PG500   Resin Pressure Indicator

● Specifications

Input

Input type	: Strain gauge type pressure sensor
	a) Pressure sensor gain setting range : 0.500 to 1.999mV/V
	-6.0mV to 15.9mV (Including zero point adjustment range)
	b) Pressure sensor gain setting range : 1.000 to 1.999mV/V
	-9.8mV to 25.9mV (Including zero point adjustment range)
	c) Pressure sensor gain setting range : 2.000 to 2.999mV/V
	-12.3mV to 32.6mV (Including zero point adjustment range)
	d) Pressure sensor gain setting range : 3.000 to 4.000mV/V
	-16.1mV to 42.5mV (Including zero point adjustment range)
Gain setting	: a) Gain setting decimal point position:
	Three decimal place, Four decimal place
	b) Setting range: 0.500 to 4.000mV/V (Three decimal place)
	0.5000 to 1.9999mV/V Four decimal place)
Shunt resistance output value:	: 40.0 to 100.0% (Functions when a resistance for sensitivity adjustment built-in pressure sensor is used)
Input impedance	: More than 1MΩ
Input break action	: Up-scale/Down-scale (Selectable)
Sensor power supply	: 7.7V DC±3% (Within 30mA DC)
Sampling time	: 0.1 sec
Input adjustment	: a) Zero point adjustment
	1.Manual setting : -Input span to +Input span
	2.Auto-zero function : -5.0 to +5.0mV (Input conversion)
	b) Ratio setting
	1. Manual setting (Gain adjustment setting) : 0.500 to 1.500
	2. Automatic calibration function
	Auto calibration is used to automatically set the PV ratio so that the measured value (PV) will be the pressure of the shunt resistance output value.
	(Functions when a resistance for sensitivity adjustment built-in pressure sensor is used)
	c) Linearize :
	Use to correct the non-linear nature of pressure sensor CZ-100P/CZ-200P.
	• Select the linearizing type symbol engraved on the rated nameplate attached to the CZ-100P or CZ-200P housing.
	d) Digital filter : 0.0 to 100.0 sec (OFF when 0 is set.)

Performance

Input accuracy	: ±0.1% of Input span
Influence of ambient temperature	: a) Input : ±0.006% of Input span/°C
	b) Sensor power supply : ±0.013% of Output span/°C

Display

Display digit	: 5-digits (The most significant digit : -1 or 1)

Hold function

Peak hold	Highest measured value is held
Bottom hold	Lowest measured value is held
	• The held values can be reset manually, by external contact signal or by communication after the confirmation by the operator.
	• Data is not backed up when the instrument power supply is off.

Digital input (Contact input)

Number of inputs	3 points (DI1 and DI2)
Input method	Non-voltage contact input
	(OPEN : 500kΩ or more, CLOSE : 10Ω or less)
Function	DI1 : Auto-zero DI2: Hold reset, DI3 : Alarm interlock reset

Alarm (Optional)

Number of alarms	: Up to 4 points
Alarm type	: Process High, Process low (Available for hold function)
Alarm output	: Relay output, Form A contact, 250V AC 0.5A (resistive load)
Other functions	: a) Energized/de-energized action is configurable.
	b) Delay timer : 0.0 to 600.0 sec)
	c) Interlock (latch) function is configurable.

Communication (Optional)

Communication method	: RS-485 (2-wire), RS-422A (4-wire)
	a) ANSI X3.28 sub-category 2.5A4 (RKC standard)
	b) MODBUS-RTU
	• Selectable
Maximum connection	: 31 units

Analog Retransmission Output (Optional)

Output signal	: 0 to 1V DC, 0 to 5V DC, 1 to 5V DC, 0 to 10V DC
	Load resistance : More than 1kΩ
	Output impedance : Less than 0.1Ω
	: 0 to 10mV DC, 0 to 100mV DC
	Load resistance : More than 20kΩ
	Output impedance : Less than 10Ω
	: 4 to 20mA DC, 0 to 20mA DC
	Load resistance : Less than 600Ω
	Output impedance : More than 1MΩ
Output type	: Measured value (PV)
Output accuracy	: ±0.1% of span
Output resolution	: More than 12 bits

