

DeZURIK
An SPX Process Equipment Operation

SPX Process Equipment

Valve Selection Guide



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Rotary Control Valves



Maxum™ Rotary Control Valves (RCV)

Major Markets: Pulp & paper, chemical, power, petroleum, refining

Design Features: The Maxum™ RCV Rotary Control Valve is an eccentric rotary control valve for throttling liquids, gases and slurries. It combines precise throttling accuracy and control over a full 90° of rotation. Tungsten carbide coated trim components and design features provide superior erosion resistance. The RCV valve is designed for bi-directional flow capability and includes four trim options for flexibility. It is designed for ease of maintenance with no internal threaded components and self-aligning seat and plug. Flanged or flangeless designs meet ANSI or ISA face-to-face dimensions.

Size Range: 1–12" (25–300mm)

Temperature Range: to 1000°F (540°C)

ANSI Class Rating: 150, 300

Pressure Rating: 285–740 psi (1965–5100 kPa)

ANSI B16.104 Shutoff Class: Up to 20 times better than ANSI Class IV standard

Body Materials: 316 and 317 stainless steel, carbon steel, Hastelloy C, Titanium

Trim Sizes: High, Full, .5 Reduced, .2 Reduced

Actuator Types: PowerRac® double-acting and spring-return actuators, spring & diaphragm actuator, handwheel, chain-wheel



V-Port Ball Valves (VPB)

Major Markets: Paper, chemical, power, petro-chem and gas

Design Features: The V-Port Ball Valve is a quarter-turn v-orifice ball valve for accurate throttling control of fibrous suspension applications plus clean, dirty, viscous and corrosive liquids and gases. It is designed to meet the highest industry standards for dynamic performance. Flanged or flangeless designs meet ANSI or ISA face-to-face dimensions. Design features include blow-out proof shaft protection, high flow capacity, splined ball-to-shaft connection for ease of maintenance and zero backlash. Seat options include flexible metal, rigid metal and PTFE seats.

Size Range: 1–20" (25–500mm)

Temperature Range: to 575°F (300°C)

ANSI Class Rating: 150, 300

Pressure Rating: to 285–740 psi (1965–5100 kPa)

ANSI B16.104 Shutoff Class: Flexible Metal, ANSI Class IV* Reinforced PTFE, ANSI Class VI Rigid Metal, ANSI Class IV *Shutoff is up to 500 times better than ANSI Class IV

Body Materials: Carbon steel, 316 and 317 stainless steel, Hastelloy C

Valve Style: V-port ball, flanged or flangeless

Actuator Types: PowerRac® double-acting and spring-return actuators, spring & diaphragm actuator, lever, handwheel, chainwheel

Rotary Control Valves



Precision Electric Control Valves (PPE)

Major Markets: Paper

Design Features: The DeZURIK Precision Electric Control Valve is recognized industrywide as the most accurate and reliable basis weight control valve available. This high-resolution control valve is specifically designed for critical paper stock control, and is used for basis weight and headbox level control applications. It provides unmatched control accuracy, positioning and repeatability with up to 16,000 repeatable positions. Accepts digital or analog signals. It features total electric operation with backlash that is essentially zero. Flange drilling is per ANSI standards.

Size Range: 4–20" (100–500mm)

Temperature Range: to 32–450°F (0–232°C)

Pressure Rating: 275 psi (1890 kPa) CWP

Body Material: 316 stainless steel

Valve Style: V-port concentric or straight concentric plug, flanged

Actuator Type: AC synchronous motor or DC stepping motor

Feedback Mechanisms: Potentiometer, resolver and optical encoder

Globe Control Valves



Cage Guided Globe Control Valves

Major Markets: Pulp & paper, chemical, power, petroleum, refining, HVAC

Design Features: DeZURIK Cage Guided Valves are a versatile line of globe valves designed for control and throttling service of high pressure steam, gases and clean liquids. Models include single seated, double-seated and balanced construction. Low noise and anti-cavitation trim options available. Low leakage balanced construction cage valves feature a unique, patented "seal-less" trim that provides tight shutoff in metal-to-metal seated valves.

Size Range: 1–16" (25–400mm)

Temperature Range: -150–1200°F (-101–649°C)

Body Materials: 316 stainless steel, cast iron, and carbon steel

ANSI Class Rating: 125–1500

Valve Style: Cage guided globe with balanced or unbalanced plug

Trim Characteristics: Linear and equal percentage

Actuator Type: Direct or reverse acting spring & diaphragm, electric motor or manual handwheel



3-Way Globe Control Valves

Major Markets: Chemical, petrochemical, oil refineries, steel, power, air conditioning and heat exchanger systems

Design Features: 3-Way Globe Control Valves are designed for mixing two fluid lines or diverting a line to two outlets. Designed to handle clean, dirty, viscous and corrosive liquids; high and low pressure steam; and clean, dirty and corrosive gases.

