



# IPEX

by aliaxis

## CORROSION RESISTANT THERMOPLASTIC VALVES

**enpure™** **Xirtec® PVC** **Xirtec® CPVC**

**Guardian™**

**Duraplus®**  
air-line

**Duraplus®**  
AND INDUSTRIAL SYSTEM



## Quality Performance Reliability

IPEX offers high-quality, high-performance thermoplastic valves and actuation products. With over 50 years of design and manufacturing experience, our lightweight, low-maintenance valves save time and money.

Our valves are available in PVC, CPVC, PP, PVDF, and ABS, featuring unique safety and performance benefits, making them ideal for various demanding applications. We provide quarter-turn pneumatic and electric actuation as well as pneumatically actuated diaphragm valves, and accessories for automated control. Whether for isolation, diversion, control, or throttling, we have a solution.

These valves are part of our complete system of pipes, valves, and fittings, all engineered to strict standards. Our extensive North American network of distribution, sales, and applications engineers ensures fast, reliable service and expert support. Additionally, valve automation is supported by a dedicated engineering team.

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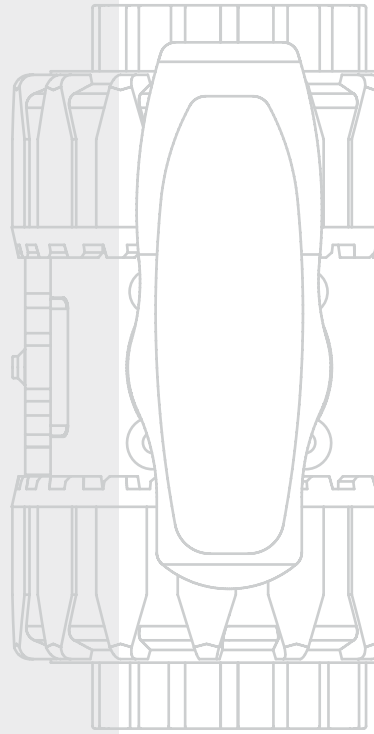
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# Actuation

## Quarter Turn Actuation

Actuation is an ideal solution for precise control of many valves in a system, when valves are remotely located, or when the process requires constant monitoring and adjustment. Pneumatic and electric actuators can be easily fitted on our ball, multi-port, and butterfly valves.

Some features and functions include:

- Corrosion-resistant housing
- Pre-loaded springs
- Adjustable cams

Many accessories such as visual position indicators, limit switches, and positioners are also available. For further information, please refer to the IPEX Industrial Technical Manual Volume IX entitled, "Quarter Turn Automation."

## Pneumatic Actuators

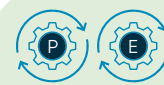
Pneumatic actuators are the most common choice for quarter turn plastic valves in process applications where a compressed air source is already available. They feature a relatively low up-front cost, high cycle life, simple construction and durability, and are ideal for fast acting on/off service.

## Electric Actuators

Electric actuators are the preferred choice when managing cycle time is important. In some applications, a quick closing valve could cause a damaging pressure surge condition (water hammer). The use of an electric actuator may also be preferred when the distance from the power source is considerable. In addition, electric actuators are the preferred (if not the only) choice when a quarter turn valve like a multi-port is used. Electric actuators are also ideal for throttling applications.

# Ball Valves

Ball valves are generally used for on/off service but can range from simple molded-in-place construction to high-end industrial designs with many features and benefits. Multi-port ball valves allow for mixing, diverting, and bypassing flow. Extensive material options allow for a wide range of chemical compatibility and resistance to highly corrosive processes. High quality ball valves are desirable because they offer full port flow with minimal frictional losses. These valves can be compact and economical, or feature rich depending on the needs of the application.



Pneumatic & Electric Actuation Available





**VKD Series**  
Ball Valves

The next generation industrial valve features the patented Dual Block<sup>®</sup> system which allows locking of the union nuts in a preset position, assuring seal integrity under severe service conditions.

**Key Features:** Patented seat stop carrier, high quality double o-ring stem with built in shear point for safety, integral actuator mounting flange and bracketing, multifunctional locking handle, vented option available.

 **SIZES:** 3/8" - 4"

 **PRESSURE:** up to 232 psi at 73°F depending on material


 **AVAILABILITY:** PVC, CPVC, PP, PVDF, and ABS with PTFE seats and either EPDM or FPM seals




**VXE Series**  
Ball Valves

These cutting-edge valves feature an EasyFit multifunction handle and full port bi-directional operation. The true union design allows the valve to be easily removed from the piping system and fully serviced.

