



# *Worcester Controls Product Catalog*



*Experience In Motion*



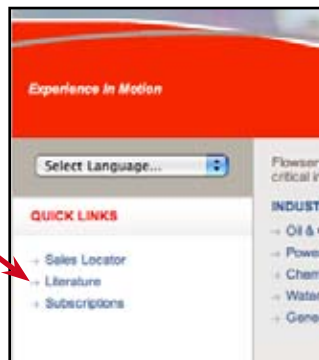
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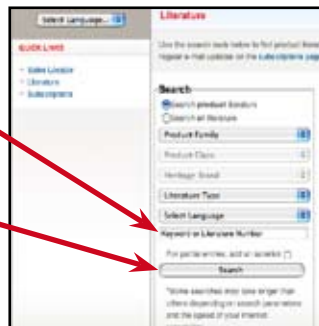
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*Flowserve rotary valves offer easy maintenance and automation backed by market-friendly expertise and quality heritage brands*



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## SERIES 44



### Features

- 3 Piece Swing out design Ball Valve
- ASME class 600 design
- Meets ASME B16.34 requirements (consult Pressure/Temperature Charts)
- “Live loaded” stem seal design
- Multiple soft and metal seat options
- Tight Shut off and Bi-Directional sealing
- Cavity Filled Designs
- Special Service Applications: UL, FM, USCG and other Special service approvals

### Sizes

- 1/4” - 2”
- Screwed end
- Socket weld
- Butt weld, Solder ends (Brass only)

### Materials

- Carbon Steel
- Stainless Steel
- Brass
- Monel
- Alloy 20
- Hastelloy-C

### Standards

- ASME B16.34
- S.E. to ASME B 2.1
- S.W. to ASME B 16.11
- API 607 Fire Test

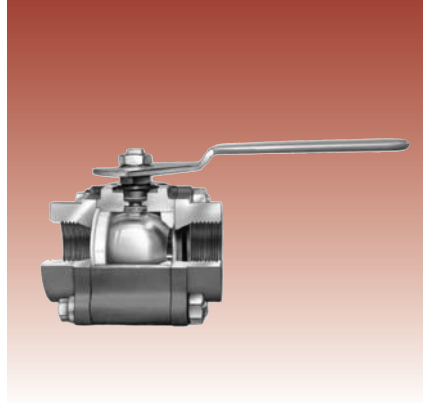
Get more information:

Product catalog:  
WCABR1050

IOMs  
WCAIM2030

See pages 2.

## SERIES 59



### Features

- 3 Piece Full Port Ball Valve:
- ASME class 600 design
- Meets ASME B16.34 requirements (consult Pressure/Temperature Charts)
- “Live loaded” stem seal
- Multiple soft and metal seat options
- Tight Shut off and Bi-Directional Sealing
- Cavity Filled Designs
- Full Port design minimizes pressure drop across the valve and maintains a high efficiency, reducing pumping cost.

### Sizes

- 1/4” - 4”
- Screwed end
- Socket weld
- Butt weld

### Materials

- Carbon Steel
- Stainless Steel

### Standards

- ASME B16.34
- S.E. to ASME B 2.1
- S.W. to ASME B 16.11
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1050

IOMs  
WCENIM2030 (for Miser)  
WCENIM2046 (for large 59)  
WCENIM2054 (for FM)

See pages 2.

## SERIES 45



### Features

- Large-diameter, 3 Piece Ball Valve
- ASME Class 300
- Three piece design allows valve to act as a valve and union
- Large diameter bore for O.E.M. equipment and packaging systems
- Compact design with multiple options
- Tight Shut off and Bi-Directional sealing
- Cavity Filled Designs

### Sizes

- 2-1/2”, 3”, 4”, 6”
- Screwed end
- Socket weld
- Butt weld

### Materials

- Carbon Steel
- Stainless Steel

### Standards

- S.E. to ASME B 2.1
- S.W. to ASME B 16.11
- ASME B16.34
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1050

IOMs  
WCENIM2046

See pages 2.

## SERIES 51/52



### Features

- Flanged Unibody Design
- ASME class 150/300
- Tight shut-off
- “Live loaded” stem seal
- Multiple soft and metal seat options
- Wide variety of Body, Seat and Seal materials means dependable, high cycle control on Steam, Petroleum products, Chemicals and abrasive liquids
- Pre-drilled mounting holes for actuation
- Tight Shut off and Bi-Directional sealing
- Cavity Filled Designs

### Sizes

- 1/2” - 10” Flanged
- ASME 150# and 300# class

### Materials

- Carbon Steel
- Stainless Steel

### Standards

- ASME B16.34
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1013

### IOMs

WCENIM2014 (for small valves)  
WCENIM2015 (for large valves)  
WCENIM2054 (for FM)

See page 2.

