









## Taco, Inc., 1160 Cranston Street, Cranston, RI 02920

(401) 942-8000

## Taco (Canada) Ltd., 8450 Lawson Road, Unit#3, Milton, Ontario L9T 0J8

(905) 564-9422

## www.TacoComfort.com

The Comfort Experts Catalog #300-9.4 Supersedes: 08/05/15 Effective Date: 07/03/23

## Contents

- Vertical Inline Pumps
- End Suction Pumps
- Optimized Efficiency Oe Package
- 10 VT Series
- 11 Cartridge / Wet Rotor Circulators
- Large Split Case Pumps
- 17 Inline Pumps
- 20 ECM Series
- 22 00e® Series
- Electronic Controls,
  Accessories & Valves
- 29 System Packages
- 30 Chilled Beam System
- Software & Tools
- Innovation & Development Center



## Vertical Inline Pumps

NOTE: All pumps are also available with 50Hz or 60Hz motors

## **Split-Coupled Pumps**



## **KS Series**

Designed for optimum performance, easy installation, and simplified maintenance. Change the seal without disturbing the motor or piping. Ideal for HVAC, industrial, and domestic water applications.

Flow Range: 40-12,500 GPM Head Range: 10'-380'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA)

Temperature: 250°F (120°C), Optional: 300°F (149°C)

HP: 34-600 Sizes: 1 ½"-14"



## **SKS Series**

Design suitable for both constant flow chiller/boiler pumping and secondary variable flow applications. The VFD's SelfSensing capabilities make do-it-yourself system balancing fast, easy, and accurate. Part of the SelfSensing Series with Probalance® equipped with ECM permanent magnet technology for Optimized Efficiency.

Flow Range: .1-7,998 GPM Head Range: .1'-282'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA)

Temperature: 250°F (120°C), Optional: 300°F (149°C)

HP: 1 ½-250 Sizes: 1"-10







## **Close-Coupled Pumps**



## **KV Series**

Design provides improved alignment and longer seal life. Hydraulically balanced axial load increases bearing life and pump efficiency, lowering NPSH requirements. Ideal for HVAC and industrial applications.

Flow Range: 10-2,650 GPM Head Range: 11'-385'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA)

Temperature: 250°F (120°C), Optional: 300°F (149°C)

HP: ¾-60 Sizes: 1 ½"-8"



## **SKV Series**

Design suitable for both constant flow chiller/boiler pumping and secondary variable flow applications. The VFD's SelfSensing capabilities make do-it-yourself system balancing fast, easy, and accurate. Part of the SelfSensing Series with Probalance® equipped with ECM permanent magnet technology for Optimized Efficiency.

Flow Range: .1-2,647 GPM Head Range: .1'-168'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA)

Temperature: 250°F (120°C), Optional: 300°F (149°C)

HP: 1 ½-75 Sizes: 1 ½"-8"





## End Suction Pumps

NOTE: All pumps are also available with 50Hz or 60Hz motors

## **Based Mounted Pumps**



## **FI Series**

Configuration with rear pullout design for fast and easy servicing. The exclusive dry shaft design protects the pump shaft from system fluid. Suitable for a variety of applications including heating, air conditioning, pressure-boosting, cooling water transfer, and water supply.

Flow Range: 20-4,800 GPM Head Range: 5'-380'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C) RPM Range: 1160-3500

HP: ½-200 Sizes: 1.5"-8"



## **SFI Series**

Configuration with rear pullout design for fast and easy servicing. The VFD's SelfSensing capabilities make do-it-yourself system balancing fast, easy, and accurate. Part of the SelfSensing Series with Probalance® equipped with ECM permanent magnet technology for Optimized Efficiency.

Flow Range: 40-4,800 GPM Head Range: 1'-390'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: ½-200 Sizes: 1 ½"-8"







## **Foot Mounted Pumps**



## **CI Series**

Configuration with rear pullout design for easy servicing. The exclusive dry shaft design protects the pump shaft from system fluid. Suitable for a variety of applications including heating, air conditioning, pressure-boosting, cooling water transfer, and water supply.

Flow Range: 20-2,650 GPM Head Range: 5'-380'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: ½-60 Sizes: 1.5"-6"



## **SCI Series**

Configuration with rear pullout design for fast and easy servicing. The VFD's SelfSensing capabilities make do-it-yourself system balancing fast, easy, and accurate. Part of the SelfSensing Series with Probalance® equipped with ECM permanent magnet technology for Optimized Efficiency.

Flow Range: 10-2,500 GPM Head Range: 1'-390'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: ½-60 Sizes: 1 ½"-6"





# Optimized Efficiency Oe Package

## **Take your system to the next level** with Taco's Optimized Efficiency Packages.

In today's environment, hydronic systems need to be up to date with the latest technology. The market is now driven towards high-efficiency solutions by ever-increasing regulations and environmental factors. Whether you need the best efficiency to combat high utilities or to reduce your carbon footprint, Taco has you covered.

By utilizing Permanent Magnet motor technology, Taco is bringing the largest ECMs available to the hydronic industry. In combination with our pumps, we aim to optimize your overall efficiency with the latest technology available. Don't get caught wishing you had a more efficient system, lead the charge with pumps that exceed regulations, utilize the latest technology available, and decrease total cost of ownership.



