

**Emerson. The leading name
in Isolation Valves**



Product Overview
Isolation Valves



Meeting all your Final Control Needs

Emerson has the complete solution

Following a major expansion of our valves and controls business, Emerson has reinforced its final control portfolio, including a complete range of isolation valves and automated valve solutions.

We understand the importance of keeping your processes running continuously, regardless of the conditions, and are dedicated to providing the reliable technologies that will help you control, regulate and isolate your process with absolute certainty.

When you want a main valve partner who can help you operate safely, improve reliability and optimize plant performance, you can be sure that Emerson has the complete solution.







Isolation Valves for utilities to the most extreme industrial conditions

As part of the Final Control portfolio, Emerson's isolation valve products provide a complete range of standard and customized solutions, whatever demand you have on a valve.

Meeting your needs

Working with one trusted partner, we'll help you take the complexity out of the procurement arm and ensure compatibility of technologies. In terms of your projects, as a single manufacturer, we can positively impact timing and delivery and on the lifecycle side, we bring an expanded range of services at the site level.

Some of our key brands include:

CLARKSON

FCT

KEYSTONE

KTM

NEOTECHA

SEMPELL

VANESSA

VIRGO



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Butterfly Valves

Butterfly Valves

Emerson manufactures a complete range of butterfly valves from general purpose through to heavy duty and high performance models. This includes resilient seated valves for long service life and tight shut-off; high performance valves capable of temperatures of 538°C (1000°F) and pressures to PN 50 (class 300); double flanged valves in sizes up to DN 3000 (NPS 120) and lined valves suitable for highly corrosive liquids, gases and slurries.

Keystone

Keystone butterfly valves set the standard, with a reliable and robust construction and have a higher cycle life with lower total cost of ownership than comparable products.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Resilient Seated



Keystone Series GR Resilient seated butterfly valves.

A heavy duty resilient seated butterfly valve with a field replaceable seat.

Features

- Designed acc. to EN 593 / API 609
- Field replaceable seat isolates the body and shaft from media
- A molded-in O-ring on face of the seat eliminates flange gaskets
- Rounded polished disc edge gives full concentric sealing, lower torques and longer seat life
- Top and bottom shaft bearings for decreased torque and increased valve life
- Valves comply to PED (2014/68/EU) Module B + D, CE Marking

Technical Data

Size range:

Lug & wafer DN 50 to 900 (NPS 2 to 36)

Double flanged DN 600 to 1800 (NPS 24 to 72)

Pressure rating:

16 bar to DN 300 (230 psi to NPS 12)
10 bar to DN 1800 (150 psi to NPS 72)

End of line:

10 bar to DN 300 (150 psi to NPS 12)
6 bar to DN 1800 (90 psi to NPS 72)

Vacuum service: 0.4 bar

Temperature:

-40°C to +160°C (-40°F to +320°F)

Applications

General industrial such as air, water and dry media

Keystone Figure 221/222/320/322 Resilient seated butterfly valves.

An economical resilient seated butterfly valve with a moulded in seat.

Features

- Bubble tight shut-off at full rated pressure in both directions
- Lugged version is suitable for full rated bi-directional end-of-line service
- Top and bottom bearings assure longer life and lower torques
- A moulded-in O-ring on face of the seat eliminates flange gaskets
- Dry shaft design, seat and disc are the only two parts in contact with medium
- Figure 221/222 to ASME standards
- Figure 320/322 to ISO standards

Technical Data

Size range:

DN 50 to 300 (NPS 2 to 12)

Pressure rating:

16 bar (250 psi)

Full 16 bar (250 psi) end-of-line shut-off capabilities with lugged valve

Temperature:

-30°C to 120°C (-20°F to 250°F)

Applications

Building & construction, irrigation, utilities and water



Keystone Series 60

Resilient seated butterfly valves.

A heavy duty resilient seated butterfly valve with a cartridge seat design.

Features

- Cartridge seat design suitable for high pressure and vacuum service
- The valve can be installed with the disc in the closed position eliminating the risk of damage during installation
- Maximum flow and rangeability is achieved with the use of a streamlined disc
- Longer seat life with low operating torques is ensured by utilizing upper and lower stem bearings

Technical Data

Size range:

DN 50 to 900 (NPS 2 to 36)

Pressure rating:

DN 50 to 300 - 17.2 bar

(NPS 2 to 12 - 250 psi)

DN 350 to 600 - 13.7 bar

(NPS 14 to 24 - 200 psi)

DN 750 to 900 - 10.3 bar

(NPS 30 to 36 - 150 psi)

PTFE seat or elastomer covered disc

DN 50 to 300 - 10.3 bar

(NPS 2 to 12 - 150 psi)

Applications

Chemical & pharmaceutical, oil & gas, food & beverage and power



Keystone Figure 990/920

Resilient seated butterfly valves.

A split body butterfly valve utilizing a one piece disc stem and field replaceable seat.

Features

- One-piece wafer-thin disc-stem provides high strength, positive disc control and the minimum obstruction to flow
- Thin disc profile provides a larger open area, increased flow capacity and control capability
- Field replaceable seat fully isolates the body and stem from flow
- A moulded-in O-ring on face of the seat eliminates flange gaskets
- Rubber and PFA molded discs available for light abrasion or chemical resistance

Technical Data

Size range:

DN 25 to 500 (NPS 1 to 20)

Pressure rating:

10 bar to DN 300 (150 psi to NPS 12)

5 bar to DN 500 (75 psi to NPS 20)

Coated Disc 7 bar DN 50 to 300

(100 psi NPS 2 to 12)

Temperature rating:

-40°C to +150°C (-40°F to 302°F)

Applications

Chemical & pharmaceutical, pulp & paper, food & beverage and power





Keystone Optiseal Resilient seated butterfly valves.

A split body butterfly valve utilizing a one piece disc stem and field replaceable seat.

Features

- Thin disc profile provides a larger open area, increased flow capacity and control capability
- Rounded polished disc edge gives full concentric sealing, lower torques and longer seat life
- Field replaceable seat fully isolates the body and stem from flow
- Primary stem sealing exceeds the pressure rating of the valve and prevents leakage through shaft area
- Top and bottom shaft bearings for minimum friction up to DN 300 (except cast iron)

Technical Data

Size range:

DN 40 to 1000 (NPS 1½ to 40)

Pressure rating:

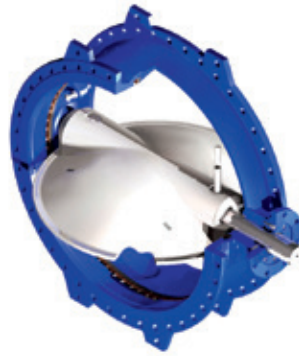
16 bar (CI body 10 bar)

Temperature rating:

-40°C to +160°C (-20°F to 320°F)

Applications

Chemical, pharmaceutical, pulp & paper, food & beverage and modulating services



Keystone Figure 56 Double flanged butterfly valves.

A large diameter double flanged eccentric disc butterfly valve.

