HAYWARD® | TRUE GRIT

DATA CENTER GUIDE

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TRUSTED IN SOME OF THE COOLEST ENVIRONMENTS: INCLUDING YOURS

IN A WORLD WHERE YOUR DATA CENTER IS ESSENTIAL FOR OPERATIONS, WHO IS HELPING YOU KEEP YOUR COOL?

At Hayward Flow Control, we understand the critical nature of temperature control in data centers. Equally important? Efficiency and uptime. There's no margin for error. **That's why we leave nothing to chance.**

Hayward® Flow Control has been a leading manufacturer of industrial thermoplastic valves and process control products for more than 60 years. In fact, Hayward was one of the originators of the first thermoplastic ball valves. Since then, we have remained committed to producing the highest quality products while providing outstanding service. All Hayward products are made in America under the most stringent standards to serve a global population.

From highly caustic chemicals to municipal waste and water systems, from data center piping systems to offshore oil transport – we've tackled some of the world's biggest and most complex flow control challenges with proven reliability.

RELIABLE BY DESIGN

Whatever your data center's size, your cooling system will require extensive piping and flow control for operation. These valves are a core part of the system, giving you total control to turn on or shut off certain areas when need. Valve reliability not only assures you can control your cooling plant fully – it also means your cooling system is online and running properly. Reliability is where Hayward stands apart. All of our butterfly and ball valves are designed using the latest state-of-the-art equipment. Our Computer Aided Design (CAD) system, linked to finite element software, provides accurate and essential stress analysis. Hayward valves are designed to be strong, with material where it counts allowing years of service. It's why we're trusted in some of the most strenuous environments in the world: mining, power generation, oil and gas, and more.

WORLD CLASS QUALITY

As an ISO 9001:2015 certified company, Hayward Flow Control adheres to the strictest guidelines relative to component manufacture, assembly and testing. We employ the latest manufacturing technologies and continue to invest in new equipment and tooling. Our reputation for quality and reliability is unmatched. In addition to a tradition of quality and expertise, Hayward's highly qualified field sales organization also provides customer assistance, training and field support.

TRUSTED DELIVERY & RESULTS

Hayward specializes in large-scale flow control — and large-scale production. With US-based operations, we offer distribution on both coasts for what you need, when you need it, without waiting for an import.

THERMOPLASTIC VS. METAL VALVES IN DATA CENTER APPLICATIONS: HOW DO THEY COMPARE?

No matter how tight your timing – or your budget – Hayward thermoplastic products offer clear and long-term benefits over traditional metal valves.

CONSIDER THESE TOTAL-COST-OF-OWNERSHIP BENEFITS:

	THERMOPLASTIC VALVES	METAL VALVES
SERVICE LIFE	30+ years	‹15
LIFETIME EFFICIENCY	Consistently reliable over the life of the product	Efficiency decreases over time
LIFETIME MAINTENANCE	Longer life means less maintenance	As efficiency decrease, maintenance increase
CARBON FOOTPRINT	Outperform metal in every category	Shorter service life means more waste
CORROSION RESISTANCE	Won't scale or tuberculate like metal Resistant to solvents, acids and alkali	Susceptible to scaling, tuberculation and deterioration
WEIGHT	6x lighter	Heavy to transport and install
TRANSPORTATION COSTS	Lighter weight means ‹cost	Heavier weight results in increase costs and environmental impacts. Castings often from overseas
INSTALLATION TIME	Lighter weight streamlines overhead installation	Increased weights may require crane or a second person, adding time to install

RUGGED, DURABLE HAYWARD FLOW CONTROL PRODUCTS ARE BUILT TO WORK IN THE TOUGHEST ENVIRONMENTS SERVING THE MOST CRITICAL INFRASTRUCTURE NEEDS – INCLUDING YOURS.