## SERIES 82 & 83 AF 82 & 83



### Features

- Flanged Full-Port Unibody Design
- ASME class 150/300
- Tight shut-off
- “Live loaded” stem seal
- Multiple soft and metal seat options
- Full Port design minimizes pressure drop across the valve and maintains a high efficiency, reducing pumping cost.
- Wide variety of Body, Seat and Seal materials means dependable, high cycle control on Steam, Petroleum products, Chemicals and abrasive liquids
- Firesafe by design

### Sizes

- 1/2”/3/4”/1”/1.5”/2.5”/10”  
For 2” and 3” to 8”, See Series 818
- ASME 150# and 300# class

### Materials

- Carbon Steel
- Stainless Steel

### Standards

- ASME B16.34
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1016

### IOMs

WCENIM2047

See page 2.

## SERIES 818 / 828



### Features

- Split Body, Full-Port Design
- Full Port Design
- ISO 5211 mounting
- Full Port design minimizes pressure drop across the valve and maintains a high efficiency, reducing pumping cost.
- Wide variety of Body, Seat and Seal materials means dependable, high cycle control on Steam, Petroleum products, Chemicals and abrasive liquids
- Cavity Filled Designs

### Sizes

- 2”, 3”- 8”
- ASME 150# and 300# class

### Materials

- Carbon Steel
- Stainless Steel

### Standards

- API 6D
- API 607 4th Edition
- NACE MR01-75
- BS 5500 Pressure Vessel Code

Get more information:

Product catalog:  
WCABR1015

### IOMs

WCENIM2020 (for std. valve)  
WCENIM2057 (for fugitive emission)

See page 2.

## Series 151 and 301



### Features

- Wafer Design
- Designed for light weight.
- Symmetrically balanced to avoid side loads from actuation 40-60% less weight than conventional ball valves
- Suitable for Steam processes including vegetable peelers, Steam ejectors, Distilleries, and more.

### Sizes

- 3", 4", 6"
- ASME 150# and 300# class

- Rated at 720 CWP

### Materials

- Bronze
- Ductile iron

Get more information:

Product catalog:  
WCABR1041

IOMs  
WCENIM2015

See page 2.

## Series D44/D4, D51, 18/19



### Features

- Multi-port Diverter Valves
- Three-piece or flanged design
- Bottom entry or side entry
- Full port or standard port
- 90 or 180 degree operation
- The D51 cast flanged have similar operations as the D44/D4 but for larger sizes
- The D44/D4 3-piece diverter valve is designed to accept media through a bottom inlet port and direct it to either of two outlet ports
- ASME 150 flanges
- The 18/19 Series is extremely adaptive
  - . Up to 5 ports
  - . multiple seat and body materials
  - . standard or full port
  - . Optional fugitive emission design
  - . Class 150 or 300
  - . Screwed, socket or butt weld and slip-on flanges

### Sizes

1/2" - 2" for D44/D4 3-piece valve  
For 2" - 8" for D51 Flanged valve  
1" - 6" for Series 18 & 19 valve

### Materials

Carbon Steel  
Stainless Steel

### Standards

ASME B16.34  
API 607 Fire Test

Get more information:

Product catalog:  
WCABR1052

IOMs  
WCENIM2030 (for Miser)  
WCENIM2015 (for large valves)

See page 2.

## Series 94, 94-150, 94-300, 94-600



### Features

- Specially designed to control and minimize fugitive Emissions.
- Outstanding performance on high-cycle applications, where no stem leakage is allowed
- Double „live loaded“ Stem seal design
- High Vacuum capability
- High cycle capability
- Suitable for Category M services
- Pressure classes to ASME 600

### Sizes

- 1/2" - 2" 3 piece design
- Screwed end
- Socket weld
- Butt weld
- 1/2" to 8" Flanged design

### Materials

- Carbon Steel
- Stainless Steel
- Hastelloy-C trim option

### Standards

- ASME B16.34
- S.E. to ASME B 2.1
- S.W. to ASME B 16.11
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1023

IOMs  
WCENIM2003 (for std. valve)  
WCENIM2057 (for fugitive emission)

See page 2.

## Series CL94, CL44, CL 51/52



### Features

- Special for Chlorine Service
- Liquid and gas
- Relief vent in ball vents to the high pressure side
- Constructed in accordance with the recommendations of the Chlorine Institute including special testing, cleaning and packaging
- Available with 94 FEM stem design
- Assembled in Class 1000 clean room
- Pressure classes to ASME 600

### Sizes

- ½" - 2" 3 piece design
- Screwed end
- Socket weld
- Butt weld
- ½" to 4" Flanged design

### Materials

Carbon Steel/Monel Trim

### Standards

- ASME B16.34
- Chlorine Institute Pamphlet 6
- MSS-SP-72, B31.1, B31.3

Get more information:

Product catalog:  
WCABR1039

IOMs

WCENIM2009 (for series 94)  
WCENBR2014 (for small 51/52)  
WCENBR2015 (for large 51/52)  
WCENBR2030 (for Miser)

See page 2.