Features

- Cast double flanged butterfly valve, drilled acc. various flange standards (JIS, BS, ISO/EN, ASME, AWWA)
- Body and disc protective coatings or rubber linings are available for sea water or corrosive services
- Seat and disc edge contours reduce seating torque, providing better shut-off and longer service life
- Stainless steel disc edge resists corrosion and avoids encrust build-up
- Self lubricating sleeve bearings allow valve installation with the shaft horizontal or vertical
- Seat replacement in line, without the use of special tools

Technical Data

Size range:

DN 500 to 3000 (NPS 20 to NPS 120)

Pressure rating:

PN 10 / 16

Temperature rating:

-40°C to +120°C (-40°F to +248°F)

Applications

Power generation plants, municipal water treatment and industrial water



Keystone K-LOK High performance butterfly valves.

A high performance butterfly valve available with ASME Class 150 and 300 pressure ratings.

Features

- Integrally cast mounting pad eliminates the use of brackets which can cause hysteresis
- Rocker-shaped gland bridge compensates for uneven adjustment of gland nuts, reducing packing leaks
- Extended neck allows for two inches of pipeline insulation
- Polymer, elastomer and fire-safe seats provide bi-directional, drop-tight closure throughout all pressure ranges
- Double offset disc design

Technical Data

Size range:

DN 50 to 900 (NPS 2 to NPS 36)

Pressure rating:

ASME 150 and 300

Temperature rating:

-40°C to +538°C (-40°F to +1000°F)

Applications

Chemical & pharmaceutical, food & beverage, marine, metals & mining, oil & gas, power and water



Lined Valves

Lined Valves

Emerson supplies a diverse range of ball, butterfly and sampling valves the wetted parts of which are lined for resistance to corrosion in a multitude of applications in industries such as chemical, petro-chemical, pharmaceutical, pulp and paper, semiconductor (UPW), foundries and mining. A dedicated reactor sampling valve enables samples to be taken from reactors or vessels containing poisoned, biological, corrosive or environmentally unfriendly media.

Neotecha

Neotecha PTFE, TFM and PFA lined valves are designed for highly corrosive media. The molding technique of applying PFA over a metal core achieving mechanical strength from the core and chemical resistance from the encapsulation has given Neotecha valves a worldwide reputation for reliability in the most severe corrosive applications.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Ball



Neotecha Ball Valves Lined ball valve.

High performance lined ball valves for isolation and control in highly corrosive and poisonous applications.

Features

- Fully PFA lined body offering the highest corrosion resistance
- Precision machined ball and seats guarantees a leak-free valve
- One piece ball/stem prevents lining damage and eliminates hysteresis
- Patented self-adjusting stem seal is maintenance and leak free
- Optimized process flow for on-off or C-ball for control applications
- Elimination of static electricity
- Spring loaded seat provides equal torque throughout its life cycle
- TA-Luft approved

Technical Data

Size range:
DN 15 to 150 (NPS ½ to 6)

Pressure class:
Full vacuum to PN16

Temperature range:
-40° to 210°C (-40° to 410°F)

Applications

Chemical & pharmaceutical, food & beverage

Butterfly



Neotecha Neoseal Lined butterfly valve.

Lined butterfly valve for highly corrosive liquids, gases and slurry.

Features

- TA-Luft approved valve with mechanical loaded shaft seals
- Ultra pure water approved with assembly in clean room (level 8)
- Machined to close tolerances for low torque and reduced stress/deformation during operation
- Excellent sealing properties using elastomer pads behind the liner
- Improved protection using thick lining on disc (3 mm)
- Serrated body flanges reducing the cold flow of the seat

Technical Data

Sizes:
DN 40 to 900 (NPS 1½ to 36)

Pressure class:
Full vacuum to PN10

Temperature range:
-40° to 200°C (-40° to 392°F)

Applications

Chemical & pharmaceutical, semiconductor and food & beverage



Neotecha Sapro
In-line sampling valve.

Compact in-line sampling solution for the extraction of representative high corrosive and or toxic samples from pipelines or reaction vessels without process interruption.

Features

- Assures a 'true representative sample' without dead volumes
- The sampling system is offered with either a bottle or syringe collection method
- The syringe collection method utilizes a bayonet connection, which is the same for all sizes
- All types are provided with a spring return manual lever
- Standard bottle adapter version allows padlocking to prohibit sample taking when not required
- The reliability of each sample is assured due to the ease of assembly and disassembly for cleaning
- Seat change is quick and easy with a universal seat for all sizes
- TA-Luft approved

Technical Data

Sizes:

DN 25 to 100 (NPS 1 to 4)

Pressure:

Vacuum to 16/25 bar (232/363 psi)

Temperature range

Up to 200°C (392°F)

Sample volume bottle: 50 - 2000 ml

Sample volume syringe: 20 - 250 ml

Applications

Chemical & pharmaceutical, pulp & paper, food & beverage



Neotecha Type PV
Reactor sampling system.

Complete sampling systems designed to handle highly corrosive liquids by sampling within a closed environment.

Features

- A special engineered transfer device extracts sample without stopping the process or opening the reactor
- Safe and simple operation using pressure less sample transfer
- All wetted parts are PTFE, PFA or glass
- No contamination of the atmosphere and sample media can be returned to the reactor
- Automated sampling possible by adding pneumatic actuators
- Options include fitting pH probe, vacuum/nitrogen/rinsing supply lines

Technical Data

Sample volume:

150/250/500 ml

Pressure:

up to 10 bar (145 psi)

Temperature:

up to 200°C (392°F)

Applications

Chemical & pharmaceutical, food & beverage



Ball Valves

Floating Ball Valves

With an outstanding portfolio of proven brands, Emerson manufactures and markets an extensive range of full and reduced bore floating ball valves serving a wide spectrum of applications in the oil and gas, petrochemical, chemical, pharmaceutical and allied process industries. The Emerson ball valve portfolio includes a diverse range of standard and customized ball valves that can be configured to suit most process applications or project packages.

KTM

KTM soft and metal seated designs are capable of a million cycles a year, making them the reliable, efficient and long lasting solution in arduous conditions. Hindle, Richards, Mecafrance and Chemat products are now part of the KTM brand.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Three Piece



KTM MCF Series RA Floating ball valves.

Allows in-line welding without disassembly and one-bolt-removal for ease of maintenance.

Features

- Bubble-tight sealing
- Integrated ISO top flange for easy automation
- Cast body materials
- Carbon steel and stainless steel body, stainless steel trim
- Reduced and full bore options
- 'Swing-out' center for easy seat and gasket replacements
- Butt weld, socket weld, threaded ends and flanged versions

Technical Data

Size range:

DN 8 to 250, (NPS ¼ to 10)

Pressure rating:

PN10 to PN100, ANSI 150/300

Temperature range:

-50° to +400°C (-58° to 752°F)

Applications

Chemical & pharmaceutical, food & beverage, marine, metals & mining, oil & gas, power and water

Two and Three Piece



KTM Series EB 500 Floating ball valves.

A two and three piece fire safe and anti-static, screwed/weld end ball valve.

