

3 1/2 DIGITAL METER OF PROGRAMMABLE



FEATURES

- Measuring DCA, DCV, ACA, ACV, Potentiometer, Pt-100, Thermocouple, Transmitter, Load Cell etc...
- Wide switchable readout range
- Accuracy 0.1% F.S ± 1 digit (DC, AC (TRMS), Potentiometer, Load Cell, Pt-100, Transmitter)
- High stability and Dimension small

1. MODEL: PFP - 1 - [] - [] - [] - [] → NON-PROGRAMMABLE

NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Thermocouple	NO	Load Cell	NO	Transmitter	NO	Aux. Power
A	DC	11	0-50.0 mV	21	0-19.99 μ A	31	0-10%	41	-50~50°C	51	0~600°C(J)	61	2.0mV/V	71	DC 4-20mA	1	AC 110/220V
B	AC(RMS)	12	0-199.9 mV	22	0-199.9 μ A	32	0-50%	42	-100~100°C	52	0~1200°C(K)	62	3.0mV/V	72	DC 1-5V	2	DC 24V
C	* AC(TRMS)	13	0-1999 mV	23	0-1.999 mA	33	0-100%	43	-199.9~199.9°C	53	0~1600°C(R)	63	* 2.0mV/V	73	DC 4-20mA	3	DC 48V
D	Potentiometer	14	0-5 V	24	0-19.99 mA	34	5-95%	44	0~850°C	59	SPECIFIED	64	* 3.0mV/V	74	DC 1-5V	4	DC 110V
E	Transmitter	15	0-10 V	25	0-199.9 mA	35	10-90%	45	-200~850°C	• Accuracy 0.2% $\pm 1^{\circ}\text{C}$ • Internal CJC trace ability $\leq \pm 0.5^{\circ}\text{C} \leq 10$ min. warm up	69	SPECIFIED	79	SPECIFIED	5	DC 220V	
F	* Pt-100(RTD)	16	0-35 V	26	0-1.999 A	39	SPECIFIED	49	SPECIFIED		• Exciting voltage DC 12V ($\leq 50\text{mA}$)	• 71-72 non-exciting DC 20V • 73-74 exciting DC20V ($\leq 25\text{mA}$)	6	AC 90~260V			
G	* Thermocouple	17	0-600 V	27	0-5.00 A	• Three wire connection • Exciting voltage DC 5V ($\leq 5\text{mA}$)	• Three wire connection	9	SPECIFIED				• $\pm 20\%$ of rate, less 3.5VA for AC input • $\pm 20\%$ of rate, less 3WATT for DC input				
H	Load Cell	18	0-1000 V	28	0-10.00 A												
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED												

note: * non-programmable

2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS)),
(23 $\pm 5^\circ\text{C}$)
Potentiometer, Load Cell, Pt-100, Transmitter)
0.15% F.S ± 1 digit (AC(RMS))
- Sampling time : 3 cycles/sec. or more
- Input impedance : 1M Ω or more (DC, AC)
- Over input indication: "1" or "-1"
- Display : Red high efficiency LEDs high 14.22mm (.56"), .8" OPTIONAL
- Polarity display : When input is negative, "-" displayed
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0-50 $^\circ\text{C}$)
- Dielectric strength : 1.5KVac / 1min. (input/power)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90% RH non-condensed)
- Weight (about) : 320g

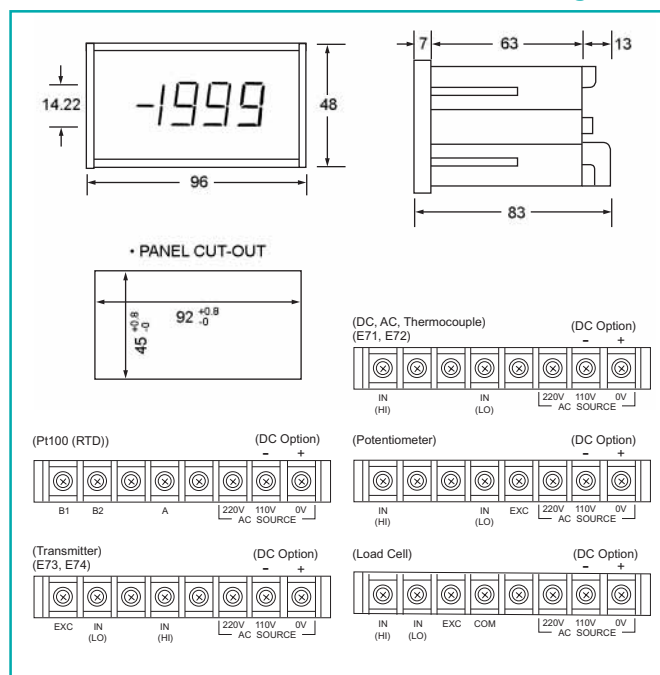
4. Program of span (GAIN) and decimal point set



Nx	1	2	4	8	10	20	40	80	OFF
P	1	2	3	4	5	6	7	8	ON

(Status off: enable, All poles off $\Sigma N=165\%$)
(All poles on $\Sigma N=0\%$)

3. Outside dimension and connection diagram



5. Programming formula

DH/DL: display high range/display low range

▲ SPAN (ΣN) = $[(DH-DL)/20]\%$

▲ Example: Input AC 0-5A, display 0-100.0A

(1) $\Sigma N = [(1000-0)/20] \% = 50\%$

(2) Setting span(ΣN) → P5-P7=off & the rest on

(3) Adjusting

3-1 input=0A adjust "ZERO" to "000" readout

3-2 input=5A adjust "SPAN" to "1000" readout

(4) setting decimal point "3" on

(5) END

3 1/2 DIGITAL METER OF PROGRAMMABLE



FEATURES

- Accuracy 0.1% F.S.
- Programmable rate 0 to 1999 digit
- Decimal point can be modified
- High noise immunity
- High stability and Dimension small

1. MODEL: PFP-1-AX- [] - [] - [] - [] - [] - []

NO	Input Type	NO	Input Range	NO	Input Range	NO	Aux. Power
A	DC	11	DC 0-50mV	16	DC 0-1mA	1	AC 110/220V
B	AC (RMS)	12	DC 0-5V	17	AC 0-36V (ACTG)	2	DC 24V
		13	DC 0-10V (Inverter)	18	AC 0-110V	3	DC 48V
		14	DC 0-10V	19	AC 0-600V	4	DC 110V
		15	DC 0-54V (DCTG)	20	AC 0-5A	5	DC 220V
				29	SPECIFIED	6	AC 90~260V
						9	SPECIFIED

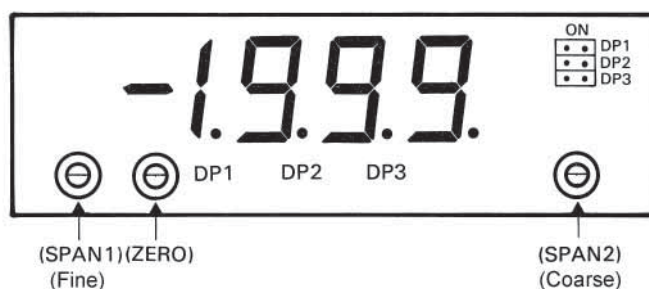
• Example: PFP-1-AX-B20-0-150.0A

Input type **AC**
 Input range **AC 0-5A**
 Minimum display value **0**
 Maximum display value **150.0**
 Unit **AC A**

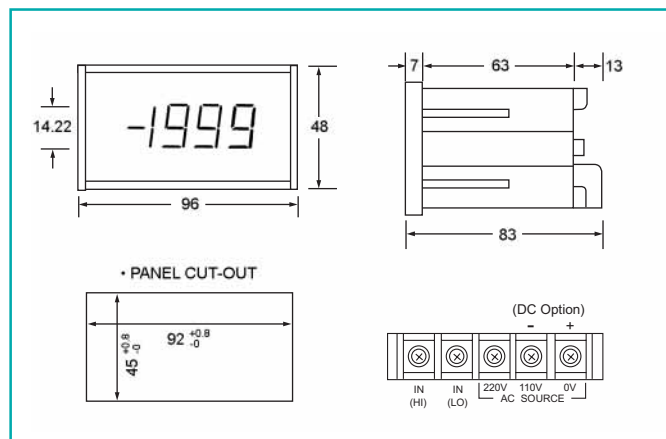
2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V, switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS)),
23 $\pm 5^\circ\text{C}$ 0.2% F.S ± 1 digit (AC(RMS))
- Sampling time : 2 cycles/sec. or more
- Zero (offset) range : 0~ ± 100 digit adjustable
- Over input indication : "1" or "-1"
- Display : Red high efficiency LEDs high
14.22mm (.56")
- Polarity display : When input is negative, "-" displayed
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
- Dielectric strength : 1.5KVac / 1min. (input/power)
- Operating condition : 0~50 $^\circ\text{C}$ (32~122 $^\circ\text{F}$)
- Operating hum. range : 20~90% RH.
- Weight (about) : 320g

4. Program of span and zero and decimal point set



3. Outside dimension and connection diagram



5. Application

Example: PFP-1-AX-A13-0-100.0M/min

- Input range : DC0~10V(Input from inverter)
- Readout range : 0~100.0M/min
- Adjusting process :
 - (1) Set DP3 on
 - (2) Set up input=10V, adjust "SPAN2" nearly to "100.0" readout
 - (3) Set up input=0V, adjust "ZERO" to "00.0" readout
 - (4) Set up input=10V, adjust "SPAN1" to "100.0" readout
 - (5) END

A digital scale with a black body and a red top edge. The red LED display shows the number '18888'. A red label on the top left reads 'POUNDFUL-L'. A yellow label on the right side reads '1000g'.

- Measuring DCA, DCV, ACA, ACV, Potentiometer, Pt-100, Thermocouple, Load Cell etc...
- Wide switchable readout range
- Accuracy 0.1% F.S ± 1 digit (DC, AC (TRMS), Potentiometer, Load Cell, Transmitter, Pt-100)
- High stability and Dimension small



NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Transmitter	NO	Aux. Power
A	DC	11	0-50.00 mV	21	0-19.999 μ A	31	0-10%	41	-50.0~50.0°C	51	DC 4-20mA	1	AC 110/220V
B	AC (RMS)	12	0-199.99 mV	22	0-199.99 μ A	32	0-50%	42	-100.0~100.0°C	52	DC 1-5V	2	DC 24V
C	* AC (TRMS)	13	0-1999.9 mV	23	0-1.9999 mA	33	0-100%	43	-200.0~200.0°C	53	DC 4-20mA	3	DC 48V
D	Potentiometer	14	0-5 V	24	0-20.00 mA	34	5-95%	44	0~850°C	54	DC 1-5V	4	DC 110V
E	Transmitter	15	0-10 V	25	0-199.99 mA	35	10-90%	45	-200~850°C	59	SPECIFIED	5	DC 220V
F	* Pt-100 (RTD)	16	0-35 V	26	0-2.000 A	39	SPECIFIED	49	SPECIFIED	• 51-52 non-exciting DC 20V • 53-54 exciting DC20V (\leq 25mA)	6	AC 90~260V	
G	Load Cell	17	0-600.0 V	27	0-5.000 A	• Three wire connection • Exciting voltage DC 5V (\leq 5mA)	• Three wire connection	• 51-52 non-exciting DC 20V • 53-54 exciting DC20V (\leq 25mA)	9	SPECIFIED			
O	SPECIFIED	18	0-1000.0 V	28	0-10.000 A				• \pm 20% of rate, less 3.5VA for AC input • \pm 20% of rate, less 3WATT for DC input				
• Non-programmable		19	SPECIFIED	29	SPECIFIED								

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V,
switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS)),
(23 $\pm 5^\circ\text{C}$) Potentiometer, Pt-100, Transmitter)
0.15% F.S ± 1 digit (AC(RMS))
- Sampling time : 3 cycles/sec. or more
- Input impedance : 1M Ω or more
- Over input indication : "0000" flash
- Display : Red high efficiency LEDs high 14.22mm
(.56")
- Polarity display : When input is negative, "-" displayed
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0-50 $^\circ\text{C}$)
- Dielectric strength : 1.5KVac / 1min. (input/power)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90% RH non-condensed)
- Weight (about) : 320g

Input range span (GAIN) selection

Span setting % = ΣN

Nx	1	2	4	8	10	20	40	80	OFF
P	1	2	3	4	5	6	7	8	ON

(Status off: enable, All poles off $\Sigma n = 165\%$
All poles on $\Sigma n = 0\%$)

DH/DL: display high range/display low range

▲ SPAN (ΣN) = $[(DH - DL) / 200] \%$

▲ Example: Input AC 0-5A, display 0-1000.0A

(1) $\sum N = [(10000 - 0) / 200] \% = 50\%$

(2) Setting span(ΣN) \rightarrow P5-P7=off & the rest on

(3) Adjusting

3-1 input=0A adjust "ZERO" to "0000" readout

3-2 input=5A adjust "SPAN" to "10000" readout

(4) setting decimal point “4” on

(5) END

4 1/2 DIGITAL METER OF PROGRAMMABLE



FEATURES

- Accuracy 0.1% F.S.
- Programmable rate 0 to 19999 digit
- Decimal point can be modified
- High noise immunity
- High stability and Dimension small

1. MODEL: PFP-2-AX- [] - [] - [] - [] - [] - []

NO	Input Type	NO	Input Range	NO	Input Range	NO	Aux. Power
A	DC	11	DC 0-50mV	16	DC 0-1mA	1	AC 110/220V
B	AC (RMS)	12	DC 0-5V	17	AC 0-36V (ACTG)	2	DC 24V
C	AC (TRMS)	13	DC 0-10V (inverter)	18	AC 0-110V	3	DC 48V
		14	DC 0-10V	19	AC 0-600V	4	DC 110V
		15	DC 0-54V (DCTG)	20	AC 0-5A	5	DC 220V
				29	SPECIFIED	6	AC 90~260V
						9	SPECIFIED

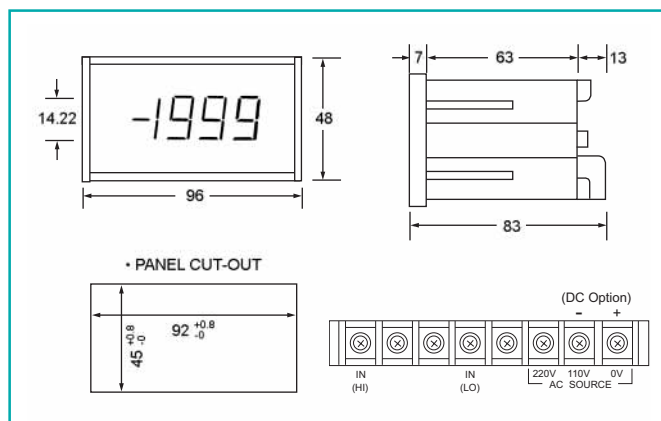
•Example: PFP - 2- AX - [B] [20] - [0] - [150.00] [A]

Input type [AC]
 Input range [AC 0-5A]
 Minimum display value [0]
 Maximum display value [150.00]
 Unit AC [A]

2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS)),
23 $\pm 5^\circ\text{C}$ 0.2% F.S ± 1 digit (AC(RMS))
- Sampling time : 2 cycles/sec.
- Zero (offset) range : 0~ ± 100 digit adjustable
- Over input indication : "0000" flash
- Display : Red high efficiency LEDs high
14.22mm (.56")
- Polarity display : When input is negative, "-" displayed
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
- Dielectric strength : 1.5KVac / 1min. (input/power)
- Operating condition : 0~50 $^\circ\text{C}$ (32~122 $^\circ\text{F}$)
- Operating hum. range: 20~90% RH.
- Weight (about) : 320g

3. Outside dimension and connection diagram



4. Program of span and zero and decimal point set



5. Application

Example: [PFP-2-AX-A13-0-100.00M/min]

- Input range : DC0~10V (Input from inverter)
- Readout range : 0~100.00M/min
- Adjusting process :
 - (1) Set DP3 on
 - (2) Set up input=10V, adjust "SPAN2" nearly to "100.00" readout
 - (3) Set up input=0V, adjust "ZERO" to "00.00" readout
 - (4) Set up input=10V, adjust "SPAN1" to "100.00" readout
 - (5) END

3 1/2 DIGITAL METER WITH BUILT-IN TRANSMITTER



FEATURES

- Measuring DC, AC, Potentiometer, Thermocouple, Pt-100, Load Cell, etc...
- Accuracy 0.1% F.S ± 1 digit (DC, AC (TRMS), Potentiometer, Pt-100, Load Cell)
- Input/output isolation 1.6KVdc
- Surge withstand 4KV (1.2 X 50 μ s)
- High stability