## Series: AF 44, FZ 44, AF 51/52, FZ 51/52, FM 51/52, AF 94, FZ 94 AF 818/828, EAF 818/828



### Features

- Fire-Safe Valves
- Ensure operational integrity before, during, and after a fire.
- Tight Shut off, Anti static, no external leakage
- Available with 94 FEM stem design
- Pressure classes to ASME 600

### Sizes

- ½" - 2" 3 piece design
- Screwed end
- Socket weld
- Butt weld
- ½" to 10" Flanged design

### Standards

- ASME B16.34
- API 607 Fire Test
- EXES 3-14-1-2A
- BS 6755-PT2
- FM 7440

Get more information:

Product catalog:  
WCABR1029

IOMs

WCENIM2003 (for series 94)  
WCENIM2014 (for small 51/52) WCENIM2015  
(for large 51/52 & 151/301)  
WCENIM2020 (for series 818/828)  
WCENIM2030 (for Miser)  
WCENIM2047 (for series 82/83)  
WCENIM2052 (for 51/52 FM)  
WCENIM2054 (for O&G shutoff FM)  
WCENIM2057 (for fugitive emissions)

See page 2.

## Series C4, C44, and C51



### Features

- Cryogenic Services
- High-performance, shutoff valves for intermittent and continuous flow applications with temperatures to -425°F
- Positive Ball/Cavity relief with V3 vent hole
- Zero Leak packing
- Effective Bonnet Extensions
- Valves designed for low thermal stress, automation and Fire Safety
- Assembled in Class 1000 clean room
- Pressure classes to ASME 600

### Sizes

- ½" - 2" 3 piece design
- Screwed end
- Socket weld
- Butt weld
- ½" to 6" Flanged design

### Materials

- Brass
- Stainless Steel

### Standards

- ASME B16.34
- API 607 Fire Test

Get more information:

Product catalog:  
WCABR1040

IOMs

WCENIM2006 (for R12/R6 or earlier)  
WCENIM2038 (for std. valve)

See page 2.

**WK44 HIGH PURITY VALVES****Features**

- High Purity, Cast 316L
- Class 100 Clean Room Assembly
- 30Ra interior surface finish
- Diverter and Three-way porting
- Aseptic purge connections
- Quick disconnect & Extended weld ends

**Specifications**

- Size Range: ½" - 2.0"
- Body Styles: 2-way and 3-way

**Materials:**

- ASTM A351-CF3M, ASTM A479
- Interior Surface Finish: 30Ra std, 15Ra electropolished
- Seats/Seals: PTFE, UHMWPE, Polyfill

**Agency Approvals**

- FDA(21CFR), USDA, USP

**Applications**

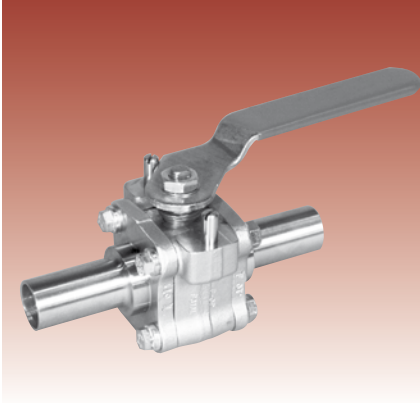
- Sterile steam, cosmetics and creams, oils, detergents, food processing

Get more information:

Product catalog:  
WCABR1035

IOMs  
WCAIM2030

See page 2.

**WK74 HIGH PURITY VALVES****Features**

- High Purity, Cast 316L - Tube bore
- Class 100 Clean Room Assembly
- 20Ra interior surface finish
- Controlled ferrite <5%
- Controlled sulfur for orbital welding
- CMTRs standard

**Specifications**

- Size Range: ½" - 4.0"
- Body Styles: 2-way and 3-way

**Materials:**

- ASTM A351-CF3M, ASTM A479
- Interior Surface Finish: 20Ra std, 10Ra electropolished
- Seats/Seals: PTFE, TFM, Polyfill

**Agency Approvals**

- ASME BPE, FDA(21CFR), USP Class 6, USDA

**Applications**

- High purity and aseptic processes, sterile steam, high purity water, fermentation, lyophilization, food processing

Get more information:

Product catalog:  
WCABR1037

IOMs  
WCAIM2018

See page 2.

