

Industrial Automation Control Since 1992

• Pressure • Temperature • Level • Flow

CATALOG 2014-2015



Sensors & Controllers

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Table of Contents**Digital Pressure Gauge**

PG801C Series LCD Display Digital Pressure Gauge.....	3
PG801E Series LED Display Digital Pressure Gauge.....	4

Pressure Transmitter

PG Series Pressure Transmitter.....	5
PS Series Submersible Level Transmitter.....	6

Temperature controller

TE Series Temperature Controller.....	7
BI Series Economic Temperature Controller.....	8

Digital Panel Meter

DU series Digital Panel Meter.....	9
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Coulometer

DW Series Single-Phase Coulometer.....	10
DZ Series 3-Phase Coulometer.....	11

Digital Counter

CT Series Digital Counter.....	12
CK Series Thumb Switch Setting Digital Counter.....	13
CP Series Batch Controller.....	14
CL Series Linespeed/Length Meter.....	15

Digital Timer

HT Series Digital Timer.....	16
HK Series Thumb Switch Setting Digital Timer.....	17

Frequency/Line-Speed/Tachometer

FT Series Frequency/Line-speed/Tachometer.....	18
FK Series Thumb Switch Setting Frequency/Line-speed/Tachometer.....	19

Inductive Sensor

TX Series Inductive Sensor.....	20
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Photoelectric Sensor

BW/BR Series Photoelectric Sensor.....	21
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Features & Ordering Code

Features

- 4 Digit LCD display
- Accuracy: 0.25% and 1% F.S for option
- Range: Vacuum to 600Bar
- Can display Max and Min value
- Different pressure units selected by software
- Different thread size for option



Ordering Code

PG801C

Accuracy: A: 1% F.S B: 0.25% F.S

Range: Vacuum to 600Bar

Output: Blank: No output 300: 4-20mA 210: 0-10V

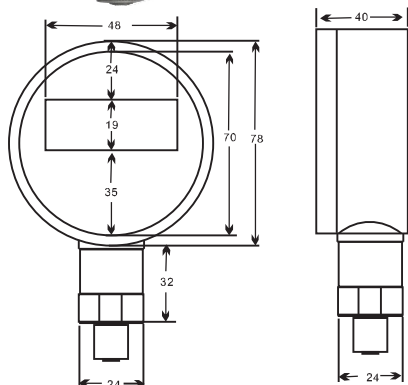
Thread Size: 1: Standard M20X1.5 2: G1/2 3: G1/4 & 1/4NPT

PG801C Series LCD Display Digital Pressure Gauge

Example: PG801C3-10Bar-B: means the DPG is in 1/4 NPT or G1/4 thread
measuring range is 0-10Bar and the accuracy is 0.25% F.S

Technical Data & Sizes

Technical Data



Accuracy:	Silicon 0.25% F.S Ceramics: 1%
Power Supply:	3VDC Battery
Pressure Range:	Vacuum to 600Bar
Housing:	ABS
Operating Temperature:	-20 to 85 Degrees
Store Temperature:	-20 to 85 Degrees
Temperature Shift:	0.05% F.S per Degree
Size:	78mm dia
Engineering Unit:	Psi, Bar, MPa, KG/CM
Thread Size:	M20X1.5, G1/2, 1/4 NPT and others
Frontal Panel:	Polycarbonate, OEM available
Max Allowed Load:	RL less than 600 Ohm
Over Pressure:	200% of the Pressure Range, Less than 1200Bar
Burst Pressure:	400% of the Pressure Range, Less than 1200Bar
Output:	4-20mA or 0-10V (If have)
IP Rate:	IP66
Weight:	Abt. 500G



Features & Ordering Code

Features

- 4 Digit LED display
- Accuracy: 0.25% and 1% F.S for option
- Range: Vacuum to 600Bar
- Can display Max and Min value
- Different pressure units selected by software
- Different thread size for option
- Output 4-20mA and 0-10V for option

Ordering Code

PG801E □ □ □ □ — **Accuracy:** A: 1% F.S B: 0.25% F.S
Alarm: Blank: No alarm J1: 1 alarm J2: 2 alarm
Range: Vacuum to 600Bar
Output: Blank: No output 300: 4-20mA 210: 0-10V
Thread Size: 1: Standard M20X1.5 2: G1/2 3: G1/4 & 1/4NPT
PG801C Series LED Display Digital Pressure Gauge

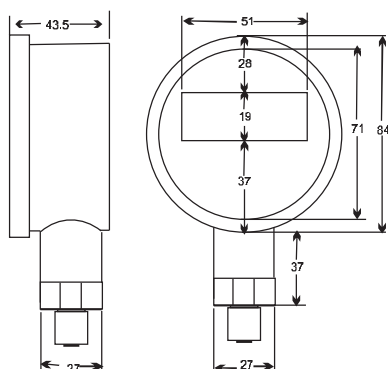
Example: PG801E3300-10Bar-J1-B: means the DPG is in 1/4 NPT or G1/4 thread size, with 4-20mA output, measuring range is 0-10Bar, 1 alarm and the accuracy is 0.25% F.S



Technical Data & Sizes



Size



Technical Data

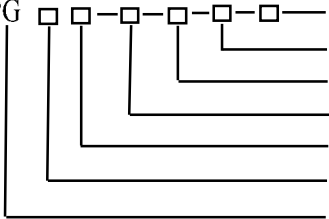
Accuracy:	Silicon 0.25% F.S Ceramics: 1%
Power Supply:	10-33VDC
Pressure Range:	Vacuum to 600Bar
Housing:	Stainless Steel
Operating Temperature:	-20 to 85 Degrees
Store Temperature:	-20 to 85 Degrees
Temperature Shift:	0.05% F.S per Degree
Size:	84mm dia
Engineering Unit:	Any unit for option when ordering
Thread Size:	M20X1.5, G1/2, 1/4 NPT and others
Frontal Panel:	Polycarbonate, OEM available
Max Allowed Load:	RL less than 600 Ohm
Over Pressure:	200% of the Pressure Range, Less than 1200Bar
Burst Pressure:	400% of the Pressure Range, Less than 1200Bar
Output:	4-20mA or 0-10V
IP Rate:	IP66
Weight:	Abt. 750G