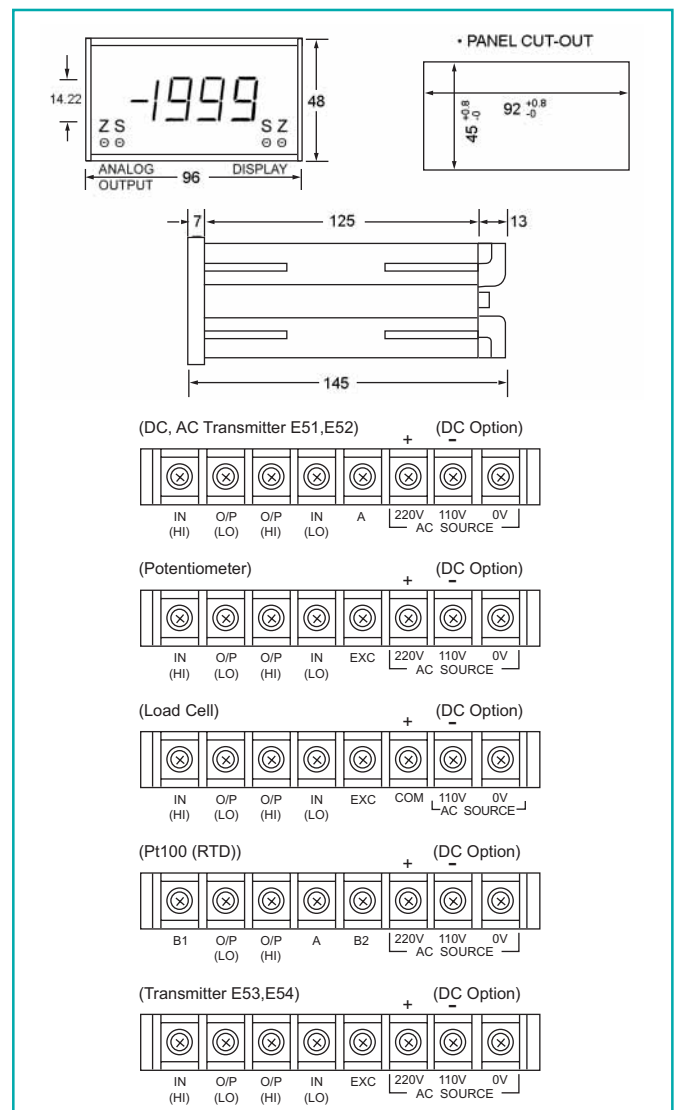
1. MODEL: PF - 3 - ■ ■ ■ ■ - X X = 1 (non-isolating), X = 2 (isolating)

NO		Input Type		NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Transmitter	NO	Output Range	NO	Aux. Power
A		DC		11	0-50.0mV	21	0-19.99μA	31	0-10%	41	-50.0~50.0°C	51	DC 4-20mA	E	DC 0-5V	1	AC 110/220V
B		AC (RMS)		12	0-199.9mV	22	0-199.9μA	32	0-50%	42	-100.0~100.0°C	52	DC 1-5V	F	DC 1-5V	2	DC 24V
C		AC (TRMS)		13	0-1999mV	23	0-1.999mA	33	0-100%	43	-199.9~199.9°C	53	DC 4-20mA	H	DC 0-10V	3	DC 48V
D		Potentiometer		14	0-5V	24	0-19.99mA	34	5-95%	44	0~850°C	54	DC 1-5V	I	DC 2-10V	4	DC 110V
E		Transmitter		15	0-10V	25	0-199.9mA	35	10-90%	45	-200~850°C	• 51-52 non-exciting DC 24V • 53-54 exciting DC24V (≤25mA)		J	DC 0-1mA	5	DC 220V
F		Pt-100 (RTD)		16	0-35V	26	0-1.999A	39	SPECIFIED	49	SPECIFIED			N	DC 0-10mA	6	AC 90~260V
G		Load Cell		17	0-600V	27	0-5.00A	• Three wire connection • Exciting voltage DC 5V (≤5mA)		• Three wire connection				P	DC 0-20mA	9	SPECIFIED
O		SPECIFIED		18	0-1000V	28	0-10.00A							Q	DC 4-20mA	• ±20% of rate, less 3.5VA for AC input • ±20% of rate, less 3WATT for DC input	
				19	SPECIFIED	29	SPECIFIED							R	SPECIFIED		

2. Specification

- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS)), (23 $\pm 5^\circ$ C)
Potentiometer, Pt-100, Load Cell, Transmitter)
0.15% ± 1 digit (AC(RMS))
- Sampling time : 3 cycles/sec. or more
- Input impedance : 1M Ω or more for DC, AC
- Temp. coefficient : 100ppm/ $^\circ$ C (0~50 $^\circ$ C)
- Output ripple (p-p) : <0.1% F.S.
- Response time : ≤ 300 ms (0~90%)
- Output drive capability : ≤ 10 mA for voltage mode
 ≤ 10 V for current mode
- Display : Red high efficiency LEDs high 14.22mm (.56")
- Polarity display : When input is negative, "-" displayed
- Dielectric strength : 2KVac / 1min. (power/input & output)
1600Vdc (input/output)
- Surge withstand : ANSI C37.90a/1974, DIN-IEC255-4
impulse voltage 4KV (1.2 x 50 μ s)
- Over input indication : "1" or "-1"
- Operating condition : 0~50 $^\circ$ C (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^\circ$ C (20 to 90% RH non-condensed)

3. Outside dimension and connection diagram



DIGITAL FREQUENCY METER



PF-FA

FEATURES

- Accuracy 0.05% F.S.
- Dimension small and High stability



PF-FB

FEATURES

- Accuracy 0.01% F.S.
- Accepts input rates up to 50KHz
- Decimal point can be modified
- Input pulse cut off sampling time can be modified (0.1 to 99.9 second)
- Display value depend on the mean input pulse several times can be modified (1 to 99 times)

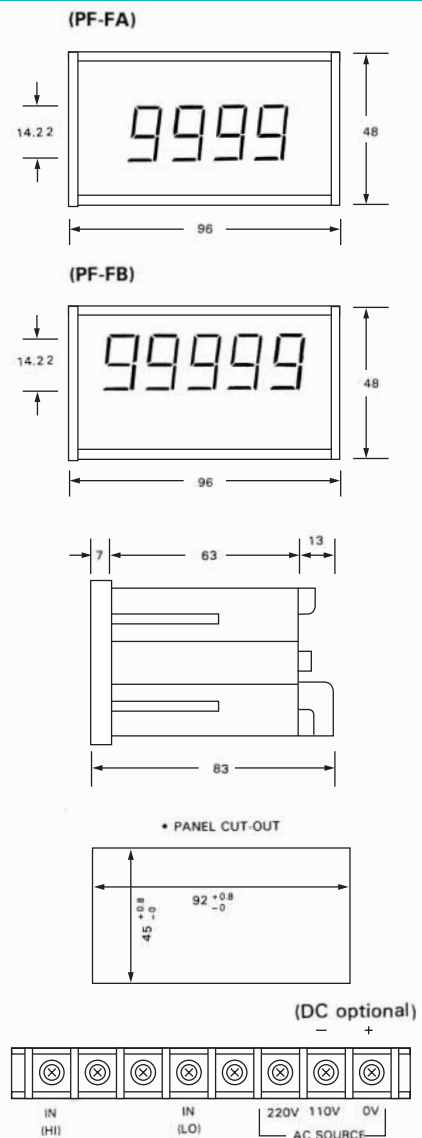
1. MODEL: PF-FA - [] [] - [] PF-FB - [] [] - []

NO	Input Frequency	NO	Input Level	NO	Aux. Power
1	0-999.9 Hz (FA)	A	Pulse (TTL)	1	AC 110/220V
2	0-99.999 Hz (FB)	B	Pulse (NPN)	2	DC 24V
3	0-999.99 Hz (FB)	C	Pulse (PNP)	3	DC 48V
4	0-9999.9 Hz (FB)	D	AC 1-60V	4	DC 110V
5	0-49999 Hz (FB)	E	AC 10-600V	5	DC 220V
9	SPECIFIED	0	SPECIFIED	6	AC 90~260V
				9	SPECIFIED
					• ±20% of rate, less 3.5VA for AC input
					• ±20% of rate, less 3WATT for DC input

2. Specification

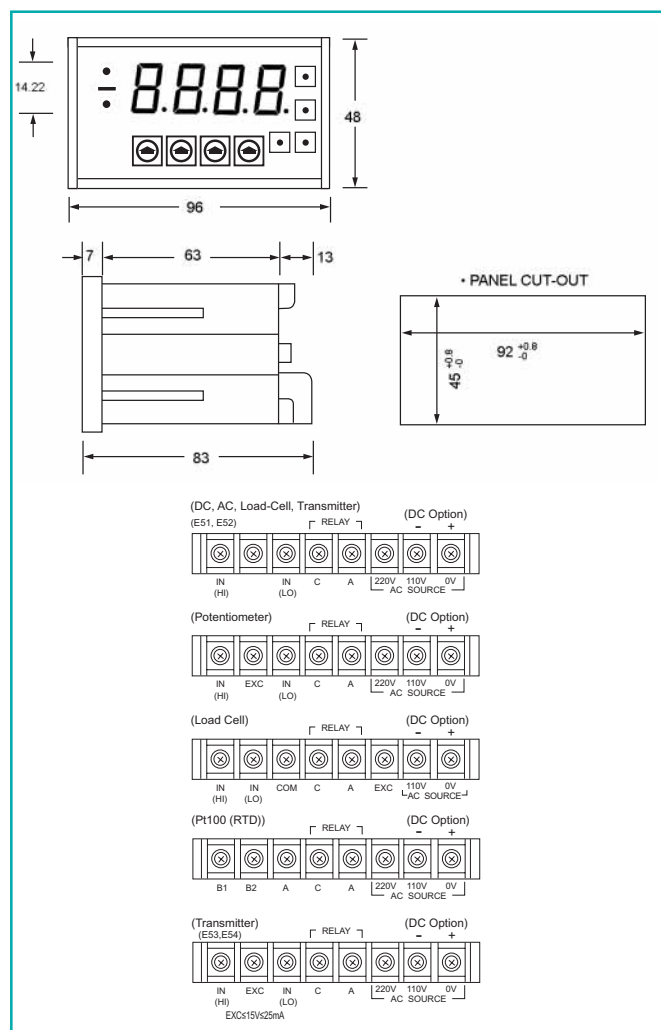
- Aux. power supply : AC110 & 220V ±20% (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V ±10%)
- Measuring accuracy : 0.05% F.S. (PF-FA)
(23 ±5°C) 0.01% F.S. (PF-FB)
- Readout range : "0" to "9999" (PF-FA)
"0" to "99999" (PF-FB)
- Sampling time : 2 cycles/sec. (PF-FA)
10 cycle/sec. (≥10Hz)
f cycle/sec. (<10Hz)
- Input impedance : 1MΩ or more
- Over input indication : "0vEr"
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Dielectric strength : 2KVac/1min. (input/power)
- Surge test : ANSI C37.90a/1974, DIN-IEC255-4
impulse voltage 4KV (1.2 x 50μs) (PF-FA)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)
- Weight (about) : 320g

3. Outside dimension and connection diagram



- Measuring DCA, DCV, ACA, ACV, Potentiometer, Transmitter, Pt-100, Load Cell, etc...
- Accuracy 0.1% F.S ± 1 digit (DC, AC (TRMS), Potentiometer, Transmitter, Load Cell, Pt-100)
- Programmable rate -9999 to 9999 digit
- Decimal point can be modified
- One alarm, compare hysteresis, alarm delay, start delay function
- Auto zero function

Note: A: deadband and deadband delay
B: alarm delay
C: compare hysteresis



MICROPROCESS DIGITAL METER RELAY



FEATURES

- Measuring DCA, DCV, ACA, ACV, Potentiometer, Thermocouple, Pt-100, Load Cell, etc...
- Accuracy 0.05% F.S ± 1 digit (DC, Transmitter)
- Programmable rate 0 to ± 19999 digit
- Auto zero function
- Man-machine interface, easy to operate (readout, decimal point, alarm function, deadband etc...)

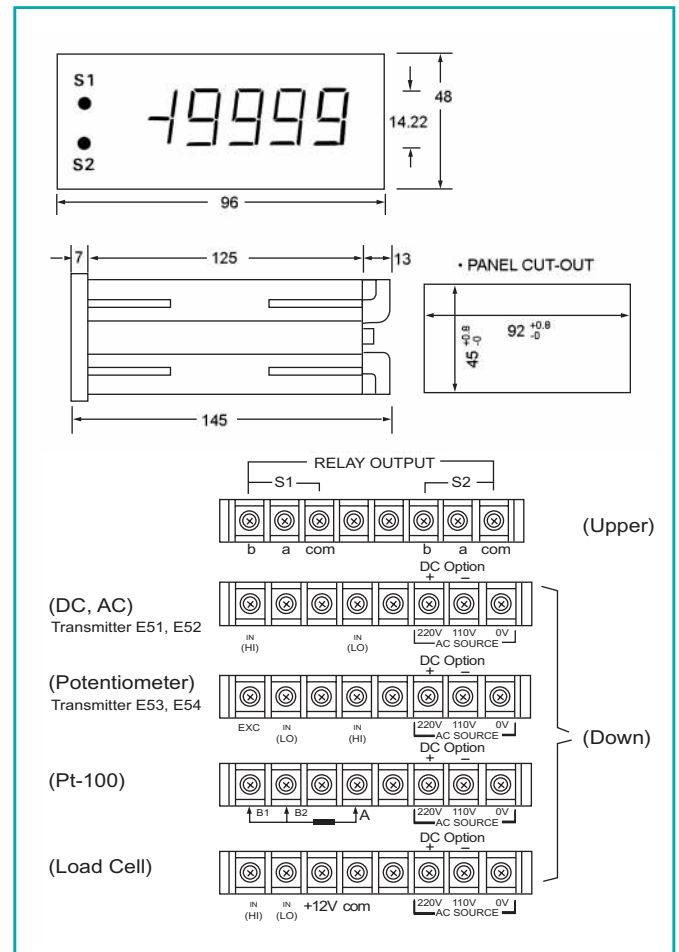
1. MODEL: PF-M-1 - [] - [] - []

NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Transmitter	NO	Aux. Power
A	DC	11	0-50.00mV	21	0-19.999 μ A	31	0-10%	41	-50.0~50.0°C	51	DC 4-20mA	1	AC 110/220V
B	AC (RMS)	12	0-199.99mV	22	0-199.99 μ A	32	0-50%	42	-100.0~100.0°C	52	DC 1-5V	2	DC 24V
C	AC (TRMS)	13	0-1999.9mV	23	0-1.9999mA	33	0-100%	43	-200.0~200.0°C	53	DC 4-20mA	3	DC 48V
D	Potentiometer	14	0-5V	24	0-20.00mA	34	5-95%	44	-200.0~400.0°C	54	DC 1-5V	4	DC 110V
E	Transmitter	15	0-10V	25	0-199.99mA	35	10-90%	45	-200~850°C	59	SPECIFIED	5	DC 220V
F	Pt-100 (RTD)	16	0-35V	26	0-1.9999A	39	SPECIFIED	49	SPECIFIED	• 51-52 non-exciting DC 24V • 53-54 exciting DC24V (\leq 25mA)	6	AC 90~260V	
G	Load Cell	17	0-600.0V	27	0-5.000A	• Three wire connection • Exciting voltage DC 5V (\leq 5mA)		• Three wire connection			9	SPECIFIED	
O	SPECIFIED	18	0-1000.0V	28	0-10.000A						• \pm 20% of rate, less 4.5VA for AC input • \pm 20% of rate, less 4WATT for DC input		
		19	SPECIFIED	29	SPECIFIED								

2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.05% F.S ± 1 digit (DC, Transmitter)
0.1% F.S ± 1 digit (AC(TRMS))
Potentiometer, Load Cell, Pt-100)
0.15% F.S ± 1 digit (AC(RMS))
- Sampling time : 2 cycles/sec
- Readout range : 0 ~ ± 19999 digit adjustable
(compare range)
(auto-zero range)
- Deadband range : 0 ~ 19999 digit adjustable
(compare hysteresis)
- Alarm delay time : 0 ~ 99 second adjustable
(deadband delay time)
- Alarm action : "Hi" or "Lo" adjustable
- Over input indication : "ovEr"
- Display : Red high efficiency LEDs high 9.14mm (0.36") (96x48mm)
14.22mm (0.56") (48x96mm)
- Polarity display : When input is negative, "-" displayed
- Relay contact output : AC 250V~3A, DC30V~5A
- Temp. coefficient : 50ppm/°C (0~50°C)
- Dielectric strength : 2KVac / 1min. (input/power)
- Surge test : ANSI C37.90a/1974, DIN-IEC255-4
impulse voltage 4KV (1.2 x 50 μ s)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)

3. Outside dimension and connection diagram



MICROPROCESS DIGITAL METER RELAY WITH BUILT-IN TRANSMITTER



FEATURES

- Measuring DCA, DCV, ACA, ACV, Potentiometer, Transmitter, Pt-100, Load Cell, etc...
- Accuracy 0.05% F.S ± 1 digit (DC, Transmitter)
- Programmable rate 0 $\sim \pm 19999$ digit
- Decimal point can be modified
- Auto zero function
- Up to 4 alarms, compare hysteresis function. (Optional)
- 15 bits DAC analog output function or RS-485/RS-232 Modbus RTU mode transmit function. (Optional)
- Offer DC 24V for two wires. ($\leq 25\text{mA}$) (Transducer excitation supply Optional)
- Max. four setting and contact point.
- Man-machine interface, easy to operate.



