

- 2 - Type discontinued
Available up until 2007

Pressure sensors PENV-A, with display

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- Clear LCD display
- Digital and analogue switching outputs
- High switching capacity
- Many integrated functions

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Key features

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Key features

These sensors are designed for use in the most demanding environments. They can be used as an alternative to pressure gauges, for example.

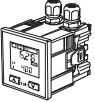
The sensors offer:

- A wide range of integrated functions
- A clear and easy to understand display
- Straightforward commissioning and simply servicing
- Wear-free characteristics
- High switching capacities
- Digital and analogue switching outputs

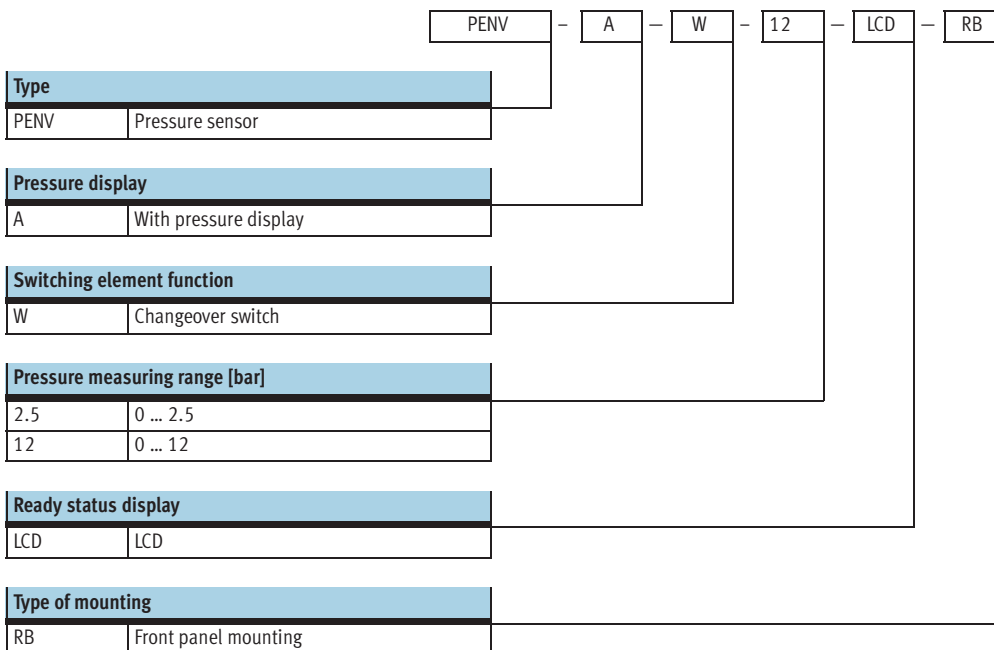
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Overview and type codes

Product range overview								
Function	Version	Type	Pneumatic connection	Operating voltage	Switch output	Electrical connection		→ Page
						Cable	Plug	
Pressure sensors		PENV-A-W	G1/8	15 ... 30 V DC	Relay	-	■	4 / 8.2-80

Type codes






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Technical data

-  - Voltage
15 ... 20 V DC
-  - Pressure
0.2 ... 12 bar
-  - Temperature range
0 ... 50 °C



General technical data				
Type	PENV-A-W-2,5-LCD-RB		PENV-A-W-12-LCD-RB	
Operating pressure	[bar]	0 ... 2.5		0 ... 12
Mechanical				
Pneumatic connection	G $\frac{1}{8}$			
Method of measurement	Piezoresistive pressure sensor			
Measured variable	Relative pressure			
Analogue outputs	U _A	0 ... 10 V		0 ... 10 V
	I _A	4 ... 20 A		4 ... 20 A
Accuracy of analogue outputs	[% FS]	1		1
Reproducibility of switching point	[% FS]	0.1		0.1
Hysteresis	0.01 ... 2.25 bar		0.02 ... 9 bar	
Temperature coefficient	1.5% FS max.		1.5% FS max.	
Electrical connection	Plug, 11-pin		Plug, 11-pin	
Type of mounting	With mounting rail Via through-holes Front panel mounting		With mounting rail Via through-holes Front panel mounting	
Mounting position	Any ¹⁾			
Weight	[g]	270		270
Electrical				
Operating voltage range	[V DC]	15 ... 30		15 ... 30
Protection against short circuit	Yes		Yes	
Protection against polarity reversal	For operating voltage		For operating voltage	
Switch output	PNP		PNP	
Ready status display	Via LCD		Via LCD	
Switching status display	Via LCD		Via LCD	
Protection class to EN 60 529	IP65			
CE symbol	73/23/EEC (low voltage), 89/336/EEC (EMC)			

1) The collection of condensate in the sensor should be prevented.

Operating and environmental conditions				
Type	PENV-A-W-2,5-LCD-RB		PENV-A-W-12-LCD-RB	
Operating medium	Filtered compressed air, lubricated or unlubricated			
Pressure measuring range	[bar]	0 ... 2.5		0 ... 12
Threshold value setting range	0.05 ... 2.5 bar		0.2 ... 12 bar	
Ambient temperature	[°C]	0 ... 50		
Temperature of medium	[°C]	0 ... 50		

