010	Ø 8x1	Ø 4	750 l/min	0.128 kg

Nominal flow Qn at 6 bar and  $\Delta p = 1$  bar, Control pressure in port 12 must be greater than pressure in port 1

## Technical information

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!  
 The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
 The oil content of compressed air must remain constant during the life cycle.  
 Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

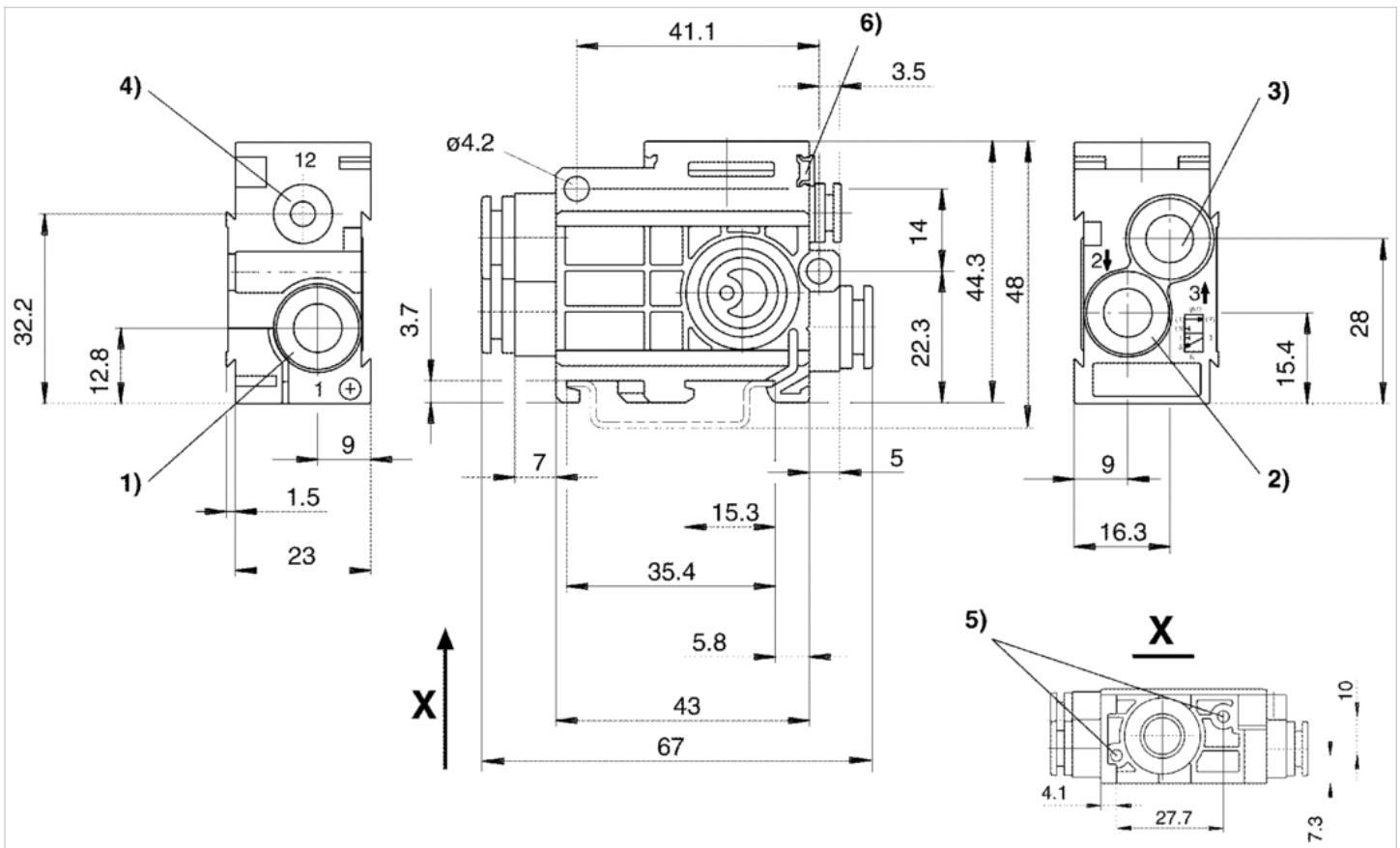
At an ambient temperature of 40 °C the max. working pressure is 10 bar .  
 vacuum operation possible: connection 1 at least 3 bar , connection 3 at least - 0.95 bar

## Technical information

Material	
Housing	Polyamide
Seals	Acrylonitrile butadiene rubber

## Dimensions

### Dimensions



- 1) port 1
- 2) port 2
- 3) port 3
- 4) port 12
- 5) pocket hole 6 mm deep for 3.5 self-tapping screw
- 6) mounting space for name plate

# Valve plug connector, series CON-VP

- Socket, form C, 2+E, angled, 90°
- ISO 15217
- unshielded
- with LED Green



Connection type	Screws
Ambient temperature min./max.	-40 ... 90 °C
Operational voltage	See table below
Protection class	IP65
Mounting screw tightening torque	0.4 Nm
Weight	See table below

## Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484187		250 / 300 V AC/DC	6 A	-	2+E
4402050330		24 V AC/DC	-	Z-diode	2+E

Part No.	LED status display	suitable cable-Ø min./max	Seal	Weight
1834484187	-	4 / 8 mm	caoutchouc/butadiene caoutchouc	0.012 kg
4402050330	Green	-	-	0.014 kg

Part No.	Fig.	
1834484187	Fig. 1	-
4402050330	Fig. 3	1)

1)

## Technical information

The specified protection class is only valid in assembled and tested state.

## Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc



## Dimensions

Fig. 1

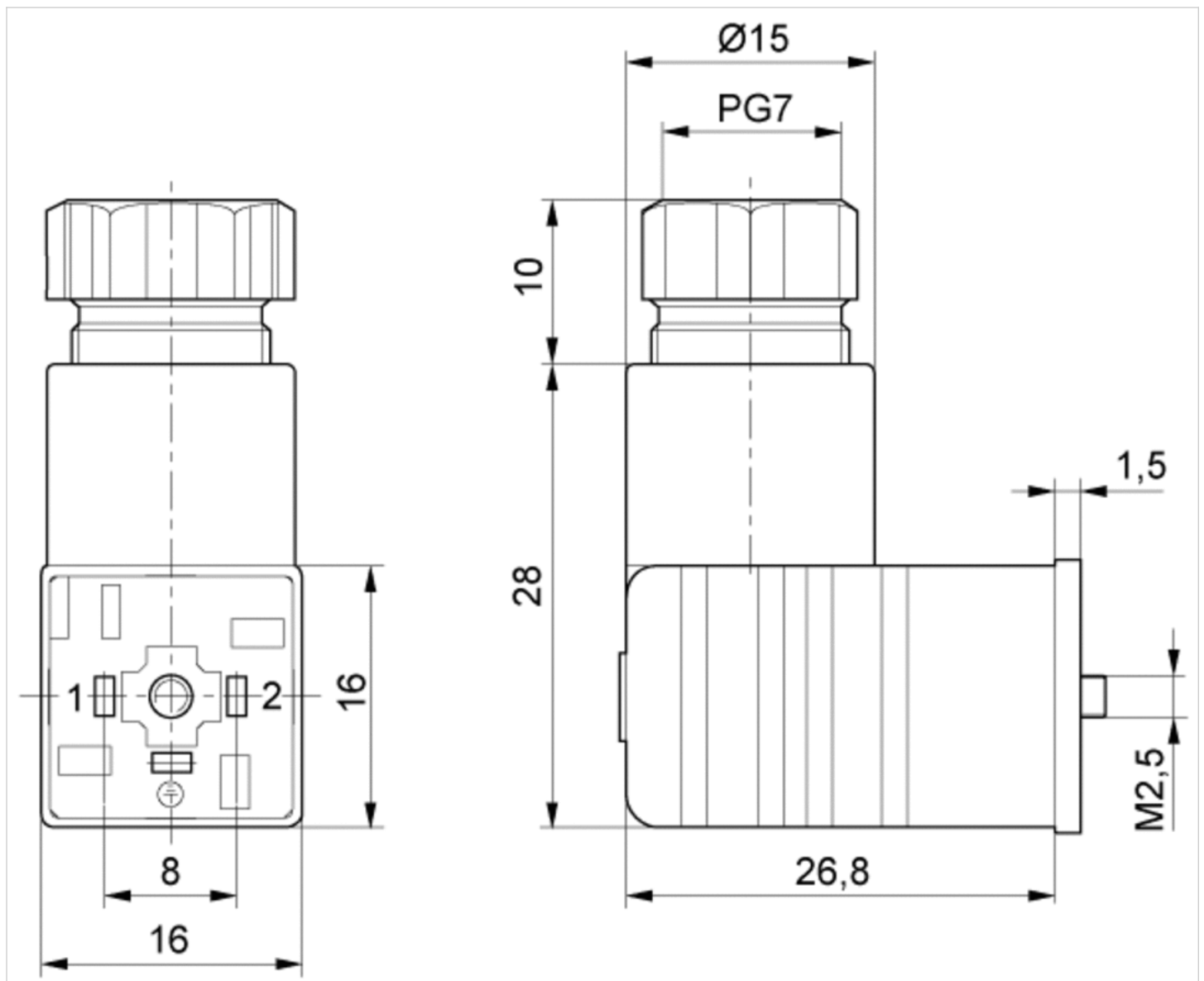


