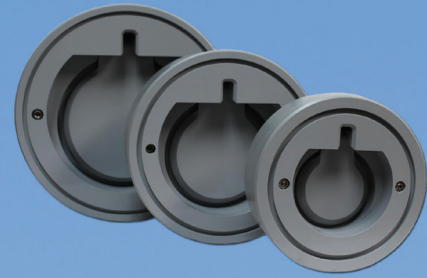
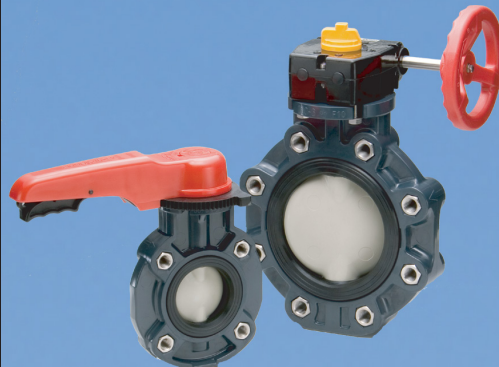




Thermoplastic Valves Direct Replacement for Metal Valves



Type-57 LIS & Type-55 IS Butterfly Valves
Type-14 Flanged Diaphragm Valves
Type P Gate Valves ■ Wafer Check Valves

Another
Corrosion
Problem
Solved.™



ASAHI/AMERICA®
Your Experts in Plastics™

www.asahi-america.com

Thermoplastics vs Metal

Asahi/America thermoplastic valves provide a dependable and economical way to handle corrosive chemicals, including sulfuric and hydrofluoric acid, nitric acid, oxidizing chemicals, caustics, solvents, halogens, and various other hostile fluids.

Thermoplastics vs Metal

Understanding the benefits and limitations of both advanced thermoplastics and metals is essential to making an informed choice in valve materials.

Thermoplastic valves can handle many different temperatures and pressures and can outperform metal with respect to corrosion, abrasion and freeze resistance, and provide lower installed cost. Thermoplastic valves are application tested having been installed in an array of industrial and commercial applications. For process lines, from wet chlorine, plating solutions, and acidic waste to demineralized water, thermoplastic valves and piping materials are your best solution.

Knowing the compatibility of the process media with the valve materials of construction, which include body, seat, seals, gaskets, diaphragms, discs, plugs, balls, packings and trims – non-wetted as well as wetted parts – impacts the valve's life and performance and contributes to its overall cost. In this catalog, we have made every attempt to provide you with information that will allow you to make the right selection.

**Look familiar ?
Plastic will solve your
corrosion problems !**



Features of Thermoplastics:

- Dielectric
- Low thermal conductivity
- Smoother than metal for better flow rates and less energy required to move fluids
- Made to last longer than metal, even when in contact with corrosive liquids
- Pure, so they do not contaminate the fluids they transport
- Chemically resistant
- Corrosion resistant, much more so than metals, which is why thermoplastics are favored by the EPA
- Lightweight, averaging a weight of 1/16th of comparable metal materials
- Used in many industries including semiconductor, mining, pulp and paper, electroplating, printing, landfills, aquaculture, waste water treatment, aquariums, theme parks and cruise ships
- Lower in total material and installation costs than conventional metal systems
- More efficient than metals, especially in operational efficiencies including chemical inertness, resistance to permeation and impurity absorption, abrasion and freeze resistance
- Advancing more steadily than their metal counterparts. These advances in thermoplastics have made possible the needed strength and heat/pressure tolerance for the vast majority of fluid flow applications

**Another
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Type-57 LIS Butterfly Valves

Specifications

Sizes: Lever: 3" – 8"
Gear: 3" – 8"

Models: Wafer Style or Lug Style with
316SS lug inserts

Operators: Lever and Plasgear

Bodies: PVC

Discs: PVC, CPVC, PP and PVDF

Seats: EPDM, FKM, or Nitrile

Seals: Same as seating material

Stems: 316 stainless steel,
Titanium, Hastelloy C® ‡

‡ Trademark of Cabot Corporation



The Type-57 LIS butterfly valve is well suited for a wide variety of applications. The Type-57 LIS butterfly valve conforms to ISO 5752 Short Pattern face to face dimensions. This allows the Type-57 LIS to **directly replace metal valves** conforming to the same standard. Available as ANSI B16.5 Wafer or ANSI B16.5 Lug models with 316SS drop-in lug inserts. Can be pneumatically or electrically actuated.

