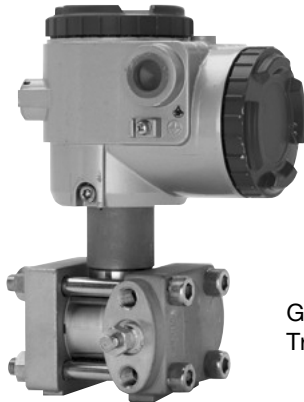


**VARIABLE SPEED PUMPING SYSTEMS**  
**PRODUCT DATA BULLETIN**

**POWERSAV®**

**SENSOR/  
 TRANSMITTERS  
 (ST-SERIES)**

**PRESSURE AND DIFFERENTIAL PRESSURE  
 SENSOR/TRANSMITTERS**



Gauge Pressure  
 Transmitter ST-101



Differential Pressure  
 Transmitter ST-102

The rugged ITT Bell & Gossett Pressure (ST-101) and Differential Pressure (ST-102) Sensor/Transmitters precisely measure system conditions and transmit a proportional 4 to 20mA dc signal to the Technologic Controller.

These capacitance type units are factory calibrated to a standard range, but can be re-calibrated at the factory to meet a variety of conditions.

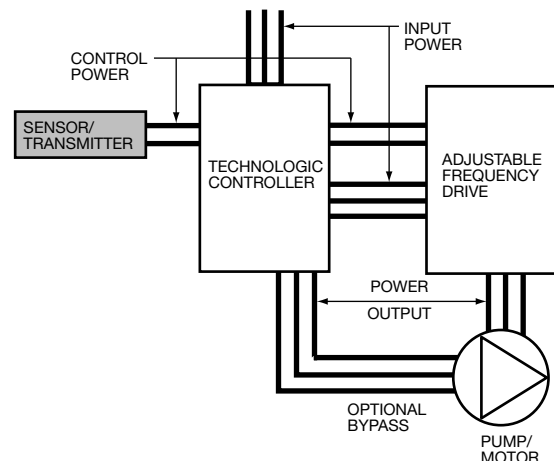
**INSTALLATION CONSIDERATIONS**

- Standard 18 gauge 2 wire shielded cable located in a conduit separate from high voltage wiring
- 24 vdc power supplied from Technologic Controller
- 1/4 inch NPT piping connections

**STANDARD FEATURES**

- Completely self contained two wire unit
- Takes accurate pressure readings and relays them to the Technologic controller up to 2000 feet away
- No separate power source required for distances less than 2000 feet
- All wetted parts are 316 stainless steel
- Built-in RFI filter effective from 20 to 1000 MHz
- Housed in IEC IP67 & NEMA 6/6P enclosure
- Unit accuracy is 0.07% full span
- Withstands static pressures up to 2300 PSI (ST-102)
- Mounting hardware
- 3 Valve bypass manifold (optional)
- Standard Calibration:  
 ST-101: 0-50 psig  
           0-150 psig  
 ST-102: 0-40 psid  
           0-70 psid  
           0-100 psid
- Approximate weight:  
 ST-101: 8 lbs.  
 ST-102: 10 lbs.

