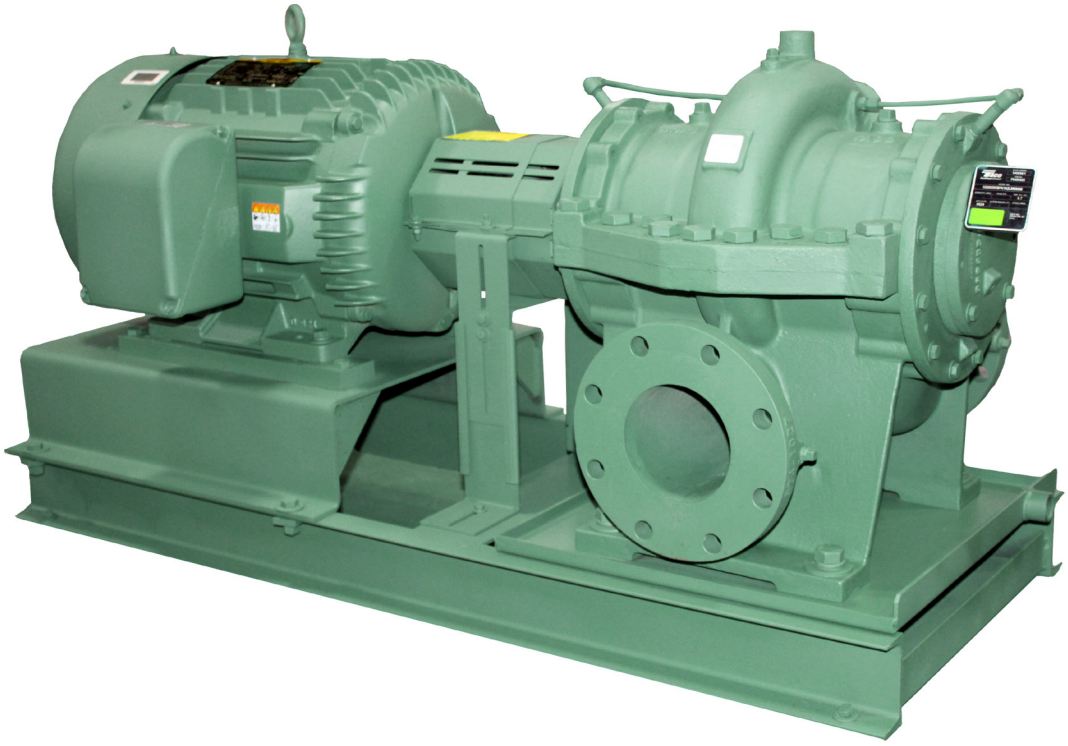
HS Series Single-Stage Double Suction Horizontal Split Case Pumps

HS Series Pumps provide the ultimate in reliability and ease of installation & serviceability for heating, air conditioning, pressure boosting, cooling water transfer, and water supply applications. Quiet, dependable, and proven performance: that's the HS Series.



Taco Comfort Solutions®
A Taco Family Company

Supersedes: NEW

Effective Date: 10/03/24
Printed in USA

Features & Benefits

Service is Easy and Fast

- The mechanical seal and bearings can be easily accessed without disturbing the top casing.
- No need to replace casing if wear rings require service. The case wear rings are separate from the case itself and are replaceable
- Quick access for service and maintenance. The top half of the casing is easily removed to allow service of the rotating unit without disturbing the piping system.

