



e-90 with optional ECM motor

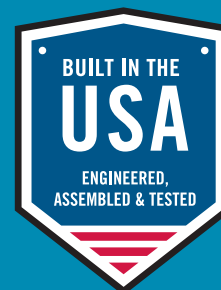
e-90E Smart Pump



e-90 (Standard)

Series e-90

Close Coupled In-Line Centrifugal Pumps



Series e-90

Close Coupled Centrifugal Pumps



The e-90 pump is a versatile in-line pump that offers wide hydraulic coverage well suited for the small commercial HVAC market. This pump is designed for heating and cooling applications with a temperature range of -10° to 250°F (-23 to 121°C) with a maximum pressure limit of 175 psi. The e-90 has eight models with connection sizes from 1"x 1" through 3"x 3". The hydraulic coverage is from 20 GPM (4.5 m³/hr) to 250 GPM (56.8 m³/hr) with a motor offering from 1/4 (.186 kW) through 5 HP (3.73 kW).

- Close-coupled, horizontal or vertical installation
- Space saving back-pull-out design, low maintenance, long life, quick shipment
- Wide range of applications; hydronic heating and cooling, pressure boosting, refrigeration and heat exchanger circulation
- Premium efficient motors 1-5 HP (0.75-3.73 kW), 3 phase (optional for Series e-90)
- Seven standard e-90 models are available with ECM Permanent Magnet smart motors (1/2 HP to 1 HP, single phase)
- Twelve standard e-90E Smart Pumps models are available, featuring Xylem's ultra-premium, IE5 permanent magnet Smart motor
- Series e-90E models are pre-assembled, pre-programmed packages with built in pump protection controls and monitoring to help optimize the pump performance

Features and Benefits:

Ease of selections

The e-90 is available in 116 standard pre-configured designs or built-to-order in bronze fitted or all bronze construction to meet a wide range of pump needs.

This pump is also available as a header pump, (less-volute) that will mount directly onto boilers for recirculation.

Ease of installation

The in-line mounted, close coupled pump is compact and versatile. The pump is designed to be mounted in the piping and can be installed either horizontally or vertically.

High hydraulic efficiency

The e-90 pump offers proven hydraulic performance which provides an efficiency improvement of 2%-18% at BEP.

Robust design

The e-90 pump is designed on the close-coupled platform eliminating a bearing frame and coupler. The pump design eliminates the need for a stub-shaft or shaft sleeve. This pump incorporates an EPR/Carbon/Silicon-Carbide mechanical seal for long service life. The motor has a 303 stainless steel shaft for corrosion resistance, double sealed ball bearings for greater water resistance, and longer bearing life.

Motors

Series e-90 motors are NEMA standard efficient, 56J with ODP enclosures and vertical drip covers. Single phase motors are 115/230V, with built in thermal overload protection. Three phase motors are 230/460V. Optional TEFC, premium efficient motors are available.

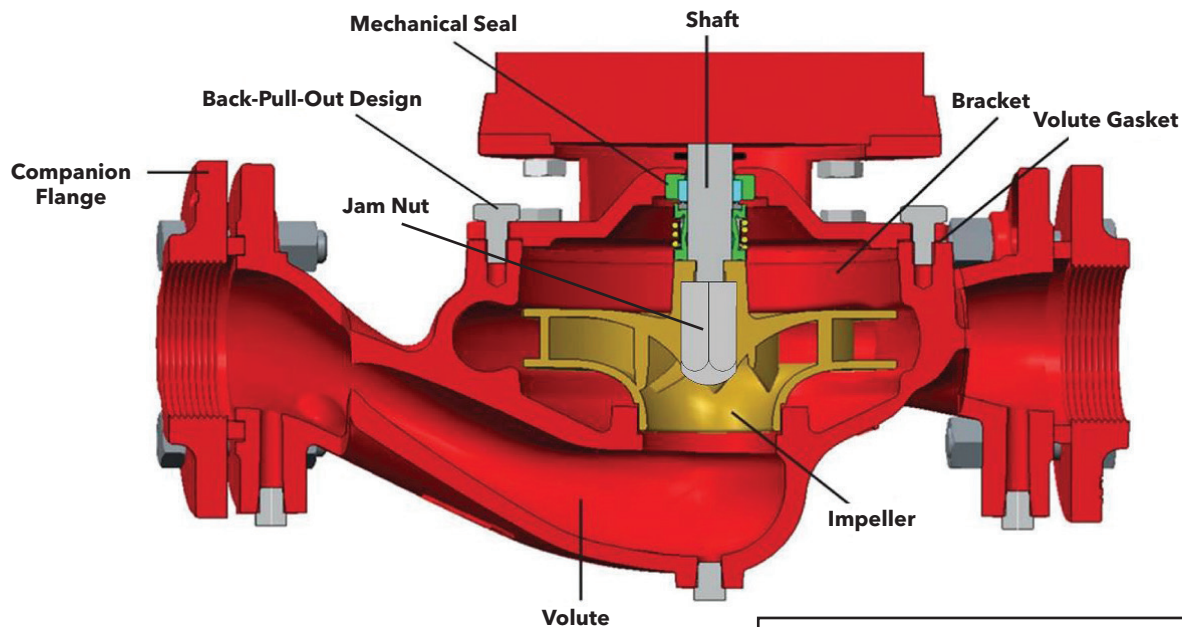
Series e-90 models with electronically commutated motors (ECM) are single phase, 1/2 HP to 1 HP, 115V and 230V.

