Proportional pressure regulator VPPE



Characteristics

At a glance

Design:
- Some selected types of the pressure regulator VPPE can be screwed onto a profile strip. This has the advantage that the profile strip can be used to create a central compressed air supply.
- The air can be fed into the profile strip at one end, at both ends through end plates, or using an intermediate air supply module (for increased air requirements).
- The holes for the profile strip must be drilled according to the assembly instructions. The pressure regulators VPPE are screwed to the profile strip using the mounting plate. The end plates are screwed to the profile strip on the front left and right. See the assembly instructions for further information: Internet: vppe

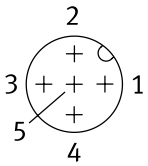
Compressed air supply on the profile strip:
- When using the profile strip as a central compressed air supply, make sure that the required compressed air supply is guaranteed. Bear in mind that an intermediate air supply module needs a valve position. The intermediate air supply module takes up one VPPE valve position.

Recommendation for compressed air supply:
- For example, with tubing diameter Ø 16 mm with simultaneous max. flow rate for all valves, the following applies: Compressed air supply – number of valves: –At one end – max. 5 valves, At both sides – max. 10 valves, With intermediate air supply – max. 5 valves each
- Intermediate supply modules must always be placed centrally. Several intermediate supply modules must be evenly distributed.

Note:
- Only the following types of proportional-pressure regulators VPPE can be mounted on profile strips using a mounting plate: valve VPPE with display and top part turned 90°, VPPE-...-E1T
- Further information on mounting proportional-pressure regulators VPPE as well as intermediate supply modules on profile strips can be found in the assembly instructions: Internet: vppe

Series

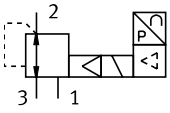
[VPPE]	Proportional pressure regulator



Pin 1: Supply 21.6 ... 26.4 V DC
Pin 2: Setpoint (-)
Pin 3: GND (-)
Pin 4: Setpoint (+) 0 ... 10 V DC / 4 ... 20 mA
Pin 5: Actual value output or switching output (can be selected via the operator panel)

Switching input/output

[V]	0 ... 10 V



Diagrams

The diagrams shown in this document are also available online. These can be used to display precise values.

Type code

001	Series	
VPPE	Proportional pressure regulator	

002	Valve function	
3	3-way valve	

003	Valve function	
1	Normally closed	

004	Pneumatic connection	
1/8	Female thread G1/8	
1/4	Female thread G1/4	

005	Pressure regulation range	
2	0.02 ... 2 bar	
6	0.06 ... 6 bar	
10	0.1 ... 10 bar	

006	Setpoint input for individual valves	
005	0 ... 5 V	
010	0 ... 10 V	
420	4 ... 20 mA	
MR	Modbus® RTU via RS485	

007	Operator unit/interface	
	None	
E1	LED display, 7-segment	

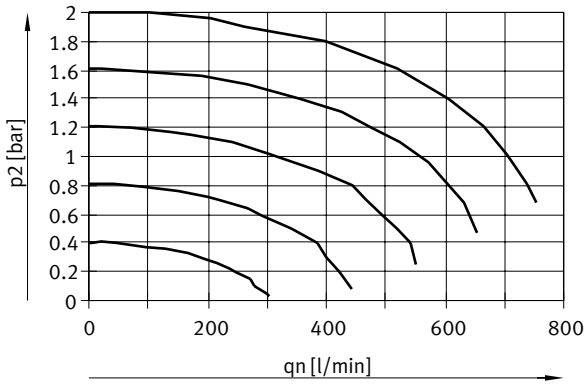
008	Mounting	
	In-line valve	
T	Common supply manifold mounting (mounting rail)	

009	Special material properties	
	None	
F1A	Recommended for production plants for manufacturing lithium-ion batteries, F1A	

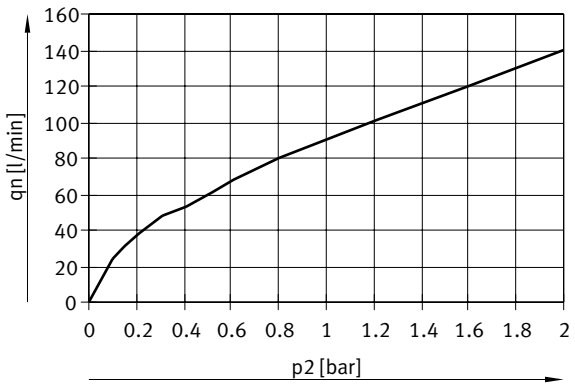
Datasheet

General technical data						
Pressure regulation range	0.002 ... 0.2 MPa		0.01 ... 1 MPa		0.006 ... 0.6 MPa	
Pressure regulation range	0.02 ... 2 bar		0.1 ... 10 bar		0.06 ... 6 bar	
Pneumatic connection, port 1	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4
Pneumatic connection, port 2	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4
Pneumatic connection, port 3	G1/8					
Design	Piloted diaphragm regulator					
Valve function	3-way proportional pressure regulator					
Safety instructions	Safety position VPPE: if the power supply cable is interrupted, output pressure is maintained unregulated.					
Sealing principle	Soft					
Type of actuation	Electrical					
Type of piloting	Piloted					
Type of mounting	With through-hole					
Mounting position	Any, Preferably upright					
Nominal size, supply	5 mm					
Nominal size, exhaust	2.5 mm					
Standard nominal flow rate (standardised to DIN 1343)	310 l/min	700 l/min	1,250 l/min	2,300 l/min	800 l/min	1,700 l/min
Product weight	390 g					

Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-2-..., qn 1 -> 2

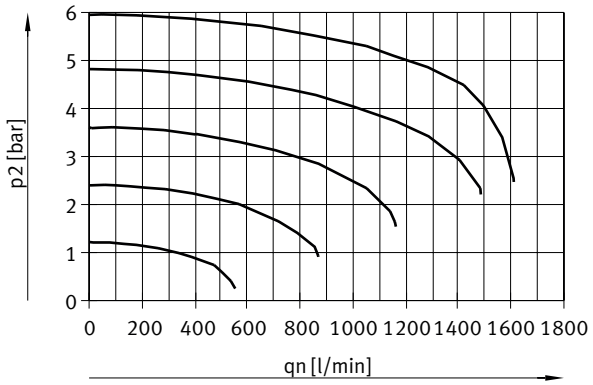


Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-2-..., qn 2 -> 3



Datasheet

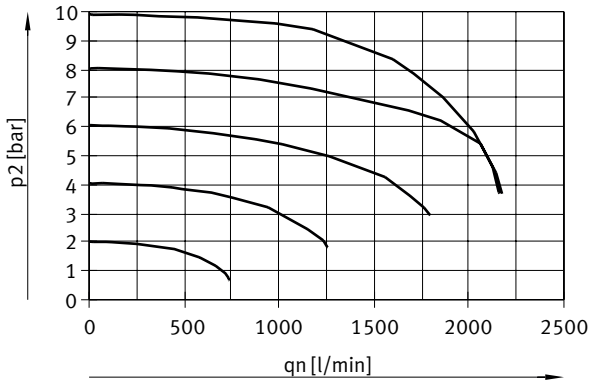
Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-6-..., qn 1 -> 2



Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-6-..., qn 2 -> 3

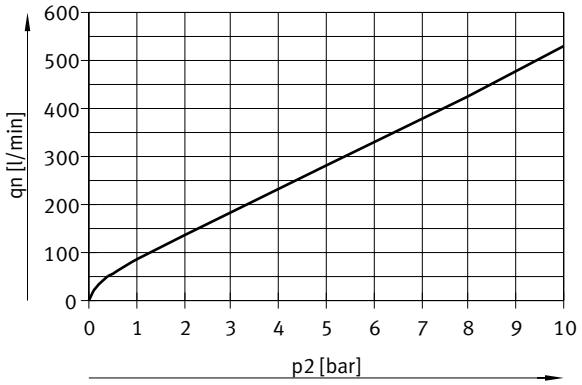


Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-10-..., qn 1 -> 2

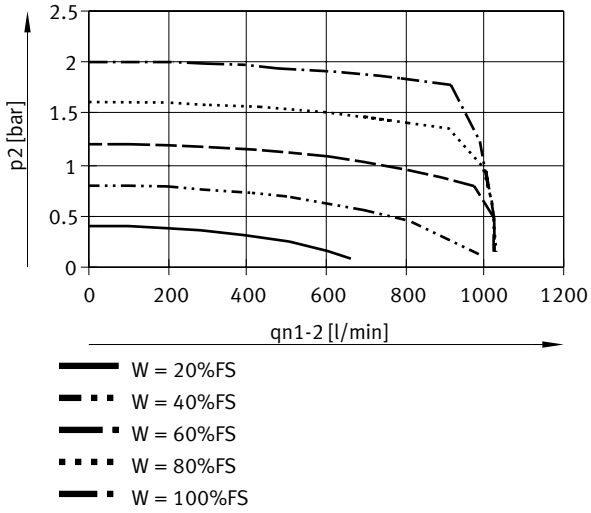


Datasheet

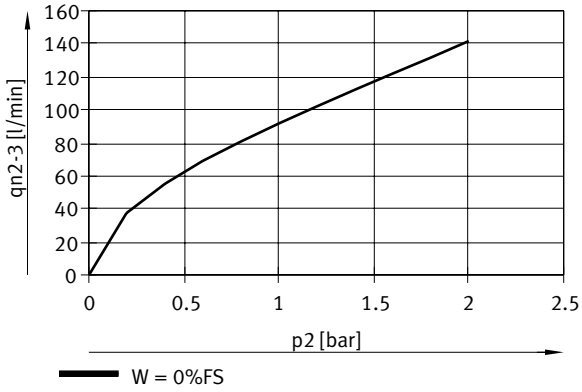
Flow rate qn as a function of output pressure p2, VPPE-3-1-1/8-10-..., qn 2 -> 3



Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-2-..., qn 1 -> 2

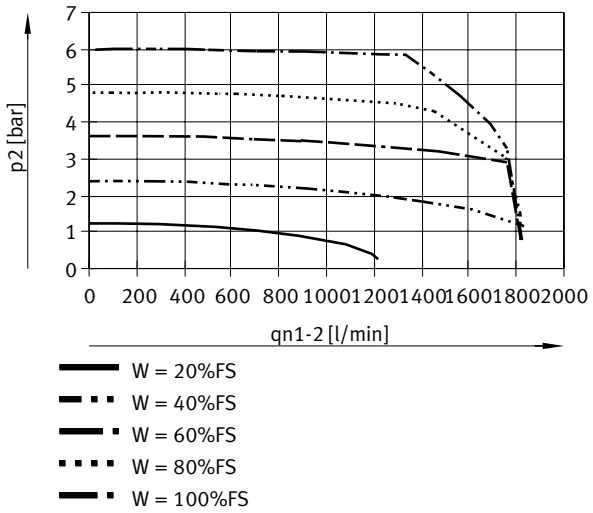


Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-2-..., qn 2 -> 3

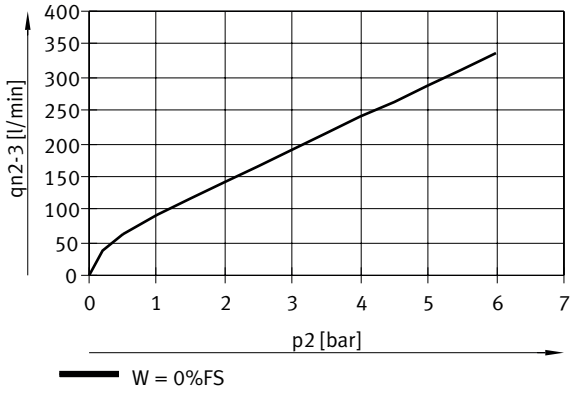


Datasheet

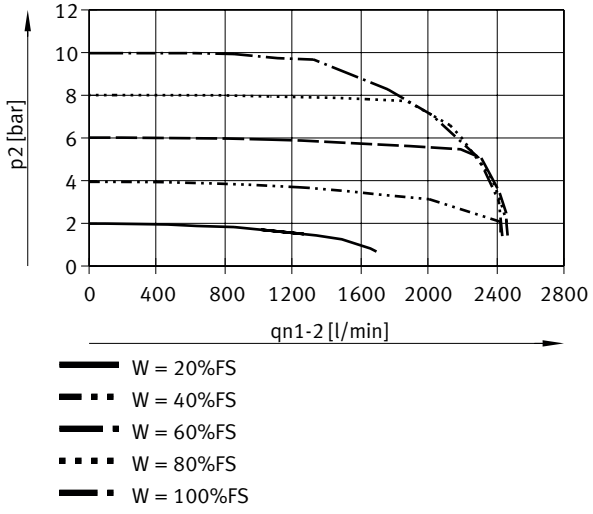
Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-6-..., qn 1 -> 2



Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-6-..., qn 2 -> 3

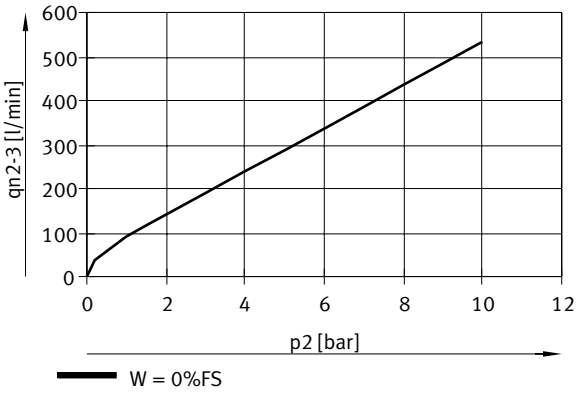


Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-10-..., qn 1 -> 2



Datasheet

Flow rate qn as a function of output pressure p2, VPPE-3-1-1/4-10-..., qn 2 -> 3



Electrical data

Signal range analogue output	0 - 10 V		1 - 5 V		4 - 20 mA	
Signal range analogue input	0 - 10 V		0 - 5 V		4 - 20 mA	
Pneumatic connection, port 1	G1/8	G1/4	G1/8	G1/4	G1/8	G1/4

Electrical connection	5-pin, M12, Plug
Operational voltage range DC	21.6 ... 26.4 V
Display type	LED indicator, 3 digits
Residual ripple	10%
Max. electrical power consumption	4.2 W
Max. current consumption	160 mA
Short circuit current rating	For all electrical connections
Reverse polarity protection	For all electrical connections
Switching output	PNP
Degree of protection	IP65

Datasheet

Operating and environmental conditions, 4 ... 20 mA, G1/4			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	4 ... 20 mA		
Pneumatic connection, port 1	G1/4		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Total accuracy	1.25%FS		
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 10 V, G1/4			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 10 V		
Pneumatic connection, port 1	G1/4		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Total accuracy	1.25%FS		
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 5 V, G1/4			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 5 V		
Pneumatic connection, port 1	G1/4		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	1 %FS		
Reproducibility	0.5 %FS		1.5 %FS
Linearity	1 %FS		
Total accuracy	1.25%FS		
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, Modbus RTU via RS485, G1/4			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	Modbus® RTU via RS485		
Pneumatic connection, port 1	G1/4		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 ... 0.004 MPa	0.005 ... 0.007 MPa	0.002 MPa
Max. pressure hysteresis	0.03 ... 0.04 bar	0.05 ... 0.07 bar	0.02 bar
Hysteresis	0.7 %FS		1 %FS
Reproducibility	0.6 ... 0.7 %FS	0.5 %FS	1 %FS
Linearity	1 %FS		
Total accuracy	1.25%FS		1.5%FS
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 4 ... 20 mA, G1/8			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	4 ... 20 mA		
Pneumatic connection, port 1	G1/8		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	0.5 %FS		1 %FS
Reproducibility	0.5 %FS		
Linearity	1 %FS		
Total accuracy	1.25%FS		1.5%FS
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 10 V, G1/8			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Setpoint input for individual valves	0 ... 10 V		
Pneumatic connection, port 1	G1/8		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.003 MPa	0.005 MPa	0.002 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar	0.02 bar
Hysteresis	0.5 %FS		1 %FS
Reproducibility	0.5 %FS		
Linearity	1 %FS		
Total accuracy	1.25%FS		1.5%FS
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity) [3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, 0... 5 V, G1/8		
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar
Setpoint input for individual valves	0 ... 5 V	
Pneumatic connection, port 1	G1/8	
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas	
Note on operating and pilot medium	Lubricated operation not possible	
Max. pressure hysteresis	0.003 MPa	0.005 MPa
Max. pressure hysteresis	0.03 bar	0.05 bar
Hysteresis	0.5 %FS	
Reproducibility	0.5 %FS	
Linearity	1 %FS	
Total accuracy	1.25%FS	
Temperature cooefficient	0.04 %/K	
Duty cycle	100%	
Ambient temperature	0 ... 60°C	
Media temperature	10 ... 50°C	
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress	
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive	
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions	
Approval	RCM c UL us - Listed (Oil)	

