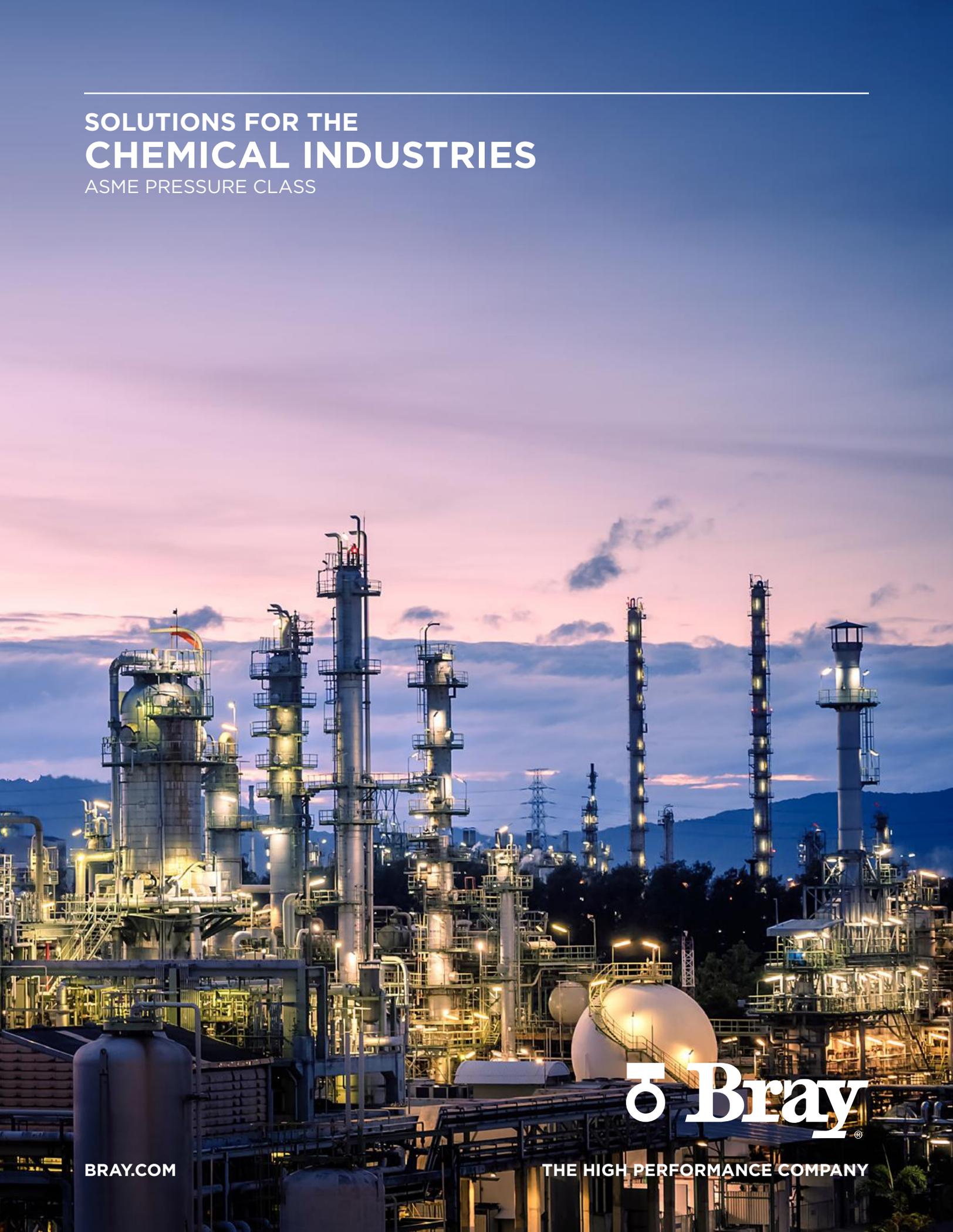

SOLUTIONS FOR THE CHEMICAL INDUSTRIES

ASME PRESSURE CLASS



Bray[®]