**WK70 HIGH PURITY VALVES****Features**

- High Purity, Forged F316L - Tube bore
- Class 100 Clean Room Assembly
- 20Ra interior surface finish
- Controlled ferrite <5% (<1% optional)
- Controlled sulfur for orbital welding
- CMTRs

**Specifications**

- Size Range: ½" - 4.0" (6.0" optional)
- Body Styles: 2-way and 3-way

**Materials:** ASTM A182 F316L, ASTM A479

- Interior Surface Finish: 20Ra std, 10Ra electropolished
- Seats/Seals: PTFE, TFM, Polyfill

**Agency Approvals**

- ASME BPE, FDA(21CFR), USP Class 6, USDA

**Applications**

- Pharmaceutical/Biotech, microelectronics, steam distribution and distillation, fermentation, lyophilization, food and beverage

Get more information:

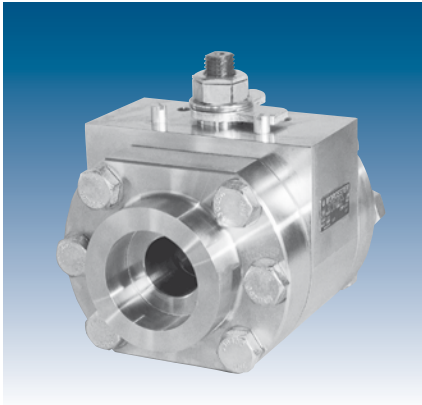
Product catalog:  
WCABR1036

IOMs  
WCAIM2018

See page 2.



**Series: 4, H44,PT  
High-per Miser  
H71 Hydromizer**



**Features**

- High-Pressure Valves
- Resilient seated valves for High pressure and High Temperature applications
- Pressures above ASME 600 to 5000 psi and (ASME Class 2500 (Consult Brochure for PT curves and limitations))
- Used in Steam, Hydraulics, gasses and fluids, CNG and Subsea

**Sizes**

- ½" - 2" 3 piece design
- Screwed end
- Socket weld, Butt weld
- ½" to 6" Flanged design
- Wafer 3"-6"

**Standards**

- ASME B16.34
- S.E. to ASME B 2.1
- S.W. to ASME B 16.11 (Consult product catalog)

Get more information:

Product catalog:  
WCABR1051

IOMs

WCENIM2015 (for large 51/51)  
WCENIM2024 (for std. valve)  
WCENIM2030 (for Miser)

See page 2.

**TANK BOTTOM VALVES**



**Features**

- Flush, Tank-bottom Drain valve
- For Biotech, Pharmaceutical, Food, Chemical and Cosmetic Processing
- Worcester 3 pc design advantages with a tank bottom end piece design.
- Available prepared for O2 and vacuum services
- Pressure classes to ASME 600

**Sizes**

- 1" - 4" 3 piece design
- Screwed end
- Socket weld, Butt weld

Get more information:

Product catalog:  
WCENBR1028

Installation instructions:

WCENIM2001

See page 2.

**SERIES CPT  
CONTROL VALVE**



**Features**

- The CPT is a characterized seat Control Valve with a revolutionary patented design
- Precision Control, high capacity
- Zero external leakage
- High Cycle Capacity
- Custom-cut Characterized Seats
- High Rangeability
- Efficient Shearing Action

**Sizes**

- ½" - 2" 3-piece design
- Screwed end
- Socket and Butt weld
- ½" to 4" Flanged design
- Wafer 3"-6"
- Pressure classes to ASME 600 (Consult Literature)

**Standards**

- ASME B16.34
- S.E. to ASME B 2.1
- S.W. to ASME B 16.11 (Consult product catalog)

Get more information:

Product catalog:  
WCABR1001

IOMs

WCENIM2009 (for series 94)  
WCENIM2040 (for series 44)

See page 2.

## SERIES 36 ELECTRIC ACTUATOR



### Features

- Compact size
- Permanently Lubricated and sealed gear train
- Thermal overload protection
- Simple mounting and installation
- Additional output switch
- Solid-State timer option for automatic cycling

### Torque Range

- 150 in-lb and 550 in-lb output torques

### Temperature Range

- 0 deg F to 150 deg F maximum ambient

### Supply Voltage

- 120 VAC 50/60, 240 VAC 50/60

### Standards

- Type 1, 4 and 4X

### Applications

- Industrial quarter-turn ball valves

### OEM installations

- Air Drying Equipment
- Sampling systems
- Compressor installations
- Condensate draining
- Tank draining

Get more information:

Product catalog:  
WCABR1006 or WCABR1007

IOM  
WCAIM2007

See page 2.

## SERIES 75 ELECTRIC ACTUATOR



### Features

- Two Year Warranty
- Baked Epoxy Coated
- Permanently Lubricate Gear Train
- Manual override
- Thermal Overload Protection
- Reversible Rotary Operation

### Optional Features

- Extended Duty Cycle Motors
- Fail Safe Capability
- Positioners and P.I.D. Controllers
- RTU Solar Power Interface

### Torque Range

- 150 - 3000 in-lbs

### Temperature Range

- -40 F to 150 F

### Supply Voltage

- 120 & 240 VAC, 12 & 24 VDC

### Standards

- Type I, 4, 4X
- Class 1, Div 1, Groups C, D

### Applications

- Process control for rotary valves, dampers and multi-turn chokes
- Boiler feed water
- Temperature control (steam, thermal fluid)
- Chemical, Power, Water/Waste Water, Food & Beverage, HVAC

Get more information:

Product catalog:  
WCABR1014

IOM  
WCAIM2013

See page 2.