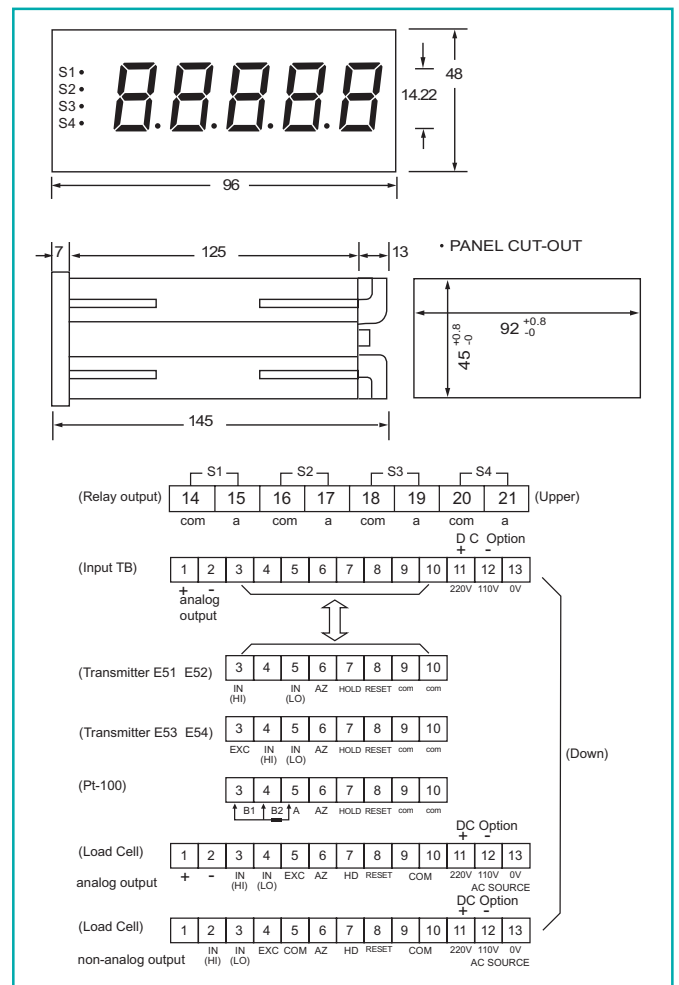
1. MODEL: PF-M-2 - ■ ■ ■ ■ X X = 0 (non-alarm), X = 1 (one-alarm)
X = 2 (two-alarm), X = 3 (three-alarm), X = 4 (four-alarm)

NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100(RTD)	NO	Transmitter	NO	Output Range	NO	Aux. Power
A	DC	11	0-50.00mV	21	0-19.999 μ A	31	0-10%	41	-50.0 \sim 50.0 $^{\circ}$ C	51	DC 4-20mA	N	None	1	AC 110/220V
B	AC (RMS)	12	0-199.99mV	22	0-199.99 μ A	32	0-50%	42	-100.0 \sim 100.0 $^{\circ}$ C	52	DC 1-5V	1	DC 4-20mA	2	DC 24V
C	AC (TRMS)	13	0-1999.9mV	23	0-1.9999mA	33	0-100%	43	-200.0 \sim 200.0 $^{\circ}$ C	53	DC 4-20mA	2	DC 1-5V	3	DC 48V
D	Potentiometer	14	0-5V	24	0-20.00mA	34	5-95%	44	-200.0 \sim 400.0 $^{\circ}$ C	54	DC 1-5V	3	DC 4-20mA	4	DC 110V
E	Transmitter	15	0-10V	25	0-199.99mA	35	10-90%	45	-200.0 \sim 850.0 $^{\circ}$ C	59	SPECIFIED	4	DC 1-5V	5	DC 220V
F	Pt-100 (RTD)	16	0-35V	26	0-1.9999A	39	SPECIFIED	49	SPECIFIED		• 51-52 non-exciting DC 24V • 53-54 exciting DC24V ($\leq 25\text{mA}$)	7	RS-232	6	AC 90 \sim 260V
G	Load Cell	17	0-600.0V	27	0-5.000A		• Three wire connection • Exciting voltage DC 5V ($\leq 5\text{mA}$)		• Three wire connection			8	RS-485	9	SPECIFIED
O	SPECIFIED	18	0-1000.0V	28	0-10.000A							9	SPECIFIED		• $\pm 20\%$ of rate, less 6.5VA for AC input • $\pm 20\%$ of rate, less 5WATT for DC input
		19	SPECIFIED	29	SPECIFIED										

2. Specification

- Aux. power supply : AC 110 & 220V $\pm 20\%$ (50 or 60 Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90 \sim 260V $\pm 10\%$)
- Measuring accuracy (23 $\pm 5^{\circ}$ C) : 0.05% F.S. ± 1 digit (DC, transmitter)
0.1% F.S. ± 1 digit (AC(TRMS), Potentiometer, Load Cell, Pt -100)
0.15% F.S. ± 1 digit(AC(RMS))
- Sampling time : 0.04 \sim 9.99 second adjustable
- Readout range (Compare range) : 0 $\sim \pm 19999$ digit adjustable
(Auto-zero range)
- Compare hysteresis range : 0 \sim 19999 digit adjustable
- Alarm delay time : 0 \sim 99.9 second adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC 250V \sim 3A, DC 30V \sim 5A
- Transmit baud rate : 2400bps, 4800bps, 9600bps, 19200bps
- Transmit format : <8,N,1>, <8,N,2>, <8,E,1>, <8,O,1>
- Analog output resolution : 15 bits DAC
- Output drive capability (analog output) : $\leq 10\text{mA}$ for voltage mode
 $\leq 10\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S.
- Response time : $\leq 100\text{ms}$ (0-90%)
- Temp. coefficient : 50 ppm/ $^{\circ}$ C (0 \sim 50 $^{\circ}$ C)
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input & output)
1.6KVdc (input/output)
- Operating condition : 0 \sim 50 $^{\circ}$ C (20 to 90% RH non-condensed)
- Storage condition : 0 \sim 70 $^{\circ}$ C (20 to 90% RH non-condensed)

3. Outside dimension and connection diagram



MICROPROCESS DIGITAL METER RELAY WITH BUILT-IN TRANSMITTER



FEATURES

- Measuring DCA, DCV, ACA, ACV, Potentiometer, Transmitter, Pt-100, Load Cell, etc...
- Accuracy 0.05% F.S. ± 1 digit (DC, Transmitter)
- Programmable rate -1999 to 9999 digit
- Decimal point can be modified
- 14 bits DAC analog output function (non-isolating)
- Auto zero function
- Man-machine interface, easy to operate (readout range, output range, decimal point, alarm function etc...)
- No setting and compare error (use pushwheel digital switches setting and digit compare)

1. MODEL: PF-M-5A - ■ ■ ■ ■ ☐ X = 0 (non-A and B and C), X = 1 (only A)
 PF-M-5B - ■ ■ ■ ■ ☐ X = 2 (only A + B), X = 3 (A + B + C)

Note: A: deadband and deadband delay
 B: alarm delay
 C: compare hysteresis

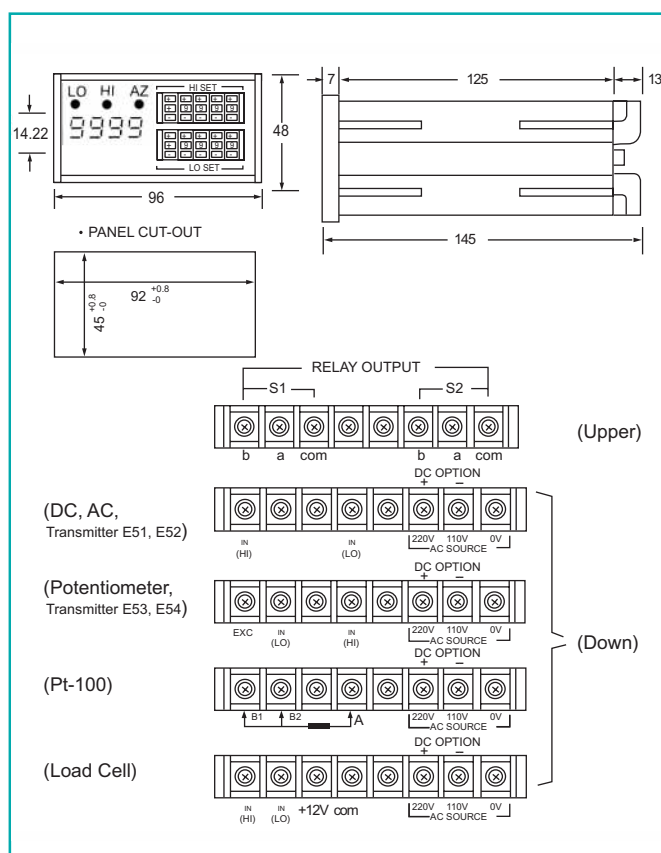
NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100(RTD)	NO	Transmitter	NO	Output Range	NO	Aux. Power
A	DC	11	0-50.00 mV	21	0-9.999 μ A	31	0-10%	41	0-50.0°C	51	DC 4-20mA	N	None	1	AC 110/220V
B	AC (RMS)	12	0-99.99 mV	22	0-99.99 μ A	32	0-50%	42	0-100.0°C	52	DC 1-5V	E	DC 0-5V	2	DC 24V
C	AC (TRMS)	13	0-999.9 mV	23	0-2.000 mA	33	0-100%	43	0-200.0°C	53	DC 4-20mA	F	DC 1-5V	3	DC 48V
D	Potentiometer	14	0-5 V	24	0-20.00 mA	34	5-95%	44	0-400.0°C	54	DC 1-5V	H	DC 0-10V	4	DC 110V
E	Transmitter	15	0-10 V	25	0-200.0 mA	35	10-90%	45	0-850.0°C	59	SPECIFIED	I	DC 2-10V	5	DC 220V
F	Pt-100 (RTD)	16	0-35 V	26	0-2.000 A	39	SPECIFIED	49	SPECIFIED		• 51-52 non-exciting DC 24V • 53-54 exciting DC24V (≤ 25 mA)	P	DC 0-20mA	6	AC 90~260V
G	*Load Cell	17	0-600 V	27	0-5.000 A		• Three wire connection • Exciting voltage DC 5V (≤ 5 mA)		• Three wire connection			Q	DC 4-20mA	9	SPECIFIED
O	SPECIFIED	18	0-1000 V	28	0-9.999 A							R	SPECIFIED		• $\pm 20\%$ of rate, less 4.5VA for AC input • $\pm 20\%$ of rate, less 4WATT for DC input
		19	SPECIFIED	29	SPECIFIED										

note: * non-output function

2. Specification

- Aux. power supply : AC 110 & 220V $\pm 20\%$ (50 or 60 HZ)
 (Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy (23 $\pm 5^\circ$ C) : 0.05% F.S. ± 1 digit (DC, transmitter)
 0.1% F.S. ± 1 digit (AC(TRMS), Potentiometer, Load Cell, Pt -100)
 0.15% F.S. ± 1 digit (AC(RMS))
- Sampling time : 0.04~9.99 second adjustable
- Readout range (output range) : -1999 ~ 9999 digit adjustable
- Setting range : 0 ~ 9999 digit adjustable
- Parameter setting : Touch switches
- Compare setting methods : Pushwheel digital switches
- Compare hysteresis (deadband) : 0~999 digit adjustable
- Alarm delay time (deadband delay time) : 0~99.9 second adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Display : Red high efficiency LEDs high 14.22mm (0.56")
- Relay contact output : AC 250V~3A, DC 30V~5A
- Analog output resolution : 14 bits DAC (PWM)
- Output drive capability : ≤ 10 mA for voltage mode
 ≤ 10 V for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S.
- Response time : 100ms (0-90%)
- Temp. coefficient : 50 ppm/ $^\circ$ C (0~50 $^\circ$ C)
- Dielectric strength : 2KVac/1 min. (power/input & output)
- Operating condition : 0 ~50 $^\circ$ C (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^\circ$ C (20 to 90% RH non-condensed)

3. Outside dimension and connection diagram



DIN72x72 MICROPROCESS DIGITAL METER RELAY



FEATURES

- Measuring DCA,DCV,ACA,ACV, Potentiometer, Transmitter, Load Cell, Pt-100, Thermocouple etc....)
- Accuracy 0.1%F.S.±1 digit
- Programmable rate -1999 to 9999 digit
- Decimal point can be modified
- Alarm, compare hysteresis, alarm delay, start delay function
- Auto zero function
- Up and down key setting, easy to operate

1. MODEL: PF-M-6A- ■ ■ ■ - ☒ (one-alarm)
 PF-M-6B- ■ ■ ■ - ☒ (two-alarm)

note: X=0 (non-A and B and C), X-1 (only A),
 X=2 (only A+B), X=3 (A+B+C)

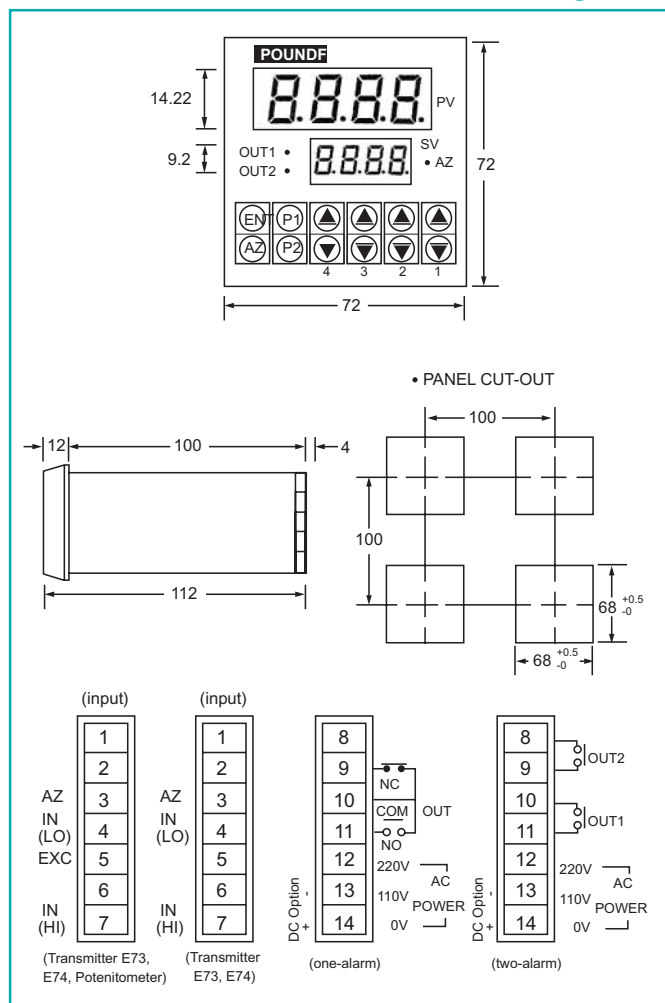
A:deadband and deadband delay
 B:alarm delay
 C:compare hysteresis

NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Thermocouple	NO	Load Cell	NO	Transmitter	NO	Aux. Power		
A	DC	11	0~50.00 mV	21	0~9.999μA	31	0~10%	41	0~50°C	51	0~760°C(J)	61	2.0mV/V	71	DC 4~20mA	1	AC 110/220V		
B	AC(RMS)	12	0~99.99 mV	22	0~99.99μA	32	0~50%	42	0~100°C	52	0~1360°C(K)	62	3.0mV/V	72	DC 1~5V	2	DC 24V		
C	AC(TRMS)	13	0~999.9 mV	23	0~2.000mA	33	0~100%	43	0~200°C	53	0~400°C(T)	63	• 2.0mV/V	73	DC 4~20mA	3	DC 48V		
D	Potentiometer	14	0~5 V	24	0~20.00mA	34	5~95%	44	0~400°C	54	0~1000°C(E)	64	• 3.0mV/V	74	DC 1~5V	4	DC 110V		
E	Transmitter	15	0~10 V	25	0~200.0mA	35	10~90%	45	0~850°C	55	0~1760°C(R)	69	SPECIFIED	79	SPECIFIED	5	DC 220V		
F	Pt-100 (RTD)	16	0~35 V	26	0~2.000mA	39	SPECIFIED	49	SPECIFIED	56	0~1750°C(S)	• Exciting voltage DC 12V (≤30mA)		• 71-72 non-exciting • 73-74 exciting DC24V (≤25mA)		6	AC 90~260V		
G	Thermocouple	17	0~600 V	27	0~5.000A	• Three wire connection • Exciting voltage DC 5V (≤5mA)		• Pt-100 CJC traceability ≤ ±0.5° < (0~70°C)		57	0~1800°C(B)					9	SPECIFIED		
H	Load Cell	18	0~1000 V	28	0~9.999A											• ±20% of rate, less 4.5VA for AC input • ±20% of rate, less 4WATT for DC input			
O	SPECIFIED	19	SPECIFIED	29	SPECIFIED														