BRAY.COM

THE HIGH PERFORMANCE COMPANY

YOUR PROCESS CONTROL PARTNER

AGRI-CHEMICALS	INDUSTRIAL GASES	PIGMENTS
CHLOR-ALKALI	SPECIALTY CHEMICALS	PLASTICS & RUBBERS
FIBERS	PETROCHEMICALS	SURFACTANTS

The chemical industry involves a diverse collection of processes, with demanding applications and extreme service conditions. Our broad portfolio of high-performance valves, actuators, and controls ideally positions Bray to meet these challenging needs — from basic and commodity chemicals, to polymers and specialty chemicals. With products engineered for **safety, reliability,** and **performance**, you can count on Bray as your technical partner of choice — to provide innovative solutions for years to come.

SOLUTIONS FOR THE CHEMICAL INDUSTRIES

Bray products are available for a variety of services, including:

- > Vapors & Gases
- > High Purity
- > Liquids
- > High Temperature
- > Cryogenic
- > Steam
- > Slurry
- > Solids

ISOLATION VALVES

Reliable zero-leakage to shut off flow of process media to a given location — usually for maintenance or safety purposes.

CONTROL VALVES

Engineered solutions to regulate flow of liquid or gas — with high precision, accuracy, and fast response times — for a wide range of processes.

AUTOMATION

Bray's modular line of actuators and direct-mount accessories offer reduced size requirements, flexible configurations, and economic savings.

For complete product details and document downloads, visit BRAY.COM

CERTIFICATIONS

Our performance-tested products are in compliance with a variety of global certifications and approvals, including Lloyd's Register, UL, ABS and more.

Factory Certifications and Approvals

- > ISO 9001 and ISO 14001
- > OHSAS 18001
- > TSG

Product Certifications

- > API 607
- > API 608
- > API 609 Category A & B
- > API 641
- > ATEX
- > CE PED
- > CRN
- > ISO 15848-1
- > GOST
- > SIL3 Certification

For your critical Safety Instrumented System (SIS) needs, Bray offers custom engineered solutions featuring our line of reliable valves, actuators, and controls.

Packages can be configured and certified for safety applications including Emergency Shut Down (ESD), High Integrity Pressure Protection Systems (HIPPS), and others.

SAFETY INSTRUMENTED SYSTEM (SIS) CAPABILITIES

Partnering with Bray for your SIS needs offers many advantages, such as:

- > Single-source OEM responsibility for complete automated valve packages.
- > Safety Integrity Level 3 (SIL 3) certified valve assemblies.
- > Customizable configurations, including adaptation of Bray automation to non-Bray valves.
- > Custom control panel designs.
- > 3D CAD modeling.
- > Valve flow modeling.
- > Finite Element Analysis (FEA).

AUTOMATED VALVE ASSEMBLIES

Capabilities of Bray's automated valve assemblies include:

- > Rugged actuator design — Bray's S98 scotch yoke pneumatic actuator is cycle tested up to 4X the required standard (EN15714-3 Actuator Performance Standard).
- > Fast acting actuation — <1 second.
- > Partial stroke test (local and remote).
- > Positive Material Identification (PMI) — to verify materials on critical applications.
- > Fugitive emissions certification to API 641 and ISO 15848-1.
- > Firesafe certification to API 607.



Triple Offset Butterfly Valves



High Performance Butterfly Valves



Flanged Ball Valves



Metal Seated Ball Valves



Scotch Yoke Pneumatic Actuators



Trunnion Mounted Ball Valves

KEEPING OUR AIR CLEAN

Recognizing the importance of sustainability, socially responsible organizations have begun looking for ways to mitigate the environmental impact of their operations. These efforts have brought attention to the volume of volatile organic compounds released by industrial manufacturing processes. With unintentional leaks from industrial equipment (such as valves) comprising the vast majority of these fugitive emissions, environmental agencies have been forced to establish emissions standards — often imposing heavy fines on those in violation.

Bray is committed to helping organizations around the world tighten their grip on fugitive emissions. Our industry leading range of low-emissions, quarter-turn valves are certified for maximum compliance with minimum environmental impact. Certification and testing standards include:

- > API 641
- > ISO 15848
- > TA Luft VDI 2440

FUGITIVE EMISSION TEST FACILITIES



Bray Research & Development facilities in Houston, India, and China include safe, dedicated areas with extensive gas leakage detection equipment — used for product development, validation, and production testing.



