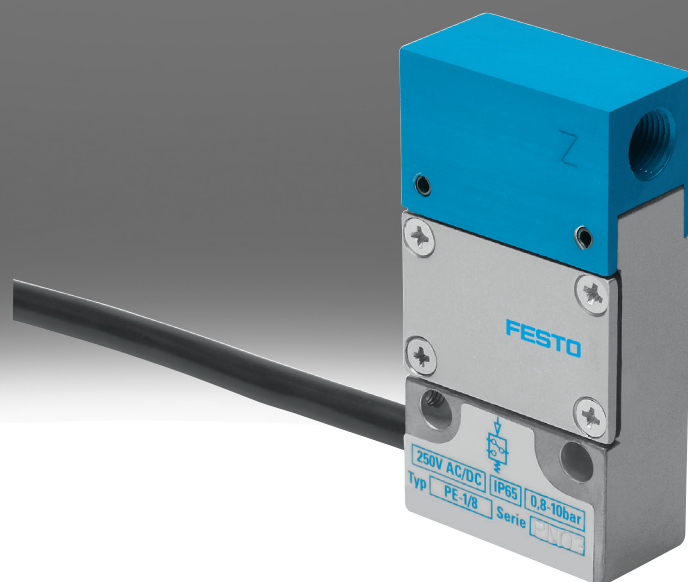


PE converter PE, VPE

FESTO



Characteristics

At a glance

Pressure or vacuum indicator with permanently set switching point.

- Pneumatic/electric differential pressure switch
- Pneumatic/electric pressure transducer
- Designed for vacuum
- Mounting on mounting frame 2N
- Splash-proof design (SW)
- Product complies with ISO 1179-1 and ISO 228-1

Type of mounting

[F1] Mounting frame 1N

Mounting on mounting frame 1N possible

[F2] Mounting frame 2N

Mounting on mounting frame 2N possible

Datasheet

General technical data				
Short type code	PE			VPE
Pneumatic connection	M5	G1/8	PK-4	G1/8
Type of mounting	With through-hole	Either: On 1n mounting frame On 2n mounting frame With through-hole	Either: On 1n mounting frame With through-hole	Either: On 1n mounting frame On 2n mounting frame With through-hole
Mounting position	optional			
Setting options	Permanently set			
Measured variable	Relative pressure			
Measurement method	Pneumatic/electric pressure transducer			

Electrical data				
Pneumatic connection	M5	G1/8	PK-4	
Electrical connection	4-wire, Cable	3 connector leads, 4-wire, Cable	3 connector leads	
Electrical connection 1, connection type	Cable			–
Electrical connection 1, connector system	Open end			
Switching output	Contacting			
Switching function	Threshold value with fixed hysteresis			
Switching element function	Changeover switch			
Switch-on point	0.001 ... 0.05 bar	-0.25 bar		–
Switch-off point	0 ... 0.05 bar	≤0.1 bar		–
Switch-on point max.	–	0.8 ... 2 bar		0.25 bar
Switch-off point min.	–	0.2 ... 0.5 bar		0.07 bar
Max. switching frequency	–	1 Hz		
Max. switching output voltage AC	250 V			–
Max. switching output voltage DC	250 V			–
Min. load current	–	100 mA		
Operational voltage range AC	–	12 ... 250 V		
Operational voltage range DC	–	12 ... 250 V		
Utilisation category - inductive load	AC-14, DC-13			
Utilisation category - resistive load	AC-12, DC-12			
Insulation voltage	2 kV			

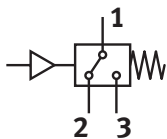
Operating and ambient conditions – PE, VPE				
Pneumatic connection	M5	G1/8	PK-4	
Operating medium	Compressed air to ISO 8573-1:2010 [7:-:]		Compressed air to ISO 8573-1:2010 [7:4:4]	
Note on operating and pilot medium	Lubricated operation not possible		Lubricated operation possible	
Pollution degree	3			
Conforms to standard	EN 60947-5-1			
Approval ¹⁾	CCC			–
CE mark (see declaration of conformity) ²⁾	To EU Low Voltage Directive			
CE marking (see declaration of conformity) ³⁾	To UK regulations for electrical equipment			
Degree of protection ⁴⁾	IP62	IP65, IP67	IP67	

1) More information www.festo.com/catalogue/pe → Support/Downloads.2) More information www.festo.com/catalogue/pe → Support/Downloads.3) More information www.festo.com/catalogue/pe → Support/Downloads.