Fig. 2

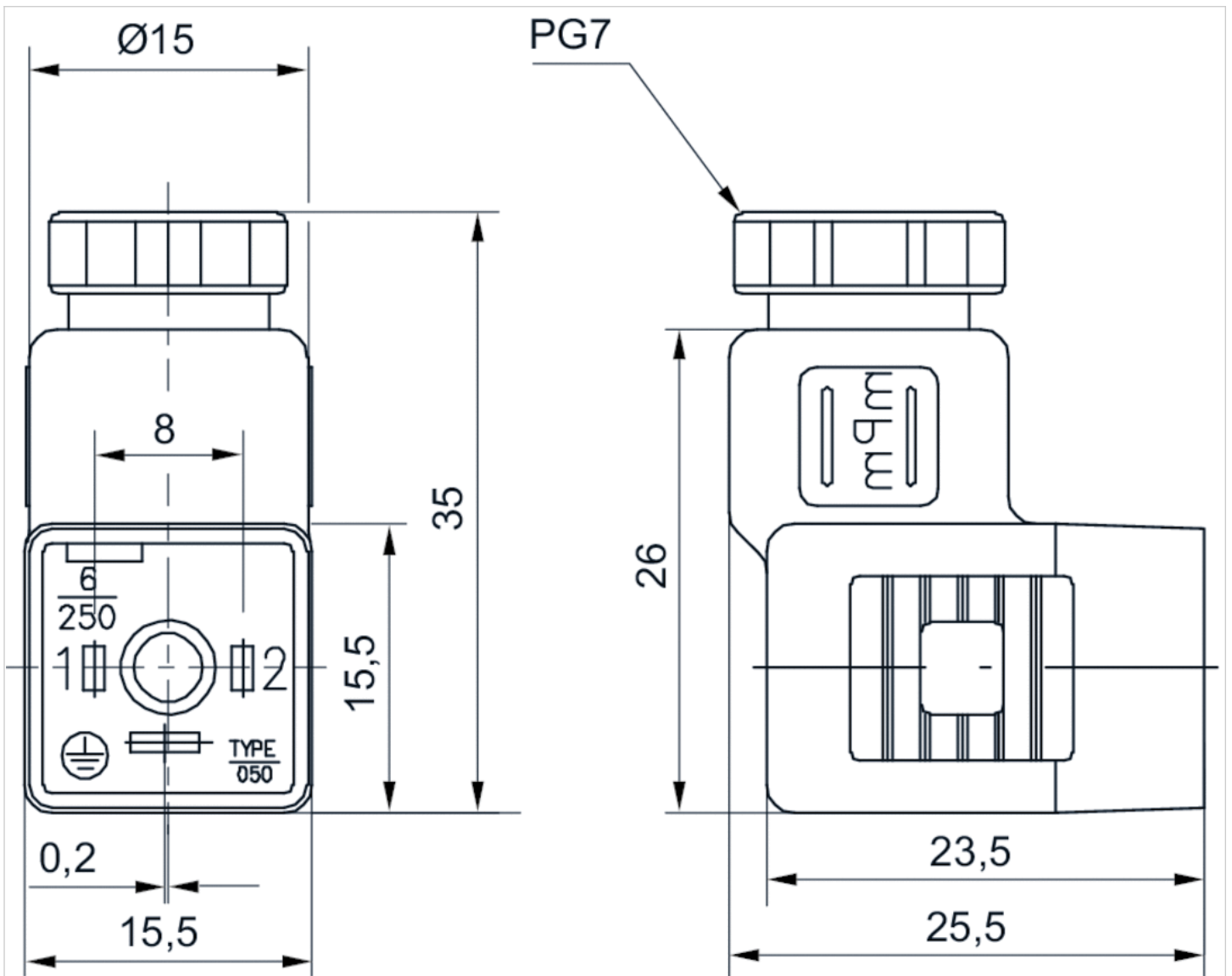
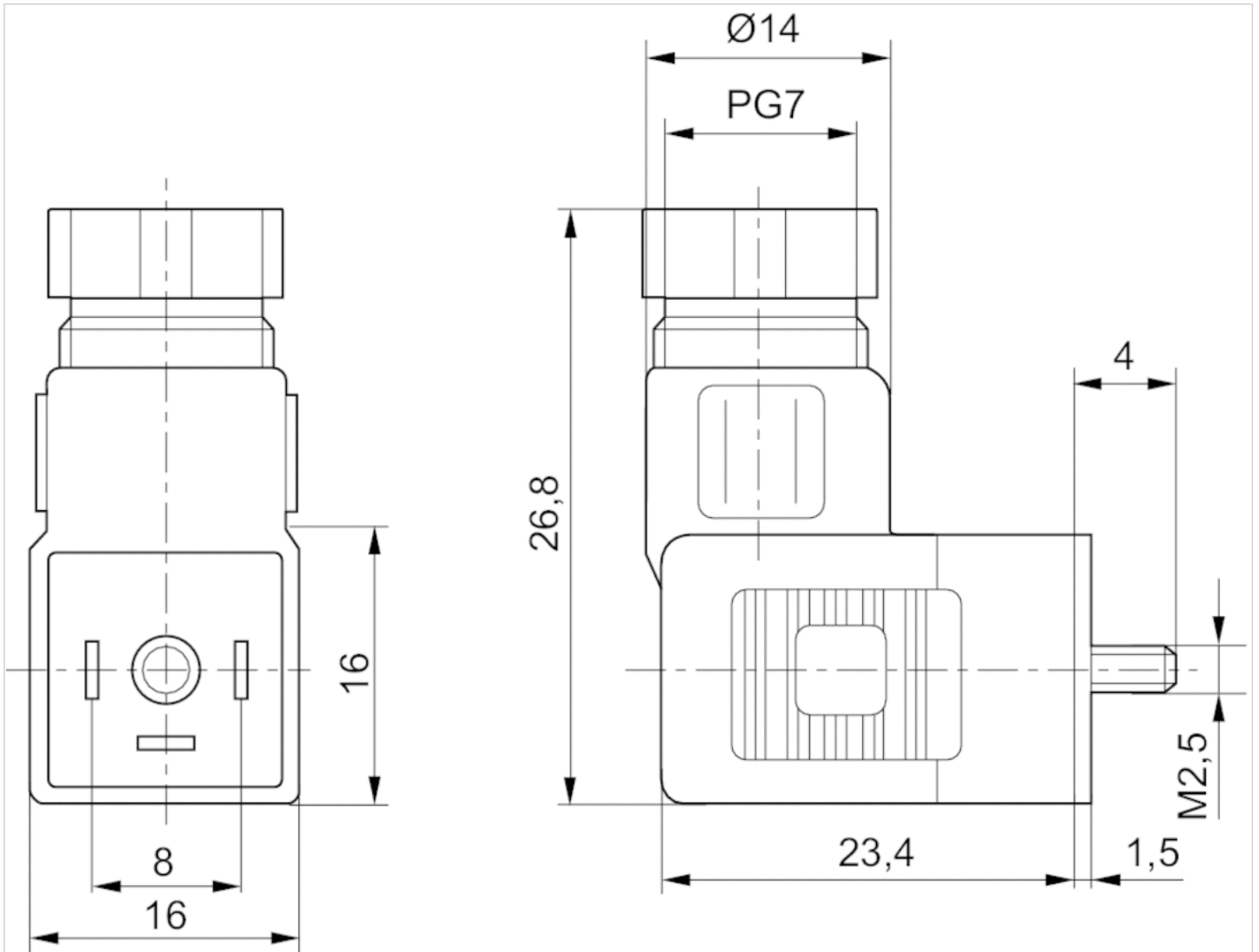
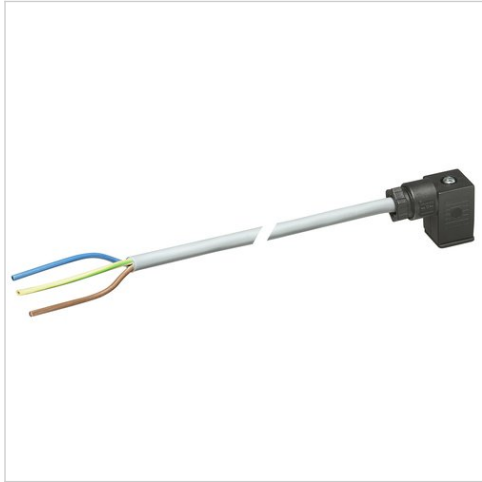