**Key Features:** Threaded seat stop carrier for improved seal integrity; EasyFit multifunctional handle with built in label system eliminates the need for additional tags; EasyFit handle also serves as a tool to install and service the valve; vented option available.

 **SIZES:** 1/2" - 4" 6" offered using venturied ends

 **PRESSURE:** 232 psi at 73°F depending on material

 **AVAILABILITY:** PVC, CPVC and ABS with PTFE seats and either EPDM or FPM seals



## VEE Series Ball Valves

The EasyFit VEE true union PVC ball valve is ideal for use in light industrial and water applications. It shares many features with the VXE such as the full port bi-directional operation.

**Key Features:** Threaded seat stop carrier for improved seal integrity, EasyFit multi-functional handle.

⚙️ **SIZES:** 1/2" - 4"

⬇️ **PRESSURE:** up to 232 psi at 73°F depending on material

✓ **AVAILABILITY:** PVC with PTFE-HDPE seats and EPDM seals



## MP Series Compact Ball Valves

This valve is ideally suited to all kinds of plumbing applications where a compact, inexpensive on/off valve is required.

**Key Features:** The simple one piece PVC body with integral end connections eliminates potential problems caused by improper adjustment of the ball seating.

⚙️ **SIZES:** 1/2" - 2"

⬇️ **PRESSURE:** 150 psi at 73°F

✓ **AVAILABILITY:** SCH40 PVC and SCH80 PVC with PTFE seats and EPDM seals



## TKD Series 3-Way Ball Valves

The TKD features the same Dual Block system as the VKD 2-way valve which allows locking of the union nuts in a preset position.

**Key Features:** The patented seat stop carrier allows for in-line micro-adjustment of the ball seating, and features o-ring cushioning to minimize wear and prevent seizing.

⚙️ **SIZES:** 1/2" - 2"

⬇️ **PRESSURE:** 232 psi at 73°F

✓ **AVAILABILITY:** PVC, CPVC, PP, PVDF and ABS with PTFE seats and either EPDM or FPM seals.



## VKR Series Regulating Ball Valves

The VKR Series Regulating Ball Valves combine the reliability and safety features of IPEX VKD ball valves with a newly designed profiled ball.

**Key Features:** Patented ball design provides best in class linear flow regulation.

⚙️ **SIZES:** 1/2" - 2"

⬇️ **PRESSURE:** 232 psi at 73°F

✓ **AVAILABILITY:** PVC, PP or PVDF with PTFE seats and either EPDM or FPM seals

# Butterfly Valves

These highly versatile valves can be used for simple on/off service but also for processes requiring throttling. End-of-line installation of a lugged version allows for downstream piping disassembly with the upstream system still under pressure. The extensive size range and material availability make them suitable for a wide range of applications. With simple, direct mounting for actuation, automated process control can be easily achieved.



Pneumatic & Electric  
Actuation Available





**FK Series**  
Butterfly Valves

The FK offers superior strength as well as excellent chemical resistance needed to operate in corrosive environments.

**Key Features:** 316SS non-wetted shaft, special trapezoid shaped liner and serrated body cavity minimize breakaway torque while offering a bubble tight seal. Locking handle with position indicator and integrated EasyFit label system. Added robustness thanks to its glass-filled PP body.

 **SIZES:** 1-1/2" – 16" (Wafer) 2-1/2" – 12" (Lugged)

 **PRESSURE:** up to 232 psi at 73°F depending on size

 **AVAILABILITY:** Glass-filled PP body with CPVC disc; Other disc materials available (PP, PVC, PVDF or ABS); Gearbox or Lever




**FX Series**  
Butterfly Valves

The FX is one of the most versatile valves on the market today. It offers superior strength and chemical resistance in highly corrosive environments and process flow conditions.

**Key Features:** Standard PVC body with PP disc, 316SS non-wetted shaft, special trapezoid shaped liner and serrated body cavity minimize break away torque while offering a bubble tight seal. Locking handle with position indicator and integrated EasyFit label system.

 **SIZES:** 1-1/2" – 12"

 **PRESSURE:** 150 PSI at 73°F depending on size

 **AVAILABILITY:** PVC body and PP or PVC disc; Gearbox or Lever; EPDM or FPM seals



## FE Series Butterfly Valves

The FE is ideal for light industrial or water use. Like all butterfly valves, it can be operated by either a lever handle or mounted gear box.