4) Splash-proof design: IP67

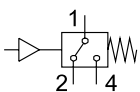
Datasheet

Specific operating conditions – PE-1/8



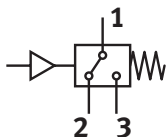
Operating pressure	0.08 ... 1 MPa
Operating pressure	0.8 ... 10 bar
Ambient temperature	-10 ... 60°C

Specific operating conditions - PE-1/8-...N-SW



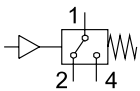
Operating pressure	0 ... 0.8 MPa
Operating pressure	0 ... 116 psi
Operating pressure	0 ... 8 bar
Media temperature	0 ... 60°C
Ambient temperature	0 ... 60°C
Max. overload pressure	12 bar

Specific operating conditions – PE-1000



Operating pressure	0 ... 0.1 MPa
Operating pressure	0 ... 1 bar
Operating pressure	0 ... 14.5 psi
Ambient temperature	-10 ... 50°C

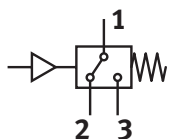
Specific operating conditions – PE-PK-4-SW



Operating pressure	0 ... 0.025 MPa
Operating pressure	0 ... 0.25 bar
Operating pressure	0 ... 3.625 psi
Media temperature	0 ... 60°C
Ambient temperature	0 ... 60°C
Max. overload pressure	8 bar

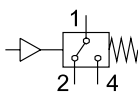
Datasheet

Specific operating conditions – PE-VK-5.1



Operating pressure	0 ... 0.025 MPa
Operating pressure	0 ... 0.25 bar
Ambient temperature	-10 ... 50°C

specific operating conditions – VPE



Operating pressure	-0.095 ... 0 MPa
Operating pressure	-0.95 ... 0 bar
Operating pressure	-13.775 ... 0 psi
Media temperature	0 ... 60°C
Ambient temperature	0 ... 60°C
Max. overload pressure	1 bar

Materials – PE-1/8

Material housing	Anodised aluminium Die-cast zinc
Material membrane	Chloroprene rubber
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Materials - PE-1/8-...N-SW

Material housing	Die-cast aluminium PA-reinforced Steel VMQ (silicone)
Material switch contact	Silver
Material electrical connection	Tin-plated
Material membrane	TPE-U(PU)
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Materials – PE-1000

Material housing	Die-cast aluminium Anodised aluminium
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Datasheet

Materials – PE-PK-4-SW

Material housing	PA-reinforced POM Steel VMQ (silicone)
Material switch contact	Silver
Material electrical connection	Tin-plated
Material membrane	Chloroprene rubber
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Materials – PE-VK-5.1

Material housing	ABS Die-cast aluminium Anodised aluminium
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

