

Specifications

Transmitter for Tie-Bar gage

CSA-593

Spec. No. EN351593-C

1/4

1. General

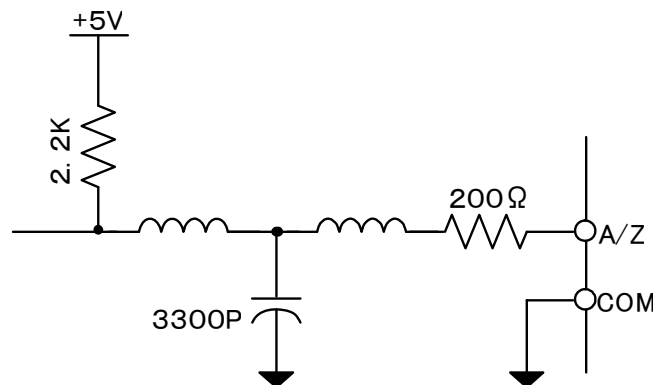
CSA-593 is a transmitter for one pair of tie-bar gage.

2. Specifications

- Bridge power supply DC5 V \pm 0.3 V within 30 mA
- Applicable transducers One pair of tie bar gage (350 Ω)
- Input range $\pm 500 \times 10^{-6}$ strain
- Output voltage ± 10 V
- Output load resistance 10 k Ω or more
- Sensitivity 10 V output at the input of 500×10^{-6} strain
- Non-linearity 0.02 %F.S. (Transmitter itself)
- Temperature coefficient
 - Zero $\pm 10 \mu\text{V}/^\circ\text{C}$ (Input conversion)
 - Sensitivity ± 0.05 %F.S./ $^\circ\text{C}$
- Frequency response range Approx. 100 Hz (Fixed)
- A/D sampling 2 000 times/s
- A/D internal resolution 24 bit
- Output frequency 2 000 times/s (Synchronous with A/D sampling rate)
- Output resolution Approx. 1/10 000
- Specifications of auto zero
 - Range Approx. $\pm 3\,000 \times 10^{-6}$ strain
 - Required time Approx. 50 ms
 - Accuracy within ± 5 V
 - External input 1 point

* The result of auto zero is not retained in blacking out.
- Check function
 - Output Approx. 5 V
 - External input 1 point

* This function is the usage for maintenance.
- Equivalent circuit of external input of auto zero and external input for check.



Specifications

CSA-593

Spec. No. EN351593-C

2/4

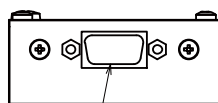
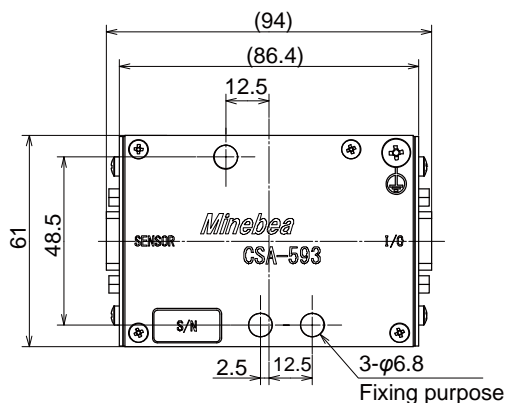
3. General specifications

- Operating temperature / humidity range
 - Temperature -10 °C ~ 70 °C
 - Humidity 80 %RH or less (Non condensing)
- Power supply
 - Power supply voltage DC24 V (Permissible variable range DC20 V ~ DC26 V)
 - Power consumption within approx. 50 mA (at DC24 V)
- Outline dimensions (W × H × D)
 - 86.4 mm × 61 mm × 24.5 mm
 - (Excludes connector and protruding parts.)
- Weight Approx. 0.5 kg

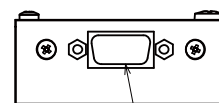
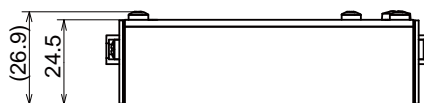
4. Accessories