Features

- Designed to ASME B16.34 and ISO 17292
- Fire Safe certified to API 607 by Lloyd's Register
- Reduced and full bore options
- Precision stainless steel ball and stem is standard in all trims
- Vented ball equalizes body cavity pressure in open position and prevents seat damage
- Fully machined seats are standard ensuring bubble-tight shut-off
- Vented seats reduce operating torque in high differential pressure applications
- Anti-static to API 608
- Ease of automation
- EN 10204 / ISO 10474 Type 3.1 certification supplied as standard

Technical Data

Size range: DN 15 to 50 (NPS ½ to 2)

Pressure rating:

ASME Class 800 and 1500

Temperature rating:

Up to 260°C (500°F)

Applications

Oil & gas, petrochemical



KTM Series EB11/EB12 - OMNI 2

Floating ball valves.

High performance two-piece ball valve where fire-safe and fugitive emission compliance is mandatory.

Features

- Soft E seat copolymer, Gratiite® Metaltite® and Cryogenic designs
- Full compliance to ASME B16.34, API608, ISO17292 and EN 12616-1
- Reduced and full bore options
- Fire Tested and Certified to API 607 and ISO 10497 (soft & metal seated)
- Fugitive emission compliant stem seal design to ISO 15848-1 class BH C03
- Cryogenic design to -196°C (-321°F)
- Anti-static design acc to ISO 17292
- Tightness to API 598 soft seat, ISO 5208 Rate A for soft seat & Rate B for metal seat, EN 12266-1 Rate A

Technical Data

Size range:

Full bore:

DN 15 to 200 (NPS ½ to 8)

Reduced bore:

DN 150 to 250 (NPS 6 to 10)

Pressure rating:

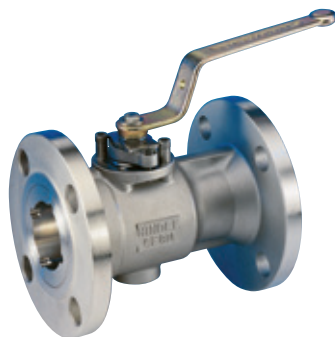
ASME Class 150 and 300

Temperature range:

-196°C to +500°C (-321°F to 932°F)
(seat dependent)

Applications

Petrochemical, chemical, oil & gas



KTM Hindle Ultra-Seal

Floating ball valves.

One and two-piece ball valves with soft, metal and carbon seats.

Features

- One-piece reduced bore body and two-piece full bore design
- Design compliance to ASME B16.34, ISO 17292, API 608
- Floating ball design for bi-directional shut-off
- ASME B16.10 flanged connections
- Cryogenic designs to -196°C (-321°F)
- Flexing soft seat design for superior shut-off and low operating torque
- Spring energized metal and carbon seat designs permitting tight shut-off and positive cavity pressure relief
- Fugitive emission performance to ISO 15848 class AH / BH C01

Technical Data

Size range:

Reduced bore:

DN 15 to 400 (NPS ½ to 16)

Full bore: DN 15 to 200 (NPS ½ - 8)

Pressure rating: ASME Class 150 and 300

Temperature range:

-196°C to +450°C (-321°F to 842°F)
(seat dependent)

Applications

Oil & gas, petrochemical, chemical, marine, pharmaceutical





KTM Series EF 190 Floating ball valves.

High performance two-piece ball valve where fire-safe and fugitive emission compliance is mandatory.

Features

- Full compliance to ASME B16.34 and EN 12516-1
- Fire Tested and Certified to API 607 and ISO 10497
- Double stem seal design complies with ISO 15848-1 Class BH C03
- Sealmaster stem sealing system for superior fugitive emission protection
- Double body seal PTFE primary seal and secondary graphite fire safe seal
- Standard ball valve with respect to the PAS1085 specification Class D
- Anti-static design according to ISO 17292
- Tightness to EN 12266-1 Rate A

Technical Data

Size range: DN 15 to 300 (NPS ½ to 12)

Pressure rating: PN 10/16, PN 25/40, ASME Class 150 and 300

Applications

Chemical, petrochemical, oil & gas, process



Virgo Series SS 09 Cast / forged floating ball valves.

A two-piece floating ball valve with live loaded stem seal for protection against leakage even at low pressures and reduced maintenance.

Features

- Low operating torques
- Bi-directional zero leakage
- Live-loaded graphite stem gasket with Belleville disc spring reduces maintenance and provides the ideal seal
- Integral ISO 5211 mounting pads
- Anti-static device maximizes safety
- Fire Safe design to API 607 / API6FA / ISO 10497
- Low fugitive emission: ISO 15848-1, C01 & tightness class BH
- Blowout-proof stem construction

Technical Data

End connections:

Flanged-RF, RTJ and welding ends

Size range:

Full Bore:
DN 15 to 65 (NPS ½ to 2½)

Reduced Bore:
DN 20 to 80 (NPS ¾ to 3)

Pressure rating:

ASME Class 150 to 1500

Temperature range:

-46°C to +200°C (-51°F to +392°F)

Applications

Oil & Gas, Process



Virgo Series SA 09 (Gland Packing) Cast floating ball valves.

A two-piece floating ball valve with adjustable stem seal which is ideal for rigorous applications in the Oil & Gas industry.

Features

- Low operating torques
- Bi-directional zero leakage
- Adjustable gland packing and O-ring seal for optimum sealing
- Integral ISO 5211 mounting pads
- Anti-static device maximizes safety
- Fire Safe design to API 607 / API6FA / ISO 10497
- Low fugitive emission: ISO 15848-1, C01 & tightness class BH
- Blowout-proof stem construction

Technical Data

End connections:

Flanged-RF, RTJ and welding ends

Size range:

Full Bore:
DN 50 to 200 (NPS 2 to 8)

Reduced Bore:
DN 80 to 200 (NPS 3 to 8)

Pressure rating:

ASME Class 150 to 1500

Design Temperature range:

-46°C to +200°C (-51°F to +392°F)

Applications

Oil & Gas, Process



EMERSON

EMERSON

Ball Valves

Trunnion Mounted Ball Valves

Emerson's broad range of trunnion design ball valves services the upstream oil and gas industry with models up to DN 1500 (NPS 60) and pressures up to 1,034 bar (15,000 psi). The trunnion design ensures that the ball is fixed within the valve body and the seats are energized to the ball. The differential pressure loading is distributed to the trunnion plates and bearings, resulting in smaller seating surface designs and greatly reduced break to open and operating torque.

FCT

End Users worldwide specify FCT trunnion ball valves on some of their most critical and demanding applications, including high integrity pressure protection, where zero leakage is required and where the environment is highly corrosive.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Two-piece



Virgo Series NL

Cast trunnion mounted ball valves.

A robust, two-piece, soft seated, side entry ball valve with triple sealing stem using 2 O-rings and a fire-safe gasket.