2. Specification

- Aux. power supply : AC110 & 220V ±20% (50 or 60Hz)
 (Optional DC 24V or 48V or 110V or 220V, Switching AC90~260V±10%)
- Measuring accuracy : 0.1% F.S ±1 digit (DC, AC(TRMS)),
 (23±5°C)
 0.15%F.S.±1digit (AC (RMS))
 0.2%F.S.±0.5°C (Thermocouple)
- Sampling time : 0.04 second
- Setting methods : Touch switches
- Readout range : -1999 ~ 9999 digit adjustable
 (Compare range)
 (Auto range)
- Compare hysteresis : 0 ~ 9999 digit adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Alarm delay time : 0 ~ 99.99 second adjustable
- Display : Red high efficiency LED's high 14.22 mm
 (.56") (readout value)
 Green high efficiency LEDs high 9.2 mm
 (.36") (preset value)
- Polarity display : When input is negative, "-" displayed
- Relay contact output: AC250V ~ 3A, DC30V ~ 5A
- Temp. coefficient : 50ppm/°C (0 ~ 50°C)
- Dielectric strength : 2KVac/1min. (input/output/power)
- Operating condition : 0 ~ 50°C (20 to 90 % RH non-condensed)
- Storage condition : 0 ~ 70°C (20 to 90 % RH non-condensed)

3. Outside dimension and connection diagram



MICROPROCESS DIGITAL METER RELAY OF PLUG-IN



FEATURES

- Input type DCA, DCV, ACA, ACV, Potentiometer, Transmitter, Pt-100, Thermocouple, etc...
- Accuracy 0.05% F.S ± 1 digit (DC Transmitter)
- Programmable rate -1999 to 9999 digit
- Dual setting and contact point
- Display value depend on the mean input several times can be modified (1 to 9 times)
- Man-machine interface, easy to operate (readout range, decimal point, alarm function, deadband etc. ...)

1. MODEL: PF-MA - - X → X = 1 (one-alarm setting), X = 2 (two-alarm setting)

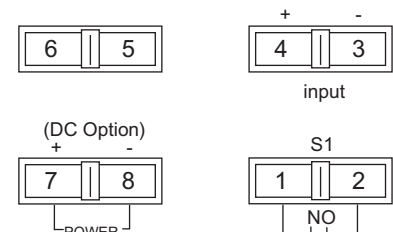
NO	Input Type	NO	DCV (ACV)	NO	DCA (ACA)	NO	Potentiometer	NO	Pt-100	NO	Transmitter	NO	Thermocouple	NO	Aux. Power
A	DC	11	0~50.0 mV	21	0~9.999 μ A	31	0~10%	41	-50.0~50.0°C	51	DC 4~20mA	6B	200~1800°C	1	AC 110V
B	AC (RMS)	12	0~99.99 mV	22	0~99.99 μ A	32	0~90%	42	-100.0~100.0°C	52	DC 10~50mA	6E	-200~400°C	2	AC 220V
C	AC (TRMS)	13	0~999.9 mV	23	0~2.000 mA	33	0~100%	43	-199.9~199.9°C	53	DC 1~5V	6J	-200~760°C	3	DC 24V
D	Potentiometer	14	0~5 V	24	0~20.00 mA	34	5~95%	44	-199.9~400.0°C	54	DC 0~10V	6K	-200~1370°C	4	DC 48V
E	Transmitter	15	0~10 V	25	0~200.0 mA	35	10~90%	45	-199.9~850.0°C	59	SPECIFIED	6R	0~1760°C	5	DC 110V
F	Pt-100 (RTD)	16	0~35 V	26	0~2.000 A	39	SPECIFIED	49	SPECIFIED			6S	0~1750°C	6	DC 220V
G	Thermocouple	17	0~600.0 V	27	0~5.000 A	• only one alarm setting • Exciting voltage DC 5V (≤ 5 mA)		• two wire connection (two alarm setting) • Three wire connection (one alarm setting)				6T	-200~400°C	7	AC 90~260V
O	SPECIFIED	18	0~999.9 V	28	0~9.999 A									9	SPECIFIED
		19	SPECIFIED	29	SPECIFIED										• $\pm 20\%$ of rate, less 3.5VA for AC input • $\pm 20\%$ of rate, less 3WATT for DC input

2. Specification

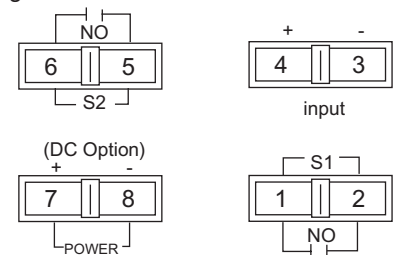
- Aux. power supply : AC110 or 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy (23 $\pm 5^\circ$ C) : 0.05% F.S ± 1 digit (DC, Transmitter)
0.1% F.S ± 1 digit (DC, AC(TRMS)),
Pt-100, Potentiometer)
0.15% F.S ± 1 digit (DC, AC(TRMS))
0.2% F.S $\pm 0.5^\circ$ C (CJC) (Thermocouple)
- Sampling time : 0.04 second adjustable
- Readout range : -1999~9999 digit adjustable
(compare range)
- Compare hysteresis : 0~9999 digit adjustable
(deadband range)
- Alarm delay time : 00.00~99.99 second adjustable
(deadband delay time)
- Alarm action : "Hi" or "Lo" adjustable
- Over input indication : "ovEr"
- Display : Red high efficiency LEDs high 9.2mm (0.36")
- Polarity display : When input is negative, "-" displayed
- Relay contact output : AC 250~3A, DC30V~5A
- Temp. coefficient : 50ppm/ $^\circ$ C (0~50 $^\circ$ C)
- Dielectric strength : 2KVac/1min. (input/output)
- Operating condition : 0~50 $^\circ$ C (humidity 20 to 90% RH non-condensed)
- Storage condition : 0~70 $^\circ$ C (humidity 20 to 90% RH non-condensed)
- Construction : Socket/plug-in type with barrier terminals

3. Terminal connection

① One alarm setting



② Two alarm setting



4. Dimension → See transmitter dimension

MICROPROCESS LVDT METER RELAY WITH BUILT-IN TRANSMITTER



FEATURES

- Accuracy : 0.05% ~ ±1 digit
- High resolution : 0~19999
- 15 bit DAC programmable analog output with high or low cut
- Auto zero function (optional)
- Up to 4 alarms
- User friendly
- RS 232 / RS485 modbus RTU mode (optional)

1. MODEL: PF-MPS2-LVDT - [Color] - [Color] - [Color]

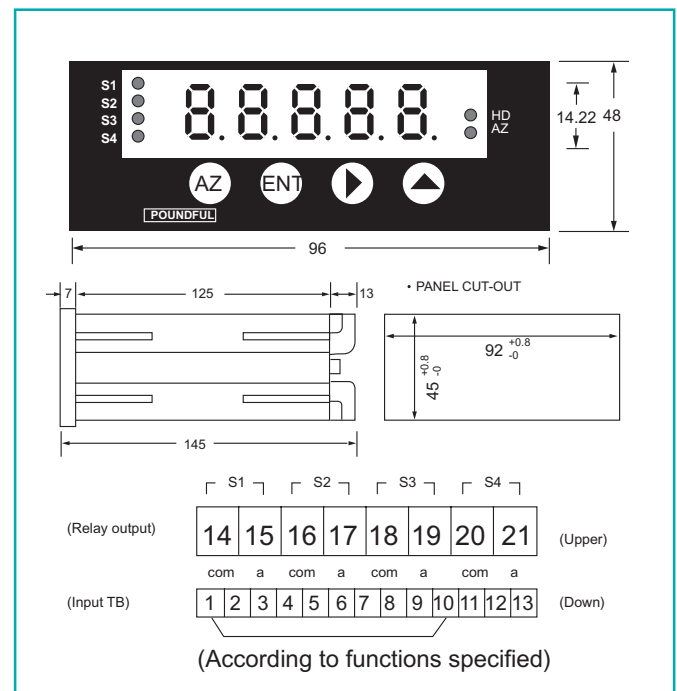
NO	Analog Output	NO	Alarm	NO	Aux. Power
0	NONE	0	NONE	1	AC 110/220V (50/60Hz)
1	DC 4~20mA	1	1 ALARM	2	DC 24V
2	DC 1~5V	2	2 ALARMS	3	DC 48V
6	DC 0~10V	3	3 ALARMS	4	DC 110V
7	RS232	4	4 ALARMS	5	DC 220V
8	RS485			6	AC 90~260V
9	SPECIFIED			9	SPECIFIED

2. Specification

- Aux. power supply : AC110 & 220V ±20% (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V, Switching AC90~260V±10%)
- Measuring accuracy : 0.05% F.S. ± 1 digit
(23±5°C)
- Sampling time : 0.04 ~ 9.99 second adjustable
- Readout range : 0 ~ ±19999 digit adjustable
(Compare range)
(Auto – zero range)
- Compare hysteresis range : 0 ~ 19999 digit adjustable
- Alarm delay time : 0 ~ 99.9 second adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC 250V~3A, DC30V~5A
- Transmit baud rate : 2400bps, 4800bps, 9600bps, 19200bps
- Transmit format : <8,N,1>, <8,N,2>, <8,E,1>, <8,0,1>
- Analog output resolution : 15 bits DAC
- Output drive capability : 10mA for voltage mode
10V for current mode
(analog output)
- Output ripple (p-p) : <0.1% F.S.
- Response time : ≤100ms
- Temp. coefficient : 50 ppm/°C (0 ~ 50°C)
- Display : Red high efficiency LEDs high 14.22mm
(0.56")
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input & output)
1.6KVdc (input/output)
- Operating condition : 0~50°C (20 to 90% RH non-condensed)
- Storage condition : 0~70°C (20 to 90% RH non-condensed)

* Refer page 97 for LVDT sensor selection

3. Outside dimension and connection diagram



MICROPROCESS RATE & TOTALIZER CONTROLLER METER



FEATURES

- Programmable rate 0 to 9999 digit (rate) 0 to 999999999 digit (totalizer)
- Accuracy 0.1% F.S. (DC, AC(TRMS))
- Programmable time base (1, 60, 3600 seconds)
- Programmable scale factor (0.0001 to 9999.9999)
- Decimal point can be modified
- Dual alarms, compare hysteresis functions
- 15 bits DAC analog output function
- Transmitter excitation supply DC 24V ($\leq 25\text{mA}$)

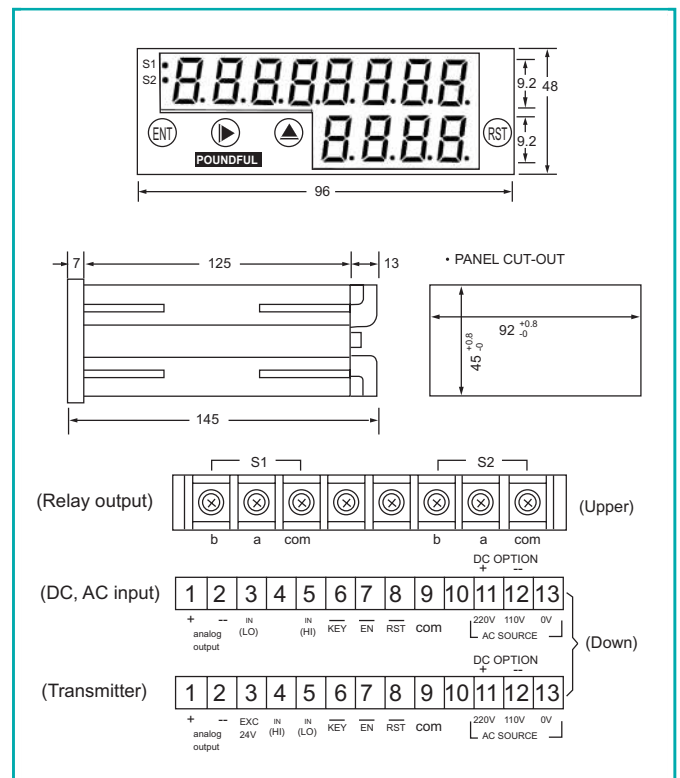
1. MODEL: PF - IT- [] - [] - [] [X] → X = 0 (non-alarm) X = 1 (one-alarm), X = 2 (two-alarm)

NO	Input Type	NO	Input Range	NO	Input Range	NO	Output Range	NO	Aux. Power
A	DC	1	DC 0-50mV (shunt)	6	DC 4-20mA (EXC. 24V)	0	None	1	AC 110/220V (50/60Hz)
B	AC (RMS)	2	DC 1-5V	7	AC 0-1A	1	DC 0-10V (non-isolating)	2	DC 24V
C	AC (TRMS)	3	DC 1-5V (EXC. 24V)	8	AC 0-5A	2	DC 4-20mA (non-isolating)	3	DC 48V
		4	DC 0-10V	9	SPECIFIED	3	DC 0-10V (isolating)	4	DC 110V
		5	DC 4-20mA			4	DC 4-20mA (isolating)	5	DC 220V
						5	SPECIFIED	6	AC 90~260V
								9	SPECIFIED

2. Specification

- Aux. power supply : AC110 or 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.1% F.S ± 1 digit (DC, AC(TRMS))
0.15% F.S ± 1 digit (AC(TRMS))
- Readout (compare) range : "0" to "9999" adjustable (rate)
"0" to "999999999" adjustable (totalizer)
- Compare hysteresis range : "0" to "99" adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC 250~3A, DC30V~5A
- Analog output selection : Rate or totalizer can be modified
- Analog output resolution : 15 bit DAC
- Output drive capability : $\leq 10\text{mA}$ for voltage mode
 $\leq 10\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S.
- Over input indication : "ovEr"
- Temp. coefficient : 100ppm/ $^{\circ}\text{C}$ (0-50 $^{\circ}\text{C}$)
- Display : Red high efficiency LEDs high 9.2mm (0.36")
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1min. (power / input & output)
- Operating condition : 0~50 $^{\circ}\text{C}$ (20 to 90% RH non-condensed)
- Storage condition : 0~70 $^{\circ}\text{C}$ (20 to 90% RH non-condensed)

3. Dimension and connection diagram



MICROPROCESS RATE & TOTALIZER CONTROLLER METER



FEATURES

- Resolution of 5 digits rate and 10 digits totalizer simultaneously
- Accuracy 0.1% F.S. for DC and AC(TRMS)
- Automatic, external or button totalizer reset
- Sensor voltage +12V or +24V can be selected ($\leq 50\text{mA}$)
- Programmable time base (1, 60, 3600 seconds)
- Programmable scale factor (0.00001 to 19999.99999)
- Rate with/without math rootextractor function
- Four alarms with hysteresis and delay functions (optional)
- 16 bits DAC analog output can be modified (optional)
- RS-485/RS-232 communication with Modbus RTU mode (optional)

1. MODEL: PF - ITA- [Color] - [Color] - [Color] - [Color]

NO	Input Type	NO	Input Range	NO	Analog Output	NO	Alarm	NO	Pulse	NO	Communication (Mobus RTU)	NO	Aux. Power
A	DC	1	DC 0-50mV	See Analog Output Table	0	None	0	None	0	None	1	AC 90~240V ±10%	
B	AC (RMS)	2	DC 1-5V		1	1 Alarm	1	Relay	1	RS485	2	DC 24~70V ±10%	
C	AC (TRMS)	3	DC 0-10V		2	2 Alarms	2	Open Collector	2	RS232	3	AC/DC 24V ±10%	
		4	DC 4-20mV		3	3 Alarms					4	DC 110V ±10%	
		5	AC 0-1A		4	*4 Alarms					9	SPECIFIED	
		6	AC 0-5A		Pulse output unavailable if 4 alarms specified								≤15VA for AC ≤10W for DC
		9	SPECIFIED										