Size Range: .5–16" (15–400mm)

Temperature Range: -150–750°F (-101–399°C)

Body Materials: 316 stainless steel, carbon steel, cast iron

ANSI Class Rating: 125–600

Valve Style: 3-Way skirt guided globe valve

Trim Characteristics: linear v-port

Actuator Type: Direct or reverse acting spring & diaphragm, springless diaphragm, electric motor or manual handwheel



Top Guided Globe Control Valves

Major Markets: Chemical, oil refining, pulp & paper, petrochemical, steel, power

Design Features: The Top Guided Globe Control Valve offers economical high-accuracy control. It is designed to handle clean, dirty, viscous and corrosive liquids; steam; and clean, dirty and corrosive gasses in low and medium-pressure services. A high-pressure design (straight through or angle) is available for pressures to 6000 psig (41340 kPa). Low Flow valve offers reduced trim sizes for low and ultra low flow applications.

Size Range: .5–2" (15–50mm)

Temperature Range: -150–1200°F (-101–649°C)

Body Materials: Stainless steel, carbon steel, chrome moly, carbon moly, other alloys on application

ANSI Class Rating: 125–1500, high-pressure design to 6000 psig (41340 kPa)

Valve Style: Top guided globe

Trim Characteristic: Equal percentage v-port, equal percentage contour and linear contour

Actuator Type: Direct or reverse acting spring & diaphragm, electric motor or manual handwheel

Globe Control Valves

Skirt Guided Globe Control Valves

Major Markets: HVAC, textile, food, tire and OEM

Design Features: The Skirt Guided Globe Valve is an economical general-purpose valve that offers rugged reliability or tighter shutoff in low and medium pressure applications.

Size Range: 1–2" (25–50mm)

Temperature Range: 0–353°F (-18–178°C)

Body Materials: Cast iron, bronze

ANSI Class Rating: 125

Valve Style: Double-seated or single-seated skirt guided globe control valve

Trim Characteristics: Modified linear v-port, equal percentage v-port

Actuator Type: Direct or reverse acting spring & diaphragm, electric motor or manual handwheel

Stem Guided Globe Control Valves

Major Markets: HVAC, textile, food, tire

Design Features: Stem Guided Globe Control Valves are a low cost, dependable valve for low-pressure applications.

Size Range: .5–2" (15–50mm)

Temperature Range: 40–250°F (4–121°C)

Body Material: Bronze

ANSI Class Rating: 125

Valve Style: Single-seated, stem guided globe control valve

Trim Characteristic: Equal percent contoured, modified linear

Actuator Type: Direct or reverse acting spring & diaphragm, electric motor or manual handwheel

Butterfly Valves



High Performance Butterfly Valves (BHP)

Major Markets: Pulp & paper, chemical, power, air conditioning, petroleum and refining

Design Features: High Performance Butterfly Valves are designed for shutoff and throttling control of liquids and gases. The dynamic PTFE seat provides bubble-tight shutoff in both directions. The Fyre Block® seat, designed for fire safe applications, meets API607 fire test standards. Stem seal options for fugitive emissions control are available. The single offset disc design provides lower torque and longer cycle life. NACE trim available. Pressurized neck extensions to accommodate additional insulation or cold box dimensions are available as an option.

Size Range: 2–60" (50–1500mm)

Temperature Range: to 700°F (370°C). On application -320°F (-196°C) to 1000°F (540°C)

ANSI Class Rating: 150, 300

Pressure Rating: 275–740 psi (1890–5100 kPa)

ANSI B16.104 Shutoff Class: PTFE and Fyre-Block® Seat, Class VI; or metal seat, Class IV or V

Body Materials: Carbon steel, 316 or 317 stainless steel

Valve Style: High performance butterfly valve, wafer or lugged

Actuator Type: Lever, handwheel, chainwheel, square nut, PowerRac® double-acting and spring-return, diaphragm, Compak® double-acting and spring-return



Resilient Seated Butterfly Valves (BRS)

Major Markets: Water, paper, wastewater, air conditioning, power, chemical

Design Features: The BRS Resilient Seated Butterfly Valve is an industrial grade rubber-lined butterfly valve used in shutoff and throttling applications for liquids, gases, vacuum and dry pellets. Solid one-piece shaft meets AWWA C504 Class 75B specifications. Features include replaceable corrosion resistant bearings and corrosion resistant disc. Single offset disc provides 360° uninterrupted sealing. Lugged valve rated for dead end service to full pressure.