Features

- Extra wall thickness for increased corrosion allowance
- PED 2014/68/EU compliance
- Bi-directional zero leakage for maximum life with minimum maintenance
- SIL 3 compliant
- Fire safe design to API 607 / API6FA / ISO 10497
- Fugitive emissions: ISO 15848-1 C01, Class BH
- Compliance to API 6D
- Blowout-proof stem
- Compression springs provide uniform loading of seats ensuring sealing at low pressures

Technical Data

End Connection:

Flanged-RF, RTJ and welding ends

Size range:

Full Bore:
DN 50 to 600 (NPS 2 to 24)
Reduced Bore:
DN 50 to 750 (NPS 2 to 30)

Pressure rating:

ASME Class 150 to 1500

Design Temperature range:

-46°C to +200°C (-51°F to +392°F)

Applications

Oil & Gas, Process

Two and Three-piece



Virgo Series NL

Forged trunnion mounted ball valves .

A two / three piece soft seated side entry ball valve with triple sealing stem using two O-rings and a fire-safe gasket.

Features

- Extra wall thickness for increased corrosion allowance
- PED 2014/68/EU compliance
- Bi-directional zero leakage for maximum life with minimum maintenance
- SIL 3 compliant
- Fire safe design to API 607 / API6FA / ISO 10497
- Fugitive emissions: ISO 15848-1 C01, Class BH
- Compliance to API 6D
- Blowout-proof stem
- Compression springs provide uniform loading of seats ensuring sealing at low pressures

Technical Data

End Connection:

Flanged-RF, RTJ and welding ends

Size range:

Full Bore:
DN 50 to 1500 (NPS 2 to 60)
Reduced Bore:
DN 50 to 1500 (NPS 2 to 60)

Pressure rating:

ASME Class 150 to 2500

Design Temperature range:

-46°C to +200°C (-51°F to +392°F)

Applications

Oil & Gas, Process



Virgo Series NG

Cast trunnion mounted ball valves.

A side entry two-piece ball valve with fully adjustable packing gland and multiple steam sealing to minimize fugitive emissions.

Features

- Extra wall thickness for increased corrosion allowance
- PED 2014/68/EU compliance
- Bi-directional zero leakage for maximum life with minimum maintenance
- SIL 3 compliant
- Fire safe design to API 607 / API6FA / ISO 10497
- Fugitive emissions: ISO 15848-1 C01, Class BH
- Compliance to API 6D
- Blowout-proof stem
- Compression springs provide uniform loading of seats ensuring sealing at low pressures

Technical Data

End Connection:

Flanged-RF, RTJ and welding ends

Size range:

Full Bore:

DN 50 to 600 (NPS 2 to 24)

Reduced Bore:

DN 50 to 750 (NPS 2 to 30)

Pressure rating:

ASME Class 150 to 1500

Temperature range:

-46°C to +200°C (-51°F to +392°F)

Applications

Oil & Gas, Process



FCT Type HPA, HRA

Trunnion mounted ball valves.

Severe service ball valve with double block and bleed function.

Features

- Trunnion mounted type HPA (pin trunnion), HRA (plate trunnion)
- Bi-directional valves, double block and bleed, allowing the venting and the draining of the body cavity
- Two seat designs available:
 - single piston effect (standard)
 - double piston effect (double barrier)
- Blow out proof shouldered stem
- Guided stem (bearings) to minimize the operating torques
- Fire tested to API 6FA and BS 6755 part II
- Compliance to API 6D

Technical Data

Size range:

Full bore:

DN 50 to 1500 (NPS 2 to 60)

Reduced bore:

DN 80 to 750 (NPS 3 to 30)

Pressure rating:

ASME Class 150 to 2500

Temperature rating:

Up to 400°C (752°F) - metal seated

Applications

Chemicals & pharmaceuticals, marine, oil & gas and power



FCT DB

Trunnion mounted

Valves with a double block and bleed function, for standard and severe applications.

Features

- Full and reduced bore valves designs
- Bi-directional valves allowing venting and draining of the body cavity in open and closed positions
- Single or double piston effect seat designs available
- Soft and metal seats available
- Blow out proof shouldered stem
- Antistatic device to BS 5351 (10 Ω under 12 Volt) between body and seats and ball and stem
- Guided stem (bearings) to minimize the operating torques
- Fire tested to API 6FA and BS 6755 part II
- Compliance to API 6D / API 6A

Technical Data

Size range:

DN 50 to DN 1500 (NPS 2 to 60)

Pressure rating:

ASME Class 150 to 2500

API 6A 3000 to 10000 psi

Temperature range:

Up to 400°C (752°F) - metal seated

-46°C to +200°C (-51°F to +392°F)

- soft seated

Applications

Upstream and downstream oil & gas



FCT TE

Trunnion mounted ball valves.

Valves with a one piece body design for in-line maintenance.

Features

- One piece body, cast or forged
- Bolted or pressure sealed bonnet
- Fire safe approved design
- End connections: butt weld, clamped, flanged or transition/pup pieces
- Maintainable in-line, even when valve is welded in pipeline
- API 6D or API 6A
- Double Block and Bleed (SPE, DPE)
- Design to ANSI B16.34
- Soft, metal/soft or metal/metal seating
- ESDV and HIPPS applications

Technical Data

Size range:

DN 50 to 1500 (NPS 2 to 60)

Pressure rating:

ASME Class 150 to 2500

API 6A 3000 to 20000 psi

Temperature range:

Up to 400°C (752°F) - metal seated

-46°C to +200°C (-51°F to +392°F)

- soft seated

Applications

Riser pipeline valves, high pressure and temperature and HIPPS



FCT DIB

Trunnion mounted ball valves.

Severe service top entry two-piece ball valve with double isolation and bleed function.

Features

- Bi-directional design with recommended orientation for DIB2
- Full or reduced bore
- DPE (DIB-1) SPE/DPE (DIB-2) seat designs
- RTJ, RF, WE, hub or API 6A flanged end connections
- Wide range of body and trim materials
- Metal seating insert is tungsten carbide (150 μm to 400 μm)
- Soft seating in PTFCE, PFA, PEEK, DEVLON V
- Elastomer O-ring, PTFE lipseal or graphite seals

Technical Data

Size range:

DN 50 to 1500 (NPS 2 to 60)

Pressure rating:

ASME Class 150 – 2500

API 6D/6A 5000 - 20000

Temperature:

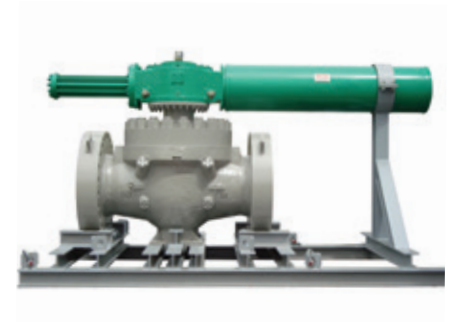
Up to 400°C (752°F) - metal seated

-46°C to +200°C (-51°F to +392°F)

- soft seated

Applications

Double isolation and bleed



FCT HIPPS

Trunnion mounted ball valves

Top entry two-piece ball valves specifically designed for shut-off protection of oil and gas pipeline and process systems.