BUILT BETTER FROM THE INSIDE OUT

TAKE A CLOSER LOOK AT WHAT MAKES HAYWARD BYV SERIES BUTTERFLY VALVES MORE RELIABLE:

- Fully molded 316 lugged valve body offers superior durability over wafer valve construction
- Narrow face-to-face dimension equates to a smaller overall footprint – fitting in the tighter spaces required for data center cooling equipment
- Raised face liner is more reliable and durable than gaskets for less on-site maintenance and less downtime
- Designed for easy change-out from lever to gear operation, critical when valves are harder to access
- Valves can also be actuated for automated control, helping operators quickly access out-of-reach shutoffs, if needed

LEADING AMERICAN SOLUTION

Hayward Flow Control isn't your run-of-the-mill thermoplastic flow controls manufacturer. We stand alone in offering the leading American solution with engineering, manufacturing, customer support and tech services all under the same roof: right in your backyard. Tired of overseas lead times? With manufacturing on American soil, Hayward Flow Control is well equipped to meet your needs, all with a global, industry-leading three-year warranty.

HAYWARD KNOWS DATA CENTERS

TBH SERIES

True Union Ball Valves

½" to 6" / DN8-150 PVC, CPVC

KEY FEATURES

- Full Port Design
- System2™ Sealing Technology provides longer cycle life, ¼" - 2"
- 250 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, ¼" - 2"
- 235 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, 2-½" - 4"
- 150 PSI / 10 Bar, non-shock at 70°F / 23°C full pressure rating, 6"
- Lockout/Tagout mechanism that secures directly to valve body for enhanced safety
- Ergonomic handle for improved grip and comfort
- ISO 5211 top flange simplifies actuation
- Permanent markings, eliminates labels
- Integral footpad for skid or panel mount
- FPM or EPDM seals
- Double O-Ring stem seals
- Reversible PTFE seats – Standard

OPTIONS

- Pneumatic or Electric Actuators
- Stem Extensions
- Manual Limit Switch

MATERIALS

BODY | SEALS | SEATS

PVC | CPVC | FPM | EPDM | PTFE

NSF Certified to NSF/ANSI 61 & 372

"Patent Pending"

TBH-Z SERIES

True Union Ball Valves

½" to 6" / DN15-150 PVC, CPVC

KEY FEATURES

- Drilled Ball for Sodium Hypochlorite applications
- 250 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, ¼" - 2"
- 235 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, 2-½" - 4"
- 150 PSI / 10 Bar, non-shock at 70°F / 23°C full pressure rating, 6"
- Lockout/Tagout mechanism that secures directly to valve body for enhanced safety
- Ergonomic handle for improved grip and comfort
- ISO 5211 top flange simplifies actuation
- Permanent markings, eliminates labels
- Integral footpad for skid or panel mount
- FPM or EPDM seals
- Double O-Ring stem seals
- Reversible PTFE seats – Standard

OPTIONS

- Pneumatic or Electric Actuators
- Stem Extensions
- Manual Limit Switch

MATERIALS

BODY | SEALS | SEATS

PVC | CPVC | FPM | EPDM | PTFE

NSF Certified to NSF/ANSI 61 & 372

CVH SERIES

Proportional Control True Union Ball Valves

½" to 6" / DN15-150 PVC, CPVC

KEY FEATURES

- Profile2™ Characterized Ball for proportional control
- System2™ Sealing Technology provides longer cycle life, ½" - 2"
- 250 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, ¼" - 2"
- 235 PSI / 16 Bar, non-shock at 70°F / 23°C full pressure rating, 2-½" - 4"
- 150 PSI / 10 Bar, non-shock at 70°F / 23°C full pressure rating, 6"
- Lockout/Tagout mechanism that secures directly to valve body for enhanced safety
- Ergonomic handle for improved grip and comfort
- ISO 5211 top flange simplifies actuation
- Permanent markings, eliminates labels
- Integral footpad for skid or panel mount
- FPM or EPDM seals
- Double O-Ring stem seals
- Reversible PTFE seats – Standard

