

## **SPECIFICATIONS**

Spec. No.EN351561B-B

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**CSA-561B** 

Transmitter for Torque Transducer

1. Specifications

• Bridge power supply AC2.0 Vrms sine wave  $5 \text{ kHz} \pm 0.1 \text{ kHz}$ • Applicable transducers Strain gage applied torque transducer

0.5 mV/V to 3 mV/V $(1 \text{ mV/V}=2 000 \times 10^{-6} \text{ strain})$ • Input range

• Output ± 10 V output

 $(\pm 0.5 \text{ mV/V input}, \text{ at AC2.0 Vrms of bridge power supply.})$ 

 $2 k \Omega$  or more Output load resistance load resistance

Output load capacity  $0.1 \mu$  F or less

 $\pm 2.5 \text{ mV/V}$ • Zero point adjustment range

Coarse adjustment Automatic balance Fine adjustment Zero adjustment trimmer

> Resistance section Approx. 1 % ( $\pm 2.5$  mV/V), Up to 2 000pF is possible. Capacitance section

Automatic balancing time Approx. 1 s  $\pm 0.2$  %F.S. Accuracy Back-up time 24 h or more

0.05 %F.S. Linearity

• Effect due to temperature variation

 $\pm 0.1 \mu \text{ V/°C (Input conversion)}$ Zero point Within  $\pm 0.05$  %F.S./°C Sensitivity

• Calibration Setting with digital switch (0 to  $\pm 9999 \times 10^{-6}$  strain)

 $\pm 0.5 \%$ Accuracy

• Frequency response range DC to 2 kHz (Filter: W/B)

(1 Hz, 10 Hz, 100 Hz, 300 Hz, 1 kHz or W/B changeable)

10 Hz to W/B: +1 dB  $-3 \text{ dB} \pm 1 \text{ dB}$ , 1 Hz : +1 dB  $-3 \text{ dB} \pm 3 \text{ dB}$ ,

• Display Output voltage display  $0 \text{ to} \pm 10.000 \text{ Digital display (Green LED)}$ 

Sampling speed Approx. 4 times/s

• ERROR function When the output reaches to out of the range of warranty on

linearity.

(+10 V or more or -10 V or less), the display flashes 0.000 or -0.000 on and off and also ERROR will be shown.

(Photocoupler output)

• Remote function Automatic balance  $\pm$  CALIB

• LOCK function Automatic balance Prohibits the operation of  $\pm$  CALIB

(including ± CALIB of Automatic balance for remote sensing.)

MinebeaMitsumi Inc. Sensing Device Business Unit

Revised on Mar, 2017



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2. General specifications

• Operating temperature/humidity range

Temperature  $-10 \,^{\circ}\text{C} \, \text{to} \, 50 \,^{\circ}\text{C}$ 

Humidity 85 %RH or less (Non condensing.)

• Power supply

Power supply voltage AC100 V  $\pm$  0 V Power supply frequency 50/60 Hz

Power consumption Approx.10 VA(at AC100 V)

• Withstand voltage Between power supply and each input terminal (A, B, C, D)

AC1 000 V for 1 min

Between the output and case, and between the each input

terminal

(A, B, C, D, E) AC250 V for 1 min

• Outline dimensions(W×H×D) 42 mm ×176 mm×284.4 mm (Excluding protrusion.)

• Weight Approx. 1.5 kg

3. Standard specifications at the shipment

• Bridge power supply AC2 V rms

• Sensitivity 10 V output at 1 mV/V input

(4 mA to 20 mA with optional P07 is attached.)

