# **1600 Series In-Line Pump**

Taco 1600 Series In-Line Pumps combine the ultimate in reliability with ease of installation and maintenance, for heating, air conditioning, pressure boosting, cooling water transfer and water supply applications. Quiet, dependable and proven performance makes the 1600 Series Pump the right choice. Available in 50 Hz and 60 Hz.







#### **Features & Benefits**

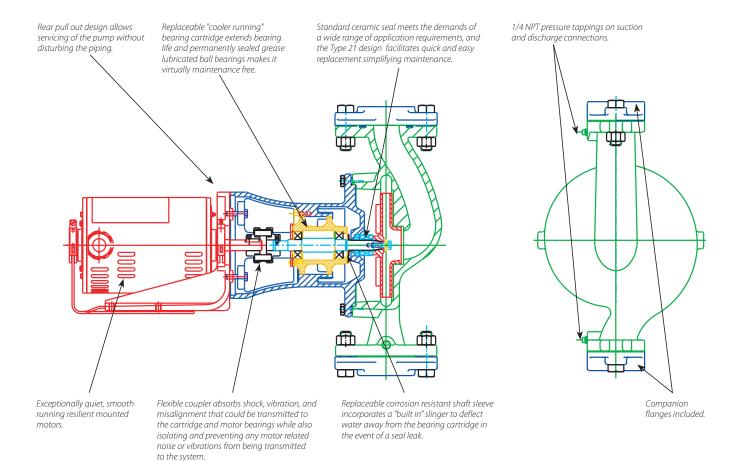
# Quiet, dependable power and proven performance.

1600 Series In-Line pumps meet the latest industry standards for hydraulic performance and reliability. Each is backed by Taco Comfort Solutions a worldwide leader in the design and manufacture of heating and cooling equipment for more than 90 years. Taco "1600" Series In-Line pumps are available in 15 models ranging in size from 1 1/2" X 1-1/2" to 2" X 2" with a flow range from 10 to 235 GPM and head capacities up to 68 feet.

Taco 1600 Series In-Line pumps utilize an exclusive replaceable, cooler running bearing cartridge design. This unique design isolates the bearings from the effects of system fluid temperatures which greatly extends bearing life. The cartridge design incorporates **permanently sealed** grease lubricated ball bearings making it virtually maintenance free. All 1600 series In-Line Pumps are

furnished with ceramic seals (standard) in order to meet a wide range of application requirements. The standard mechanical seal is an industry-standard Type 21 design consisting of the rotating element (SS spring & retainer, EPT elastomers, and carbon mating ring) and ceramic seat.

The standardized cartridge design simplifies maintenance with minimal parts requirements, one size cartridge and mechanical seal to service the entire product line.



Features Benefits

**Rugged Casing Design**The 1600 Series has a maximum operating pressure of 175psi, and a maximum

operating temperature of 300°F. The 1600 Series is available in cast-iron stainless steel

fitted construction or all stainless steel construction.

**Cartridge Assembly**Replaceable "cooler running" bearing cartridge extends bearing life, and with

permanently sealed greased lubricated ball bearings it is virtually maintenance free.

**Pressure Tappings** Pressure tappings allow for differential pressure readings to be taken across the pump.

One Piece Enclosed Impeller Dynamically balanced stainless steel impeller assures long life

and higher pump efficiencies.

**Cupro-Nickel Shaft Sleeve** Non corrosive shaft sleeve protects the shaft by preventing contact between

the shaft and system fluid eliminating the need for more expensive corrosion

resistant shaft materials.

**Standard Mechanical Seal** 1600 Series In-Line pumps utilize a Type 21 seal design which facilitates quick

and easy replacement. Available in ceramic (standard) or the new "Sealide C" (for more aggressive system fluids) ensures the flexibility to meet a wide range

of application requirements. One size seal fits all models.

**Flexible Coupler** Flexible coupler absorbs shock, vibration and misalignment that could be transmitted

to the cartridge and motor bearings while also isolating and preventing any motor

related noise or vibrations from being transmitted to the system.

