

- All Piping is Non-Ferrous with Type 304 Stainless Steel Headers
- "EZ" Start through Quick Setup
- Full Factory Performance Test at Rated Flow & Head
- Duplex and Triplex Configurations
- Vertical Multi-Stage Stainless Steel Pumps
- Vertical Pump Configuration Minimizes Footprint
- Serial Communication
- 4-6 Pump Packages Optional



70M-MS Multi-Stage Pressure Booster

PACKAGED SYSTEMS GROUP

70M-MS Multi-Stage Pressure Booster

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
- All analog inputs shall be provided with current limit circuitry to provide short circuit protection and safeguard against incorrect wiring of sensors.
- IEC Magnetic Starters with Integral Overload Protection
- Short Circuit protection for each pump via fuses

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
- Log Menu
- On-Screen Help Function
- On-line Diagnostics
- 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
- kW and Amp Transducer with On-Board Calibration
- Elapsed Time Meters
- Suction and Discharge Pressure Displays
- Virtual Hand-Off-Auto Switches for each Pump
- Pump Exercise
- Parameter Backup Through Save and Load Menu
- Scheduled Start/Stop of System
- Real Time Clock

Optional Features

- NEMA 4 or 12 Panel 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 flow staging or for gpm display)
- NEMA Starters
- Short Circuit Protection for Each Pump Via Circuit Breakers
- 304 Stainless Steel Ball Valves
- 304 Stainless Steel Base

- (4–6) Pump Systems
- Audible Alarm
- Flow Switch No Flow Shutdown
- Phase Monitoring
- Pressure Switch (for redundant low suction cutout)

Energy Management System Interface Hardwired Communication:

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

Serial communication:

- Above Points Plus:
- Pressure, Temperature and Power Measurement
- System Flow – with Optional Flow Meter
- Pump Alternation
- No Flow Shut Down Status

Factory Assembled Pressure Booster System

- Vertical Multi-Stage Stainless Steel Pumps
- All Non-Ferrous Piping
- Pressure Reducing Valves
- Thermal Relief Mechanism
- Pump/PRV Isolation Valves

* These items are sub items below "Visual Alarm Messages"



70M-MS Multi-Stage 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)

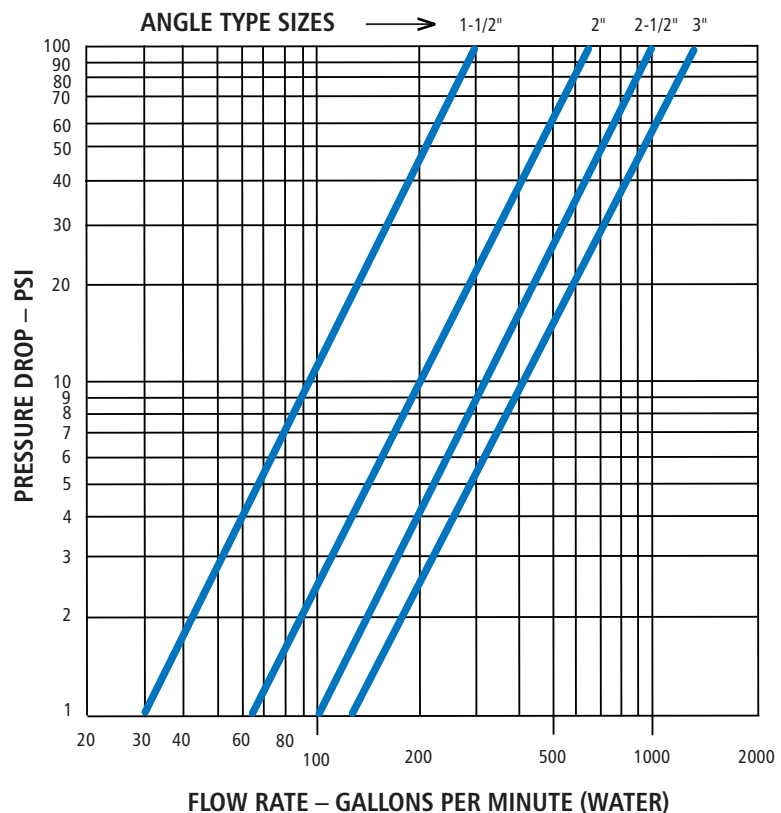
2. Pump Package Pressure Drop: 2.2 psig x 2.31 = 4.62 ft (B)

