

Bell & Gossett®
Bulletin D-206D

70M Pressure Booster



- *Duplex and Triplex Standard Configurations*
- *Quick Set-up through “EZ” Start*
- *Vertical Pump Configuration Minimizes Footprint*
- *Serial Communication*
- *Factory Performance Test to Rated Flow & Head*
- *4-6 Pumps Packages Optional*

Engineered for life

Packaged
Systems
Group

Microprocessor Control Panel

- Exclusive Bell & Gossett Design
- Internal Diagnostics
- Differential Temperature No Flow Shut Down
- Automatic or Manual Operation
- NEMA 1 Enclosure
- UL listed
- cUL or CSA Certified
- Current Limit Circuitry to Provide Short Circuit Protection of Analog Inputs
- IEC Magnetic Starters with Integral Overload Protection
- Fuses for Short Circuit Protection



Optional Features

- NEMA 4 or 12 Enclosure
- Low Level Cutout with Alarm (used when drawing from a tank)
- High Level Cutout (used when filling a tank)
- Differential Pressure switches (for pump failure indication)
- Flow Meter (for staging to flow or for gpm display)
- NEMA Starters
- Short Circuit Protection for Each Pump Via Circuit Breakers
- Audible Alarm
- Flow Switch No Flow Shutdown
- Phase Monitoring
- Pressure Switch (for redundant low suction cutout)

User-Friendly Operator Interface

- User Selectable Pump Staging Methods:
 - kW (True Power)
 - Amps (RMS)
 - Flow (GPM) (flow sensor required)
 - Pressure (PSI)
- “EZ” Start through Quick Setup
- Parameter Backup through Save and Load Menu
- On-screen Help Function
- On-line Diagnostics
- Log Menu
- Visual Alarm Messages
 - High and Low Suction Pressure Alarms
 - High and Low System Pressure Alarms
 - High Temperature Alarm
 - Overload Failure Alarm
- Manual or Automatic Pump Alternation
- Pump Exercise
- kW and Amp Transducer with On-Board Calibration
- Real Time Clock
- Scheduled Start/Stop of System
- Elapsed Time Meters
- Suction and Discharge Pressure Displays
- Virtual H-O-A Switches
- Phase Monitoring

Energy Management System Interface

Hardwire Communication:

- Pump Run Indication
- Start/Stop Digital Input
- Alarm Indication
- System Auto/Manual Indication

Serial Communication:

- Above points plus –
- Pressure, Temperature and Power Measurement
- System Flow
- Pump Alternation
- No Flow Shut Down Status

Factory Assembled Pressure Booster System

- Bell & Gossett Series 1531 Pumps
- All Copper Piping
- Cla-Val Pressure Reducing Valves
- Thermal Relief Mechanism
- Pump/PRV Isolation Valves
- ISO 9001 Certified Facility
- UL Listed Pumping System

70M's Three-Step Selection Process

Step 1 System Demand: _____ GPM
 0-215 = 3" Up to 375 = 4" Up to 835 = 6"

Step 2 Required Pump Total Dynamic Head

1. System Discharge Pressure Required: _____ psig x 2.31 = _____ ft (A)
2. Pump Package Pressure Drop: 2.2 psig x 2.31 = 4.62 ft (B)
3. PRV Pressure Drop (see Chart A):
 Pump Flow – _____ GPM... _____ psig x 2.31 = _____ ft (C)
 (Chart A)

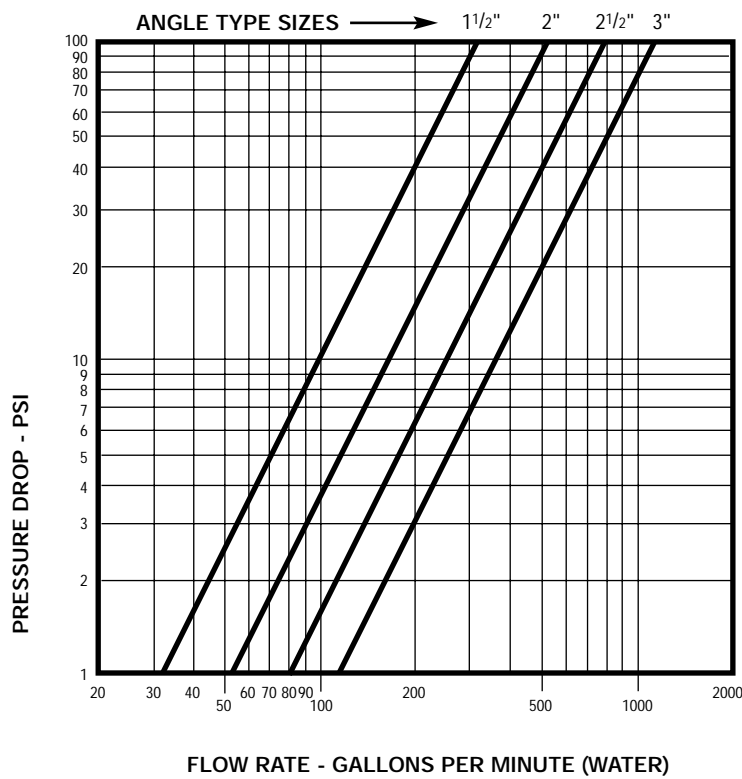


Chart A
PRV Pressure Drop

4. Suction Pressure from City Supply or Tank* _____ psig x 2.31 = _____ ft (D)
 *Note NPSH requirement of final pumps selected.