High-efficiency Impeller

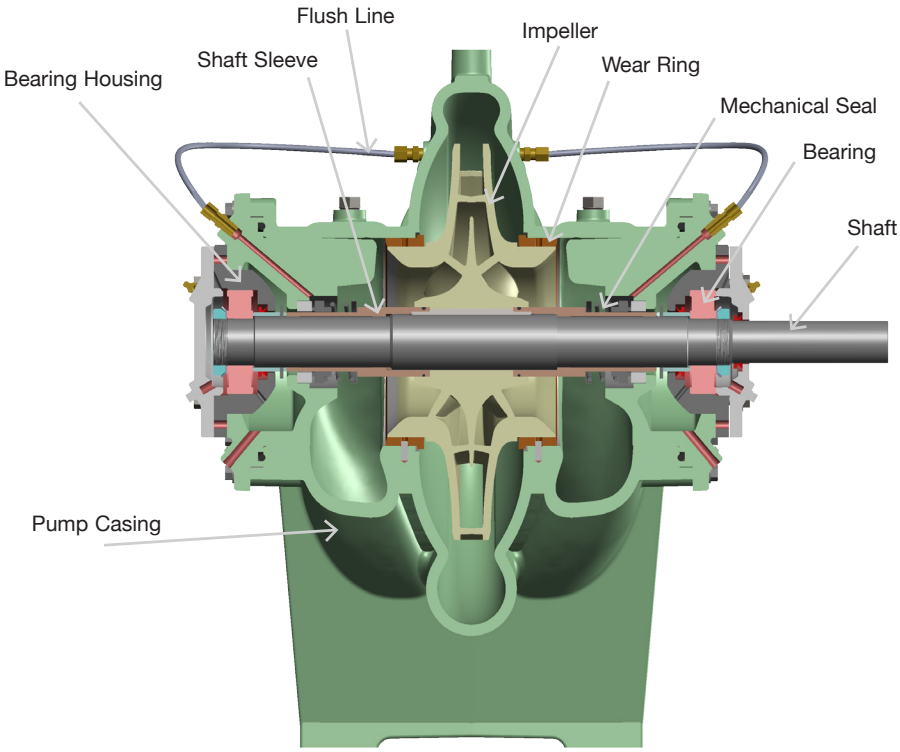
- High-efficiency, double suction hydraulically & dynamically balanced bronze impeller.

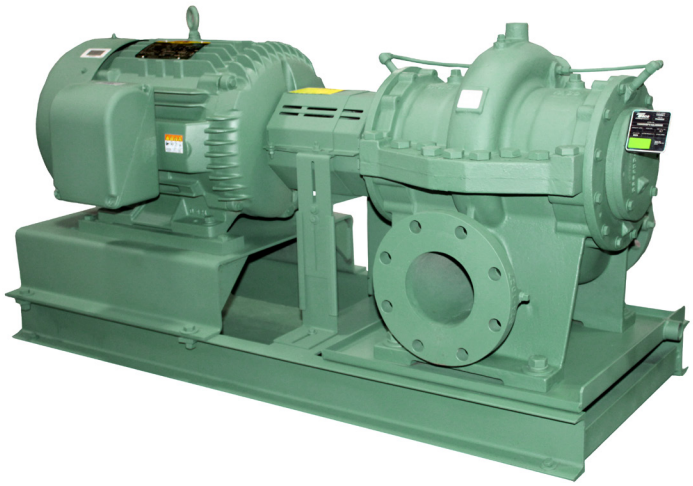
Short Shaft Design

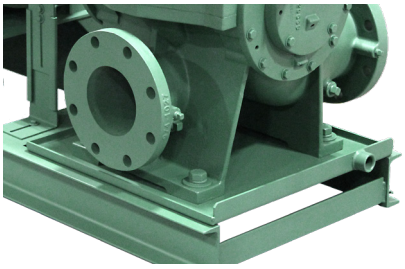
- Rigid engineered shaft design has low deflection at all operating points. This reduces the mechanical seal wear and bearing loading and minimizes the vibration, resulting in long running life.

Heavy-Duty Casing

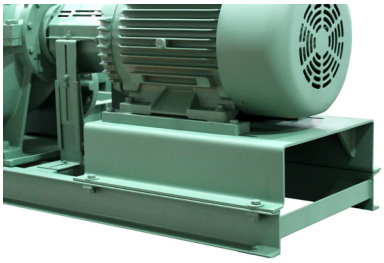
- For greater strength extra heavy construction of the pump, casing provides greater structural integrity and reduces the risk of distortion. The pump feet are cast integrally with the bottom half of the spiral casing and extended to support the inserts that carry the pump bearings.