Features & Ordering Code

Features

- Accuracy 0.25% and 0.5% for option
- Range from vacuum to 600BAR
- Nominal output signal: 4-20mA, 0-10V...
- Different thread size for option: M20X1.5 Standard, G1/2, 1/4 NPT...
- Based on film sensing element deposited on stainless steel diaphragm
- Wildly applied in measuring pressure in oil, air and hydraulic circuits

Ordering Code

PG  **Accuracy:** A: 0.5% F.S B: 0.25% F.S
Connection: Blank: Cable GB: Hirschman M: LED display
Range: Vacuum to 600Bar
Appearance Type: Blank: Standard Y: Industrial P: Frash Diahrgram C: Compact
Output: 300: 4-20mA 205: 0-5V 215: 1-5V 245: 0.5-4.5V
Thread Size: 1: Standard M20X1.5 2: G1/2 3: G1/4 & 1/4NPT
PG Series Pressure Transmitter

For example: PG3300-10Bar-GB-B, means it is a standard type pressure transmitter with 1/4 NPT, 4-20mA output, range 0-10Bar, Hirschman connector, accuracy 0.25%.



Technical Data & Sizes

Technical Data

Output:	Voltage: 0-10V, 1-5V, 0-5V, 0.5-4.5V Current: 4-20mA
Accuracy:	Silicon 0.25% F.S Ceramics: 0.5%
Power Supply:	10-33VDC
Pressure Range:	Vacuum to 600Bar
Housing:	Stainless Steel 304 (316 need special order)
Max Allowed Load:	Voltage: 100K Ohm Current: 600 Ohm
Temperature:	-20 to 85 Degrees
Temperature Shift:	0.05% F.S per Degree
Over Pressure:	200% of the Pressure Range, Less than 1200Bar
Burst Pressure:	400% of the Pressure Range, Less than 1200Bar

Standard Type

Industrial Type



Frash Diahrgram

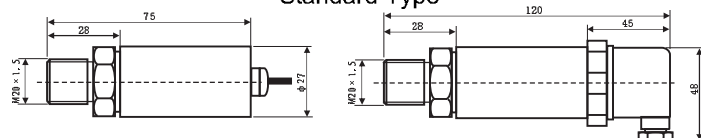


Compact Type

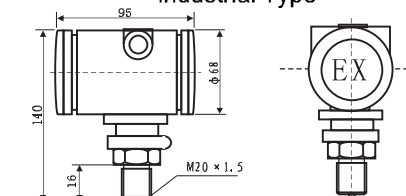


Size

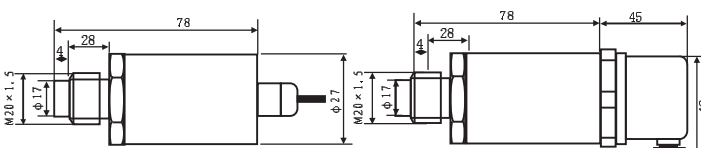
Standard Type



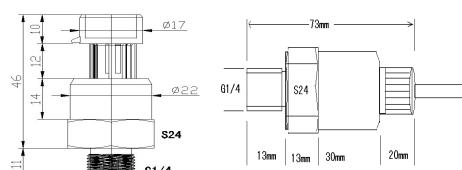
Industrial Type



Frash Diahrgram



Compact Type



Features & Ordering Code

Features

- Submersible type, easy to use
- Isolation amplifier IC, high anti-interference
- Oil proof, waterproof, anti-corrosion, anti clogging
- permeable and hard-wearing cable
- Stainless steel structure, explosion proof
- Accuracy: 0.25%

Ordering Code

PS ☐ ☐ - ☐ ☐ _____ Blank: Direct cable S: Shell head M: LED display

Range Description: 0-200m H₂O for option

300: 4-20mA 205: 0-5V 215: 1-5V 210: 0-10V

1: M20X1.5 Standard 2: G1/2

PS series Submersible Level Transmitter

Example: PS1300-10mH₂O

It means thread size M20X1.5 standard, 4-20mA output, range 0-10m water



PS1300

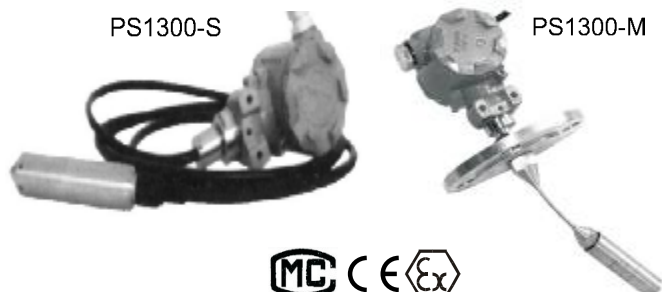
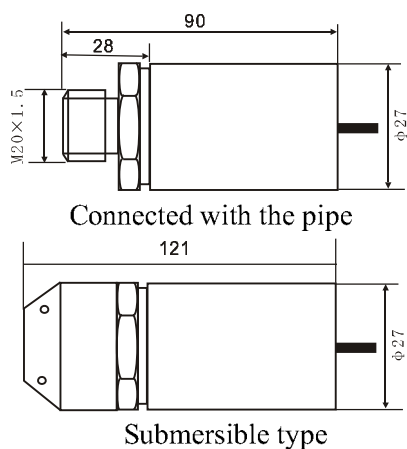