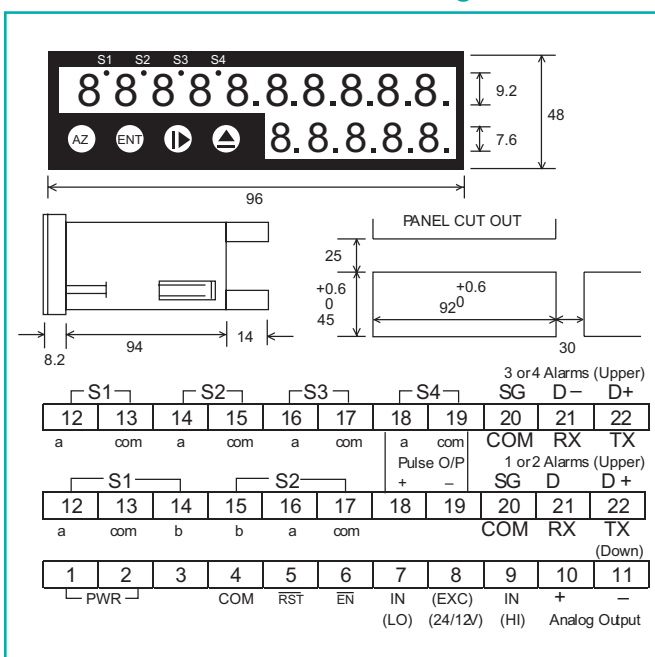
2. Specification

- Aux. power supply : AC 90~240V $\pm 10\%$ 50/60Hz
DC 24~70V $\pm 10\%$
AC/DC 24V $\pm 10\%$
DC 110V $\pm 10\%$
- Measuring accuracy : 0.1% F.S. ± 1 digit (DC, AC(TRMS))
(23 $\pm 5^\circ\text{C}$)
0.15% F.S. ± 1 digit (AC(RMS))
- Readout (compare) range : "0" to "24999" adjustable (rate)
"0" to "2147483647" adjustable (totalizer)
- Alarm selection : Rate and Totalizer can be modified
- Compare hysteresis range: 0~999 adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Alarm relay contact output: AC 250V/3A, DC 30V/5A
- Analog output selection : Rate or Totalizer can be modified
- Analog output resolution : 16 bit DAC (isolating)
- Output drive capability : $\leq 20\text{mA}$ for voltage mode
 $\leq 14\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S
- Response time : $\leq 250\text{ms}$ (0~90%)
- Pulse relay contact output : DC 100V/0.5A $\leq 10\text{VA}$
300, 400, 500, 600, 700ms
- Pulse open collector : $\leq \text{DC } 30\text{V}/40\text{mA}$
20, 30, 40, 50, 60ms
- Communication speed : 2400, 4800, 9600, 19200 bps
- RTU data format : <8,N,1>, <8,N,2>, <8,E,1>, <8,O,1>
- Communication address : "1" to "247" can be modified
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM
- Waterproof and dustproof : IP65 (optional)
(front direction) (optional)
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
- Operating condition : 0~50 $^\circ\text{C}$ (20~90% RH non-condensed)
- Storage condition : 0~70 $^\circ\text{C}$ (20~90% RH non-condensed)

3. Analog output switching table

NO	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	Non-output	switching status	on=1 off=0
1	0 ~ 1V	1-0-1-1-1-0	1-1
2	0 ~ 5V	1-0-1-0-1-0	1-1
3	1 ~ 5V	1-1-1-0-1-1	1-1
4	0 ~ 10V	1-1-0-1-0-0	1-1
5	2 ~ 10V	1-1-1-1-0-1	1-1
6	0 ~ 1mA	0-1-1-1-1-0	0-0
7	0 ~ 10mA	1-0-1-0-1-0	0-0
8	0 ~ 20mA	1-1-0-1-0-0	0-0
9	4 ~ 20mA	1-1-1-1-0-1	0-0
S	SPECIFIED (NON-PROGRAMMABLE)		

3. Dimension and connection diagram



MICROPROCESS RATE AND TOTALIZER CONTROLLER METER(PULSE INPUT)



FEATURES

- Programmable rate 0 to 9999 digit (rate), 0 to 99999999 digit (totalizer)
- Input pulse or magnetic pick-up can be modified
- Accuracy 0.03% F.S. (rate)
- Input ranges from 0.01Hz to 10KHz
- Programmable time base (1,60,3600 second)
- Programmable rate 0 to 9999 digit
- Input pulse cut off sampling time 0.1~99.9 second can be modified
- Programmable totalizer of pulse in time base (0~99999999)
- Programmable scale factor (0.0001~9999.9999)
- Dual alarm function (Optional)
- 15 bit DAC isolating analog output function (Optional)

1. MODEL: PF - FRT - [Color] - [Color] - [Color] - [Color]

NO	Input Type	NO	Alarm	NO	Analog Output	NO	Communication	NO	Aux. Power
A	Pulse (NPN)	0	Non-alarm	N	None	N	None	1	AC 100V/200V
B	Pulse (PNP)	1	One-alarm	I	DC 4-20mA	1	RS232	2	DC 24V
C	Magnetic pick-up	2	Two-alarm	V	DC 0-10V	2	RS485	3	DC 48V
				R	SPECIFIED			4	DC 110V
								5	DC 220V
								6	AC 90~260V
								9	SPECIFIED
									• ±20% of rate, less 3.5VA for AC input
									• ±20% of rate, less 3WATT for DC input

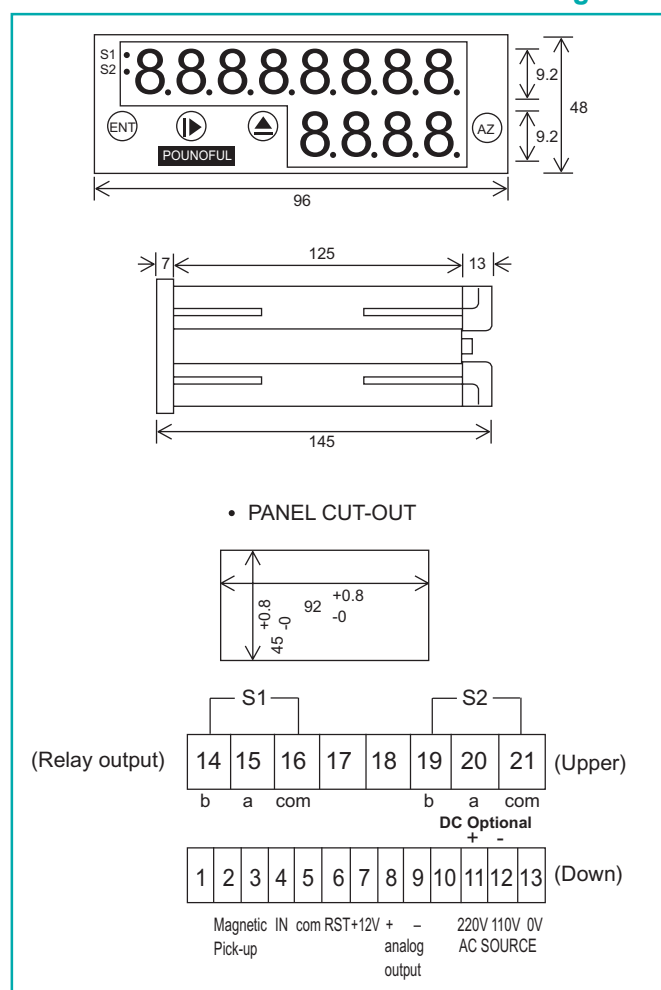
3. Function switches (SW1)

- 1 SW1-1 ON : magnetic pick-up input
- 2 SW1-2 ON : pulse input
- 3 SW1-3 ON : pulse PNP
- 4 SW1-4 ON : pulse NPN

2. Specification

- Aux.power supply : AC110 & 220V ±20% (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V switching AC90~260V ±10%)
- Measuring accuracy : 0.03% F.S (rate) (23±5°C)
- Count input type : Switch selectabe current sourcing (≤5mA) or current sinking (≤2.5mA) or magnetic pick-up
- Count input trigger levels : Pulse (V_{IH}=3V, V_{IL}=2.5V)
Magnetic pick-up (V_{IH}≥30mV(p-p), 40V max.) can be modified
- Max.count rates : ≤10kHz (50% duty cycle) (pulse)
≤10kHz (magnetic Pick-up)
- Sampling time : 10cycle/sec. (≥10Hz) (rate)
f cycle/sec. (<10Hz) (rate)
- Over input indication : "ovEr"
- Readout (compare) range : "0" to "9999" adjustable (rate)
"0" to "99999999" adjustable (totalizer)
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC250V~3A, DC30V~5A
- Analog output resolution : 15 bit DAC (isolating)
- Output drive capability : ≤10mA for voltage mode
≤10V for current mode
- Output ripple (p-p) : <0.1%F.S.
- Temp. coefficient : 50ppm/°C (0-50°C)
- Display : Red high efficiency LEDs high 9.2mm
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (input/output/power)
- Operating condition : 0~50°C (20 to90%RH non condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

4. Outside dimension and connection diagram



MICROPROCESS RATE & TOTALIZER CONTROLLER METER (PULSE INPUT)



FEATURES

- Programmable rate 0 to 29999 digit (rate), 0 to 2147483647 digit (totalizer)
- Input pulse or magnetic pick-up can be modified
- Accuracy 0.03% F.S.
- Automatic, external, or button totalizer reset
- Input ranges from 0.01Hz to 15KHz
- Sensor voltage +12V or +24V can be selected ($\leq 50\text{mA}$)
- Programmable time base (1,60,3600 second)
- Programmable scale factor (0.00001 to 19999.99999)
- Input pulse cut off sampling time 0.1~99.9 second can be modified
- Programmable totalizer of pulse in time base (0~99999999)
- Four alarms with hysteresis and delay functions (optional)
- 16 bit DAC analog output type can be modified (optional)
- RS485/ RS232 communication with Modbus RTU mode (optional)

1. MODEL: PF-FRTA - [Color Codes]

NO Input Type		NO Analog Output		NO Alarm		NO Alarm		NO Pulse		NO Communication (Modbus RTU)		NO Aux. Power		NO Aux. Power		
A	Pulse (NPN)	See Analog Output Switching Table	0	None	3	3 Alarms	0	None	0	None	0	None	1	AC 90 ~ 240V	4	DC 110V
B	Pulse (PNP)		1	1 Alarms	4	4 Alarms	1	Relay	1	RS485	2	DC 24 ~ 70V	9	SPECIFIED		
C	Magnetic pick-up		2	2 Alarms			2	Open Collector	2	RS232	3	AC/DC 24V		≤15VA for AC ≤15W for DC		
Pulse output unavailable if 4 alarms specified																

2. Specification

- Aux. power supply : AC 90~260V $\pm 10\%$ 50/60 Hz
DC 24~70V $\pm 10\%$
AC/DC 24 $\pm 4\text{V}$
DC 110V $\pm 10\%$
- Measure accuracy : 0.03% F.S. (23 $\pm 5^\circ\text{C}$)
- Count input type : Switch selectable current sourcing ($\leq 5\text{mA}$) or current sinking ($\leq 2.5\text{mA}$) or magnetic pick-up
- Count input trigger levels : Pulse ($V_{IH}=3\text{V}$, $V_{IL}=2.5\text{V}$)
Magnetic pick-up ($V_{IH}\geq 30\text{mV}$ (p-p), 40V max.) can be modified
- Max.count rates : $\leq 15\text{KHz}$ (50% duty cycle) (pulse)
 $\leq 15\text{KHz}$ (magnetic Pick-up)
- Sampling time : 10cycle/sec. ($\geq 10\text{Hz}$) (rate)
f cycle/sec. ($< 10\text{Hz}$) (rate)
- Over input indication : "ovEr"
- Readout (compare) range : "0" to "29999" adjustable (Rate)
"0" to "2147483647" adjustable (totalizer)
- Alarm selection : Rete and totalizer can be modified
- Compare hysteresis range : "0" to "999" adjustable
- Alarm action : "Hi" or "Lo" adjustable
- Alarm relay contact output : AC 250V/ 3A , DC 30V/5A
- Analog output selection : Rate or totalizer can be modified
- Analog output resolution : 16 bit DAC (isolating)
- Output drive capability : $\leq 20\text{mA}$ for voltage mode
 $\leq 14\text{V}$ for current mode
- Output ripple (p-p) : $\leq 0.1\%$ F.S.
- Response time : $< 250\text{ms}$ (0~90 %)
- Pulse relay contact output : DC 100V / 0.5A $\leq 10\text{VA}$
- Pulse open collector : $\leq \text{DC } 30\text{V} / 40\text{mA}$
- Communication speed : 2400, 4800, 9600, 19200 bps
- RTU Data format : $< 8, \text{N}, 1>$, $< 8, \text{N}, 2>$, $< 8, \text{E}, 1>$, $< 8, 0, 1>$
- Communication address : "1" to "247" can be modified
- Parameter setting : Touch switches
- Memory type : Non-volatile EEPROM
- Waterproof and dustproof (front direction) (optional) : IP65(optional)
- Dielectric strength : 2KVac/1min. (power / input / output)
- Temp. coefficient : 100ppm/ $^\circ\text{C}$ (0~50 $^\circ\text{C}$)
- Operating condition : 0~50 $^\circ\text{C}$ (20~90% RH non-condensed)
- Storage condition : 0~70 $^\circ\text{C}$ (20~90% RH non-condensed)

3. Function switches (SW1)

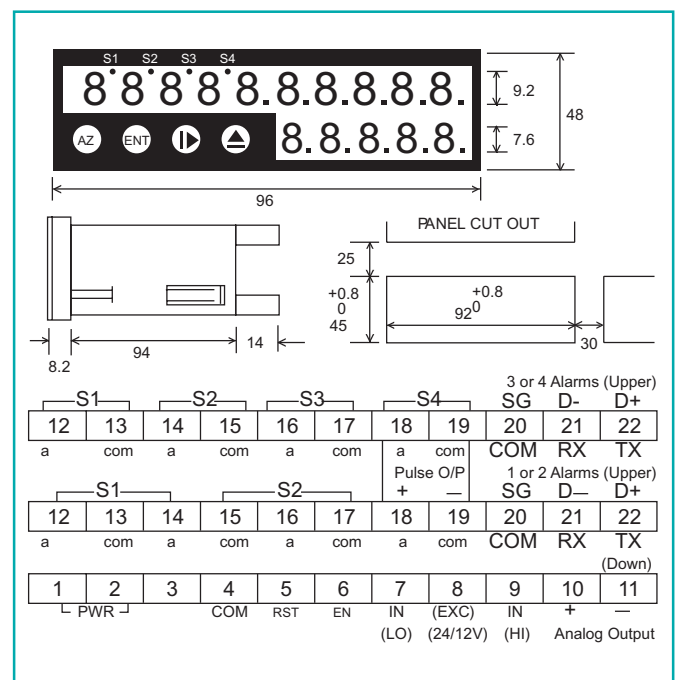
S1	S2
1 [] S1-1 short : pulse input	1 [] S2-1 short : NPN
2 [] S1-2 short : pulse input	2 [] S2-2 short : PNP
3 [] S1-3 short : Magnetic pick-up	3 [] S2-3 short : 1KHz Filter
4 [] S1-4 short : Magnetic pick-up	4 [] S2-4 short : 50KHz Filter

S2-3 and S2-4 are open for the low pass filter which is 15KHz cut-off frequency.