A Variable Frequency Drive is required to operate the Permanent Magnet motor. The Oe package cannot be sold without a drive.

# Pump+Motor Prive Pump+ECM Motor+Drive Pump+ECM Motor+Drive

## **Features**

→ Horsepower range: 3-10hp

**RPM:** 1750

**♦ Voltage Options:** 230V/460V/60/3

**→ Motor Enclosure Type:** TEFC

◆ Drive Enclosure Options: NEMA 1, NEMA 12, NEMA 4X

## **Benefits**

• Longer service life, more uptime & higher reliability

Increased performance, quieter & smoother operation

 Reduced lubrication frequency, resulting in lower maintenance costs

Low operating temperature

Flatter motor efficiency profile than the equivalent induction motor as the speed & load decline

## **Increase Total Efficiency**

Taco not only meets but exceeds the regulations passed down by the DOE.

In doing so, we also deliver a complete package to our users that saves on energy and the environment.

Our Oe package is simple, we take our pump, add a Permanent Magnet motor, and top the equipment off with a drive to increase your savings at slower speeds!

## Oe Package including SelfSensing with ProBalance®

Everything the Oe package has to offer and the added benefits of the Taco programmed SelfSensing Drives!

Increase your performance with the Taco SelfSensing drives included with the Permanent Magnet motor pumps for the best energy rating Taco has to offer. The added benefits of DIY balancing will decrease the total cost of ownership over the lifetime of the pump.





## VT Series

NOTE: All pumps are also available with 50Hz or 60Hz motors

Provide ultimate reliability and ease of installation in applications including condenser water, chilled water, water transfer, pressure boosting, and water supply. Quiet, dependable, with proven performance.

Flow Range: 50-15,000GPM Head Range: 6'-1,800'

Working Pressure: 200 PSIG (1379 KPA)

Temperature: 140°F (60°C)

HP: 5-600

Connection Sizes: 5"-21" Flange: ANSI 150 lb.



# Cartridge / Wet Rotor Circulators



## LoadMatch® Series

Designed for quiet, efficient operation on LoadMatch® Fan Coil Heating and Cooling Systems. Each circulator includes a removable Integral Flow Check (IFC®) to prevent gravity flow and reduce installation costs. An anti-condensate baffle prevents the build-up of condensate on the motor windings when pumping chilled water. The unique, field-serviceable cartridge contains all moving parts. Replacing the cartridge rebuilds the circulator. With no mechanical seal, the selflubricating, maintenance-free design of the LoadMatch® Circulators provides unmatched reliability.





## Variable Speed 00<sup>®</sup> Series

Designed to operate the pump at different speeds based on an externally-generated analog voltage signal input.

Flow Range: 0-52 GPM Variable Speed Solar Control: 0-31 GPM

Head Range: 0'-35' Variable Speed Solar Control:

HP: Variable Speed/Variable Voltage: 1/40-1/8

Variable Speed Setpoint, Outdoor Reset, Delta-T: 1/40-1/6

Min. Fluid Temp.: 40°F (4°C) Max. Fluid Temp.: 230°F (110°C)

Max. Working Pressure: Variable Speed/Variable Voltage: 125 PSI (006-008), 150 PSI (009-0014)

Variable Speed Solar Control, Setpoint, Delta-T: 125 PSI

Variable Speed Outdoor Reset: 125 PSI, 150 PSI

Connection Sizes (in): Variable Speed/Variable Voltage: 34" Sweat, 34", 1", ¼", 1 ½", 2", Flanged

Variable Speed Solar Control: 1/2", 3/4" Sweat, 3/4", 1", 1 ¼", 1 ½" Flanged

Variable Speed Setpoint, Outdoor Reset, Delta-T: 34", 1", 1 14", 1 1/2" Flanged, 34" Bronze Sweat or 34" NPT Stainless Steel

## Cartridge / Wet Rotor Circulators



## 3-Speed 00® Series

All 00® Series 3-Speed Cartridge Circulators include our replaceable cartridge design and an Integral Flow Check (IFC®) which prevents gravity flow, reduces installation costs, and improves system performance.

Max. Flow:

0015-18 GPM

0010-31 GPM

0012-42 GPM

0013-32 GPM

Max Head (ft):

0015-17'

0010-11'

0012-14' 0013-33'

Min. Fluid Temp.: 40°F (4°C) Max. Fluid Temp.: 230°F (110°C)

Max. Working Pressure: 125 PSI

Connection Sizes: 34", 1", 114", 11/2" Flanged



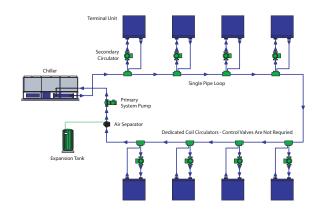


## LoadMatch® System

A self-balancing green hydronic single piping system designed to save on costs, improve efficiency, and more. LoadMatch® is the system of choice for commercial, institutional, and residential buildings. LoadMatch® delivers improved comfort design, simplicity, greater operational control, lower installation costs, simpler maintenance, and significant energy savings.

