Totaliser/Ratemeter Model PM6-FC

AMALGAMATED INSTRUMENT CO

8457

Litres

Millimetres
Bottles
Kilolitres
Total Units
THE LIST GOES ON

your choice of printed units on the front panel
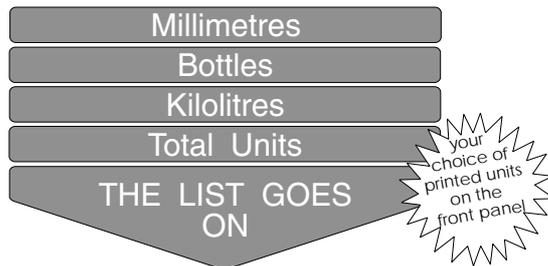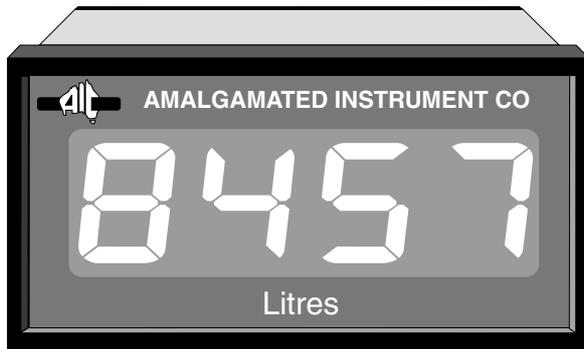
Description

The PM6 panel mount display features easy to use set up programming functions. Changes to the settings are made using three pushbuttons located at the rear of the instrument. Operation mode for the PM6 can be set to either totaliser or ratemeter.

The PM6-FC accepts pulse inputs and may be scaled to read directly in your engineering units e.g. Metres, Kilolitres, Litres/min, etc.

The PM6-FC can accept its input pulses from most common sensor types such as NPN, PNP, switch contact, magnetic pickup output, TTL, CMOS etc. type devices.

Reset and display hold external inputs are provided. The instrument has a 5V transmitter supply on all models plus a 24VDC unregulated transmitter supply on AC powered models.

A special feature of the PM6 is the programmable display brightness, which allows the display intensity to be reduced to conserve power or to reduce glare in darker areas.

A "wrap around" feature can be used to give a visual indication (four flashing decimal points) that the display has wrapped around from a count of 9999 and has begun to count again from zero.

Your choice of legend (e.g. Litres) can be printed on the front of the instrument.

The PM6 is packaged in a rugged industrial $\frac{1}{8}$ DIN panel mount enclosure, with a behind panel depth of only 115mm. Electrical connections are made via plug in type screw terminals for ease of installation, maximum wire diameter 2.5mm².

Features

- Functions as: Counter/totaliser or ratemeter
- Input frequency up to 10kHz
- 4 digit high brightness LED display
- Large 20mm high digits
- Display viewing distance up to 10m
- Programmable display brightness
- Easily scaled to read in engineering units
- Can be scaled without the need for test equipment or special tools
- Scaling and functions setup via rear pushbuttons
- Calibration and set up data stored in EEPROM
- Programmable decimal point
- Programmable digital filter
- Totaliser memory retention at least forty days with power removed
- Leading zero blanking
- "Wrap around" feature allows warning that count has exceeded 9999.
- "Low range" function allows input down to 0.25Hz without the annoying flashing between the indication and zero readings often associated with low frequency inputs
- Visual user selectable low and/or high frequency limit warning via display blanking
- Reset and display hold via external inputs
- Inbuilt transmitter supply, +5VDC or unregulated 18 to 24VDC. (unregulated supply on AC powered models only)
- Choice of power supplies 240 VAC, 110VAC, 32VAC, 24VAC, non-isolated 12 to 24V DC, isolated 12 to 48V DC or 50 to 110 VDC (factory configured)
- Plug-in screw electrical terminals
- DIN size 48mm x 96mm bezel
- State of the art microprocessor design
- Computer tested and pre-calibrated
- High reliability surface mount electronics

PM6FC-1.1-0

Specifications and Ordering Information

Specifications are subject to change without notice

TECHNICAL SPECIFICATIONS

Input: Selectable types inc: NPN, PNP, switch contact, magnetic pickup, output from TTL or CMOS etc.

Signal voltage: 48VDC or RMS Max. 100mV Min.

