

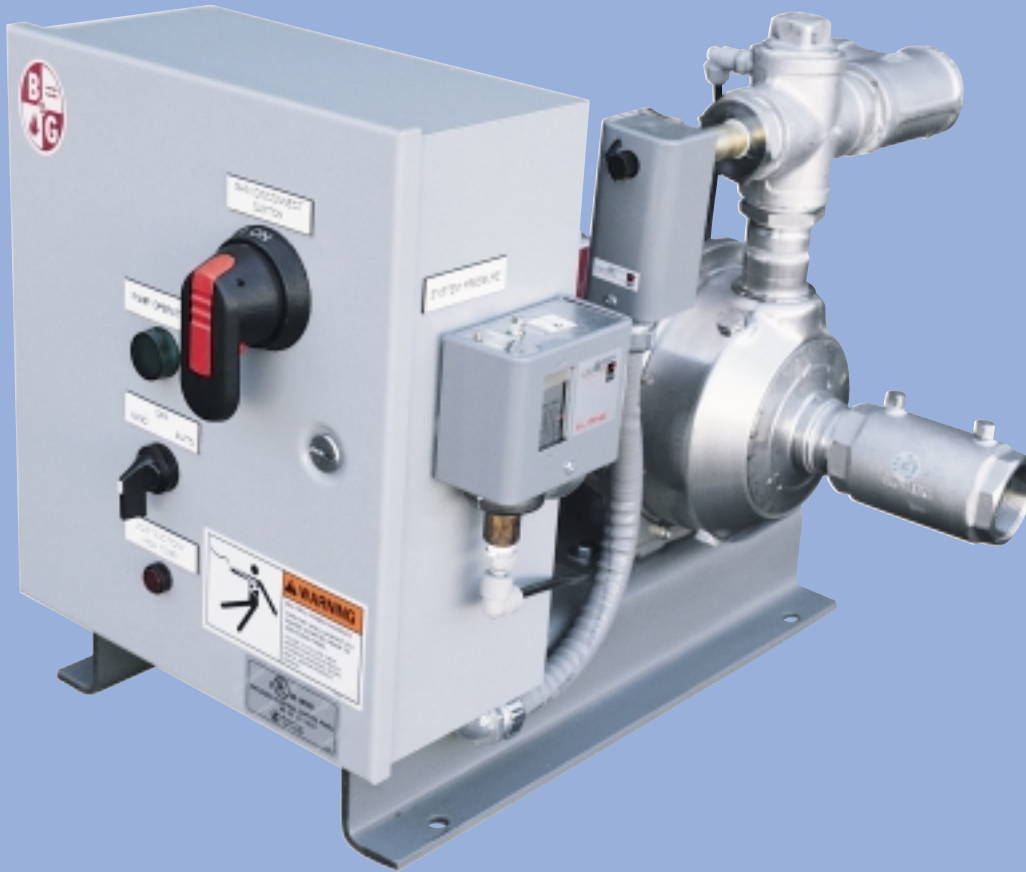


ITT

Bulletin-D208A

Bell & Gossett

MiniBooster™ Systems



Specifically designed as a compact, easy to install and maintain package for applications where sufficient main pressure is not available or elevation is a problem. Typical installations include residences, apartment buildings, condominiums and light commercial applications. The MiniBooster is available in both one and two pump packages. Simplex capacities are from 20 to 110 GPM at a boost of 20 to 55 psig. Duplex capacities are up to 220 GPM.



www.bellgossett.com

Engineered for life



MiniBooster™ Systems

Pumps are close coupled with stainless steel casing and internals. All piping on the package is non-ferrous for use with potable water. Simplex units feature all stainless steel piping and check valve. Duplex units have bronze check and isolation valves, all copper piping and copper headers.

Pump motors are open drip-proof from 1.5 hp through 5 hp. The MiniBooster is factory assembled, wired and tested. Electrical panel is UL listed, NEMA 1 enclosure with

voltages ranging from 230/1/60, 208-230/3/60, and 460/3/60. The panel includes a control power transformer, Hand-Off-Auto switch(s), pilot lights(s), and minimum run timer to prevent short cycling. The pump(s) will stop during periods of low demand and restart upon a drop in system pressure.