## SERIES 72 ELECTRO-HYDRAULIC ACTUATOR



### Features

- Fail-safe on power failure
- Fast moving valve closure
- Long operational life
- No hydraulic reservoir- mounts in any position
- No clutches, battery packs or clock springs
- Simple 2-wire control
- Two Year Warranty
- FM Approved
- Cost-effective

### Torque Range

- Up to 900 in-lbs ( end of spring )

### Temperature Range

- 0 F to 150 F

### Supply Voltage

- 120 & 240 VAC, 24 VDC

### Standards

- Type 4, 4X
- Class 1, Div 1, Groups B,C,D

### Applications

- Oil & Gas Safety Shut Off
- Tank Farms
- Water/Waste Water
- Burner Management
- Oil Field Steam Generators
- Dampers

Get more information:

Product catalog:  
WCABR1025

IOM  
WCAIM2049

See page 2.

## SERIES 34 PNEUMATIC ACTUATOR



### Features

- Compact Scotch-Yoke design
- Baked epoxy coating
- Minimum air consumption
- Adjustable speed control
- Single external air and electrical connections
- Fail-safe spring return option
- Built-in solenoid air pilot
- High temperature option

### Torque Range

- Up to 1000 in-lbs @ 100 psi input

### Temperature Range

- -25 F to 160 F, Optional to 250 F

### Supply Voltage

- 24, 120, 240, 480 VAC; 12, 24VDC

### Standards

- Type 1, 4, 4x
- Class 1, Div 1, Groups A, B, C, D

### Applications

- Industrial Qtr-Turn valve automation
- Automotive, OEM, Chemical & Water

Get more information:

Product catalog:  
WCENBR1004

IOM  
WCAIM2008

See page 2.

## SERIES 39 PNEUMATIC ACTUATOR



### Features

- High Performance, High Cycle Design
- Two-Year warranty
- Twin piston, double rack & pinion
- Extruded, anodized aluminum body
- NAMUR, ISO mounting
- Polished stainless steel guide rods
- Multi-spring force transfer
- Dual male output shafts
- End cap air supply ports
- End mount solenoid/switch accessories

### Torque Range

- Up to 60,000 in-lbs @ 120 psi input

### Temperature Range

- -40 F to 212 F; (high temp option 300F)

### Pressure Range

- 30-120psi DA, 40-120psi SR

### Standards

- Type 1, 4, 4x
- Class 1, Div 1, Groups A, B, C, D

### Applications

- Chemical, Petrochemical & Refining,
- Power, Oil & Gas, Food & Beverage

Get more information:

Product catalog:  
WCABR1003

IOM  
WCAIM2036

See page 2.

## ACCESS ACTUATOR PNEUMATIC ACTUATOR with PROCESS INTERFACE



### Features

- Integral solenoid & position switch
- Single electrical connection
- High flow spool valve
- Manual override and speed control
- No mounting brackets
- Diagnostic LED circuit board
- Digital Fieldbus networks

### Torque Range

- Up to 60,000 in-lbs

### Enclosure

- Type 4, 4X; U.L.; CSA approved
- Class 1, Div 1, Groups B, C, D
- Intrinsically Safe, NRTL/C approved

### Position Switch

- SPDT/DPDT, Gold Contact, Proximity

### Temperature Range

- 0 F to 160 F

### Supply Voltage

- 12, 24 VDC, 24, 120, 240 VAC

### Pressure Range

- 40 to 120 psi

### Standards

- 4, 4x, 7, 9 and 12

### Applications

- Digital Fieldbus Networks, Chemical,
- Petrochemical & Refining, Oil & Gas,
- Food & Beverage, Pharmaceutical

Get more information:

Product catalog:  
WCABR1024

IOM  
WCAIM2027  
WCAIM2028  
WCAIM2023  
WCAIM2032

See page 2.