LoadMatch® hydronic piping distribution systems utilize a primary single pipe loop joined with a decoupled secondary piping loop for all terminal units. In addition, maintenance-free wet rotor circulators are substituted for control valves in this decoupled secondary loop.





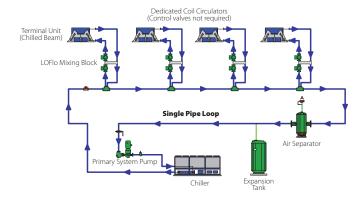


## **LOFIo® Injection Pumping**

The Taco LOFlo® Injection Pumping System is used in hydronic heating and cooling systems to significantly reduce the flow of water. Typically used in radiant panel (ceiling, wall, or floor) and chilled beam (passive and active) applications, the technology significantly reduces pump flows and pipe sizes for reduced energy consumption and lower first costs. In addition, the LOFlo® Injection Pumping System also provides precise control of supply water to the terminal, e.g., chilled beam, and precise control of room temperatures.

The basic concept of the LOFIo® Mixing Block, shown here, is to provide a complete injection missing station in a simple factory-assembled package that controls each individual zone at the lowest possible flow rate by maintaining the highest possible supply water temperatures in cooling and lowest possible supply water temperatures in heating.





# Large Split Case Pumps

NOTE: All pumps are also available with 50Hz or 60Hz motors

## Single-Stage, Double-Suction Horizontal Pumps



## **GT Series**

Provides the ultimate in reliability and ease of installation for heating, air conditioning, pressure boosting, cooling water transfer, and water supply applications. Quiet, dependable, and proven performance.

Flow Range: 1,800-18,000 GPM

Head Range: 25'-430'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: 50-1,500 Sizes: 10"-18"



## **TA Series**

A new, modular construction technique, these pumps are a major advance in pump design. With just three basic bearing and shaft modules, there are multiple seal and construction options for application flexibility, simplified maintenance, and design flexibility to accommodate future performance needs.

Flow Range: 75-5,500 GPM Head Range: 15'-390'

Max. Working Pressure: 300 PSIG (2070 KPA)

Temperature: 250°F (120°C), Optional: 300°F (149°C)

HP: 3-400 Sizes: 2"-12"



Single-Stage, Double-Suction Vertical Pumps



## **TC Series**

Provides the ultimate in reliability and ease of installation for heating, air conditioning, pressure boosting, cooling water transfer, and water supply applications. The TC Series' top suction and discharge make this product line the ideal choice for minimizing your installation footprint.

Frame-mounted pumps featuring high efficiency, rugged construction, compact design, foot-mounted volute, center drop-out coupler, and re-greaseable bearings. These features along with the vertically split case make installation, operation, and service easy to perform.

Flow Range: 100-390 GPM Head Range: 24'-1,100'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: 2-800 Sizes: 3"-14"



## **TS Series**

Provides the ultimate in reliability and ease of installation for heating, air conditioning, pressure boosting, cooling water transfer, and water supply applications. The TS Series' side inlet connection and top outlet connection make this product line an ideal choice for minimizing your installation footprint.

Frame-mounted pumps featuring high efficiency, rugged construction, compact design, foot-mounted volute, center drop-out coupler, and re-greaseable bearings. These features along with the vertically split case make installation, operation, and service easy to perform.

Flow Range: 100-390 GPM Head Range: 24'-1,100'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: 2-800 Sizes: 3"-14"

## Large Split Case Pumps

## **Horizontal Split Case Pumps**



## **HS Series**

A new, modular construction technique, these pumps are a major advance in pump design. With just three basic bearing and shaft modules, there are multiple seal and construction options for application flexibility, simplified maintenance, and design flexibility to accommodate future performance needs.

Flow Range: 83-2,201 GPM

Head Range: 7'-240'

Max. Working Pressure: 175 PSIG (1210 KPA);

Optional: 300 PSIG (2070 KPA) Temperature: 250°F (120°C)

HP: 10-100 Sizes: 6"





## 1600 Series (Loadmatch compatible)

Featuring a replaceable, permanently lubricated bearing cartridge and the exclusive cool-bearing cartridge design isolates the bearing from the effects of system temperatures to greatly extend bearing life. A standard bearing design also means that a single-bearing cartridge can be used to service the entire line, making servicing a snap.

Flow Range: 20-200 GPM Head Range: 10'-68'

Working Pressure: 175 PSI with cold water,

125 PSI at rated temperature

Temperature: 250°F (120°C), 300°F (149°C) with Hi-Temp Seal

HP: 1/4-3 Sizes: 1 1/2"-2"





## 1900 Series (Loadmatch compatible)

Meets the latest industry standards for hydraulic performance and reliability and is designed to be energy efficient and fit anywhere in the piping layout. The 1900 Series® Close-Coupled In-Line Pump is self-supported by the piping and can be installed horizontally or vertically. The pump and sealed ballbearing motor are maintenance-free. Rear pull-out design and standard motor simplify servicing and a single seal and shaft sleeve fits all models.

