

3½ DIGIT MINI-SIZE DC VOLTMETER

¾ DIN Cutout with 14.2 mm (0.56") LED Display



DPF53 Series



- ✓ Miniature DIN Case with 24 x 72 mm Bezel
- ✓ ±1999-Count Display Span
- ✓ AC or DC Power with Excellent Common Mode Rejection
- ✓ Display Hold
- ✓ RoHS 2 Compliant



DPF53-AV2 shown actual size.

The DPF53 is a low-cost 3½ digit dc voltmeter with a full-size 14.2 mm (0.56") LED, yet housed in a small ¾ DIN case with a 24 x 72 mm bezel. The case fits into a standard ¾ DIN cutout, 22.2 x 68 mm (0.87 x 2.68"), and requires a depth of less than 120 mm (4.72") behind the panel, including the standard plug-in screw-clamp connectors.

Analog Input

Range	±199.9 mV	±1.999V	±19.99V	±199.9V
Resolution	0.1 mV (100 µV)	0.001V (1 mV)	0.001V (10 mV)	0.1V (100 mV)
Maximum Input	130 Vp	250 Vp	250 Vp	250 Vp
Input Resistance	1 GΩ	1.1 MΩ	1.0 MΩ	1.0 MΩ
Bias Current	50 pA	5 pA	1 pA	1 pA

SPECIFICATIONS

Configuration: Differential, bipolar

Zero: Automatic

Span Adjustment: ±5%

NMR: 56 dB, 50/60 Hz

CMR, SIG LO to PWR GND:

120 dB, DC to 60 Hz

CMV, SIG LO to PWR GND: 1500 Vp

per HV test, 354 Vp per IEC spacing

CMV, SIG LO to DIG GND: 0V

Maximum Error: ±0.05% rdg ±1 count

Span Tempo: ±0.01% rdg/°C

Step Response: 1 sec

A/D Technique: Dual-slope, avg-value

Polarity: Automatic

Signal Integration Period: 100 ms

Read Rate: 2.5/sec

Display Type: 7-segment, LED

Height: 14.2 mm (0.56")

Symbols: 1.8.8.8

Decimal Points: Three position jumper selectable behind lens

Overrange Indication: Three least significant digits blank

AC Voltage: 24, 100, 115 or 230 Vac ±15%, 49 to 63 Hz

DC Voltage (Non-Isolated): 5V dc ±5%, 7 to 32 Vdc

Power Consumption: 1.5 W

Operating Ambient:

0 to 60°C (32 to 140°F); 95% RH at 40°C, non-condensing

Bezel: 24 x 72 mm (0.94 x 2.83")

Panel Cutout: 22.2 x 68 mm (0.87 x 2.68")

Depth Behind Bezel (With Connector): 120 mm (4.72")

Weight: 200 g (7 oz)

To Order

Model No.	Meter Input Range
DPF53-AV2	±199.9 mV input voltmeter
DPF53-AV3	±1.999V input voltmeter
DPF53-AV4	±19.99V input voltmeter
DPF53-AV5	±19.99V input voltmeter

Options

Order Suffix	Description
-GR	Green LED display
-230V	230 Vac power
-100V	100 Vac power
-24VAC	24 Vac power
-5VDC	5 Vdc power, non-isolated
-7/32	7 to 32 Vdc power, non-isolated

Accessories

Model No.	Description
DPP-2	¾ DIN panel punch
SPC364	NEMA 4X splashproof lens cover
TP2	Bezel adaptor, 25 x 74 mm (1.0 x 2.9")
TP3	Bezel adaptor, ¾ to ½ DIN
RP23	19" rack panel for two ¾ DIN meters
RP43	19" rack panel for four ¾ DIN meters

Comes complete with operator's manual.

Ordering Examples: DPF53-AV2, ¾ DIN size voltmeter, ±199.9 mV input, 115 Vac power. DPF53-AV4, ¾ DIN size voltmeter, ±19.99V input, 115 Vac power, with SPC364 NEMA 4X lens cover.