Fig. 3



# Valve plug connector, series CON-VP

- Socket form C 2+E angled 90°
- open cable ends 3-pin
- with cable
- unshielded



Ambient temperature min./max.	-20 ... 80 °C
Operational voltage	See table below
Protection class	IP67
Wire cross-section	0.75 mm <sup>2</sup>
Mounting screw tightening torque	0.4 Nm
Weight	See table below

## Technical data

Part No.		Operational voltage	Max. current	Protective circuit	Contact assignment
1834484212		230 V AC/DC	6 A	-	2+E
1834484213		230 V AC/DC	6 A	-	2+E
1834484214		230 V AC/DC	6 A	-	2+E
1834484215		230 V AC/DC	6 A	-	2+E
1834484204		24 V AC/DC	6 A	Z-diode	2+E
1834484205		24 V AC/DC	6 A	Z-diode	2+E
1834484206		24 V AC/DC	6 A	Z-diode	2+E
1834484207		24 V AC/DC	6 A	Z-diode	2+E
1834484208		230 V AC/DC	6 A	Varistor	2+E
1834484209		230 V AC/DC	6 A	Varistor	2+E
1834484210		230 V AC/DC	6 A	Varistor	2+E
1834484211		230 V AC/DC	6 A	Varistor	2+E
1834484236		24 V AC/DC	6 A	Z-diode	2+E

Part No.	LED status display	Number of wires	Cable-Ø	Cable length	Weight	Fig.	
1834484212	-	3	5.9 mm	3 m	0.183 kg	Fig. 1	-
1834484213	-	3	5.9 mm	3 m	0.183 kg	Fig. 2	-
1834484214	-	3	5.9 mm	5 m	0.308 kg	Fig. 1	-
1834484215	-	3	5.9 mm	5 m	0.308 kg	Fig. 2	-
1834484204	Yellow	3	5.9 mm	3 m	0.185 kg	Fig. 1	1)
1834484205	Yellow	3	5.9 mm	3 m	0.185 kg	Fig. 2	1)
1834484206	Yellow	3	5.9 mm	5 m	0.292 kg	Fig. 1	1)
1834484207	Yellow	3	5.9 mm	5 m	0.298 kg	Fig. 2	1)
1834484208	Yellow	3	5.9 mm	3 m	0.171 kg	Fig. 1	1)
1834484209	Yellow	3	5.9 mm	3 m	0.194 kg	Fig. 2	1)
1834484210	Yellow	3	5.9 mm	5 m	0.297 kg	Fig. 1	1)

Part No.	LED status display	Number of wires	Cable-Ø	Cable length	Weight	Fig.	
1834484211	Yellow	3	5.9 mm	5 m	0.285 kg	Fig. 2	1)
1834484236	Yellow	3	5.9 mm	10 m	0.571 kg	Fig. 2	1)

1) Scope of delivery incl. flat gasket

## Technical information

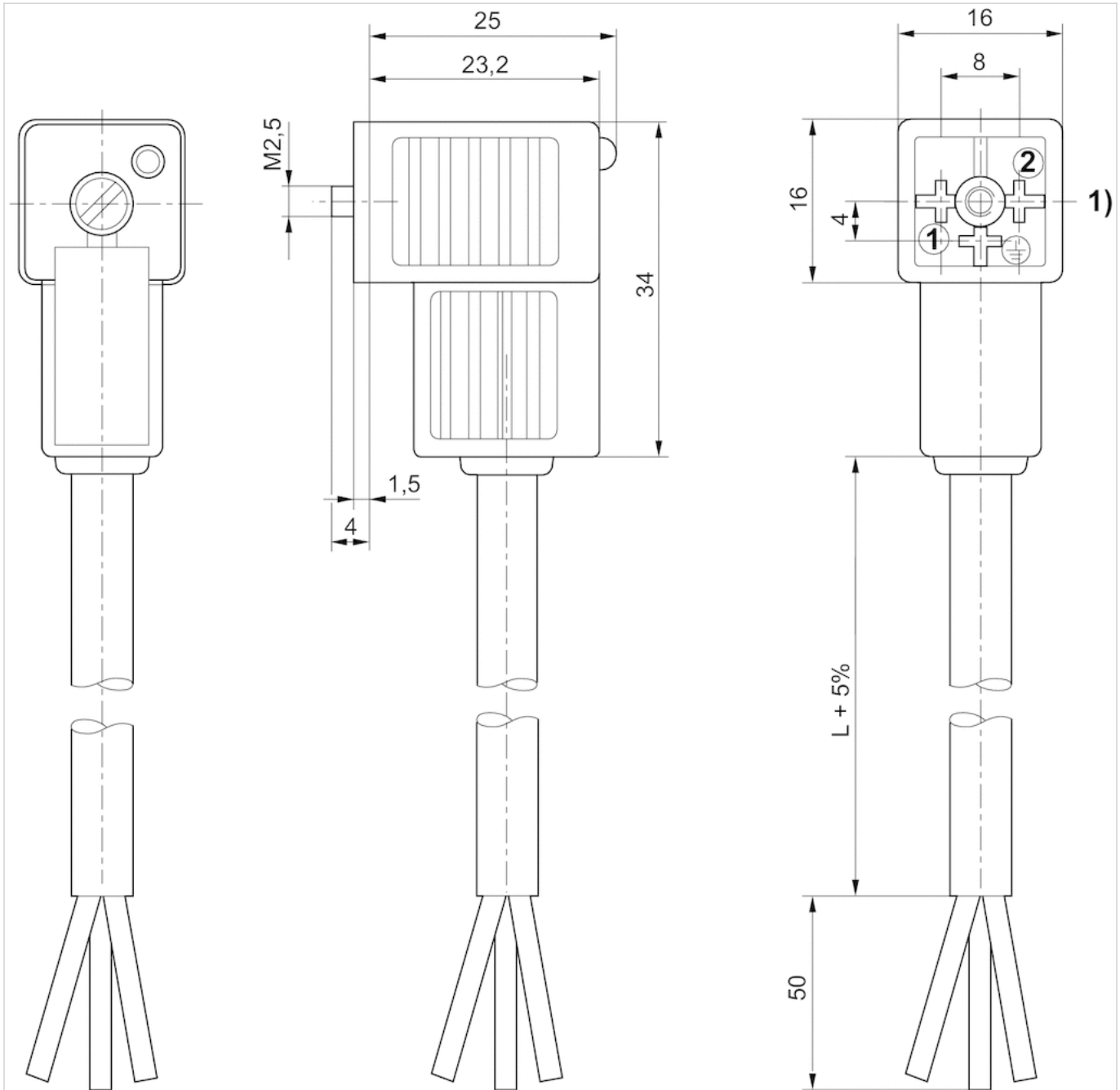
The specified protection class is only valid in assembled and tested state.