Standard Features (Sizes 3" – 8")

- Direct replacement for metal valves conforming to ISO 5752 short face-to-face dimensions
- Standard model has PVC body with PP disc for superior chemical and corrosion resistance as well as elevated temperature capabilities
- Non-wetted 316 stainless steel stem has full engagement over the entire length of the disc and is totally isolated from the media
- Full seat design isolates the body and stem from the media and acts as mating flange gaskets
- Integral body stops in valve body to prevent overtightening of mating flanges
- Spherical disc design for improved Cv's and superior durability
- Plasgear™ operator – Industry first composite enclosure gear operator
- Integral ISO-5211 top mounting pad for actuation mounting
- Polypropylene stem retainer

Sample Specification

All Type-57LIS butterfly valves shall be of solid thermoplastic lined body design with only the disc and seat as wetted parts. The face-to-face dimension shall be in accordance to ISO-5752 short face-to-face dimensions. All valves shall meet Class 6 bubble-tight shut-off standards. Operators shall be either molded PP lever handles with PPG trigger and 21-position throttle plate or Plasgear™ plastic enclosure gear operators. The lever handle shall feature a molded provision for padlocking. Valves shall feature spherical design discs for improved Cv's and lower seating torque. Seats or liners shall be molded and formed around the valve body and provide a gasket face for mating flanges. The valve body shall include molded body stops to prevent mating flange overtightening. Valves shall be molded wafer style and accept 316 stainless steel factory installed lug inserts. Lug style valves shall be capable of having the downstream flange removed while maintaining full line pressure on the upstream side. Valve stems shall be 316 stainless steel and have full engagement over the entire length of the disc. Valves shall feature molded ISO-5211 top flange bolt patterns for actuation mounting. PVC shall conform to ASTM D1784 Cell Classification (CC) 12454-A, PP to ASTM D41101 CC 0210B67272, and PVDF to ASTM D3222-91A CC Type II. All Type 57LIS butterfly valves shall be rated to 150psi at 70° F and be wafer or drop in lug style, as manufactured by Asahi/America, Inc.



For complete technical information visit our web site
www.asahi-america.com

Type-55 IS Butterfly Valves

Specifications

Sizes:	2" - 12"
Models:	Wafer Style
Operators:	Lever: 2" - 5" Gear: 2" - 12"
Bodies:	Powdercoat finish Ductile Cast Iron (FCD-S)
Discs:	PTFE
Seats:	PTFE backed with Neoprene ^{®†} backing
Stems:	Stainless steel 304

† Trademarks of E. I. du Pont de Nemours and Company



The Type-55 IS butterfly valve is well suited for a wide variety of applications. The Type-55 IS butterfly valve conforms to ISO 5752 Short Pattern face to face dimensions. This allows the Type-55 IS to **directly replace metal valves** conforming to the same standard. Available as ANSI B16.5 Wafer or ANSI B16.5 Lug models with 316SS drop-in lug inserts. Can be pneumatically or electrically actuated.

Standard Features (Sizes 2"-12")

- Face to face dimension conforms to ISO 5752 short pattern for metal valves
- Powdercoated cast ductile iron body for corrosion resistance
- Highly corrosion resistant PTFE disc and PTFE seat are the only parts in contact with the process media
- Stainless steel stem is non-wetted, isolated from the media, and has full engagement thru the entire length of the valve body and disc
- High CV value achieved with strong, thin disc
- Class VI bubble tight shut-off
- Lever handle features 19 position throttling plate and factory padlock provision
- Plasgear™ engineered resin enclosure gear-operator with stainless steel trim
- Top flange conforms to ISO 5211 for actuation mounting

Sample Specification

Type-55 IS Butterfly valves shall feature a powder coat finish cast ductile iron body with PTFE disc and seat. The PTFE seat shall be Neoprene backed for chemical resistance and flexibility over a wide range of temperatures. The face to face dimensions of the valve shall conform to ISO 5752 short pattern wafer style. Valves shall feature a 304 SS stem with full engagement thru the valve body and disc. Valves 2" - 5" shall feature a lever handle with 19 position throttling plate and trigger padlock provision. Valves 2" - 16" feature gear operators which shall be worm gear design, self-locking Plasgear™ as manufactured by Asahi/America Inc. Valves shall be rated to 150psi from -5°F thru 210°F sizes 2" - 12" and 100psi from -5°F thru 210°F sizes 14" and 16", as manufactured by Asahi/America Inc.

For complete technical information visit our web site
www.asahi-america.com



Type 14 Flanged Diaphragm Valves

Specifications

Sizes: 1/2" - 4"

Body Materials: PVC, CPVC, PP and PVDF

Bonnet Materials: PVC, PP, PPG and PVDF

Diaphragms: EPDM and
3-Layer EPDM/PVDF/PTFE
Also available in Nitrile
and FKM

End Connection: Flanged

Operator: Handwheel



The Type-14 flanged diaphragm valve is well suited for a wide variety of applications. The Type-14 flanged diaphragm valve conforms to ISO 5752 Short Pattern face to face dimensions. This allows the Type-14 diaphragm valve to **directly replace metal valves** conforming to the same standard. Can be pneumatically or electrically actuated.