Duplex models provide automatic alternation to permit even pump usage, and units can be sized to act a 100% stand by or stage pumps based on demand. Lag pump

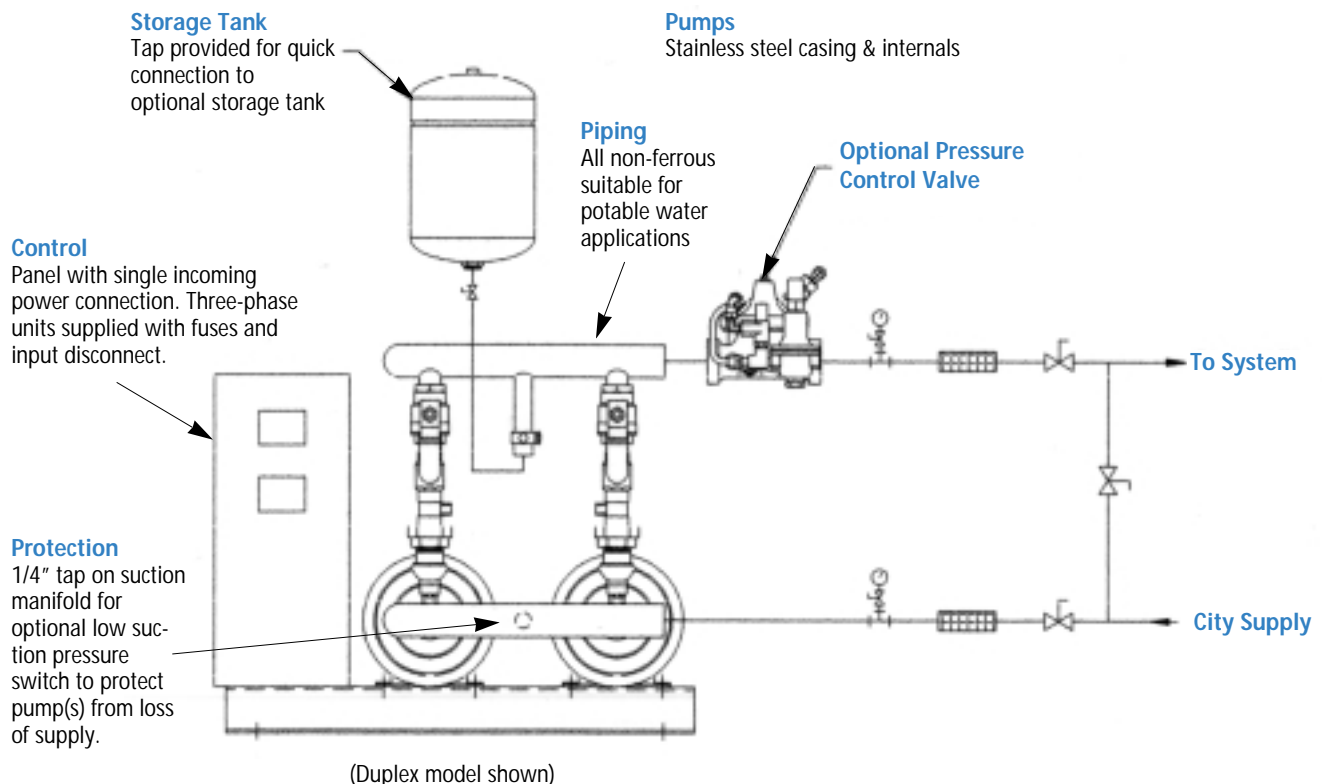
will start automatically upon failure of lead pump and pump failure is indicated at the panel.

Options:

Pressure control valves
115/1/60 Voltage
Storage Tank
Low Suction Pressure Cutout

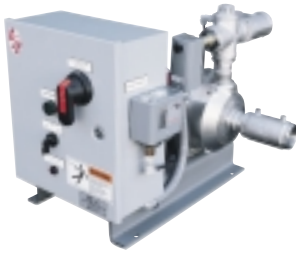
Common configurations stocked at the factory.

Typical Field Piping



Package
UL Listed Compact Design

Simplex MiniBooster Selection Chart



PSI	20 GPM	30 GPM	40 GPM	50 GPM	60 GPM	70 GPM	80 GPM	90 GPM	100 GPM	110 GPM
20					1B20	1B20	1B30	1B30	1B30	
25			1A15	1B20	1B20	1B30	1B30	1B30	1B30	1B50
30	1A15	1A15	1A20	1B20	1B30	1B30	1B50	1B50	1B50	1B50
35	1A15	1A15	1A20	1B30	1B30	1B50	1B50	1B50	1B50	
40	1A15	1A20	1A30	1B50	1B30	1B50	1B50	1B50		
45	1A20	1A20	1A30	1B50	1B50	1B50				
50	1A20	1A30	1B50	1B50						
55	1A20	1A30								

CONSULT FACTORY

*Above selections provide non-overloading motors across entire pump curve.

