2x2x9.5C Series e-80SC
In-Line Mounted Centrifugal Pumps

SPECIFICATIONS

FLOW
HEAD
HP
RPM
VOLTS
CYCLE
ENCLOSURE
APPROX. WEIGHT
SPECIALS

MATERIALS OF CONSTRUCTION

- Stainless Steel Fitted

MAXIMUM WORKING PRESSURE

- 175 psi (12 bar) with 125# ANSI flange drilling
- 250 psi (17 bar) with 250# ANSI flange drilling (requires 250# Seal)

MOUNTING

- In-Line Piping
- Flange Supports

TYPE OF SEAL

- Standard Inside Unitized (EPR/Carbon-Ceramic)
- Inside Unitized (EPR/Carbon-Tungsten Carbide)-250#
- Inside Unitized (FKM/Carbon-Ceramic)
- Inside Unitized (EPR/SiCar/SiCar/SS)
- Other seal, see description
- Outside (EPR/Carbon-Ceramic)-250#
- Outside (FKM/Carbon-Ceramic)-250#

PUMP VARIABLE SPEED CONTROL

- Integrated Technologic® Sensorless Control (ITSC)
- Integrated Technologic® (IT)
- External input by others
- Pressure Sensor(s)
- Differential Pressure Sensor(s)
- Flow Sensor(s)
- By Others
2x2x9.5C
Series e-80SC
In-Line Mounted Centrifugal Pumps

SPECIFICATIONS
FLOW _______ HEAD _______
HP _______ RPM _______
VOLTS _______ INPUT _______
CYCLE _______ PHASE _______
ENCLOSURE _______
APPROX. WEIGHT _______
SPECIALS _______

MATERIALS OF CONSTRUCTION
☐ Stainless Steel Fitted

MAXIMUM WORKING PRESSURE
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MOUNTING
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PUMP VARIABLE SPEED CONTROL
☐ Integrated Technologic® Sensorless Control (ITSC)
☐ Integrated Technologic® (IT)
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TYPE OF SEAL
☐ Standard Inside Unitized (EPR/Carbon-Ceramic)
☐ Inside Unitized (EPR/Carbon-Tungsten Carbide)-250#
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### 2x2x9.5C
#### Series e-80SC
Centrifugal Pump Submittal - In-Line Piping

**DIMENSIONS - Inches (mm)**

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<th>MOTOR FRAME</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E (max)</th>
<th>F</th>
<th>G</th>
<th>H (max)</th>
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<th>250# ANSI</th>
<th>R</th>
<th>V (min)</th>
<th>Suct/Disch</th>
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Dimensions are subject to change. Not to be used for construction purposes unless certified.

**NOTE:** For TEFC add 1-1/2” to dimensions E & H.
### Dimensions - Inches (mm)

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NOTE: For TEFC add 1-1/2" to dimensions E & H.
## 2x2x9.5C Series e-80SC
In-Line Mounted Centrifugal Pumps With Integrated Technologic Control

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<thead>
<tr>
<th>TECHNOLIGIC STANDARD FEATURES</th>
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<tbody>
<tr>
<td><strong>CONTROL METHOD WITH INTEGRATED TECHNOLOGIC® SENSORLESS CONTROL (ITSC)</strong></td>
<td>Factory configured for sensorless operation.</td>
</tr>
<tr>
<td><strong>CONTROL METHOD WITH INTEGRATED TECHNOLOGIC® (IT)</strong></td>
<td>Field configurable for sensor by others, building management system input, or optional sensor(s) provided.</td>
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<tr>
<td><strong>ENCLOSURE</strong></td>
<td>NEMA 12 (same as IP55 &amp; UL type 12)</td>
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<tr>
<td><strong>POWER DISCONNECT SWITCH</strong></td>
<td>Included standard. Fused Disconnect Switch optional with three phase input voltage.</td>
</tr>
<tr>
<td><strong>HARMONIC SUPPRESSION</strong></td>
<td>Integrated non-saturating dual DC link reactors provide better harmonic performance than a 5% AC line reactor.</td>
</tr>
<tr>
<td><strong>COOLING</strong></td>
<td>Fan-cooled through temperature controlled and easy replacement.</td>
</tr>
<tr>
<td><strong>AMBIENT TEMPERATURE RATING</strong></td>
<td>14°F to 113°F (-10°C to 45°C)</td>
</tr>
<tr>
<td><strong>COMMUNICATION PROTOCOLS</strong></td>
<td>BACnet, Modbus RTU, N2 Metasys, FLN Apogee</td>
</tr>
<tr>
<td><strong>ANALOG INPUTS</strong></td>
<td>2 configurable for either voltage (0 to 10VDC) or current (0/4 to 20mA)</td>
</tr>
<tr>
<td><strong>ANALOG OUTPUTS</strong></td>
<td>1 (0/4 to 20mA) up to 500 ohm load accurate to 1% of full scale</td>
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<tr>
<td><strong>DIGITAL INPUTS</strong></td>
<td>4 (0 to 24VDC), NPN or PNP, 0 to 24VDC, on 5 msec scan interval, Up to 2 can be configured as pulse inputs.</td>
</tr>
<tr>
<td><strong>DIGITAL OUTPUTS</strong></td>
<td>2 (0 to 24VDC), 40mA max current, configurable as pulse outputs.</td>
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<tr>
<td><strong>RELAY OUTPUTS</strong></td>
<td>2 programmable, 240VAC or 400VAC up to 2 A</td>
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<tr>
<td><strong>MINIMUM CONTROL HEAD</strong></td>
<td>____ ft (default set to 40% of design head if not unknown)</td>
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**Xylem Inc.**
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847)966-3700  Fax: (847)965-8379
www.bellgossett.com
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### DIMENSIONS - Inches (mm) TC SHAFT MOTORS

