



PWTE SERIES

# EN 733 (DIN24255) SINGLE STAGE END SUCTION PUMPS



MODEL PWTEF



MODEL PWTEC

# PWTE SERIES SINGLE STAGE END SUCTION PUMPS

Capacities to 1584 m<sup>3</sup>/hr  
 Heads to 150 meters  
 Temperatures to 85°C

## Setting New Standards of Efficiency

Pentair is delivering over a century of innovation for constant peace of mind. The years of experience with design, sales and manufacturing of centrifugal pumps has led to the new generation of the Pentair. Liquid handling requirements have evolved over the years and have increased along with temperatures and pressures. Today's installations demand sturdy but quiet, smooth running pumps with longer life cycles. These modern pumps with a clean, straightforward and updated design were developed with upgraded materials of construction and a simplified offering without limiting ranges and keeping maximum interchangeability in mind. The new Pentair offer industry leading durability and are the most reliable solution for your liquid handling needs.

### STANDARD FEATURES

- ◆ Offered in two configurations:
  - PWTEC Close coupled
  - PWTEF Flexible coupled-frame mounted
- ◆ Cast Iron Casings provide higher strength and durability
- ◆ Dimensions match the largest installed base for maximum interchangeability
- ◆ Bronze impellers and Stainless Steel shaft sleeves provide less corrosion, additional chemical resistance and durability
- ◆ Heavy duty power frames with minimum 8,000 hours L10 bearing life
- ◆ Single volute on suction and discharge
- ◆ Gauge tap on suction and discharge on flange
- ◆ Standard back pullout design reduces downtime
- ◆ Internal self-flushing mechanical seal for continuous lubrication and extended durability, eliminates the need for exterior lubricating and tubing
- ◆ Sealed-For-Life bearings
- ◆ Coupling guard (Pentair PWTEF only)
- ◆ Working pressures up to 10 Bar as per EN 733
- ◆ Structure steel base

### OPTIONAL FEATURES

- ◆ Soft packing (Pentair PWTEF Only)
- ◆ Cast Iron and 304 Stainless Steel impeller are available
- ◆ Drip pan (Pentair PWTEF only)
- ◆ Certified performance testing

### APPLICATIONS

- ◆ HVAC Systems
- ◆ Boosting
- ◆ Chilled and Hot Water
- ◆ Commercial Pools
- ◆ Industrial Uses
- ◆ Municipal



Residential



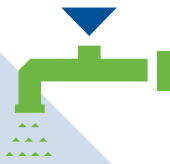
Commercial



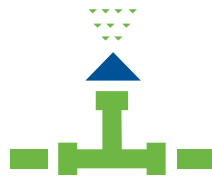
Industrial



Municipal & Infrastructure



Water & Fluid Treatment



Water & Fluid Movement

# PUMP SIZE OFFERING

Pump Sizes	
32-125	80-315
32-160	80-315G <sup>(2)</sup>
32-200	80-400 <sup>(1)</sup>
32-250 <sup>(1)(3)</sup>	100-160 <sup>(1)</sup>
40-125	100-200
40-160	100-250
40-200	100-315
40-250 <sup>(3)</sup>	100-400
40-315 <sup>(1)</sup>	125-200 <sup>(1)</sup>
40-315G <sup>(2)</sup>	125-250
50-125	125-315
50-160	125-400
50-200	125-500 <sup>(1)</sup>
50-250	150-200 <sup>(1)</sup>
50-315 <sup>(1)</sup>	150-250 <sup>(1)</sup>
50-315G <sup>(2)</sup>	150-315
65-125	150-400
65-160	150-500 <sup>(1)</sup>
65-200	200-250 <sup>(1)</sup>
65-200G <sup>(1)</sup>	200-315 <sup>(1)</sup>
65-250 <sup>(3)</sup>	200-400 <sup>(1)</sup>
65-315	200-500 <sup>(1)</sup>
65-315G <sup>(2)</sup>	250-315 <sup>(1)</sup>
80-160	250-400 <sup>(1)</sup>
80-200	250-500 <sup>(1)</sup>
80-250	300-400 <sup>(1)</sup>