Frequency range: 10kHz Max. (0.25Hz Min for frequency measurement)

Input impedance: 10KΩ

Total memory: Total retained for at least forty days with power removed

Display update: 4/sec nominal (≥1/sec @ low frequency)

Microprocessor: MC68HC05C8 CMOS

Ambient temp: -10 to 60°C

Humidity: 5 to 95% non condensing

Display type: 4 digit red 20mm digit height

Power supply: 240V, 110V, 32V, 24V AC, non isolated 12 to 24V DC, isolated 12 to 48V DC or 50 to 110 VDC (factory configured)

Power usage: AC supply 2VA + transmitter current
DC supply 2W + transmitter current

Transmitter supply: 5VDC regulated - all models or 18 to 24VDC unregulated, **(20mA maximum)** - AC models only
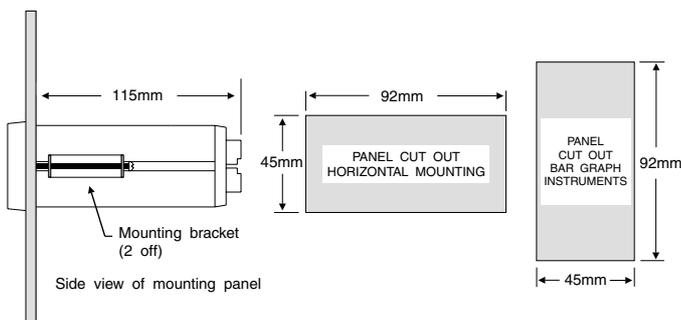
PHYSICAL CHARACTERISTICS

Bezel size: DIN 48mm x 96mm x 10mm

Case size: 44mm x 91mm x 120mm behind face of panel

Panel cut out: 45mm x 92mm +1mm &- 0mm

Connections: Plug in screw terminals (max 2.5mm^2 wire)
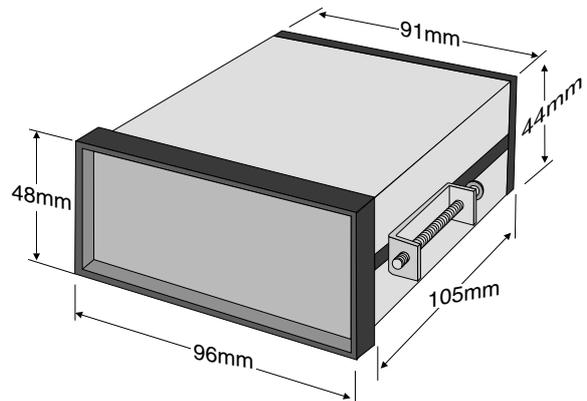
Weight: 400 gms unpacked

ORDER CODE

240VAC powered:	PM6-FC-240-4E
110VAC powered:	PM6-FC-110-4E
32VAC powered:	PM6-FC-32-4E
24VAC powered:	PM6-FC-24-4E
12-48VDC powered (isolated):	PM6-FC-DC-4E
12-24VDC powered (non isolated):	PM6-FC-DCN-4E
50-110VDC powered:	PM6-FC-DCH-4E

PANEL MOUNT INSTALLATION

115mm

92mm

45mm PANEL CUT OUT HORIZONTAL MOUNTING

92mm

PANEL CUT OUT BAR GRAPH INSTRUMENTS

45mm

Mounting bracket (2 off)

Side view of mounting panel

INSTRUMENT DIMENSIONS

91mm
44mm
48mm
105mm
96mm

ELECTRICAL CONNECTIONS

SETUP PUSHBUTTONS

1 2 3 4 5 6 7 8 9 10 11 F ▲ ▼

MAINS EARTH
AC NEUTRAL(DC+)
AC ACTIVE (DC-)
GND
DC OUTPUT TRANSMITTER SUPPLY (UNREGULATED)
+24VDC
SIGNAL INPUT
+5V TRANSMITTER SUPPLY
RESET
GROUND
DISPLAY HOLD

Input
5
6
7
8 Gnd
9
10
11 Pulse input

Input using +5VDC supply
5
6
7
8 Gnd
9
10 +5V Sensor
11 Pulse input

Input using unregulated supply
5 +18 to 24VDC Unreg
6 Sensor
7
8 Gnd
9
10
11 Pulse input

Display hold and reset connections
5
6 Display hold momentary or latching switch
7
8
9 Reset momentary action switch
10
11

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