**Key Features:** The FE includes many of the features and benefits from the FX/FK valves such as a non-wetted stem and trapezoidal gasket design.



**SIZES:** 1-1/2" – 12"



**PRESSURE:** up to 232 psi at 73°F  
depending on size



**AVAILABILITY:** PVC body and disc;  
Gearbox or Lever; EPDM seals



# Diaphragm Valves

Diaphragm valves are the perfect solution when precise flow throttling is required. The weir-style design – no dead space in the valve – is well-suited to abrasive slurries or volatile fluids that could off gas. These valves are widely used in high purity applications because their design prevents friction and subsequent particle creation when cycling. Many body and diaphragm material options are available as well as pneumatic actuation.



Pneumatic Actuation  
Available



**DK Series  
Dialock®**  
Diaphragm  
Valves



**VM Series**  
Diaphragm  
Valves

The DK series diaphragm valves are able to be mounted in any position. The DK offers one of the best CV values in the diaphragm valve market to ensure minimal pressure loss.

**Key Features:** The innovative and patented Dialock locking mechanism allows the manual handwheel with position indicator to be adjusted and locked in over 300 positions. Available in manual and pneumatic control styles.

The VM Series' weir-style design allows for precise throttling while the compact design allows for installation in any orientation.

**Key Features:** Available automation and multiple accessories make this one of the most advanced and versatile lines in the industry.

↺ **SIZES:** 1/2" – 2-1/2"

↓ **PRESSURE:** up to 150 psi at 73°F

✓ **AVAILABILITY:** PVC, CPVC, PP or PVDF, 3 choices of diaphragms (EPDM, FPM, or PTFE [EPDM backed])

↺ **SIZES:** 3" – 4"

↓ **PRESSURE:** up to 150 psi at 73°F

✓ **AVAILABILITY:** PVC, CPVC, PP, or PVDF, 3 choices of diaphragms (EPDM, FPM, or PTFE [EPDM backed])



### DKD Series

Direct Acting  
Pneumatic  
Diaphragm  
Valves

The internal geometry of the DKD has been optimized to increase fluid dynamic efficiency, while the simplified design and components guarantees high reliability and durability for your system.

**Key Features:** The DKD is extremely compact and very light. Includes a compact polypropylene actuator and threaded SS insert for wall mounting. Air or water can be used as control fluid.

 **SIZES:** 1/2" - 2"

 **PRESSURE:** 120 PSI

 **AVAILABILITY:** PVC with EPDM diaphragm



### DV Series

Diaphragm  
Valves

The DV is a rugged industrial product. It features a raising position indicator, and a molded flanged body to eliminate the risk of leaky joints.

**Key Features:** The raising position indicator also functions as an adjustable travel stop. This feature can be used to avoid over-compression of the diaphragm, or as a travel limiter allowing different settings for the "closed" position.