Size Range: 2–36" (50–900mm)

Temperature Range: to 250°F (122°C)

Pressure Rating: 175–225 psi (1210–1550 kPa) CWP

ANSI B16.104 Shutoff Class: Exceeds Class VI.
Zero leakage to full rating

Body Materials: Cast iron, ductile iron

Valve Style: Wafer or lugged

Actuator Type: Lever, handwheel, chainwheel, square nut, PowerRac® double-acting and spring-return cylinder, electric motor, Compak® double-acting and spring-return cylinder, diaphragm



AWWA Butterfly Valves (BAW)

Major Markets: Water, power, wastewater

Design Features: DeZURIK AWWA Butterfly Valves meet the requirements of AWWA C504 standards. They are used for shutoff on clean and dirty water and gases. Offset disc design, corrosion resistant shaft, stainless steel disc edge, and self-compensating shaft seals are features on all DeZURIK AWWA valves. Molded-in body seat with disc locators provides positive sealing and longer seat life on sizes 3–20" (80–500mm). Large valves, 24" and larger (600mm and larger) feature adjustable, replaceable seat, non-hollow disc structure, and rubber seat retained within a dovetail groove in the valve body and locked in place by an epoxy wedge.

Size Range: 3–120" (80–3000mm)

Temperature Range: to 290°F (143°C)

AWWA Class: 25A, 75B, 150B, 250B

Pressure Rating: 25–75 psi (170–520 kPa) , 150–250 psi (1030–1700 kPa) CWP Shutoff - Bubble tight to full rated pressure.

Body Materials: Cast iron, ductile iron

Valve Style: Flanged and mechanical joint

Actuator Type: Lever, handwheel, chainwheel, square nut, cylinder, electric motor

Special Construction: Square and Rectangular AWWA Butterfly Valves are designed in a variety of sizes for square/rectangular configurations. Specially designed packages for pump check control applications are also available.

Butterfly Valves



Resilient Seated General Service Butterfly Valves (BGSII)

Major Markets: General industrial, HVAC, paper, chemical

Design Features: General Service Rubber Lined Butterfly Valves are designed for shutoff and isolation service of liquids and gases. Thin profile, on-center disc provides high flow capacity. Features include field replaceable resilient seat in EPDM or XNBR materials with discs available in 316 stainless steel and ACB2. Body wall thickness conforms to the requirements of ANSI Class 125 and all AWWA classes.

Size Range: 2–36" (50–900mm)

Temperature Range: to 250°F (122°C)

Pressure Rating: Sizes 2-12 200 CWP; 14-36 150 CWP

Shutoff Class: Bubble tight to 150 psi (1030 kPa)

Body Materials: Cast iron

Valve Style: Wafer or lugged

Actuator Type: Lever, handwheel, Compak[®] double-acting and spring-return actuators

Plug Valves



Eccentric Plug Valves (PEC)

Major Markets: Wastewater, water, HVAC, mining, chemical, power, steel

Design Features: Eccentric action and resilient plug facings assure lasting dead-tight shutoff. Clean interior design and straight-through flow allow high maximum flow capacity with minimum pressure drop. Heavy-duty stainless steel bearings, choice of resilient plug facings, welded-in corrosion resistant nickel seat and variety of end styles are available. Capable of handling clean and dirty liquids and gases, sludges and slurries.

Size Range: .5–72" (15–1800mm)

Temperature Range: to 300°F (150°C)

Pressure Rating: 125–450 psi (860–3100 kPa) CWP shutoff pressure to 275 psi (1980 kPa)

Shutoff Class: Resilient plug facing: drip tight rating up to 275 psi (1890 kPa)

Actuator Type: Lever, handwheel, chainwheel, square nut, cylinder, electric motor

Body Materials: Cast iron, aluminum, carbon steel, stainless steel, Alloy 20, Monel and ductile iron, acid resistant bronze

Special Service Eccentric Plug Valves

Pump Check Valves

Specially designed for precise flow regulation on pumping installations.

Balancing Valves

Specially designed for adjusting and reading flow in condensers, and hot/chilled water systems of heating and air conditioning systems.

Oxygen Service Valves

Special modifications, cleaning and testing for oxygen service.

Soft Rubber Lined Eccentric Valves

Ideal for on-off corrosive and abrasive slurry service.