## Technical information

Material	
Seals	caoutchouc/butadiene caoutchouc
Cable sheath	Polyvinyl chloride

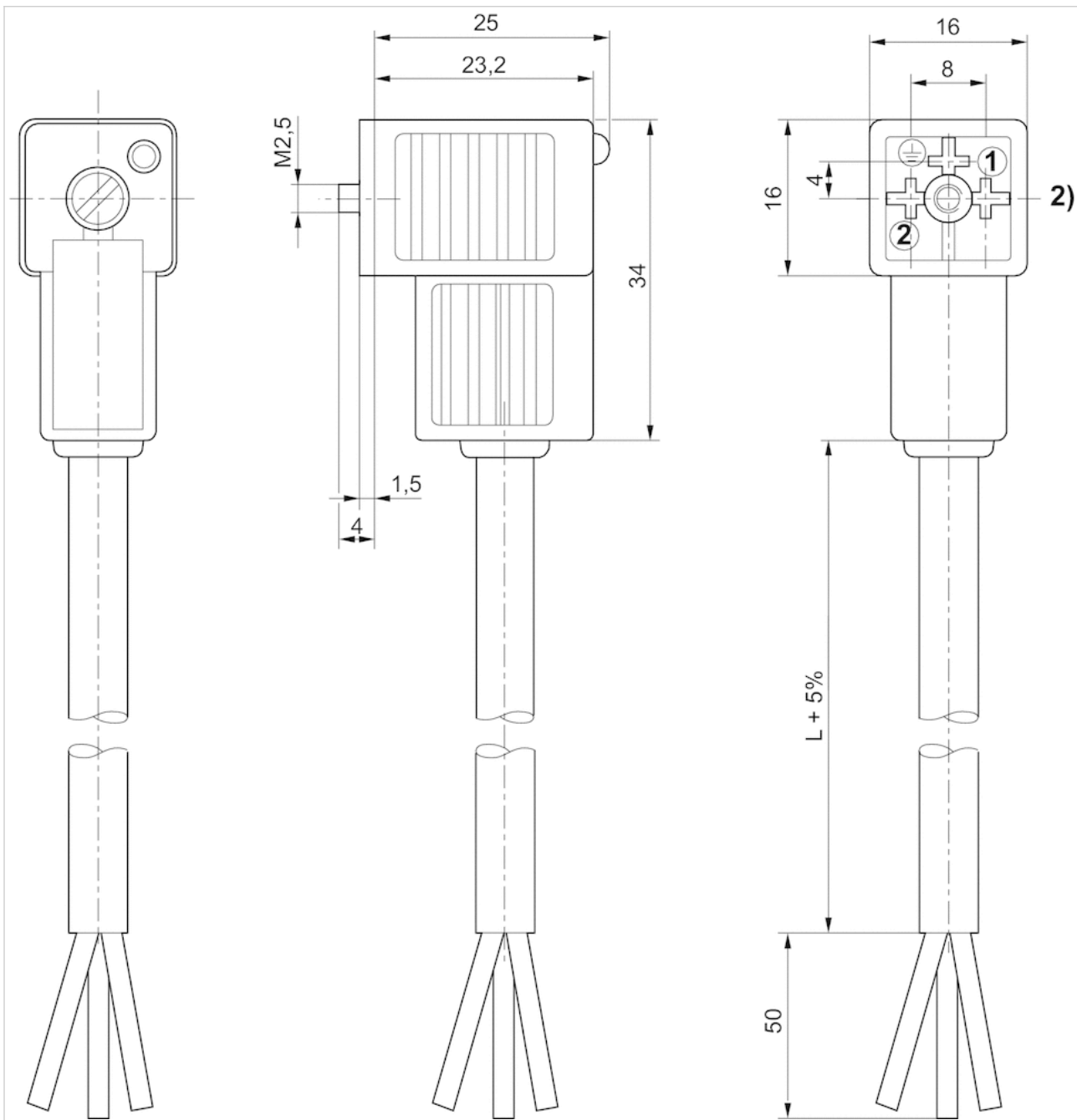
# Dimensions

Fig. 1



1) 0° female insert

Fig. 2



2) 180° female insert

# Contact bridges, series CON-CB

- Plug, 4-pin, straight, 180°
- Socket, form C, 2-pin, straight
- Number of solenoid coils 1