 **SIZES:** 1/2" - 6"

 **PRESSURE:** up to 150 psi at 73°F depending on size

 **AVAILABILITY:** PVC with EPDM or PTFE diaphragm



### CM Series


Diaphragm  
Valves

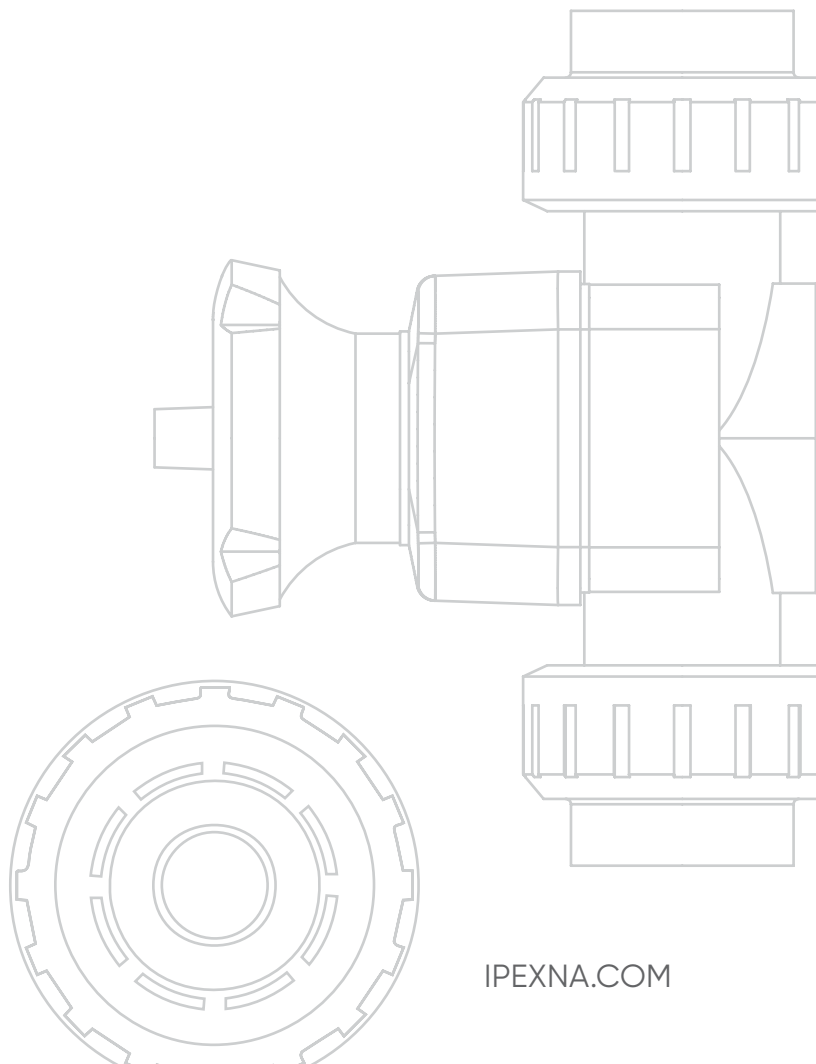
The CM is a compact design with true union ends, ideal for OEMs.

**Key Features:** Standard position indicator and integrated mounting bushings.

 **SIZES:** 3/8" - 1/2" in PVC, 1/2" in CPVC, 16 mm - 20 mm in PP or PVDF

 **PRESSURE:** up to 90 psi at 73°F

 **AVAILABILITY:** PVC, CPVC, PP or PVDF, 3 choices of diaphragms (EPDM, FPM, or PTFE [EPDM backed])



# Check and Vent Valves

Check valves should be used whenever there is a need to prevent back-flow. This may be when two incompatible fluids cannot be allowed to mix, or when reverse flow would cause undesirable drainage of a system line or tank. Many styles exist including: ball checks, heavy duty swing checks, and highly efficient piston checks. These valves are typically gravity operated and require very little back pressure to seal. Air release valves safely allow any entrapped air or gas to escape, avoiding damage to the piping system.



Metric Conversion  
Available



**SXE Series**  
Ball Check  
Valves

This popular style of check valve features a true union design allowing for easy removal and maintenance of the valve without disturbing the rest of the pipe assembly. Positive shutoff of the valve in both vertical and horizontal installations is achieved with just 3 psi of back pressure.

**Key Features:** The EasyFit multifunctional handle from VXE and VEE valves can be used for installation, ball access and nut tightening. The internal design is optimized for maximum flow and minimum turbulence, preventing ball sticking and chatter.

 **SIZES:** 1/2" – 4"

 **PRESSURE:** 232 psi at 73°F

 **AVAILABILITY:** PVC and CPVC with either EPDM or FKM seals




**SSE Series**  
Spring Assisted  
Check Valves

The all new SSE complements our SXE ball check valves, providing trouble free service for industrial, OEM and water service applications.

**Key Features:** The internal profile of the SSE, combined with the spring assisted contoured ball, gives the advantage of trouble-free vertical and horizontal installations, even if only very low backpressure is available.

 **SIZES:** 1/2" – 4"

 **PRESSURE:** 232 psi at 73°F

 **AVAILABILITY:** PVC with a standard 316SS spring and either EPDM or FKM seals. The spring is also available in PTFE encapsulated 316SS and Hastelloy, depending on the size.



## VR Series Piston Check Valves

The VR is a Y-pattern valve that will perform equally as well in both vertical and horizontal orientations.

**Key Features:** All PVC high performance components allowing for increased flow rate yet a low-return pressure for positive seal.

↻ **SIZES:** 1/2" - 4"

↓ **PRESSURE:** up to 232 psi depending on size

✓ **AVAILABILITY:** PVC with EPDM and FKM seals available



## SC Series Swing Check Valves

The SC combines superior flow rate with maximum versatility. Ideal for back-flow prevention in large diameter lines, both horizontal and vertical.