3-Way and 4-Way Plug Valves (PTW/PFW)

Major Markets: Paper, water, wastewater, and air conditioning

Design Features: 3-way and 4-way Plug Valves are designed for throttling and diverting of clean, dirty, viscous and corrosive liquids; sludge; abrasive and fibrous slurries; clean and dirty corrosive gases. Single and double plug styles can be arranged into a variety of flow combinations. Features include heavy-duty stainless steel bearings, long-life stem seal, resilient plug facings for dead-tight shutoff, and metal plugs for high temperature applications.

Size Range: 3–16" (80–400mm)

Temperature Range: to 400°F (200°C)

Pressure Rating: 125 psi (860 kPa) CWP

Body Materials: Cast iron, aluminum, carbon steel, 316 stainless steel

Valve Style: 3-way or 4-way tapered plug

Actuator Type: Lever, handwheel, chainwheel, cylinder, electric motor

Knife Gate Valves



Bi-Directional Knife Gate Valves (KBD)

Major Markets: Paper, chemical, power

Design Features: Unique two-stage bi-directional seat provides dead-tight shutoff in both directions and on dead-end service. Designed for shutoff and isolation services handling corrosive, abrasive and viscous liquids; abrasive slurries, pulp stock, and dry materials. Seat design eliminates pockets that trap process media. Provides maximum flow capacity. Resilient seats are locked into the valve body and provide guiding for the gate.

Size Range: 3–12" (80–300mm)

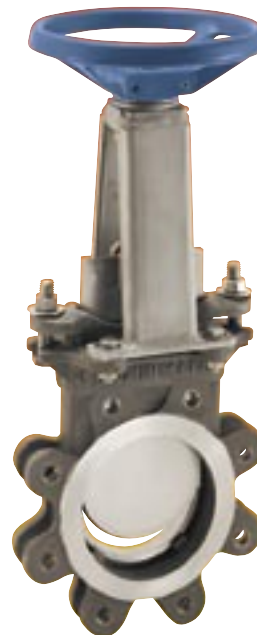
Temperature Range: 250°F (122°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: 304, 316 and 317 stainless steel

Valve Style: Bi-directional knife gate, lugged

Actuator Type: Handwheel, chainwheel, bevel gear, cylinder, electric motor



Cast Stainless Steel Knife Gate Valves (KGC)

Major Markets: Paper, water, wastewater, chemical, power, steel, mining

Design Features: Cast Stainless Steel Knife Gate Valves are designed for on-off and isolation services handling corrosive, abrasive and viscous liquids; abrasive slurries, pulp stock, and dry materials. The solid cast-bodied full port knife gate valve features a corrosion-resistant stainless steel body, gate, stem and packing gland. Improved packing chamber design. Cast-in guides and jams ensure long-lasting operation. Resilient seats provide bubble-tight shutoff; metal seats meet TAPPI Leakage Rate standards. Special v-orifice design available for throttling applications.

Size Range: 2–36" (50–900mm)

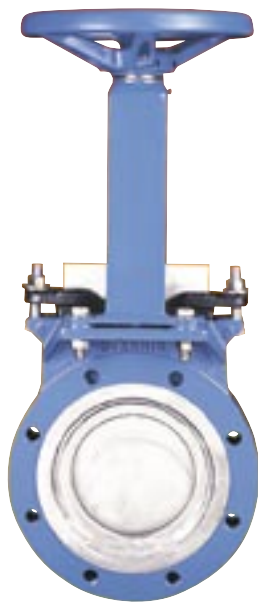
Temperature Range: to 1000°F (540°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: 304, 316 and 317 stainless steel

Valve Style: Knife gate, lugged

Actuator Type: Lever, handwheel, chainwheel, bevel gear, cylinder, electric motor



Series L Knife Gate Valves (KGL)

Major Markets: Paper, chemical

Design Features: Cast/Fabricate Stainless Steel Knife Gate Valves are designed for on-off and isolation services handling corrosive, abrasive and viscous liquids; abrasive slurries, pulp stock, and dry materials. The solid cast-bodied knife gate valve features a corrosion-resistant stainless steel body, gate, stem and packing gland. Welded-in guides and jams ensure long-lasting operation. Resilient seats provide bubble-tight shutoff. Special v-orifice design available for throttling applications.

