azbil

Multifunction-Panelmeter
Model PCM13

OVERVIEW

The PCM13 multifunction-panelmeter receives analog and pulse outputs from flowmeters, pressure gauges, photoelectric switches, etc., and displays process and totalized values using LEDs. This highly-efficient panelmeter features a variety of output functions and a power distributor function in addition to a counter function.

FEATURES

- 4 to 20 mA DC or 1 to 5 V DC for analog input. Open collector, non-voltage contact pulse, or voltage pulse for pulse input.

- Has built-in 250 Ω resistance for SFC communications, so a communications power supply can be provided by using the distributor function. (Only applicable when selected in additional specifications.)

- A distributor function is built-in as a sensor power supply. 12 V DC or 24 V DC output is available.

- Analog output, pulse output, or contact output.

- Process value display or totalized value display can be selected, depending on use.

- LED color: green or red, selected depending on the operating environment.

- Easy-to-read large LED display.

- Built-in memory to store totalized value in case of power failure.

- Reset function, preset function and pause function.

SPECIFICATIONS

Input

4 to 20 mA DC, 1 to 5 V DC

Open collector, Non-voltage contact pulse

(contact capacity: 12 V DC, 10 mA),

Voltage pulse (4.5 to 30 V on H level, 0 to 2.0 V on L level)

Pulse frequency

100 Hz or 1000 Hz max.

Pulse width

5 ms or more at 100 Hz

0.3 ms or more at 1000 Hz

Duty ratio

50% or less

Output

4 to 20 mA DC, Open collector pulse

(10, 500, 1000 Hz, output capacity: 30 V DC, 200 mA max.)

Contacts (process value: 2 contacts, totalized value: 2

contacts, contact capacity: 250 V AC, 0.3 A)

Distributor function

12 V DC ±5% / 150 mA max.

24 V DC ±5% / 50 mA max.

Reset function

Resets totalized count and totalized initial value

(using front mask internal switch or external reset signal).

Power supply

90 to 264 V AC, 50/60 Hz, 24 V DC ±10%

Display

Green or red LEDs, Character height 15 mm

Process value (5-digit) or totalized value (6-digit)

Cut-off function

0 to 10%

Ambient temperature range

0 to 50 °C

Ambient humidity range

10 to 85% RH (no condensation)

Storage temperature range

-20 to 70 °C

Case material

ABS resin

Memory

Non-volatile memory, 10-year storage period

Mounting

Panel mounted with dedicated mounting bracket

Mass

Approx. 500 g

Power consumption

Approx. 16 VA

Attachments

Engineering unit seals (Pa, kPa, MPa, N/m^2, bar, m^3/s, m^3/min, m^3/h, Nm^3/s, Nm^3/min, Nm^3/h, l/s, l/min, l/h, kl/min, Nl/min, Nl/h, W/h, kW/h, cal/h, kcal/h, Mcal/h, Gcal/h, T/h, t/h, g/h, m/s, A, m^3, Nm^3, l, kl, Nl, Nkl, W, kW, W-s, W-h, kW-h, cal, kcal, Mcal, Gcal, T, t, kg, g, m, km, Ah, kA•h)

