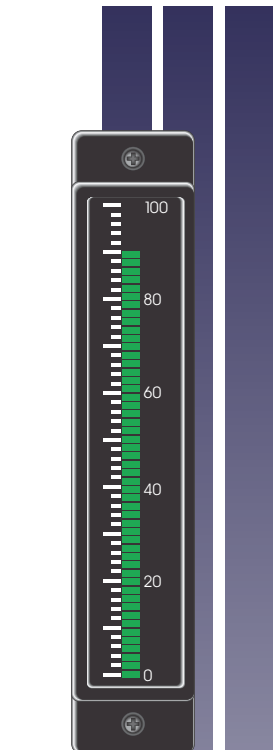


Bowmar Series Single Edgewise BarGraphs™

The Weschler Bowmar Series Single Edgewise BarGraphs feature bright, easy-reading 3" to 10" LED bars for OEM and process applications. The Bowmar Series offer 51 or 101 segment bar displays with 2% or 1% resolution. Choose from red, green or amber LEDs on most larger models. Colors can also be mixed within the bar to provide permanent indication zones. An optional low/high brightness control adjusts LED intensity for operator and control room conditions. Standard white on black or custom black on white scales can be provided. Expanded scales can also be ordered to view the most important part of a measurement in greater detail.

Screw terminal connectors are standard on the APM series. Connections to the BG series are made to a rear panel card edge connector. Front panel, mounting and performance are identical in both series.

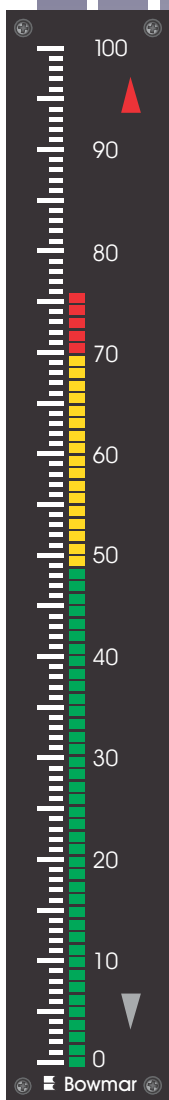
The Bowmar BarGraph instruments accept DC process inputs, either voltage or current. Other BarGraph models can be configured for a wide variety of input signals. Retrofit sizes are available for most panel and switchboard meters in use today. These instruments satisfy the high quality standards set forth by the utility, OEM and process control industries.



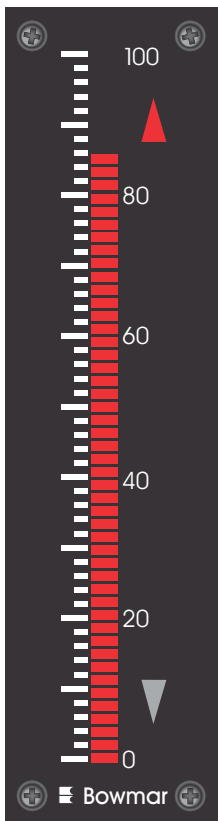
APM-500



APM-100



APM-800
with MX option



APM-600

FEATURES

51 or 101 segment LED bar array

Red, green, yellow, blue, white or mixed color bar

Programmable LED brightness

DC inputs to 10A and 100V

Differential input

Harsh environment enclosures



16900 FOLTZ PARKWAY - CLEVELAND, OH 44149
Phone: (440) 238-2550 - Fax: (440) 238-0660
www.weschler.com e-mail: sales@weschler.com

SPECIFICATIONS

Bar Display

APM500, APM600, BG600

51 segment LED plus underrange and overrange

5" display

APM100, BG100

101 segment LED plus underrange and overrange

3" display

APM800, BG800

100 segment LED plus underrange and overrange

10" display

Input Type

DC Volts 50mV to 100V

DC Amps 10mV to 10A

Response Time

25msec full scale, damping to 1sec available

Temperature

Operation 0 to 50°C

Storage -60 to 71°C

Shock

to 8.5 G's

Humidity

0 to 95% RH, non-condensing

Weight

6 to 27 oz.

Calibration

NIST traceable factory calibration. Some models may be field adjusted $\pm 20\%$ at Zero and Full Scale

Power Requirement

5VDC $\pm 0.25V$, 400mA typical

Input Impedance

$\geq 100k\Omega$ typical, 50mV current shunt for most ammeters

Linearity

0.5% (from 0 to 50°C)