Flow Range: 7-280 GPM Head Range: 6'-164'

Working Pressure: 175 PSI in accordance with ASA B16.1 Temperature: 250°F (120°C), 300°F (149°C) with Hi-Temp Seal

HP: 14-7 1/2 Sizes: 1 1/2"



## Inline Pumps



## 110-120 Series

Designed to efficiently circulate heated or chilled water in residential or light commercial Hydronic Systems. These 110-120 Series In-Line Circulators may also be used for zoning large installations and are available in bronze or stainless steel construction for domestic hot water applications. 110-120 Series In-Line Circulators demonstrate proven performance, dependability, quiet operation, and long-lasting performance.

Flow Range: 0-68 GPM Head Range: 0'-22'

Max. Working Pressure: 125 PSI Temperature: 240°F (116°C)

HP: 1/12, 1/8, 1/6, 1/3

Connection Sizes: 34"-2"



## 121-138 Series

With millions in service and backed by more than five decades of experience, Taco's 121-138 Series In-Line Circulators have earned their reputation for proven performance and dependable, quiet operation. These circulators are designed to efficiently circulate heated or chilled water in a full range of residential and commercial hydronic and solar systems; including zoning large installations, primary-secondary systems, and parallel pumping designs. These rugged workhorses are available in sizes and configurations to meet all your needs, including stainless steel construction for freshwater service.

Flow Range: 0-160 GPM Head Range: 0'-40'

Max. Operating Pressure: 150 PSI Temperature: 250°F (116°C)

HP: 1/4-1

Connection Sizes: 2 1/2"-3"



## 1900 VFD Series (Loadmatch compatible)

Meets the latest industry standards for hydraulic performance and reliability and is compact, energyefficient, and can be installed anywhere in the piping layout. The variable frequency drive (VFD) on the 1900 VFD Series Close-Coupled In-Line Pump operates your buildings with greater efficiency; using them to control your pumps can significantly reduce energy costs. The VFD can reduce the motor speed when full flow is not required, thereby reducing the power required and the electrical energy used.

Flow Range: 10-270 GPM Head Range: 50'-160'

Working Pressure: 175 PSI in accordance with ASA B16.1 Temperature: 250°F Standard, 300°F with Hi-Temp Seal

HP: 1/4-7 1/2 Sizes: 1"-2"





## 2400 Series

Specifically designed for quiet, efficient, dependable operation in a wide range of medium to high flow/head hydronic heating, chilled water cooling, and hot water recirculation applications. The space-saving, close-coupled, maintenance-free motor with permanently lubricated, sealed-for-life bearings, stainless steel shaft, Noryl® impeller, and durable, carbon/silicon-carbide mechanical seal provide unmatched reliability. Available in Cast Iron or Stainless Steel construction.

Flow Range: 0-90 GPM Head Range: 0'-46'

Min. Fluid Temp: 40°F (4°C) Max. Fluid Temp: 225°F (107°C) Max. Working Pressure: 150 PSI

HP: 1/2, 1/3, 1/6, 1/10

Connection Sizes: 3/4"-3"

## ECM Series









## 1900e® Series

Self-sensing, close-coupled, mechanically sealed in-line circulator pumps that exceed industry and efficiency standards with an advanced hydraulic design. They feature an ECM motor and integrated frequency drive. Simple yet versatile control options include constant pressure, constant speed, proportional pressure, 0-10Vdc, and parallel pump alternation. These standard features combined with the intuitive user interface allow for quick start-ups achieving optimum system efficiency and maximum comfort. These pumps are available in Ductile Iron for closed-loop hydronic heating and cooling systems or Stainless Steel, NSF Commercial Hot Certified for DHW applications.

Max. Shut-off Head: 1911ecm: 50' 1915ecm: 65' Max. Flow: 1911ecm: 105 GPM 1915ecm: 120 GPM

Max. Operating Pressure: 175 PSI (12 bar)

Water Temperature Range: 36° to 230°F (2 to 110°C) Ambient Temperature Range: 32° to 104°F (0 to 40°C) Ambient Humidity: Less than 95% RH (Indoor Use Only)













## 00e® Series VR 15-30

ECM high-efficiency, wet-rotor, self-sensing commercial circulators ideal for HVAC and potable water applications. The wide range of models with Low, Medium, or High head options provides differential head pressures up to 65 ft. and flow ranges up to 320 GPM. BMS communication with Modbus, BACnet, 0-10Vdc, and PWM comes standard while high-efficiency ECM technology reduces power consumption by up to 85%. The stainless steel models are NSF 61 & 372 domestic and commercial hot rated.

Flow Range: 0-320GPM Head Range: 0'-65'

Max. Operating Pressure: 175 PSI

Water Temp. Range: 36°-230°F (2.2°-110°C)

Ambient Operation Temp. Range: 32°-104°F (0°-40°C)

HP: 0.4-2.1

Connection Sizes: 1 1/2"-3"



## 00e® Series ECM High-Efficiency Circulator Family

Taco made ECM easy to install and easy to program. Now, finding the most efficient ECM circulator is easier than ever with the new Hydraulic Institute (HI) Energy Rating label.

HI Energy Rating labels provide a clear and easy way to identify energy-efficient circulators—the higher the rating, the greater the savings! HI Energy Ratings offer trusted performance data, tested to industry standards through certified and audited test labs.