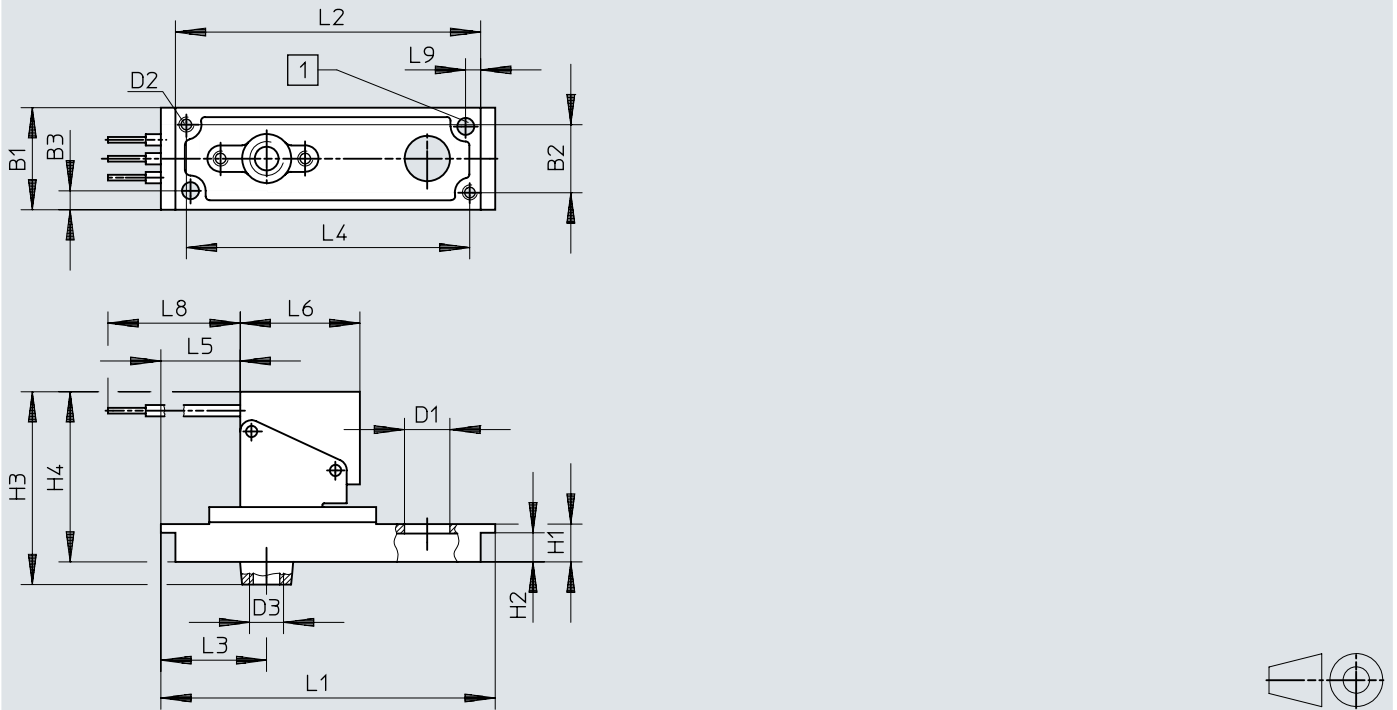
Materials – VPE

Material housing	PA-reinforced POM Steel VMQ (silicone)
Material switch contact	Silver
Material electrical connection	Tin-plated
Material membrane	Chloroprene rubber
Material cable sheath	PVC
LABS (PWIS) conformity	VDMA24364-B1/B2-L

Dimensions

Dimensions – Dimensions – PE-1/8-2N-SW

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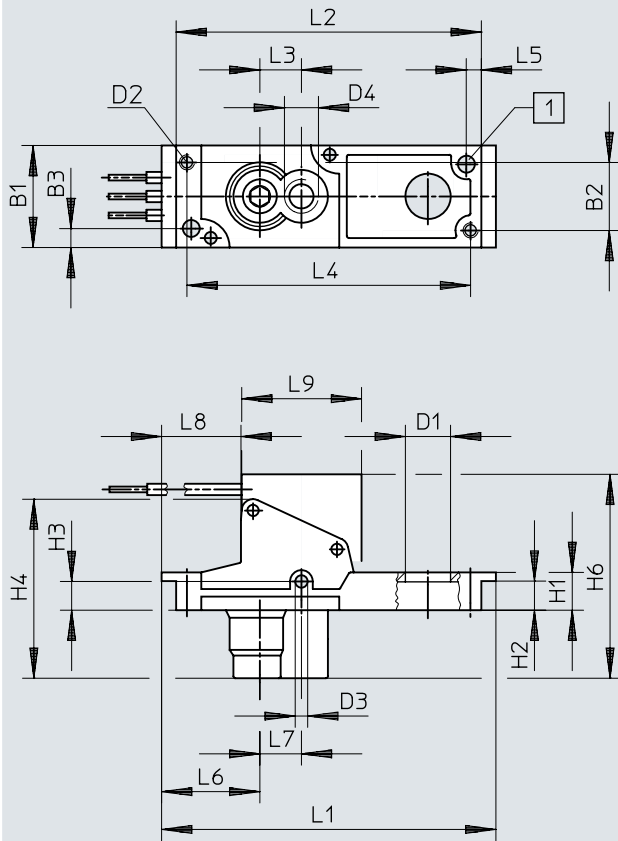
[1] For M4 thread

