WGI-400A

Instrumentation Amplifier

●Compact, General-Purpose ●Wide Input Range

Models

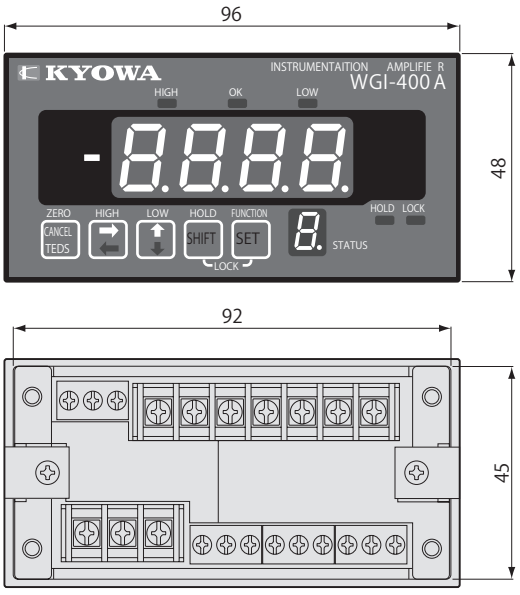
Model	Power supply	Model	Power supply
WGI-400A-00	AC operation with no optional function	WGI-400A-10	DC operation with no optional function
WGI-400A-01	AC operation with BCD output	WGI-400A-11	DC operation with BCD output
WGI-400A-02	AC operation with RS-232C	WGI-400A-12	DC operation with RS-232C
WGI-400A-03	AC operation with RS-485	WGI-400A-13	DC operation with RS-485

Compact, 48×96 mm (front surface) Wide measuring range ±3.2 mV/V

- ●3 sensitivity registration modes (actual load calibration, sensitivity-registered calibration, numerical value-registered calibration)
- ●Selectable 4 high/low limit patterns in memory
- ●Level test with desired set-value
- ●Wide operating voltage range : 90 to 240 VAC or 10 to 30V DC (AC or DC selected when ordering)
- ●3 optional functions: RS-232C, RS-485, BCD output

The WGI-400A is a compact general-purpose low-cost instrumentation amplifier providing basic functions required for measurement in combination with strain gage transducers. The wide input range ensures usage without worrying about initial value of transducer. Furthermore, it provides new functions such as switchable relative value memory patterns and preset value-based level test.

■Dimensions



Specifications

●Measuring Section

Number of Channels :	1
Applicable Transducers :	Strain gage transducers
Applicable Bridge Resistance :	87.5 to 1000Ω
Bridge Excitation :	2V DC, 30 mA or 4V DC, 50 mA, selectable
Measuring Range :	±3.2 mV/V (Including zero adjustment range)
Sampling Rate :	Approx. 50 times/sec.
Resolution :	64000 counts/input range in both polarities
Calibration Modes :	Actual load calibration, sensitivity-registered calibration, numerical value-registered calibration

●Indication Section

Indication Range :	-9999 to +9999
Nonlinearity :	Within±(0.1% FS ±1 digit)
Zero Stability :	Within±0.5μV_{RTI} / ℃
Sensitivity Stability :	Within±0.01% FS/℃
Decimal Point :	Can be put anywhere.
Zero Function :	Any value in the input range can be set to digital zero; execution by key operation or external contact signal
Minimum Scale :	Selectable from 1, 2, 5, 10, 20, 50 or 100
Moving Averaging Function :	Selectable from
Zero Tracking :	By setting the time, width and operating range
Zero Approximation :	A desired value can be preset to let the indicator read 0 for any signal in a range of 0 to the preset value.
Adding Function :	Indicated value at the time of executing zero compensation can be set to a desired value.
Original value display function :	Enable to display input value in mV/V
Level Test :	Possible with a desired value input

●Control Input

Number of Input Signals :	4 (ZERO command, level test command and 2 pattern select commands)

●Control Output

Number of Output Signals :	3 (HI, OK and LO)
Output System :	Open collector
Rated Output :	30V DC, 20 mA (resistive load)
Comparison/Judgment :	Based on high/low limits
Judgment Result :	1 (OK)
Relative Value Memory Patterns :	4 patterns. switchable

●Analog Output

Output Signal :	±10 V or 4 to 20 mA, switchable
Nonlinearity :	Within±0.1% FS
Scaling :	Can freely be set.
Response Speed :	Approx. 0.25 sec.

●Others

EMC :	Conforms to IEC61326-1(class A)
Safety Feature :	Conforms to IEC61010-1 (Installation categoryII pollution degree 2)
Power Supply :	AC 90~240V, 50/60 Hz, or 10 to 30 VDC (to be specified when ordering)
Power Consumption :	Approx. 6 VA (AC operation), approx. 8 W (DC operation)
Operating Temperature Range :	-10 to 50℃
Dimensions :	96(W) x 48(H) x 142(D) mm (with no option)
Panel Cut Dimensions :	$92^{+0.4}_{0}$ x $45^{+0.4}_{0}$ mm
Panel thickness :	0.8 to 5.0 mm
Weight :	Approx. 500 g

Standard Accessories: Unit seal. Instruction Manual

Optional Accessories:
AC power cables P-23 (for 100 VAC), P-28 (for 200 VAC)
BCD output cable N-43
BCD output printer cable N-44