Technical Data & Sizes

Technical Data

Measuring range	0 to 5m H ₂ O... 0 to 200m H ₂ O
Pressure type	Gauge pressure, absolute pressure
Accuracy	0.5%F.S (including linearity, repeatability and hysteresis)
Long term stability	±0.2%F.S. per year
Output signal	4 ~ 20mA (2-wire), 1 ~ 5V (3-wire), 0 ~ 5V (3-wire)
Power supply	12 ~ 36V DC (24V DC)
Response time	10ms
Allowed overpressure	2.5 times full scale
Probe material	1Cr18Ni9Ti
Measuring media	Liquids that can be compatible with 1Cr18Ni9Ti and 316L stainless steel
Working temperature	(-40)°C ~ 85°C
Media temperature	(-30)°C ~ 60°C
Compensated temperature	(-10)°C ~ 60°C

Size



Features & Ordering Code

Features

- 4 digit dual display
- Universal input by K, J, T, S, Pt100, Cu50 set by software
- Can be with 2 relay or SSR alarms
- Can be with 4-20mA analogue output
- Fuzzy PID or ON/OFF control control output set by software

Ordering Code

TE □□-□□□□—Input signal: Default: K, J, T, S, Pt100, Cu50, etc

AL2: R: Relay S: SSR/logic N: no alarm

— AL1: R: Relay S: SSR/logic N: no alarm

—OUT: R: Relay S: SSR/logic K: SCR

I: 4 ~ 20mA or 0 ~ 20mA

D: 0 ~ 10V or 0 ~ 5V

— Power supply: Default: 90 - 260V AC

E: 24V DC 10%

—Size: 4: 48H X 48W 6: 96H X 48W

7: 72H X 72W 8: 48H X 96W

9: 96H X 96W
— TE Series temperature controller

TE4 48X48



TF9 96X96

TE7 72X72



Eg: TE4-IRR means the size is 48X48, with 4-20mA output, 2 relay alarm

Technical Data & Sizes

Technical Data

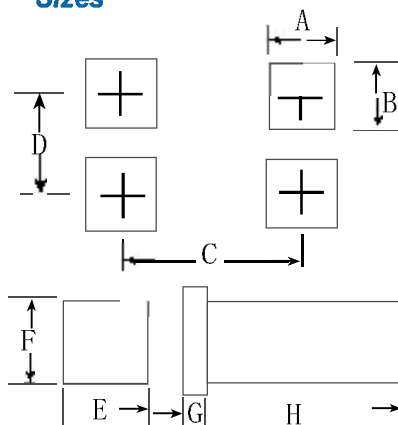
Power supply	TE4: 90 ~ 260V AC/DC; TE6/ 7/ 8/ 9: 220V/ 110V AC		
Consumption	≤5VA		
Display range	(-199℃ ~ 400℃; 0℃ ~ 1200℃		
Accuracy	0.3%FS ± 2digit		
Sampling rate	≤300ms		
Control output	RELAY: Normally open contact, 250V AC/ 3A; 30V DC/ 3A. COS ϕ =1; SSR/LOGIC: TE4/ 6/ 8: 24V DC ± 2V/ 20mA TE7/ 9: 12V DC ± 1V/ 20mA, 1: 4 ~ 20mA		
Alarm	RELAY: Normally open contact: 250VAC/ 3A, 30V DC/ 3A COS ϕ =1		
Input signal	TC	K	0 ~ 1200℃
		J	0 ~ 1200℃
		T	(-150)℃ ~ 400℃ (special order)
		S	0℃ ~ 1600℃
	RTD	Pt100	(-199)℃ ~ 600℃
		Cu50	(-50)℃ ~ 150℃
	Others	Please mention when ordering	
Withstand voltage	1500V Rms (Between power terminal and the housing)		
Insulation strength	Min. 50M Ω 500V DC (Between power terminal & the housing)		
Temperature	0 ~ 50℃ (No freeze)		
Storage Temperature	(-10)℃ ~ 60℃ (No freeze)		
Humidity	35 ~ 85%RH		
Weight	TE4: abt 250g; TE6/ 7/ 8/ 9: abt 350g		



TE6 48X96



Sizes



TE8 96X48



Size Model	A	B	C	D	E	F	G	H
TE4	45 + 0.5	45 + 0.5	65	65	48	48	8	80
TE6	45.5 + 0.5	91 + 0.5	65	115	48	96	12	100
TE7	68 + 0.5	68 + 0.5	95	95	72	72	12	100
TE8	91 + 0.5	45 + 0.5	65	115	48	48	12	100
TE9	91 + 0.5	91 + 0.5	115	115	96	96	12	100

Features & Ordering Code

Features

- 3 digit dual display
- SV value set by key, one key for one digit
- Single input by K, J, E, Pt100 and Cu50 selectable
- Fuzzy PID or ON/OFF control control output set by software
- Most economic

Ordering Code

BI ☐ ☐ ☐ — **Input Signal:** K: K type J: J type E: E type P: Pt100 Cu: Cu50
Control Output: R: Relay output S: SSR output
Sizes: 4: 48X48 6: 48X96 7: 72X72 9: 96X96
BI Series of Economic Temperature Controller

Eg: BI4-R-J means the size is 48X48, relay control output and input by thermocouple J.



BI4
48X48



Technical Data & Sizes

Technical Data

Input type	K:K Type input(range:0-600℃) P:PT100 Type input(range:0-600℃)	
Display range	E:E Type input(range:0-400℃) J:J Type input(range:0-600℃)	
	Cu:Cu50 Type input(range:0-150℃)	
Deviation	0.8%F.S ±3Digit	
Resolution	1℃	
Control mode	PID control or ON/OFF control set by key	
Control output	Relay : AC250V3A SSR: DC8-15V	
Power	AC220V±20% 100—240VAC/DC (Customized)	
Ambient temperature	0-50℃ 45-85% (No freezing)	

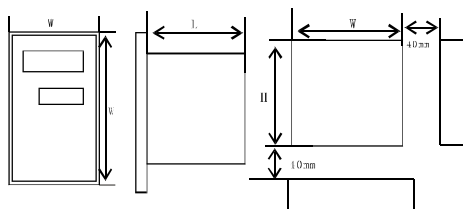
BI6 48x96



BI9 96x96



Sizes



型号	面板尺寸 H X W	壳体尺寸 h X w X L	开孔尺寸 a X b
BI4	48X48	45X45X64	45.6X45.6
BI6	96X49	90X45X63	91X45.6
BI7	72X72	65X65X63	66X66
BI9	96X96	89X89X63	90X90