Standard Features (Sizes 1/2" - 4")

- Flanged (ANSI) face-to-face dimensions are equivalent to most commonly used metallic valves
- Rugged body and bonnet are of solid thermoplastic for maximum corrosion resistance
- Uniquely designed body and bonnet together with diaphragms of new sealing designs by computer dynamic analysis for superior sealing
- Weir design for excellent throttling
- Bubble-tight sealing, even in applications such as slurries or suspended particles
- Bonnet seals to protect internal from corrosive environments
- Built-in travel stop to prevent overtightening or compressive strain on diaphragm
- Integrally molded bottom stand for simple yet firm panel mounting
- Indicator at the top for indication of valve position and prevention of overtightening
- PVDF gas barrier, which protects EPDM backing from gas permeation, is standard for all valves with PTFE diaphragm
- Low profile
- Bayonet structure to connect compressor and diaphragm – Easy diaphragm replacement

Sample Specification

All Type-14 flanged diaphragm valves shall be of solid thermoplastic construction for body and bonnet with molded flanged ends. The valves shall come standard with a position indicator, travel stop (to prevent overtightening) and bonnet O-ring sealing arrangement. The valve shall be weir type with a square bonnet body sealing design and bayonet connection diaphragm (1/2"- 2") or round bonnet body sealing design (2-1/2"- 4"). All PTFE diaphragms shall be supplied with a PVDF gas barrier between the layers of EPDM and PTFE for aggressive chemical service. The face-to-face dimensions shall conform to Type G. PVC conforming to ASTM D1784 Cell Classification 12454-A, CPVC conforming to ASTM D1784 Cell Classification 23567A, PP conforming to ASTM D4101 Cell Classification PPO210B67272, PPG (bonnet only) conforming to ASTM D4101 Cell Classification PPO110M20A21130, and PVDF conforming to ASTM D3222 Cell Classification Type II. PVC, CPVC, PP and PVDF shall be rated to 150psi for elastomeric and PTFE diaphragms at 70° F., as manufactured by Asahi/America, Inc.

For complete technical information visit our web site
www.asahi-america.com



Type P Gate Valves

Specifications

Sizes: 2" - 8"
Body: High Impact PVC
Models: Flanged (ANSI)

Types/Sizes: "P" Type: PP, 1-1/2" - 8"
Seals: EPDM, FKM(Optional)



The Type-P Gate Valve is well suited for a wide variety of applications. The Type P gate valve conforms to ISO 5752 Short Pattern face to face dimensions. This allows the Type-P gate valve to **directly replace metal valves** conforming to the same standard. Available as ANSI. Can be pneumatically or electrically actuated.

Standard Features (Sizes 2" - 8")

- Straight through flow with minimal pressure drop
- Unique sliding cylindrical plug design provides larger seating area than conventional gate valves
- Made of durable, corrosion resistant plastic
- No metal to media contact anywhere in valve
- Clean-out (drain) plug in bottom area of valve body
- Rated for full vacuum service
- Lightweight for easier and economical installation
- Positive bubble-tight shut-off
- Visual position indicator

Sample Specification

All gate valves shall be constructed of high impact PVC and have no metal to media contact. The gate shall be a tapered cylindrical plug design PVC shall conform to ASTM D1784 Cell Classification 12454-A, and PP to ASTM D4101 Cell Classification

PPO210B67272. Valves shall have a pressure rating of 150psi at 70° F sizes 1-1/2" through 8", 110psi at 70° F size 10", and 75psi at 70° F sizes 12" and 14". The valve shall have a non-rising stem, come standard with sealed position indicator, clean-out plug and EPDM or FKM seals, as manufactured by Asahi/America, Inc.

For complete technical information visit our web site
www.asahi-america.com



Wafer Check Valves

Specifications

Size Range: 3" - 12"

Models: Wafer Style ANSI

Bodies: PVC

Seals: EPDM or FKM



The Wafer Check Valve is well suited for a wide variety of applications. The wafer check valve conforms to ISO 5752 Short Pattern face to face dimensions. This allows for **directly replace metal valves** conforming to the same standard. Available as ANSI B16.5 Wafer model.

Standard Features (Sizes 3" - 12")

- PVC body with EPDM or FKM seals
- Slim profile permits easy installation
- Wafer style fits between two mating flanges
- Face-to-face meets ASME/ANSI B16.10
- No spacer required
- No pipe interference with disc
- Vertical or horizontal installation
- No external shaft
- Excellent chemical resistance
- Max pressure: 150psi 3"-8"
85psi 10" and 12"
- Max temperature: 120°F

Sample Specification

All wafer check valves shall be of solid thermoplastic construction, having no metal that comes in contact with the media. Valves shall incorporate a single disc design suitable for either horizontal or vertical installations. Valves shall be wafer style conforming to ASME/ANSI B16.1 face-to-face dimensions for 150 lb. flanges. Valves shall be round body design with all O-ring seals of either EPDM or FKM and accept as an option an SWP-B ETFE coated spring for use in vertical applications. PVC shall conform to ASTM D1784 Cell Classification 12454. Valves shall be rated to 150psi (3"- 8") and 85psi (10" and 12") at 70° F, as manufactured by Asahi/America, Inc.

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