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Datasheet

Operating and environmental conditions, Modbus RTU via RS485, G1/8			
Inlet pressure 1	0.6 ... 0.8 MPa	0.6 ... 1.1 MPa	0.3 ... 0.4 MPa
Inlet pressure 1	6 ... 8 bar	6 ... 11 bar	3 ... 4 bar
Pressure regulation range	0.006 ... 0.6 MPa	0.01 ... 1 MPa	0.002 ... 0.2 MPa
Pressure regulation range	0.06 ... 6 bar	0.1 ... 10 bar	0.02 ... 2 bar
Pneumatic connection, port 1	G1/8		
Operating medium	Compressed air to ISO 8573-1:2010 [7:4:4], Inert gas		
Note on operating and pilot medium	Lubricated operation not possible		
Max. pressure hysteresis	0.004 MPa	0.007 MPa	0.002 MPa
Max. pressure hysteresis	0.04 bar	0.07 bar	0.02 bar
Hysteresis	0.7 %FS		1 %FS
Reproducibility	0.6 %FS	0.5 %FS	1 %FS
Linearity	1 %FS		
Total accuracy	1.25%FS		1.5%FS
Temperature cooefficient	0.04 %/K		
Duty cycle	100%		
Ambient temperature	0 ... 60°C		
Media temperature	10 ... 50°C		
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress		
CE mark (see declaration of conformity) [2]	To EU EMC Directive In accordance with EU RoHS Directive		
UKCA marking (see declaration of conformity)[3]	To UK instructions for EMC To UK RoHS instructions		
Approval	RCM c UL us - Listed (Oil)		

1) More information www.festo.com/x/topic/crc

2) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

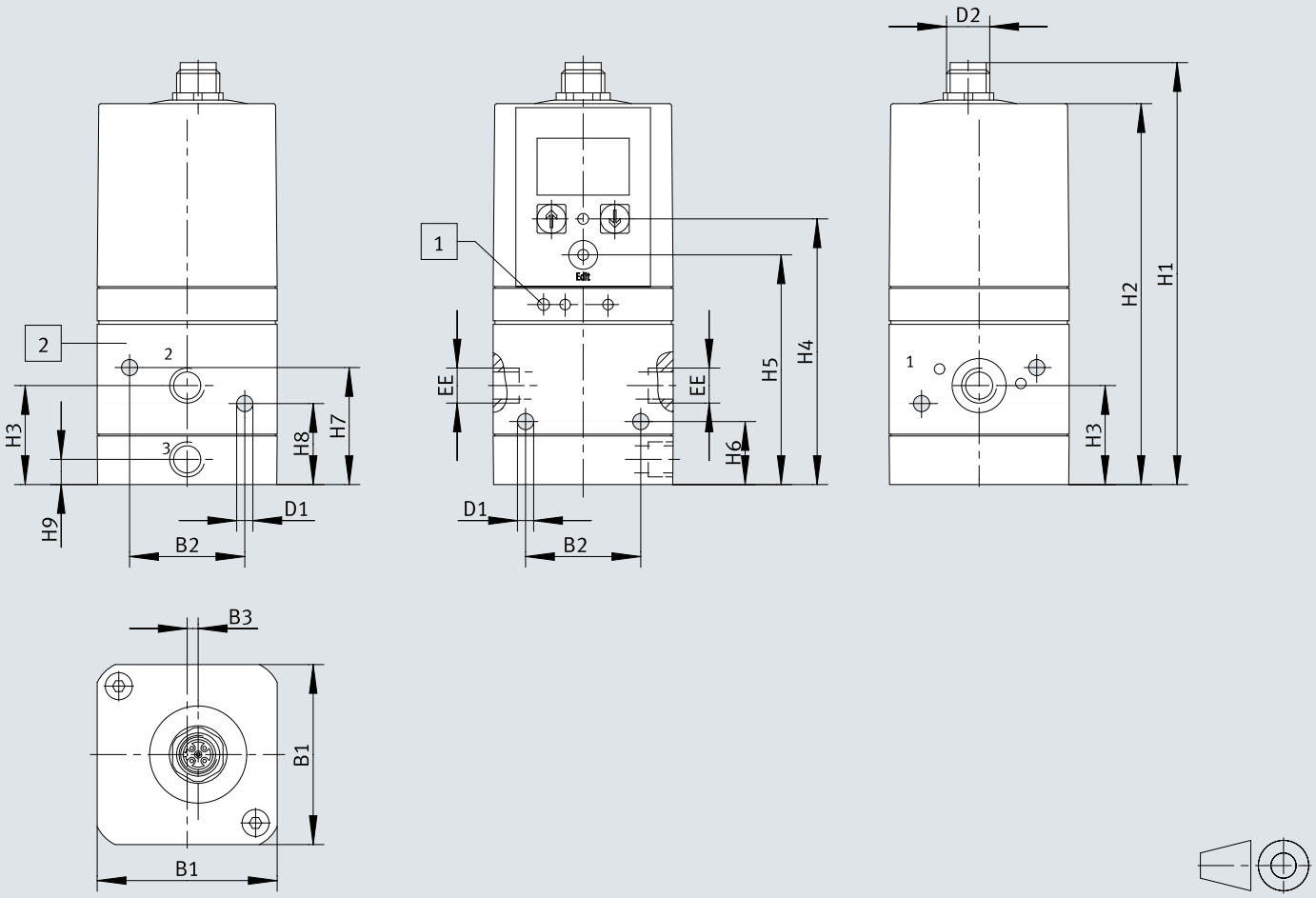
3) For information about the area of use, see the EC declaration of conformity at: www.festo.com/catalogue/... → Support/Downloads.
If the devices are subject to usage restrictions in residential, commercial or light-industrial environments, further measures for the reduction of the emitted interference may be necessary.