Series e-90E Smart Pumps feature Xylem's ultra-premium, IE5 permanent magnet Smart Motor. Three phase models are 460V, 3 HP (2.2 kW). Motors contain integrated VFD capable of operating at multiple speeds ranging from 800 to 3600 RPM.



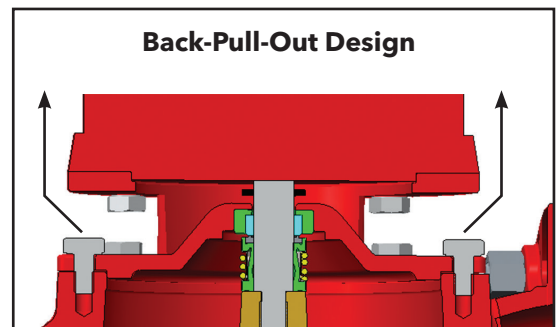
Construction Material For Parts In Contact With Fluid

Pump Series e-90	Volute	Impeller	Volute Gasket	Shaft	Bracket	Companion Flange
Bronze Fitted Pump	Cast Iron ASTM #A159	ASTM #B584	Cellu-Fiber	Stainless Steel	Cast Iron ASTM #A159	1", 1-1/4", 1-1/2" - Steel SAE1006 2", 3" - Cast Iron ASTM #A159
All Bronze Pump	Cast Bronze ASTM #B584	ASTM #B584	Cellu-Fiber	Stainless Steel	CF8 Stainless ASTM #A351	1", 1-1/4", 1-1/2" - Bronze ASTM #36 2", 3" - Cast Bronze ASTM #B584

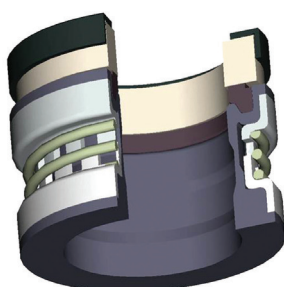


Ease of Maintenance

Back-pull-out design allows the pump to be serviced without disturbing the piping. Motors include sealed for life bearings. This pump design requires no coupler or stub-shaft to install. The one-piece unitized mechanical seal simplifies seal removal and replacement.