	B1	B2	B3	D1 ∅	D2	D3	H1	H2	H3	H4	L1	L2	L3	L4	L5	L6	L8	L9
PE	27	18	5	12	M4	3,3	10	7,7	51	45	88,5	80,8	28	75	21	31,7	500	4

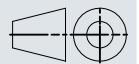
Dimensions

Dimensions – Dimensions – VPE-1/8-2N-SW

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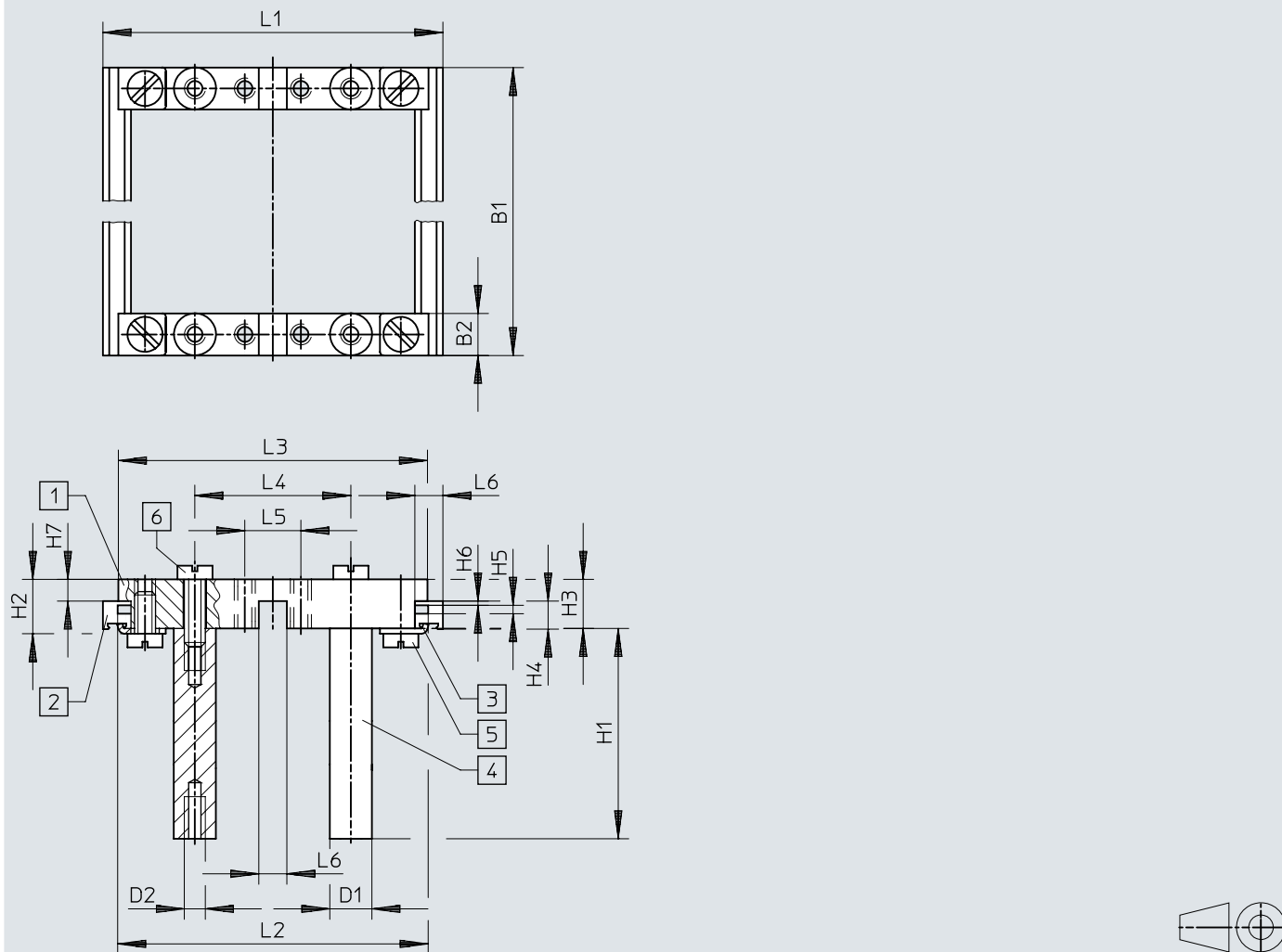
[1] For M4 thread



