WGA-120A

Carrier Type Instrumentation Amplifiers

Move into the future with reliable measurements

KYOWA

NEW PRODUCT INFORMATION

Carrier type instrumentation amplifiers strong against inverter noise

Features

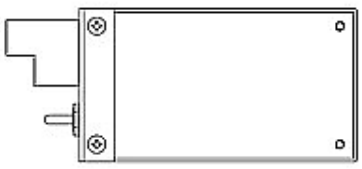
- Strong against inverter noise
- Rich in lineup for variety applications
- Voltage/current output switchable

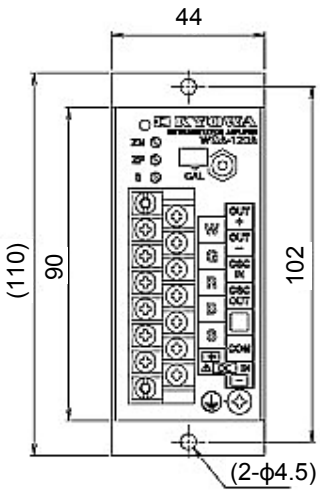
Models

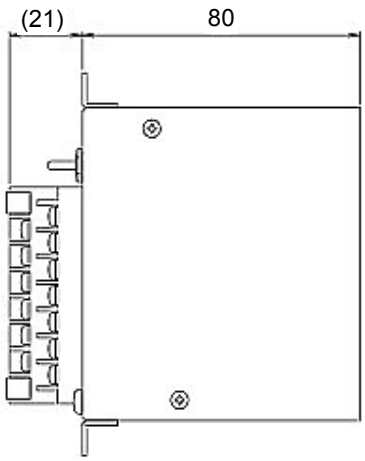
Model	Power requirements			Balance adjustment
WGA-120A-00	DC	DC10.5 to 15V	3.5W or less	Manual
WGA-120A-01	AC100V	AC90 to 110V	6.5VA or less	
WGA-120A-02	AC200V	AC180 to 220V	6.5VA or less	
WGA-120A-03	AC240V	AC216 to 264V	6.5VA or less	
WGA-120A-10	DC	DC10.5 to 15V	3.5W or less	Automatic
WGA-120A-11	AC100V	AC90 to 110V	6.5VA or less	
WGA-120A-12	AC200V	AC180 to 220V	6.5VA or less	
WGA-120A-13	AC240V	AC216 to 264V	6.5VA or less	

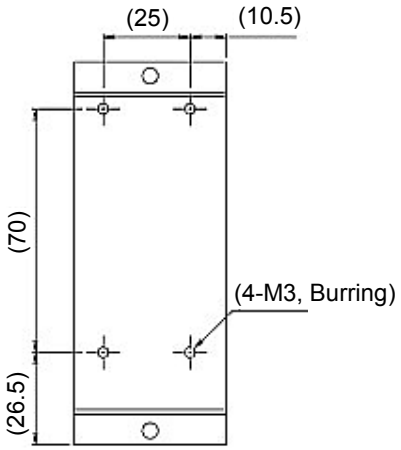
Dimensions

WGA-120A-00





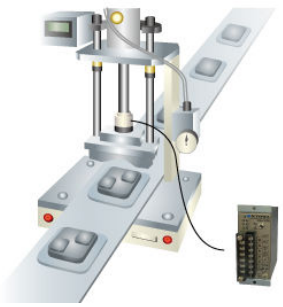




Specifications

No. of measuring channel	1
Applicable transducers	Strain gage transducers
Applicable bridge resistance	87.5 to 1000Ω (Up to four 350Ω transducers can be connected in parallel, bridge excitation voltage is limited to 2 or 1Vrms for transducers with bridge resistance 175Ω or less)
Bridge excitation	5Vrms, 2Vrms, 1Vrms, rectangular wave (Switchable by changing the internal jumper connection)
Input range	(see table below)
Rated output	Voltage: ±10V (Load resistance: 2kΩ or more) Current: 4 to 20mA (Load resistance: 500Ω or less, voltage output: 0 to 10V) (Switchable by changing the internal jumper connection)
Zero adjustment range	Within ±1.5mV/V, manual balance or auto balance model by selecting model.
Sensitivity adjustment range	x2000, x4000, x10000 (Switchable by changing the internal jumper connection) Adjustable between x0.4 and x1.0 by the trimmer
Calibration	Calibration by the parallel method 0.25mV/V, 0.05mV/V at 350Ω bridge resistance (Switchable by the internal jumper connection)
Frequency response	10, 30, 100, or 500 Hz (Switchable by changing internal jumper connection) Amplitude ratio at the cutoff point: -3dB Attenuation: -12dB/oct. (Excluding 500 Hz)
Signal-noise Ratio	53 dBp-p or more [Conditions] Sensitive: x10000, x0.5 (Adjustment by the trimmer), frequency response: 500z, bridge resistance: 120Ω, and bridge excitation: 2Vrms
Nonlinearity	Within ±0.1%FS
Stability	Temperature Zero: Within ±0.2μV_{RTI} / ℃, sensitivity: Within ±0.05% ℃ Time Zero: Within ±0.5μV_{RTI}/ H, sensitivity: Within ±0.2% /H [Conditions] Sensitive: x10000, x1.0, bridge resistance: 120Ω, and bridge excitation: 2Vrms
Operating temperature range	-10 to 50℃
Operating humidity range	20 to 85%RH (Noncondensing)
Dimensions	44(W)x90(H)x80(D) (Excluding protrusions)
Weight	DC power supply model: Approx. 350g AC power supply model: Approx. 450g
Panel cut dimensions	45(W)x93.4(H)
EMC Directive	EN61326-1 (Class A)
Low Voltage Directive	EN61010-1, EN61010-2-030 (Installation Category II, Pollution Degree 2, Measurement Category O)
RoHS Directive	EN50581
Optional accessories	AC power cable: P-23 (For AC200V); P-28 (For AC200V/240V) DIN rail mounting plate: EDP-70

Input range (mV/V)				
Sensitivity switch	Bridge excitation (Vrms)	Sensitivity adjustment range		
		x1	to	x0.4
x2000	1	±5	to	±12.5
	2	±2.5	to	±6.25
	5	±1	to	±2.5
x4000	1	±2.5	to	±6.25
	2	±1.25	to	±3.125
	5	±0.5	to	±1.25
x10000	1	±1	to	±2.5
	2	±0.5	to	±1.25
	5	±0.2	to	±0.5



Specifications are subject to change without notice for improvement.

Safety precautions Be sure to observe the safety precautions given in the instruction manual, in order to ensure correct and safe operation.

JQA-0821
JQA-EM4824

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