# F326 Flange Mounted Motor Torque Transducer

#### Standard Range 20Nm

- $\bigcirc$  Standard motor mounting fixings
- ⊘ Universal motor mounting
- $\bigcirc$  Static motor installation only
- Oust proof construction
- ⊘ Custom ranges
- Traceable calibration with certificate included in the standard price

# Specification

Parameter	Value	Unit
Non-linearity - Terminal	$\pm 0.1$	% RT
Hysteresis	$\pm 0.4$	% RT
Creep - 20 minutes	±0.1	% AT
Repeatability	±0.05	% RT
Rated output - Nominal	2.1	mV/V
Rated output - Rationalised	2.0	mV/V
Rationalisation tolerance	±0.5	% RT
Zero load output	$\pm 4$	% RT
Temperature effect on rated output per °C	±0.005	% AT
Temperature effect on zero load output per °C	±0.005	% RT
Temperature range - Compensated	-10 to +50	°C
Temperature range - Safe	-10 to +80	°C
Excitation voltage - Recommended	10	V
Excitation voltage - Maximum	20	V
Bridge resistance	700	Ω





Insulation resistance - Minimum at 50Vdc	500	MΩ
Structural stiffness	Range dependant	N/m
Sealing	Dust proof	
Weight - Nominal (excluding cable)	8.5	kg

# The F326 fits between a motor and its mounting structure acting as a low profile coupling or adaptor plate.

The motor shaft passes through the centre of the F326, the resultant torque reaction on the motor stator is equal and opposite to the shaft torque. Torque is transmitted from the motor stator through the F326 transducer to the earth structure or chassis. This makes the F326 suitable for many process applications, examples are; Bulk powder handling - mass flow measurement Rheology - liquid viscosity measurement Mechanical handling - conveyor belt drive torque F326 transducers can be designed for most motor drive applications where the motor is itself static. We are happy to design variants of this transducer to meet your specific requirements. Please consult our engineering department.

## Order Codes

Code	Description
	See the loadcell ordering code sheet for more details. Add range in the required force units. Most F326 loadcells are manufactured to special requirements and are given an F326-Zxxxx number.

# **C**<sub>Notes</sub>

- AT = Applied torque.
- RT = Rated torque.
- Temperature coefficients apply over the compensated range.
- The motor mass can create an initial zero change and is replicated during our calibration.

# Connections

The loadcell is fitted with 2 metres of PVC insulated 4 core screened cable type 16-2-4C.

Excitation + = Red, Excitation - = Blue, Signal + = Yellow, Signal - = Green, Screen = Orange. The screen is not connected to the loadcell body.

### Files



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