Gain Temperature Coefficient

$\pm 0.015\%/^{\circ}C$ maximum

Zero Temperature Coefficient

$\pm 0.01\%/^{\circ}C$ maximum

Under-range

150% of input

Over-range

250% of input

Display Modes

Bar and Point

Power Supply Sensitivity

$\pm 0.1\%$ /volt maximum

Input Bias Current

100 nA typical

Common Mode Rejection

60dB typical

Standard Scales

0-10

0-50

0-100

-10/0/+10

-50/0/+50

-100/0/+100

Available with % signs

Over 2300 scales available

OPTIONS MATRIX GUIDE

| BG SERIES Option Code | 100 | 600 | 500 | 800 | DESCRIPTION |
|--------------------------|-----|-----|-----|-----|------------------------------------|
| G | ● | ● | | | Custom Input Range |
| T | | | | | Screw-Terminal Barrier Strip |
| Z | ● | ● | | | Bezel |
| Gr | ● | ● | ● | ● | Green Display |
| F | ● | ● | ● | ● | Increased Damping |
| S | ● | ● | ● | ● | Library Scale (Scale #) |
| MX | ● | ● | ● | ● | Mixed Display (Red, Green, Yellow) |
| YL | ● | ● | ● | ● | Yellow Display |
| BL | ● | | | | Blue Display |
| WH | ● | | | | White Display |
| UN | ● | | | | Sunlight Readable |
| X | | ● | | | Drip Proof Bezel |

● = Available

| APM SERIES Option Code | 100 | 150 | | 500 | 600 | 800 | DESCRIPTION |
|---------------------------|-----|-----|--|-----|-----|-----|------------------------------------|
| F | ● | ● | | ● | ● | ● | Increased Damping |
| G | ● | ● | | ● | ● | ● | Custom Input Range |
| Z | ● | ● | | | ● | | Black Metal Bezel |
| X | | | | | ● | | Drip Proof Bezel |
| P | | | | | ● | ● | Red Filter |
| Gr | ● | ● | | ● | ● | ● | Green Display |
| YL | ● | ● | | ● | ● | ● | Yellow Display |
| MX | ● | ● | | ● | ● | ● | Mixed Display (Red, Green, Yellow) |
| BL | ● | ● | | | | | Blue Display |
| WH | ● | ● | | | | | White Display |
| UN | ● | ● | | | | | Sunlight Readable |
| S | ● | ● | | ● | ● | ● | Library Scales (Scale #) |

● = Available

ORDERING GUIDE

SAMPLE PART NUMBER

(SEE BOTTOM OF PAGE FOR EXAMPLE)

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|
| A | P | M | 1 | 0 | 0 | V | V | 0 | 1 | 0 | S | 1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|

PART NUMBER

| | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|

TYPE:

- APM1 = 3" LED BarGraph
- APM5 = 5" LED BarGraph, with bezel
- APM6 = 5" LED BarGraph
- APM8 = 10" LED BarGraph
- BG1 = 3" LED BarGraph
- BG6 = 5" LED BarGraph

INPUT TYPE:

- 00 = DC
 - 10 = Digital Input*
 - 20 = AC* Volts/Amps
 - 50 = Center Zero (APM only)
- *Not available on BG100/BG600

INPUT SENSITIVITY:

- VV = Volts
- MV = Millivolts
- AA = Amps
- MA = Milliamps
- UA = Microamps

INPUT LEVEL:

Example 4/20, 10, 150
Indicate Full Scale Value

SCALE NUMBER:

(Consult factory for exact need)

| VERTICAL | HORIZONTAL | RANGE |
|----------|------------|-----------------|
| S12 | S13 | 0-10 |
| S8 | S11 | 0-50 |
| S3 | S1 | 0-100 |
| S3% | S1% | 0-100% |
| S136 | S137 | -10, 0, +10 |
| S113 | S112 | -50, 0, +50 |
| S4 | S2 | -100, 0, +100 |
| S242 | S10 | Tick Marks Only |
| Sbnk | Sbnk | Blank |
| SH | SH | Custom Artwork |

OPTIONS:

If more than one option is required, continue placing each respective option letter after each other.
See *Options Matrix Guide page 2*, or Consult

ACCESSORIES:

- ACC-001 Card Edge Connectors (BG/BGD)
- ACC-002 Screw Type Barrier Strip (BG/BGD)
- ACC-003 Power Supply (120VAC to 5VDC @ 3 Amps)

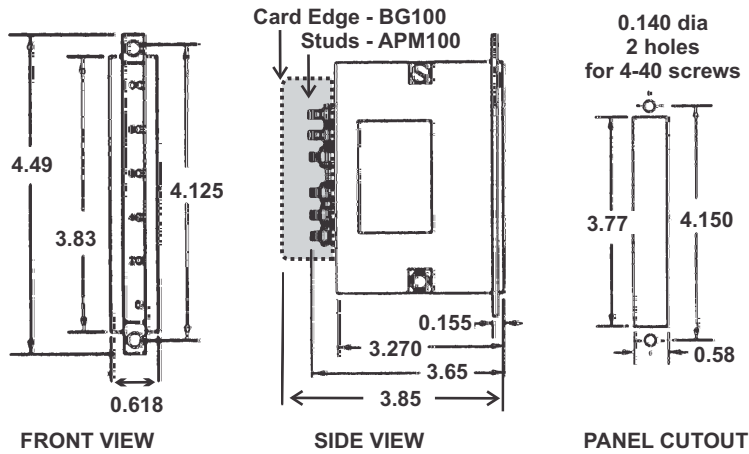
EXAMPLE:

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|
| A | P | M | 1 | 0 | 0 | V | V | 0 | 1 | 0 | S | 1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|--|--|--|--|

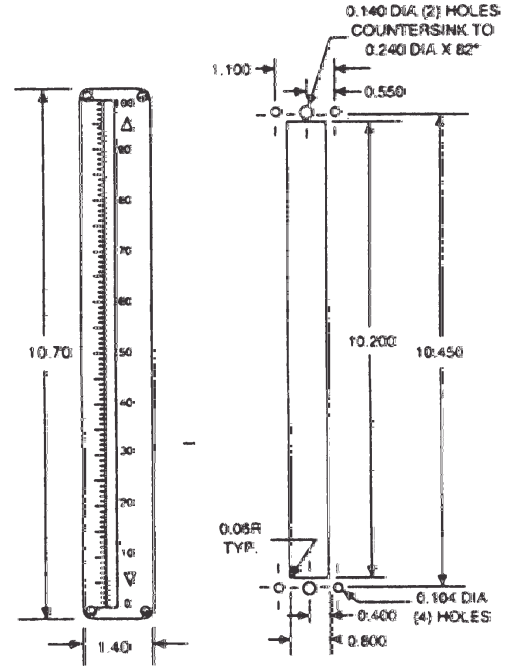
(APM1) 3" LED BarGraph, (00) DC input, (VV) Volts input sensitivity, (010) 0-10 input level, (S1) 0-100 horizontal scale.

DIMENSIONS

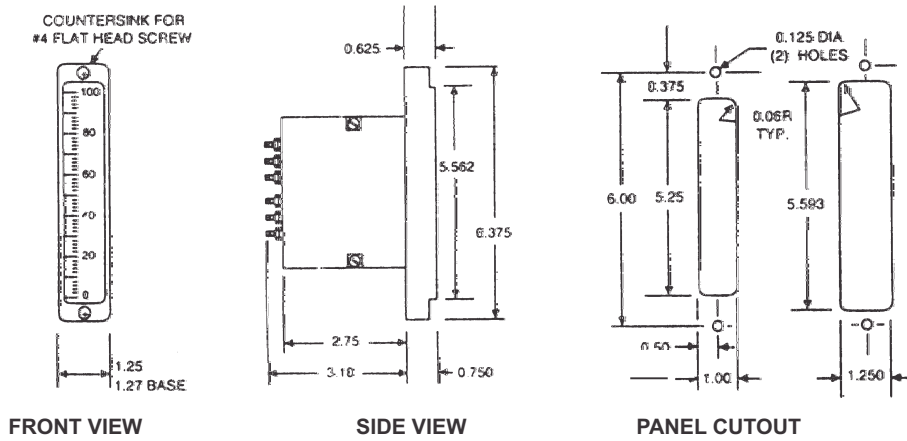
APM 100



APM 800

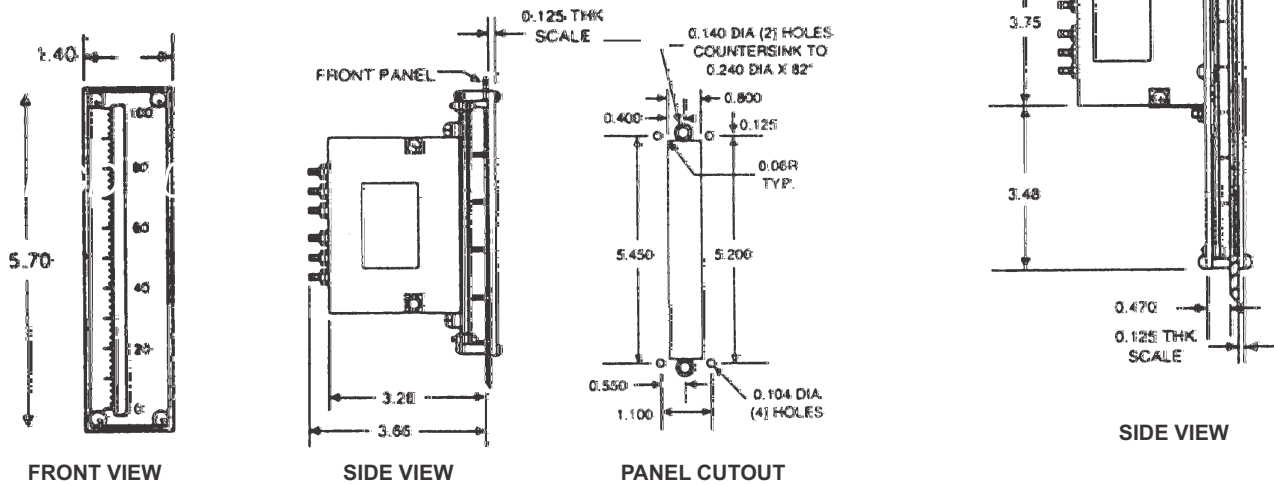


APM 500



FRONT VIEW PANEL CUTOUT

APM 600



2/22/12

Options and features vary by model. Contact factory for details and latest specifications.



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