

Series e-80SCXL

SPLIT-COUPLED VERTICAL IN-LINE CENTRIFUGAL PUMP



The Series e-80SCXL pump delivers best-in-class performance with industry-leading efficiencies.

The Series e-80SCXL pump is a highly efficient, split-coupled, vertical in-line centrifugal pump that provides efficient pumping across the widest range of operational conditions. Designed for vertical in-line mounting, it's ideal for hydronic heating and cooling systems, light industrial processes and general service.

Motor and Motor Bracket

The Series e-80SCXL pump accepts 60 hz TC-face NEMA Premium motors. The brackets feature a wide access area for easy seal removal.

Stainless Steel Impellers

The Series e-80SCXL pump incorporates stainless steel impellers to improve sustainable hydraulic performance, resist chemicals and reduce corrosion. They're balanced to ANSI Grade G6.3, to provide years of quiet performance and trouble-free service.

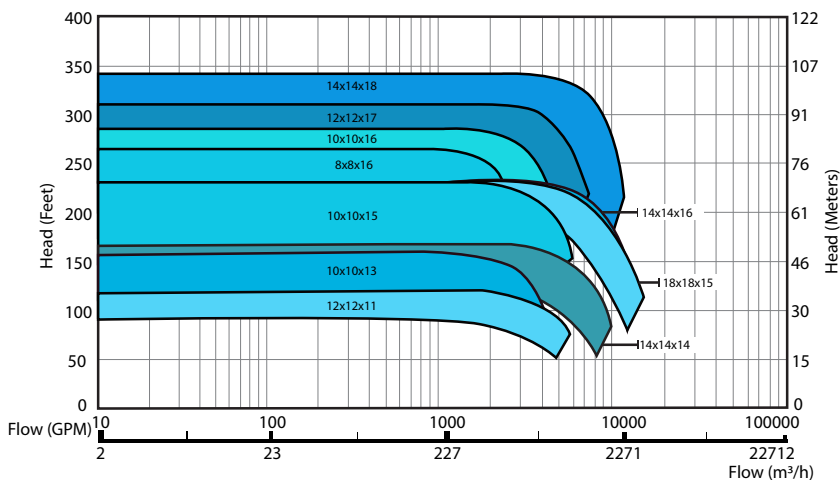
Mechanical Seal

The seal of the Series e-80SCXL pump has a compact Rotating Unitized Seal Head design for easy seal replacement. It features a positive metal-to-metal drive system that reduces the torsional stress on the bellows. In addition, the bellows are pressure supported without creases or folds, which creates lower stress and extends the life of the seal. The e-80SCXL pump includes a standard internally flushed mechanical seal with a maximum working pressure of 16 bar. Two optional mechanical seals, each with a maximum pressure of 25 bar, are also available, one is installed internally and one for external installation. Both seal types utilize an external flush line to prolong seal life.



Series e-80SCXL installation at a data center in Dubai.

Standard Performance Curves



Applications

- Hydronic heating & cooling systems
- Light industrial process
- General service

Advantages

- Best-in-class hydraulic performance
- Low operating and maintenance cost
- Low maintenance
- Vertical installation reduces overall footprint
- Several seal options

Construction Materials (for parts in contact with fluid pumped)

Description	Stainless Steel Fitted Pump
Shaft	420 Stainless Steel
Volute	Cast Iron ASTM A48 Class 35
Impeller	ASTM A743 Grade CF8 (304SS)
Impeller Key	Stainless Steel
Impeller Lock Washer	Stainless Steel
Volute O Ring	Nitrile Rubber
Throttle Bushing	Bronze
Seal Assemblies	
Standard Seal-Inside Flushed	
Bellows	EPR
Faces	Carbon-SiC
Metal Parts	Stainless Steel
Spring	Stainless Steel
Optional Seal-Inside Flushed	
O Rings	Viton
Faces	SiC-SiC
Metal Parts	Stainless Steel
Optional Seal-Outside Flushed	
O Rings	Viton
Faces	SiC-SiC
Metal Parts	Stainless Steel

Standard pump construction is 175 psi working pressure with 125 ANSI flange drilling. Optional 250 psi working pressure with 250 ANSI flange drilling is available.