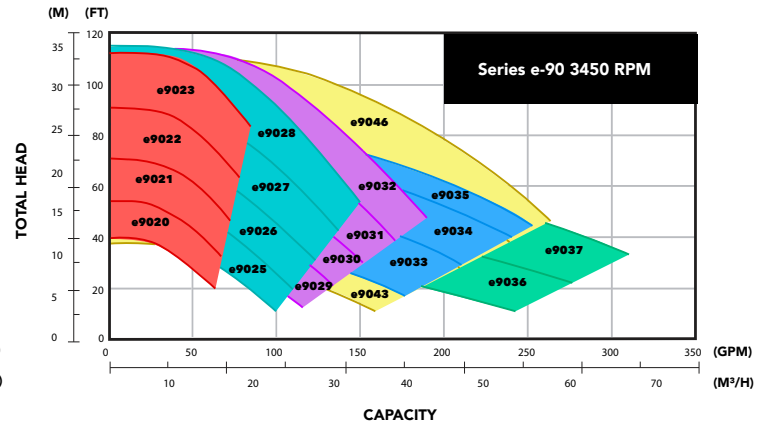
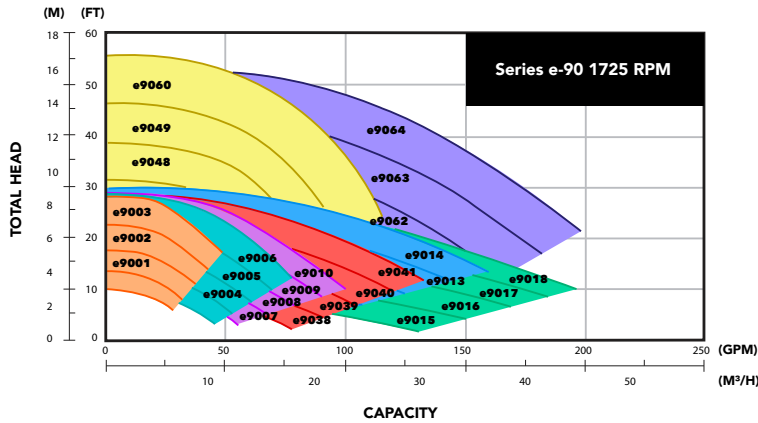
Pump Series e-90	Mechanical Seal					
	Seal Housing	Seal Elastomer	Seal Ring	Spring	Seat Insert	Maximum Temperature
Standard	Stainless Steel	EPR	Carbon	Stainless Steel	Silicon-Carbide	250°F
Optional	Stainless Steel	FKM	Carbon	Stainless Steel	Silicon-Carbide	225°F
Optional	Stainless Steel	EPR	Graphite Silicon-Carbide	Stainless Steel	Graphite Silicon-Carbide	250°F



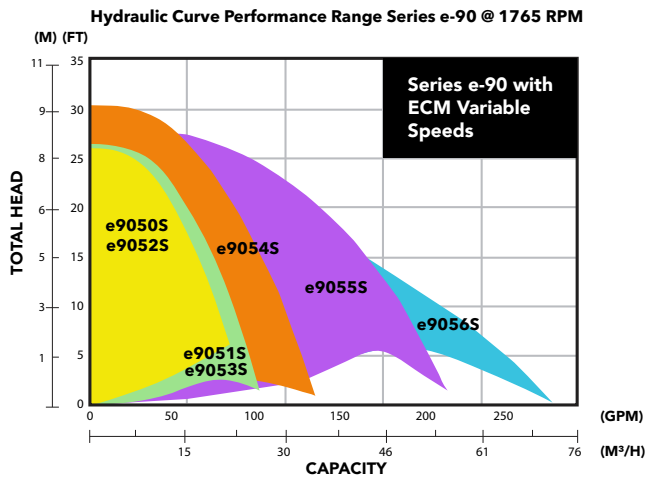
Mechanical Seal

The e-90 pump uses a modern unitized mechanical seal with a stainless steel drive mechanism that puts less torsional stress on the seal bellows, allowing for longer mechanical seal life.

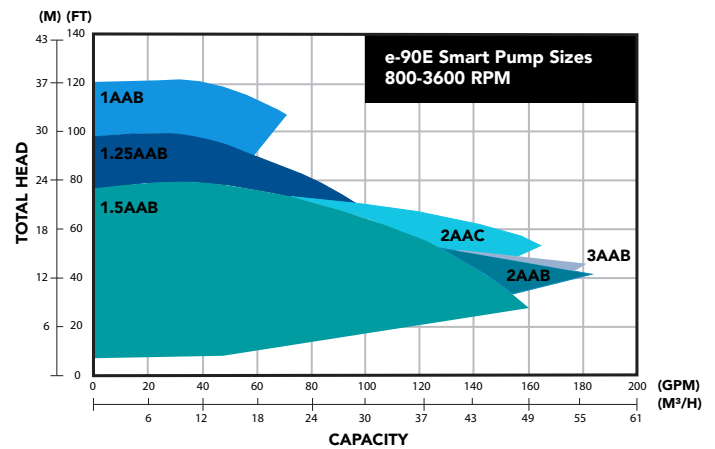
Standard Performance Curves



ECM Performance Curves



e-90E Smart Pump Performance Curves



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Xylem Product Cybersecurity

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Learn more about
Series e-90 Pumps

