

SPECIFICATIONS

CSA-561

Transmitter for Torque Transducer

SPEC.No.EN351561-B

1/3

1. General

- Bridge power supply AC2.0 V rms sine wave 5 kHz \pm 0.1 kHz
- Applicable transducers Strain gage applied torque transducer
- Input range 0.5 mV/V to 3 mV/V (1 mV/V = $2\,000 \times 10^{-6}$ strain)
- Output ± 10 V output
(± 0.5 mV/V input, at bridge power supply is AC2.0 V rms.)
- Output load resistance Resistance load 2 k Ω or more
Output capacity load 0.1 μ F or less
- Zero point adjustment range ± 2.5 mV/V
 - Coarse adjustment Automatic balance
 - Fine adjustment Zero adjustment trimmer
 - Resistance section Approx. 1 % (± 2.5 mV/V),
 - Capacitance section Up to 2 000 pF is possible.
 - Automatic balancing time Approx. 1 s
 - Accuracy ± 0.2 %F.S.
 - Back-up time 24 h or more
- Linearity 0.05 %F.S.
- Effect due to temperature variation
 - Zero point $\pm 0.1 \mu$ V/ (Input conversion)
 - Sensitivity Within ± 0.05 %F.S./
- Calibration Setting with digital switch (0 to $\pm 9\,999 \times 10^{-6}$ strain)
 - Accuracy ± 0.5 %
- 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 dB ± 1 dB, 1 Hz : +1 dB - 3 dB ± 3 dB
- Display Output voltage display 0 to ± 10.000 Digital display (Green LED)
Sampling 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 \pm CALIB of Automatic balance for remote sensing.)

2. General Specifications

- Operating temperature/humidity range
 - Temperature - 10 to 50
 - Humidity 85 %RH or less (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)

SPECIFICATIONS

- 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

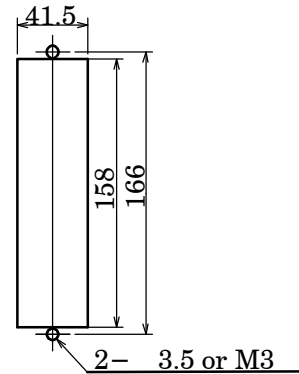
- Instruction manual 1 piece
- Fuse 1 piece
- Power supply cable 1 piece
- Minus driver 1 piece

5. Options

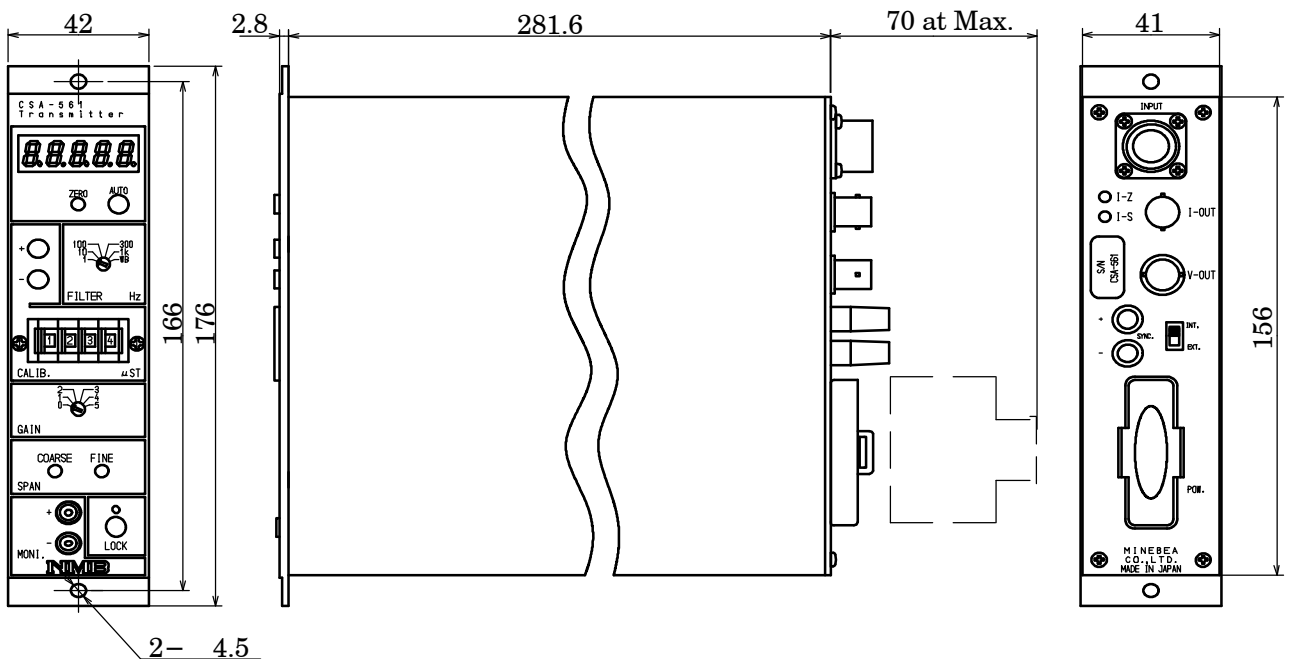
5-1. Current output

- P/N CSA561-P07
- Output 4 mA to 20 mA
- Load resistance 510 or less
- Linearity ± 0.05 %F.S or less

Panel cut dimensions



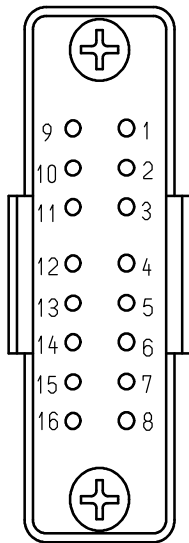
6. Outline dimensions



Unit : mm

SPECIFICATIONS

7. Connector pin configuration



Pin No.	Function	
1	- CALIB	Input
9	+CALIB	Input
2, 10	Auto balance	Input
3, 11	Synchronous terminal (SYNC)	Input · Output
4, 12	COM1	
5	BUSY	Output
13	ERROR	Output
6	COM2	
14	GND	
7, 15	AC power supply	
8, 16	AC power supply	

COM1 is applied for the common of - CALIB, +CALIB, Auto Balance and synchronous terminal.

COM2 is applied for the common of BUSY and ERROR.

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