Run by trained and experienced fugitive emissions specialists, our facilities include:

- > Helium mass spectrometer.
- > Tracer gas leak standards with calibrated depletion rates — for accurate and precise testing and pressures up to 6,000 psi (414 bar).
- > Measurement capabilities at extreme temperatures from -320°F to 1,000°F (-196°C to 538°C).

PRODUCT	BRAND	TYPE	MODEL	PROCESS								
				AGRI-CHEMICALS	CHLOR-ALKALI	FIBERS	INDUSTRIAL GASES	SPECIALTY CHEMICALS	PETROCHEMICALS	PIGMENTS	PLASTICS & RUBBERS	SURFACTANTS
CONTROL VALVES	Flow-Tek	Segmented Ball	Series 19	■	■	■		■	■	■	■	■
		V-port		■	■	■	■	■	■	■	■	■
BALL VALVES	Amresist	PFA Lined	Acris	■	■	■		■		■	■	■
	Flow-Tek	Severe Service	Series M1, M4	■				■	■			■
		Trunnion Mounted	1B	■				■	■			
		Flanged (2-pc)	Series F15/F30	■	■	■	■	■	■	■	■	■
		Flanged (1-pc)	Series RF15/RF30	■	■	■	■	■	■	■	■	■
		3-piece	Triad	■	■	■	■	■	■	■	■	■
		Multi-port	MPF/MPT	■	■	■	■	■	■	■	■	■
BUTTERFLY VALVES	Amresist	PFA Lined	Acris	■	■	■		■		■	■	■
	Bray	Triple Offset	Tri Lok	■	■		■	■	■	■	■	■
		High Performance	McCannalok	■	■		■	■	■	■	■	■
		Resilient Seated	Series 2X, 3X	■	■	■		■		■	■	■
KNIFE GATE VALVES	Bray	Unidirectional	950	■								
			940	■					■	■		
	Bidirectional	740	■							■		
		762	■									
		768	■									
CHECK VALVES	Rite	Swing Check	205, 210	■	■	■	■	■	■	■	■	■
ACTUATORS	Bray	Pneumatic Scotch Yoke	Series 98	■	■	■	■	■	■	■	■	■
		Hydraulic Scotch Yoke	Series 98H	■	■	■	■	■	■	■	■	■
		Pneumatic Rack & Pinion	Series 92/93	■	■	■	■	■	■	■	■	■
		Gear Operator	Series 04, 05	■	■	■	■	■	■	■	■	■
	Flow-Tek	Gear Operator	FTG	■	■	■	■	■	■	■	■	■
CONTROL ACCESSORIES	Bray	Positioner	Series 6A/6P	■	■	■	■	■	■	■	■	■
		Proximity Sensor	Series 54	■	■	■	■	■	■	■	■	■
		Valve Status Monitor	Series 5A/5B/5C	■	■	■	■	■	■	■	■	■
		Solenoid	Series 60/62/63	■	■	■	■	■	■	■	■	■
		Filter Regulator	Series 55	■	■	■	■	■	■	■	■	■



Flow-Tek Series 19

CONTROL VALVES | SEGMENTED BALL

- > Segmented ball valve for modulating control and on-off applications in gas, liquid, and slurry services.
- > Uninterrupted flow path with customizable profiles and trim materials is ideal for handling solids and viscous media.
- > Splined stem-to-segment connection provides precise control with low hysteresis.
- > Optimized seat design provides constant sealing force, even at low differential pressures.
- > Optional replaceable liners and hard coatings for highly abrasive applications.

Size Range	NPS 1 to 16	DN 25 to 400
Temperature Range	-50°F to 500°F	-46°C to 260°C
Pressure Ratings	ASME Class 150 300 600	
Fugitive Emissions	ISO 15848-1	



Flow-Tek V-Control
SIL 3 Capable

CONTROL VALVES | V-PORT

- > Bidirectional, bubble-tight shutoff and modulating control in a single package.
- > Standard and custom characterized ports allow for precise control over a wide flow range.
- > Non-turbulent flow path offers higher Cv, with rangeability in excess of 800:1.
- > Wide range of seat materials to meet application needs, including high pressures and temperatures.
- > Adjustable live-loaded stem sealing system with certified low emission packing.