	B1	B2	B3	D1	D2	D3	H1	H2	H3	H4	H6	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
				∅																	
VPE	27	18	5	12	M4	G1/8	10	7,7	7,6	47,4	54	88,5	80,8	11	75	G1/8	4	26	11	21	31,7

Dimensions

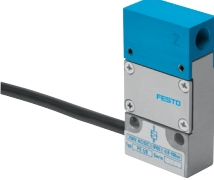
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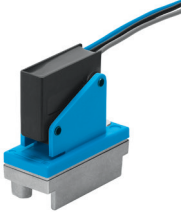



- [1] Connecting component NRV-2N
- [2] Profile strip NRQ-8-480
- [3] Mounting bracket NRW-12/3
- [4] Bolt NRB-12/60
- [5] Socket head screw DIN 84-M6X18-4.8
- [6] Socket head screw DIN 84-M6X12-4.8


	B1	B2	D1 ∅	D2	H1	H2	H3	H4	H5	H6	H7	L1	L2	L3	L4	L5	L6
NRRQ	480	12	12	M6	60	15,5	14	8	2,4	1,2	6,2	97	88,6	88,2	44,5	16	8


Ordering data

Ordering data – PE-1/8						
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	G1/8	4-wire, Cable	1 m	225 g	3344	PE-1/8

Ordering data – PE-1/8-1N-SW						
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	G1/8	3 connector leads	0.5 m	50 g	6484	PE-1/8-1N-SW


Ordering data – PE-1/8-2N-SW						
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	G1/8	3 connector leads	0.5 m	65 g	7862	PE-1/8-2N-SW

Ordering data – PE-1000						
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	M5	4-wire, Cable	1 m	230 g	3719	PE-1000


Ordering data – PE-PK-4-SW						
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	PK-4	3 connector leads	0.5 m	40 g	7471	PE-PK-4-SW

Ordering data


Ordering data – PE-VK-5.1

	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	M5	4-wire, Cable	1 m	250 g	7451	PE-VK-5.1

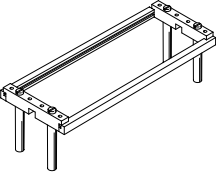
Ordering data – VPE-1/8-SW

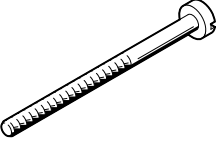
	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	G1/8	3 connector leads	0.5 m	38 g	12593	VPE-1/8-SW


Ordering data – VPE-1/8-2N-SW

	Pneumatic connection	Electrical connection	Cable length	Product weight	Part no.	Type
	G1/8	3 connector leads	0.5 m		12595	VPE-1/8-2N-SW

Accessories

Mounting frame NRRQ				
	Short type code	LABS (PWIS) conformity	Part no.	Type
	NRRQ	VDMA24364-B1/B2-L	9364	NRRQ-1N
			9365	NRRQ-2N

Socket head screws				
	Based on standard	LABS (PWIS) conformity	Part no.	Type
	DIN 84	VDMA24364-C1-L	208938	DIN 84-M6X12-4.8
			200568	DIN 84-M6X18-4.8

Mounting bracket NRW				
	Short type code	LABS (PWIS) conformity	Part no.	Type
	NRW	VDMA24364-B1/B2-L	11571	NRW-9/1,5-B

Cover cap SPE-B				
	Short type code	LABS (PWIS) conformity	Part no.	Type
	SPE		165614	SPE-B