## SERIES ELK39 END MOUNT POSITION SWITCH



### Features

- End mount versus top mount
- Reduced assembly height
- Reduced installation envelope
- Eliminates mounting kits
- Multiple switch options
- Aluminum enclosure
- U.L., CSA & FM Approvals

### Enclosure

- Die cast aluminum, epoxy coated

### Standards

- Type 4, 4X; U.L.; CSA approved
- Class1, Div1, Groups C,D
- Class1, Div2, Groups E,F, G

### Position Switch

- SPDT/DPDT, Gold Contact, Proximity

### Temperature Range

- 0 to 160 F

### Switch Ratings

- SPDT-15 Amp, 125, 250, 480 VAC; 1/2A, 24VDC
- DPDT-10Amp, 125, 250 VAC; 0.3A,125VDC
- Proximity Sensor - (5-200mA, 20-140VAC, 10-140VAC, UL listed, CSA Certified)

### Applications

- Remote position indication
- Relay device for pumps
- Alarms and indicator lights
- Industrial, Chemical, Petrochemical installations

Get more information:

Product catalog:  
WCABR1027

IOM  
WCAIM2051

See page 2.

## ACCESS Actuator END MOUNT POSITION SWITCH



### Features

- Integral solenoid & position switch
- Single electrical connection
- High flow spool valve
- Manual override and speed control
- No mounting brackets
- Diagnostic LED circuit board
- Digital Fieldbus networks

### Enclosure

- Die cast aluminum, epoxy coated

### Standards

- Type 4, 4X; U.L.; CSA approved
- Class1, Div1, Groups B,C,D
- Class1, Div2, Groups E,F, G
- Intrinsically Safe, NRTL/C approved

### Position Switch

- SPDT/DPDT, Gold Contact, Proximity

### Temperature Range

- 0 to 160 F

### Switch Ratings

- SPDT - 15 Amp, 24,120,240 VAC; 1/2A, 24VDC
- DPDT - 10 Amp, 24,120,240 VAC; 1/2A, 24VDC
- I.S.- (Gold Contacts), 1 Amp, 120 VAC, 1 Amp, RES (0.5A IND) 24 VDC
- Proximity Sensor - (5-200mA, 20-140VAC 10-140VAC, UL listed, CSA Certified)

### Applications

- Digital Fieldbus Networks, Chemical,
- Petrochemical & Refining, Oil & Gas,
- Food & Beverage, Pharmaceutical

Get more information:

Product catalog:  
WCABR1024

IOM  
WCAIM2027 (standard)  
WCAIM2028 (intrinsically safe)  
WCAIM2023 (DeviceNet)  
WCAIM2032 (AS-i)

See page 2.

## UltraSwitch WGL Series TOP MOUNT POSITION SWITCH



### Features

- Pharos visual position indicators for high contrast, wide angle viewing
- Compliance to NAMUR VDI/VDE 3845 mounting specifications eliminates coupler and maximizes interchangeability
- Captive stainless steel cover screws
- Prewired multipoint terminal strip
- Quick-Set spring loaded cams are extra wide and splined to permit tool-free limit switch calibration
- Extensive switch offering for a wide range of applications including mechanical, proximity, solid state sensor options

### Description

- Provides a compact and economical package for NEMA 4 visual and remote electrical indication of valve position

### Housing Material

- Die cast aluminum; electrostatic powder coated

### Standards

- NEMA 4, 4x

### Hazardous Area Classifications

- Class I, Division 2, Groups A, B, C, D approvals when supplied with hermetically sealed magnetic proximity switches.
- ATEX II 2G EEx me II T4-T6 with Phazer II and BRS switches.
- Class II Division 2 Groups F&G

Get more information:

Product catalog:  
WCENBR1057

Product Specification  
WCENPS1054

IOM  
WCENIM2075

See page 2.



## UltraSwitch WPL Series TOP MOUNT POSITION SWITCH



### Features

- UltraDome visual position indicators for high contrast, wide angle viewing
- Compliance to NAMUR VDI/VDE 3845 mounting specifications eliminates coupler and maximizes interchangeability
- Captive stainless steel cover screws
- Prewired multipoint terminal strip
- Quick-Set spring loaded cams are extra wide and splined to permit tool-free limit switch calibration
- Extensive switch offering for a wide range of applications including mechanical, proximity, solid state, and analog feedback options

### Description

- Engineered resin enclosure provides excellent protection for harsh corrosive environments

### Housing Material

- Non-metallic engineered resin

### Standards

- NEMA 4, 4x

### Hazardous Area Classifications

- Class I, Division 2, Groups A, B, C, D approvals when supplied with hermetically sealed magnetic proximity switches Atex II 2 G EEx me II T4-T6 with Phazer II and BRS switches.
- Class II Division 2 Groups F&G

Get more information:

Product catalog:  
WCENBR1057

Product Specification  
WCENPS1055

IOM  
WCENIM2075

See page 2.

