

Process Instrumentation - Valves



Overview

A single innovative field device can provide better process control and improve the performance of any one of your production assets: personnel, equipment, energy use, or inventory. Employing multiple instruments can positively impact the performance of all areas of your enterprise.

Schneider Electric field devices are allied with various industry-leading brands that result in systems, software, and services that dramatically improve your operations' economic, safety, and environmental performance. In addition, the deployment of multiple advanced measurement systems will enhance the availability and utilization of all the assets on which your success depends.

Description

No matter the application, Schneider Electric enables you to drive your process at its best. Our portfolio of general service and severe service valves cover today's toughest demands for valve performance.

General Service Valves

Whether at high pressures, in corrosive media, or subzero fluids, our family of plug valves reliably address the vast majority of requirements at low energy consumption through low torque designs.

Severe Service Control Valves

Longer service life and reduced cost of ownership are made possible through highly engineered anti-cavitation control valves that neutralize detrimental wear and tear. A range of material, pressure and temperature options maximize flexibility for severe service applications.

Ball Valves

Long life in tough applications, including corrosive fluids and cryogens make our ball valves the hallmark of our valve portfolio. Customers world wide can fully customize the ball valves to international design and performance standards.

Butterfly Valves

Ideal for precision throttling and on-off applications, our butterfly valves provide performance and long-term value through low friction and small torque, bidirectional sealing, intrinsic fire-proof structure and dead zone free design.

SRD998 Valve Positioner

The intelligent positioner SRD998 is designed to operate pneumatic valve actuators. Enhanced functionalities enable a significant reduction in commissioning time and reduction of the total installation cost.

- · Fast commissioning with user-friendly LCD, rotary selector and intuitive menu
- Full valve compatibility with improved control performance
- Seamless DCS integration based on HART® 7



Benefits

- Enables SE as single source provider of Process Automation.
- Cost of ownership reduction and streamlined maintenance with other SE offers including Valve Positioners.
- Automated control of fluid flow improves system accuracy and avoids manual operation.
- SE branded valves cast in factory's own foundry.
- Available material traceability, fugitive emissions certifications, engineering drawings.

Applications

- · Oil & Gas
- Water & Wastewater
- Mining, Metals & Minerals
- Power Generation
- Consumer Packaged Goods
- Severe Vibration & Temperature Applications

Globe Valves







Model		VTX10	VTX30	VTX50
Description		Quick Change Trim Single Seat Control Valve	Quick Change Trim Cage Control Valve	Pressure Balanced Cage Control Valve
Plug		Contoured Plug	Drilled Hole Plug	Drilled Hole Plug
Size Range		1/2"-16"	1/2"-16"	3"-16"
Body Rating	gs	Class 150 - Class 300	Class 150 - Class 300	Class 600 - Class 1500
Constant	Equal %	4.7-2925	2.9-1463	29-3250
Cv value	Linear	4.7-2925	2.9-2925	46-6700
Bonnet		-50°F – 986°F (-46°C - 530°C)	-50°F – 986°F (-46°C - 530°C)	-50°F – 986°F (-46°C - 530°C)
Flow Chara	cteristics	Equal Percentage, Linear, Quick Opening	Equal Percentage, Linear	Equal Percentage, Linear
Shutoff Class		ANSI/FCI 70-2 Class IV, V, VI	ANSI/FCI 70-2 Class IV, V	ANSI/FCI 70-2 Class IV, V
Materials		WCC, LCC, 316 SS, 304 SS, WC6, WC9	WCC, LCC, 316 SS, 304 SS, WC6, WC9	WCC, LCC, 316 SS, 304 SS, WC6, WC9
Packing		PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite
Body Connections*		RF, RTJ, BW, SW	RF, RTJ, BW, SW	RF, RTJ, BW, SW
Actuator		Spring Diaphragm, Linear Piston, Electric	Spring Diaphragm, Linear Piston, Electric	Spring Diaphragm, Linear Piston, Electric

Rotary Control Valves





Model	VTX70	VTX90
Description	Rotary Eccentric Plug Control Valve	V-Ball Control Valve
Ball	Eccentric Plug	V-Ball
Body Size	1"-14"	1"-20"
Body Ratings	Class 150 - Class 600	Class 150 - Class 300
Calculated CV	5.6-2600	19-15210
Bonnet	-76°F - 660°F (-60°C - 350°C)	-20°F - 790°F (-29°C - 425°C)
Flow Characteristics	Modified Equal %	Modified Equal %
Leakage Class	ANSI/FCI 70-2 Class IV, V, VI	ANSI/FCI 70-2 Class IV, V, VI
Materials	WCC, LCC, 316 SS, 304 SS, WC6, WC9	WCC, LCC, 316 SS, 304 SS, WC6, WC9
Packing	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite
Body Connections*	Wafer (RF), Flanged (RF)	Wafer (RF), Flanged (RF)
Actuator	Rack & Pinion, Scotch Yoke, Electric, Hydraulic	Rack & Pinion, Scotch Yoke, Electric, Hydraulic