Features & Ordering Code

Features

- True value measurement. Range: 0-9999
- Hysteresis setting, enhance the ability and stability
- High accuracy, reach 0.2%F.S
- Key setting, 8" width 4-digit LED display
- Can be with RS484, analogue 4-20mA

Ordering Code

DU - -

Blank: No communication 4: RS485
 Range Description: Eg: DA4-20mA, AV200...
 Blank: No alarm R: 1 relay alarm RR: 2 relay alarms
 Blank: No analog I: 4-20mA analog output
 Blank: No aux. power A: DC12V B: DC24V
 4: 48X48 7: 72X72 8: 48X96
 4: 4 Digit 5: 5 Digit
 DU series Digital Panel Meter

Example: DU58B-IRDA4-20mA-4, means 5 digit display, in 48X96 size, 24VDC aux. power, 1 alarm, measure 4-20mA, with RS485 communication.

DU48 48X96 (4 Digit)

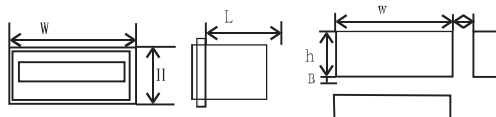


Technical Data & Sizes

Technical Data

Power supply	AC 220V $\pm$ 10%, 50/60HZ; 90 ~ 260V can be special ordered
Energy consumption	<5W
Relay contact capacity	250V AC/3A or 30V AC/5A
Input mode	Optical isolated between input and output
Insulation resistance	$\geq$ 100M Ω
Insulation strength	1.5KV/ 0.5mA one minute
Anti-disturbance	Power supply: $\pm$ 1.6KVp-p Input: $\pm$ 300Vp-p
Shocking proof	10 ~ 55Hz, 0.75mm
Working environment	0 ~ 50°C, 35 ~ 85%RH (No freezing)
Input signal	Current: 0 ~ 20mA, Voltage: 0 ~ 10V (0 ~ 5V, 0 ~ 10V, 0 ~ 50mV)
Overload capacity	Reach 120%F.S
Display	(-1999) ~ 9999
Accuracy	0.2%F.S $\pm$ 2 Digit
Sampling rate	1 - 4/S adjustable
Analogue	0 ~ 10mA, 4 ~ 20mA, 0 ~ 10V

Size



Model	Panel size (H x W)	Shell (H x W x L)	Mounting hole (A x B)
DU44	48 X 48	46 X 46 X 80	50 x 25
DU48	48 X 96	45 X 91 X 90	50 x 25

DU44 48X48 (4 Digit)



DU58 48X96 (5 Digit)



Features & Ordering Code

Features

- 3 LED windows displays watt, voltage and current
- Measuring true value, 4 digit display
- Measure Voltage/ Current/ Watt/ Power factor and Frequency
- Up to 3 alarms
- Can be with Analog output and RS485

Ordering Code

DW □ □ □ □ □ □ □ □ — IN2 input signal: AV, AA, DA, DV is optional
 □ □ □ □ □ □ □ □ — IN1 input signal: AV, AA, DA, DV is optional
 □ □ □ □ □ □ □ □ — Communication: Blank: no communication 2: RS-232 4: RS-485
 □ □ □ □ □ □ □ □ — AL3: R: Relay S: SSR/ LOGIC T: SCR control N: no alarm 3#
 □ □ □ □ □ □ □ □ — AL2: R: Relay S: SSR/ LOGIC T: SCR control N: no alarm 2#
 □ □ □ □ □ □ □ □ — AL1: R: Relay S: SSR/ LOGIC T: SCR control N: no alarm 1#
 □ □ □ □ □ □ □ □ — Analogue output: Default: No analogue output I: DC 0 ~ 10mA or DC 4 ~ 20mA
 □ □ □ □ □ □ □ □ — Dimension: 8: 48H X 96W X 100L 9: 96H X 96W X 100L
 □ □ □ □ □ □ □ □ — Power supply: Default: AC 90 ~ 260V 50/ 60Hz E: DC 24V
 □ □ □ □ □ □ □ □ — DW Series Intelligent single pahse coulometer



Note: AV: AC Voltmeter AA: AC Ampere meter DA: DC Ampere meter DV: DC Voltmeter

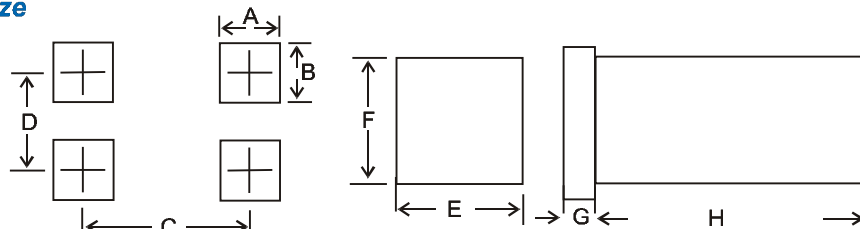


Technical Data & Sizes

Technical Data

Power supply	90-260V AC 50/60Hz
Measuring object	Ture effective value measuring , single phase, voltage/ current/power/ power factor/Frequency/Kilowatt-hour/ reactive power etc
Direct input range	Voltage: 0 ~ 600V Current: 0 ~5A or 0 ~ 10A
PT, CT setting	Setting freely by software
Accuracy	Voltage: $\pm 0.5\%FS \pm 2$ digit
	Current: $\pm 0.3\%FS \pm 2$ digit
	Watt: $\pm 0.5\%F S \pm 2$ digit
	Power Factor: $\pm 0.5\%FS \pm 2$ digit
	Frequency: 0-400Hz ± 1 Hz
Analogue	0 ~ 10V or 4 ~ 20mA selectable by software
Alarm	Relay: Normal On 250V AC/ 3A or 30V DC/ 3A COS ϕ =1
Communicatin	RS232 or RS485 with MODBUS RTU protocol