## 006e3®

Infinite Speed dial selections perfect for hot water recirculation and hydronic heating applications

Flow Range: 0-11 GPM Head Range: 0'-13'

Max. Operating Pressure: 150 PSI Max. Water Temp.: 203°F (95°C) Min. Water Temp.: 36°F (2°C) Max. Operating Power: 44W Voltage: 120V, 60 Hz Single phase

Max. AMP Rating: 0.54

Connection Sizes (in): 1" Union, Sweat, NPT, Press with  $\frac{1}{2}$ "

or ¾" Fitting Sets (sold separately)





## 007e®

Install it, forget it.® ECM performance equivalent to the legendary Taco 007 circulator, with Green Mode

Flow Range: 0-16 GPM Head Range: 0'-10'

Max. Operating Pressure: -Cast Iron: 125 psi (8.6 bar) -Stainless Steel: 150 psi (10 bar) Min. Water Temp.: 36°F (2°C) Max. Water Temp.: 230°F (110°C) Voltage: 120V, 60 Hz Single phase

Max. Operating Power: 44W Max. AMP Rating: 0.54

Connection Sizes (in): 34"-11/2"

## 00e® Series





## 0015e3®

3 easy settings ideal for hydronic systems zoned with circulators or zone valves or used on potable water systems for domestic water recirculation.

Flow Range: 0-16 GPM Head Range: 0'-18' Max. Operating Pressure: -Cast Iron: 125 psi (8.6 bar) -Stainless Steel: 150 psi (10 bar) Min. Water Temp.: 36°F (2°C) Max. Water Temp.: 230°F (110°C) Voltage: 120V, 60 Hz Single phase Max. Operating Power: 44W Max. AMP Rating: 0.54

**VR1816** 

Infinitely variable fixed speed & 6 pressure presets to fit your job.

Flow Range: 0-16 GPM Head Range: 0'-18' Max. Operating Pressure: 125 PSI Min. Water Temp.: 36°F (2°C)

Max. Water Temp.: 230°F (110°C) Voltage: 120V, 60 Hz Single phase Operating Power: 4W-44W

Max. AMP Rating: 0.54







## 0018e®

Mobile app-connected for superior system efficiency & control.

Flow Range: 0-16 GPM Head Range: 0'-18' Max. Operating Pressure: -Cast Iron: 125 psi (8.6 bar) -Stainless Steel: 150 psi (10 bar)

Min. Water Temp.: 36°F (2°C) Max. Water Temp.: 230°F (110°C) Voltage: 120V, 60 Hz Single phase Operating Power: 4W-44W Max. AMP Rating: 0.54

VT2218

Delta-T for maximum system efficiency and comfort.

Flow Range: 0-18 GPM Head Range: 0'-22' Max. Operating Pressure: 125 PSI Min. Water Temp.: 36°F (2°C)

Max. Water Temp.: 230°F (110°C) Voltage: 110-120V, 50/60 Hz,

Single Phase

Max. Watts: 58

Max. Amp Rating: 0.67 Connection Sizes: 34"-11/2"



## 0026e™

Easy ECM - Easy to install. Easy to program.

Max. Shut-off Head: 26 ft

Max. Flow: 44 GPM

Max. Pressure: 150 psi (10.3 bar)

Min. Temp: 14°F (-10°C) Max. Temp: 230° F (110°C) Voltage: 115/208/230V, 50/60Hz

Single phase

Operating Power Range: 10-25W

Max. AMP: 1.05A Flange-to-flange: 6 1/2"



## 0034e® & 0034e+®

Ideal for large residential and light commercial hydronic heating, chilled water cooling, and domestic hot water systems.

Shut-off Head: 34 ft

Max Flow: 50 GPM

Max Pressure: 150 psi (10.3 bar) Max Temp: 230°F (110°C) Min Temp: 14°F (-10°C)

Voltage: 115/208/230V, 50/60Hz

Single phase

Max Power: 170 W Max AMP: 1.48 A Flange-to-flange: 6 1/2"

## Electronic Controls, Accessories & Valves

## Clarity3®

## Simple, Turn-Key BAS Solution Designed Around the User, Not the Hardware.

Taco's industry-leading Clarity3® control platform can provide powerful control options for any property and can be integrated into existing building controls through our GCE integration platform. This means seamless integration with most control manufacturers and advanced building analytics. Clarity3® by Taco's Innovative Energy Solutions helps building owners find, learn, and act. Rely on Taco to help you take control of your building. Choose the system that is simple to use, narrowing the focus to what you truly need. Easy-to-use dashboards make reporting easy to understand enabling owners to act on reliable information. Clarity3® open protocol integration capability means you are no longer tied to proprietary systems or single source suppliers. You'll get an objective analysis of the most cost-effective way to improve your building automation system.

## For the building owner:

Find: Quickly narrow your focus.

Learn: Easy-to-use dashboards, reports, and graphics.

Act: Command, modify, or watch features.

## For the controls integrators:

Simple: Easy to install, allows you to be mobile.

Standardized: Follows standards but allows for customization.

Scalable: To all building types.