Size Range	NPS ½ to 12	DN 15 to 300
Temperature Range	-50°F to 650°F	-46°C to 343°C
Pressure Ratings	ASME Class 150 300 600	
Fugitive Emissions	API 641 ISO 15848-1 TA Luft VDI 2440	



Amresist Acris
SIL 3 Capable (Full Port)

BALL VALVES | PFA LINED

- > Fully PFA lined body, ball, and stem provides unsurpassed resistance to corrosion.
- > Bidirectional zero-leakage sealing in standard and full port configurations.
- > Robust 1-piece ball and stem in full port design, with optional V-port for modulating.
- > Adjustable PTFE packing provides positive stem sealing and reduces fugitive emissions.
- > ISO 5211 top mounting plate simplifies actuator mounting.

Size Range	NPS ½ to 6	DN 15 to 150
Temperature Range	-49°F to 400°F	-45°C to 204°C
Pressure Ratings	Up to 250 psi	Up to 17 bar



Flow-Tek Series M1
SIL 3 Capable

BALL VALVES | SEVERE SERVICE (2-PIECE AND 3-PIECE BODY)

- > Application-specific designs for extreme process conditions in unidirectional and bidirectional applications.
- > Energized ball & seats with wide sealing surfaces ensure reliable performance during all operating conditions.
- > 360° mate-lapped ball & seats provide uninterrupted sealing and extend valve life.
- > Matched trim materials and hard coatings equalize thermal expansion rates to improve performance and extend valve life.
- > One-piece blowout-proof stem with gall resistant dual thrust bearings protect against actuator misalignment and stem sideloading.
- > Adjustable live-loaded stem sealing system with certified low emission packing.

Size Range	NPS ½ to 36	DN 15 to 900
Temperature Range	Up to 1100°F	Up to 593°C
Pressure Ratings	ASME Class 150 to 4500	
Fugitive Emissions	API 641 ISO 15848-1	



Flow-Tek Series M4

BALL VALVES | SEVERE SERVICE (UNIBODY)

- > Forged heavy-wall unibody design for extreme pressures and temperatures in unidirectional applications.
- > Energized ball & seats with wide sealing surfaces ensure reliable performance during all operating conditions.
- > 360° mate-lapped ball & seats provide uninterrupted sealing and extend valve life.
- > One-piece blowout-proof stem with upper bearing protects against actuator misalignment and stem sideloading.
- > Standard 4-year performance warranty.

Size Range	NPS ½ to 4	DN 15 to 100
Temperature Range	Up to 1100°F	Up to 593°C
Pressure Ratings	ASME Class 1700 to 4500	



Flow-Tek Series 1B
SIL 3 Capable

BALL VALVES | TRUNNION MOUNTED

- > API 6D forged construction is ideally suited for a wide range of applications.
- > Self-relieving seat design allows for safe operation without the need for dedicated bleed lines.
- > Pressure energized stem sealing system includes sealant injection ports compliant with ISO 15848-1.
- > Double block and bleed capable, with standard drain and vent ports.
- > Available API 607 certification and NACE MR0175 compliance.

Size Range	NPS 2 to 24	DN 50 to 600
Temperature Range	-50°F to 600°F	-45°C to 315°C
Pressure Ratings	ASME Class 150 300 600	
Fugitive Emissions	ISO 15848-1	

BALL VALVES



Flow-Tek Series RF15/RF30, F15/F30
SIL 3 Capable

BALL VALVES | FLANGED

- > Available in 2-piece (full port) and 1-piece (standard port) body configurations.
- > Adjustable live-loaded stem sealing system with certified low emission packing.
- > Seat design ensures bidirectional zero-leakage performance with low operating torque.
- > Optional cavity fillers reduce the potential for media entrapment and process contamination.
- > Available API 607, API 608, and NACE MR0175 compliance.