Seal Selection Guide - Optional Outside Seal

A. Standard Seal - Inside with Flush Line

EPR/Carbon/Silicon Carbide; Temperature Range -22° to +392°F (-30° to +200°C). *Maximum pressure is 260 (16 bar).

B. Optional Seal - Inside with Flush Line

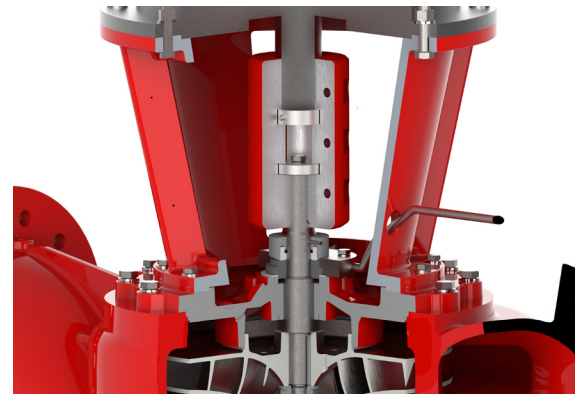
SiC/SiC-Viton; Temperature Range -15° to +400°F (-26° to +204°C). *For use on open or closed water systems. Maximum pressure is 360 psi (25 bar).

C. Optional Seal - Outside with Flush Line

SiC/SiC-Viton; Temperature Range -22° to +392°F (-30° to +200°C). *For use on closed or open systems where the pressure requirements exceed the limitations of the standard seal or an alternate seal design is desired. Maximum pressure is 360 psi (25 bar).

*For operating conditions above 250°F (121°C) and no greater than 300°F (149°C) a cooled flush is required. On closed systems cooling is accomplished by inserting the optional heat exchanger kit in the flush line to cool the seal flushing fluid.

Flush line filters and sediment separators are available on request.



Optional outside seal

Engineering Specifications

Furnish and install pumps with capacities as shown on the plans. Pumps shall be split-coupled in-line, for installation in a vertical position, motor up, capable of being serviced without disturbing piping connections.

Pump volute shall be of Class 35 cast iron. The volute shall have an integrated cast baseframe or separated baseframe bolted to volute for installation on concrete base following the recommendations in the manufacturer's installation instructions. The impeller shall be of stainless steel, enclosed type, balanced to Hydraulic Institute Standards (ANSI/HI 9.6.4.5-2000, figure 9.6.4.158). The allowable residual imbalance conforms to ANSI Grade G6.3, keyed to the stainless steel shaft and secured by a locking cap screw. The pump shaft shall be guided by a bronze lower throttle bushing.

The liquid cavity shall have a tapped flush line with a manual valve to remove air from the seal chamber for fast initial start-up. The mechanical seal shall have a compact rotating unitized seal head design with EPR elastomer bellows and a positive metal-to-metal drive system to reduce the torsional stress on the bellows. The bellows will be pressure supported without creases or folds for long life.

The spacer coupling shall be of high tensile aluminum, split to allow the servicing of the seal without disturbing the pump or motor. The motor bracket shall contain a

stainless steel coupler guard conforming to both ANSI 815.1 section 8 and OSHA 1910.219 standards for safety.

(Optional) The seal flush line shall be fitted with a field installed 50 micron cartridge filter (a cyclone separator when the pump differential pressure exceeds 30 psi) and a sight flow indicator.

Pumps shall be rated for continuous operation at a minimum of 175 psi working pressure (optional 250 psi) and 300°F (149°C). The volute shall have gauge tapings at the suction, and discharge nozzles and vent and drain tapings at the top and bottom.

The motor shall be Premium efficient, complying to NEMA specifications, and shall be the size, voltage and enclosure called for on the plans. It shall have heavy-duty grease-lubricated ball bearings, completely adequate for the maximum load for which the pump is designed.

Each pump shall be factory tested per Hydraulic Institute Standards. It shall then be thoroughly cleaned and painted with at least one coat of high-grade machinery enamel prior to shipment.

Series e-80SCXL pumps are manufactured by Bell & Gossett, a Xylem, Inc. brand.

Learn more about
Series e-80SCXL
Pumps:



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



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