## SmartDrive+TSL

No one knows more about controlling pumps than the people who make the pumps. That's why our variable speed SmartDrives deliver the finest precision performance for maximum system efficiency and reduced life cycle costs. There's a SmartDrive that's perfect for your application. SmartDrive HVAC is upgradeable with Taco System Logic (+TSL) software to control VFDs in applications such as Delta T or Delta P, geothermal hot/cold changeover, or domestic water boosters.



### **SmartDrive Basic Drive**



### **SmartDrive HVAC Drive**



**SmartDrive** SP Side Panel



**SmartDrive** VP Vertical Panel



+TSL This symbol tell you that a +TSL upgrade is available for this unit





## Plus Two Multi-Purpose Valve

Offers performance – low-pressure drops that are equal to or better than any valve on the market today—and convenience: You can replace the stem seal packing under full system pressure. Made of ductile iron with stainless steel and bronze fitted construction to provide years of trouble-free service.

Range Flow: 20-10,000 GPM Working Pressure: 175 PSI, 300 PSI

Connection Sizes: 1 1/2", 2", and 2 1/2", threaded, 3"-14", flanged



## **Accu-Flo Balancing Valve**

Taco Accu-Flo Balancing Valves use a modified venturi design to deliver four to five times greater accuracy than most conventional balancing valves. Flow Measurement is independent of stem and ball position, and the tamperresistant memory stop provides accurate resetting. With a calibrated nameplate for presetting, all-brass interior parts, precision machining, and 100% factory testing, these valves are the highest-quality fixed-port venturi balancing valves on the market today.

Fixed-port venturi balancing valve Bronze Body ( $\frac{1}{2}$ "-2", Sweat and NPT) Cast Iron Body (2½", 3", 4", Flanged)

## Electronic Controls, Accessories & Valves



## Suction Diffuser Rear Strainer Pullout (RSP)

Incorporates numerous features into one device that simplifies installations and reduces installation costs. It is a flow straightening device that provides maximum flow efficiency at the suction inlet of the pump. At the same time, it reduces space and fitting requirements and eliminates the need for an equivalent length of ten pipe diameters of straight run on the suction side of the pump. It is an elbow (and in some cases a reducing elbow) with a built-in strainer that is easily maintained and will provide years of trouble-free system performance.

Flow Range: 20-10,000 GPM

Working Pressure: ANSI Class 125 Flanged units-175 PSI,

ANSI Class 250 Flanged units-300 PSI

Connection Sizes: 1 1/2"-16"

## **Differential Pressure Transmitters**



## **DPS629**

SmartDrives with +TSL Delta-P programs come preprogrammed with all the Taco DPS629 information. Sensor connects directly to VFD.

Accuracy: +0.5% F.S. (includes linearity, hysteresis & repeatability)

Temperature Limits: 0 to 200°F (-18 to 93°C).

**Compensated Temperature** Limits: 0 to 175°F (-18 to 79°C).

Pressure Limits: 0-25 PSI with an overpressure limit of 250PSI Thermal Effect: 0.02%/°F (0.036%/°C) includes zero & span

Power Requirements: 13-30 VDC (2-wire)

Output Signal: 4 to 20 mA. Optional 0-5, 0-10 VDC



## **DPS3100D**

Accuracy: +0.075% F.S. (@20°C) Range ability: 100:1 turn down

Temperature Limits:

Process: -40 to 248°F (-40 to 120°C)

Ambient:

without LCD: -40 to 185°F

(-40 to 85°C)

with LCD: -22 to 176°F (-30 to 80°C)

Pressure Limits: Max pressure range:

-14.5 to 2000 PSI

Burst pressure 10,000 PSI

Thermal Effect: +0.125% span/32°C Power Requirements: 11.9 to 45 VDC

Output Signal: 4 to 20 mA

## Booster Package Systems

Taco's new and improved fully integrated domestic water booster systems are the ideal pressure-boosting solution for multi-residential and commercial buildings.

Each system comes with a range of features and benefits exclusive only to Taco, including an integral controller in every drive, electrical mechanical disconnect, and grooved pipe coupling system for easy maintenance and reconfiguration. Available in Simplex, Duplex, Triplex, or Quadraplex configurations. Taco Booster Systems are factory assembled, performancetested, UL labeled, NSF listed, and backed with our reputation for quality and technical support.

A single "plug-and-play" package solution, available in a wide variety of pump types, sizes, configurations, and materials to suit your specific needs. Simplex configuration is ideal for applications up to 125GPM, Duplex is ideal for applications up to 350GPM, Triplex for applications up to 750GPM, and Quadraplex in applications up to 2,000GPM.



## Chilled Beam System

Radiant/Chilled Beam Injection Pumping System: A Safer, Healthier, and More Efficient Solution.



## **Efficient Solution**

The variable air volume comfort systems found in most buildings today provide inadequate protection against airborne germs, viruses, and mold. How does that happen? In these types of systems, air is blown through ducts into every room, recirculating time and again. That air can pick up contaminants along the way and disperse them everywhere, bringing the risk of infection to everyone in its path.