Size



Size Model	A	B	C	D	E	F	G	H
DW8	43.5+0.5	91+0.5	65	115	96	48	12	100
DW9	91+0.5	91+0.5	115	115	96	96	12	100



Features & Ordering Code

Features

- 4 LED windows displays watt, voltage, current and power factor
- Measuring true value, 4 digit display
- Measure Voltage/ Current/ Watt/ Power factor and Frequency
- Up to 4 alarms
- Can be with Analog output and RS485

Ordering Code

DZ 9 □□□-□□□□□ — Communication: Blank;no communication T: RS485

input signal: AV / AA the display range is optional

AL4: R: **Relay** S: SSR/LOGIC T: SCR **control** N: no alarm

AL3: R: Relay S: SSR/LOGIC T: SCR control N: no alarm

AL2: R: Relay S: SSR/LOGIC T: SCR control N: no alarm

AL1: R: Relay S: SSR/LOGIC T: SCR control N: no alarm

Analog output: Default: No analogue output I: DC0-10mA or DC4-20mA

3 : three phase

size: 9 96H×96W×70L

—power supply Default AC 90~260V 50/60HZ E: DC 24V

DZ Series Intelligent three phase coulometer

DZ93 96X96

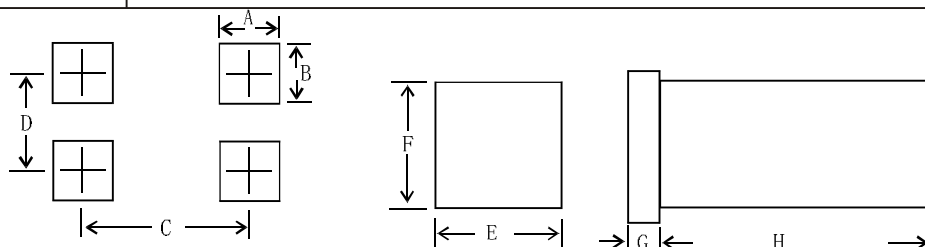


Technical Data & Sizes

Technical Data

Power supply	90-260V AC 50/60Hz
Measuring object	Ture effective value measuring , single phase, voltage/ current/power/ power factor/Frequency/Kilowatt-hour/ reactive power etc
Direct input range	Voltage: 0 ~ 600V Current: 0 ~5A or 0 ~ 10A
PT, CT setting	Setting freely by software
Accuracy	Voltage: $\pm 0.5\%FS \pm 2$ digit
	Current: $\pm 0.3\%FS \pm 2$ digit
	Watt: $\pm 0.5\%FS \pm 2$ digit
	Power Factor: $\pm 0.5\%FS \pm 2$ digit
	Frequency: 0-400Hz ± 1 Hz
Analogue	0 ~ 10V or 4 ~ 20mA selectable by software
Alarm	Relay: Normal On 250V AC/ 3A or 30V DC/ 3A COS ϕ =1
Communicatin	RS232 or RS485 with MODBUS RTU protocol

Size



Size Code	A	B	C	D	E	F	G	H
DZ93	91+0.5	91+0.5	115	115	96	96	10	65

Features & Ordering Code

Features

- Can be used as counter, length meter.
- 5, 6 digit dual display
- 4 types of input mode and 6 types of output mode for option.
- Rate and preset is available
- Input and output is optical isolated, high anti-interference

Ordering Code

CT ☐ P/S ☐ ☐ ☐ — Blank: Without communication 4: RS485
 1: with one alarm HI 2: with 2 alarm HI, L0
 4: 4 digit display 5: 5 digit display 6: 6 digit display
 P: Preset function is available; S: Rate setting is available
 Dimension(mm): 4: 48H*48W*80L 7: 72H*72W*80L 8: 48H*96W*80L 16: 80H*160W*80L
 CT Series intelligent digital counter/ length meter

Example: CT8-PS61B: means it is CT series 6 digit counter/ length meter, with rate setting function, power supply in 90 ~ 250V AC, size: 48H*96W, with one alarm HI, with no communication function.

CT8 48X96



Technical Data & Sizes

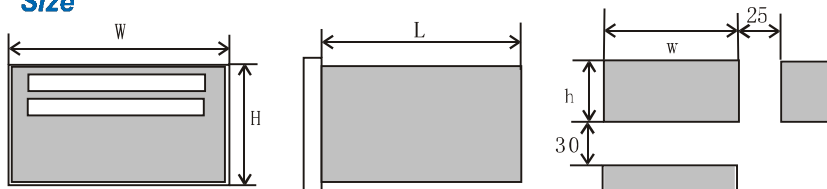
Technical Data

Power supply	90 ~ 250V AC 50/ 60Hz
Consumption	<5W
Relay capacity	250V AC/ 3A or 30V DC/ 5A
Auxiliary power	DC12V, max. 50mA or DC24V/50mA
Insulation resistance	≥10MΩ
Dielectric strength	Minute 2KV/ 50mA
Anti-interference	Power: ± 2KV, Input: ± 400V
Vibration resistance	10 ~ 55Hz, 0.75mm
Working environment	Temperature: 0 ~ 50°C, Humidity: 35 ~ 85%RH
Input signal	Square wave, sine wave, input signal: 0 ≤ L ≤ 2V, 5V ≤ H ≤ 30V
Input impedance	≥10KΩ
Counting rate	30CPS/ 5000CPS
Rate setting	0.0001~99999 (CT4); 0.00001~999999 (CT7/ CT8 / CT16)
Delay output time	0.01 second ~ 99.99 second delay output

CT4 48X48
(5 Digit)



Size



Model	Panel size (H X W)	Shell size (H X W X L)	Hole size (a X b)
CP7	72×72	68×68×80	90×90
CP8	48×96	45×91×80	90×126