OPTIONS

- Pneumatic or Electric Actuators
- Stem Extensions
- Manual Limit Switch

MATERIALS

BODY | SEALS | SEATS

PVC | CPVC | FPM | EPDM | PTFE

NSF Certified to NSF/ANSI 61 & 372

BYV SERIES

Butterfly Valves

2" to 12" / DN50-300 PVC, CPVC, GFPP

KEY FEATURES

- One Piece Injection Molded Body
- Hand Lever with 19 Lockable Stop Positions & 360° Interlocking Splines
- External Disc Position and Flow Indication
- Hydro-dynamic Centric Disc for Increased Flow Performance
- Over-Sized Liner Face Maximizes Surface Contact with Flanges
- 1-Piece 316 Stainless Steel Stem with Threaded Retaining Gland
- Stem Bearing and Seal Retainer for Absolute Stem Position and Seal
- ISO 5211 Top Flange and Stem Drive
- All Sizes Meet ANSI B16.10 / ISO 5752 Face to Face Dimensions
- Pressure Rated at 150 PSI/10 Bar in All Sizes @ 70°F Non-Shock
- **BYB Series Large Diameter Butterfly Valves:** 14" to 24" available in PVC, CPVC, PP and PVDF

OPTIONS

- Over-Molded 316 Stainless Steel Lugs
- Titanium or Hastelloy™ Stem Materials
- Gear Operators
- Complete Range of Pneumatic or Electric Actuators
- Lock Out Caps
- Stem Extensions
- Chain Operator for Gear Box

MATERIALS

BODY — LINER

GFPP *PLATINUM | PVC | CPVC | VITON® | EPDM | NITRILE *Disc only

NSF Certified to NSF/ANSI 61 & 372, PVC/EPDM 2" - 12", CPVC/EPDM 4" - 12"

"Patented & Other Patents Pending" Pat. No.:9,695,947

HRS SERIES

Industrial Electric Actuators

266 - 177,000 Torque in/lbs

KEY FEATURES

- Units are equipped with two (2) volt-free Form A Auxiliary switches
- ISO5211 compliant mounting with a double square female drive socket
- Raised visual position indicator
- NEMA 4X/IP67 compliant
- EMT entry ports with sealed cable glands
- Internal Heater Standard
- Manual Override
- Available Voltages 12VAC/VDC, 24VAC/VDC, 120/230VAC

OPTIONS

- Power Supply Flexibility
- On / Off or Proportional Control
- Local Control Stations
- IP68 Submersion
- Battery Backup
- Supercap Backup
- Interchangeable ISO5211 Flange & Drives

Local Control Station

Battery Backup

ECP SERIES

Industrial Electric Actuators

Ball & Butterfly Valves up to 6" / DN150

KEY FEATURES

- Ideal for Corrosive Atmosphere and Environments
- Corrosion-Resistant GFPP Housing
- LED Status Light
- Anti-Condensation Heater
- Manual Override
- Position Indicator
- 4 SPDT Micro Limit Switches
- Lightweight - Easy for Installation
- ISO 5211 Mounting Base
- Stainless Steel Fasteners 303 SS
- 100% Factory Tested
- Single Phase 24~265VAC/VDC

OPTIONS

- Digital Positioner 0-20mA, 4-20mA or 0-10V
- Battery Backup

TC SERIES

True Union Ball Check Valves

¼" to ⅜" DN8-10 PVC
½" to 2" DN15-50 PVC, CPVC, PP
2-½" to 6" DN65-150 PVC, CPVC
¼" to 1" DN8-25 PVDF

KEY FEATURES

- Available in PVC, CPVC, PP and PVDF
- For Horizontal or Vertical Installation
- Square Cut Seat for Positive Sealing
- Seats with Minimum Back Pressure
- 1/2" to 6" are Sure Block Design
- 1/4" and 3/8" are Trim Check Design

OPTIONS

- Foot Valve Screens

MATERIALS

BODY: PVC, CPVC, PP, PVDF
SEALS: FPM, EPDM

NSF Certified to NSF/ANSI 61 & 372 PVC and CPVC 1/4" - 4"

WCV SERIES

Full Pattern Wafer Check Valves

2" to 8" / DN50-200 PVC & CPVC

KEY FEATURES

- Robust Full Pattern Body
- Available in PVC and CPVC
- Pressure Rated at 150 PSI/10 Bar in All Sizes @ 70°F Non-Shock
- No Special Spacers or Flanges Required
- High Cv Rating Equal to Metal Check Valves, Saves on Energy and Pump Wear
- FPM or EPDM Gasket and Face Seal
- One-Piece Disc and Shaft Design

OPTIONS

- 316 Stainless Steel or Hastelloy® Disc Spring

MATERIALS

BODY: PVC, CPVC
SEALS: FPM, EPDM

HAYWARD CHECK VALVES

For more check valve solutions from Hayward Flow Control,visit our website to learn more about our full line of ball and Y-pattern checks as well as Swing Check, Full Pattern Wafer check valves.