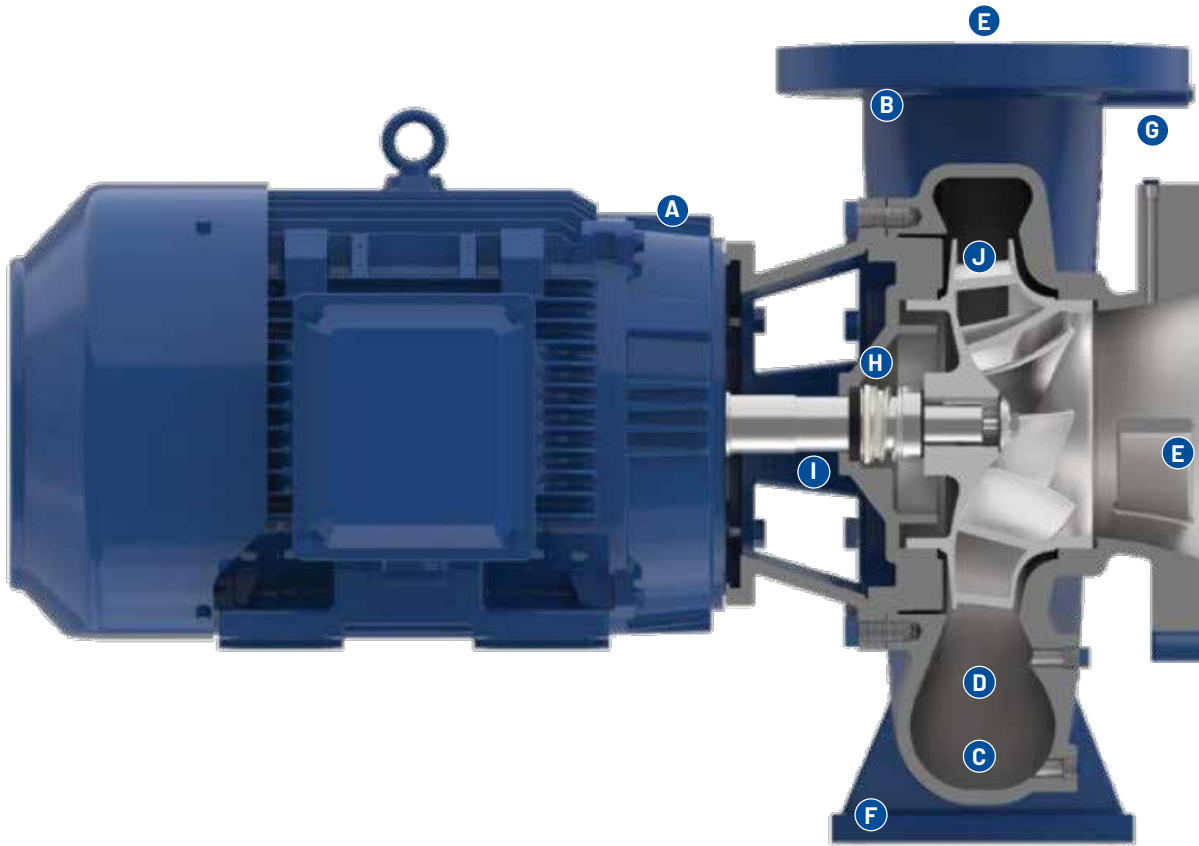
(1) These models are not part of EN733

(2) Ductile Iron casing and cover are standard - not part of EN 733

(3) Ductile Iron casing and cover are required when operating at 2P 60hz

"G" Only applicable for 2P 50hz - not part of EN 733

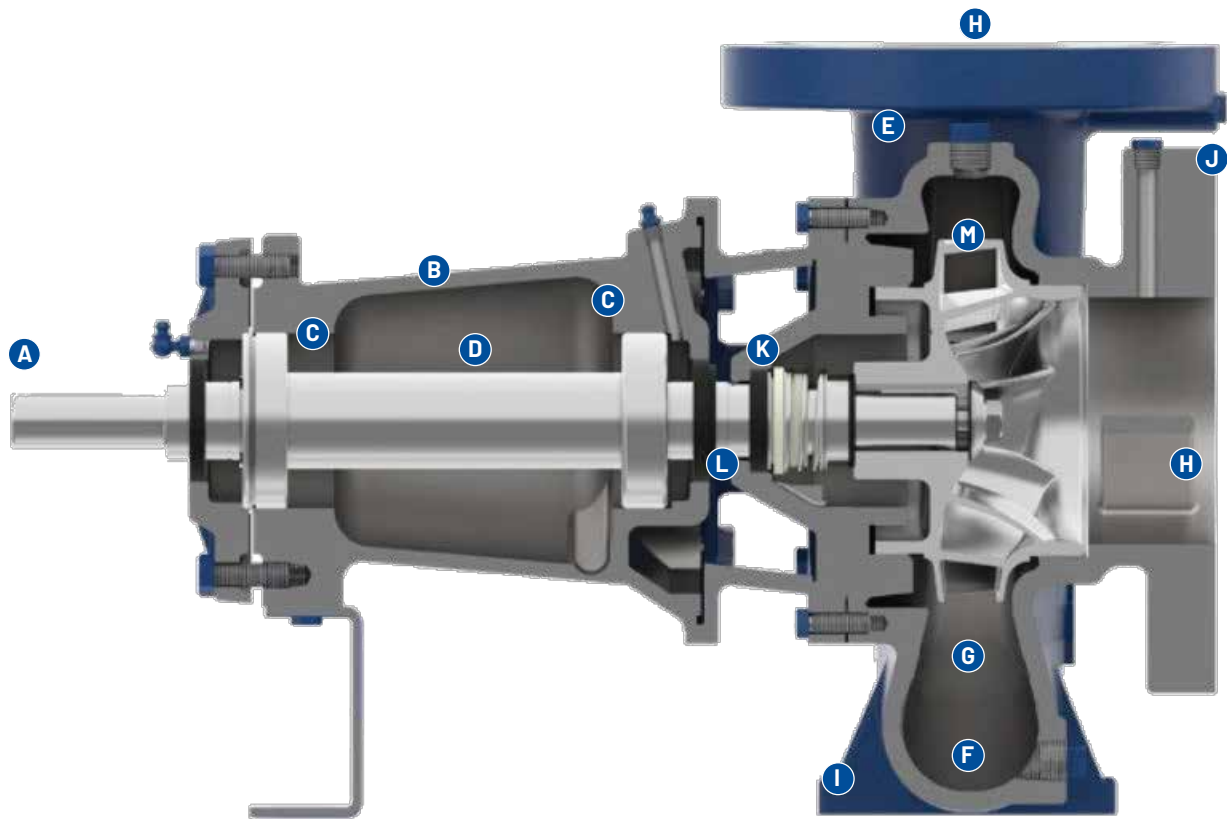
# PENTAIR PWTEC CLOSE COUPLED



- A. Standard IEC motors**  
provide low noise level pump operation,  
available for IE2 and IE3.
- B. Cast Iron casing**  
long life with higher working pressures.
- C. Factory Hydro test**  
guarantees casing and seal integrity.
- D. Single volute discharge**
- E. Suction and discharge flange**  
Standard DIN2501 PN16.
- F. Casing feet for easy back pull out**  
allows servicing of pump without disturbing  
suction and discharge pipelines.

- G. Gauge taps on suction and discharge flanges**
- H. Mechanical seal**  
carbon against ceramic face for optimum  
performance. Long life is assured with  
304SST metal parts and Viton  
elastomers.
- I. Shaft sleeve**  
to protect the motor shaft.
- J. Bronze impeller**  
keyed to shaft extension and secured by a  
cap screw and washer.