## UltraSwitch WXCL Series TOP MOUNT POSITION SWITCH



### Features

- UltraDome visual position indicators for high contrast, wide angle viewing
- Compliance to NAMUR VDI/VDE 3845 mounting specifications eliminates coupler and maximizes interchangeability
- Captive stainless steel cover screws
- Prewired multipoint terminal strip
- Quick-Set spring loaded cams are extra wide and splined to permit tool-free limit switch calibration
- Extensive switch offering for a wide range of applications including mechanical, proximity, solid state, and analog feedback options

### Description

- Provides a heavy-duty and rugged globally-certified explosion-proof package for visual and remote electrical indication of valve position

### Housing Material

- Die cast aluminum; dichromate conversion undercoat; electrostatic powder top coat

### Standards

- NEMA 4, 4x, 7 and 9, IP65, IP67

### Hazardous Area Classifications

- Explosion-Proof (UL/CSA/ATEX) mechanical switch options
- Class I, Divisions 1, Groups C and D
- Class II, Divisions 1, Groups E, F and G
- ATEX II 2 G EEx d IIB T5
- Explosion-Proof (UL/CSA/ATEX) proximity/solid state switch options (except NJ)
- Class I, Division 1, Groups C and D
- Class I, Division 2, Groups A, B, C and D with select hermetically sealed proximity switches
- Class II, Divisions 1 and 2, Groups E, F and G
- ATEX II 2 G EEx d IIB T5

Get more information:

Product catalog:  
WCENBR1057

Product Specification  
WCENPS1056

IOM  
WCENIM2076

See page 2.

## Aviator Integrated Valve Controller TOP MOUNT POSITION



### Description

- Designed for use with pneumatic rotary industrial valve actuators in hazardous locations. With the same features as the UltraSwitch, the Aviator provides actuator/valve control by receiving a direct solenoid voltage signal. Also provides remote indication of open and closed valve positions by completing separate electrical circuits.

### Housing Material

- Aluminum (XV and CV models)
- Engineered Resin (WR model)

### Standards

- NEMA 4, 4x, 7, 9 IP66/IP67 (XV model)
- ATEX EEx d IIB (CV model)
- NEMA 4, 4x (WR model)

### Hazardous Area Classifications

- Class I, Division 1, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2 Groups F&G
- Class I, Division 2, Groups A, B, C and D
- ATEX II 2 G EEx d IIB T4-T6
- ATEX II 3 G EEx nC II T4-T6 with R4 P1, PP and B4 switch options.

Get more information:

Product catalog:  
WCENBR1057

See page 2.

## BUSwitch Integrated Valve Controller

### TOP MOUNT POSITION



#### Description

- Designed for use with pneumatic rotary industrial valve actuators in hazardous locations with digital fieldbus communications. With the same features as the Aviator, the BUSwitch provides actuator/valve control by receiving a direct solenoid voltage signal. Also provides remote indication of open and closed valve positions by completing separate electrical circuits. Available in the following fieldbus protocols: AS-i, DeviceNet, FOUNDATION Fieldbus and PROFIBUS DP.

#### Housing Material

- Aluminum (XV and CV models)
- Engineered Resin (WR model)

#### Standards

- NEMA 4, 4x, 7, 9 IP66/IP67 (XV model)
- ATEX EEx d IIB (CV model)
- NEMA 4, 4x (WR model)

#### Hazardous Area Classifications

- Class I, Division 1, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, F&G
- Class I, Division 2, Groups A, B, C and D
- Class I, Divisions 1 and 2, Groups A, B, C and D Intrinsically safe for FOUNDATION Fieldbus protocol only
- ATEX II 2 G EEx d IIB T4-T6
- ATEX II 3 G EEx nC II T4-T6 with Foundation Fieldbus only

Get more information:

Product catalog: AXENBR0006

Installation instructions:

AXENIM0032 or for non-metallic AXENIM0097

Product specification:

AXENPS0059 or for non-metallic AXENPS0098

Installation instructions:

AXENIM0087 for AS-i protocol

Installation instructions:

AXENIM0048 for FOUNDATION Fieldbus protocol

Installation instructions:

LML0012 for PROFIBUS DP protocol

See page 2.

## PM15 & PM15E Positioner

### Pneumatic & Electropneumatic



#### Features

- Simple calibration
- Modular design
- External I/P module
- High gain, high capacity spool valve
- Gold plated spool valve
- Stainless internals
- Gauge ports
- Multiple feedback accessories
- NAMUR output shaft
- ISO mounting

#### Enclosure

- Die cast aluminum, epoxy paint

#### Ingress Protection

- IP66, NEMA 4

#### Approvals

- ATEX - EExd, EEx ia, EEx nI
- CSA - Class1, Div1, Groups BCDEFG  
I.S. - Class1, Div1, Group A,B,C,D
- FM - Class1, Div1, Groups B,C,D  
I.S. - Class1, Div1, Group A,B,C,D

#### Temperature Range

- -40F to 185F

#### Accessories

- Position indication, fail freeze, remote mount

#### Applications

- Accurate and reliable control of linear and rotary pneumatic actuators for modulating control

Industries served: All

Get more information:

Product catalog:

WCABR1032

IOM

WCAIM2016

WCAIM2017

See page 2.