Drip Pan Standard



Per Hydraulic Institute and ASHRAE the grouting of bases is always recommended.

A fully welded reinforced, rigid structural steel base reduces vibration and improves alignment.

Materials of Construction

MATERIALS OF CONSTRUCTION

Item	Bronze Fitted		Stainless Steel
	Standard Pump Construction		Optional
	125# Flange	250# Flange	125# or 250#
Casing	Cast Iron ASTM A48/A48M-03 Class 30A	Ductile Iron ASTM A536-84 Grade: 65-45-12	N/A
Cover	Cast Iron ASTM A48/A48M-03 Class 30A	Ductile Iron ASTM A536-84 Grade: 65-45-12	N/A
Impeller	Bronze ASTM 584 C83600, C84400 or C87500	Bronze ASTM 584 C83600, C84400 or C87500	N/A
Wear Ring	Bronze ASTM 584 C93200	Bronze ASTM 584 C93200	N/A
Sleeve	Bronze ASTM 584 C93200	Bronze ASTM 584 C93200	N/A
Shaft	Carbon Steel AISI 1045	Carbon Steel AISI 1045	Stainless Steel TYPE 416"T" or 410"T" ASTM A582
Key	Carbon Steel AISI 1045	Carbon Steel AISI 1045	Stainless Steel AISI 304

N/A - Not Available

OPERATING SPECIFICATIONS

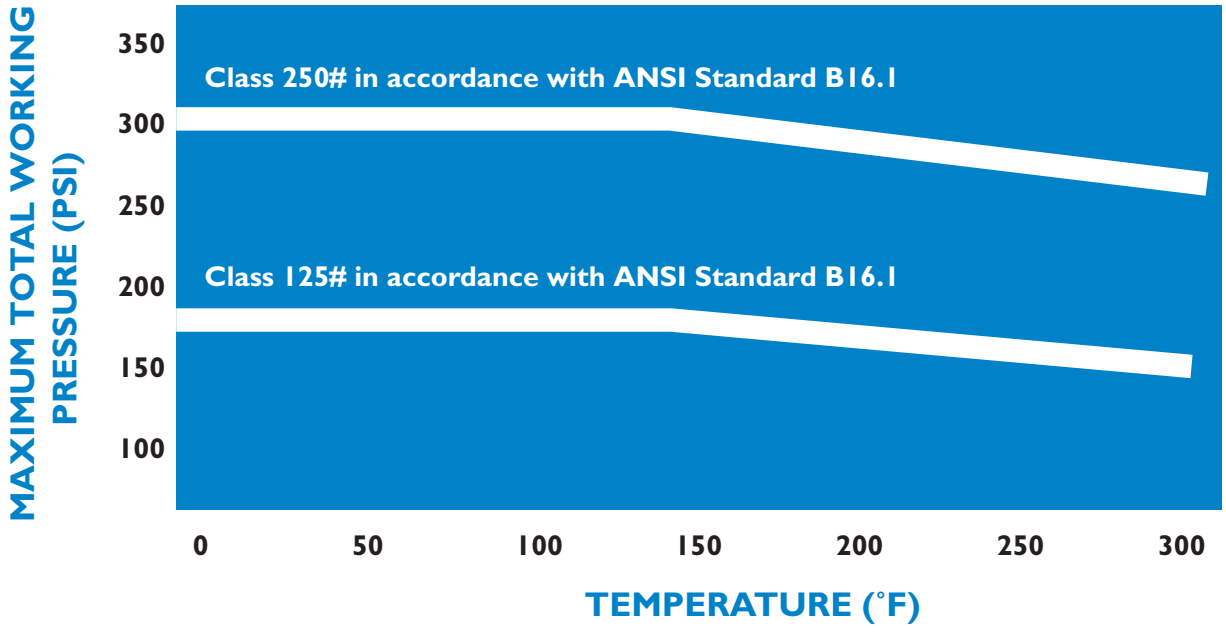
	Standard	Optional
Flange	ANSI Class 125	ANSI Class 250
Pressure	175 PSIG* (1210 KPA)	300 PSIG** (2070 KPA)
Temperature	250°F (120°C)	250°F (120°C)