Setting at shipment

Default value set at factory

MODEL SELECTION

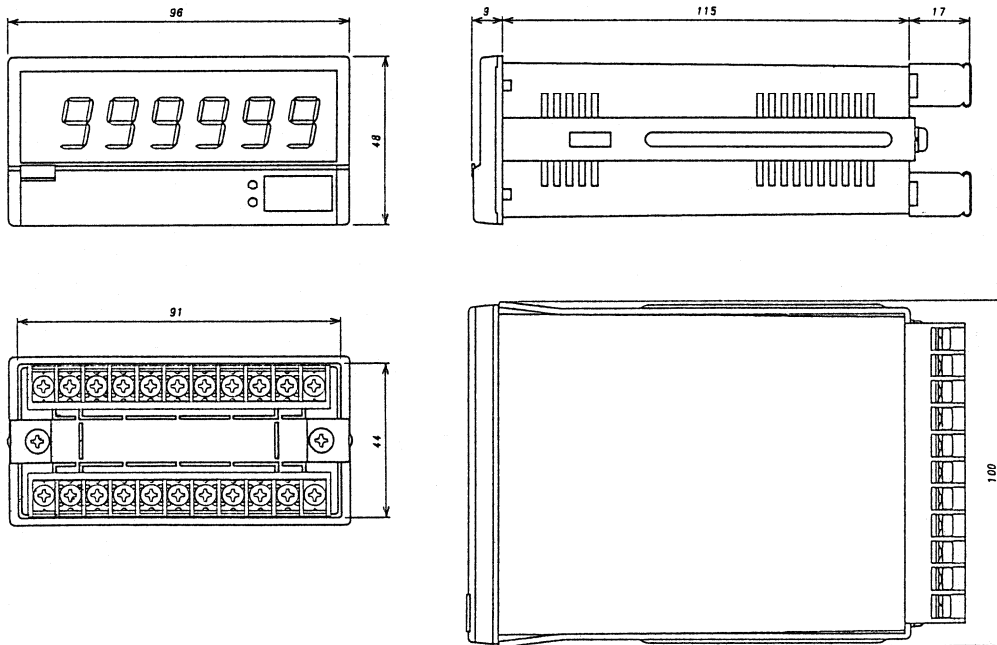Multifunction Panelmeter

PCM13　-(1)(2)(3)(4)　-(5)　-Options

Model No. Example : PCM13 -A3BR -2 -A

Basic model No.	PCM13 -

(1)	Power supply	90V to 264V AC.	A
		24V±10% DC.	B

(2)	Input	Analog 4 to 20mA DC	1
		Analog 1 to 5V DC	2
		Pulse	3
		Analog 0 to 5V DC	4

(3)	Output	With pulse / without 4 to 20mA DC.	A
		With pulse / With 4 to 20mA DC.	B
		With Pulse / with Integrated 4 to 20mA DC. signal	C

(4)	Display color	Green LED	G
		Red LED	R

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(5)	Distributor function	None	X
		DC12V / 150mA	1
		DC24V / 50mA	2

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Options	Options	No option	X
	Contact output	With contact output	A
	Test report	With test report	B
	Integrated resistance	With resistance for communications equipment	C
	Certification of traceability	With certification of traceability	G

DIMENSIONS

(Unit:mm)

Panel cutting dimensions $92^{+0.8}_{0} \times 45^{+0.6}_{0}$

Terminal Layout

Upper terminal

(Without contact output)

Terminal	NC	NC	NC	NC	NC	P.O	RESET	PA/LA	D.COM
	1	2	3	4	5	6	7	8	9
Function	NC					Pulse output	Reset	Pulse/Latch	Common

(With contact output)

Terminal	AL1OUT	AL2OUT	AL3OUT	AL4OUT	ALCOM	P.O	RESET	PA/LA	D.COM
	1	2	3	4	5	6	7	8	9
Function	Contact output					Pulse output	Reset	Pulse/Latch	Common

Lower terminal (for pulse input)

(Without sensor power supply or analog output)

Terminal	Hi (1)	Hi (2)	COM	NC	NC	NC	GND	P2 (+)	P1 (-)
	1	2	3	4	5	6	7	8	9
Function	Input		Common	NC			Ground	Power supply	

(With sensor power or analog output)

Terminal	Hi (1)	Hi (2)	COM	NC	NC	NC	GND	P2 (+)	P1 (-)
	1	2	3	4	5	6	7	8	9
Function	Input		Common	Sensor power supply	Analog output		Ground	Power supply	

Lower terminal (for 4 to 20mA dc or 1 to 5 V dc)

(Without sensor power supply or analog output)

Terminal	Hi-	Lo-	COM	NC	NC	NC	GND	P2 (+)	P1 (-)
	1	2	3	4	5	6	7	8	9
Function	Input		Common	NC			Ground	Power supply	

(With sensor power supply or analog output)

Terminal	Hi-	Lo-	COM	NC	NC	NC	GND	P2 (+)	P1 (-)
	1	2	3	4	5	6	7	8	9
Function	Input		Common	NC			Ground	Power supply	

Note

(10)