Size Range: 2–72" (50–1800mm)

Temperature Range: to 1000°F (540°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: 304 and 316 stainless steel

Valve Style: Knife gate, lugged

Actuator Type: Lever, handwheel, chainwheel, bevel gear, cylinder, electric motor



Urethane Knife Gate Valves (KGU)

Major Markets: Mining, power

Design Features: One-piece cast-in-place urethane liner designed especially for handling abrasive slurries and dry materials in the mining industry. Provides drip-tight shutoff. Rugged stainless steel gate, long-life packing, stainless steel stem, corrosion resistant yoke sleeve, and heavy-duty super-structure.

Size Range: 4–24" (100–600mm)

Temperature Range: -40–180°F (82°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: Cast iron with gates of 304, 316 stainless steel

Valve Style: Urethane lined knife gate valve, wafer

Actuator Type: Lever, handwheel, chainwheel, cylinder, electric motor



Level Sensor Isolation Valves (KLS)

Major Markets: Paper

Design Features: Specially designed to mount between the stock chest and the level sensor. Allows removal of sensor without draining stock chest. Ratchet or socket drive actuator allows close mounting of valve to tank.

Size Range: 3" (80mm)

Temperature Range: to 450°F (233°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: 316 and 317 stainless steel, Hastelloy C, 254 SMO stainless steel

Valve Style: Level sensor knife gate valve, lugged

Actuator Types: Ratchet handles or square drive with non-rising stem



Cast Knife Gate Valves (KGN)

Major Markets: Pulp and Paper, Power, Steel, Mining

Design Features: Cast stainless steel one piece body with metal seat to meet the shut-off requirements of TAPPI. The body and gate are available in 304 and 316 stainless steel material. The packing gland is the same material as the body and supports a variety of packing types for temperature up to 1000 Degrees F. Valves can be mounted with a variety of accessories including lever operators, cylinders with limit switches and solenoids.

Size Range: 2-24" (50-600mm)

Temperature Range: to 1000°F (540°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Body Materials: 304 and 316 stainless steel

Valve Style: Knife gate, lugged

Actuator Types: Handwheel, chainwheel, bevel gear, cylinder. Electric motor.

Special Service Gate Valves

Dust Collector Valves

Specially designed cylinder actuated knife gate valve with double packing and overlapping gates to overcome the difficulties in handling steel mill blast furnace dust.

Square/Rectangular Knife Gate Valves

Specially designed to fit special piping configurations.

Bonneted Knife Gate Valves

Special designs to prevent media from entering the atmosphere. Pressurized bonnet is bolted above packing area.

Lateral or Y Knife Gate Valves

Multiple valves fabricated in special configurations for diverting services.

Ported Gate Valves



O-Port Gate Valves (KGO)

Major Markets: Paper, steel, chemical

Design Features: Specially designed to handle high-density paper stock, wood chips, plastic pellets, cleaners, trash dump, and refiner bypass isolation applications. Adjustable chest guides provide positive gate-to-seat support and eliminate stock build-up and gate jamming. Flush ports allow prevention of stock dewatering in the valve body. Full standard port diameter minimizes turbulence and pressure loss. PTFE or hardened metal seat available for extra protection.

Size Range: 3–36" (80–900mm)

Temperature Rating: to 1000°F (540°C)

Pressure Rating: 100–740 psi (690–5100 kPa) CWP

Body Materials: 316 and 317 stainless steel and carbon steel

Valve Style: O-port knife gate valve, flanged ANSI 150 or 300

Actuator Type: Handwheel, chainwheel, bevel gear, cylinder and electric motor

Ported Gate Valves



Unival Ported Gate Valves (PGV)

Major Markets: Mining, paper, power, chemical

Design Features: Innovative, pressure-assisted sealing system utilizes elastomer sleeves with radial and gate thrust support rings. Design features include streamlined flow passage, bi-directional shutoff, adjustable packing and rounded gate edges. Stem protection and actuator lockout device is standard.

Size Range: 2–24" (50–600mm)

Temperature Range: to 400°F (204°C)

Pressure Rating: 150 psi (1030 kPa) CWP

Valve Style: Ported gate valve, wafer

Body Materials: Ductile iron, 316 stainless steel

Actuator Type: Handwheel, chainwheel, pneumatic and hydraulic cylinder, electric motor

Consistency Transmitters



Rotating Consistency Transmitters (SDP)

Major Markets: Paper

Design Features: Consistency range from 0.75% to 10% at velocities from 0.1 to 10 feet (.03 to 3 meters) per second. Motor-driven sensor located in pulp stock flow is highly sensitive to consistency changes and insensitive to flow changes. Capable of measuring consistency changes as small as $\pm .0025\%$.