CT7 72X72



Features & Ordering Code

Features

- Thumb switch setting, can be used as counter, length meter
- Four input modes and 18 output mode for option
- With rate setting, preset, and delay time
- Input and output is optically isolated
- High anti-interference
- Power failure memory up to 10 years

Ordering Code

CK ☐ - P S ☐ ☐ B — Blank: No communication 4: RS485
 1: one alarm Hi; 2: two alarm Hi, Lo
 4: 4 digit display 5: 5 digit display 6: 6 digit display
 Function: P: with preset function S: Rate setting function
 Dimension: 4: 48H * 48W * 80L 7: 72H * 72W * 90L 8: 48H * 96W * 100L
 CK series digital counter/ length meter

Example: CK8-PS51A, means it's CK series 5 digit display counter, with preset and rate setting, size in 48H * 96W, with no communication function, power supply as default: 90 ~ 250V AC

CK7-PS62B 72x72

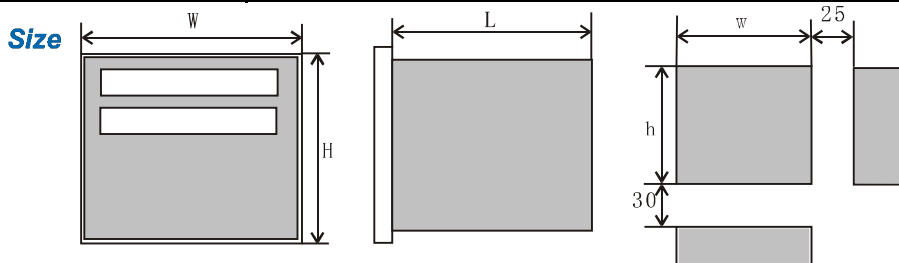


Technical Data & Sizes

Technical Data

Power supply	AC 90V ~ 250V 50/ 60Hz
Energy consumption	<5W
Relay contact capacity	250V AC/ 3A or 30V DC/ 5A
Auxiliary power	DC 12V/ 50mA (max) or DC 24V, 50mA
Insulation resistance	≥100MΩ
Dielectric strength	2KV/ 0.5mA (one minute)
Anti-interference	power ±2KV, input: ± 400V
Vibration resistance	10 ~ 55Hz; 0.75mm
Working environment	Temperature: 0 ~ 50℃ (no freeze); Humidity: 35 ~ 85%RH
Input signal	Square wave, sine wave, input signal: $0 \leq L \leq 2V$, $5V \leq H \leq 30V$
Input impedance	>10KΩ
Counting rate	30CPS/ 5000CPS
Rate setting	0.001 ~ 9999 (CK4), 0.00001 ~ 999999 (CK7), 0.0001 ~ 99999 (CK8)
Delay time setting	0.01 ~ 99.99s
Counting range	4 digit display: (-1999) ~ 9999 (can set to 3 decimal point); 5 digit display: (-19999) ~ 99999 (can set to 4 decimal point); 6 digit display: (-199999) ~ 999999 (can set to 5 decimal point)

CK8-PS61A 48X96



Model	Panel size (H X W)	Shell size (H X W X L)	Hole size (a X b)
CK7	72 X 72	68 X 68 X 80	68.5 X 68.5
CK8	48 X 96	44 X 90 X 80	44.5 X 90.5

Features & Ordering Code

Features

- Upper display totalize batch, lower display counter of the batch
- Four output modes for option
- With rate setting, preset, and delay time
- Input and output is optically isolated
- High anti-interference
- Power failure memory up to 10 years

Ordering Code

CP ☐ P ☐ S ☐ 6 ☐ 2 ☐ Blank: No communication 4: RS485

2: With 2 alarm HI, LO output

6: 6 digit LED display (upper line 6 digit show length, 4 digit show batch counting)

S: Coefficient setting

P: Preset function

Dimension(mm): 7:72H X 72W X 90L 8: 48H X 96W X 90L 16: 80H X 160W X 90L

CP Series intelligent digital length meter/ batch counter

Example: CP8-PS62B: means in size: 48H*96W, 2 alarm HI, LO output; with no communication function.

CP8 48X96

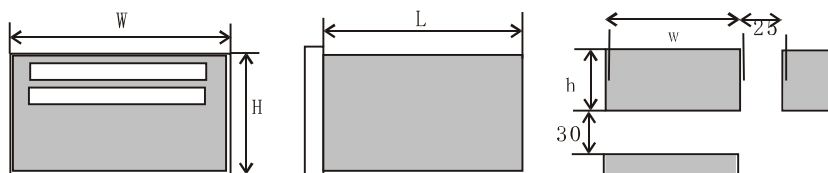


Technical Data & Sizes

Technical Data

Power Supply	AC90~250V±10V 50/60HZ
Energy Consumption	< 5W
Relay capacity	250V AC/ 3A or 30V DC/ 5A
Auxiliary Power	DC12V/ 80mA(max)
Insulation resistance	≥100MΩ
Dielectric strength	2KV/ 0.5mA per minute
Anti-interference	± 2KV power supply; ± 400V input
Anti-vibration	10~55Hz; 0.75mm
Ambient environment	Temperature: 0 ~ 50℃ (no freeze) , Humidity: 35 ~ 85%RH
Input signal	Square wave, sine wave, input signal: 0≤L≤2V, 5V≤H≤30V
Input impedance	>10KΩ
Counter speed	30CPS/ 5000CPS
Coefficient setting	0.0001~99.9999
Output delay time	0.01 second ~ 99.99 second delay output
Counter range	0~999999

Size



Model	Panel size (H X W)	Shell size (H X W X L)	Hole size (a X b)
CP7	72×72	68×68×80	90×90
CP8	48×96	45×91×80	90×126

CP7 72X72



Features & Ordering Code

Features

- Upper display length, lower display speed
- Four output modes for option
- With rate setting, preset, and delay time
- Input and output is optically isolated
- High anti-interference
- Power failure memory up to 10 years