3. Analog output switching table

NO	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	Non-output	switching status on=1 off=0	
1	0 ~ 1V	1-0-1-1-1-0	1-1
2	0 ~ 5V	1-0-1-0-1-0	1-1
3	1 ~ 5V	1-1-1-0-1-1	1-1
4	0 ~ 10V	1-1-0-1-0-0	1-1
5	2 ~ 10V	1-1-1-1-0-1	1-1
6	0 ~ 1mA	0-1-1-1-1-0	0-0
7	0 ~ 10mA	1-0-1-0-1-0	0-0
8	0 ~ 20mA	1-1-0-1-0-0	0-0
9	4 ~ 20mA	1-1-1-1-0-1	0-0
S	SPECIFIED (NON-PROGRAMMABLE)		

4. Dimension and connection diagram



MICROPROCESS RPM & LINE-SPEED METER



FEATURES

- Accuracy 0.01% F.S.
- Accepts input rates up to 5KHz (Optional up to 50KHz)
- Display type of RPM or line-speed can be modified
- Display unit (M/min), (y/min), (ft/min) of line-speed can be modified
- Input pulse of revolution can be modified (1~9999)
- Decimal point can be modified
- Input pulse cut off sampling time can be modified (0.1 to 99.9 second)
- Display value depend on the mean input pulse several times can be modified (1 to 99 times)



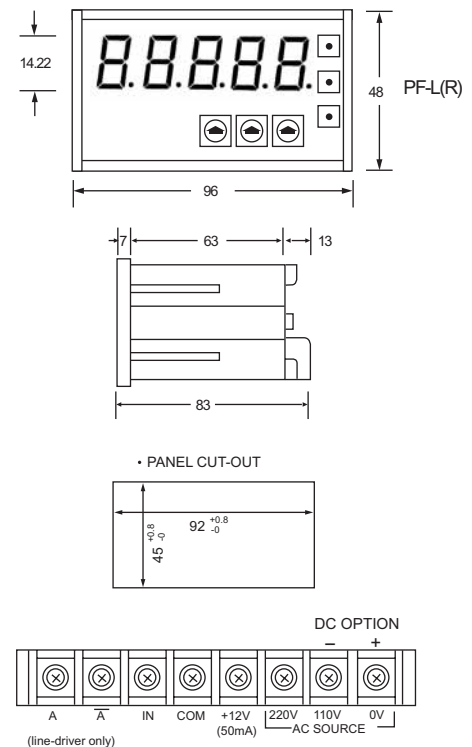
1. MODEL: PF-L(R) - ■ ■ ■ - ☐ X=5 (Input rate up to 5KHz) X=50 (Input rate up to 50KHz)
PF-L(R)N - ■ ■ ■ - ☐ (Non-rotary switches) (Non-line driver type)

NO	Input Type	NO	Sensor Power	NO	Aux. Power
1	Pulse (TTL) (5V)	A	DC 5V ($\leq 100\text{mA}$)	0	DC 12V
2	Pulse (NPN) (12V)	B	DC 12V ($\leq 50\text{mA}$)	1	AC 110/220V
3	Pulse (PNP) (12V)			2	DC 24V
4	AC 1-60V			3	DC 48V
5	Line-driver RS422(5V)			4	DC 110V
6	Line-driver RS422(12V)			5	DC 220V
9	SPECIFIED			6	AC90~260V
					<ul style="list-style-type: none"> • $\pm 20\%$ of rate, less 2.5VA for AC input • $\pm 20\%$ of rate, less 2WATT for DC input

2. Specification

- Aux. power supply : AC 110 & 220V $\pm 20\%$ (50 or 60Hz) $\pm 20\%$
(Optional DC 12, 24, 48, 110, 220V
AC/DC 90~260V $\pm 10\%$)
- Measuring accuracy : 0.01% F.S. (23 $\pm 5^\circ\text{C}$)
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or
Lo bias ($V_{IH}=3.7\text{V}$, $V_{IL}=2.0\text{V}$)
- Max. count rates : 5KHz (optional up to 50KHz)
(50% duty cycle)
- Sampling time : 10 cycle/sec. ($\geq 10\text{Hz}$)
f cycle/sec. ($< 10\text{Hz}$)
- Over input indication : "ovEr"
- Readout range : "0" to "99999" adjustable
- Diameter setting : 0~999mm (PF-L(R)) (rotary switches)
0~9.9999mm (PF-L(R)N)
(Touch switches setting)
- Parameter setting : Touch switches
- Display : Red high efficiency LEDs 14.22mm (0.56")
- Memory mode : Non-volatile EEPROM memory
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 50\text{mA}$)
- Dielectric strength : 1.5KVac/1 min. (input/power)(PF-L(R))
1.5KVac/1 min. (input/power/display)
(PF-L(R)N)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Outside dimension and connection diagram



MICROPROCESS RPM & LINE-SPEED CONTROLLER METER



FEATURES

- Accuracy 0.03% F.S.
- Accepts input rates up to 20KHz
- Display type of RPM or line-speed can be modified
- Input pulse of revolution can be modified
- Dual alarm, compare hysteresis, alarm delay function
- 15 bit DAC analog voltage or current mode can be modified
- Autochange of decimal point can be modified
- Input pulse cut off sampling time (0.1-99.9 second) can be modified
- Display value depend on the mean input pulse several times can be modified

1. MODEL: PF - MR - X → See output switching table (S2)

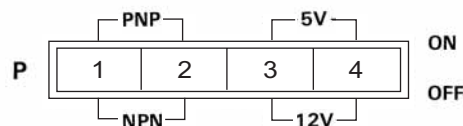
- 0 (non-alarm)
- 1 (one-alarm)
- 2 (two-alarm)

2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24, 48, 110, 220V
AC/DC 90~260V $\pm 10\%$)
- Measuring accuracy : 0.03% F.S. ($23 \pm 5^\circ\text{C}$)
- Count input type : Switch selectable current sourcing or
current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or
Lo bias ($V_{IH}=3.7\text{V}$, $V_{IL}=2.0\text{V}$)
- Sampling time : 10 cycle/sec. ($\geq 10\text{Hz}$)
f cycle/sec. ($< 10\text{Hz}$)
- Over input indication : "ovEr"
- Readout (compare) range : "0" to "99999" adjustable
- Diameter setting : 0~9.999M
- Parameter setting : Touch switches
- Alarm action : "Hi" or "Lo" adjustable
- Compare hysteresis : 0~9999 digit adjustable
- Alarm delay time : 0~99.9 second adjustable
- Relay contact output : AC 250V~3A, DC 30V~5A
- Analog output resolution : 15 bit DAC
- Output drive capability : $\leq 10\text{mA}$ for voltage mode
 $\leq 10\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S
- Response time : $\leq 300\text{ms}$ (0~90%) $\geq (10\text{Hz})$
- Display : Red high efficiency LEDs 14.22mm
(0.56")
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 50\text{mA}$)
- Memory mode : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

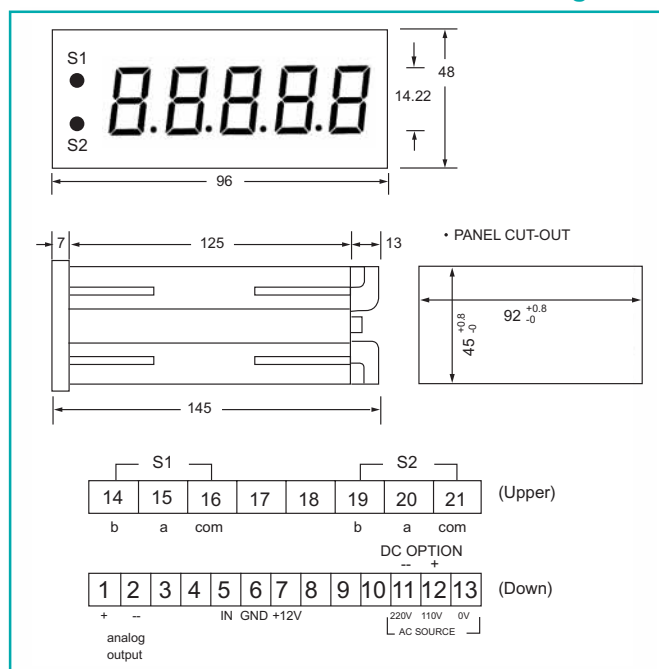
- S1 → P₁, P₂, input type selection
P₃, P₄, input trigger level selection



- S2 → P₁-P₂-P₃-P₄-P₅-P₆ output range selection
P₇-P₈ output mode: voltage/current selection

X	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	non-output	switching status ON=1 OFF=0	
1	0~1V	1-0-1-1-1-0	1-1
2	0~5V	1-0-1-0-1-0	1-1
3	1~5V	1-1-1-0-1-1	1-1
4	0~10V	1-1-0-1-0-0	1-1
5	2~10V	1-1-1-1-0-1	1-1
6	0~1mA	0-1-1-1-1-0	0-0
7	0~10mA	1-0-1-0-1-0	0-0
8	0~20mA	1-1-0-1-0-0	0-0
9	4~20mA	1-1-1-1-0-1	0-0
S	SPECIFIED (NON-PROGRAMMABLE)		

4. Outside dimension and connection diagram



MICROPROCESS RPM & LINE-SPEED CONTROLLER METER



FEATURES

- Accuracy 0.03% F.S.
- Input frequency up to 100KHz
- Display type of RPM or Line-speed can be modified
- Input pulse of revolution can be modified
- Sensor voltage +12V or +24V can be switched ($\leq 80\text{mA}$)
- Four alarms with hysteresis and delay functions (optional)
- 16 bit DAC analog output can be modified (optional)
- Support RS485 or RS232 with Modbus RTU mode (optional)

1. MODEL: PF - MRA

NO	Alarm	Analog Output	Communication	Aux. Power
0	None	See Analog Output	0 None	1 AC 90~260V
1	1 Alarm	Switching Table	1 RS485	2 DC 24~70V
2	2 Alarm		2 RS232	3 AC/DC 24V
3	3 Alarm		9 SPECIFIED	4 DC 110V
4	4 Alarm			9 SPECIFIED

2. Specification

- Aux. power supply : AC 90~260V $\pm 10\%$ 50/60Hz $\leq 10\text{VA}$
DC 24~70V $\pm 10\%$ $\leq 7\text{W}$
AC/DC 24V $\pm 10\%$ $\leq 10\text{VA}$
DC 110V $\pm 10\%$ $\leq 9\text{W}$
- Measuring accuracy : 0.03% F.S. ($23 \pm 5^\circ\text{C}$)
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or
Lo bias ($V_{IH}=3.5\text{V}$, $V_{IL}=1.5\text{V}$)
- Sampling time : 10 cycle/sec. ($\geq 10\text{Hz}$)
f cycle/sec. ($< 10\text{Hz}$)
- Readout (compare) range : "0" to "99999" adjustable
- Diameter setting : 0~9.9999M
- Parameter setting : Touch switches
- Alarm action : "Hi" or "Lo" adjustable
- Compare hysteresis : 0~9999 digit adjustable
- Alarm delay time : 0~99.9 or -0.1~ -99.9 second adjustable
- Relay contact output : AC 250V/3A, DC 30V/5A
- Analog output resolution : 16 bit DAC
- Output drive capability : $\leq 20\text{mA}$ for voltage mode
 $\leq 14\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S
- Response time : $\leq 300\text{ms}$ (0~90%) $\geq (10\text{Hz})$
- Communication speed : 2400, 4800, 9600, 19200 bps
- Communication format : <8,N,1>, <8,N,2>, <8,O,1>, <8,E,1>
- Communication address : "1" to "247" can be modified
- Display : Red high efficiency LEDs 14.22mm (0.56")
- Sensor power supply : 12VDC or 24VDC $\pm 10\%$ ($\leq 80\text{mA}$)
- Memory mode : Non-volatile EEPROM
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1)

ON	PNP	5V	x	x	x	x	
P	1	2	3	4	5	6	7
OFF	NPN	12V					8

P1 : Input type selection (ON=PNP; OFF=NPN)

P2, P3 : Input signal filter selection

P2-P3 (ON=1 OFF=0)	Input Signal Filter Range
0-0	100KHz
1-0	10KHz
0-1	50Hz
1-1	45Hz

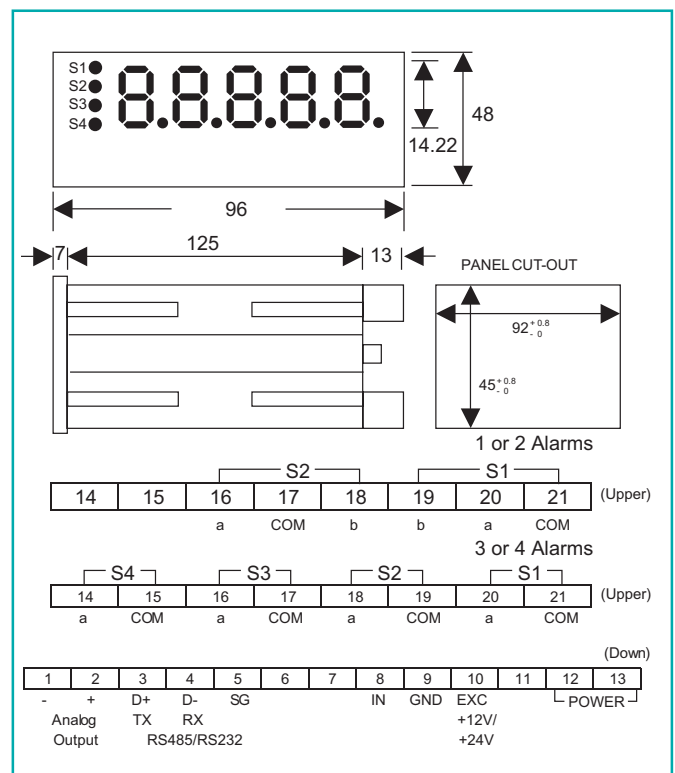
P4 : Input trigger level selection (ON=5V; OFF=12V)

P5, P6, P7, P8 : Don't care

4. Analog output switching table

NO	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	Non-output	Switching status	ON=1 OFF=0
1	0~1V	1-0-1-1-1-0	1-1
2	0~5V	1-0-1-0-1-0	1-1
3	1~5V	1-1-1-0-1-1	1-1
4	0~10V	1-1-0-1-0-0	1-1
5	2~10V	1-1-1-1-0-1	1-1
6	0~1mA	0-1-1-1-1-0	0-0
7	0~10mA	1-0-1-0-1-0	0-0
8	0~20mA	1-1-0-1-0-0	0-0
9	4~20mA	1-1-1-1-0-1	0-0

5. Outside dimension and connection diagram (unit:mm)



DIN72x72 MICROPROCESS RPM/LINE-SPEED CONTROLLER METER



FEATURES

- Accuracy 0.03%F.S.
- Accepts input rates up to 20KHz
- Display type of RPM or LINE-SPEED can be modified
- Input pulse of revolution can be modified
- Dual alarm, compare hysteresis, alarm delay function
- Input pulse cut off sampling time (0.1 ~ 99.9 second)
- Decimal point can be modified
- Display value depend on the mean input pulse several times can be modified
- Up and down key setting, easy to operate

1. MODEL: PF-MR724 - ☒ → X=0 (non-alarm)

X=1 (one-alarm)

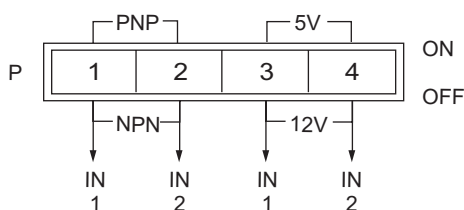
X=2 (two-alarm)

2. Specification

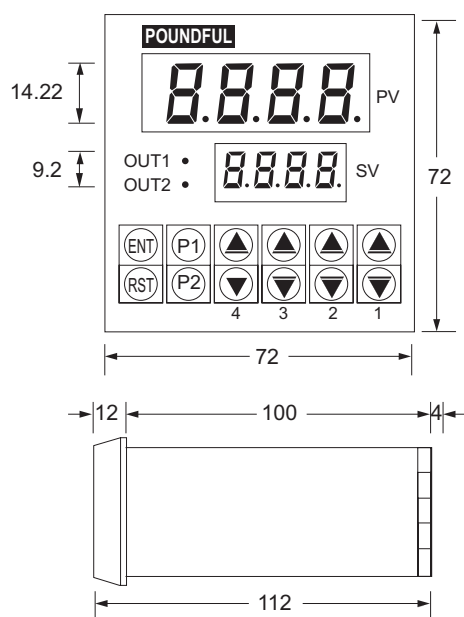
- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24V or 48V or 110V or 220V, Switching AC90~260V $\pm 10\%$)
- Measuring accuracy : 0.03% F.S. (23 $\pm 5^\circ\text{C}$)
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or
Lo bias ($V_{IH}=3.7\text{V}$, $V_{IL}=2.0\text{V}$)
- Sampling time : 10 cycle/sec. ($\leq 10\text{HZ}$)
f cycle/sec. ($\leq 10\text{HZ}$)
- Over input indication : "ovEr"
- Readout (compare) range : "0" to "9999" adjustable
- Diameter setting : 0.001~9.999M
- Setting methods : Touch switches
- Display count value : Red high efficiency LED's high
14.22mm (.56")
- Display preset value : Green high efficiency LED's high
9.2mm (.36")
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC 250~3A, DC30V~5A
- Sensor power type : 12VDC $\pm 10\%$ ($\leq 60\text{mA}$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (input/output/power)
- Operating condition : 0~50 $^\circ\text{C}$ (20 to 90 % RH non-condensed)
- Storage condition : 0~70 $^\circ\text{C}$ (20 to 90 % RH non-condensed)

3. Function switches

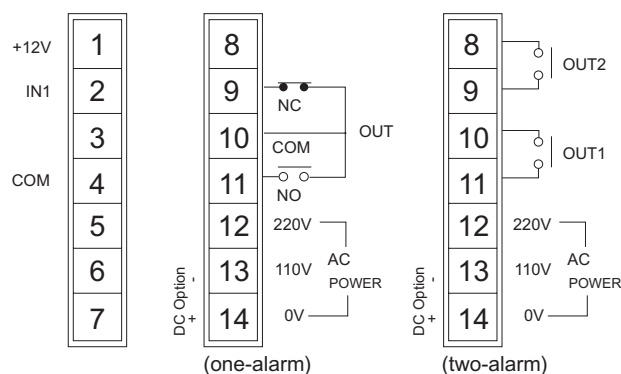
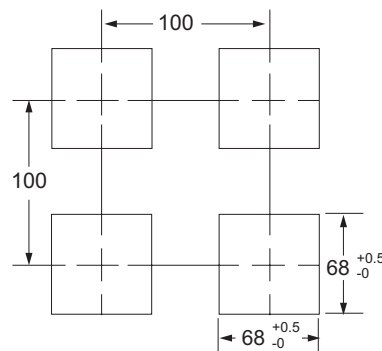
- P1, P2 → input type selection
- P3, P4 → input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



