WGI-400A

Instrumentation Amplifier

●Compact & general-purpose
●Wide input range

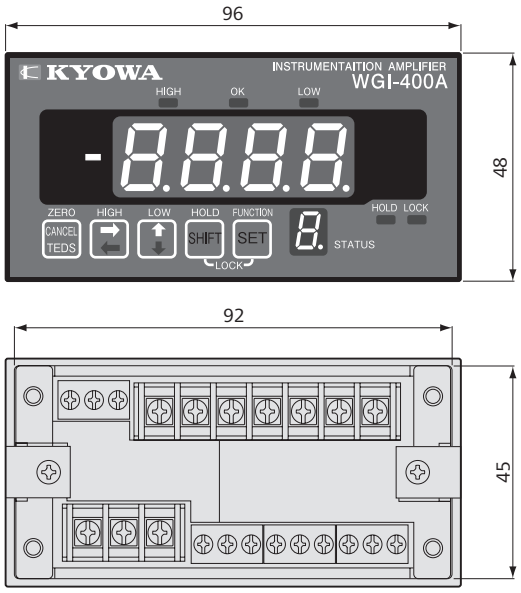
*Japanese version: Contact us.
Unless otherwise specified,
English version will be delivered.

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 power supply voltage range:
AC power supply (100 to 240 V)
DC power supply (10 to 30 V) (Selectable)
●Option: RS-232C, RS-485, BCD output

The WGI-400A is a compact general-purpose moderately priced 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



Models

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

Specifications

●Measuring Section	
Channels	1
Applicable Transducers	Strain-gage transducers
Applicable Bridge Resistance	87.5 to 1000 Ω (350 Ω, 4 in parallel connection)
Bridge Excitation	2 VDC, 30 mA or 4 VDC, 50 mA, switchable
Measuring Range	±3.2 mV/V (Including zero adjustment range)
Sampling Rate	Approx. 50 times/s
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)
Stability	Zero point: Within ±0.5 μV_{RTI} / °C Sensitivity: Within ±0.01%/°C
Decimal Point	Put to anywhere possible
Zero Functions	Any value in the input range is 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 Functions	Selectable from 0, 2, 4, 8, 16, 32, 64 or 128
Zero Tracking	By setting the time, width and operating range
Zero Approximation	A desired value is preset to let the indicator read 0 for any signal in a range of 0 to the preset value.
Adding Functions	Indicated value is set to a desired value (When executing zero compensation).
Original Value Display Functions	Enable to display input value in mV/V
Level Test	Display of arbitrary values possible
●Control Input	
Input Signals	4 (ZERO command, level test command and 2 pattern select commands)
●Control Output	
Output Signals	3 (HI, OK and LO)
Output Modes	Open collector
Rated Output	30 VDC, 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 Signals	±10 V or 4 to 20 mA, switchable
Nonlinearity	Within ±0.1% FS
Scaling	Set freely
Response Speed	Approx. 0.25 s
●Others	
Compliance	Directive 2014/30/EU (EMC) Directive 2014/35/EU (LVD) Directive 2011/65/EU (RoHS)
Power Supply	100 to 240 VAC, or 10 to 30 VDC (To be specified when ordering)
Power Consumption	Approx. 6 VA (AC operation) Approx. 8 W (DC operation)
Operating Temperature	-10 to 50°C
Dimensions	96 W x 48 H x 144 D mm (With no option)
Panel-cut Dimensions	$92.2^{+0.4}_{0}$ x $45.2^{+0.4}_{0}$ mm Panel thickness 0.8 to 5.0 mm
Weight	Approx. 300 g

Standard Accessories: Instruction manual, unit seal

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