Ordering Code

CL□-P S 6 2□ — B: no communication T: with RS-485 communication

- 2: means 2 alarm control output, Hi, Lo
- 6: 6 digit display
- S: Rate setting
- P: Preset setting
- Dimension (mm): 7: 72H * 72W * 90L; 8: 48H * 96W * 90L
- CL Series Digital Linespeed/ Length meter

Example: CL8-PS62B---means that this is a CL series 6 digit display linespeed/ length meter, with 2 alarm control

CL8 48X96

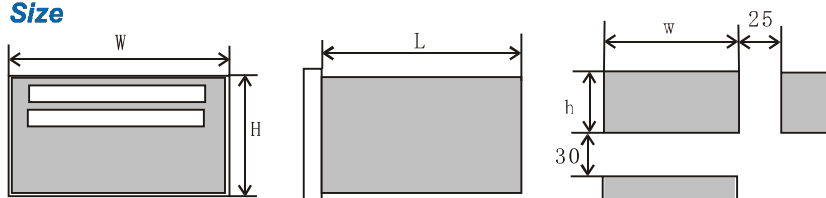


Technical Data & Sizes

Technical Data

Power supply	AC 90V ~ 250V 50/ 60Hz
Energy consumption	<5W
Relay contact capacity	250V AC/ 3A or 30V DC/ 5A
Auxiliary power	DC 12V/ 80mA (max)
Insulation resistance	≥100MΩ
Dielectric strength	2KV/ 0.5mA (one minute)
Anti-interference	power ±2KV, input: ± 400V
Vibration resistance	10 ~ 55Hz; 0.75mm
Working environment	Temperature: 0 ~ 50℃ (no freeze); Humidity: 35 ~ 85%RH
Input signal	Square wave, sine wave, input signal: $0 \leq L \leq 2V$, $5V \leq H \leq 30V$
Input impedance	>10KΩ
Counting rate	5000CPS
Rate setting	0.0001 ~ 99.9999
Delay time setting	0.01 ~ 99.99S
Counting range	0 ~ 999999 (can set to 4 digit decimal point)

Size



Model	Panel size (H*W)	Shell size (H*W*L)	Mounting size (a*b)
CL7	72×72	68×68×80	90×90
CL8	48×96	45×91×80	90×126

CL7 72X72

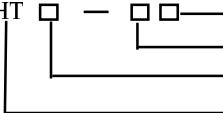


Features & Ordering Code

Features

- 4 Digit dual display
- Power failure memory function
- Up and down timing function
- Dual delay output, the delay time free set
- Reset by key operation or terminal shorted

Ordering Code

HT  1: 1 segment of output 2: 2 segments of output
4: 4 digit display
Dimension(mm): 4: 48H*48W*80L 7: 72H*72W*80L 6: 96H*48W*80L
HT Series Digital Timer



HT4 48X48

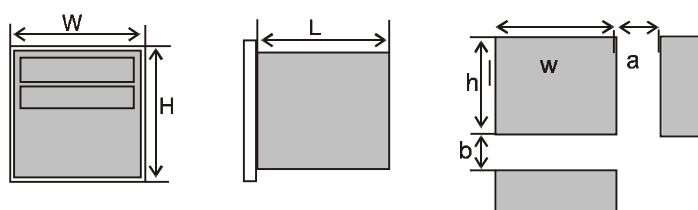
Example: HT4-42, means that HT Series 4 digits timer relay, size in 48H X 48W, with two segment output, 220V AC power supply.

Technical Data & Sizes

Technical Data

Supply voltage	220V AC $\pm$ 10V, 50/ 60Hz
Energy consumption	<3W
Repeatability accuracy	$\pm$ 0.2%
Reset time	<100mS
Contact load	250V AC/ 3A (Resistance load)
Timing range	0.01s ~ 99.99s; 0.1s ~ 999.9s; 0.01m ~ 99.99m; 0.1m ~ 999.9m 0.01h ~ 99.99h; 0.1h ~ 999.9h; 1s ~ 99m 59s, 1m ~ 99h 59m
Delay range	0.1s ~ 999.9s; 0.1m ~ 999.9m; 0.1h ~ 999.9h
Anti-interference	$\pm$ 2000V/ 1m
Operation environment	0°C ~ 50°C (with no condensation); 35 ~ 85%RH
Operation life	Mechanical life: 5 million times above; electrical life: 100 thousand times for rated load

Size



HT7 72X72



Model	Panel size	Shell size	Hole size
	H X W (mm)	H X W X L (mm)	A X B (mm)
HT4	48 X 48	45 X 45 X 88	46 X 46
HT6	96 X 48	92 X 45 X 90	93 X 46
TH7	72 X 72	68 X 68 X 90	69 X 69

Features & Ordering Code

Features

- 4 Digit display, Thrm switch setting.
- Up and down timing function
- Dual delay output time, delay output time can be set freely
- With external reset, pause connection for easy manual control;
- High accuracy, High anti-interference;



Ordering Code

HK	HK Series digital timer relay	
Dimension (mm)	2	87H X 58W X 80L
	4	48H X 48W X 80L
Function	A	With one relay alarm function (with no menu setting and no power fail memory)
	B	With two relay alarm function (2 time limits or 1 time limit+ 1 instantaneous output)
	C	With one relay alarm function (With menu setting and data memory function)

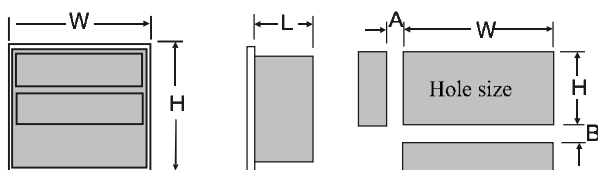
Example: HK2-C, means that HK series timer relay, size 87H*58W. With one relay alarm.