Motors: All NEMA Standard (T Frame)
* In accordance with ANSI Standard B16.1 Class 125
** In accordance with ANSI Standard B16.1 Class 250 Dim.

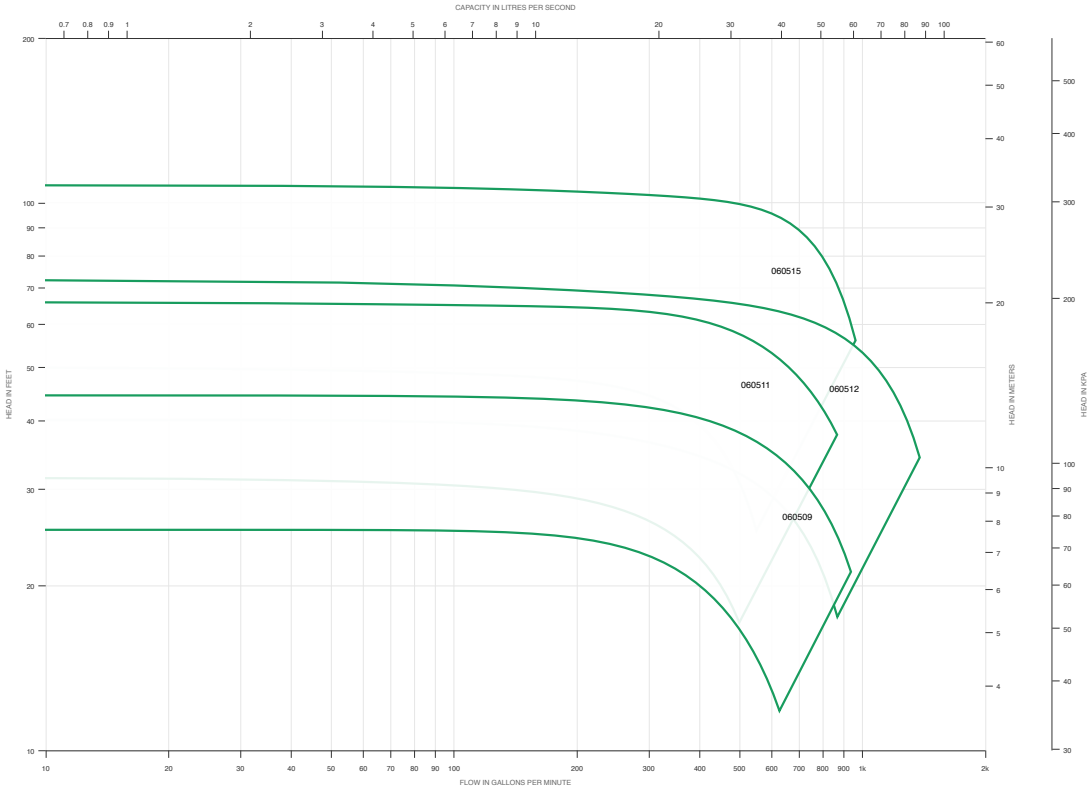
FEATURES

	Standard	Optional
Wear Rings	Case Wear Rings	N/A
Seal Flushing	Recirculation Line	Filter & Abrasive Separators
Motors	All Standard NEMA and IEC Motors	
Base	Drip Type Base	
Additional Options	Two Rotation Options	