Chamber Size: 12–36" (300–900mm)

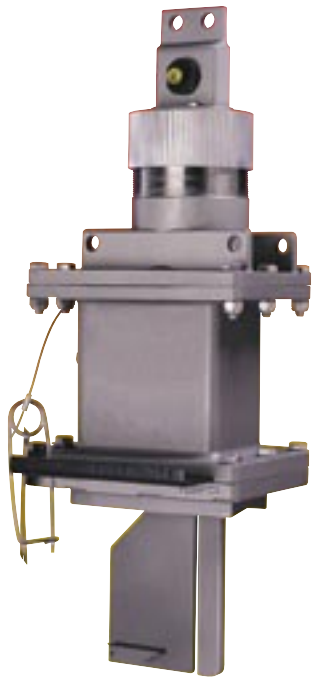
Chamber Pressure Rating: 125 psi (860 kPa)

Chamber Material: 304, 316 or 317L stainless steel

Shaft, Sensor Material: 316 or 317L stainless steel

Chamber Style: Horizontal, vertical, open, pan

Output: Pneumatic, electronic



AccuTrax® Electronic Blade Consistency Transmitters (SBC)

Major Market: Paper

Design Features: Designed to operate over a wide range of velocities from 1.5 feet (.5 meter) to 16 feet (5 meters) per second and consistencies from 1.5% to 16%. Unique sensor design allows transmitter to accurately measure consistency over changing production rates and varying pressures, sensing changes as small as $\pm .0075\%$. The pipeline module can be easily and quickly installed and withdrawn without process shutdown. Recycle program available.

Mounting Module Materials: 316 stainless steel, Hastelloy C

Temperature Rating: to 212°F (100°C)

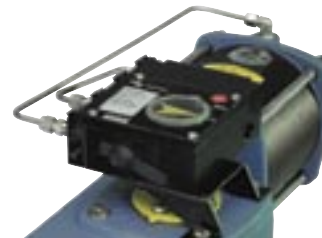
Pressure Rating: 200 psi (1380 kPa)

Accessories



Globe Valve Positioners

DeZURIK pneumatic and electro-pneumatic positioners for rising stem globe valves feature a durable, field-proven and economical design for control applications. Electro-pneumatic units are available with CSA or FM explosion-proof or intrinsically safe options.



Rotary Valve Positioners

DeZURIK pneumatic and electro-pneumatic positioners are designed for high accuracy in critical control applications. DeZURIK control valves equipped with positioners provide exceptional accuracy and speed of response, surpassing the requirements of industry accuracy specifications.

Actuators

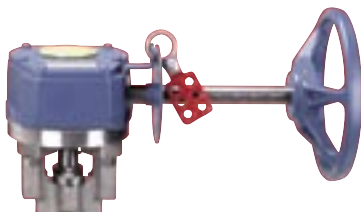


PowerRac® Actuators

The rack and pinion design of PowerRac® Actuators provides high-operating torque for accurate control in modulating services, and high opening torque for on/off services. The unique square collet coupling rigidly clamps the drive pinion to the valve shaft, eliminating backlash in the drive connection. This rigid connection allows thrust from the cylinder to precisely position the valve. Positioners are solidly mounted on the actuator housing with a square nut, feeding exact valve position directly to the positioner. No lost motion assures accurate valve positioning. The modular design and compact size allow the actuator to be close coupled to the valve. Standard ISO bolt circle allows PowerRac® Actuators to be used on all DeZURIK quarter turn valves. Double-acting or fail-safe spring-return cylinder options available. PowerRac® Actuators are available with safety lockout devices.

Lifetime Warranty: DeZURIK has always been committed to the highest quality products and service, and our Lifetime Warranty on PowerRac® demonstrates our confidence in the quality and features of this actuator. Contact your local DeZURIK representative for details.

Manual Gear Actuators



Manual Gear Actuators feature a cast iron housing with sintered bronze bearings on each end of the stainless steel input shaft for durability and performance. The ductile iron gear provides strength for robust applications and a long service life without maintenance. Manual Actuators are available with handwheel, chainwheel or a 2" (50mm) square nut input option. All Manual Actuators feature external position indication and are available with safety lockout devices.



Rotary Diaphragm Actuators

DeZURIK Diaphragm Actuators are designed specifically for use on quarter-turn valves. They feature all steel, cast iron and stainless steel construction for corrosion resistance in caustic environments. The actuators are designed for on/ off or modulating service in either a fail-open or fail-closed mode. Action can be easily changed in the field with no additional parts required. The spring cartridge is cage retained at the factory for increased safety. The output shaft is supported at the top and bottom with bronze bearings that absorb side thrust and insure smooth, efficient, and accurate throttling control. Diaphragm Actuators are available with safety lockout devices.



