8x8x9½
Series 80®
In-Line Mounted Centrifugal Pumps

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Flow</th>
<th>Head</th>
<th>HP</th>
<th>RPM</th>
<th>Volts</th>
<th>Cycle</th>
<th>Phase</th>
<th>Enclosure</th>
<th>Approx. Weight</th>
<th>Specials</th>
</tr>
</thead>
</table>

 MATERIALS OF CONSTRUCTION
- BRONZE FITTED
- ALL IRON

MAXIMUM WORKING PRESSURE
- 175 psi (12 bar) W.P. with 125# ANSI flange drilling
- 250 psi (17 bar) W.P. with 250# ANSI flange drilling (requires 80-S)
- 300 psi (21 bar) W.P. with 250# ANSI flange drilling (EPR-Sintered Silicon Carbide-Sintered Silicon Carbide) Requires 80-S

TYPE OF SEAL
- 80 Standard Seal (Buna-Carbon/Ceramic)
- 80-F Standard Seal w/ Flush Line (Buna-Carbon/Ceramic)
- 80-S Stuffing Box construction w/ Flushed Mechanical Single Seal (EPR-Tungsten Carbide/Carbon)
- 80-D Stuffing Box construction w/ Flushed Double Mechanical Seal (EPR-Carbon/Ceramic)
- Requires external water source
- 80-PF Stuffing Box Construction w/ Flushed Packing (Graphite Impregnated PTFE)

![Performance Characteristic Curve](chart.png)

**Notes:**
- 8x8x9½ CENTRIFUGAL PUMP
- SERIES 80
- PERFORMANCE CHARACTERISTIC CURVE
- CURVES BASED ON TEST USING CLEAR COLD WATER AT A TEMPERATURE OF NOT OVER 80°F. PERFORMANCE IS GUARANTEED AT INDIATED OPERATING POINT ONLY.
- HORSEPOWER CURVES DO NOT INCLUDE MOTOR SERVICE FACTOR
- 1770 R.P.M.
- 90% 50% 65% 70% 75% 80% 90% 94%
- 50 HP 25 HP 10 HP
- N.P.S.H. REQUIRED
- 10 20 30 40 50 60 70 80 90 100
- TOTAL HEAD IN FEET
- CAPACITY IN U.S. GALLONS PER MINUTE
- Requires external water source
- 80 -PF Stuffing Box Construction w/ Flushed Packing (Graphite Impregnated PTFE)

xylem
Let's Solve Water
**NOTE:** For 1 phase Motors add 1" to dimensions E & H.

Dimensions are subject to change. Not to be used for construction purposes unless certified.

**For TEFC Motors add S dimension to dimensions E & H.**

Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries.

© 2013 Xylem Inc.
8x8x9½
Series 80
In-Line Mounted Centrifugal Pumps

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

MATERIALS OF CONSTRUCTION
☐ BRONZE FITTED  ☐ ALL IRON

MAXIMUM WORKING PRESSURE
☐ 175 psi (12 bar) W.P.
☐ 250 psi (17 bar) W.P.
☐ 300 psi (21 bar) W.P.

TYPE OF SEAL
☐ 80 Standard Seal (Buna-Carbon/Ceramic)
☐ 80-F Standard Seal w/ Flush Line (Buna-Carbon/Ceramic)
☐ 80-S Stuffing Box construction w/ Flushed Mechanical Single Seal (EPR-Tungsten Carbide/Carbon)
☐ 80-D Stuffing Box construction w/ Flushed Double Mechanical Seal (EPR-Carbon/Ceramic)
☐ Requires external water source
☐ 80-PF Stuffing Box Construction w/ Flushed Packing (Graphite Impregnated PTFE)
# 8x8x9½ Series 80®
In-Line Mounted Centrifugal Pumps
With Optional Integrated Technologic® featuring Sensorless Control

## TECHNOLOGIC STANDARD FEATURES

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL METHOD</td>
<td>Constant Pressure, Linear Control Curve, Quadratic Control Curve Factory configured for sensorless operation standard. Field configurable for use with a wired transducer.</td>
</tr>
<tr>
<td>ENCLOSURE</td>
<td>IP55 / NEMA 12 / UL type 12</td>
</tr>
<tr>
<td>POWER DISCONNECT SWITCH</td>
<td>Included standard. Fused Disconnect Switch optional.</td>
</tr>
<tr>
<td>EM/RFI CONTROL</td>
<td>Integrated filter to meet EN62800-3.</td>
</tr>
<tr>
<td>HARMONIC SUPPRESSION</td>
<td>Integrated non-saturating dual DC link reactors provide better harmonic performance than a 5% AC line reactor.</td>
</tr>
<tr>
<td>COOLING</td>
<td>Fan-cooled through temperature controlled and easy replacement.</td>
</tr>
<tr>
<td>AMBIENT TEMPERATURE RATING</td>
<td>14°F to 113°F (-10°C to 45°C)</td>
</tr>
<tr>
<td>COMMUNICATION PROTOCOLS</td>
<td>BACnet, Modbus RTU, N2 Metasys, FLN Apogee</td>
</tr>
<tr>
<td>ANALOG INPUTS</td>
<td>2 configurable for either voltage (0 to 10VDC) or current (0/4 to 20mA)</td>
</tr>
<tr>
<td>ANALOG OUTPUTS</td>
<td>1 (0/4 to 20mA) up to 500 ohm load accurate to 1% of full scale</td>
</tr>
<tr>
<td>DIGITAL INPUTS</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>DIGITAL OUTPUTS</td>
<td>2 (0 to 24VDC), 40mA max current, configurable as pulse outputs.</td>
</tr>
<tr>
<td>RELAY OUTPUTS</td>
<td>2 programmable, 240VAC or 400VAC up to 2 A</td>
</tr>
</tbody>
</table>