Features

- Bidirectional design with recommended orientation
- Full or reduced bore
- SPE/DPE (recommended) seat design
- RTJ, RF, WE, API 6A flanges or hub end connections
- Standard API 6D / API 6A face-to-face dimensions, others on request
- Metal seating insert is tungsten carbide (150 μm to 400 μm)
- PTFE lipseal or graphite seals

Technical Data

Size range:

DN 50 to 1500 (NPS 2 to 60)

Pressure rating:

ASME Class 150 to 2500

API 6A 5000 to 20000 psi

Temperature range:

Up to 400°C (752°F) - metal seated

-46°C to +200°C (-51°F to +392°F)

- soft seated

Applications

Independent system protecting downrated downstream installation from upstream overpressure



FCT Figure 5600

Trunnion mounted ball valve.

A one-piece fully welded ball valve ideal to minimize any risk of fugitive emissions from flanges in the natural gas and oil industry.

Features

- Manufactured exclusively in forged materials, large size valves included
- Double block and bleed, allows venting and draining of the body cavity, in both open and closed positions
- Full and reduced bores available
- Single piston effect or double piston effect seat designs available
- Certified in compliance with PED and ATEX requirement
- Firesafe certified to the API 6FA, ISO 10497 Ed.1992, API 607 Ed.3 and BS 6755 part II

Technical Data

Size range:

DN 50 to 1400 (NPS 2 to 56)

Pressure rating:

ASME Class 150 to 900

Temperature range:

-60° to 200°C (-76° to 392°F)

Applications

Gas transportation and distribution, oil & gas



KTM EO Series

Trunnion mounted ball valves.

Two and three-piece, bi-directional, cast body block and bleed valves.

Features

- Locking device
- Cavity relief
- Positive shut-off
- Blow-out proof stem
- Fugitive emission control
- Fire safe construction
- Energized soft and metal seated
- ISO integral mounting flange
- Sulfide stress cracking resistant (compliant to NACE MR-01-75-2002)
- Suitable for cryogenic, vacuum and lethal/toxic services

Technical Data

Size range:

DN 50 to 600 (NPS 2 to 24)

Pressure rating:

ASME Class 150 to 1500

Temperature range:

-196°C to 450°C (-321°F to 842°F)

Applications

Oil & gas, chemical, petrochemical, refineries, pulp & paper and power



KTM Series PDS

Powder discharge system ball valves.

Suitable for high speed and high frequency powder handling applications.

Features

- Superior seating to ANSI/FCI 70-2 Class V
- Spring loaded seat assures tight sealing even at low pressure
- Scraper design minimizes residual powder between ball and seat to maintain seal and smooth open-close action
- Powder proof devices around seat areas shield against contaminants
- Non-lubricated dry PEEK bearing with low friction provides high abrasion resistance

Technical Data

Size range:

DN 15 to 350 (NPS ½ to 14)

Pressure rating:

ASME Class 150 to 600

Temperature:

-46° to 180°C (-51° to 356°F)

Applications

High cycle powder applications such as polyethylene and polypropylene production

Triple Offset Valves

Triple Offset



Triple Offset Valves

Triple offset valves are an alternative lower-cost solution to traditional process valves providing premium performance, long service life and minimum maintenance in extreme operating conditions.

Vanessa

Vanessa triple offset valves are lighter, easier to install and virtually maintenance free, with advanced reliability, durability and reduced total cost of ownership.

* According to 'Leakage Rate A' when tested with high pressure water and low pressure air of ISO 5208 and EN 12266-1 standards and the 'Resilient Seat Valves' requirement of API 598.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Vanessa Series 30,000

Triple offset valve.

A robust triple offset valve with integral-to-body seat for a wide range of applications, including zero leakage* isolation, ON-OFF, emergency shutdown and pressure/flow control.

Features

- All-metal construction available in basic, cryogenic and high temperature configurations
- Stellite® grade 21 seat overlays provide excellent durability
- Resilient metal seal ring ensures perfect seating force distribution
- The one-piece shaft ensures high pressure containment safety/maximum torque seating integrity
- Two-piece packing gland and graphite packing minimize external emission risk
- Heavy duty bearings withstand high pressure loads and wear

Technical Data

Size range:

DN 80 to 3000 (NPS 3 to 120)

Pressure rating:

ASME class 150-1500,
EN PN 10-250

Temperature rating:

-254°C to +815°C (-425°F to +1500°F)

Applications

Oil & gas, LNG, gas treatment, chemical & petrochemical, power, district heating (HVAC), desalination, mining and water

Vanessa Series 30-RS

Triple offset valve.

A triple offset valve with bolted-on seat design for zero leakage* isolation.

Features

- Bolted-on seat is installed upstream to eliminate the risk of bolt failure while retaining pressure and minimize leakage through its gasket
- The all-metal construction ensures inherent fire-resistance
- Resilient metal seal ring ensures perfect seating force distribution around seat circumference
- Shares the same packing gland, bearing, one piece shaft, disc-to-shaft connection and anti blow-out system configuration with Series 30,000

Technical Data

Sizes:

DN 80 to 600 (NPS 3 to 24)

Pressure rating:

ASME class 150-300,
EN PN 10, 16, 25, 40

Temperature rating:

-29°C to +350°C (-20°F to +662°F)

Applications

Refineries, utilities, chemicals, black liquor, steam, HVAC, sugar, ethanol & pulp and paper plants



Knife Gate Valves

Knife Gate Valves

Emerson manufactures knife gate valves for light to heavy slurry service in the mining and mineral processing, power, pulp and paper, waste water and chemical industries. Customers rely on our knife gate valves for reliable, longer service life and lower total cost of ownership.

Clarkson

Clarkson high performance knife gate valves can be relied on to deliver a 100% bubble-tight isolation shut off where absolute zero downstream leakage is essential.

Keystone

Keystone knife gate valves are designed for light to medium and arduous duty service suitable in water, process and mining industries.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

General Purpose



Keystone Figure 952

General purpose knife gate valves.

Compact, uni-directional valves for high flow rates with low pressure drops.

Features

- Self-aligning gland box
- One piece 316 SS integral cast body, chest and lugs
- Integral cast in gate wedges minimize flow obstructions
- High quality gate finish for optimum sealing
- Integral RTFE gate scraper and gate guides to support gate
- Complies with MSS SP-81 face-to-face dimensions

Technical Data

Size range:

DN 50 to 600 (NPS 2 to 24)

Pressure rating: 10 bar (150 psi)

Temperature rating:

316 SS seat: 230°C (445°F)

RTFE seat: 150°C (300°F)

FKM seat: 150°C (300°F)

Urethane seat: 50°C (122°F)

Applications

Chemical & pharmaceutical, food & beverage, metals & mining, oil & gas, power and water

Perimeter Seated



Keystone Figure PCS 17

Resilient seated knife gate valve.

A bi-directional valve that ensures zero leakage in either direction.

