

800-2XX0 Pressure Transducers

Product Information Sheet

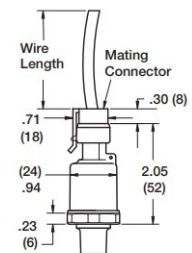
Overview

The family of pressure transducers has a stainless steel housing with a 1/8" male national pipe thread (NPT) fitting. The rugged design makes the transducer compatible with all HFC/HCFC refrigerants, water, glycol, CO₂, and ammonia. The sensor includes a 20' cable with a weather-proof Packard connector to allow for ease of sensor replacement. The sensor is available in six pressure ranges. The specifications for each sensor are listed below:


Emerson Part Number	800-2100	800-2200	800-2500	800-2650	800-2710	800-2720
Pressure Range	0-100 PSI	0-200 PSI	0-500 PSI	0-650 PSI	0-1000 PSI	0-2000 PSI
Proof Pressure (PSI)	200	400	1000	1087	2000	4000
Burst Pressure (PSI)	500	1000	2500	3250	5000	10000
Supply Current	10mA max			13mA max		
Max per MultiFlex or 16Al (50mA max)	5			3		
Accuracy	Less than ±2% span			Less than ±2.5% span		
Operating Supply Voltage	5.0±0.05 VDC 1%					
Output Voltage	0.5 to 4.5 VDC					
Output Load	10 kOhm min					
Insulation Resistance	Greater than 100 MOhm at 50 VCD for 1 minute					
Operating Temperature	-40°F to +257°F (-40°C to +125°C)					
Storage Temperature	-40°F to +257°F (-40°C to +125°C)					
Durability	Greater than 1 million cycles					
Response Time	Less than 5 msec					



P/N 800-2100



P/N 800-2XX0 Dimensions

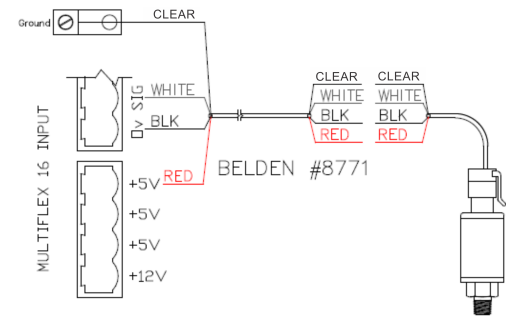
Emerson Part Number	800-2100	800-2200	800-2500	800-2650	800-2710	800-2720
Vibration	11 g					
Drop Test	1 meter on 3 axis					
Electrical Connection	Packard Electric Metri-Pack Series					
Pressure Connection	1/8- 27 NPT					
Vacuum Tightness	Yes					
Agency Approval						

Installation

The sensor connections to the input point on the 16AI board are polarity sensitive. The sensor is connected as shown in the wiring diagram. The sensor can be wired to any available point on the 16AI board.

The dip switch for the 16AI input should be set to the ON position.

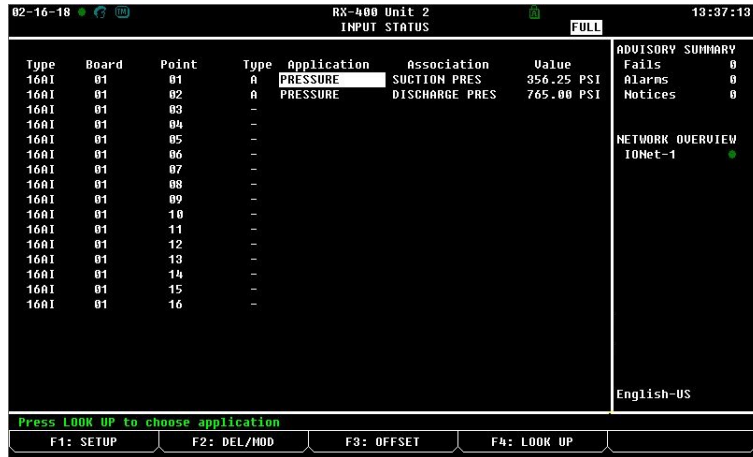
ONLY CONNECT THE PRESSURE TRANSDUCER TO A +5V DC TERMINAL.



During routine troubleshooting and commissioning, transducer may be exposed to a vacuum environment.

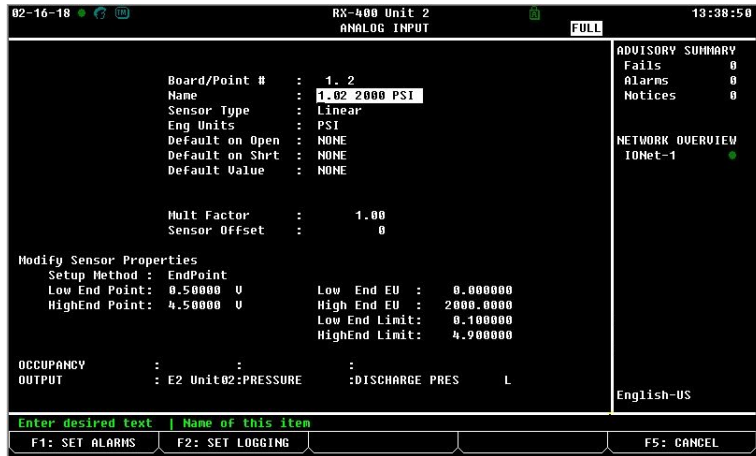
E2 Programming - Manually Set Up Pressure Transducer Inputs


1. Press **Log In/Out** and log in to the E2 with Level 4 access (default login USER/PASS).
2. Press **Alt** + **I** to view the *INPUT STATUS* screen.
3. Use the arrow keys to highlight the correct board and point for the pressure transducer.



4. Press **F1** to create an analog input and set the following parameters:
 - a. Change Sensor Type to Linear
 - b. Change Eng Units to PSI
 - c. Setup Method: Endpoint
 - d. Low End Point: 0.5V
 - e. HighEnd Point: 4.5V
 - f. Low End EU: 0
 - g. High End EU: the Highest Pressure range based on the model
 - h. Low End Limit: 0.1
 - i. HighEnd Limit: 4.9





5. Type in the desired name for the point in the point **Name** field.
6. Use the arrow keys to highlight the **Sensor Type** field and press **F4** to change the sensor type.
7. For an 800-2100, press **E**; for an 800-2200, press **F**; for an 800-2500, press **G**; for an 800-2650, press **6**.
8. Press **Enter**  to accept the sensor input.