General Specifications

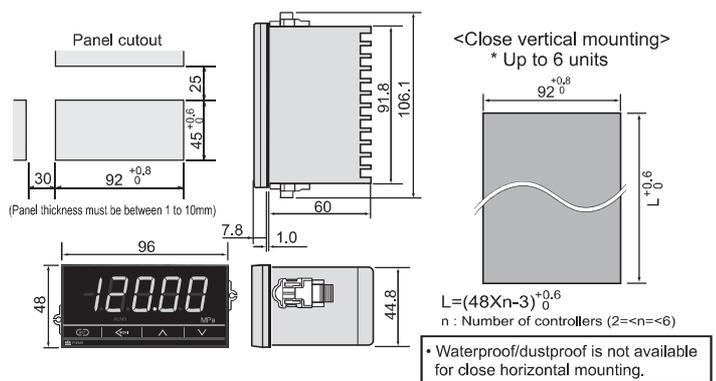|	
Waterproof/Dustproof	: NEMA4X, IP66
	• Waterproof/Dustproof protection only effective from the front in panel mounted installation.
Supply voltage	: a) 90 to 264V AC (50/60Hz, Selectable)
	Rating : 100 to 240V AC
	b) 21.6 to 26.4V AC ±10% (50/60Hz, Selectable)
	Rating : 24V AC
	c) 21.6 to 26.4V DC
	Rating : 24V DC
Power consumption	: a) 100 to 240V AC : Less than 10VA (at 240VAC)
	b) 24V AC : Less than 7.0VA
	c) 24V DC : Less than 210mA
Rush current	: Less than 12A
Memory backup	: Backed up by non-volatile memory (FRAM)
	• Data retaining period : Approx. 10 years
	• Number of writing : Approx. 10,000,000,000 times.
	(Depending on storage and operating conditions.)
Insulation resistance	: More than 20MΩ (500V DC) between measured terminals and ground
	More than 20MΩ (500V DC) between power terminals and ground
Dielectric voltage	: 1500V AC for one minute between measured terminals and ground
	1500V AC for one minute between power terminals and ground
Weight	: Approx. 200g
Ambient temperature	: -10 to +50°C (14 to 122°F)
Ambient humidity	: 5 to 95% RH (Non condensing)
Ambient atmosphere	: Free from corrosive and flammable gas and dust.
	Free from external noise, vibration, shock, and exposure to direct sunlight.

● External Dimensions   Unit : mm

Panel cutout

25
45 +0.6/0
30   92 +0.8/0
(Panel thickness must be between 1 to 10mm)

91.8
106.1
60
7.8   1.0
96
48
120.00 MPa
44.8

<Close vertical mounting>
* Up to 6 units

92 +0.8/0
L +0.6/0

L=(48Xn-3) +0.6/0
n : Number of controllers (2=<n=<6)

• Waterproof/dustproof is not available for close horizontal mounting.

● Model and Suffix Code

No.	Specifications	Model and Suffix Code		Hardware coding only					Quick start code				
				①	② ③	④	⑤	⑥	⑦	⑧	⑨	⑩	
		PG500		□	□ * □	- □	- □	□	- □	□	□	□	
①	Input type	Standard type	A										
		Intrinsic safety type	B										
		Standard type (Loose Nut : 0.0 to 0.5MPa,Fixed Nut : 0 to 5MPa)	C										
		Intrinsic safety type (Loose Nut : 0.0 to 0.5MPa,Fixed Nut : 0 to 5MPa)	D										
		For 3.33mV/V output type	X										
②	Power supply	100 to 240V AC	4										
		24V AC/DC	3										
③	Alarm	Not supplied			N								
		Number of alarm output (Specify 1 to 4)			□								
④	Analog output	Not supplied				N							
		See Analog Output Signal Code Table, Code : 1 to 8)				□							
⑤	Communication	Not supplied					N						
		RS-422A					4						
		RS-485					5						
⑥	Initial setting	No quick start code (Default setting)						N					
		Specify quick start code						1					
⑦	Alarm 1	See Alarm Code Table							□				
⑧	Alarm 2	See Alarm Code Table								□			
⑨	Alarm 3	See Alarm Code Table									□		
⑩	Alarm 4	See Alarm Code Table										□	

● Analog Output Signal Code Table

1	0 - 10mV DC
2	0 - 100mV DC
3	0 - 1V DC
4	0 - 5V DC
5	0 - 10V DC
6	1 - 5V DC
7	0 - 20mA DC
8	4 - 20mA DC

● Alarm Code Table

N	No alarm
H	Process High
J	Process Low
K	Process High with Alarm Hold
L	Process Low with Alarm Hold

● Rear Terminals

Terminal cover
(Sold separately)
Model Code:
KFB400-58
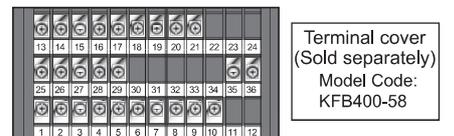
• Use a solderless terminal for screw size M3X6.

No.	13	14	15	16	17	18	19	20	21	22	23	24
Contents	COM DI1 DI2 DI3				SHD EXC+ EXC- SIG+ SIG- (Red) (Brown) (Blue) (Black)							
	Digital input				Sensor input CZ-200P CZ-100P							

No.	25	26	27	28	29	30	31	32	33	34	35	36
Contents	SG T(A) T(B) R(A) R(B) RS-422A					SG T/R(A) T/R(B) RS-458					AO + -	
	Communication										Analog output	

No.	1	2	3	4	5	6	7	8	9	10	11	12
Contents	100 to 240V AC 24V AC + 24V DC		COM ALM1 NO ALM2 NO			COM ALM3 NO ALM4 NO				CAL+ CAL-		
	Power supply		Alarm output							Calibration output		

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