• Frequency response range 10 Hz

4. Accessories

Instruction manual 1 pieceFuse 1 piece

• Power supply cable

(FA409-482-2M) 1 piece
• Minus driver 1 piece

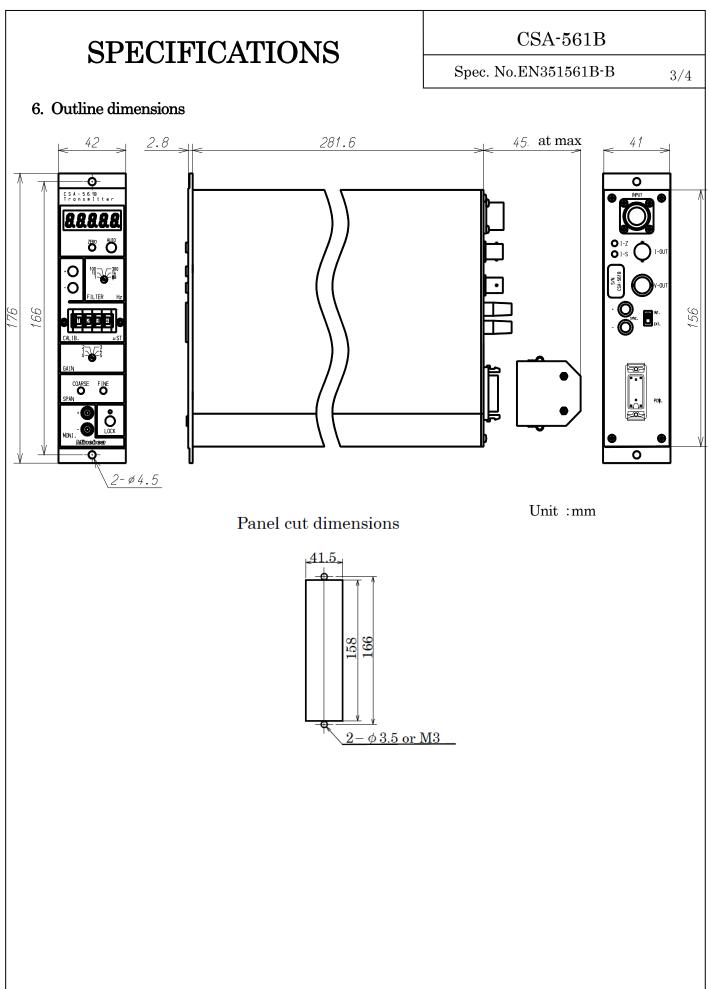
5. Options

5-1. Current output

 $\begin{array}{lll} \bullet \text{ P/N} & \text{CSA561B-P07} \\ \text{Output} & 4 \text{ mA to } 20 \text{ mA} \\ \text{Load resistance} & 510 \, \Omega \text{ or less} \\ \text{Linearity} & \pm 0.05 \, \% \text{F.S or less} \\ \end{array}$ 

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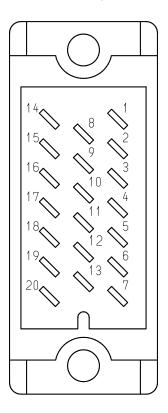
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## 7. Connector pin configuration (View from the rear panel)



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Pin No.	Function	
1	-CALIB	Input
2,3	GND	
4,5	Auto balance	Input
6,7	COM1	
8,9	AC power supply	
12,13	AC power supply	
14	BUSY	Output
15	ERROR	Output
16,17	COM2	
18,19	Synchronous terminal (SYNC)	Input• Output
20	+CALIB	Input

\*COM1 is applied for the common of −CALIB, +CALIB, Auto Balance and Synchronous terminal.

\*\*COM2 is applied for the common of BUSY and ERROR.

\*The terminals with plural pin number is short-circuited internally.

\*The connector model on rear panel

Connector : MR-20MW (Made by HONDA TSUSHIN KOGYO)
Mounting attachment : MR-R4+ (Made by HONDA TSUSHIN KOGYO)

\*The connector model on attached power supply cable

Connector : MR-20F (Made by HONDA TSUSHIN KOGYO)
Case : MR-20L+ (Made by HONDA TSUSHIN KOGYO)

<sup>\*</sup> Specifications and Outline dimensions and so on which have printed may subject to change for the purpose of improvement without notice.