



Series e-82

TWIN VERTICAL IN-LINE MOUNTED CENTRIFUGAL PUMP
Compact parallel pumping solution for increased capacity and redundancy



Doubling your capacity has never been easier

We have further expanded our offering of energy efficient pumping solutions. The Series e-82 pump covers a wide hydraulic range, with eleven close coupled models available from 2.5" to 6" suction and discharge. The pumps are stainless steel fitted, matching the hydraulics and the flange-to-flange dimensions of the single e-80 pumps and our legacy Series 80 pumps, but with double the power. The option of parallel pumping provides redundant capacity, as well as the capability to meet duty requirements with smaller horsepower motors and drives. It also improves pump efficiency at reduced flow. As the system load is reduced, pumps can be de-staged to achieve higher motor and drive efficiencies.



Applications

- Hydronic heating and cooling systems
- Light industrial process
- General service
- Pressure boosting
- OEM applications

Product Overview

- 11 models from 2.5" to 6" suction and discharge
- Min. impeller diameter = 7" and Max. impeller diameter = 11"
- NEMA motors (JM/JP) and motor brackets
- Stainless steel fitted construction
- Stainless steel impellers to resist chemicals and reduce corrosion
- Internally flushed mechanical seals (including glycol applications)
- Back pull-out design for easy installation, service, and maintenance in a compact footprint
- Option for parallel or duty standby operation
- Automatic flapper valve that responds to isolation of one pump or transition to parallel flow
- Flows up to 1600 GPM (at 1800 RPM operation)
- Head up to 130' TDH (at 1800 RPM operation)
- 175 PSI (standard)

Premium Efficient Motors

The Series e-82 pump features a standard NEMA premium JM vertical solid shaft motor in a drip-proof enclosure when the standard mechanical seal is selected. It includes a NEMA Premium JP motor when a stuff box configuration is preferred. Premium efficient motors with TEFC enclosures are available options. A precisely machined, cast iron motor bracket allows the motor to be rotated at 90° intervals to allow convenient positioning of the junction box.

Motor Bracket

A precisely machined, rigid cast iron motor bracket ensures positive concentric alignment between motor and pump components. This helps promote maintenance-free operation and contributes to pump longevity.

Stainless Steel Impellers

The Series e-82 pump incorporates stainless steel impellers to improve sustainable hydraulic performance, to resist chemicals and to reduce corrosion. They're balanced to ANSI Grade G6.3, which provides years of quiet performance and trouble-free service.

Internally Flushed Mechanical Seal

The built-in mechanical seal chamber has anti-vortex baffles and a flexible, stainless steel, braided hose from discharge, to assure seal cooling and lubrication. The Series e-82 pump includes a standard seal with a maximum working pressure of 175 psi, for use on open or closed clear water systems.

Reliable Flapper Valve

The flapper valve provides positive shutoff to one side of the pump in duty/standby operation. In parallel operation, pressure guides the free flowing valve into a position where both sides of the pump operate together to optimize hydraulic performance. The valve is composed of EPDM rubber, which is enclosed in a stainless steel body. Self-sealing bolts are used during assembly to ensure leak-free operations.

Easy Installation, Service and Maintenance Integrated Variable Speed Drives

Optional Bell & Gossett variable speed drives provide variable flow pumping for the broadest range of applications. The Integrated Technologic Sensorless Control drive (ITSC) combines the energy savings of variable flow with sensorless curve control to provide turn down at low flow, while eliminating the cost and time of using wired transducers and sensors. The Integrated Technologic drive (IT) is another variable speed option designed for building automation system control. It's an energy efficient and economical alternative for applications that don't require sensorless control. A third is the Technologic Intelligent Pump Controller (IPC), which has a start-up genie, making it easy to commission and easy to integrate with any BMS.

PPS Controller

Series e-82 pumps can be integrated in parallel operation for sensorless control using an optional Technologic sensorless controller. It features a large display screen that shows actual system performance via real-time graphical displays of the hydraulic pump curve, system curve and control curve. As pumps are added to the parallel pumping system, efficiency increases because each pump works less. Plus, individual pumps can be staged ON/OFF more effectively, thanks to the controller's wide hydraulic efficiency range.

The bottom of the volute is tapped with four bolt holes to accept an ANSI/ASME flange, which provides additional support for the pump. The back pull-out design allows the Series e-82 pump to be serviced without disturbing the piping, which means repairs can be made quickly and easily, and downtime is kept to a minimum. Flush-line filters and sediment separators are available on special request.

Drop-in Replacement

In retrofit installations, the Series e-82 pump is a drop-in replacement for a Series 80 or a Series e-80 pump, to immediately increase capacity or to serve as a standby. It has a flapper valve, for instant changeover between the two pumps. In addition, a blanking plate is included, to isolate the stand-by head for maintenance while the primary pump is in use. The Series e-82 provides approximately 40% space saving and piping reduction over traditional parallel installations.

Construction Materials

(For parts in contact with fluid pumped)

Description	Stainless Steel Fitted Pump
Shaft	Carbon Steel
Volute	Cast Iron ASTM A48 Class B
Impeller	ASTM A743 Grade CF8 (304SS)
Shaft Sleeve	Stainless Steel
Impeller Key	#304 Stainless Steel
Impeller Washer	Carbon Steel
Impeller Lock Washer	#304 Stainless Steel
Impeller Capscrew	#304 Stainless Steel
Volute Gasket	Cellulose Fiber
Flapper Valve	#316 Stainless Steel with EPDM gasket
Seal Assemblies	
Standard Seal	
Bellows	Buna-N
Faces	Carbon-Ceramic
Metal Parts	Brass or Stainless Steel
Spring	Stainless Steel
For Stuffing Box Design - Single Seal	
O-Rings	EPR
Faces	Carbon-Tungsten Carbide
Metal Parts	Stainless Steel
Spring	Stainless Steel

Xylem |'zīləm|

- 1) The tissue in plants that brings water upward from the roots;
- 2) a leading global water technology company.

We're a global team unified in a common purpose: creating advanced technology solutions to the world's water challenges. Developing new technologies that will improve the way water is used, conserved, and re-used in the future is central to our work. Our products and services move, treat, analyze, monitor and return water to the environment, in public utility, industrial, residential and commercial building services settings. Xylem also provides a leading portfolio of smart metering, network technologies and advanced analytics solutions for water, electric and gas utilities. In more than 150 countries, we have strong, long-standing relationships with customers who know us for our powerful combination of leading product brands and applications expertise with a strong focus on developing comprehensive, sustainable solutions.

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We value your feedback. Please take our 3 question survey at **bellgossett.com/survey** to let us know how we are doing.



Xylem Inc.
Phone: (847) 966-3700
Fax: (847) 965-8379
www.xylem.com/bellgossett

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