Required Pump Total Dynamic Head = A + B + C - D =

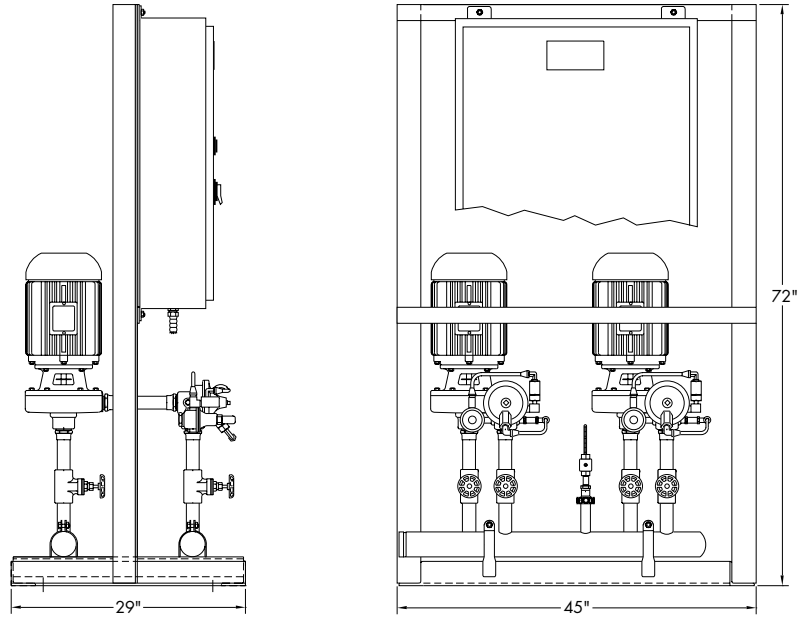
_____ ft + _____ ft + _____ ft - _____ ft = _____ ft (TDH)

Step 3

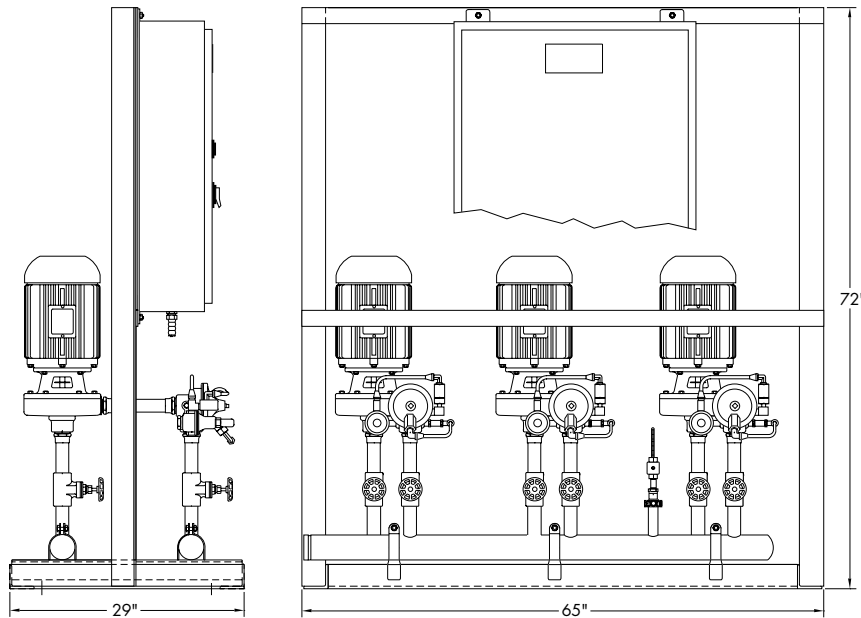
Use the ESP-Plus Pump Selection program or Bell & Gossett published pump curves to select pumps. If you cannot find a model number to fit your application, call your local Bell & Gossett representative for a booster that will fit.



70M DUPLEX DIMENSIONS



70M TRIPLEX DIMENSIONS



Dimensions valid for 3" and 4" headers only.
Do not use for construction. Dimensions are approximate and subject to change.
Consult factory for certified dimensions.
Consult factory for 4-6 pump application.

© COPYRIGHT 2008 BY
ITT CORPORATION
PRINTED IN U.S.A. 3-08

THE ITT ENGINEERED BLOCKS SYMBOL AND
ENGINEERED FOR LIFE ARE REGISTERED
TRADEMARKS OF ITT CORPORATION

ITT
8200 N. Austin Avenue
Morton Grove, IL 60053
Phone: (847) 966-3700
Fax: (847) 966-9052
www.bellgossett.com



CANADA
ITT R&CW Canada
55 Royal Road
Guelph, Ontario,
N1H 1T1, Canada
Phone: (519) 821-1900
www.itfpc.ca