

### **WE OFFER**

- Standard Chemical Feed Systems
- Controls / Controllers
- Metering Pumps
- Custom Engineered Systems
- On-Site Oxidant Generation
- Polymer Feed Systems
- Chemical Storage & Accessories
- Booster Skids
- Performance Monitoring Tools
- Transfer Pumps
- Level Monitoring
- Web Based Remote Monitoring
- Instrumentation
- Flow Measurement
- Innovative Accessories

### SPECIALIZED SERVICES

- System Installations
- Start Up & Commissioning
- Contract Maintenance
- Emergency Repairs
- Plant Audits / System Surveys
- Pump/ Accessory Repairs
- Equipment Pool Management
- Equipment Rentals
- Controller Maintenance & Repair

### MARKETS SERVED

- Industrial
- Municipal
- Commercial
- Recreational

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### **Duplex Booster Pump Systems**



- Variable-Speed control reduces changes in pressure
- Delivered programmed assembled and ready to run
- High-quality Grundfos<sup>®</sup> pumps ensure optimum performance
- Electrical enclosure: NEMA 4X
- Base material: PVC
- Piping material: 304SS

These preassembled booster pump systems provide complete solutions for your pressure boosting application needs. They operate using one pump with a second pump on standby, making them ideal for commercial, multifamily residential, municipal and rural water systems, or for reuse systems in waste water treatment facilities. These heavy-duty systems are packed with features.

### Variable-frequency drive control

Variable frequency drive control provides pressure more consistently than fixed-speed systems controlled by a pressure switch. Variable-frequency drives are adjustable, allowing you to customize each package to your specific needs. The control panel is mounted in a NEMA 4X enclosure, and includes an HOA 3-position switch, a main disconnect switch with status light, and a 2-position pump selector switch.

### **Grundfos CR series pumps**

Grundfos CR series pumps are among the most reliable and efficient multistage booster pumps in the industry. All seal components are contained in a single unit, simplifying replacement and minimizing downtime. Expect years of trouble-free performance.

Pumps are operated by a 3-phase TEFC motor, capable of running on 208-230V or 460V. System pressure is measured and sent to the pre-programmed controller.

The pump speed then changes automatically, adjusting appropriately to maintain pressure at the user-specified set point.

Pumps can be started manually or automatically with use of a float switch or other system input. Two alarms are also provided; a VFD fault alarm and an alarm that occurs when system pressure drops below 30 psi for more than 15 seconds.

All valves and piping are 304SS and mounted to a PVC base. Their compact design allows easy removal of pumps for servicing.

FLOW	PRESSU	RE	
(GPM)	(PSI)	HP	PART#
50	100	5	CF-BS50-5
100	100	10	CF-BS100-10
150	100	15	CF-BS150-15
200	100	20	CF-BS200-20





### **Duplex Booster Pump Systems**

### **Applications**

These integrated booster systems are suitable for a variety of different applications demanding reliable and cost efficient performance. The systems are ideal for a variety of liquids from potable water to industrial liquids within a very wide temperature, flow and pressure scale.

General examples of applications:

#### Water supply

- Filtration and transfer at waterworks
- Distribution from waterworks
- Pressure boosting in mains
- Pressure boosting in high-rise buildings
- Pressure boosting for industrial water supply

### Industry

- Pressure boosting in...
- Process water systems
- Washing and cleaning systems
- High-pressure wash down systems
- Vehicle washing tunnels
- Fire fighting systems

### Liquid transfer in...

- Cooling and air-conditioning systems (refrigerants)
- Boiler feed and condensate systems
- Machine tools (cooling lubricants)

### Transfer of...

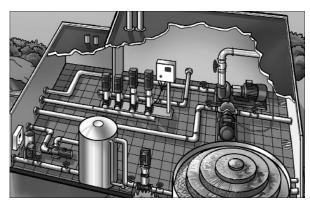
- Oils and alcohols
- Acids and alkalis

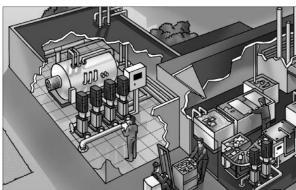
### Water treatment

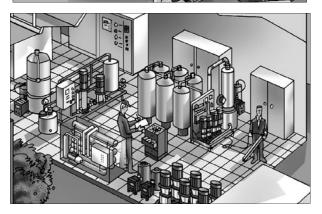
- Ultra-filtration systems
- Reverse osmosis systems
- Softening, ion exchange
- Demineralizer systems
- Distillation systems
- Separators
- Swimming pools

### Irrigation

- Field irrigation (flooding)
- Sprinkler irrigation
- Drip-feed irrigation







## The Inside Story

### Motor

Grundfos provides many motor solutions depending upon the application and demand. In addition, Grundfos makes its own motors to ensure maximum performance. The motors are remarkably quiet and highly efficient.

### **Cartridge seal**

The specially designed cartridge seal increases reliability, ensures safe handling and enables easy service and access.

### **Shaft seal solutions**

The cartridge shaft seal configuration comes in a wide choice of materials. It is available in flushed seal and double seal configurations and can handle temperatures from -40°F to +356°F (-40°C to +180°C).

### **High-performance hydraulics**

Pump efficiency is maximized by state-of-the-art hydraulic design and carefully crafted production technology.

### **Durable bearings**

The CR bearings are long-lived thanks to robust materials and a wide range of options for difficult liquids.

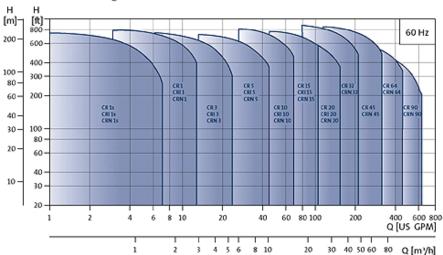
### **Material options**

The CR is available in four different materials: AISI 304/cast iron, stainless steel AISI 304, stainless steel AISI 316, and titanium.

### Wide range of sizes

The CR comes in 11 hydraulic sizes and hundreds of pressure sizes, ensuring that you can always find exactly the right pump for the job.

### CR Performance Range



### CR Efficiency







# **Variable-Speed Duplex Booster Pump Systems**

### **General Layout**