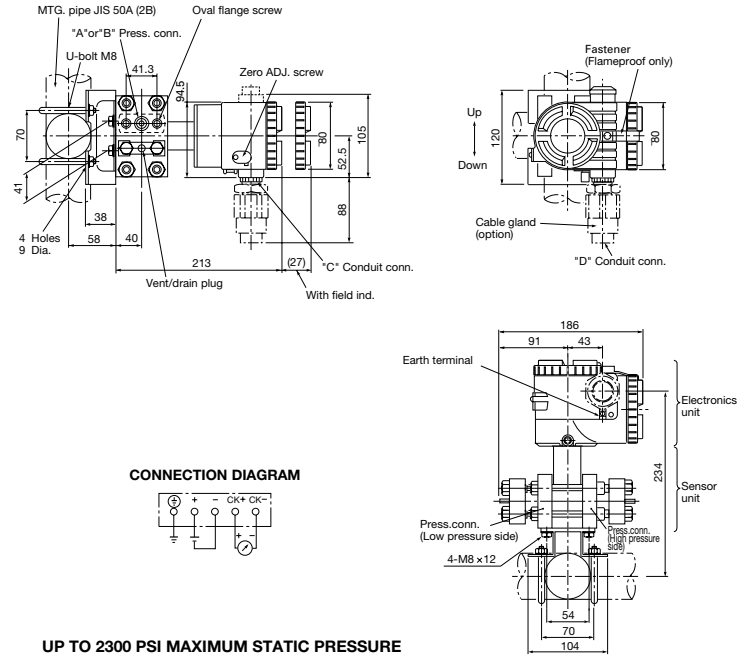
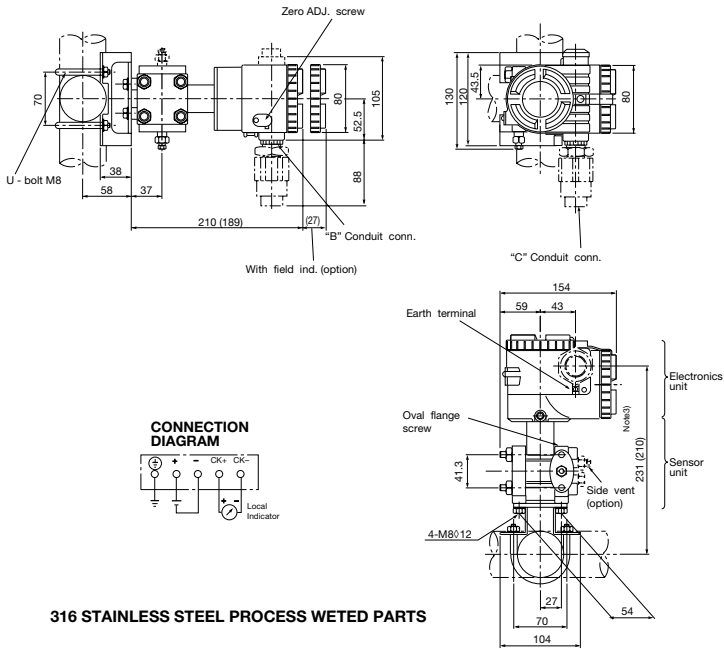
**POWERSAV®  
 BLOCK DIAGRAM**



*Engineered for life*



## OUTLINE DIMENSION DRAWINGS DIMENSIONS IN MILLIMETERS



## Sensor/Transmitter Specification

### Pressure Transmitter # ST-101

Furnish ( ) field mounted gauge pressure transmitter(s) as indicated on plans for measuring gauge pressure and transmitting an isolated linear 4-20 mA dc output for use in a standard two-wire 24V dc system. The unit shall be accurate to  $\pm 0.07\%$  of full span, have an adjustable span limit between \_\_\_\_\_ and \_\_\_\_\_ psi and shall withstand over ranges up to a static pressure of \_\_\_\_\_ psi with negligible change in output. It shall have stainless steel wetted parts with 1/4" NPT process connection. Unit shall be protected against radio frequency interference and shall have a water tight (NEMA Type 6/6P) electrical enclosure with 1/2" NPT conduit connection.

### Differential Pressure Transmitter # ST-102

Furnish ( ) field mounted differential pressure transmitter(s) as indicated on plans for measuring differential pressure and transmitting an isolated linear 4-20 mA dc output for use in a standard two-wire 24V dc system. The unit shall be accurate to  $\pm 0.07\%$  of full span, have an adjustable span limit between \_\_\_\_\_ and \_\_\_\_\_ psi and shall withstand over ranges up to a static pressure of 2300 psi with negligible change in output. It shall have stainless steel wetted parts with 1/4" NPT process connection. A 3 valve bypass manifold shall be available as an option. Unit shall be protected against radio frequency interference and shall have a water tight (NEMA Type 6/6P) electrical enclosure with 1/2" NPT conduit connection.