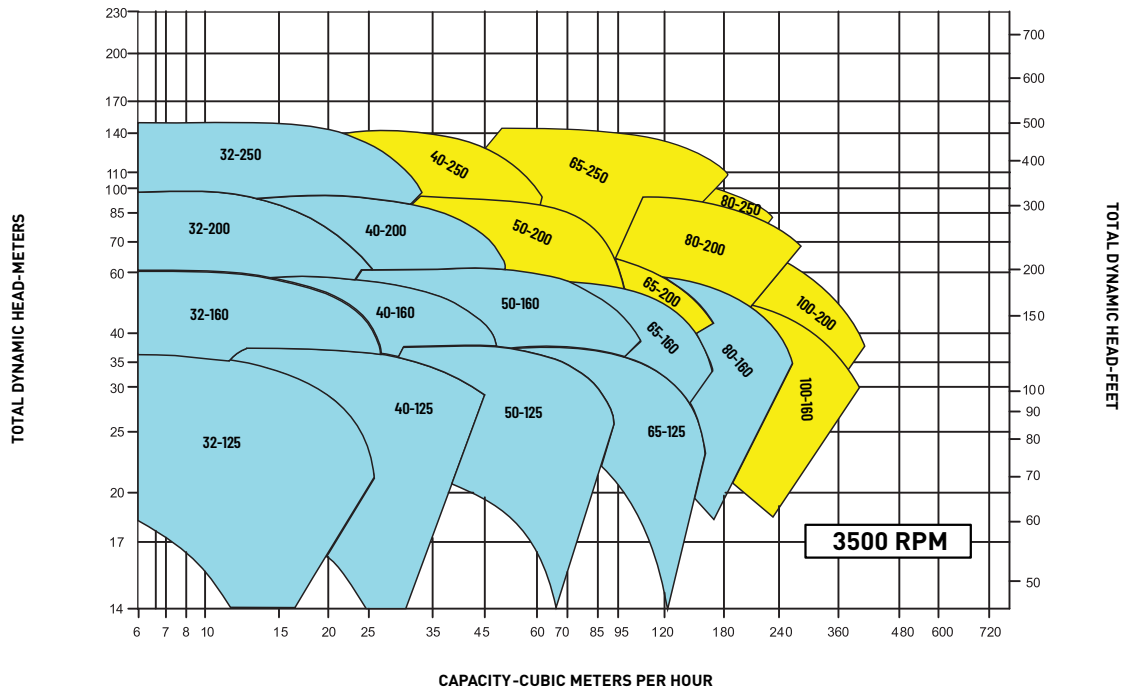
# PENTAIR PWTEF FLEXIBLE COUPLED



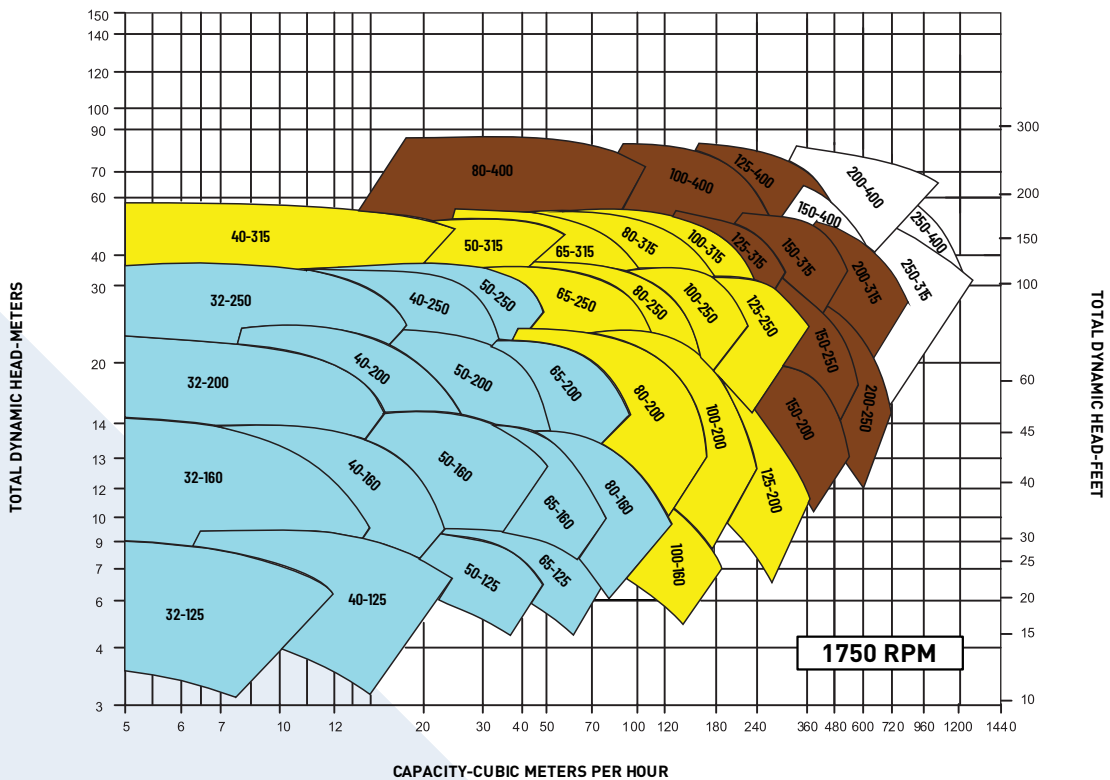
- A.** Standard IEC motors  
provide low noise level pump operation.
- B.** Heavy duty power frame
- C.** Seal-For-Life bearings
- D.** Stainless Steel shaft  
designed for minimum deflection.
- E.** Cast Iron casing  
long life with higher working pressures.
- F.** Factory Hydro test  
guarantees casing and seal integrity.
- G.** Single volute discharge
- H.** Suction and Discharge flange  
standard DIN2501 PN16.
- I.** Casing feet for easy back pull out  
allows servicing of pump without disturbing suction and discharge pipelines.
- J.** Gauge taps on suction and discharge flanges
- K.** Mechanical seal  
carbon against ceramic face for optimum performance. Long life is assured with 304SST metal parts and Viton elastomers.
- L.** Shaft sleeve  
to protect the pump shaft.
- M.** Bronze impeller  
keyed to shaft extension and secured by a capscrew and washer.