Fortunately, there is a healthier heating and cooling option: A radiant/ chilled beam system, powered by Taco's LOFlo® Injection pumping and Clarity3® Building Automation Controls. Chilled beams use water to transfer safe, consistent comfort without the use of in-room fans. There are no drafts, no noise, and little risk of spreading germs because chilled beams do not recirculate air to adjacent spaces.

And because radiant/chilled beam systems use water, the most efficient and natural energy transfer medium on the planet, the increased ventilation won't result in increased energy costs. You may even see savings from your previous HVAC system. It's a system that's perfect for schools, hospitals, and office buildings. What's more, there are chilled beam solutions for both new building construction and retrofit projects.

## No Rain, All Gain

Taco's Clarity3® Building Automation Control monitors room temperature, supply water temperature, and ever-changing dewpoint, adjusting the system's water temperatures to prevent condensation and deliver quiet, worry-free comfort.

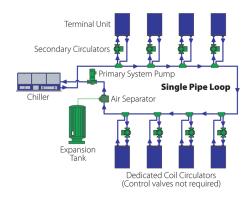
## **Cost Competitive**

Taco's LOFlo® Injection pumping system eliminates the need for large air ducts in new buildings because it uses small pipes to transfer heating and cooling. This means a lower building height and fewer raw materials in the construction phase. Combined with superior efficiency and longer life cycles, you'll save in the construction phase and all the way through the life of the system.



## Software & Tools





## **Project Builder**

A powerful web-based app that:

- · Saves time, eliminates paperwork, and increases accuracy
- · Helps you quickly select the right products, gathering related project schedule files automatically
- Allows you to save each job as a project which you can re-visit, modify, or archive at any time
- Saves and outputs all files in convenient formats
- · Enables sharing and collaboration with colleagues

## Hydronic System Solutions® (HSS)

Slash system design time with a collection of interactive tools. With HSS you can:

- · Design and compare HVAC systems
- · Eliminate recalculation time for changes
- · Calculate plant total loads, flows
- · Size pipe and equipment
- · Select and schedule equipment
- · Reduce errors
- · Make design changes quickly and easily
- · LoadMatch® Wizard allows modeling of systems in minutes





The award-winning Taco Tags use wireless NFC technology to provide you with all relevant information, for a specific product, right on your phone. Detailed specifications, technical documents, instruction manuals, how-to videos, and more, are all guickly and easily accessible. This digital library contains the most up-to-date information for that specific piece of equipment.

By utilizing the power of Taco Tags, Taco is ensuring you have the resources you need to make fast, informed decisions in the field, increasing your productivity while saving you time.

Taco Tags set a new standard for customer support and in 2019 they received the AHR Expo Innovation Award for the most inventive product and technology.

## Available on Android and Apple Devices.

- **Product Specifications**
- CAD/REVIT Files
- **Submittal Sheets**
- Repair Parts Info
- · Order Info
- · Technical Support
- · Taco Rep Info
- · Catalog Sheets

## **Building Efficiency Systems Tool™ (BEST)**

BEST Software accurately compares different HVAC systems and calculates performance, life cycles, and related costs.

- · Simple building types wizard
- · Select up to 4 HVAC systems to compare side-by-side
- Customizable with more than 30 pre-loaded HVAC system types specific to your building needs
- Calculate the Building Energy Efficiency Ratio (BEER) under actual building operating conditions
- Quick cost outputs, including installation, replacement, maintenance, monthly energy, electrical and fossil fuel consumption, total life cycle, cumulative life cycle cost by year, system payback time, pump and fan HP, system coefficient of performance, and more
- Industry developed by commercial manufacturers from North America

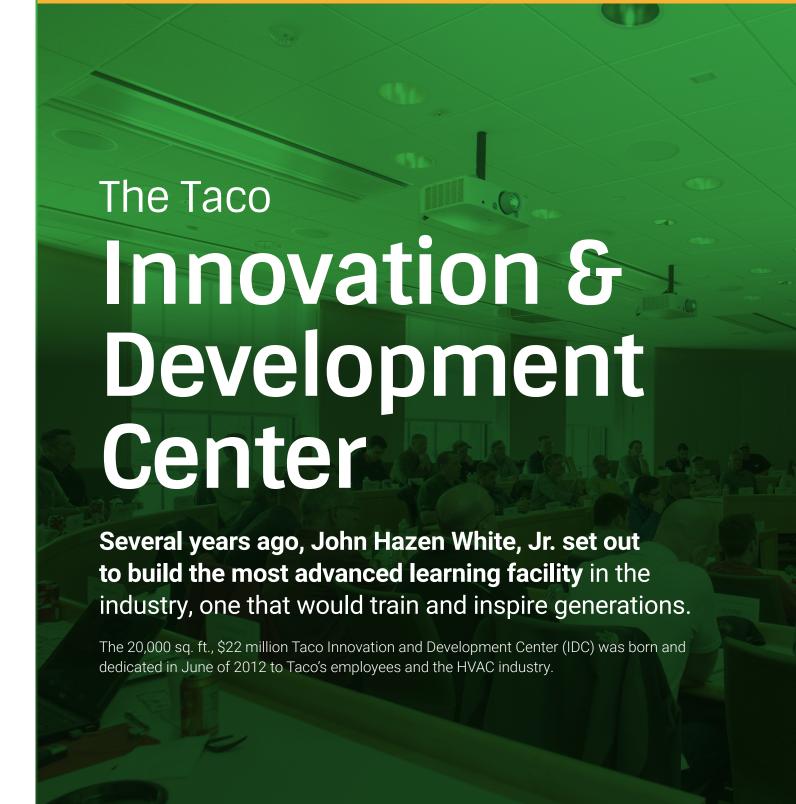
## **HI Certified Test Lab**

Taco Comfort Solutions' pump test laboratory in Cranston, RI is a Hydraulic Institute's (HI) Pump Test Lab.