**Resilient Mounted Motor**Resilient mounted motor insures quiet reliable vibration free operation of the pump.

Parts Flexibility Superior parts flexibility: one cartridge, one seal, and two motor frames

fit all pump models.

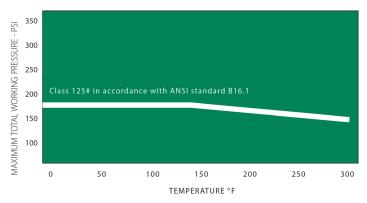
Factory Tested All 1600 series pumps are factory tested, and are built in accordance

with Hydraulic Institute Standards.

## **Operating Specifications**

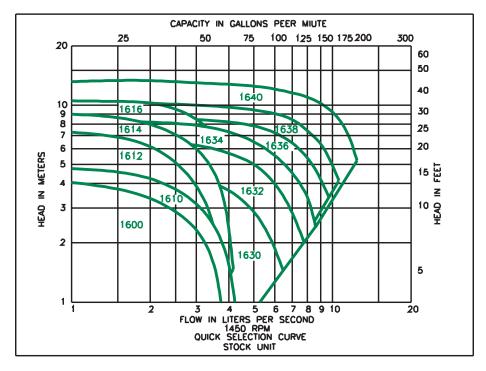
Description	Standard	Optional	
Pressure	175psi Maximum Operating Pressure (125psi Flanges Standard)		
Temperature Mechanical Seal	250°F	300°F	
Motors	Nema Standard, Resilient Mounted	Special Enclosures	
Coupler	Flexible Type		
Pump Bearings	Ball Bearing Replaceable Cartridge		
Pressure Tappings	Tapped Suction & Discharge Ports Provided as Standard		
Pump Flanges	Available with the Pump		

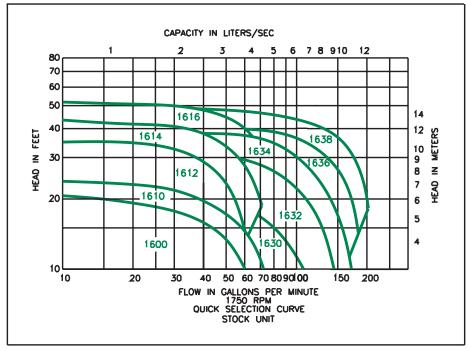
## **Pressure Temperature Ratings**



#### 1600 Series Performance Field 1450 RPM 50 Hz

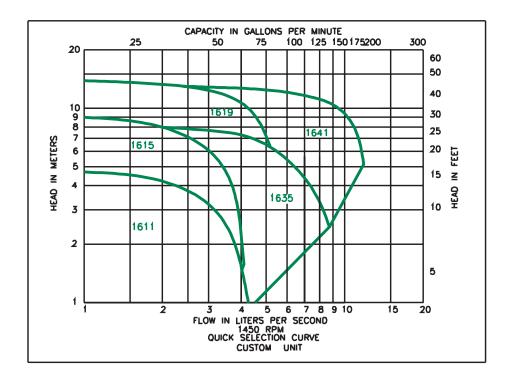
Curves also available on TacoNet®.

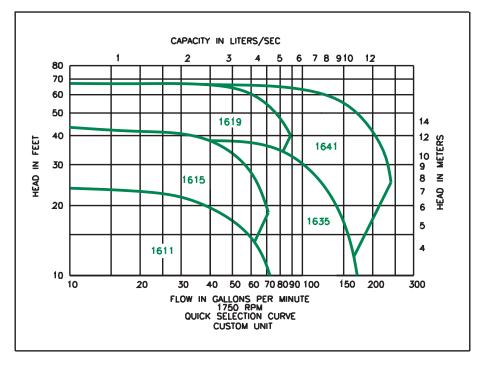




#### 1600 Series Performance Field 1750 RPM 60 Hz

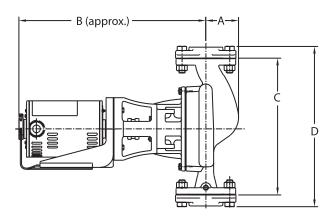
Curves also available on TacoNet®.