# PUMP PERFORMANCE

## 3500 RPM, 60 Hz RANGE CHART



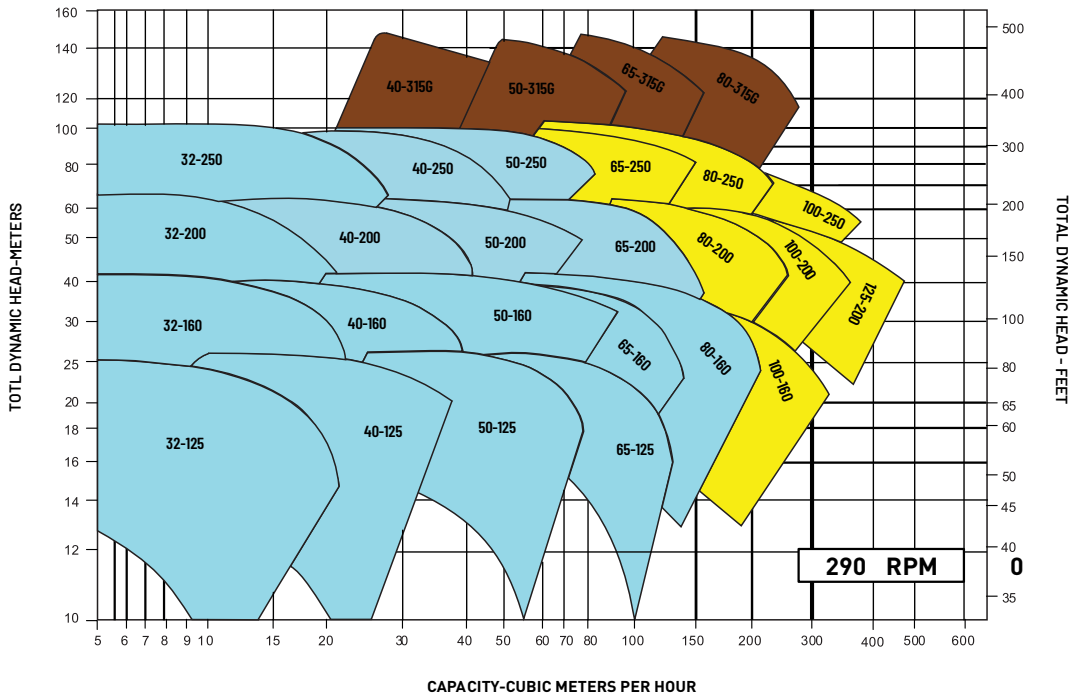
## 1750 RPM, 60 Hz RANGE CHART



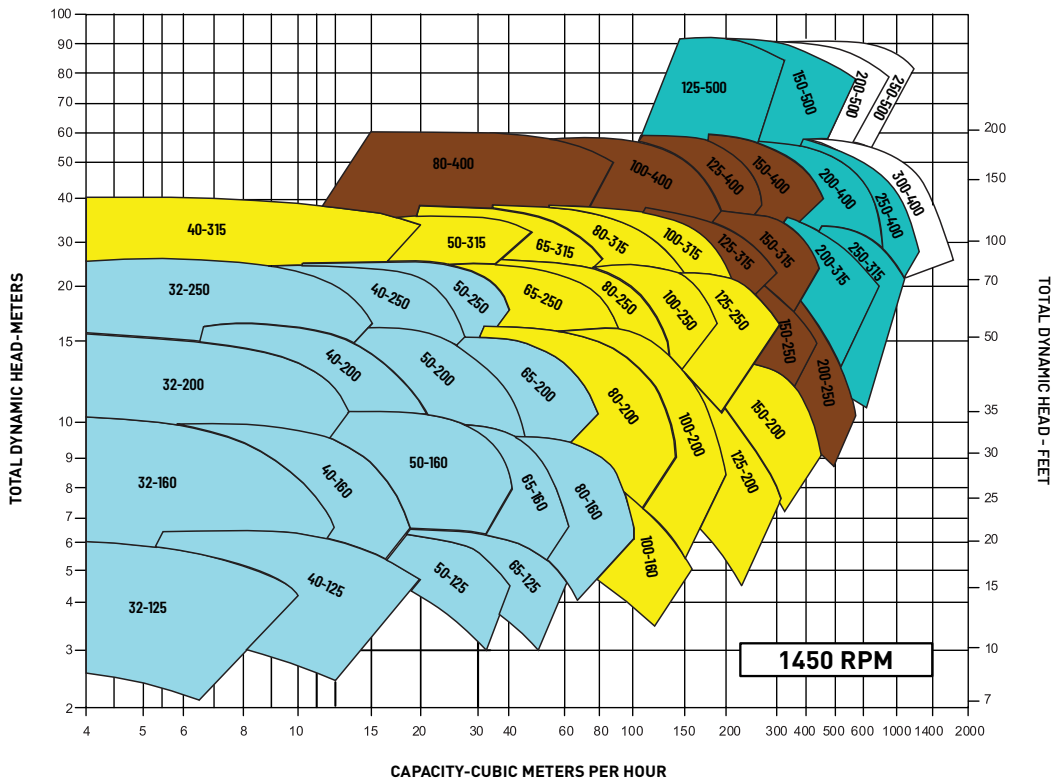
Reference only: For the most current information, refer to Performance curve and Selection Tool.  
 \*These sizing are available only PWTEF model

# PUMP PERFORMANCE

## 2900 RPM, 50 Hz RANGE CHART



## 1450 RPM, 50 Hz RANGE CHART



Reference only: For the most current information, refer to Performance curve and Selection Tables.  
 \* These sizing are available only PWTEF model

# PUMP FEATURES

## TECHNICAL DATA BASED ON STANDARD MATERIALS AND PUMPING CLEAN WATER

Pump Series		PWTEF	PWTEC
Pump type		Flexible-coupled end suction pump	Close-coupled end suction pump
Capacities (m <sup>3</sup> /hr)		Up to 1584 m <sup>3</sup> /hr	Up to 500 m <sup>3</sup> /hr
Pump Head (m)		Up to 150 m	Up to 150 m
Speed (rpm)	50Hz	1450 or 2900 rpm	1450 or 2900 rpm
	60Hz	1750 or 3500 rpm	1750 or 3500 rpm
Temperature (°C)		Standard 85°C	Standard 85°C
Working Pressure (Bar)		Standard 10 Bar	Standard 10 Bar
Flange pressure rating		PN16	PN16

## MATERIALS OF CONSTRUCTION

Pump Part	Standard material	Optional
Casing	Cast Iron	-
Impeller	Bronze	Cast Iron and 304 Stainless Steel
Seal plate/motor bracket	Cast Iron	-
Shaft	Stainless Steel ASTM 420	-
Sleeve	Stainless Steel ASTM 420	-
Power frame	Cast Iron	-
Shaft Seal	Mechanical seal	Soft Packing (Pentair PWTEF only)



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