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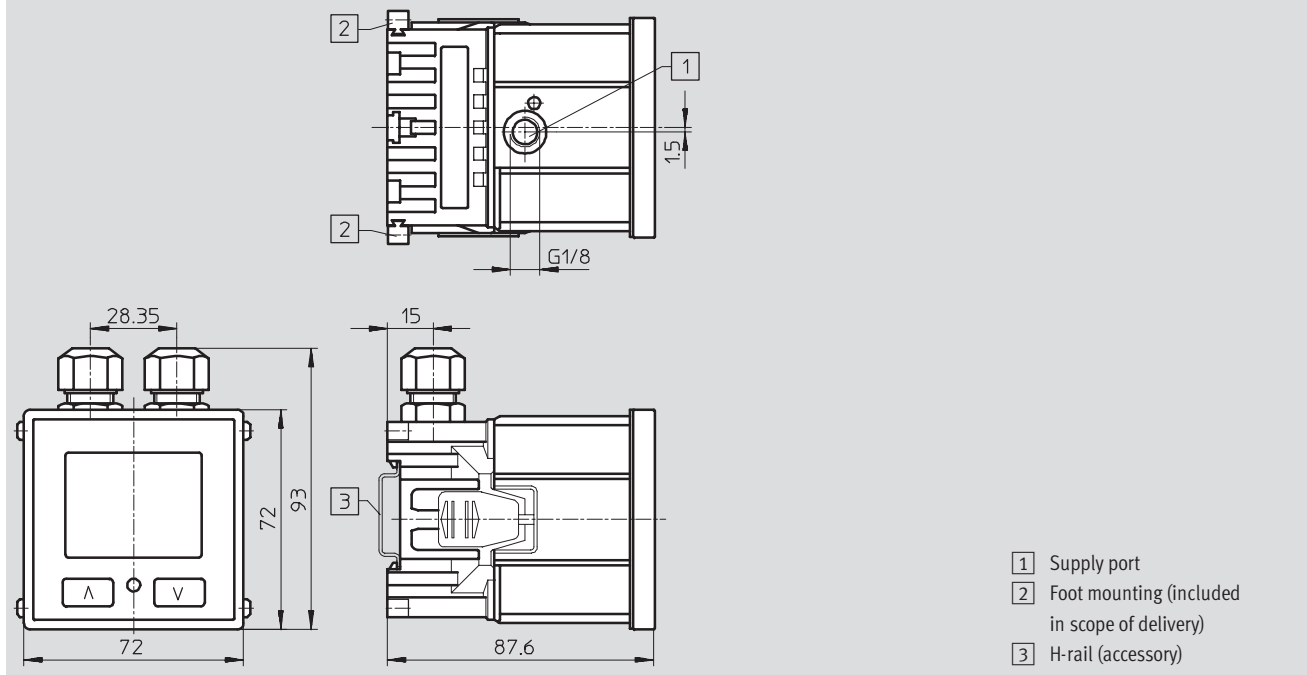
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Technical data

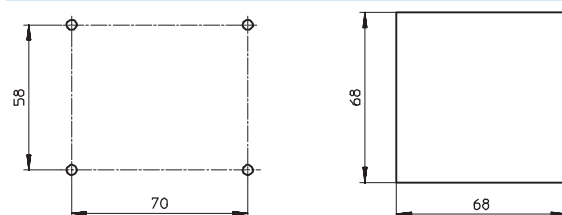
Materials	
Housing	Polycarbonate
Cover	Polyacetal
Window	Polycarbonate
Keyboard	Silicone rubber

Dimensions Download CAD data → www.festo.com/en/engineering

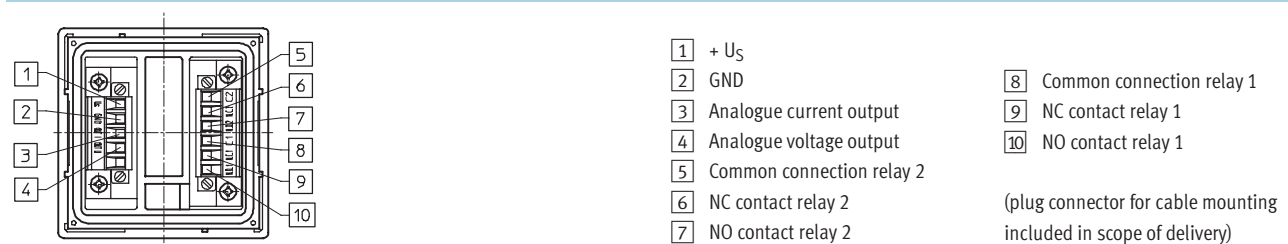


Mounting

Drilling pattern for wall mounting Aperture for front panel mounting



Electrical connection, shown without cover

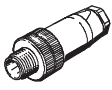
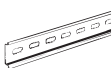


Ordering data				
Description	Pneumatic connection	Pressure measuring range [bar]	Part No.	Type
Piezoresistive pressure sensor with LCD display	G1/8	0 ... 2.5	161 055	PENV-A-W-2,5-LCD-RB
	G3/8	0 ... 12	161 056	PENV-A-W-12-LCD-RB

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Accessories



Ordering data – Accessories			Technical data → 4 / 5.1-146	
	For pressure sensor	Brief description	Part No.	Type
Plug				
	PENV-A...	Straight plug, 4-pin, M12x1, Pg7	18 666	SEA-GS-7
		Straight plug, 4-pin, M12x1, Pg9	18 778	SEA-GS-9
		Straight plug, 4-pin, M12x1, Pg11, for 2 sensor cables	18 779	SEA-GS-11-DUO
		Straight plug, 4-pin, M12x1	192 008	SEA-GS-7-2,5
		Straight plug, 5-pin, M12x1, Pg11, for 2 sensor cables	192 010	SEA-5GS-11-DUO
DIN mounting rail to EN 60715				
	PENV-A...	2 m long	35 430	NRH-35-2000