Materials, mounting plate (set)	
Material plate	Wrought aluminium alloy
Material seals	NBR
Material screws	Steel
Note on materials	RoHS compliant
Corrosion resistance class CRC [1]	2 - Moderate corrosion stress

1) More information www.festo.com/x/topic/kbk

Dimensions

Dimensions – VPPE Download CAD data www.festo.com

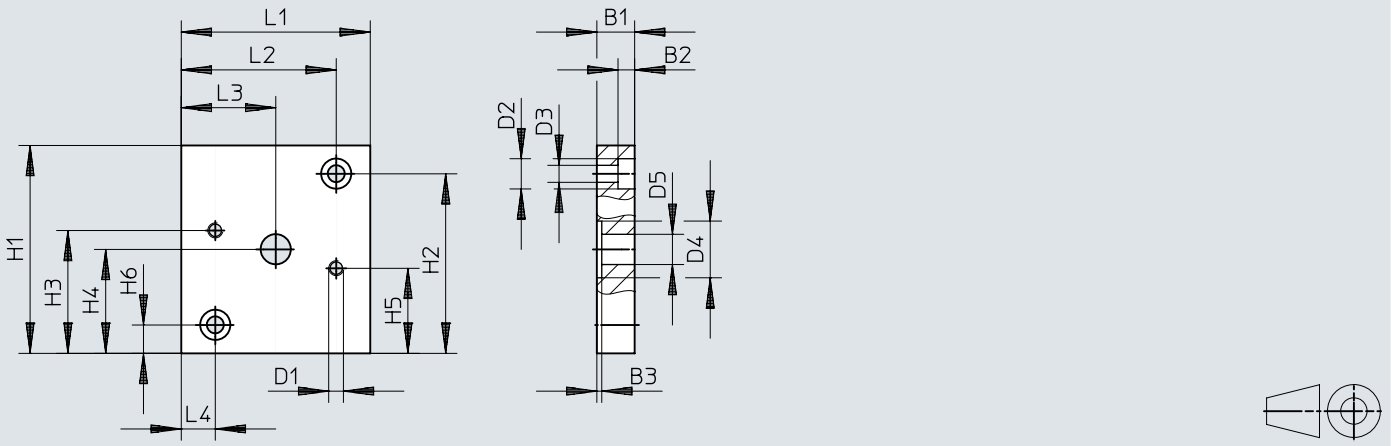


[1] Earthing hole
[2] Booster with variant VPPE-...-E1T rotated 90°

	B1	B2	B3	D1 ø	D2	EE	H1	H2	H3	H4	H5	H6	H7	H8	H9
VPPE-3-1-1/8- ... E1 ...	50	32	3,1	4,5	M12x1	G1/8	117,2	105,8	27,5	73,8	63,8	17,5	32,5	22,5	7
VPPE-3-1-1/4- ... E1 ...						G1/4									

Dimensions

Dimensions – Mounting plate Download CAD data www.festo.com



	B1	B2	B3	D1	D2 ø	D3 ø	D4 ø	D5 ø	H1	H2	H3	H4	H5	H6	L1	L2	L3	L4
VAME-P5-MK	10	4,6	1,3	M4	8	4,5	15	8	55	47,5	32,5	27,5	22,5	7,5	50	41	25	9

Ordering data

VPPE, in-line valve

	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	0.5 %FS	**557771**	**VPPE-3-1-1/8-2-010-E1**
			4 - 20 mA	4 - 20 mA		**557774**	**VPPE-3-1-1/8-2-420-E1**
	0.006 ... 0.6 MPa	0.06 ... 6 bar	0 - 10 V	0 - 10 V		**557772**	**VPPE-3-1-1/8-6-010-E1**
			4 - 20 mA	4 - 20 mA		**557775**	**VPPE-3-1-1/8-6-420-E1**
	0.01 ... 1 MPa	0.1 ... 10 bar	0 - 10 V	0 - 10 V		**557773**	**VPPE-3-1-1/8-10-010-E1**
			4 - 20 mA	4 - 20 mA		**557776**	**VPPE-3-1-1/8-10-420-E1**

VPPE, common supply manifold

	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	0.5 %FS	**557777**	**VPPE-3-1-1/8-2-010-E1T**
			4 - 20 mA	4 - 20 mA		**557779**	**VPPE-3-1-1/8-2-420-E1T**
	0.006 ... 0.6 MPa	0.06 ... 6 bar	0 - 10 V	0 - 10 V		**567539**	**VPPE-3-1-1/8-6-010-E1T**
			4 - 20 mA	4 - 20 mA		**567540**	**VPPE-3-1-1/8-6-420-E1T**
	0.01 ... 1 MPa	0.1 ... 10 bar	0 - 10 V	0 - 10 V		**557778**	**VPPE-3-1-1/8-10-010-E1T**
			4 - 20 mA	4 - 20 mA		**557780**	**VPPE-3-1-1/8-10-420-E1T**

VPPE, F1A, recommended for production plants for manufacturing lithium-ion batteries