DIN 48x48 MICROPROCESS 4 DIGITAL COUNTER



FEATURES

- Readout range from -999 to 9999
- Accepts input rates 30 or 5000 CPS can be modified
- Four counting modes up, down, up/down, quadrature can be modified
- Quadrature sensing (Up to 4 times)
- Input scaling divider 1 to 9999
- Programmable timed output (0.1~99.9 second)
- Decimal point can be modified

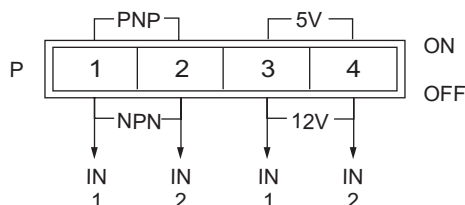
- 1. MODEL: PF - C48 -** ■ X → X = R (Relay output)
X = 0 (Open collector output)
- 0 (non-alarm)
 - 1 (one-alarm)
 - 2 (two-alarm)

2. Specification

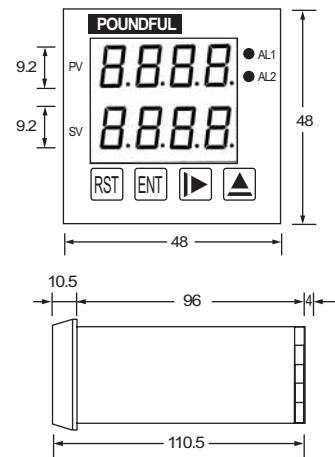
- Aux. power supply : AC/DC 90~260V $\pm 10\%$
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5V$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 10KHz$ (up, down, up/down mode)
 $\leq 5KHz$ (quadrature mode)
- Over input indication : "ovEr" and "-ovEr"
- Readout (compare) range : "-999" to "9999" adjustable
- Parameter setting : Touch switches
- Display count value : Red high efficiency LEDs 9.2mm (0.36")
- Display preset value : Green high efficiency LEDs 9.2mm (0.36")
- Output delay time : 0.1~99.9 second adjustable
- Output operate types : Single preset (eight type)
Dual preset (sixteen type)
- Relay contact output : AC 250V~3A, DC 30V~5A
- Contactless output : Open collector, DC30V/60mA Max.
- Sensor power type : 12VDC $\pm 10\%$ ($\leq 60mA$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 1.5KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

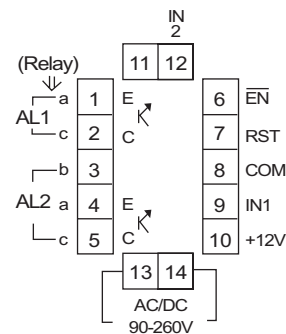
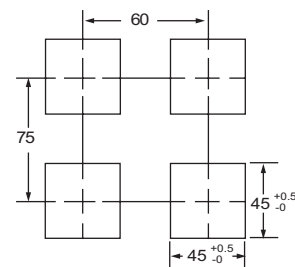
- S1 → P₁, P₂, input type selection
P₃, P₄, input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



DIN 48x96 MICROPROCESS 5 DIGITAL COUNTER



FEATURES

- 5 digit, 0.56" (14.22mm) high display with negative sign and overflow indicators
- Accepts input rates up to 6KHz
- Bi-directional counting, up/down control
- Quadrature sensing (Up to 4 times resolution)
- Input scaling for built-in rate divider (1 to 9999)
- Programmable output operate type and output time delay (0.1~99.9 second)
- Full programmability of decimal point location and lead zero blanking
- Switch selectable to accept count pulses from a variety of source (TTL, CMOS, RLC sensors)

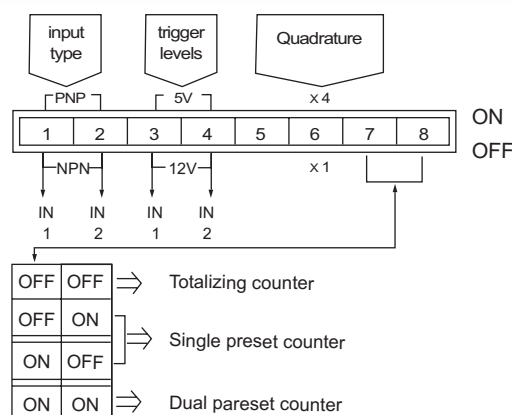
1. MODEL: PF - C - ☒

- X = 0: Totalizing counter
- X = 1: Single preset counter
- X = 2: Dual preset counter

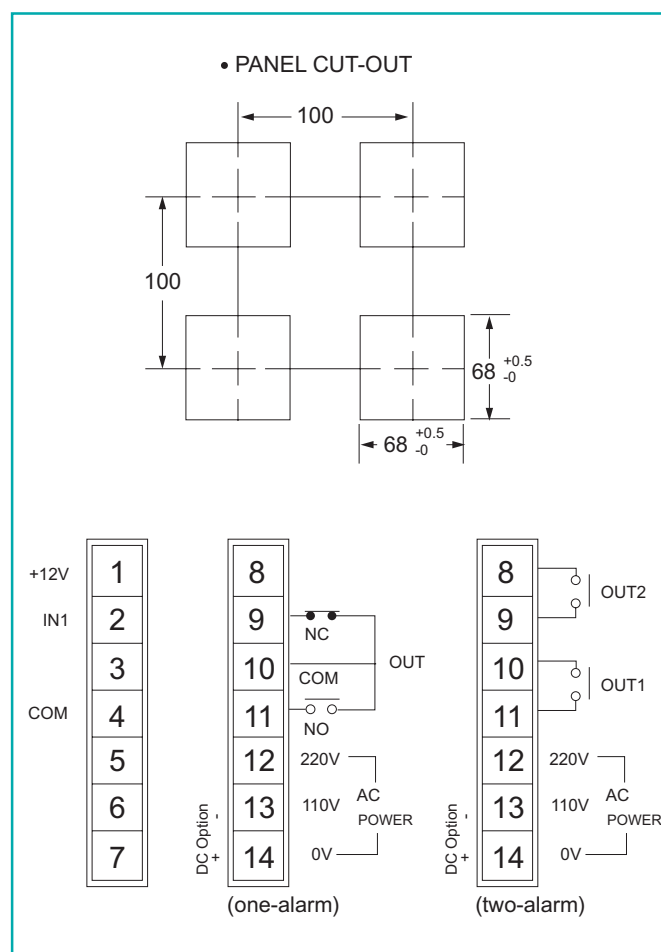
2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz) $\pm 20\%$
Optional DC 12, 24, 48, 110, 220V
AC/DC 90~260V $\pm 10\%$
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 60\text{mA}$)
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or
Lo bias ($V_{IH}=3.7\text{V}$, $V_{IL}=2.0\text{V}$)
- Max. count rates : Uni- or Bi-directional modes (6KHz)
Quadrature modes (3KHz)
- Max. count range (preset range) : "-9999" to "99999"
- Count scale rates : Scale divider (1 to 9999)
- Over input indication : "ovEr"
- Display (count value) : Red high efficiency LEDs 14.22mm (0.56")
(preset value) : Red high efficiency LEDs 9.2mm (0.36")
- Polarity display : When input is negative, "-" displayed
- Output delay time : 0.1-99.9 second adjustable
- Output operate types : Single preset (eight type)
Dual preset (sixteen type)
- Relay contact output : AC 250V~3A, DC 30V~5A
- Memory : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)



4. Outside dimension and connection diagram



DIN 72x72 MICROPROCESS 4 DIGITAL COUNTER



FEATURES

- Accepts input rates 30 or 300 or 3000 CPS can be modified
- Four counting modes up, down, up/down, quadrature can be modified
- Input scaling multiplier (0.001 to 9.999)
- Programmable timed output (0.01~99.99 second)
- Decimal point can be modified
- Up and down key setting, easy to operate
- Count inhibit function (GATE control)

1. MODEL: PF - C724 - X X → X = R (Relay output),
X = 0 (Open collector output)

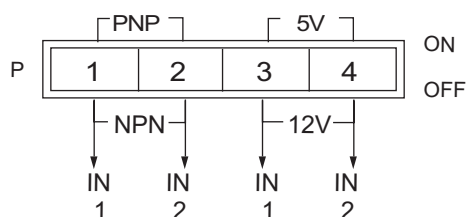
- 0 (non-alarm)
- 1 (one-alarm)
- 2 (two-alarm)

2. Specification

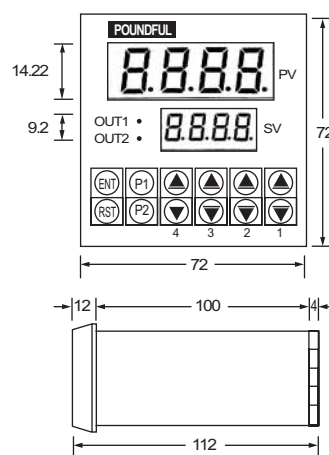
- Aux. power supply : AC 110/220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24, 48, 110, 220V $\pm 20\%$
AC 90~260V $\pm 10\%$
DC 24~70V $\pm 20\%$)
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 3KHz$ (up, down, up/down mode)
 $\leq 1KHz$ (quadrature mode)
- Over input indication : "ovEr" and "-ovEr"
- Readout (compare) range : "-999" to "9999" adjustable
- Parameter setting : Touch switches
- Display count value : Red high efficiency LEDs 14.22mm (0.56")
- Display preset value : Green high efficiency LEDs 9.2mm (0.36")
- Output delay time : 0.01~99.99 second adjustable
- Output operate types : Manual (N) and automatic (R and C)
- Relay contact output : AC 250V~3A, DC 30V~5A
- Contactless output : Open collector, DC 30V/60mA Max.
- Sensor power type : 12VDC $\pm 10\%$ ($\leq 60mA$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

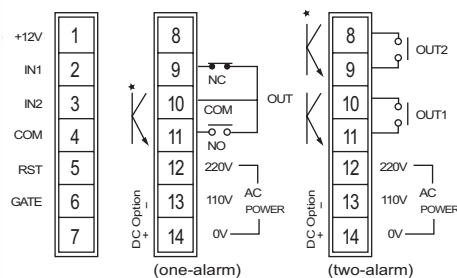
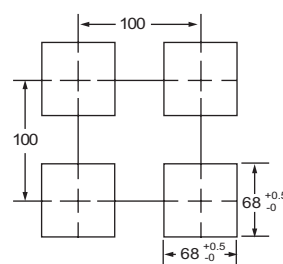
- P1, P2 → input type selection
- P3, P4 → input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



★ (open collector output)

DIN 72x72 MICROPROCESS 6 DIGITAL COUNTER



FEATURES

- Readout range from -99999 to 999999
- Accepts input rates 30 or 300 or 3000 CPS can be modified
- Four counting modes up, down, up/down, quadrature can be modified
- Input scaling multiplier (0.00001 to 9.99999)
- Programmable timed output (0.01~99.99 second)
- Decimal point can be modified
- Up and down key setting, easy to operate
- Count inhibit function (GATE control)



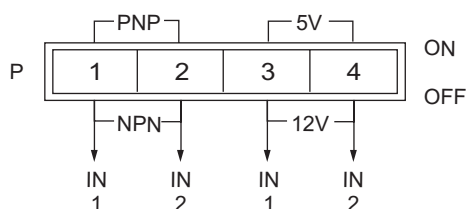
- 1. MODEL: PF - C726 -** X \rightarrow X = R (Relay output),
X = 0 (Open collector output)
- 0 (non-alarm)
 - 1 (one-alarm)
 - 2 (two-alarm)

2. Specification

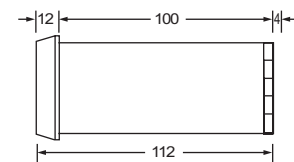
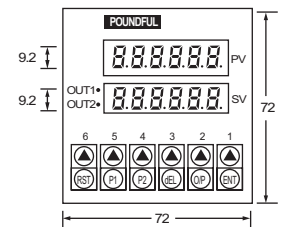
- Aux. power supply : AC 110&220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24, 48, 110, 220V $\pm 20\%$
AC 90~260V $\pm 10\%$
DC 24~70V $\pm 20\%$)
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 3KHz$ (up, down, up/down mode)
 $\leq 1KHz$ (quadrature mode)
- Over input indication : "ovEr"
- Readout (compare) range : "-99999" to "999999" adjustable
- Setting methods : Touch switches
- Display count value : Red high efficiency LEDs 9.2mm (0.36")
- Output delay time : 0.01~99.99 second adjustable
- Output operate types : Manual (N) and automatic (R and C)
- Relay contact output : AC 250V~3A, DC 30V~5A
- Contactless output : Open collector, DC 30V/60mA Max.
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 60mA$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches

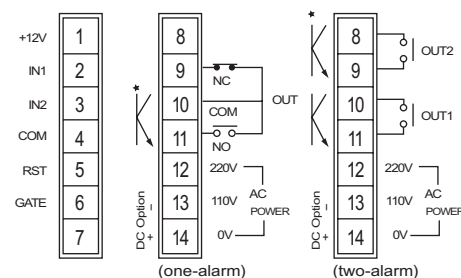
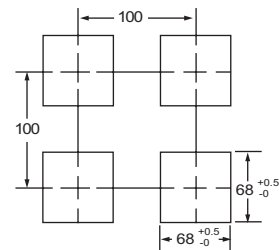
- P₁, P₂ \rightarrow input type selection
- P₃, P₄ \rightarrow input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



★ (open collector output)

MICROPROCESS 6 DIGITAL AUTOMATION ORIENT CONTROLLER METER



FEATURES

- Readout range from -99999 to 999999
- Accepts input counting for quadrature sensing (up to 4 times resolution)
- Input scaling multiplier (0.00001 to 9.99999)
- Base counter value can be modified
- Compare hysteresis can be modified
- Three relay output function (A>B, A=B, A<B)
- Decimal point can be modified
- Up and down key setting, easy to operate

1. MODEL: PF - C726 - CC - ☒ → X= R (Relay Output)

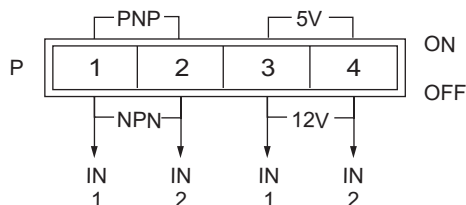
X= O (Open Collector Output)

2. Specification

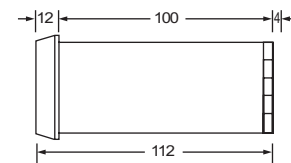
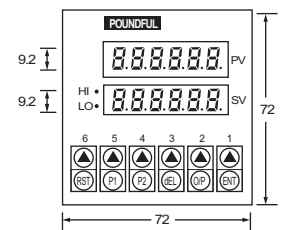
- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24, 48, 110, 220V $\pm 20\%$
AC 90~260V $\pm 10\%$
DC 24~70V $\pm 20\%$)
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5V$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 500Hz$
- Over input indication : "ovEr"
- Readout (compare) range : "-99999" to "999999"
- Base counter range : "-99999" to "999999"
- Compare hysteresis range: "0.00001" to "999999"
- Setting methods : Touch switches
- Display count value : Red high efficiency LEDs 9.2mm (0.36")
- Display preset value : Red high efficiency LEDs 9.2mm (0.36")
- Relay contact output : AC 250V~3A, DC 30V~5A
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 60mA$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

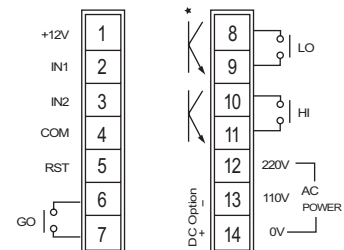
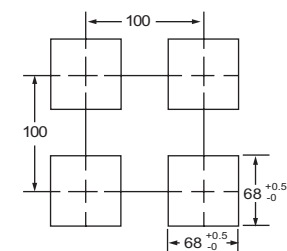
- P₁, P₂ → input type selection
- P₃, P₄ → input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



★ (open collector output)

MICROPROCESS 4 DIGITAL COUNTER (ONE-ALARM) & 6 DIGITAL TOTALIZER COUNTER



FEATURES

- Readout range from 0 to 9999 (counter), 0 to 999999 (totalizer counter)
- Accepts input rates 30 or 300 or 3000 CPS can be modified
- Input scaling divider 1 to 9999
- Totalizer counting modes can be modified (synchronize and un-synchronize)
- Programmable timed output (0.01 to 99.99 sec.)
- Output operate type can be modified manual (N) and automatic (R and C)
- Up and down key setting, easy to operate

