

Transmitter for optical transmission method torque meter OPT-563B

2023/03/22

Features



- Special transmitter for optical transformer method torque meter.
- The calibration data for four torque meters can be recorded and changed.
- Digital compensation of asymmetry, linearize and twist direction reversing can be executed.
- Up to 2 points as analog output for torque is selectable from a voltage output (standard), current output or frequency output.
- The analog output for the rotational speed is selected from either of voltage output or current output, and are selected whether or not to exist of the frequency output.
- Digital output is selectable one from RS-232C interface, RS-422/485 interface, Profibus interface or CANopen interface.

Specification

Specification name	Specification contents
Bridge power supply	24 VDC \pm 2 VDC, 2 A
Applicable transducer	Optical transformer method torque transducer
Input range	Torque signal 5 kHz \sim 15 kHz (based on signal RS-485) Rotation speed signal 0 Hz \sim 50 000 Hz
	Analog output (Standard) DC \pm 10 V (at \pm rated output of torque transducer)

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Output voltage	Digital output (Option) Select one from RS-232C, RS-422/485, PROFIBUS or CANopen.
Zero adjustment range	±2 %R.O.
Digital compensation	Asymmetry compensation ±10%R.O. Linearize compensation 10 points at the maximum Twist direction reversing compensation The direction of the twist and the output signal are reversed.
Non-linearity (Display and voltage output)	0.01 %F.S. (Voltage output)
CHECK	Approx. 80 % of rated output (Set by function)
Temperature efficient	Zero point ±0.025 %R.O./10°C, Sensitivity ±0.025 %R.O./10°C
Frequency response range	(Changeable to 1 Hz, 10 Hz, 30 Hz, 50 Hz, 100 Hz, 300 Hz, 500 Hz or 1 kHz) Above is 10 Hz ~ 1 kHz : -3 dB±1 dB, 1 Hz : -3 dB±3 dB
Torque display section	Display of output 0 ~ ± 99 999 digital display (Green LED) Display type Analog output, Torque Condition display A/Z, LOCK, CHECK, H, M, ERROR Display of unit Changeable to V, Nm or kNm Display rate Approx. 20 times/s (Changeable to 4 times/s)
Rotation speed display section	Display of output 0 ~ ± 27 500 digital display (Green LED) Display type Rotation speed Condition display LOCK Display of unit r/min Display rate Approx. 20 times/s (Changeable to 4 times/s)
External control input signal	Digital filter, Sheet key lock, Changeover of calibration data, Indication of luminous energy decrease
Operating temp. / humidity range	0 °C ~ 50 °C, 85 %RH orless (Non condensing)
Power supply	100 VAC ~ 240 VAC, 50/60 Hz (Permissible variable range : 85 VAC ~ 264 VAC),
Power consumption	Approx. 60 VA (at 100 VAC)
Outline dimensions (WxHxD)	68 mm x 209 mm x 252 mm (Excludes protruding parts)
Weight	Approx. 2 kg

Options

Current output

Frequency output

RS-232C interface

RS-422/485 interface

PROFIBUS interface

CANopen interface

Rotation detector MP-987

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rotation detector OPT-563B