Features

- Unique drop-in perimeter cartridge seats ensure zero leakage and quick and cost-effective maintenance
- Seat geometry and precision moulding process ensure zero water leakage at low or high pressures
- In-line replaceable seat
- Solid cast, one piece 316 stainless steel or WCB carbon steel body for optimum performance and reliability
- Complies with MSS SP-81 face to face and full port design to Schedule 40

Technical Data

Size range:

DN 50 to 900 (NPS 2 to 36)

Pressure rating:

DN 50 to 600: 10 bar (150 psi)

DN 750 to 900: 6 bar (100 psi)

Temperature rating:

EPDM seat: 150°C (300°F)

NBR seat: 95°C (200°F)

FKM seat: 205°C (400°F)

Applications

Chemical & pharmaceutical, food & beverage, metals & mining, oil & gas, power and water



Clarkson SU10R

Slurry knife gate valve

Bi-directional isolation with a field replaceable snap-in liner that completely protects the wetted area from abrasion and corrosive slurries.

Features

- True bi-directional flow and shut-off.
- Unique one-piece, precision molded high strength polyurethane liner protects the wetted parts, from corrosion and abrasion.
- The liner has integral sealing beads to support and wipe slurry from the gate.
- It can replace conventional and short pattern slurry knife gate valves.
- Compact two-piece split body construction for easy maintenance.
- Fully rated 316 stainless steel gate, with optional 17-4 ph for improved resistance to highly abrasive applications.
- Complies with MSS SP-81 face-to-face dimensions.

Technical Data

Size range:

DN 50 - 600 (NPS 2 - 24)

Pressure rating:

1000 kPa (150 psi) at cold working pressure (non-shock)

Not suitable for vacuum service

Temperature rating:

50°C (120°F) on liquid service

80°C (175°F) on dry service

Applications

Mining, mineral processing, coal preparation, chemicals and wastewater



Clarkson KGA/KGD/KGF

Slurry knife gate valves.

Valves with heavy-duty, full port elastomer sleeves for isolation against heavy slurries.

Features

- May be used in wet or dry services easily dealing with large, heavy particles and tramp material
- 100% bubble-tight shut-off results in absolutely zero downstream leakage
- Field replaceable elastomer sleeves
- Double-seated design provides bi-directional flow and shut-off
- Unobstructed flow eliminates turbulence, minimizes pressure drop across valve

Technical Data

Size range:

KGA DN 80 to 1500 (NPS 3 to 60)

KGD DN 50 to 600 (NPS 2 to 24)

KGF DN 80 to 900 (NPS 3 to 36)

Pressure ratings:

KGA 6.9 bar (100 psi) max.

KGD 10 bar (150 psi) max.

KGF 51 bar (740 psi) max.

Temperature ratings:

80°C to 205°C (180°F to 400°F)

Applications

Metals & mining and power



Clarkson ZP300

Keystone OS 1700

Zero pocket knife gate valves.

Bi-directional valves designed for the rigors of high pressure slurry and oil sands applications.

Features

- Full round port and seat design offers low pressure drop across valve and longer service life in abrasive applications
- True bi-directional flow and shut-off
- 17-4 ph SS hardened gate provides improved abrasion resistance
- Heavy cross section precision molded elastomer seat. Simple to replace, no shimming or trimming
- Wide range of elastomer seat materials

Technical Data

Size range:

DN 50 to 1200 (NPS 2 to 48)

Pressure ratings:

ZP300: to ASME Class 300

OS1700: to ASME Class 150

Temperature rating:

Up to 205°C (400°F)

depending on elastomer

Applications

Mining, oil sands tailings

Angle Slurry & Isolation Valves

Angle Slurry & Isolation Valves

Angle slurry / isolation valves are designed and engineered specifically for the mining and process industry or other applications where built up scale or settled slurries need to be cleared to allow flow. These include: Alumina - bauxite slurries, digestion slurries, flash vessel vapor return, green and spent liquors, washer underflow/overflow, tertiary and secondary thickeners, press filter isolation, mudline disposal; precipitation; filtrate underflow; hydrate slurry storage.

Lunkenheimer

Lunkenheimer high quality isolation valves are used in severe applications such as alumina, nickel and gold mining, they are relied on for critical isolation preventing expensive downtime.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Angle Slurry



Lunkenheimer Figure 603-607 Isolation and check valves.

Specially designed for severe service in alumina and mining applications where scale and erosion are present.

Features

- Valves can be reground in-line
- Designed to ASME B16.34
- Heavy duty wall and flange thickness well in excess of ASME B16.34 and ASME B16.5
- Pads for fitting drain ports
- Tested to API 598
- Large stem diameters for strength and stiffness
- Stellite 6 hardfacing as standard on disc and seat surfaces
- Hard facing available on stem
- Documentation to EN 10424 1999 Type 3.1B (DIN 50409)

Technical Data

Size range:

DN 50 to 600 (NPS 2 to 24)

Pressure rating:

ASME Class 150 to 600

Temperature rating:

up to 345°C (650°F)

Applications

Alumina refining, mining

Isolation



Lunkenheimer Figure K4050/4250 Isolation valves.

Specially designed for severe service in alumina and mining applications where scale and erosion are present.

Features

- Venturi style inlet throat design increases fluid velocity across seating area to reduce scale formation
- Split body design allows for easy maintenance
- Bolted bonnet
- Body, connector and yoke in CS
- Design offers low torque and easy manual operation
- Replaceable surface-hardened Stellite facing disc and seats
- Design to ASME B16.34; tested as per API 598

Technical Data

Size range:

DN 50 to 500 (NPS 2 to 20)

Pressure rating:

ASME Class 150

Temperature range:

-29° to 425°C (-20° to 797°F)

Applications

Alumina refining, mining



Gate, Globe & Check Valves

For Power Applications

Emerson's forged and cast gate, globe and check valves serve the DIN and ASME power generation markets. Applying cutting-edge material science and valve designs, Sempell isolation and non-return valves are designed for all types of power plants, including ultra supercritical plants, which operate at temperatures up to 720°C (1328°F).

Sempell

Sempell gate, globe and check valve solutions are manufactured in high quality forged and cast steel for harsh service conditions, where leak-tight performance, absolute safety and 100% reliability is vital at high pressures and temperatures.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Large Bore Forged GGC



Sempell Raisteam

HP forged gate, globe and check valves.

Valves for harsh service conditions, such as elevated temperature and pressure ratings.

Features

- Valve design in accordance with EN 12516, meeting ASME B16.34, API 600, ISO, DIN, TRD, VGB, TRB, PED standards
- Maximum tightness by gasket design and packing in pure graphite
- Globe valves available in T and Y angle patterns
- Split wedge design standard on gate valves. Parallel slide configuration available upon request
- Check valves available as swing check and tilting disc configurations

Technical Data

Size range:

DN 50 to 700 (NPS 2 to 28)

Pressure rating:

ASME: from Class 900 to 4500

DIN: from PN 160 to 720

Temperature rating:

-46°C to 650°C (-51°F to 1202°F)

Applications

Power, petrochemical and process

Large Bore Cast GGC



Sempell Style A

Gate, globe and check valves.

Pressure seal cast valves designed for high pressures and temperatures and specialized applications.

