# EATON Lebow Products Product Information

**Eaton Corporation**
1728 Maplelawn Road
P.O. Box 1089

Troy, Michigan 48099
Telephone (313) 643-0220
TWX (810) 232-4818

## STRAIN GAGE REACTION TORQUE SENSOR

MODEL 2110 - 5K S/N 705 CALIBRATION DATE: 2/29/88

SPECIFICATIONS:

RATED CAPACITY..... 5,000 In. Lbs.
MAX. LOAD (without zero shift)..... 50% overload (150% of rated capacity)
SIGNAL SENSOR..... 4 arm bonded strain gage bridge
BRIDGE RESISTANCE..... 350 ohms nominal
MAX. BRIDGE EXCITATION..... 20 volts DC or AC RMS
COMPENSATED TEMP. RANGE..... +70 deg. F to +170 deg. F
USEABLE TEMP. RANGE..... -65 deg. F to +200 deg. F
*EFFECT OF TEMP. ON ZERO..... ±0.002% of rated capacity/deg. F
*EFFECT OF TEMP. ON OUTPUT..... ±0.002% of reading/deg. F
NONLINEARITY..... ±0.02 % of rated capacity
OUTPUT..... CW+ 2.104 mV/Volt at rated capacity
CCW- 2.104 mV/Volt at rated capacity

*Within compensated temperature range

ELECTRICAL CONNECTIONS: Western Regional Wiring Code

RECEPTACLE: Pig Tails MS-3102A-14S-5P OR PTO2E-10-6P
MATING CONNECTOR: MS-3106A-14S-5S PTO6W-10-6S

| PINS | FUNCTION | RESISTANCE |
|---|---|---|
| RED A(+) and D(-) BLK | Excitation | 372.4 ohms |
| GRN B(+) and C(-) WHT | Signal | 350.7 ohms |

CALIBRATION:

A precision wire wound resistor, when shunted across one leg of the strain gage bridge, produces an electrical signal equivalent to an applied torque. This shunt calibration is valid only when used with high input impedance indicators. The equivalent values below were determined by factory calibration.

| LOAD VALUE | | ACROSS PINS | RESISTOR VALUE |
|---|---|---|---|
| 3,470 In. Lbs. | CW(+) | GRN B and A RED | 60 K ohms |
| 3,473 In. Lbs. | CCW(-) | GRN B and D BLK | 60 K ohms |