Duplex MiniBooster Selection Chart

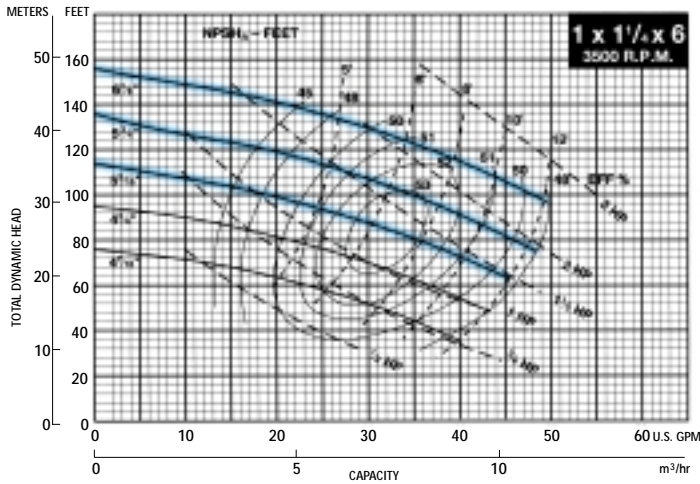


PSI	40 GPM	60 GPM	80 GPM	100 GPM	120 GPM	140 GPM	160 GPM	180 GPM	200 GPM	220 GPM
20					2B20	2B20	2B30	2B30	2B50	
25			2A15	2B20	2B30	2B30	2B30	2B50	2B50	2B50
30	2A15	2A15	2A20	2B20	2B30	2B30	2B50	2B50	2B50	
35	2A15	2A20	2B30	2B30	2B50	2B50	2B50	2B50	2B50	
40	2A20	2A20	2A30	2B50	2B50	2B50	2B50			
45	2A20	2A30	2B50	2B50	2B50	2B50				
50	2A20	2A30	2B50	2B50						
55	2A20									

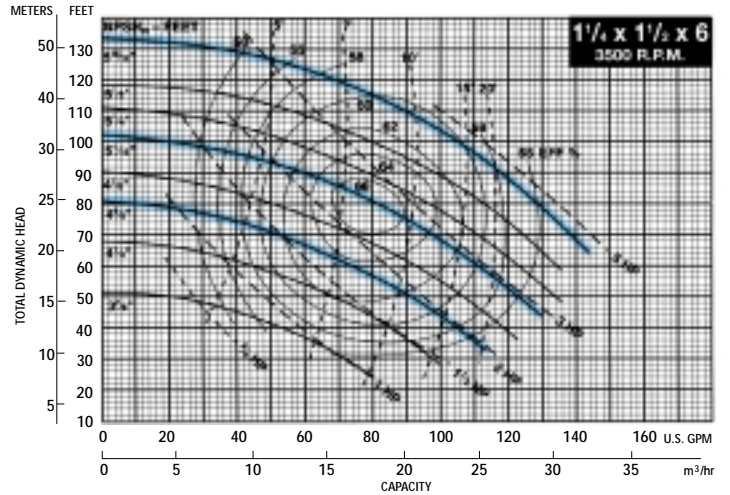
CONSULT FACTORY

*Above selections provide non-overloading motors across entire pump curve. Selections are based on two pumps in parallel. Refer to 3530 pump curves or consult factory for duty/standby operation.

MiniBooster Model A* Pump Curve



MiniBooster Model B** Pump Curve



Model Number

# of pumps	Pump Model/ RPM	Horsepower	Voltage/Phase	Impeller Diameter
1	A* = 1 x 1-1/4, 3500	05 = 1/2 HP	A = 208-230/3/60	A = 4-5/8"
2	B** = 1-1/4 x 1-1/2, 3500	07 = 3/4 HP	C = 460/3/60	B = 5-1/16"
		10 = 1 HP	D = 575/3/60*	C = 5 3/16"
		15 = 1-1/2 HP	K = 115/1/60*	D = 5-3/4"
		20 = 2 HP	Z = 230/1/60	E = 5-15/16"
		30 = 3 HP		F = 6-1/8"
		50 = 5 HP		Z = other