	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	**8168527**	**VPPE-3-1-1/8-2-MR-E1-F1A**
	0.006 ... 0.6 MPa	0.06 ... 6 bar			0.6 %FS	**8168528**	**VPPE-3-1-1/8-6-MR-E1-F1A**
			0 - 10 V	0 - 10 V	0.5 %FS	**8156419**	**VPPE-3-1-1/8-6-010-E1-F1A**
			1 - 5 V	0 - 5 V		**8156421**	**VPPE-3-1-1/8-6-005-E1-F1A**
			4 - 20 mA	4 - 20 mA		**8156423**	**VPPE-3-1-1/8-6-420-E1-F1A**
	0.01 ... 1 MPa	0.1 ... 10 bar				**8168529**	**VPPE-3-1-1/8-10-MR-E1-F1A**
			0 - 10 V	0 - 10 V		**8156420**	**VPPE-3-1-1/8-10-010-E1-F1A**
			1 - 5 V	0 - 5 V		**8156422**	**VPPE-3-1-1/8-10-005-E1-F1A**
			4 - 20 mA	4 - 20 mA		**8156424**	**VPPE-3-1-1/8-10-420-E1-F1A**

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4

	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	**8181689**	**VPPE-3-1-1/4-2-MR-E1-F1A**

Ordering data

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4

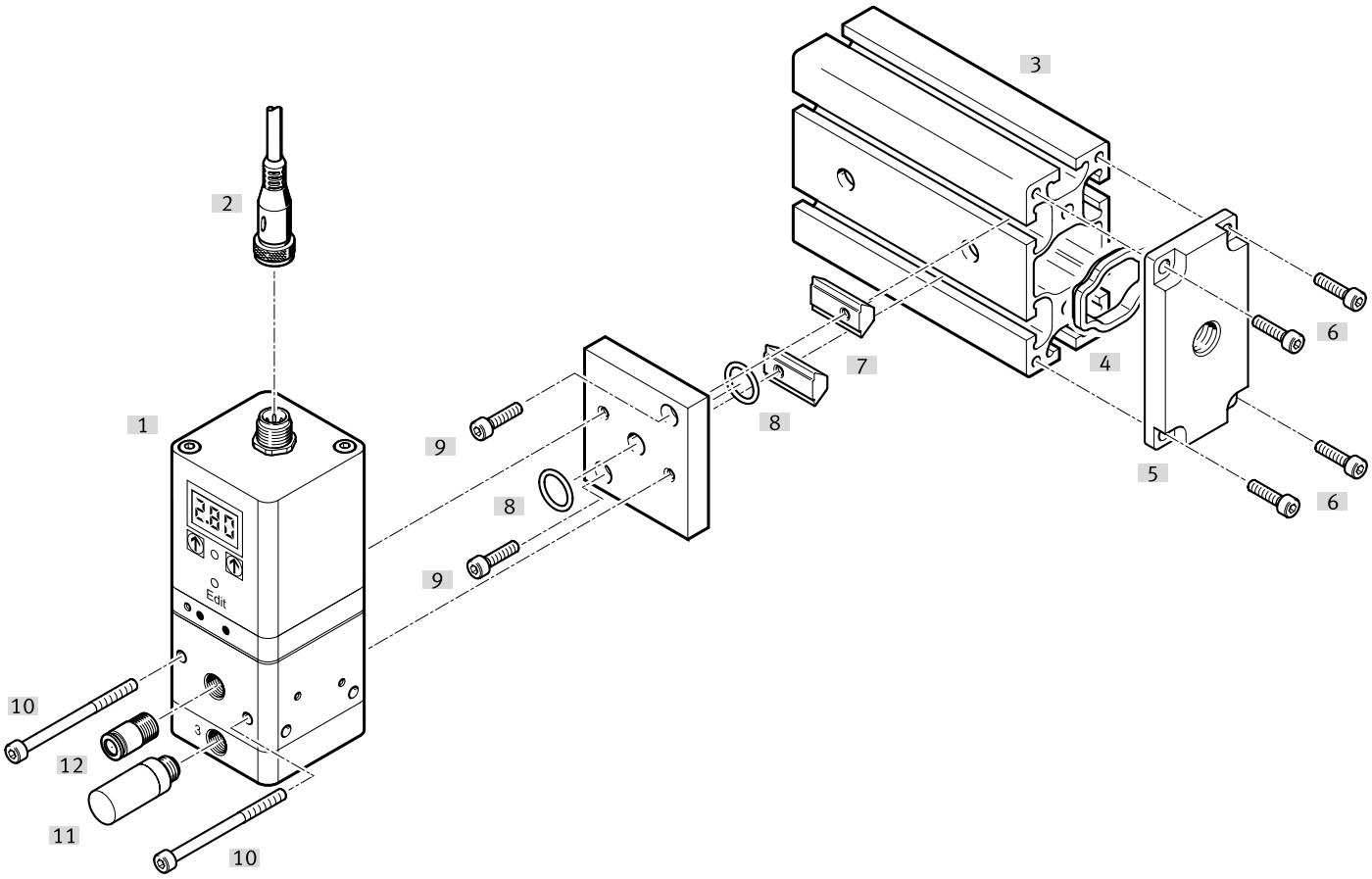
	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar	0 - 10 V	0 - 10 V	1.5 %FS	**8181683**	**VPPE-3-1-1/4-2-010-E1-F1A**
			1 - 5 V	0 - 5 V		**8181680**	**VPPE-3-1-1/4-2-005-E1-F1A**
			4 - 20 mA	4 - 20 mA		**8181686**	**VPPE-3-1-1/4-2-420-E1-F1A**
	0.006 ... 0.6 MPa	0.06 ... 6 bar			0.7 %FS	**8181690**	**VPPE-3-1-1/4-6-MR-E1-F1A**
			0 - 10 V	0 - 10 V	0.5 %FS	**8181684**	**VPPE-3-1-1/4-6-010-E1-F1A**
			1 - 5 V	0 - 5 V		**8181681**	**VPPE-3-1-1/4-6-005-E1-F1A**
			4 - 20 mA	4 - 20 mA		**8181687**	**VPPE-3-1-1/4-6-420-E1-F1A**
	0.01 ... 1 MPa	0.1 ... 10 bar				**8181691**	**VPPE-3-1-1/4-10-MR-E1-F1A**
			0 - 10 V	0 - 10 V		**8181685**	**VPPE-3-1-1/4-10-010-E1-F1A**
			1 - 5 V	0 - 5 V		**8181682**	**VPPE-3-1-1/4-10-005-E1-F1A**
			4 - 20 mA	4 - 20 mA		**8181688**	**VPPE-3-1-1/4-10-420-E1-F1A**