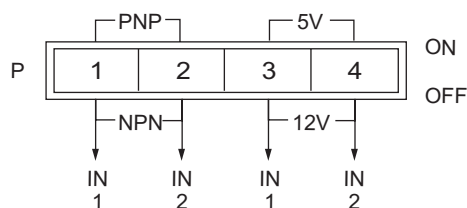
1. MODEL: PF - C726 - CT - ☒ X → X= R (Relay Output)
X=O (Open Collector Output)

2. Specification

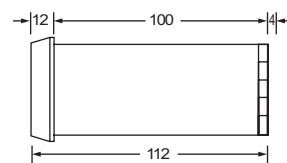
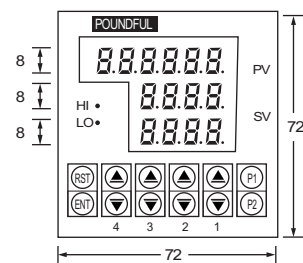
- Aux. power supply : AC 110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 24, 48, 110, 220V $\pm 20\%$
AC 90~260V $\pm 10\%$
DC 24~70V $\pm 20\%$)
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5V$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 3KHz$
- Over input indication : "ovEr"
- Readout range : "0" to "9999" (counter)
"0" to "999999" (totalizer counter)
- Compare range : "0" to "9999"
- Setting methods : Touch switches
- Display count value : Red high efficiency LEDs high 8mm (0.31")
- Display preset value : Red high efficiency LEDs high 8mm (0.31")
- Output delay time : 0.01~99.99 second adjustable
- Output operate type : Manual (N) and automatic (R and C)
- Relay contact output : AC 250V~3A, DC 30V~5A
- Contactless output : Open collector, DC30V/60mA Max.
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 60mA$)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches

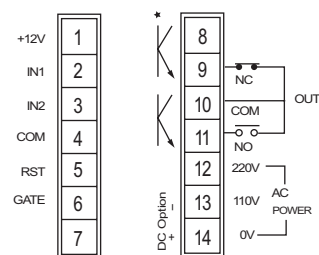
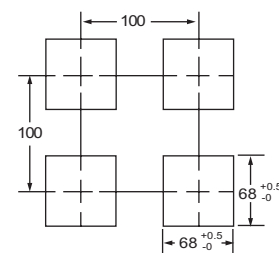
- P₁, P₂ → input type selection
- P₃, P₄ → input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



★ (open collector output)

MICROPROCESS LENGTH (FLOW) CONTROLLER METER



FEATURES

- Readout range from -9999 to 99999
- Accepts input rates 50 or 5000 CPS can be modified
- Four counting modes up, down, up/down, quadrature can be modified
- Input scaling multiplier 00.001 to 99.999 can be modified
- Decimal point can be modified
- Auto zero function
- Dual alarm, compare hysteresis alarm delay function
- 15 bit DAC analog voltage or current mode can be modified

1. MODEL: PF - CA - X → See output switching table (S2)

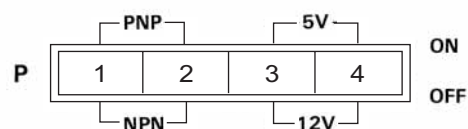
- 0 (non-alarm)
- 1 (one-alarm)
- 2 (two-alarm)

2. Specification

- Aux. power supply : AC110 & 220V $\pm 20\%$ (50 or 60Hz)
(Optional DC 12, 24, 48, 110, 220V
AC/DC 90~260V $\pm 10\%$)
- Count input type : Switch selectable current sourcing or
current sinking
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5V$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : $\leq 10KHz$ (up, down, up/down mode)
 $\leq 5KHz$ (quadrature mode)
- Over input indication : "ovEr" and "-ovEr"
- Readout (compare) range : "-9999" to "99999" adjustable
- Parameter setting : Touch switches
- Alarm action : "Hi" or "Lo" adjustable
- Compare hysteresis : 0~9999 digit adjustable
- Alarm delay time : 0~99.9 second adjustable
- Relay contact output : AC 250V~3A, DC 30V~5A
- Analog output resolution : 15 bit DAC
- Output drive capability : $\leq 10mA$ for voltage mode
 $\leq 10V$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S
- Response time : $\leq 1/f + 10ms$ (0~90%)
- Display : Red high efficiency LEDs 14.22mm
(0.56")
- Sensor power supply : 12VDC $\pm 10\%$ ($\leq 50mA$)
- Memory mode : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

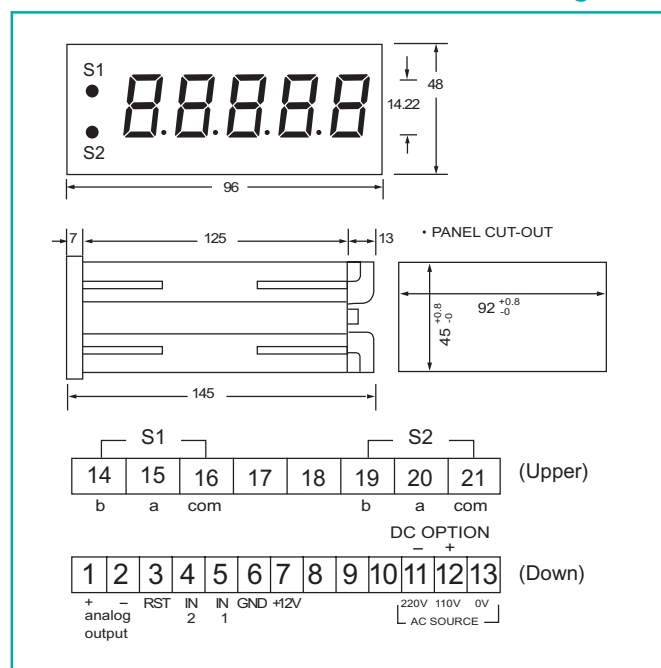
- S1 → P₁, P₂, input type selection
P₃, P₄, input trigger level selection



- S2 → P₁-P₂-P₃-P₄-P₅-P₆ output range selection
P₇-P₈ output mode: voltage/current selection

X	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	non-output	switching status	ON=1 OFF=0
1	0~1V	1-0-1-1-1-0	1-1
2	0~5V	1-0-1-0-1-0	1-1
3	1~5V	1-1-1-0-1-1	1-1
4	0~10V	1-1-0-1-0-0	1-1
5	2~10V	1-1-1-1-0-1	1-1
6	0~1mA	0-1-1-1-1-0	0-0
7	0~10mA	1-0-1-0-1-0	0-0
8	0~20mA	1-1-0-1-0-0	0-0
9	4~20mA	1-1-1-1-0-1	0-0
S	SPECIFIED (NON-PROGRAMMABLE)		

4. Outside dimension and connection diagram



MICROPROCESS LENGTH (FLOW) CONTROLLER METER



FEATURES

- Readout range from -1999 to 99999
- Accepts input rates 45 or 50 or 5000 or 20000 CPS can be modified
- Four counting modes up, down, up/down, quadrature (x 1, x 2, x 4, mode) can be modified
- Sensor voltage +12V or +24V can be switched ($\leq 80\text{mA}$)
- Input scaling multiplier 00.001 to 99.999 can be modified
- Decimal point can be modified
- Auto zero function
- Four alarms with hysteresis and delay functions (optional)
- 16 bit DAC analog output can be modified (optional)
- Support RS485 or RS232 with Modbus RTU mode (optional)

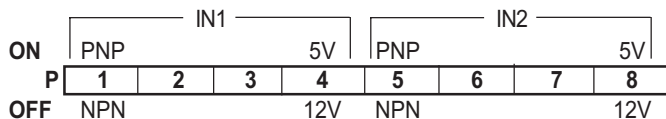
1. MODEL: PF - CAA - - - -

Analog Output	NO	Alarm	NO	Communication	NO	Aux. Power
See Output	0	None	0	None	1	AC 90~240V
Switching Table	1	1 Alarms	1	RS485	2	DC 24~70V
	2	2 Alarms	2	RS232	3	AC/DC 24V
	3	3 Alarms	9	SPECIFIED	4	DC 110V
	4	4 Alarms			9	SPECIFIED

2. Specification

- Aux. power supply : AC 90~240V $\pm 10\%$ 50/60Hz $\leq 15\text{VA}$
DC 24~70V $\pm 10\%$ $\leq 10\text{W}$
AC/DC 24V $\pm 10\%$ $\leq 10\text{VA}$
DC 110V $\pm 10\%$ $\leq 10\text{W}$
- Count input type : Switch selectable current sourcing or current sinking
- Count input trigger levels : Switch selectable Hi bias ($V_{IH}=7.5\text{V}$, $V_{IL}=5.5\text{V}$) or Lo bias ($V_{IH}=3.5\text{V}$, $V_{IL}=1.5\text{V}$)
- Sampling time : 10 cycle/sec. ($\geq 10\text{Hz}$)
f cycle/sec. ($< 10\text{Hz}$)
- Readout (compare) range : "-19999" to "99999" adjustable
- Max.count rated : $\leq 20\text{KHz}$ (up, down, up/down)
 $\leq 10\text{KHz}$ (quadrature mode)
- Parameter setting : Touch switches
- Over input indication : "ovEr" and "ovEr"
- Alarm action : "Hi" or "Lo" adjustable
- Compare hysteresis : 0~9999 digit adjustable
- Alarm delay time : 0~99.9 or 0.1~99.9 second adjustable
- Relay contact output : AC 250V~3A, DC 30V~5A
- Analog output resolution : 16 bit DAC
- Output drive capability : $\leq 20\text{mA}$ for voltage mode
 $\leq 14\text{V}$ for current mode
- Output ripple (p-p) : $< 0.1\%$ F.S
- Response time : $\leq 1/f + 10\text{ms}$ (0~90%)
- Communication speed : 2400, 4800, 9600, 19200 bps
- Communication format : <8,N,1>, <8,N,2>, <8,O,1>, <8,E,1>
- Communication address : "1" to "247" can be modified
- Display : Red high efficiency LEDs 14.22mm (0.56")
- Sensor power supply : 12VDC or 24VDC $\pm 10\%$ ($\leq 80\text{mA}$)
- Memory mode : Non-volatile EEPROM
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1)



P1, P5 : Input type selection (ON=PNP; OFF=NPN)

P2, P3, P6, P7 : Input signal filter selection

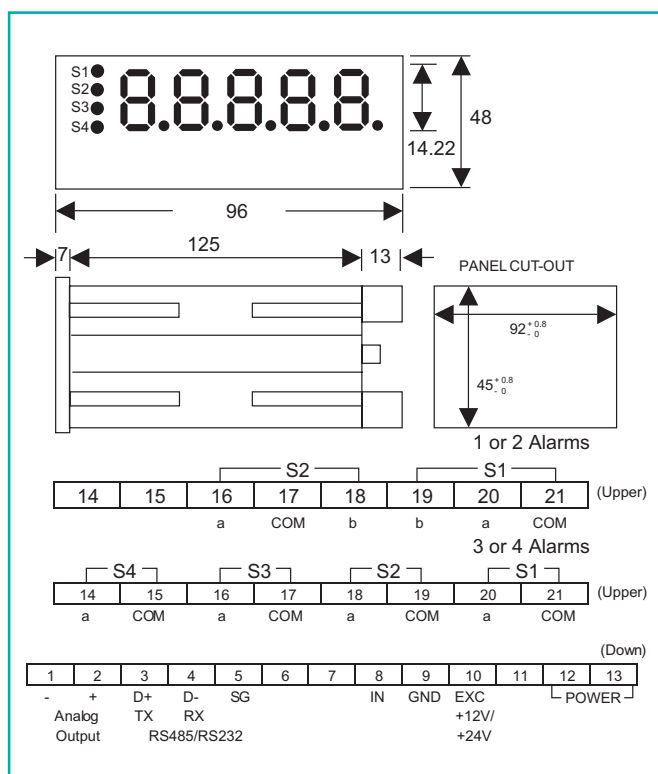
P2-P3 (ON=1 OFF=0)	Input Signal Filter Range
0-0	20KHz
1-0	5KHz
0-1	50Hz
1-1	45Hz

P4, P8 : Input trigger level selection (ON=5V; OFF=12V)

4. Analog output switching table

NO	Output Range	O/P Range 1-2-3-4-5-6	O/P Mode 7-8
0	Non-output	Switching status ON=1 OFF=0	
1	0~1V	1-0-1-1-1-0	1-1
2	0~5V	1-0-1-0-1-0	1-1
3	1~5V	1-1-1-0-1-1	1-1
4	0~10V	1-1-0-1-0-0	1-1
5	2~10V	1-1-1-1-0-1	1-1
6	0~1mA	0-1-1-1-1-0	0-0
7	0~10mA	1-0-1-0-1-0	0-0
8	0~20mA	1-1-0-1-0-0	0-0
9	4~20mA	1-1-1-1-0-1	0-0
S	SPECIFIED (NON-PROGRAMMABLE)		

5. Outside dimension and connection diagram (unit:mm)



MICROPROCESS 4 DIGITAL HI/LO DISPLACEMENT CONTROLLER METER



FEATURES

- Readout range from -999 to 9999
- Accepts input rates 50 or 500 CPS can be modified
- Accepts input counting for quadrature sensing (up to 4 times resolution)
- Input scaling multiplier (0.001 to 9.999)
- Dual alarm, alarm action can be modified (PF-C724-CA-C)
- Alarm, compare hysteresis can be modified (PF-C724-CA-CC)
- Decimal point can be modified
- Up and down key setting, easy to operate
- Count inhibit function (GATE control)

1. MODEL: PF - C724 - CA - X Y → X = R (Relay Output) X=O (Open Collector Output)

Y = C1 (One alarm setting), C2 (Two alarm setting)

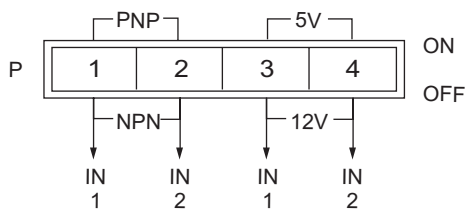
Y = CC (Alarm ± hysteresis setting)

2. Specification

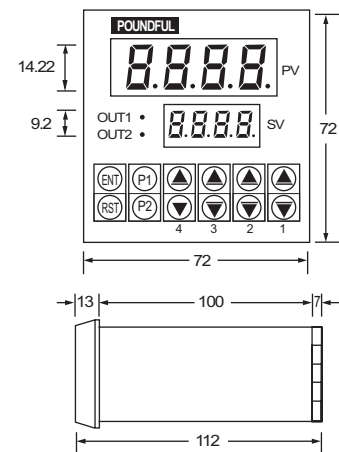
- Aux. power supply : AC110 & 220V ±20% (50 or 60Hz)
(Optional DC 24, 48, 110, 220V ±20%
AC 90~260V ±10%
DC 24~70V ±20%)
- Count input trigger levels : Switch selectable
Hi bias ($V_{IH}=7.5V$, $V_{IL}=5.5V$) or
Lo bias ($V_{IH}=3.7V$, $V_{IL}=2.0V$)
- Max. count rates : ≤ 500Hz
- Over input indication : "ovEr"
- Readout (compare) range : "-999" to "9999"
- Setting methods : Touch switches
- Display count value : Red high efficiency LEDs 14.22mm (0.56")
- Display preset value : Red high efficiency LEDs 9.2mm (0.36")
- Alarm action : "Hi" or "Lo" adjustable
- Relay contact output : AC 250V~3A, DC 30V~5A
- Contactless output : Open collector, DC 30V/60mA Max.
- Sensor power supply : 12VDC ±10% (≤60mA)
- Memory type : Non-volatile EEPROM memory
- Dielectric strength : 2KVac/1 min. (power/input/output)
- Operating condition : 0~50°C (20~90% RH non-condensed)
- Storage condition : 0~70°C (20~90% RH non-condensed)

3. Function switches (S1, S2)

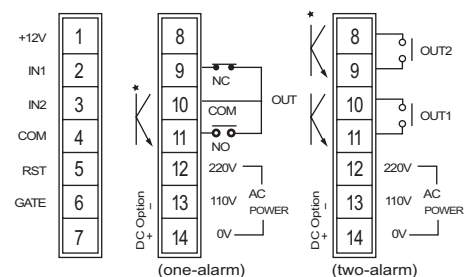
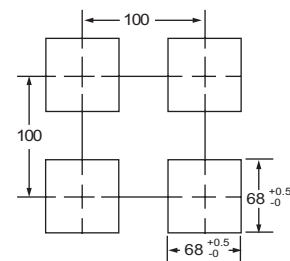
- P₁, P₂ → input type selection
- P₃, P₄ → input trigger level selection



4. Outside dimension and connection diagram



• PANEL CUT-OUT



★ (open collector output)