Size Range	NPS ½ to 12	DN 15 to 300
Temperature Range	-50°F to 750°F	-46°C to 399°C
Pressure Ratings	ASME Class 150 300	
Fugitive Emissions	API 641 ISO 15848-1 TA Luft VDI 2440	



Flow-Tek Triad Series
SIL 3 Capable

BALL VALVES | 3-PIECE BODY

- > Modular design available in full or standard port, with a variety of end connections.
- > Encapsulated bolting and dual body seals provide added protection against external leakage.
- > Adjustable live-loaded stem sealing system with certified low emission packing.
- > Optional cavity fillers reduce the potential for media entrapment and process contamination.
- > Available API 607, API 608, and NACE MR0175 compliance.

Size Range	NPS ¼ to 4	DN 8 to 100
Temperature Range	-50°F to 550°F	-46°C to 287°C
Pressure Ratings	Up to 2200 psi	Up to 151 bar
Fugitive Emissions	API 641 ISO 15848-1 TA Luft VDI 2440	



Flow-Tek Series MP

BALL VALVES | MULTI-PORT

- > Multi-directional flow control with flanged, threaded, or weld-in end connections.
- > 3-way and 4-way configurations in standard or full port, for diverting or mixing applications.
- > Live-loaded stem packing design ensures positive sealing to the atmosphere.
- > Four-seat design maintains balanced seat loading and proper ball alignment.
- > Optional cavity fillers reduce the potential for media entrapment and process contamination.

Size Range	NPS ½ to 12	DN 15 to 300
Temperature Range	-25°F to 500°F	-31°C to 260°C
Pressure Ratings	ASME Class 150 300	



Flow-Tek MCU

MEDIA CONTAINMENT UNIT

Flow-Tek’s Media Containment Unit (MCU) has been engineered to provide increased environmental protection and plant safety, through a secondary seal — which can be monitored for early detection of stem leaks.

- > Designed for both automated and manual service with Flow-Tek’s modular line of automation accessories.
- > Available sealant injection system for emergency shut-off or third seal.
- > Investment cast stainless steel unit is highly corrosion-resistant.
- > Easily installed in the field onto existing Flow-Tek ball valves.
- > Lowers operating costs by reducing lost production time due to fugitive emissions and unscheduled maintenance.



Flow-Tek Body Cavity Fillers

BODY CAVITY FILLERS

Available body cavity fillers reduce body cavity volume in order to minimize freezing, seizing and trapped media, ensuring smooth valve operation, even in tough conditions.

- > Cavity fillers reduce the potential for media entrapment in the void between the ball and the valve body.
- > Retrofittable design reduces cavity volume by more than 90%.
- > Prevents cross-process contamination.
- > Ideal for polymerizing media and sanitary applications.
- > Available materials include TFM, Tek-Fil, UHMWPE.



Flow-Tek Series SRH

SPRING RETURN HANDLES

Spring return handles are manufactured from heavy duty stainless steel components, to withstand frequent daily use in refueling, sampling, drains, and other OSHA applications that require positive closure of a manual valve.

- > Locking device is standard, for locking the valve in the preferred position.
- > Available in 3 sizes to fit compatible Flow-Tek full or standard port ball valves.
- > Mounts directly to rugged investment cast ISO 5211 mounting pads.
- > Easily retrofitted on existing compatible Flow-Tek lever operated ball valves.



Amresist Acris®

BUTTERFLY VALVES | PFA LINED (2-PIECE BODY)

- > Fully PFA lined disc and body provide unsurpassed resistance to corrosion, permeation, and microbial contamination.
- > Bidirectional zero seat leakage with streamlined disc engineered for maximum flow (Cv) with minimal resistance.
- > Acriseal™ live-loaded self-adjusting stem sealing system eliminates leak paths and reduces fugitive emissions.
- > Energized flange seals maintain proper sealing between valve and pipe flange.
- > Optional Titanium Grade 7 disc and shaft for highly corrosive environments.