3½ DIGIT MINI-SIZE DC PROCESS METERS

¾ DIN Cutout with 14.2 mm (0.56") LED Display **OMEGA**

DPF51 Series

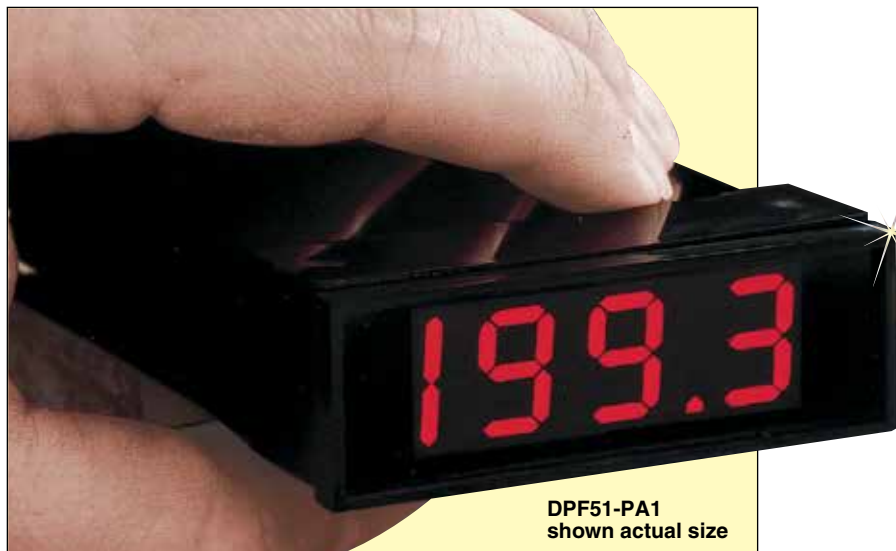


- ✓ Miniature DIN Case
- ✓ 0.05% of Reading Accuracy
- ✓ ±1999-Count Display Span
- ✓ Input Ranges from 199.9 mV to 100V or 4 to 20 mA
- ✓ Available with 24V/ 10 Vdc Sensor Excitation
- ✓ AC or DC Power with Excellent Common Mode Rejection
- ✓ RoHS 2 Compliant

The DPF51 and DPF52 are low-cost 3½ digit process indicators with a full-size 14.2 mm (0.56") LED, yet housed in a small ¾ DIN case with a 24 x 72 mm bezel. The case fits into a standard ¾ DIN cutout, 22.2 x 68 mm (0.87 x 2.68"), and requires a depth of less than 120 mm (4.72") behind the panel, including the standard plug-in screw-clamp connectors.

SPECIFICATIONS

Maximum Error: ±0.05% rdg ±1 count
Zero Tempco: ±0.01% of offset/°C
Span Tempco: ±0.02% of rdg/°C
Full-Scale Step Response: 1 sec
NMR, SIG HI to SIG LO: 60 dB, 50/60 Hz
CMR, SIG GND to SIG LO: 86 dB, dc to 60 Hz
CMV, SIG GND to SIG LO: -1 to +2.5 Vdc
Power Supply Rejection: 86 dB at 50/60 Hz
A/D Technique: Dual-slope, average value
Signal Integration Period: 100 msec
Read Rate: 2.5/second
Transmitter Excitation Supply: Selectable 10V @ 30 mA or 24 Vdc @ 20 mA
Line Regulation: ±0.01%/V of AC power
Load Regulation: ±0.5%
Tempco: ±0.02%/°C
Ripple at 50/60 Hz: ±0.01%
Type: 7-segment, LED; 14.2 mm (0.56")
Decimal Points: Three positions jumper-selectable
Power: 24, 100, 115 or 230 Vac ±15% @ 2 watts; 49 to 63 Hz
Operating Ambient: 0 to 60°C (32 to 140°F) 95% RH at 40°C (no condensing)



Dimensions: 24 H x 72W x 120 mm D (0.94 x 2.84 x 4.6")

Bezel (with TP2 Adaptor): 25 x 75 mm (0.98 x 2.96")

Panel Cutout: 22.2 x 68 mm (0.87 x 2.68")

Weight: 200 g (7 oz)

Analog Input

Range	4 to 20 mA	0 to 200 mV	1 to 5V	0 to 10V	0 to 100V
Maximum Input	55 mA	250 Vp	250 Vp	250 Vp	250 Vp
Input Resistance	13 Ω	1 MΩ	1 MΩ	1 MΩ	1 MΩ
Bias Current	50 pA	50 pA	10 pA	5 pA	1 pA

To Order

Model No.	Input Range	Excitation
DPF51-PA1	4 to 20 mA	—
DPF51-PV2	0 to 199.9 mV	—
DPF51-PV3	0 to 5 Vdc	—
DPF51-PV4	0 to 10 Vdc	—
DPF51-PV5	0 to 100 Vdc	—
DPF52-EA1	4 to 20 mA	24 Vdc @ 20 mA, 10 Vdc @ 30 mA selectable
DPF52-EV2	0 to 199.9 mV	
DPF52-EV3	0 to 5 Vdc	
DPF52-EA4	0 to 10 Vdc	
DPF52-EV5	0 to 100 Vdc	

Options (no additional cost)

Order Suffix	Description
-GR	Green LED display
-230V	230 Vac power
-100V	100 Vac power
-24VAC	24 Vac power
-5VDC	7 to 32 Vdc power, non-isolated; DPF51 models only
-7/32	7 to 32 Vdc power, non-isolated DPF51 models only

Comes complete with operator's manual.

Ordering Examples: DPF51-PV4, ¾ DIN size indicator, 0 to 10V input, 115 Vac power.

DPF52-EA1, ¾ DIN size indicator, 4 to 20 mA input, 24/10V sensor excitation, 115 Vac power, with SPC364 NEMA 4 lens cover.