Ambient temperature min./max.	-15 ... 50 °C
Protection class	IP65
Operational voltage	24 V AC/DC
Voltage tolerance AC 50 Hz	-10% / +10%
Voltage tolerance AC 60 Hz	-10% / +10%
Valve LED status display	Yellow
Mounting screw	M2.5 with slot
Tightening torque for mounting screws [+0,05]	0.25 Nm
Weight	0.016 kg

## Technical data

Part No.
5763573113

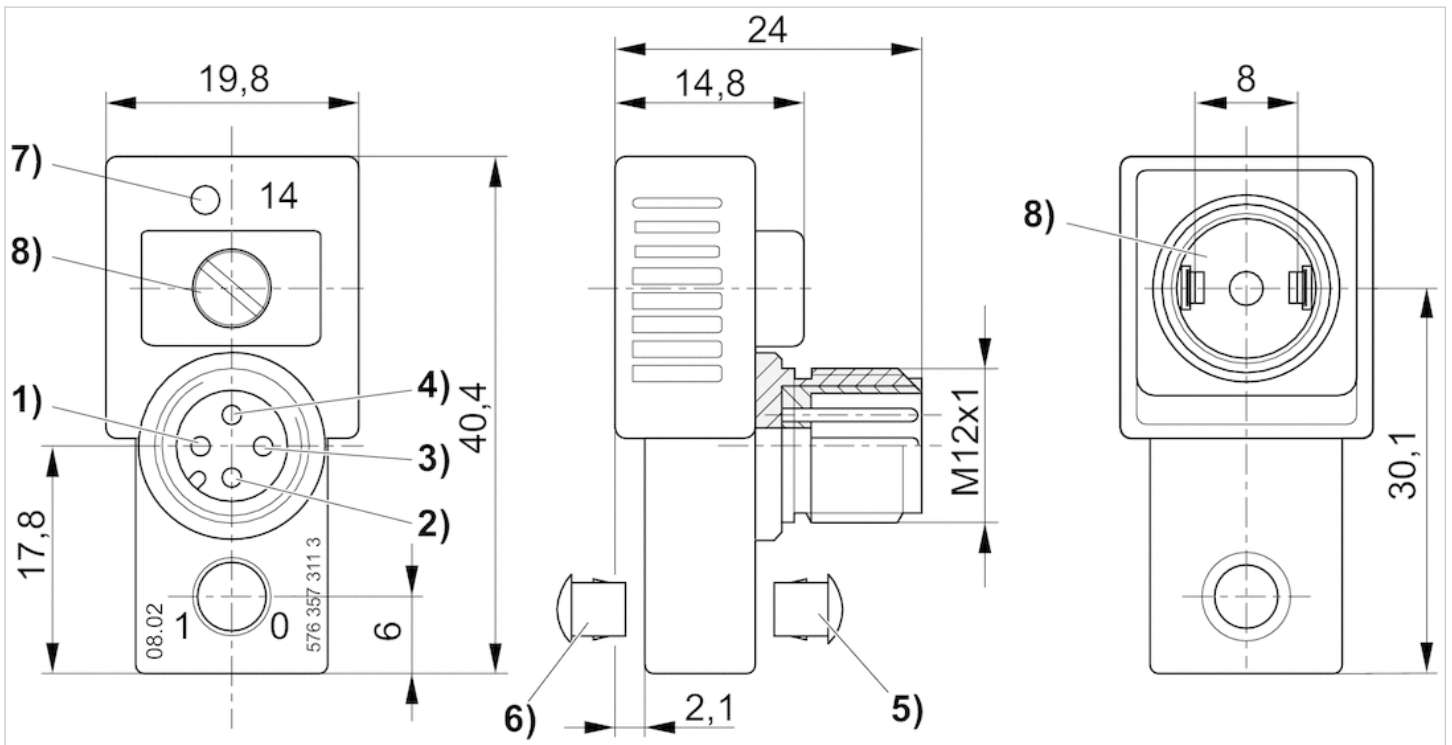
## Technical information

Material	
Housing	Polyester amide
Seals	Fluorocaoutchouc



## Dimensions

### Dimensions



- 1) not assigned
- 2) not assigned
- 3) 0 V
- 4) magnet 14
- 5) Sealing cap for manual override not removable
- 6) Removable
- 7) LED valve
- 8) captive seal and screw

# Contact bridges, series CON-CB

- Control Snap Ø8
- Plug, 3-pin, straight, 180°
- Socket, form C, 2-pin, straight
- Number of solenoid coils 1



Ambient temperature min./max.	-25 ... 75 °C
Protection class	IP65
Operational voltage	24 V DC
Valve LED status display	Yellow
Mounting screw	M2.5 with slot
Tightening torque for mounting screws [+0,05]	0.25 Nm
Weight	0.012 kg