*Built to order product

Example:
Model 2A20CD includes: One 3530 model 1 x 1-1/4, 3500, 2HP with 460/3/60 input power and a 5-3/4" impeller

Model	HP	Overall Dimensions and Weights		System Connections	
		Simplex	Duplex	Simplex	Duplex
1A15 or 2A15	1.5	24-5/8"L x 19-3/4"W x 17-3/8"H 206 LBS	29-1/4"L x 30-3/4"W x 24-7/8"H 410 LBS	1-1/2" x 1-1/2"	2"
1A20 or 2A20	2				
1A30 or 2A30	3				
1B20 or 2B20	2	24"L x 19-3/4"W x 17-3/8"H 206 LBS	30-3/4"L x 32-5/8"W x 29"H 410 LBS		3"
1B30 or 2B30	3				
1B50 or 2B50	5				

Specification: Simplex

Furnish and install a Bell & Gossett MiniBooster model _____. MiniBooster shall be capable of providing a minimum pressure of ____ psig when supplied with a minimum suction pressure of ____ psig. The booster system shall be capable of a total flow of _____ (20 – 110 gpm) at a boost of _____ (20 – 55 psig.) Unit shall be provided to utilize (____ {208-230, 460}/3/60 or 230/1/60) input power.

MiniBooster shall be factory assembled, wired and tested as a packaged pressure boosting system*. Unit shall be a skid-mounted package consisting of a Bell & Gossett 3530 close-coupled stainless steel pumps with open drip-proof motor, non-corrosive piping and valves and UL listed, NEMA 1 panel with panel-mounted system pressure switch. Stainless steel check valve shall be mounted in pump suction piping. Base shall be formed steel. Package shall be rated for a maximum working pressure of 135 psig and a maximum operating temperature of 225°F.

Panel features shall include a control power transformer, Hand – Off- Auto switch, minimum run timer to prevent short-cycling, a green light for pump run indication, and a red light to indicate unit shutdown. No flow shutdown shall be provided via system pressure switch. High temperature cutout, with automatic reset, shall be set to stop pump operation at 100-240°F, user adjustable. Door-interlocked input disconnect switch and short circuit protection shall be standard on all three-phase packages. The system shall start upon a drop in system pressure and stop upon detection of no flow.

The following options shall be available.

- Low suction pressure switch to ensure adequate suction pressure to pump.
- Hydropneumatic tank shall ship loose and attach directly to package tank connection shown on mechanical drawing.
- Cla-Val epoxy coated pressure reducing valve

Specification: Duplex

Furnish and install a Bell & Gossett MiniBooster model _____. MiniBooster shall be capable of providing a minimum pressure of ____ psig when supplied with a minimum suction pressure of ____ psig. The booster system shall be capable of a total flow of _____ (20 – 220 gpm) at a boost of _____ (20 – 55 psig.) Unit shall be provided to utilize (____ {208-230, 460}/3/60 or 230/1/60) input power.

MiniBooster shall be factory assembled, wired and tested as a packaged pressure boosting system*. Unit shall be a skid-mounted package consisting of two Bell & Gossett 3530 close-coupled stainless steel pumps with open drip-proof motor, non-corrosive piping and valves and UL listed, NEMA 1 panel with panel-mounted system pressure switches. Bronze check valve shall be mounted in pump discharge piping. Base shall be formed steel. Package shall be rated for a maximum working pressure of 135 psig and a maximum operating temperature of 225°F.

Panel features shall include for each pump a control power transformer, Hand – Off- Auto switch for each pump, minimum run timer to prevent short-cycling, automatic pump alternation, green lights for individual pump run indication, and a red light to indicate unit shutdown. No flow shutdown shall be provided via system pressure switch. High temperature cutout, with automatic reset, shall be set to stop pump operation at 100-240°F, user adjustable. Door-interlocked input disconnect switch and short circuit protection for each pump shall be standard on all three-phase packages. The system shall start upon a drop in system pressure and stop upon detection of no flow.

The following options shall be available.

- Low suction pressure switch to ensure adequate suction pressure to pump.
- Hydropneumatic tank shall ship loose and attach directly to package tank connection shown on mechanical drawing.
- Cla-Val epoxy coated pressure reducing valve.

* Manufacturer shall be listed by Underwriters Laboratories as a manufacturer of packaged pumping systems.