SW Series Swing Check

Patent No. 8,887,757

YC SERIES

Y-Check Valves

½" to 4" / DN15-100 PVC, CPVC
½" to 1" / DN15-25 PVDF

KEY FEATURES

- Available in PVC, CPVC, and PVDF
- Pressure Rated at 150PSI/10 Bar in All Sizes @ 70°F Non-Shock
- Horizontal or Vertical Installation
- Molded-In or True Union Socket or Threaded Connections
- Full Flow Design
- Minimal Back Pressure Required to Seat Piston
- PVC, CPVC or PVDF Coil to Guide Piston to a Positive Seat

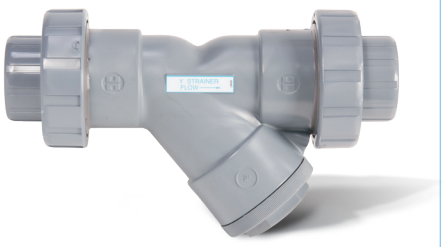
MATERIALS

BODY: PVC, CPVC, PVDF
SEALS: FPM, EPDM

YS SERIES

Y-Strainers

½" to 2" / DN15-50 PVC, CPVC, CLEAR PVC
2-½" to 4" / DN65-100 PVC, CPVC
½" to 1" / DN15-25 PVDF



KEY FEATURES

- Available in PVC, CPVC, Clear PVC and PVDF
- Pressure Rated at 150 PSI/10 Bar in All Sizes @ 70°F Non-Shock
- For Horizontal or Vertical Installation
- Molded-In or True Union Socket or Threaded End Connections
- FPM or EPDM Seals
- 2:1 Open Area Ration
- Hex Cap for Easy Access to Screen
- Standard Screen 1/32" Perforation*

*Standard PVDF Screen Has 3/32" Perforation

OPTIONS

- Stainless Steel or other Alloys Perf or Mesh
- Strainer Screens Available in Various Sizes

MATERIALS

BODY: PVC, CPVC, CLEAR PVC, PVDF
SEALS: FPM, EPDM

SB SERIES

Simplex & Duplex Basket Strainers

½" to 4" / DN15-100 PVC, CPVC, GFPP, and Eastar® 6" to 8" / DN150-200 PVC, CPVC ½" to 2" / DN15-50 PVDF

KEY FEATURES

- PVC, CPVC, GFPP, PVDF and Eastar®
- Pressure Rated at 150 PSI/10 Bar in All Sizes @ 70°F Non-Shock
- Ergonomic Hand Removable Cover
- In-Line or Loop Connections
- External Cover Threads
- Integral Flat Mounting Bases
- Thermoplastic Baskets Standard
- Ideal for protecting pumps and other critical system equipment

OPTIONS

- Stainless Steel, Monel®, Hastelloy® and Titanium Strainer Baskets
- Pressure Differential Gauge and Switch for 6" and 8" / DN150-200 Sizes
- Baskets Available with Perforated or Mesh Liners

MATERIALS

BODY: GFPP PLATINUM, PVC, CPVC, EASTAR®, PVDF
SEALS: FPM, EPDM

NSF Certified to NSF/ANSI 61 & 372 PVC and CPVC

FLV/CFLV SERIES

Simplex & Duplex Bag/ Cartridge Filters

Single Length 1-¼" - 2" / DN32-50 GFPP, PVC, CPVC
Double Length 2-½" - 4" DN65-100 GFPP, PVC, CPVC

