# Minebea

## SPECIFICATIONS TRANSMITTER

### CSA-503C

Spec. No.EN351503C-J

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1. General

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The instrument is a transmitter for the application with strain gage applied transducers.

### 2. Specifications

• Bridge power supply	DC10 V±0.3 V within 120 mA (Changeable to DC2.5 V or DC5 V) with remote sensing applied.		
• Applicable transducers	Up to 4 pieces of strain gage applied transducers $(350 \ \Omega)$ can be connectable.		
• Input range	0.3 mV/V to 3 mV/V		
• Output	$\pm 10$ V output (At the input of $\pm 0.3$ mV/V when bridge power supply is DC10 V.)		
• Output load resistance	$2 \mathrm{k} \Omega$ or more		
• Zero adjustment range	±2.4 mV/V		
Coarse adjustment	Rotary switch		
Fine adjustment	Zero adjustment trimmer		
• Non-linearity	0.01 %F.S.		
• Temperature coefficient			
Zero point	Within $\pm 0.45 \ \mu \text{ V/C}$ (Input conversion)		
Sensitivity	Within ±0.005 %F.S./°C		
• CALIBRATION	0.3 mV/V±0.0003 mV/V, 1 point Applicable Extension cable is Minebea's standard CAB–501 (6 cores) within 100 m. Except when zener barrier is in use.		
• CHECK	1 point		
• Frequency response range	10 Hz (1 Hz or 100 Hz can be changeable.)		
General specifications			
• Operating temperature/humic	lity range		
Temperature	-10 °C to 50 °C		
Humidity	Less than 80 %RH (Non condensing.)		
• Power supply			
Power supply voltage	AC100 V±10 V		
Power supply frequency	50/60 Hz		
Power consumption	Approx. 10 VA (At AC100 V)		
• Insulation resistance	$DC500 \text{ V}, 100 \text{ M}\Omega \text{ or more}$		
	between power supply line and case.		
• Withstand voltage	AC1 500 V for 1 min. between power supply line and the case.		
• Outline dimensions(W×H×D)			
	$42~\mathrm{mm}  imes 176~\mathrm{mm}  imes 164.4~\mathrm{mm}$ (Excludes protruding parts.)		
• Weight	Approx. 1.5 kg		



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## 4. Standard specifications at the time of shipment

• Bridge power supply	DC10 V
• Sensitivity	10 V output at the input of 0.3 mV/V (4 mA to 20 mA when optional P07 is applied.)
• Frequency response range	10 Hz
• Power supply	
Power supply voltage	AC100 V±10 V
Power supply frequency	50/60 Hz
5. Accessories	
• Instruction manual	1 piece
• Fuse	1 piece
• Minusdriver	1 piece
• Shortening bar between A–F	and C–G
	2 pieces

### 6. Options

#### 6-1. Specifications for current output

• P/No.	CSA503C-P07	
Outj	put	4 mA to 20 mA (Isolation)
Load	l resistance	$510 \ \Omega \ { m or \ less}$
Non	-Linearity	0.02 %F.S.
Tem	perature efficient	
Zero	point	$\pm 0.004$ %F.S./°C
Sens	sitivity	$\pm 0.005$ %F.S./°C

### 6-2. Automatic zero

• P/No CSA-503C-P99 Operating voltage for automatic zero

Within ±10 V

Required time for automatic zero

Within approx. 1 s.

Accuracy on automatic zero

	Within $\pm 5 \text{ mV}$
Non-Linearity	0.01 %F.S.
Temperature range	

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Zero point	Within ±0.005 %F.S./C
Sensitivity	Within ±0.005 %F.S.
Battery back-up time	Approx. 5 years (Lithium battery is used.)

### 6-3. Power supply voltage

• P/No.CSA503C-P61	$ m AC110V\pm11V$
• P/No.CSA503C-P63	$AC200 V \pm 20 V$
• P/No.CSA503C-P64	$AC220 V \pm 22 V$



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### 7. Outline dimensions



Specifications and outline dimensions and so on which have printed may subject to change for the purpose of improvement without notice.