- Instruction manual 1 piece

5. Outline dimension



Tie-bar gage input side
D-SUB 9 pin female



I/O signal side
D-SUB 9 pin male

Unit: mm

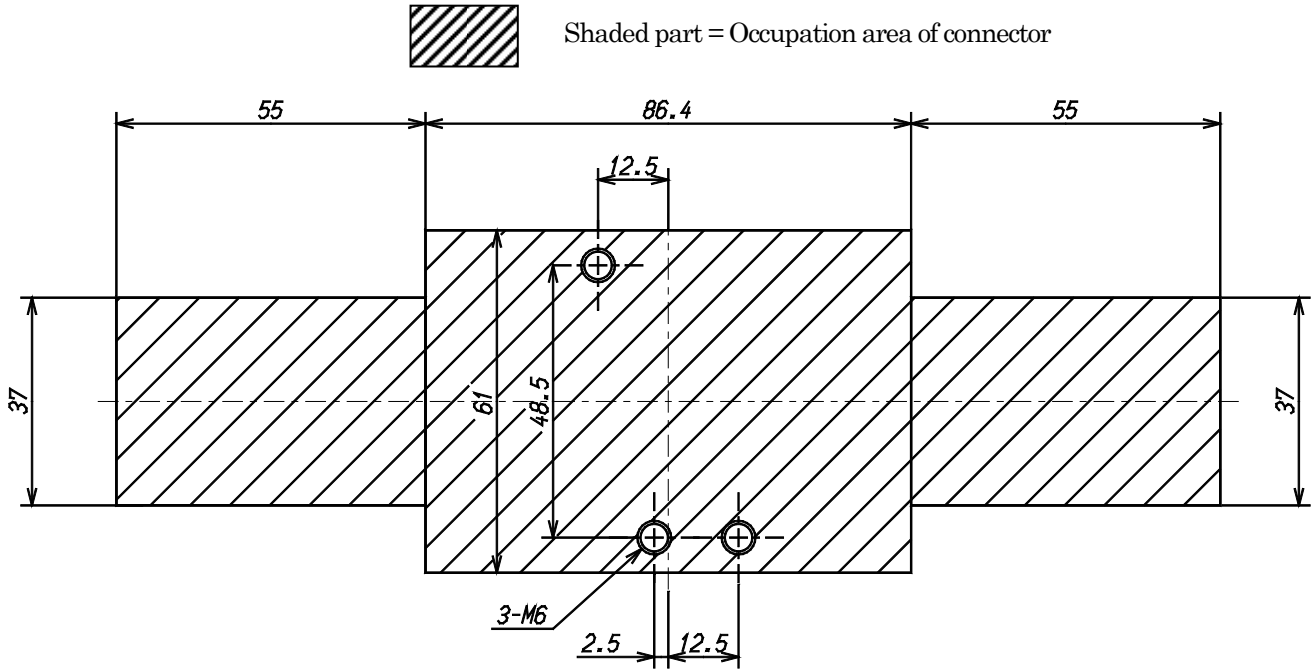
Specifications

CSA-593

Spec. No. EN351593-C

3/4

6. Installation hole dimensional drawing



Unit: mm

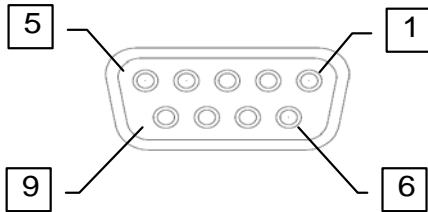
Specifications

CSA-593

Spec. No. EN351593-C

4/4

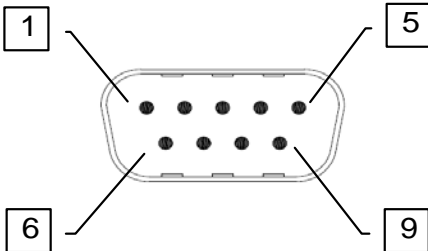
7. Disposition of connector pin



* Figure of a connector for tie-bar gage seen from uniting side. (Socket side insert)

Connector for tie-bar gage (SENSOR)

Pin No.	Name	Usage
1	A	Tie-bar gage
2	B	Tie-bar gage
3	B'	Tie-bar gage
4	D	Tie-bar gage
5	D'	Tie-bar gage
6	Shield	Tie-bar gage
7	C	Tie-bar gage
8	N.C.	No use
9	Shield	Tie-bar gage



* Figure of a I/O connector seen from uniting side. (Pin side insert)

I/O connector (I/O)

Pin No.	Name	Usage
1	+24V	DC24 V
2	V-OUT+	Voltage output
3	V-OUT-	
4	for adjustment 1	No use
5	for adjustment 2	
6	+24V COM	DC24 V (Common)
7	A/Z	Input of Auto Zero
8	CHECK	Input of Check
9	COM	Common for A/Z and Check

Suitable plug (for I/O connector) : Equivalent to DE-9SF-N (JAE)

- * Connector plug is not attached.
- * The screw for fixing base is inch type thread.
- * Don't connect with N.C. pin, adjustment 1 and adjustment 2.

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