Technical Data & Sizes

Technical Data

Supply voltage	220V AC $\pm$ 10V, 50/ 60Hz
Energy consumption	<3W
Repeat error	$\pm$ 0.2%
Reset time	<100mS
Contact load	250V AC/ 3A (Resistance load)
Timing range	0.01s ~ 99.99s; 0.1s ~ 999.9s; 0.01m ~ 99.99m; 0.1m ~ 999.9m
	0.01h ~ 99.99h; 0.1h ~ 999.9h; 1s ~ 99m 59s, 1m ~ 99h 59m
Delay time range	0.1s ~ 999.9s; 0.1m ~ 999.9m; 0.1h ~ 999.9h
Anti-interference	$\pm$ 2000V/ 1m
Operation environment	0°C ~ 50°C (with no condensation); 35 ~ 85%RH
Operation life	Mechanical life: above 5 million times; electrical life: 100 thousand times for rated load

Size



Model	Panel size H X W (mm)	Shell size H X W X L (mm)	Hole size A X B (mm)
HK2-	87 X 58	45 X 45 70	90 X 110
HK4-	48 X 48	45 X 45 X70	46 X 46

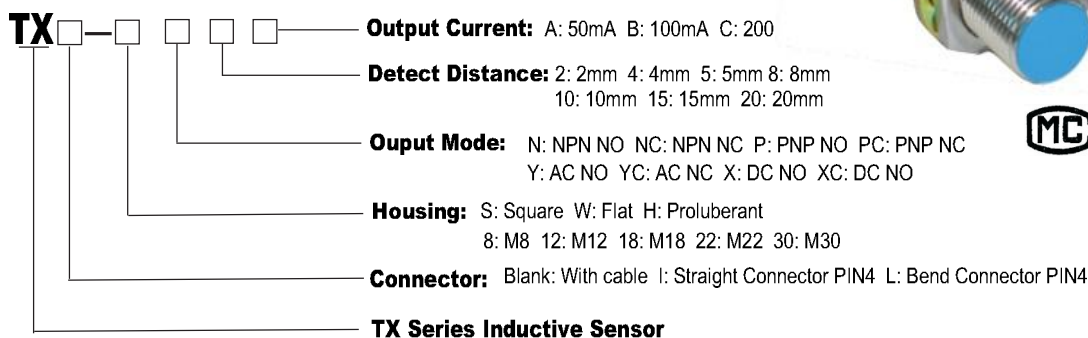
Features & Ordering Code

Features

Quick response, Long operation life, Reliable action, high anti-interference, and anti-shock, water-proof ability.

Widely applied to measuring, counting, Rpm measuring in mechanism, chemical, paper manufacture light industry, etc.

Ordering Code



Cylinder M8 M12 M18 M22 M30



For example: TX-12N4C means Inductive proximity sensor with on connector, sensing distance is 4mm, cylindrical type 12mm in diameter, NPN, NO, max. output current is 200mA.

Technical Data & Sizes

Technical Data

	Cylinder Type	Square Type	Flat Type	Proluberant Type
Power Supply	12-24VDC	12-24VDC	12-24VDC	12-24VDC
Detect Object	Magnetic metal	Magnetic metal	Magnetic metal	Magnetic metal
Housing Material	Metal	ABS	ABS	ABS
Ambient temperature	-25~70°C	-25~70°C	-25~70°C	-25~70°C
IP rating	IP66	IP66	IP66	IP66
Output Mode	NPN, PNP, AC, DC	NPN, PNP, AC, DC	NPN, PNP, AC, DC	NPN, PNP, AC, DC
Sizes	M8, 12, 18, 22, 30	18X18, 30X30, 40X40		

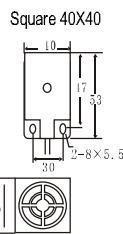
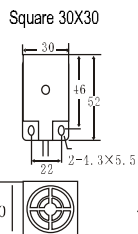
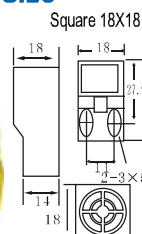
With straight Connector



Proluberant Type



Size



M8, 12, 18, 22, 30



Square Type

Features & Ordering Code

Features

- Fixed focus diffuse models for sensing small targets.
- A visible red LED beam makes setup easy
- Clear object detection models for sensing molds, cartons...
- Highly visible indicator LEDs provide power and output status.



BW-W50 50X50X18

Ordering Code

BW/BR — ☐ ☐ ☐ ☐ — **Detect Distance:** 5: 0-5CM 10: 0-10CM 30: 0-30CM
Detect Mode: A: Through-beam
Output Mode: N: NPN NO P: PNP NO NC: NPN NC PC: PNP NC
Structure: M18: Cylinder 18mm W50: Flat 50x50x18mm
BW: Adjustable BR: Fixed Photoelectric Sensor

Eg: BW-M18NA10, means it is a cylinder M18 adjustable photoelectric sensor with NPN NO output and detect 10CM distance.

Technical Data & Connection

Technical Data

Light source	Infrared LED (detect mode)
Standard object	White Non-reflective paper
Supply voltage	10 ~ 30V DC, 90 ~ 250V AC, 12 ~ 240V AC/ DC
Current consumption	<30mA
Load current	200mA max.
Residual voltage	1V max. (This is only applied to NPN NO & PNP NO)
Indicator	Red LED
Protection Degree	IP65 IEC
Ambient temperature	(-25°C) ~ 70°C (with no fog or freeze.)
Storage temperature	30°C ~ 80°C
Ambient humidity	35 ~ 85%RH
Ambient light	Incandescence lamp: ≤300Lux, Sun light: ≤100Lux
Cable length	Length 2M (Standard length)
Housing material	ABS plastic

Connection

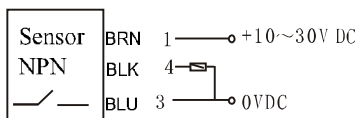


Figure 1: NPN Three-Wire NO/ NC

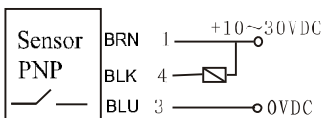


Figure 2: PNP Three-Wire NO/ NC

BW-M18 Cylinder M18