3. PRV Pressure Drop (*see Chart A*):

Pump 1 Flow – _____ GPM. . . _____ psig x 2.31 = _____ ft (C)
(Chart A)

Pump(s) 2 (and 3) Flow – _____ GPM. . . _____ psig x 2.31 = _____ ft

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 =

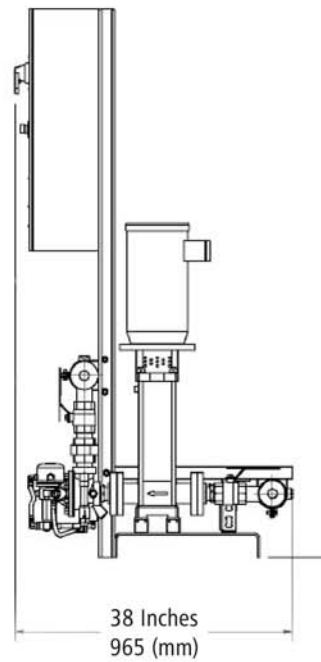
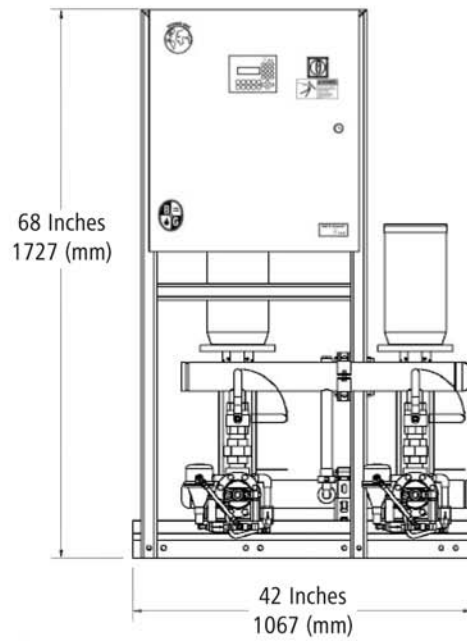
_____ ft + _____ ft + _____ ft – _____ ft = _____ ft (TDH)

(Repeat for lag pump(s) if unequal pumps are utilized.)

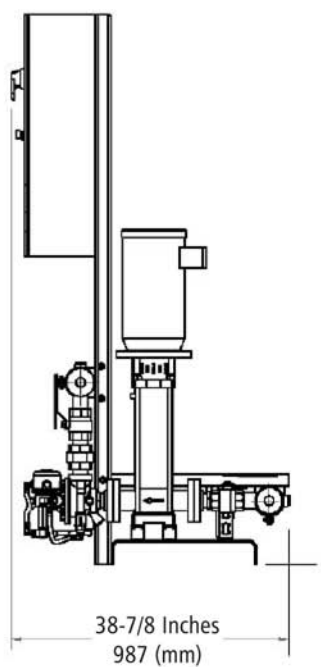
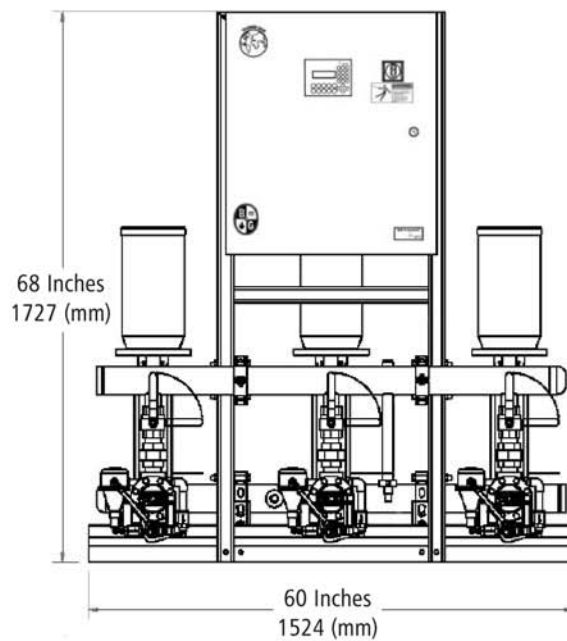
Step 3

Use the ESP-PLUS Pump Selection program or Bell & Gossett published pump curves to select pumps. If you cannot find a package to fit your application, call your local Bell & Gossett Representative for a Booster that will fit.

70M-MS Duplex Dimensions



70M-MS Triplex Dimensions



Dimensions valid for systems utilizing 1SV, 2SV, 3SV or 4 SV pumps with 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 system using 33-92SV pumps or 4-6 pump configurations



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