

PCE-DPD-F Series Force and Weight Indicator

Mounting display for strain gauges with mV & V / modular output cards / 6 digit LED display / 230V or 24V power supply

The built-in display is used to indicate the force and weight detected by load cells and load cells with strain gauges. The output signal of the measuring cell is irrelevant because the DMS display makes it possible to display the correct weight in mV / V based on the set sensitivity. The DMS display shows the measured values on a 6-digit LED display. The measuring range could theoretically be between -199999 ... 999999. Depending on the desired and adjusted scaling, a corresponding unit sticker can be applied to the installation indicator.

The DMS display can directly supply voltage to the connected measuring cell with strain gauges. The supply voltage can be selected between 5V and 10V. Depending on the voltage selected, up to 8 or 4 force or load cells can be connected to the DMS digital display. A special feature of this digital display for mV / V is the modular output concept. Different, changeable output cards are available depending on the application.

- Digital display for strain gauges
- mV / V input
- 3 different measuring speeds
- Modular output cards available
- 1/8 DIN panel mounting dimensions
- LED display

Specifications:

Technical specification for DMS display of the PCE-DPD-F series

Signal Input Range	Accuracy at 25°C	Sensitivity in mV / V at 5V	Sensitivity in mV / V at 10V
0 ... 100 mV DC	± 0.05% of v. mb	20 mV / V	10 mV / V
0 ... 30 mV DC	± 0.05% of v. mb	6 mV / V	3 mV / V
0 ... 20 mV DC	± 0.05% of v. mb	4 mV / V	2 mV / V
0 ... 15 mV DC	± 0.05% of v. mb	3 mV / V	1.5 mV / V
0 ... 10 mV DC	± 0.05% of v. Mb.	2 mV / V	1 mV / V
0 ... 5 mV DC	± 0.05% of v. Mb.	1 mV / V	0.5 mV / V
Maximum input voltage		30V in all measuring ranges	
Supply voltage measuring cells		5V or 10V	
Maximum current		140-mA	
Maximum number of measuring cells (with 350 Ohm measuring cells otherwise max. 140-mA)		5V supply: 1 ... 8 measuring cells 10V supply: 1 ... 4 measuring cells	
Display		6-digit 7-segment LED display	
Units (usable by user)		g, kg, t, pcs, mg, lb, N, kN	

Colour	Red
Character height	14 mm
display area	-199999 ... 999999
decimal	Adjustable after each digit
Under and Overreach Display	Blinking the display
Measuring rate (adjustable) / response time	16 Hz / 63 ms 50 Hz / 20 ms 60 Hz / 17 ms
Refresh rate display	16 Hz
Electrical connections	Screw connections 1 ... 2.5 mm ²
Power supply	PCE-DPD-F1: 85 ... 265V AC / DC PCE-DPD-F2: 11 ... 60V DC / 24/48V AC
Input	Max. 1 W without output cards max. 4 W with output cards
Degree of protection	Front: IP65
Assembly	Panel cut
Size panel cutout	92 x 44 mm / 3.6 x 1.7 in
Dimensions	96 x 48 x 91 mm / 3.7 x 1.9 x 3.6 in
Weight	About 150 g / < 1 lb
Operating temperature	0 ... 50°C / 32 ... 122°F
Storage temperature	-20 ... 70°C / -4 ... 158°F
Heating time	About 15 minutes

Technical specification for DMS display of the PCE-DPD-F2

Signal Input Range	Accuracy at 25°C	Sensitivity in mV / V at 5V	Sensitivity in mV / V at 10V
0 ... 100 mV DC	± 0.05% of v. mb	20 mV / V	10 mV / V
0 ... 30 mV DC	± 0.05% of v. mb	6 mV / V	3 mV / V
0 ... 20 mV DC	± 0.05% of v. mb	4 mV / V	2 mV / V
0 ... 15 mV DC	± 0.05% of v. mb	3 mV / V	1.5 mV / V
0 ... 10 mV DC	± 0.05% of v. Mb.	2 mV / V	1 mV / V
0 ... 5 mV DC	± 0.05% of v. Mb.	1 mV / V	0.5 mV / V
Maximum input voltage		30V in all measuring ranges	
Supply voltage measuring cells		5V or 10V	
Maximum current		140-mA	
Maximum number of measuring cells (with 350 Ohm measuring cells otherwise max. 140-mA)		5V supply: 1 ... 8 measuring cells 10V supply: 1 ... 4 measuring cells	
Display		6-digit 7-segment LED display	
Units (usable by user)		g, kg, t, pcs, mg, lb, N, kN	
Colour		Red	
Character height		14 mm	
display area		-199999 ... 999999	
decimal		Adjustable after each digit	

Under and Overreach Display	Blinking the display
Measuring rate (adjustable) / response time	16 Hz / 63 ms 50 Hz / 20 ms 60 Hz / 17 ms
Refresh rate display	16 Hz
Electrical connections	Screw connections 1 ... 2.5 mm ²
Power supply	11 ... 60V DC / 24/48V AC
Input	Max. 1 W without output cards max. 4 W with output cards
Degree of protection	Front: IP65
Assembly	Panel cut
Size panel cutout	92 x 44 mm / 3.6 x 1.7 in
Dimensions	96 x 48 x 91 mm / 3.7 x 1.9 x 3.6 in
Weight	About 150 g / < 1 lb
Operating temperature	0 ... 50°C / 32 ... 122°F
Storage temperature	-20 ... 70°C / -4 ... 158°F
Heating time	About 15 minutes

Delivery scope:

- 1 x DMS indicator PCE-DPD-F (in selected configuration)
- 1 x Power supply terminal
- 1 x Strain gauge terminal
- 1 x Unit label
- 1 x User manual