Size Range	NPS 1 to 24	DN 25 to 600
Temperature Range	-20°F to 320°F	-29°C to 160°C
Pressure Ratings	Up to 150 psi	Up to 10 bar
Fugitive Emissions	ISO 15848-1	



Tri Lok
SIL 3 Capable

BUTTERFLY VALVES | TRIPLE OFFSET

- > Designed for high pressure, high temperature, and critical service applications.
- > Bidirectional, torque seated, metal-to-metal sealing with zero leakage.
- > Splined disc-to-stem connection prevents misalignment and minimizes hysteresis.
- > Fully adjustable stem sealing system with certified low-emission packing.
- > Field-replaceable sealing components minimize maintenance costs and extend valve service life.

Size Range	NPS 3 to 48	DN 80 to 1200
Temperature Range	-320°F to 842°F	-196°C to 450°C
Pressure Ratings	ASME Class 150 300 600 900	
Fugitive Emissions	API 641 ISO 15848-1 TA Luft VDI 2440	



McCannalok
SIL 3 Capable

BUTTERFLY VALVES | HIGH PERFORMANCE

- > Designed for high pressure, high temperature, and critical service applications.
- > Energized resilient seat design provides bidirectional, zero leakage shutoff throughout the full pressure range.
- > Double offset geometry reduces seat wear and extends valve service life.
- > Fully adjustable stem sealing system with certified low-emission packing.
- > Optional firesafe and metal seat designs available.

Size Range	NPS 2 to 66	DN 50 to 1650
Temperature Range	-320°F to 842°F	-196°C to 450°C
Pressure Ratings	ASME Class 150 300 600	
Fugitive Emissions	API 641 ISO 15848-1 TA Luft VDI 2440	



Bray Series 30/31
SIL 3 Capable

BUTTERFLY VALVES | RESILIENT SEATED (1-PIECE BODY)

- > Industry leading bidirectional butterfly valve designs since 1986.
- > Streamlined disc engineered for maximum flow (Cv) with minimal resistance.
- > Spherically machined and polished disc edge for zero leakage and longer seat life.
- > Internal disc-to-stem connection isolates the line media from the valve stem.
- > Tongue and groove seat is locked in place, allowing use in dead end services.

Size Range	NPS 2 to 20	DN 50 to 500
Temperature Range	-20°F to 400°F	-29°C to 204°C
Pressure Ratings	Up to 175 psi	Up to 12 bar



Bray Series 20/21
SIL 3 Capable

BUTTERFLY VALVES | RESILIENT SEATED (2-PIECE BODY)

- > 2-piece wafer or lug style allows for ease of assembly and maintenance.
- > Engineered disc maximizes flow and minimizes resistance, providing a high Cv.
- > Spherically machined and polished disc edge for zero leakage and longer seat life.
- > 1-piece disc/stem design provides complete protection from particle entrapment.
- > Tongue and groove seat is locked in place, allowing use in dead end services.
- > Available with stainless steel body for corrosive environments.

Size Range	NPS 1 to 20	DN 25 to 500
Temperature Range	-20°F to 400°F	-29°C to 204°C
Pressure Ratings	Up to 150 psi	Up to 10 bar



Bray Series 22/23
SIL 3 Capable

BUTTERFLY VALVES | PTFE LINED (2-PIECE BODY)

- > 2-piece wafer or lug style body with epoxy coating.
- > Stainless steel disc can be encapsulated in a variety of materials.
- > Blowout proof stem and disc are pressed together for a positive connection.
- > PTFE seat is isostatically molded to provide superior chemical resistance.
- > Resilient seat energizer provides uniform force for bubble tight shutoff.

Size Range	NPS 2 to 24	DN 50 to 600
Temperature Range	0°F to 392°F	-18°C to 200°C
Pressure Ratings	Up to 150 psi	Up to 10 bar



Bray Series 940, 950

KNIFE GATE VALVES | UNIDIRECTIONAL

- > Engineered for on/off services, ranging from general purpose to severe media, including slurries, powders, and solids.
- > 1-piece body with a wide range of soft or metal seat options.
- > Optional deflection cone and purge ports.
- > Available energized quad seal packing for enhanced gland sealing.
- > Designed for manual and automated applications.

