



Static Torque Dual Flange STDF

USER'S MANUAL



Read the user's manual carefully before starting to use the unit or software. Producer reserves the right to implement changes without prior notice.

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STDF Torque

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1. Technical Specification

| Model | STDF |
|------------------------------|---------------------------------|
| Rated capacity (R.C.) | 10Nm ~ 1000Nm |
| Rated output (R.O.) | 1mV/V ±1% |
| Non-linearity | 0.3% (0.1kgf-m under 0.5% R.O.) |
| Hysteresis | 0.3% (0.1kgf-m under 0.5% R.O.) |
| Repeatability | 0.02% of R.O. |
| Terminal resistance, input | 350Ω±1% |
| Terminal resistance, output | 350Ω±1% |
| Insulation resistance | 2000ΜΩ |
| Temp. effect on zero balance | ±0.1% R.O. /10°C |
| Temp. effect on rated output | ±0.1% Load /10°C |
| Excitation recommended | 10V DC |
| Safe overload | 120% R.C. |
| Cable length | Ø5.5 4core cable, 3m |

02. Electrical Connection

The STDF output signal is mV/V based on strain gauges. An amplifier is required for condition the signal. All DC amplifiers and carrierfrequency amplifiers designed for strain gauge measurement systems can be used.

Connection to Amplifier



| 5 Pin | Function |
|-------|--|
| Pin 1 | Signal Positive ^(Sig + Vie) |
| Pin 2 | Signal Negative ^(Sig - Yie) |
| Pin 3 | Excitation Positive (Exc + Ve) |
| Pin 4 | Excitation Negative |
| Pin 5 | Shield - |

02. Electrical Connection

Free cable ends

| Wire | Function |
|-----------------|--------------------------------------|
| Green | Signal Positive ^(Sig +Ve) |
| Yellow | Signal Negative ^(Sig-Ve) |
| Brown | Excitation Positive (Exc + Ve) |
| White | Excitation Negative (Exc - Ve) |
| Aluminium Color | Shield C |

The output signal is positive for the above connection. If negative output is required, interchange the polarity of output signal.



03. Product Description



04. Procedure

Mount on flat and clean surface required.



Torque must be in center in-line of axis whether its clockwise (or) anticlockwise direction



04. Procedure

Mount the sensor by tighten screws in a 12 o'clock, 60'clock, 9 o'clock, and 3 o'clock in a cross like manner (the same technique that is used when bolting your tires).



| Screw Size | Torque (NM) |
|------------|-------------|
| 1 | |
| | |
| | |
| | |
| | |
| | |

04. Procedure

When installing the sensor, connect it to an instrument and monitor the output to prevent possible overload. Use koal touch indicator If not sure about force to be measured. Use feedback control to prevent sensor from overloaded. If not sure about torque to be measured. Use feedback control to prevent sensor from overloaded.



In an environment with a high amount of moisture or humidity, create a drip loop on the cable to prevent any water from flowing into the sensor.