---

Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries. © 2013 Xylem Inc.
### 8x8x9½ Series 80®
In-Line Mounted Centrifugal Pumps
With Optional Integrated Technologic® featuring Sensorless Control

#### DIMENSIONS – Inches (mm)

<table>
<thead>
<tr>
<th>MOTOR FRAME</th>
<th>A</th>
<th>B</th>
<th>E (Max)</th>
<th>G</th>
<th>H (Max)</th>
<th>125# ANSI</th>
<th>250# ANSI</th>
<th>R</th>
<th>VFD</th>
<th>Rv</th>
<th>Zv</th>
<th>W</th>
<th>Hv</th>
<th>Xv</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>J</td>
<td>N</td>
<td>P</td>
<td>J</td>
<td>N</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>254</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17 (432)</td>
<td></td>
<td>A5</td>
<td>14-17/32 (369)</td>
<td>14-45/64 (373)</td>
<td>9-1/2 (241)</td>
<td>44-5/8 (1133)</td>
<td>7-1/16 (179)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B1</td>
<td>16-53/64 (427)</td>
<td>16-45/64 (424)</td>
<td>9-1/2 (241)</td>
<td>47-5/8 (1209)</td>
<td>5-7/8 (149)</td>
</tr>
<tr>
<td>256</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17 (432)</td>
<td></td>
<td>A5</td>
<td>14-17/32 (369)</td>
<td>14-45/64 (373)</td>
<td>9-1/2 (241)</td>
<td>44-5/8 (1133)</td>
<td>7-1/16 (179)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>B1</td>
<td>16-53/64 (427)</td>
<td>16-45/64 (424)</td>
<td>9-1/2 (241)</td>
<td>47 (1194)</td>
<td>5-7/8 (149)</td>
</tr>
<tr>
<td>284</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16-1/8 (410)</td>
<td></td>
<td>C1</td>
<td>19-37/64 (497)</td>
<td>19-5/8 (498)</td>
<td>12-3/32 (307)</td>
<td>53-15/64 (1352)</td>
<td>3-19/32 (91)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C1</td>
<td>19-37/64 (497)</td>
<td>19-5/8 (498)</td>
<td>12-3/32 (307)</td>
<td>54-47/64 (1390)</td>
<td>3-19/32 (91)</td>
</tr>
<tr>
<td>286</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16-1/8 (410)</td>
<td></td>
<td>B2</td>
<td>17-37/64 (446)</td>
<td>17-23/64 (441)</td>
<td>9-1/2 (241)</td>
<td>46-3/8 (1178)</td>
<td>5-1/2 (140)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C1</td>
<td>19-37/64 (497)</td>
<td>19-5/8 (498)</td>
<td>12-3/32 (307)</td>
<td>54-47/64 (1390)</td>
<td>3-19/32 (91)</td>
</tr>
<tr>
<td>324</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18-3/4 (476)</td>
<td></td>
<td>B2</td>
<td>18-37/64 (472)</td>
<td>18-7/32 (463)</td>
<td>9-1/2 (241)</td>
<td>51-43/64 (1313)</td>
<td>5 (127)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C1</td>
<td>20-37/64 (523)</td>
<td>20-31/64 (520)</td>
<td>12-3/32 (307)</td>
<td>52-1/8 (1321)</td>
<td>3-3/32 (78)</td>
</tr>
<tr>
<td>326</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18-3/4 (476)</td>
<td></td>
<td>C1</td>
<td>20-37/64 (523)</td>
<td>20-31/64 (520)</td>
<td>12-3/32 (307)</td>
<td>52-1/8 (1321)</td>
<td>3-3/32 (78)</td>
</tr>
</tbody>
</table>

**Xylem Inc.**  
8200 N. Austin Avenue  
Morton Grove, IL 60053  
Phone: (847)966-3700  
Fax: (847)965-8379  
www.bellgossett.com  

Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries.  
© 2013 Xylem Inc.
## 8x8x9½ Series 80
In-Line Mounted Centrifugal Pumps
With Optional Integrated Technologic® featuring Sensorless Control

### STUFFING BOX 80-PF, 80-S, 80-D

<table>
<thead>
<tr>
<th>MOTOR FRAME</th>
<th>A</th>
<th>B</th>
<th>E (Max)</th>
<th>G</th>
<th>H (Max)</th>
<th>125# ANSI</th>
<th>250# ANSI</th>
<th>R</th>
<th>VFD</th>
<th>Rv</th>
<th>Zv</th>
<th>W</th>
<th>Hv</th>
<th>Xv</th>
</tr>
</thead>
<tbody>
<tr>
<td>254</td>
<td>18 (457)</td>
<td>24-1/8 (613)</td>
<td>10-1/4 (260)</td>
<td>44-5/8 (1133)</td>
<td>11-3/4 (298)</td>
<td>8</td>
<td>7/8 (22)</td>
<td>13 (330)</td>
<td>12</td>
<td>1 25</td>
<td>17 (432)</td>
<td>A5</td>
<td>14-17/32 (369)</td>
<td>14-45/64 (373)</td>
</tr>
</tbody>
</table>

Xylem Inc.
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847)966-3700
Fax: (847)965-8379
www.bellgossett.com

Bell & Gossett is a trademark of Xylem Inc. or one of its subsidiaries.
© 2012 Xylem Inc.