**Key Features:** Stainless steel wetted parts and hardware, top entry design, extremely low back pressure requirements.

↻ **SIZES:** 3" - 8"

↓ **PRESSURE:** up to 150 psi at 73°F depending on size

✓ **AVAILABILITY:** PVC with either EPDM or FKM seals



## VA Series Air Release Valves

The VA is a no-spill valve designed for tanks, slurries, or start-ups.

**Key Features:** The VA is a plastic valve controlled by media and not pressure. It allows for air to escape a piping system during filling and then acts as a vacuum breaker during draining.

↻ **SIZES:** 3/4", 1-1/4" and 2"

↓ **PRESSURE:** 232 psi

✓ **AVAILABILITY:** PVC with EPDM seals. FPM sealing kits are also available.



## Metric Conversion Kit

For socket end valves

IPEX offers PVC and CPVC metric ISO end connectors for our VKD, TKD, VXE and VEE ball valves, SXE check and vent valves, and RV specialty valves.

**Key Features:** These metric ISO end connectors are a straight swap with the standard ASTM or NPT connectors that come with the valve. This allows for IPEX valves to be integrated into metric systems such as European made skid equipment or to be used as transitions from metric to IPS pipe size.

↻ **SIZES:** 1/2" (20mm) - 2" (63mm)

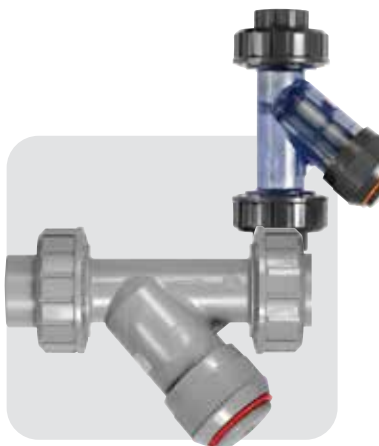
✓ **AVAILABILITY:** PVC or CPVC with SOC connection

# Specialty Valves

IPEX offers several specialized valves for some unique process requirements. Sediment strainers trap suspended particles, ensuring that downstream components are protected. Solenoids are ideal for high-cycle applications where remote operation and precise control are important. Lab valves are an economical solution for small scale on/off requirements.



Metric Conversion  
Available





**RV Series**  
Sediment  
Strainers

The RV Y-pattern strainer protects critical pipeline components by removing solids and suspended impurities.

**Key Features:** Clear PVC construction allows for inspection of the screen while in service, whereas the bottom-entry design permits maintenance on the valve while in-line. This Y-pattern strainer is also available in Xirtec® CPVC.

 **SIZES:** 1/2" – 4"

 **PRESSURE:** up to 232 psi depending on size

 **AVAILABILITY:** Clear PVC or CPVC with EPDM or FPM seals. Multiple strainer materials and mesh sizes available.




**LV Series**  
Laboratory  
Valves

The LV is an ingenious PVC quarter turn product supplied with an assortment of connections that match up with many kinds of pipe or hose.

 **SIZES:** 1/4"

 **PRESSURE:** 150 psi at 73°F

 **AVAILABILITY:** PVC or CPVC with EPDM seals



## VV Angle Seat Valves

The VV is designed for economical throttling of flow, and is particularly suitable for on-off service of clean fluids.

**Key Features:** Angle seat (Y-pattern) design for vertical and horizontal installation, simple top-entry maintenance while the valve is installed in-line, True Union body design.



**SIZES:** 1/2" - 2"



**PRESSURE:** up to 150 psi at 73°F depending on size



**AVAILABILITY:** PVC with EPDM seals and PTFE gland packing



## S12/22 Series Solenoid Valves

The S12/22 Series is designed for industrial, OEM and water service applications.

**Key Features:** Direct acting 2 way-2 position flow control valve, electric solenoid actuator redesigned to exceed 5 million cycles without having to perform maintenance, 100% duty cycle, lever type shutter design, standard manual override, LED position indicator,



**SIZES:** 1/4" - 1/2"



**PRESSURE:** up to 90 psi at 73°F



**AVAILABILITY:** PVC with either EPDM or FPM seals

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# The Responsible Choice for **Over 50 years**





VALVES AND ACTUATION PRODUCTS



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