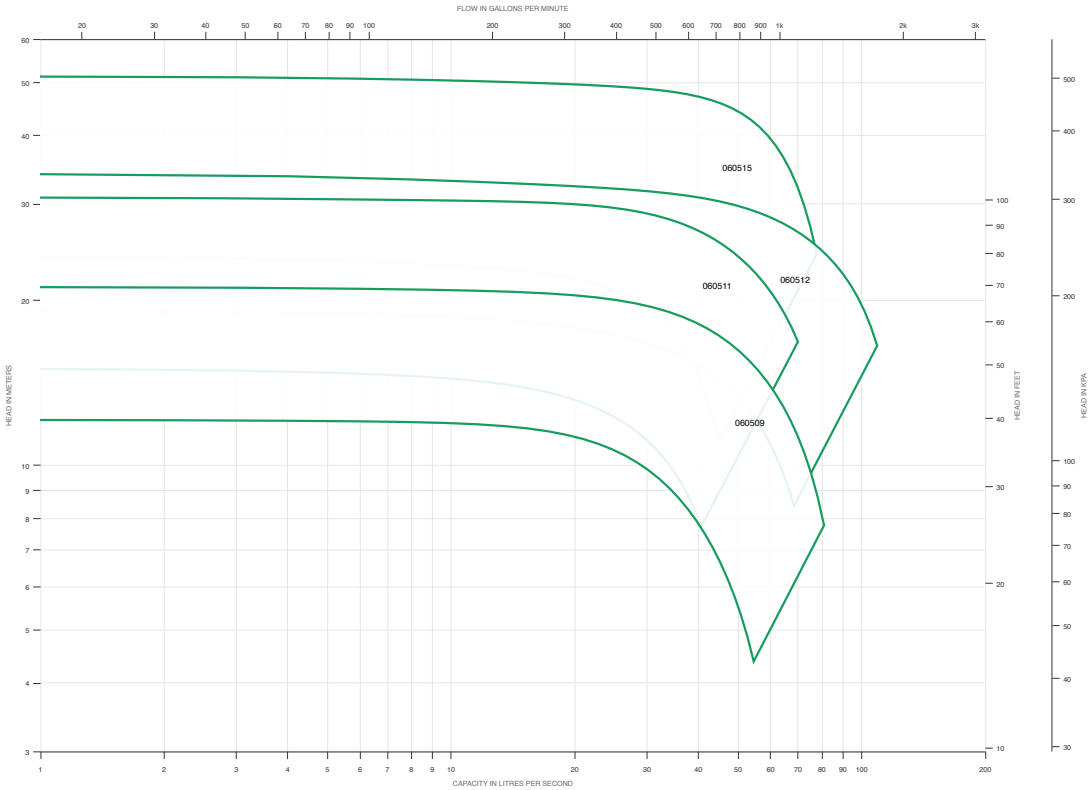
Pressure-Temperature Ratings



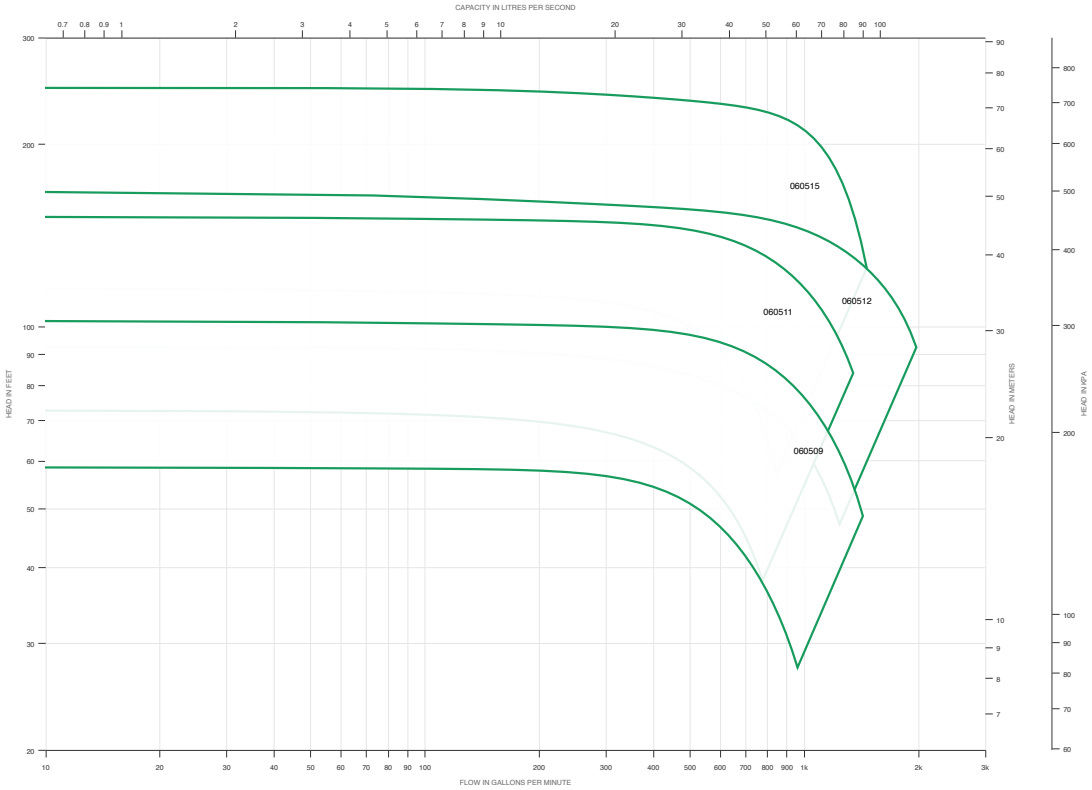
1160 Performance Curves Family



1450 Performance Curves Family



1760 Performance Curves Family



Typical Specification

Furnish and install Double Suction Horizontal Split Case pump(s) with capacities and characteristics as shown on the plans. Pumps shall be Taco model HS or approved equal. Pump volute or casing shall be class 30 cast iron or ductile iron Grade: 65-45-12 with integrally cast mounting feet to allow servicing without disturbing piping connections.

The pump flanges shall be drilled to match the piping standards of the job, either ANSI class 125 or ANSI class 250. The pump may be fitted with a replaceable bronze wear ring, drilled and tapped for gauge ports at both the suction and discharge connections and for drain port at the bottom of the casing. The impeller shall be bronze . The impeller shall be dynamically balanced to ANSI Grade G6.3 and shall be fitted to the shaft with a key. The pump shall incorporate a dry shaft design to prevent the circulating fluid from contacting the shaft. The pump shaft shall be high tensile alloy steel or stainless steel with a replaceable bronze shaft sleeve.

The pump shall have a self-flushing seal design or a positive external seal flushing line. The pump may be furnished with a seal flush line and a Purocell #900 replaceable cartridge filter with shut-off isolation valve installed in the seal flushing line. The filter shall have the ability to remove particles down to five microns in size.

The pump mechanical seal shall have a Ni-Resist Seat and carbon Rotor with EPT elastomer rated to 250º F. The seal/bearing housing shall be tapped and shall include a barbed hose fitting for safe routing of any leaking seal fluid.

The base shall be made of structural steel. The base shall also include a factory-provided, integral drain pan fabricated from steel with a minimum thickness of 0.1875” and shall contain a ¾” drain connection. A flexible coupler suitable for both across-the-line starting applications as well as variable torque loads associated with variable frequency drives, shall connect the pump to the motor and shall be covered by a coupler guard. Pumps shall be installed per all applicable Hydraulic Institute and ANSI standards to ensure proper alignment and pump longevity.

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Taco, Inc., 1160 Cranston Street, Cranston, RI 02920 | Tel: (401) 942-8000 | **Taco (Canada), Ltd.**, 8450 Lawson Road, Suite #3, Milton, Ontario L9T 0J8 | Tel: (905) 564-9422
www.TacoComfort.com