Size Range	NPS 2 to 36	DN 50 to 900
Temperature Range	-65°F to 392°F	-54°C to 200°C
Pressure Ratings	Up to 150 psi	Up to 10 bar



Bray Series 740, 762, 768

KNIFE GATE VALVES | BIDIRECTIONAL

- > Engineered for on/off services, ranging from general purpose to severe media, including slurries, powders, and solids.
- > Available in 1-piece or 2-piece body styles.
- > Steel-reinforced, elastomer sleeve designed for bidirectional zero-leakage shutoff.
- > Optional deflection cone and purge ports.
- > Available energized quad seal packing for enhanced gland sealing.
- > Designed for manual and automated applications.

Size Range	NPS 2 to 36	DN 50 to 900
Temperature Range	-65°F to 392°F	-54°C to 200°C
Pressure Ratings	Up to 150 psi	Up to 10 bar



Rite 210

CHECK VALVES | SWING CHECK

- > Flow-activated, wafer design, swing check valve.
- > Resilient or metal seated models offer zero-leakage in all pressure classes.
- > High-flow, low pressure drop design.
- > Limited movement of internal parts reduces wear and enhances service life.
- > Full line of accessories available to meet many application needs.

Size Range	NPS 1 to 60	DN 25 to 1500
Temperature Range	-50°F to 650°F	-46°C to 343°C
Pressure Ratings	Class 125 to 2500	



Bray Series 98 Pneumatic
SIL 3 Capable



Bray Series 98 Hydraulic
SIL 3 Capable

ACTUATOR | PNEUMATIC & HYDRAULIC SCOTCH YOKE

- > Modular design allows for a wide range of configurations, for both single and double acting applications.
- > Designed for reliable, high-cycle operation with simplified maintenance.
- > Compact design offers a high torque-to-weight ratio, with easy field configuration.
- > Symmetrical or canted yokes provide optimized torque output.
- > ATEX, SIL 3 capable, IP66/IP67M; PED upon request.

Torque Output Range	2,744 to 885,100 in-lb	310 to 100,000 Nm
Temperature Range	-50°F to 300°F	-46°C to 149°C
Pressure Ratings	40 to 150 psi	2.8 to 10.3 bar



Bray Series 92/93
SIL 3 Capable

ACTUATOR | PNEUMATIC RACK & PINION

- > Modular design available for single or double acting applications.
- > Enclosed and self-contained construction with internal air porting.
- > Permanently lubricated, with independently adjustable travel stops.
- > Anodized aluminum body with polyester coated end caps; special materials and coatings available for added corrosion resistance.
- > ATEX, SIL 3 capable, PED.

Torque Output Range	Up to 44,130 in-lb	4,986 Nm
Temperature Range	-40°F to 350°F	-40°C to 149°C
Pressure Ratings	Up to 140 psi	Up to 10 bar



Bray Series 04, 05



Flow-Tek Series FTG

ACTUATOR | MANUAL GEAR

- > Heavy duty, self-lubricating, self-locking design for on/off or modulating applications.
- > Valve position indicator with independently adjustable travel stops.
- > Declutch, chainwheel, lockout, square nut, and stainless steel housing options available.

Torque Output Range	2,000 to 70,000 in-lb	226 to 7,900 Nm
Temperature Range	Up to 250°F	Up to 120°C



Bray Series 6A
SIL 2 Capable



Bray Series 6A Explosion Proof
SIL 2 Capable

CONTROL ACCESSORIES | ELECTRO-PNEUMATIC POSITIONER

Precision digital control with proven reliability, Series 6A positioners are designed with ease of installation, simple calibration, efficiency, and economy in mind.

- > Zero bleed design with LCD display and auto calibration function.
- > Standard 4-20 mA input. Optional Hart, Profibus PA, or Fieldbus communications protocols available.
- > Available polycarbonate, aluminum, or stainless steel enclosure.
- > Intrinsically safe (Ex ia, ib) or explosion proof (Ex d) available on request. SIL 2 capable.
- > Intelligent features include Partial Stroke Test, Fail in Place, Fail Safe, and Valve Performance Test.