## L93 Pulsair Positioner

### Analog and Digital



#### Features

- Linear and rotary actuator control
- Loop powered, microprocessor design
- Simple user interface
- High visibility graphic display
- Auto calibration
- Two-stage air delivery
- Piezoelectric low power control
- "Zero" air bleed design
- Digital communication options
- NAMUR output, ISO mounting

#### Enclosure

- Die cast aluminum, epoxy paint

#### Ingress Protection

- IP66, Type 4x

#### Approvals

- ATEX - EExd, EEx ia, EEx nI
- CSA - Class1, Div1, Groups BCDEFG  
I.S. - Class1, Div1, Group A,B,C,D
- FM - Class1, Div1, Groups B,C,DI  
I.S. - Class1, Div1, Group A,B,C,D

#### Temperature Range

- -22F to 185F

#### Accessories

- Position indication, fail freeze, remote mount

#### Applications

- High performance digital process control for linear and rotary actuators for modulating control

Industries served: All

Get more information:

Product catalog:

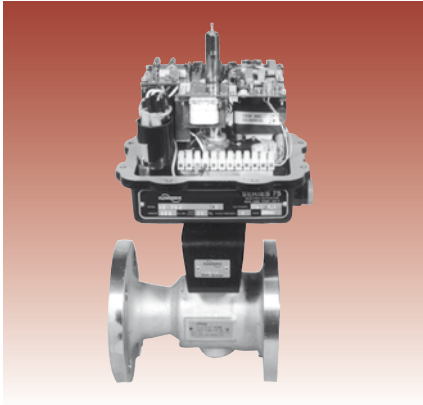
WCABR1019

IOM

WCAIM2055

See page 2.

## AF17 Positioner Positioners - Electric Actuation



### Features

- Solid-state circuit board
- Multiple signal inputs
- LED calibration
- Deadband control
- Direct and reverse acting
- Position feedback

### Enclosure

- Die cast aluminum, epoxy paint

### Supply Voltage

- 120VAC, 240VAC, 12VDC, 24VDC

### Standard Inputs

- 1-5mA, 4-20mA, 10-50mA, 0-135 ohm  
0-1000 ohm, 0-5 VDC, 0-10 VDC

### Temperature Range

- -40F To 150F

### Accessories

- Analog output module

### Applications

- Position control for rotary electric actuators to control valves and dampers.

**Industries served:** All

Get more information:

Product catalog:

WCABR1027

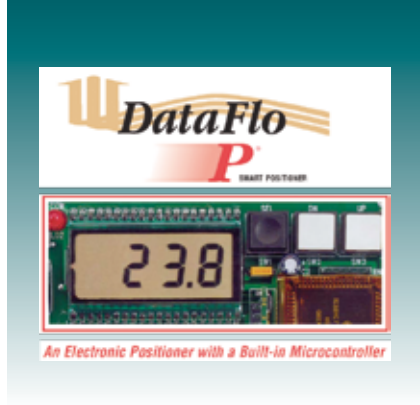
IOM

WCAIM 2031

WCAIM2050

See page 2.

## DFP17 - DataFlo Positioner Positioners - Electric Actuation



### Features

- Microprocessor control
- Pushbutton calibration
- Speed control
- Electronic travel stops
- Adjustable dead band
- Multiple I/O options
- Digital network communications
- 20 programmable functions

### Enclosure

- Die cast aluminum, epoxy paint

### Supply Voltage

- 120VAC, 240VAC, 12VDC, 24VDC

### Standard Inputs

- 1-5mA, 4-20mA, 10-50mA, 0-135 ohm,  
0-1000 ohm, 0-5 VDC, 0-10 VDC

### Temperature Range

- -40F To 150F

### Accessories

- Analog output module

### Applications

- High performance control for Qtr-turn and Multi-turn rotary electric actuators for modulating control of valves and dampers.

**Industries served:** All

Get more information:

Product catalog:

WCABR1024

IOM

WCAIM2037

See page 2.

## DFC17 - DataFlo Controller Controllers - Electric Actuation



### Features

- Microprocessor PID control
- Autotuning
- Local process control
- Pushbutton calibration
- Performance monitoring
- Multiple I/O options
- Modbus network communications
- RS485 network communications
- Desk top software

### Enclosure

- Die cast aluminum, epoxy paint

### Supply Voltage

- 120VAC, 240VAC, 24VDC

### Standard Inputs

- 4-20mA, RTD, Thermocouple

### Temperature Range

- -40F To 150F

### Accessories

- Analog output, 24VDC power supply

### Applications

- Direct process control (P.I.D.) for flow, temperature, pressure, level and Ph applications. Primary industries: Food & beverage, OEM, Industrial & Automotive

Get more information:

Product catalog:

WCABR1024

IOM

WCAIM2026

See page 2.



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