KEY FEATURES

- GFPP, PVC or CPVC Material
- Heavy Duty Injection Molded Construction with True Union Design
- True Union End Connections - Socket, Threaded or Flanged
- Solid Heavy-Duty Basket Standard
- Hand Removable Ergonomic Cover with Liquid Displacing Dome
- Vent Valve on Cover
- In-Line or Loop Configuration
- Drain Port at Bottom
- Integral Mounting Base

OPTIONS

- Pressure Differential Gauge and Switch
- EPDM Seals
- Cartridge Adapters - CFLV only
- Duplex Configurations

SYSTEM PROTECTION

Hayward offers a full line of Pressure Differential Gauge kits to help better protect your vital systems from damage. Pressure Differential Gauges indicate when to clean, change or replace your bag filter or strainer.

MATERIALS

BODY: GFPP, PVC, CPVC
SEALS: FPM, EPDM

"Patented" Pat. No.:9,630,127

LIQUID LEVEL, FLOW AND ANALYTICAL PRODUCTS FROM HAYWARD FLOW CONTROL MEASURE AND CONTROL

HLS SERIES

Level Sensors

KEY FEATURES

- Highly accurate hydrostatic pressure measurement, 0.25% accuracy full scale
- All CPVC housing with Al2O3 (Alumina) sensing diaphragm
- 0-15 and 0-33 ft measurement range, 33 and 49 ft of PTFE coated cable std
- 10-35 VDC power required
- 4-20mA analog output signal
- 0-140ºF temperature range
- MP10 desiccant tube and MP11 protection volume breather protection available
- Ceramic Sink Weights available for high specific gravity applications

HLST SERIES

Indicating Level Transmitter

KEY FEATURES

- Dual Channel input and display (CH2 is RTD for temperature)
- Configurable, multi-color LCD display
- Simple, Intuitive menu makes set-up quick and easy
- NEMA 4X (IP65) Face, ¼ DIN chassis dimensions
- 100-240 VAC, 50-60 Hz power range std.
- Programmable dual relays and dual open collectors
- Optional HMCENC NEMA 4X Electrical Enclosure, ¼ DIN Cutout, 6 wire connectors

HEX800 SERIES

Flowmeter

KEY FEATURES

- Insertion Electromagnetic Flow Sensor, 1" to 12"
- No moving parts, provides high reliability
- PVC Wetted Body, PVDF end cap, Hastelloy C Electrodes, EPDM o-ring, Cast AL Housing
- 0.28 to 20 FPS Velocity Range equals <1 GPM to 7000 gpm based on line diameter
- 150 psi @ 75F max, 32 to 130F
- +/- 1% Accuracy of Full Scale
- Blind 4-20mA output or integral (Built-in) Indicating Transmitter (HFT440)
- Full rage of required insertion fittings available

HMC200 SERIES

MULTI-PARAMETER CONTROLLER

KEY FEATURES HMC200

- pH, ORP, conductivity & flow parameters available
- Highly visible large backlit LCD display
- Flexible and easy calibration, including multipoint conductivity calibration for acids and bases
- 4-20mA process output with range scaling and PID Control
- Universal mounting hardware for surface and panel mounting

HMC300 SERIES

WEB ENABLED MULTI-INPUT CONTROLLER

KEY FEATURES HMC300

- Inputs for four 4-20 mA sensors of any kind in any combination: pH, ORP, conductivity, dissolved O2, Chlorine, level and more
- Inputs for three frequency or pulse counters, including Hayward HEX flow sensors
- Outputs of four relays programmable for any of the inputs
- Alarm notifications by e-mail, text, and/or display for each input

NOTES

Hayward Flow Control is passionate about solving our customer's problems.

Our products serve vital roles in numerous unforgiving processes that impact all walks of life. With an industrial mindset and a passion for excellence, Hayward Flow Control continues to drive forward with purpose, forward thinking and American ingenuity. We mean it when we say:

TRUE GRIT. WE HAVE IT.

CERTIFIED ISO 9001

3 YEAR HAYWARD GLOBAL WARRANTY QUALITY ASSURED

Buy American

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