VPPE, F1A, recommended for production systems for the manufacture of Li-ion batteries, thread G1/4

	Pressure regulation range	Pressure regulation range	Signal range analogue output	Signal range analogue input	Reproducibility	Part no.	Type
	0.002 ... 0.2 MPa	0.02 ... 2 bar			1 %FS	**8202577**	**VPPE-3-1-1/4-2-MR-E1T-F1A**
			0 - 10 V	0 - 10 V	1.5 %FS	**8202571**	**VPPE-3-1-1/4-2-010-E1T-F1A**
			1 - 5 V	0 - 5 V		**8202568**	**VPPE-3-1-1/4-2-005-E1T-F1A**
			4 - 20 mA	4 - 20 mA		**8202574**	**VPPE-3-1-1/4-2-420-E1T-F1A**
	0.006 ... 0.6 MPa	0.06 ... 6 bar			0.6 %FS	**8202578**	**VPPE-3-1-1/4-6-MR-E1T-F1A**
			0 - 10 V	0 - 10 V	0.5 %FS	**8202572**	**VPPE-3-1-1/4-6-010-E1T-F1A**
			1 - 5 V	0 - 5 V		**8202569**	**VPPE-3-1-1/4-6-005-E1T-F1A**
			4 - 20 mA	4 - 20 mA		**8202575**	**VPPE-3-1-1/4-6-420-E1T-F1A**
	0.01 ... 1 MPa	0.1 ... 10 bar				**8202579**	**VPPE-3-1-1/4-10-MR-E1T-F1A**
			0 - 10 V	0 - 10 V		**8202573**	**VPPE-3-1-1/4-10-010-E1T-F1A**
			1 - 5 V	0 - 5 V		**8202570**	**VPPE-3-1-1/4-10-005-E1T-F1A**
			4 - 20 mA	4 - 20 mA		**8202576**	**VPPE-3-1-1/4-10-420-E1T-F1A**