The Hydraulic Institute program assists pump OEMs and other pump test laboratories improve their current laboratory procedures and policies by working with an experienced third-party auditor to develop and maintain accurate, uniform, repeatable pump testing protocols. The program also helps participating organizations adhere to the requirements of the international test laboratory accreditation standard (ISO 17025) concerning test measurement equipment.

As the DOE requires increased efficiencies for commercial and industrial pumps, a manufacturer's ability to demonstrate accurate pump performance becomes an important part of compliance. Performing these tests in a lab not only applies the industry standard (HI 40.7), but also stands up to independent third-party audits.

The pump test lab approval program is HI's latest program designed to support the DOE's energy-saving initiatives.





## State-of-the-art classrooms

The IDC's expansive classrooms are equipped with advanced multimedia hardware. From a simple PowerPoint. presentation to a live streaming webinar, each classroom can deliver visual content to class attendees in the building or on the Internet. Classrooms are flexible to hold classes of any size.

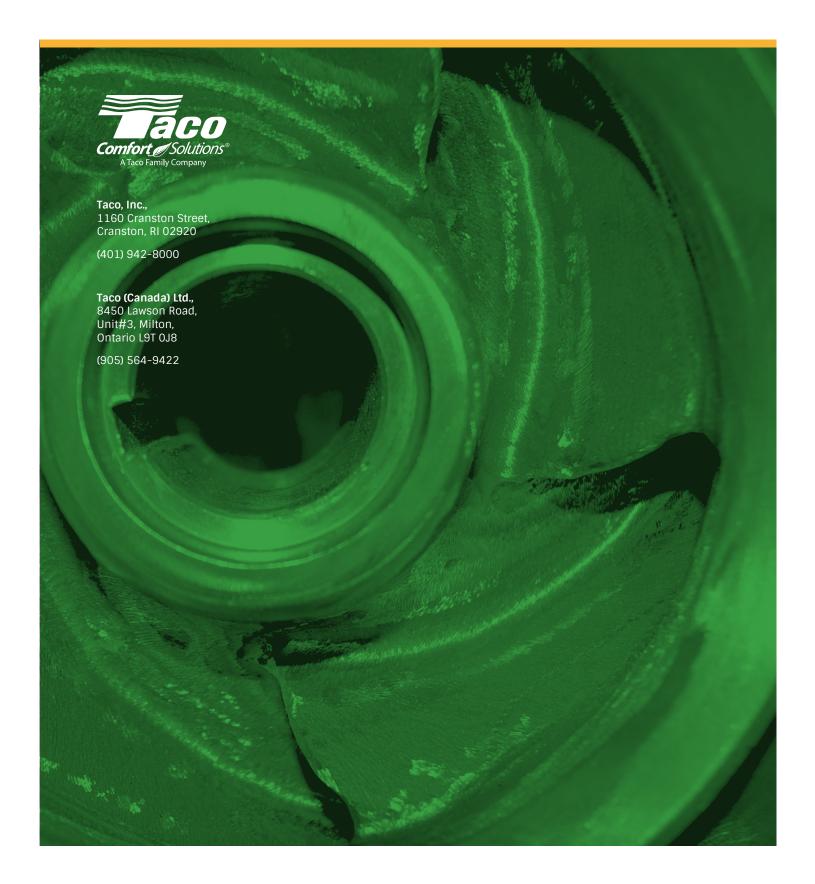
## **Green Building comfort**

The entire building's comfort system was designed by some of the brightest minds in HVAC engineering using Taco's Hydronic System Solutions. software. The software also helped size the IDC's pipe and equipment, calculate total loads and flows, and generate schedules. Award-winning LoadMatch® single pipe and LOFlo® Radiant cooling systems were installed as real-time demonstration of the energy savings, reliability, and comfort so essential for LEED Green Building certification. System components can be seen in action throughout the building, thanks to viewing panels in walls, ceilings, and floors making the IDC a hands-on "living lab".

## The incredible mechanical room

The IDC's mechanical room is a marvel of hydronic technology, featuring energy-efficient boilers and chillers, variable speed pumping, geothermal and energy recovery systems, solar heating systems. Workhorse TC and TA pumps, vertically aligned KV and KS pumps, variable speed drives, solar pumping stations, heat exchangers, and air-dirt separators are all working displays, managing the comfort of the entire Taco facility. In this room, visitors can see how everything goes together in the most advanced hydronic facility in the industry.





## www.TacoComfort.com

The Comfort Experts Catalog #300-9.4 Supersedes: 08/05/15

Effective Date: 07/03/23