## **Applications**

LoadMatch® Systems	Cooling Towers		
Air Conditioning Systems	Golf Courses		
Recirculation	Dry Cleaning Plants		
Booster Service	Livestock Watering		
Heating Systems	Bottle Washers		
Laundry Equipment	Lawn Sprinklers		



#### **Materials of Construction**

Description	Standard	Optional	NSF 61	
Casing	Cast Iron	SS (304)	SS (304)	
Impeller	Cast SS (304)		SS (304)	
Shaft	Hardened Alloy Steel	SS (416)	SS (416)	
Shaft Sleeve	Cupro-Nickel		Cupro-Nickel	
Bracket	Cast Iron	Cast Iron with SS Face Plate	Cast Iron with SS Face Plate	

## **Pump Dimensions & Weights**

Model No.		Power		Dimensions					
Custom	Stock	Flange Size	60Hz HP (KW)	50Hz HP (KW)	Α	В	С	D	Weight
l ⊢	1600	1-1/2	1/4* (.19)	1/6* (.17)	3 (76)	16-1/2 (419)	10-1/4 (260)		59
	1610		1/3* (.25)	1/4* (.19)	3 (76)	16-1/2 (419)		12-7/8 (327)	61
			1/2 (.37)	1/3* (.25)	3 (76)	17.00 (432)			
l 1615 <del>-</del>		1-1/2 (38)	1/3* (.25)	1/4* (.19)	3-1/8 (79)	18 (457)			
	1612		1/2 (.37)	1/3* (.25)	3-1/8 (79)	18-1/2 (470)			89
	1614		3/4 (.56)	1/2 (.37)	3-1/8 (79)	19 (483)	13-1/2 (343)	16-1/8 (410)	91
		]	1 (.75)	3/4 (.56)	3-1/8 (79)	19-1/2 (495)			
1619		2 (51)	3/4 (.56)	1/2 (.37)	3 (76)	18-1/2 (470)			
	1616		1 (.75)	3/4 (.56)	3 (76)	19 (483)			99
			1-1/2 (1.1)	1 (.75)	3 (76)	21 (533)	14-1/2 (368)	17-3/8 (441)	
			2 (1.5)	1-1/2 (1.1)	3 (76)	23 (584)			
1635	1630	2 (51)	1/2 (.37)	1/3* (.25)	3-1/2 (89)	18 (457)			91
	1632		3/4 (.56)	1/2 (.37)	3-1/2 (89)	18-1/2 (470)	13-1/2 (343)		93
	1634		1 (.75)	3/4 (.56)	3-1/2 (89)	19 (483)		16-1/8 (410)	100
			1-1/2 (1.1)	1 (.75)	3-1/2 (89)	21 (533)			
1641	1636	2 (51)	1-1/2 (1.1)	1 (.75)	3-5/8 (92)	21 (533)	16-1/2 (419)	19-1/2 (495)	126
	1638		2 (1.5)	1 1/2 (1.1)	3-5/8 (92)	23 (584)			153
			3 (2.37)	2 (1.5)	3-5/8 (92)	24 (610)			

<sup>•</sup> English dimensions are in inches. Metric dimensions are in millimeters.

<sup>•</sup> Do not use for construction purposes unless certified.

<sup>•</sup> Metric data is presented in ( ).

<sup>\* 1/4</sup> HP and 1/3 HP AVAILABLE IN 1 PHASE ONLY.



#### **eLink® Taco Connectivity**

Taco Tags use the power of NFC technology to provide users withall the relevant documents for a specific product, right on their phone. Your digital document library will always be accessible with the most up to date documentation and product information for that specific piece of equipment.

Utilizing the power of Taco Tags to provide you with all of your documentation needs, Taco is ensuring our user base is informed to take control of their equipment.

eLink provides easy access to product specs, technical documentation, instruction manuals and much more. Stay tuned as we continue to grow the eLink offerings on Taco commercial equipment.





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