Peripherals

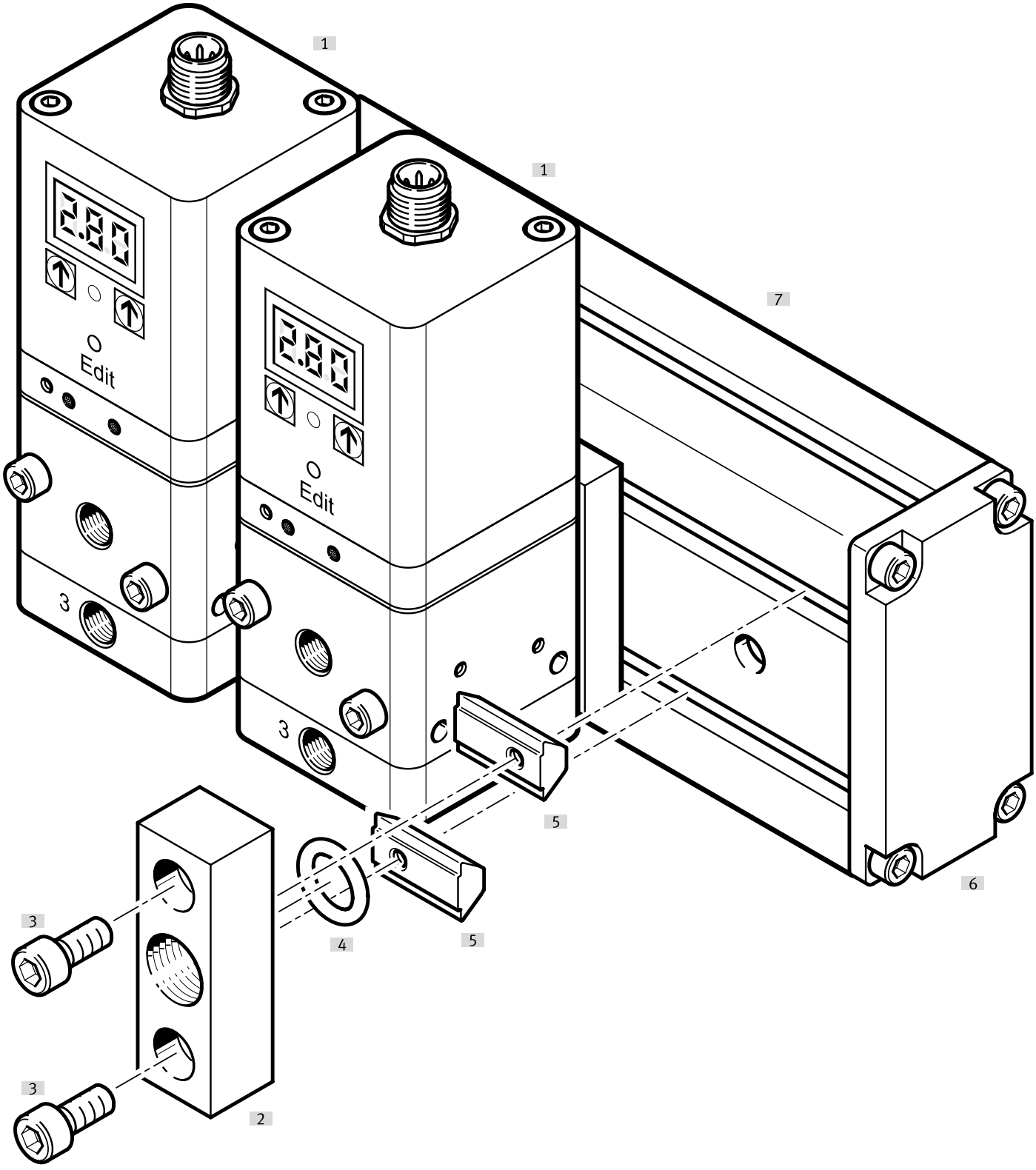
Peripherals overview



Accessories			→ Link
	Type/order code	Description	
[1]	Proportional pressure regulator	VPPE	🔗 –
[2]	Connecting cable	With straight plug socket for actuating the VPPE	24
[3]	Profile strip	Standard profile strip as central air supply	24
[4]	Compressed air supply plate (set)	For supplying compressed air (consists of compressed air supply plate, screws and seal)	24
[5]	Seal	–	🔗 –
[6]	Socket head screw M5x12	For fitting pressure supply plate with profile strip	🔗 –
[7]	Slot nuts	For fastening on the profile strip using clamps	🔗 –
[8]	O-ring	For sealing	🔗 –
[9]	Socket head screw M5x12	For fitting pressure supply plate with profile strip	🔗 –
[10]	Socket head screw M4x16	For fitting the mounting plate to the slot nut	🔗 –
[11]	Silencer	For mounting in exhaust ports	🔗 u
[12]	Push-in fitting	For connecting tubing with standard O.D.	🔗 quick star

Peripherals

Additional supply



Accessories			→ Link
	Type/order code	Description	
[1]	Proportional pressure regulator	VPPE	–
[2]	Additional supply (set)	For supplying compressed air (consists of compressed air supply plate, screws and seal)	25
[3]	Socket head screw M6x20	For fitting pressure supply plate with slot nut	–
[4]	O-ring	For sealing	–

Peripherals

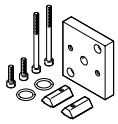
Accessories			→ Link
	Type/order code	Description	
[5]	Slot nuts	For fastening on the profile strip using clamps	–
[6]	End plate (SET)	For sealing the profile strip (consists of an end plate, screws and seal)	24
[7]	Profile strip	Standard profile strip as central air supply	24

Accessories

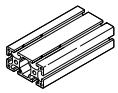
Connecting cable, straight

	Electrical connection 1, connector system	Cable length	Part no.	Type
	M12x1, A-coded to EN 61076-2-101	2.5 m	8078242	NEBA-M12G5-U-2.5-N-LE5
		5 m	8078243	NEBA-M12G5-U-5-N-LE5

Mounting plate set, consisting of: 1x mounting plate, 2x socket head screws M4X55, 2x socket head screws M4X16, 2x slot nut, 2x O-ring

	Product weight	Part no.	Type
	110 g	570966	VAME-P5-MK

Profile column (profile strip), made of aluminium, as central air supply, length: individually adjustable

	Mounting position	Part no.	Type
	Any	175964	HMBS-80/40- -

Set end plate closed, for sealing the profile strip, consisting of: 1x plate, 1x seal, 4x cylinder screws M5x12

	Product weight	Part no.	Type
	96 g	8021858	VABE-P5-C

Set pressure supply plate, with connecting thread G1/4, consisting of: 1x plate with connecting thread G1/4, 1x seal, 4x socket head screws M5x12

	Product weight	Part no.	Type
	85 g	8021861	VABF-P5-P3A3-G12
	87 g	8021860	VABF-P5-P3A3-G38
	88 g	8021859	VABF-P5-P3A3-G14

Pressure supply plate set, with connecting thread G3/8, consisting of: 1x plate with connecting thread G3/8, 1x seal, 4x socket head screws M5x12

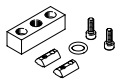
	Product weight	Part no.	Type
	85 g	8021861	VABF-P5-P3A3-G12
	87 g	8021860	VABF-P5-P3A3-G38
	88 g	8021859	VABF-P5-P3A3-G14

Pressure supply plate set, with connecting thread G1/2, consisting of: 1x plate with connecting thread G1/2, 1x seal, 4x socket head screws M5x12

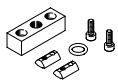
	Product weight	Part no.	Type
	85 g	8021861	VABF-P5-P3A3-G12
	87 g	8021860	VABF-P5-P3A3-G38
	88 g	8021859	VABF-P5-P3A3-G14

Accessories

Additional supply set, with connecting thread G1/4, consisting of: 1x plate with G1/4 connection, 1x O-ring, 2x slot nut, 2x cylinder screws M6x20

	Product weight	Part no.	Type
	58 g	**8021863**	**VABF-P5-P1A3-G38**
	61 g	**8021862**	**VABF-P5-P1A3-G14**

Additional supply set, with G3/8 connection, consisting of: 1x plate with G3/8 connecting thread, 1x O-ring, 2x slot nuts, 2x cylinder screws M6x20

	Product weight	Part no.	Type
	58 g	**8021863**	**VABF-P5-P1A3-G38**
	61 g	**8021862**	**VABF-P5-P1A3-G14**