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<th>Hv</th>
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Kv=2 (50)
Pressure Sensor/Transmitter For Pumps with TECHNOLOGIC® Drives

**FEATURES**
- 4-20mA output
- 10-28 VDC supply voltage
- Operating Temperature: -40 to 85°C (-40 to 185°F)
- Storage Temperature: -40 to 100°C (-40 to 212°F)
- Enclosure IP-66 (housing only)
- High Strength Stainless Steel Construction
- No Oil, Welds or Internal O-rings
- Wide Operating Temperature
- Low Static and Thermal Errors
- Compatible with Wide Variety of Liquids and Gases
- EMI/RFI Protection
- UL/cUL 508 Approved (with housing)
- 1lb. (0.45 kg) approximate weight

**B&G PART NUMBERS**
- S13203 Pressure range: 0-100 psi (0-689 kPa)
- S13204 Pressure range: 0-300 psi (0-2068 kPa)

Consult factory for other ranges.

**INSTALLATION CONSIDERATIONS**
- Standard 24 AWG (0.61 mm dia.) 2 wire shielded cable located in a conduit separate from high voltage wiring
- 24 vdc power supplied from Technologic Controller

**TECHNOLOGIC ANALOG SENSOR WIRING**

**DIMENSIONAL INFORMATION**
Dimensions in Inches (Millimeters)

Jacketed Cable
10 ft. (3 m) long,
0.156 (3.962) dia.

Shrink Tubing
3/8" (9.5 mm) dia.
Differential Pressure Sensor/Transmitter for Pumps with TECHNOLOGIC® Drives

FEATURES
- Relays reading to the Technologic controller up to 2000 ft. (610 m) away
- All wetted parts are 316 stainless steel
- Built-in RFI filter effective from 20 to 1000 MHZ
- Withstands static pressures up to 2300 PSI (15858 kPa)
- 3 Valve bypass manifold (optional)
- 10 lbs. (4.5 kg) approximate weight

B&G PART NUMBERS
S100089 Pressure range: 0 - 40 psi (0 - 276 kPa)
S100091 Pressure range: 0 - 70 psi (0 - 483 kPa)
S100092 Pressure range: 0 - 100 psi (0 - 689 kPa)

Consult factory for other ranges.

INSTALLATION CONSIDERATIONS
- Standard 18 AWG (1.194 mm dia.) 2 wire shielded cable located in a conduit separate from high voltage wiring
- 24 vdc power supplied from Technologic Controller for distance <2000 ft (610 m)

DIMENSIONAL INFORMATION
Dimensions in Inches (Millimeters)

1 Process connection 1/4-18NPT for absolute pressure (+) side
2 Mounting thread 7/16-20 UNF to EN 61518
3 Dummy plug
4 Electrical connection: Screwed gland 1/2-14 NPT
5 Connection side
6 Electronic side, no digital display
7 Access cover over magnetic pushbuttons
8 Sealing screw with vent shown (optional)
9 Side vent for measuring liquid
10 Side vent for measuring gas (supplement H02)
11 Mounting bracket (2 shackles, 4 nuts, 4 U-plates, 1 angle) made of steel
Flow Sensor/Transmitter For Pumps with TECHNOLOGIC® Drives

The rugged Bell & Gossett Flow Sensor/Transmitter precisely measures system flow and transmits a proportional 4 to 20 mA DC signal to the Technologic Controller for display or program calculations.

STANDARD FEATURES
- Optional software and cable available for field programming
- Suitable for mounting in vertical pipe
- Suitable for mounting in horizontal pipe within 45° of top dead center
- Non-magnetically sensed, non-fouling paddle wheel
- NEMA 4X Transmitter Enclosure
- Maximum Pressure Ratings:
  - 1000 psi @ 100°F, 900 psi @ 200°F,
  - 750 psi @ 300°F (6895 kPa @ 38°C, 6205 kPa @ 93°C, 5171 kPa @ 149°C)
- Maximum Temperature Ratings:
  - Fluid - 300°F (149°C) continuous service
  - Electronics - 150°F (66°C)
- 9.9 lbs (4.5 kg) approximate weight

INSTALLATION CONSIDERATIONS
- Standard 18 AWG (1.194 mm dia.) gauge 3 wire shielded cable located in conduit separate from high voltage wiring
- 24 vdc power supplied from Technologic Controller
- Takes accurate readings and relays them to the Technologic Controller up to 2,000 ft. (610 m) away, when 10 pipe diameters upstream and 5 pipe diameters downstream of straight uninterrupted flow is present.

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Consult factory for custom flow range calibration.