

Reaction Torque Sensors

Motor Flange - SAE Flange [01298]

Accurately measure torque with hydraulic motor and pump load adapters and eliminate the guesswork of how hose pressure relates to drive torque with Sensor Developments SAE Type 2 reaction torque sensors. The reaction torque sensor features male and female SAE type flanges for easy integration in between the motor and load adapter. Various capacities and SAE flanges are available. This approach can also be adapted to other flange interfaces. Please contact factory regarding custom configurations.



SPECIFICATIONS

| | |
|-----------------------------------|-------------------|
| Capacity | 1400 in-lbs. |
| Overload capacity | 150% of F.S. |
| Output at F.S | 2.0 mV/V nominal |
| Non-linearity | 0.10% of F.S. |
| Hysteresis | 0.10% of F.S. |
| Zero balance | 1.00% of F.S. |
| Compensated temperature | 70 to 170°F |
| Useable temperature | -65 to +250°F |
| Temperature effect on zero | 0.002% of F.S./°F |
| Temperature effect on span | 0.002% of Rdg./°F |
| Bridge resistance | 350 Ohms |
| Excitation voltage, maximum | 20 Vdc |

Motor Flange - C-face Mount [01291]

This unique style torque sensor is designed to measure the reaction forces exerted on the motor housing that feature a C-face mount. SDI's model 01291 is directly mounted to the motor's flange face as the main interface between it and the torque load. It can be used with variable displacement motors, fluid meters, linear actuators, and other drive motors to measure the output torque, in real-time and at the source. The use of this sensor greatly reduces the potential of electrical noise due to bearings or slip-ring brushes, and allows for more extreme environmental exposures, such as at sea or at remote field sites.



SPECIFICATIONS

| | |
|-----------------------------------|-------------------|
| Capacity | 500 in-lbs. |
| Overload capacity | 150% of F.S. |
| Output at F.S | 2.0 mV/V nominal |
| Non-linearity | 0.10% of F.S. |
| Hysteresis | 0.10% of F.S. |
| Zero balance | 1.00% of F.S. |
| Compensated temperature | 70 to 170°F |
| Useable temperature | -65 to +250°F |
| Temperature effect on zero | 0.002% of F.S./°F |
| Temperature effect on span | 0.002% of Rdg./°F |
| Bridge resistance | 350 Ohms |
| Excitation voltage, maximum | 20 Vdc |