Bray Series 6P
SIL 2 Capable

CONTROL ACCESSORIES | PNEUMATIC POSITIONER

Outstanding control and split-range capability for a wide range of quarter-turn valves with Double Acting or Single Acting/Spring Return actuators.

- > 2-stage pilot relay design provides precise response characteristics using a 3-15 psi pneumatic control signal.
- > High visibility dome position indicator with 3 gauges as standard.
- > Anodized and powder-coated aluminum construction for corrosion resistance.
- > Simple calibration with independent zero and span adjustments.
- > 4-20mA position feedback transmitter and/or limit switches available.



Bray Series 54
SIL 2 Capable

CONTROL ACCESSORIES | INDUCTIVE PROXIMITY SENSOR

Series 54 Inductive Proximity Sensors provide non-contact valve position monitoring solutions for reliable plant operation. Compact design mounts easily to **VDI/VDE 3845 compliant** quarter-turn actuators.

- > Two independent sensors for open and close valve position indication.
- > Rugged design is resistant to shock, vibration, UV, and corrosion.
- > IP66/67/69K enclosures with hermetically sealed sensors protect against environmental ingress.
- > Non-contact sensing eliminates the effects of mechanical wear, switch welding, arcing, and sparking.
- > LED indication for sensor power, switch, and solenoid status.
- > Available AS-i sensor for digital networks solutions.

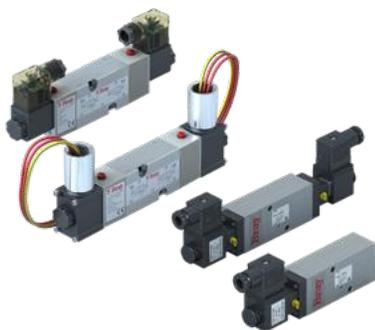


Bray Series 5A, 5B, 5C
+ Optional Resin Housing

CONTROL ACCESSORIES | VALVE STATUS MONITOR

Series 5A, 5B, and 5C Valve Status Monitors (VSM) provide reliable visual and electrical position indication on all **VDI/VDE 3845 compliant** quarter-turn rotary actuators. Suitable for general purpose environments (5A and 5B), intrinsically safe areas (5A and 5B), or hazardous locations (5C).

- > Shatterproof and UV-resistant dome indicators are double sealed to prevent water ingress.
- > IP66/67/68 rated enclosures provide ensure reliable operation in all operating environments.
- > Intrinsically safe (Ex ia) or explosion proof (Ex db, tb) available on request.
- > Spring loaded splined cams facilitate easy and accurate switch setting.
- > CommPro (AS-i), Device Net, and Profibus DP network protocols are available for digital network solutions.
- > Multiple switch options with imperial or metric conduit connections and easy access terminal strips.



Bray Series 60, 63

CONTROL ACCESSORIES | SOLENOID

Suitable for use with single or double acting actuators, these Series 60/63 solenoid valves are available with 1/2 NPT conduit connections or DIN connectors with PG9 cable gland.

- > Compact modular construction.
- > Pilot operated spool control design, with single or dual coil.
- > Low power, intrinsically safe, and hazardous location options available.
- > NEMA 4, 4X, IP65 rated.



Bray Series 55

CONTROL ACCESSORIES | FILTER REGULATOR

Designed to provide nominal filtration removal of solids and liquids from compressed air, with accurate control to any pneumatic control device. Recommended for use with the Bray Series 6A and 6P positioners.

- > Provides 5 micron filtration.
- > Locking knob allows for downstream pressure adjustment, and locks the pressure setting in place.
- > Threaded collar permits easy attachment of bracket for panel mounting.
- > Bowl quick-release allows easy access to filter element without special tools.

SINCE 1986, BRAY HAS PROVIDED FLOW CONTROL SOLUTIONS FOR A VARIETY OF INDUSTRIES AROUND THE WORLD.

VISIT **BRAY.COM** TO LEARN MORE ABOUT BRAY PRODUCTS AND LOCATIONS NEAR YOU.

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THE HIGH PERFORMANCE COMPANY

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