Features

- Valve designs to ASME B16.34
- Wide range of materials and designed for maximum safety and flow efficiency
- End to end dimensions to ASME B16.10
- Technologically advanced pressure seal bonnet design
- Gate valves with eyelet follower
- Y and T patterns available
- Wedge and parallel slide gate valves available
- Swing, tilting disk and piston check valves available

Technical Data

Size range:

DN 50 to 600 (NPS 2 to 24) and larger

Pressure rating:

ASME Class 900 to 2850

Temperature rating:

-46°C to 650°C (-51°F to 1202°F)

Applications

Power, petrochemical and process



**Sempell VA 500 Series
Yarway Welbond Model 5600**
High pressure stop and check valves.

T, Y and angle pattern valves designed to provide maximum service life with minimum maintenance.

Features

- Bonnetless die-forged body
- One piece body design with packing only
- Stellite seat
- Simple on-line actuator mounting
- Small driving forces
- Low pressure loss
- Generous port sizes and disc retraction ensures optimum flow
- Globe valve repairable in-line faster, more easily and at lower cost

Technical Data

Size range:

DN 10 to 80 (PN 3/8 to 3)

Pressure rating:

VA500: PN 100 to 500

5600: 117 to 310 bar (1700 to 4500 psi)

Temperature rating:

VA500: -20°C to 620°C (-4°F to 1148°F)

5600: 550°C to 599°C (1022°F to 1039°F)

Applications

Oil & gas and power



Sempell BSCV
Extraction steam check valve.

Check valves for all turbine steam extraction and cold reheat non-return applications.

Features

- Bolted and pressure seal bonnet designs available
- Tilting disc or swing disc
- Forced open designs for CRH duty
- Stellite seat faces
- Counterweight available
- Side mounted or centrally mounted actuator
- Pneumatic or gravity operation
- Designs in accordance with ASME B16.34, DIN, TRD codes

Technical Data

Size range:

DN 150 to 1200 (NPS 6 to 48)

Pressure rating:

ASME 150 to 1000 (PN 40 to 100)

Temperature range:

-30°C to +650°C (-22°F to 1202°F)

Applications

Power



Sempell
Preheater protection valves

HP and LP heater protection valves – motor or medium operated, three way design.

Features

- Compatible with DIN and ASME standards
- Cast or forged bodies
- Changeover plug
- Excellent reliability
- Optional damper
- Spring loaded version also available

Technical Data

Size range:

DN 80 to 500 (NPS 3 to 20)

Pressure rating:

ASME 900 to 2500 (PN 160 to 420)

Temperature range:

100°C to 360°C (212°F TO 680°F)

Applications

Power

Gate, Globe & Check Valves

For Process and Oil & Gas Applications

Emerson supplies engineered gate, globe and check valve solutions for large diameter pipe, noble alloy materials, cryogenic service and steam turbine extraction applications in the upstream oil and gas, power and petrochemical markets.

Fasani

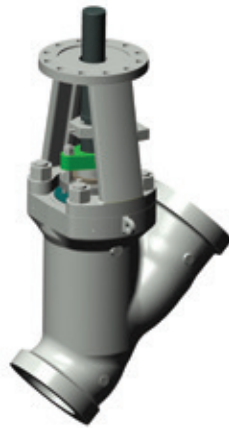
Fasani high integrity gate, globe and check valves are purpose designed to withstand high pressures, abrasion and extreme temperatures - reducing maintenance and increasing uptime.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Cast Pressure Seal



Fasani Style B

Gate, globe and check valves.

Cast gate, globe and check valves with pressure seal bonnet designed for high pressures and temperatures.

Features

- Robust body in a wide variety of material options
- Technologically advanced pressure seal bonnet design ensures perfect body-to-bonnet tightness
- Seat rings seal welded to the body
- Valves designed to ASME B16.34 with wall thickness to API 600
- Face to face dimensions as per ASME B16.10
- Y and T patterns available
- Wedge and parallel slide gate valves available
- Swing, tilting disk and piston check valves available

Technical Data

Sizes:

DN 50 to 750 (NPS 2 to 30) and larger

Pressure rating:

From ASME Class 600 to 2500

Temperature ratings:

-46°C to + 650°C (-61°F to 1202°F)

Applications

Oil & gas, chemical & petrochemical

Cast Bolted Bonnet



Fasani Bolted Bonnet Valves

Gate, globe and check valves.

Valves manufactured to guarantee the highest performance in the widest spectrum of oil and gas applications.

Features

- Manufactured to ASME B16.34 and BS 1868 and API 600
- Robust valve body in a wide range of materials (including NACE compliance)
- Y and T patterns available
- Wedge and parallel slide gate valves available
- Swing, tilting disk and lift check valves available
- Flanged, butt-weld or special connections
- Cryogenic specifications available

Technical Data

Sizes:

DN 50 to 2100 (NPS 2 to 84) and larger

Pressure rating:

From ASME 150 to 2500

Temperature ratings:

-60°C to 650°C (-76°F to 1202°F)

Applications

Oil & gas, chemical & petrochemical and power



Hancock 6000C/6000F Range Gate, globe and check valves.

Bolted bonnet cast and forged steel valves with metal-to-metal seating in flanged or butt weld ends.

Features

- Gate valves manufactured to API 600 (cast) and to API 602 (forged)
- Globe valves manufactured to BS1873 (cast) and to API 602 (forged)
- Check valves manufactured to BS 1868 (cast) and API 602 (forged)
- Complies with B16:34 requirements
- Tested in acc. with API 598
- Wide range of body and trim materials available including stellite faced sealing surfaces
- Wide range of end connections

Technical Data

Size range:

Cast: DN 50 to 600 (NPS 2 to 24)

Forged: DN 15 to 50 (NPS ½ to 2)

Pressure rating:

ASME Class 150 to 600

ANSI Class 800 to 1500

Applications

Petrochemicals, oil & gas and power



Keystone Prince Wafer swing check valves.

Compact wafer style design and round unobstructed port tackle many tough applications.

Features

- Compact wafer style body is lighter than traditional full-bodied check valves and minimizes piping support
- Options include: silicone-free cleaning, oxygen-cleaning, vertical service, left-hand operation, levers, weights and cushions
- External spring available preventing fiber wrapping around or chemical attack of the spring
- Maintenance is minimal with field replaceable O-ring seat

Technical Data

Size range:

DN 50 to 900 (NPS 2 to 36)

Pressure rating:

10 to 51 bar (150 to 740 psi)

Temperature rating:

-40°C to 365°C (-40°F to 690°F)

Applications

Building, chemical & pharmaceutical, food & beverage, marine, metals and mining, oil & gas, power and water



Keystone Figure 85/86 Swing type wafer check valves.

Weight loaded valves with short face-to-face dimensions or spring-loaded high capacity models.