## Technical data

Part No.	Wire cross-section
5763503183	0.14 mm <sup>2</sup>

## Technical information

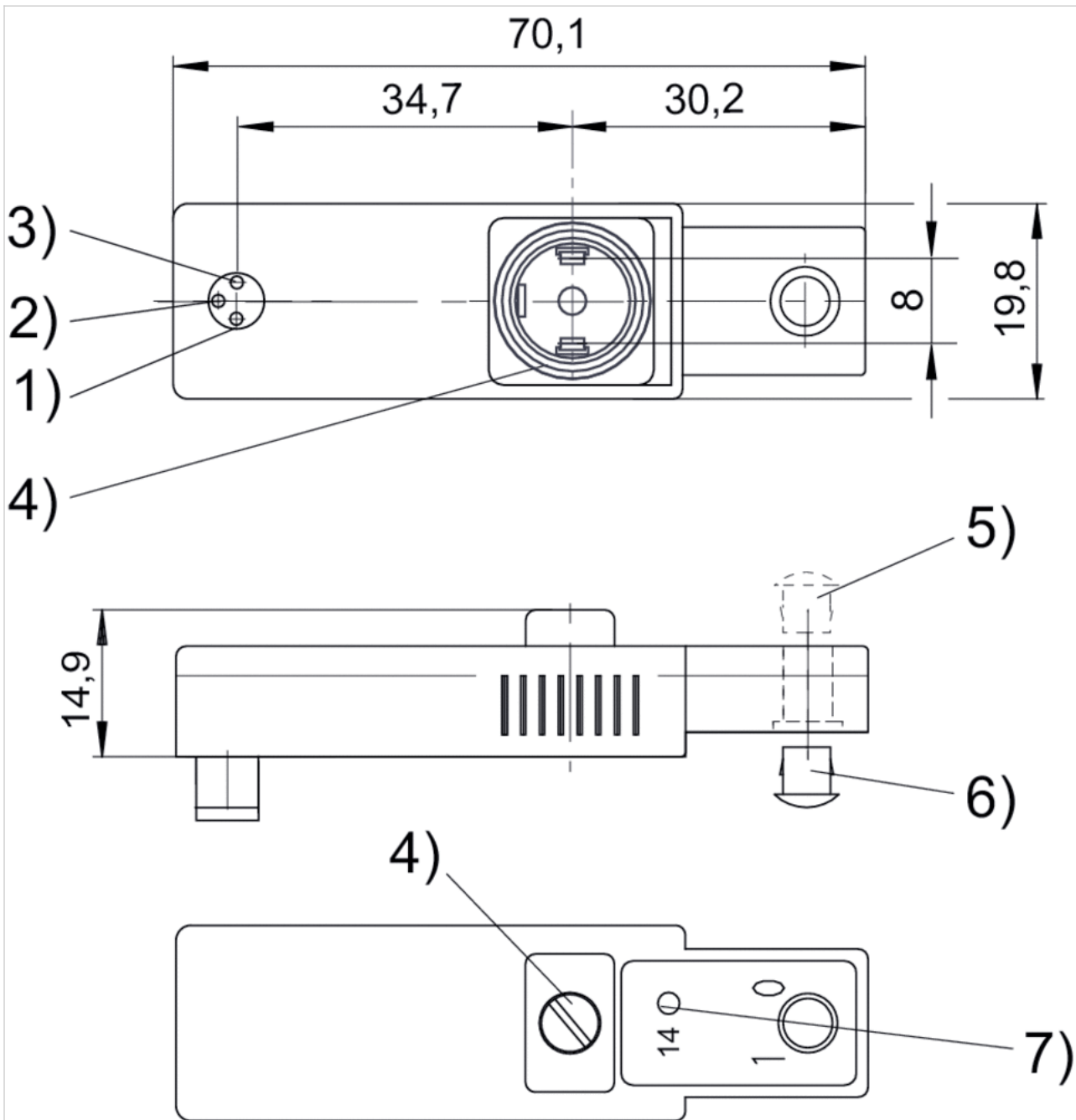
The specified protection class is only valid in assembled and tested state.

## Technical information

Material	
Housing	Polyester amide
Seals	Fluorocaoutchouc

Dimensions

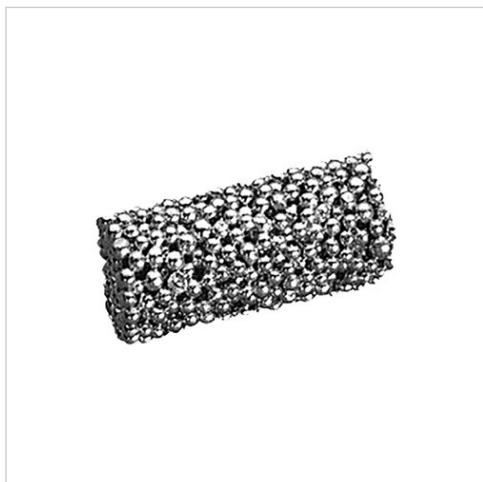
Dimensions



- 1) solenoid 14 2) not assigned 3) 0 V
- 4) captive seal and screw 5) sealing cap for manual override not removable 6) removable 7) LED valve

# Silencers, series SI1

- Sintered bronze



Working pressure min./max.

0 ... 10 bar

Ambient temperature min./max.

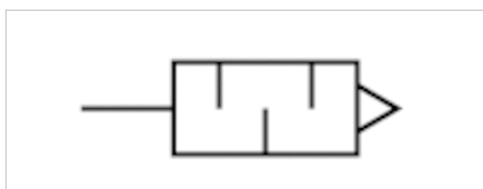
-25 ... 80 °C

Medium

Compressed air

Weight

0.008 kg



## Technical data

Part No.