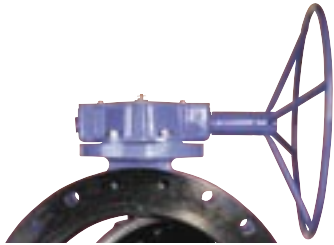
G-Series Rotary Actuators

G-Series Actuators are available on large butterfly and plug valves where constant high torque capability throughout the stroke is required. They feature a rack and pinion design and are engineered for high-flow, high-cycle applications. G-Series Actuators are available with either manual or cylinder actuator input. G-Series Actuators provide long service life and feature a rugged, heavy-duty, cast gear sector. Multiple bronze and stainless steel bearings provide support and minimize friction to assure smooth operation and throttling action.



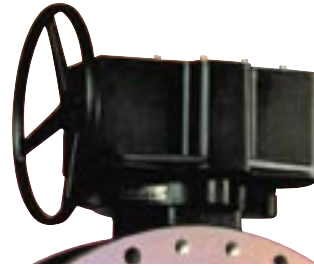
Compak™ Actuators

Compak™ Actuators are a versatile rack-and-pinion design actuator available as either double-acting or fail-safe spring-return. Upper and lower bushings, combined with a large wear pad, minimize wear and increase actuator life cycle. The compact, modular design allows the actuator to be mounted for a low profile assembly. Compak™ Actuators are matched to each valve's torque requirements to ensure that the most economical valve and actuator package is specified.



M-Series Actuators

M-Series Actuators are designed for use on smaller DeZURIK AWWA Butterfly Valves. The M-Series Actuator meets the requirements of AWWA C504 standards. The fully enclosed scotch yoke mechanism allows the M-Series Actuator to provide a torque curve that matches the torque requirements of the valve. The thread system of the traveling nut is self-locking, maintaining disc position under varying flow conditions.



LA-Series Actuators

LA-Series Actuators are designed for use on large DeZURIK AWWA Butterfly Valves. The LA-Series Actuator meets the requirements of AWWA C504 standards. The link-arm mechanism allows the LA-Series Actuator to provide characterized closure that slows valve travel and increases torque as the disc comes into the seat. The actuators feature high compressive strength yoke nut bearings that ensure reliable operation and increased cycle life. The actuator is self-locking, maintaining valve position under varying flow conditions.



Linear Diaphragm Actuators

Type 01 and 05 pneumatic actuators are specifically designed for DeZURIK linear control valves. These spring and diaphragm style actuators feature rugged cast iron/steel construction. Type 01 actuators are designed for heavy-duty globe valves and have stroke sizes up to 4" (200mm). The 05 actuator is a low cost actuator of aluminum construction with strokes up to 1 1/2" (40mm) for light, medium and smaller heavy-duty valve applications. The actuators come in various sizes, spring ranges, and diaphragm areas. Actuators can be specified as direct or reverse acting for failsafe valve positioning.

Valve Selection Chart

1 = Typical Application
 2 = May Be Used
 3 = Limited Application
 4 = Not Used

	Linear Control Valves				Rotary Control Valves		Rotary Control & Isolation
Application Requirements	Cage Guided	Top Guided	Skirt Guided	3-Way	Rotary Control Valve	V-Port Control Valve	High Performance Butterfly
Function:							
On-Off	1	1	1	4	1	2	1
Throttling	1	1	1	1	1	1	1
Diversion	4	4	4	1	4	4	3
Media:							
Liquids (Clean)	1	1	1	1	1	1	1
Liquids (Dirty)	4	1	2	2	1	1	3
Liquids (Viscous)	4	1	1	1	1	1	2
Liquids (Corrosive)	1	1	1	1	1	1	1
Slurries (Sludge)	4	1	3	3	1	1	3
Liquids & Slurries (Scaling)	4	3	4	4	2	3	4
Slurries (Abrasive)	4	3	4	4	1	3	2
Slurries (Fibrous)	4	4	4	4	4	1	2
High Pressure Steam (+150lbs.)	1	2	2	2	1	3	1
Low Pressure Steam	1	1	1	1	1	1	1
Gasses (Clean)	1	1	1	1	1	1	1
Gasses (Dirty)	3	1	1	1	1	1	3
Gasses (Corrosive)	1	1	1	1	1	1	1
Dry Materials	4	4	4	4	4	4	4
Valve Characteristics:							
High Flow Capacity	1	1	1	1	1	1	1
Low Head Loss (Wide Open)	N/A	N/A	N/A	N/A	N/A	1	1
Low Torque/Thrust	1	2	3	3	2	1	1
High Temp., 800°F+ (425°C+)	2	1	3	3	3	4	3
Cryogenic	3	1	3	3	2	4	3
Erosion Resistance	4	2	3	3	1	3	2
Cavitation (Kc) @ 60% Open	.61	.70	.80	.80	.60	.49	.35
Recovery Factor F_L^2 @ 60% Open	.90	.94	.87	.87	.70	.61	.43
Shutoff Class	ANSI II-VI	ANSI IV-VI	ANSI IV-VI	ANSI IV	ANSI IV-VI	ANSI II, IV, VI or better	ANSI IV, V, VI or better
Pressure Rating	ANSI 125-900/1500	ANSI 125-900-1500	ANSI 150-600	ANSI 125-600	ANSI 150-300	ANSI 150 & 300	ANSI 150 & 300