Features

- Figure 85 has compact, low weight, wafer thin body allowing installation between various flange standards
- Figure 86 has a special shaped disc with a large opening angle resulting in high Kv values
- Choice of cast iron (86), stainless steel, carbon steel or NiAlBz (85) body types
- Field replaceable O-ring seat
- Low pressure shut-off (< 0.1 bar)
- Positive shut-off even at very small differential pressures

Technical Data

Size range:

DN 40 to 900 (NPS 1½ to 36)

Pressure rating: 16 bar (232 psi)

Temperature rating:

85: -60°C to 204°C (-76°F to 399°F)

86: -40°C to 190°C (-40°F to 374°F)

Applications

Building, chemical & pharmaceutical, food & beverage, marine, metals & mining, oil & gas and water

Boiler Trim Valves

Boiler Trim Valves

Emerson's throttling and blow-off valves protect boilers against the destructive forces inherent in high pressure drop service and the ingress of dirt, sediment and scale.

Yarway

Yarway isolation valves are instrumental in maximizing efficiency and lowering costs for the power industry.

Automated Valves from a single source

Emerson isolation valves are available as complete automated valve solutions supplied as a single product rather than packaged components.

See page 32 for more details.

Throttling



Yarway Hydrop Throttling valves.

Control the destructive forces inherent in high pressure drop service through rapid energy dissipation.

Features

- Rapid energy dissipation controls the destructive forces inherent in high pressure drop service
- Accurate and repeatable settings
- Quick-change disc to convert from one orifice size to another
- Guided disc - eliminates disc vibration and chatter
- Loose disc design provides multi-position seating and assures positive alignment of seat and disc surfaces
- Dual-purpose disc separate surfaces for shutoff and throttling
- Stellite® seat - resists corrosion and wiredrawing
- In-line repair

Technical Data

Size range:

DN 25 to 40 (NPS 1 to 1½)

Pressure rating:

117 and 186 bar (1700 and 2700 psi)

Temperature range:

to 538°C (1000°F)

Applications

Oil & gas and power

Blow off



Yarway Hardseat Blow-off valves.

Hard seated valves designed for blow-off service in boiler systems with pressures of 3206 psig.

Features

- Designed according ASME section 1, ASME B31.1, ASME B16.34
- For boiler systems up to 3206 psig
- Rugged construction to withstand high pressure and high velocities
- Excellent resistance to cleaning acids and wear caused by precipitated solids
- Stellite® valve and seat
- Resists wear
- Provides long service life

Technical Data

Size range:

DN 25 to 65 (NPS 1 to 2½)

Pressure rating:

ASME class 600 and 1500

Applications

Oil & gas and power



Yarway Unit Tandem

Blow-off valves.

Seatless and hardseat valves for both blowing and sealing services.

Features

- Designed according ASME section 1, ASME B31.1, ASME B16.34
- For boiler systems up to 3206 psig
- Rugged one-piece construction to withstand high pressure and high velocities
- Excellent resistance to cleaning acids and wear caused by precipitated solids
- A combination of hardseat-hardseat or hardseat-seatless valves in a single body
- Eliminates pipe joints, reduces potential leaks, fits into a confined space

Technical Data

Size range:

DN 25 to 65 (NPS 1 to 2½)

Pressure rating:

ASME class 300 to 2500

Applications

Oil & gas and power





Complete automated valve solutions from a single source

When it comes to providing complete Automated Valve solutions, Emerson is the only company you need to know.

Forget about juggling with multiple vendors or the complexities of valve integration. Emerson can supply you with the fully engineered, integrated configured Automated Valves you demand, from a single source.

Consider the advantages of a single supplier:

- Emerson will manage, administer and produce your Automated Valves as 'Product' and not packaged components
- Emerson's Automated Valves are designed to function as one optimized solution, eliminating integration complexity
- All valves are fully tested to a global set of standards
- Emerson manufactures all its components. This makes us totally responsible and accountable for the solutions we supply, irrespective of the parts we integrate into each product
- Having one supplier will minimize risk and commissioning complexities, whilst also ensuring on-time delivery and project certainty
- Modular automated valve solutions allow streamlined maintenance and inventory planning







Lifecycle Services

Emerson Lifecycle Services provide customers with expertise, technology and processes that can help them operate safely, improve asset reliability and optimize process capabilities. Maintenance services keep your plant operating safely, consistently and economically. Reliability services improve your asset reliability and preserve your investment. Performance services optimize your plant performance and achieve business goals.

Emerson services that support your maintenance, reliability and performance goals include:

- Shutdowns, Turnarounds, and Outages: Scheduled downtime must be carefully planned and methodically executed
- Guardian Support: Make better decisions and reduce risk with one central, prognostic service

- Wireless Services: We offer a broad range of services to help you quickly get the most out of wireless technology
- Connected Services: Supplement your staff with remote analysis and expertise

Capabilities

With over 80 service centers strategically located, available 24/7/365, and a fleet of fully stocked service vehicles, Emerson can support you anywhere you need us - from the field to our own state-of-the-art production facilities. Our pickup and delivery services assist you with your service and repair needs with minimal downtime.

Products Serviced Include:

- Final Control Services: Fisher, Biffi, Bettis, Virgo, Vanessa, Keystone, Hindle etc.
- Pressure Management: Anderson Greenwood-Crosby, Varec, Enardo

- Measurement Instrumentation Services: Rosemount, Micro Motion, Daniel and Roxar
- Control and Safety System Services: DeltaV, DeltaV SIS and Ovation
- Asset Reliability: Machinery Health and AMS Suite
- Operations and Business Management: Roxar and Syncade



Make smarter decisions with AMS Device Manager

With 60% of safety incidents currently occurring during reactive maintenance across the industry, today's maintenance challenge is a significant one.

On the one hand you need to uncover valve failures without disassembly, whilst on the other you have to identify the valves that need repairing or replacing during turnarounds. It's important that you reduce loop variability too, plus there is the added bonus of avoiding any unplanned downtime and maintenance costs.

In short, smarter asset management has never been more vital. Which is why Emerson's fully integrated diagnostic and monitoring solutions are integral to helping our customers increase their valve performance, reliability and safety.

Welcome to AMS Device Manager

AMS Device Manager is an asset management system that delivers the

predictive diagnostics you require to make faster, more accurate and better informed decisions about the smart field devices in your Shell plant.

Along with speeded up commissioning, it also uses a device calibration program and produces a well-documented instrument system. And with Emerson's Install Services you can be up and running incredibly quickly.

AMS Device Manager Install Services

These services ensure your AMS Device Manager system is correctly installed, properly configured and fully customized to suit your connectivity requirements.

AMS Device Manager Implement Standard Services

Our Implement Standard Services, in turn, allow us to seamlessly integrate your AMS Device Manager system into your maintenance work processes. This will give you a level of asset optimization

that ensures the right information gets to the right people at the right time - so you can take immediate action, streamline everyday maintenance and continually improve plant performance.

Start making smarter decisions now. AMS Device Manager's connected services means you can enjoy all the benefits of:

- **Increased safety** through the early identification of asset condition and control issues
- **Increased reliability** with the improvement of control valve and loop performance
- **Improved turnaround efficiency**
- **Predictive maintenance**
- **Remote troubleshooting**

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