8993800114

## Technical information

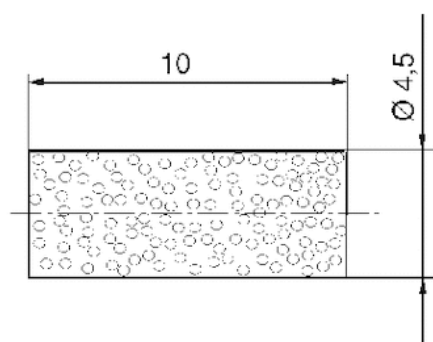
Material

Silencer

Sintered bronze

## Dimensions

### Dimensions



# Throttle valve, Series CH02

- Qn = 1300 l/min
- Throttle valve with silencer



Working pressure min./max.	0 ... 10 bar
Ambient temperature min./max.	-25 ... 60 °C
Weight	0.06 kg

## Technical data

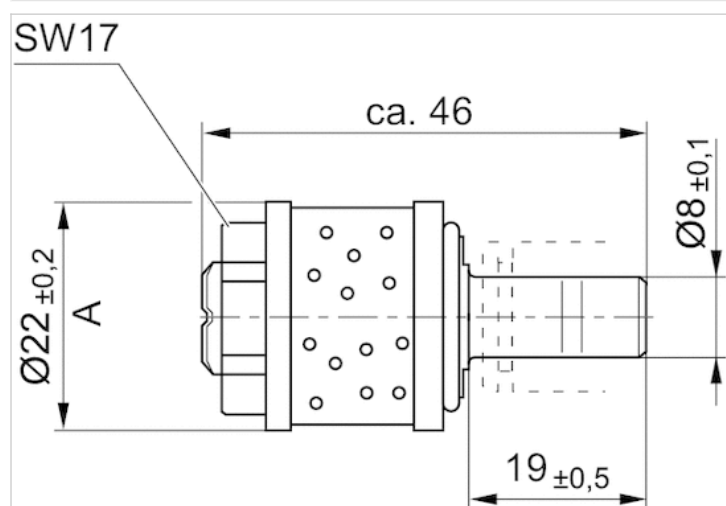
Part No.	Port 1	Flow
		Qn
3341052010	Ø 8	1300 l/min

## Technical information

Material	
Housing	Brass, galvanized
Seals	Acrylonitrile butadiene rubber
Silencer	Polyethylene

## Dimensions

### Dimensions



# Air connection module



Working pressure min./max.	0.5 ... 8 bar
Ambient temperature min./max.	-15 ... 60 °C
Weight	0.008 kg

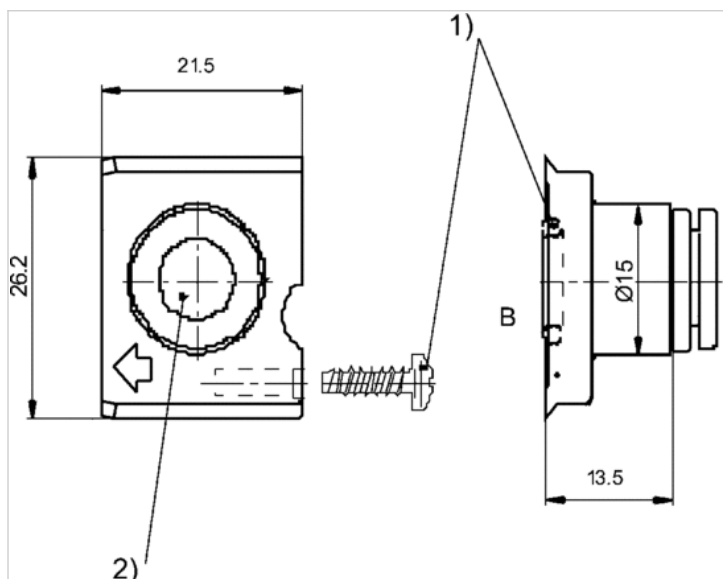
## Technical data

Part No.	Type	Delivery unit
579000092	Air connection module	1 piece

## Technical information

Material	
Housing	Polyamide

## Dimensions



1) mounting screw and O-ring included in scope of delivery

2) Push-in fitting Ø 8x1

## Threaded pins



### Technical data

Part No.	Version	Thread connection	Delivery quantity
8102060582	For mounting on the hat rail	M4	50 piece

## Name plates

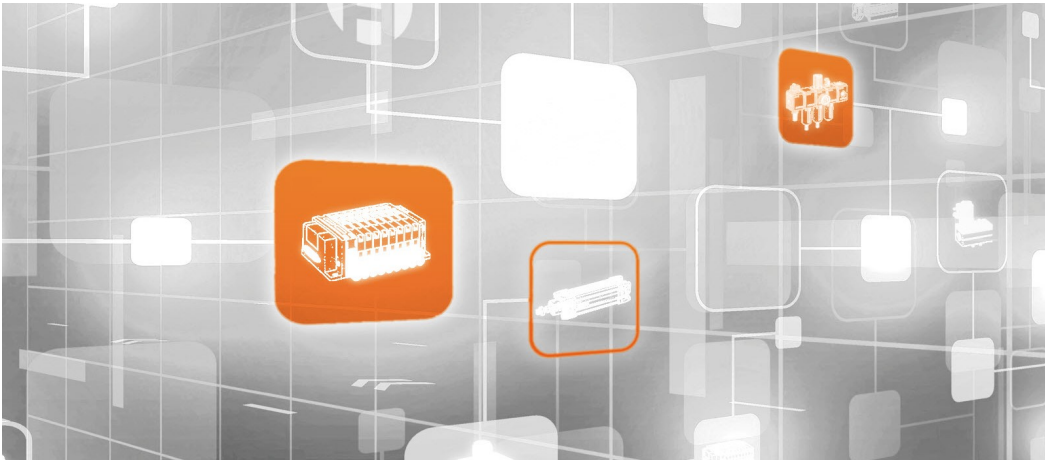


### Technical data

Part No.	Type	Delivery unit
8943056312	1-10	5 piece
8943056322	11-20	5 piece



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