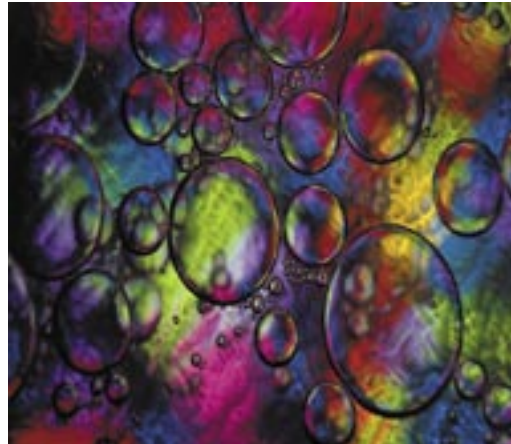
Note: This valve selection chart is designed to provide you with a quick reference on valve style capabilities. The chart considers both cost and performance factors for a specific application when determining whether a valve style is rated Typical, May Be Used, or Limited Application. For more information, contact DeZURIK or your local representative with your specific application requirements.

Valve Selection Chart

1 = Typical Application
 2 = May Be Used
 3 = Limited Application
 4 = Not Used

	Resilient Seated Butterfly Valve		Plug Valves		Gate Valves	
Application Requirements	Resilient Seated	AWWA	Eccentric	3-Way & 4-Way	Knife Gate	Ported Gate
Function:						
On-Off	1	1	1	4	1	1
Throttling	1	1	1	1	3	4
Diversion	3	3	4	1	4	4
Media:						
Liquids (Clean)	1	1	1	1	1	3
Liquids (Dirty)	2	2	1	1	1	1
Liquids (Viscous)	1	2	1	1	1	1
Liquids (Corrosive)	2	4	1	1	2	1
Slurries (Sludge)	2	2	1	1	1	1
Liquids & Slurries (Scaling)	4	4	3	4	4	1
Slurries (Abrasive)	3	4	2	2	1	1
Slurries (Fibrous)	2	4	2	1	1	1
High Pressure Steam (+150lbs.)	4	4	4	4	4	4
Low Pressure Steam	4	4	3	3	4	3
Gasses (Clean)	1	1	1	1	2	2
Gasses (Dirty)	2	2	1	1	2	2
Gasses (Corrosive)	2	4	1	1	2	2
Dry Materials	2	4	2	4	1	1
Valve Characteristics:						
High Flow Capacity	1	1	1	1	1	1
Low Head Loss (Wide Open)	1	1	1	1	1	1
Low Torque/Thrust	2	2	2	1	2	2
High Temp., 800°F+ (425°C+)	4	4	3	4	1	4
Cryogenic	4	4	4	4	4	4
Erosion Resistance	3	4	1	3	1	1
Cavitation (Kc) @ 60% Open	.35	.35	.59	N/A	N/A	N/A
Recovery Factor F_L^2 @ 60% Open	.40	.40	.70	N/A	N/A	N/A
Shutoff Class	ANSI VI or better	AWWA C504	ANSI IV, VI or better	N/A	TAPPI	Class VI or better
Pressure Rating	150/175 psi CWP	AWWA 25, 75, 150	125-450 psi CWP	125 psi CWP	125/150 psi CWP	100/150 psi CWP

Note: This valve selection chart is designed to provide you with a quick reference on valve style capabilities. The chart considers both cost and performance factors for a specific application when determining whether a valve style is rated Typical, May Be Used, or Limited Application. For more information, contact DeZURIK or your local representative with your specific application requirements.



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