Severe Service Control Valves





Model		MVR20	MVR40
Description		Multistage Axial Flow Control Valve	Multipath and Multistage Control Valve
Plug		Anti-Cavitation	Labyrinth Disk Stack
Size Range		1"-4"	1"-12"
Body Ratin	gs	Class 600 - 2500	Class 150 - 2500
Cv value	Equal %	Modified	Custom
Cv value	Linear	Modified	Custom
Bonnet		-20°F – 780°F (-30°C - 420°C)	-50°F – 986°F (-46°C - 530°C)
Flow Characteristics		Modified Linear	Equal Percentage, Linear
Shutoff Class		ANSI/FCI 70-2	ANSI/FCI 70-2 Class IV, V, VI; MSS-SP-61
Materials		A105, F11, F22	WCB, WC6, A105, F11
Packing		PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite
Body Connections*		RF, RTJ, BW, SW	RF, RTJ, BW, SW
Actuator		Spring Diaphragm, Linear Piston, Electric	Spring Diaphragm, Linear Piston, Electric

Ball Valves



Model	BAV90
Description	Two Piece, Flanged, Soft Seated, General Service Ball Valve
Ball	Full Port
Size Range	1/2"-12"
Body Ratings	Class 150 - Class 300
Port Size	Full Port
Bonnet	-20°F - 390°F (-29°C - 200°C)
Flow Characteristics	Quick-Opening
Shutoff Class	API598; ANSI/FCI 70-2 Class VI
Materials	WCC, LCC, 316 SS, 304 SS, WC6, WC9
Packing	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite
Body Connections*	RF
Actuator	Rack & Pinion, Scotch Yoke, Electric, Hydraulic

Butterfly Valves







Model	TVT60	TVT80	TVT80-Cryo
Description	High Performance Butterfly Valve	Triple Offset Butterfly Valve	Triple Offset Butterfly Valve – Low Temperature
Disc	Double-Offset	Triple-Offset	Triple-Offset
Size Range	2"-32"	3"-120"	3"-32"
Body Rating	Class 150	Class 150 - Class 900	Class 150 - Class 300
Bonnet	-49°F - 925°F (-45°C - 500°C)	-49°F - 925°F (-45°C - 500°C)	-320°F - 85°F (-196°C - 29°C)
Flow Characteristics	Modified Equal %	Modified Equal %	Modified Equal %
Shutoff Class	Metal Seat ANSI/FCI 70-2 Class IV; Soft Seat ANSI/FCI 70-2 Class VI	API598; ANSI/FCI 70-2 Class V	API598; ANSI/FCI 70-2 Class V
Material	WCC, LCC, 316 SS, 304 SS, WC6, WC9	WCC, LCC, 316 SS, 304 SS, WC6, WC9	304 SS, 316 SS, WCB
Packing	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite	PTFE V-Ring, PTFE V-Ring Double, PTFE Filled, Grafoil/Graphite
Body Connections*	2"-32" Wafer (RF) 2"-24" Flanged (RF)	Wafer (RF), Flanged (RF)	Wafer (RF), Flanged (RF)
Actuator	Rack & Pinion, Scotch Yoke, Electric, Hydraulic	Rack & Pinion, Scotch Yoke, Electric, Hydraulic	Rack & Pinion, Scotch Yoke, Electric, Hydraulic

Actuation



Model	ASP10	APR30
Description	Multi-Spring and Diaphragm Actuator	Pneumatic Rack and Pinion Actuator
Performance	Hysteresis Less than 1% of Full Stroke w/ Positioner Less than 3% of Stroke w/out Positioner Linearity Less than 1% of Full Stroke w/ Positioner Less than 5% of Full Stroke w/out Positioner	90% Torque Transmission Efficiency of Rack and Pinion, Quick-Acting, NAMUR and ISO Mounting
Function	Double-Acting, Spring-Return, Fail-Safe	Double-Acting, Spring-Return, Fail-Safe
Accessories	I/P Positioner, PP Positioner, Limit Switch, Solenoid Valve, Speed Controller, Filter Regulator	I/P Positioner, PP Positioner, Limit Switch, Solenoid Valve, Speed Controller, Filter Regulator
Options	Manual Handwheel, Low-Temp Service, High-Temp Service	Manual Handwheel, Low-Temp Service, High-Temp Service
Materials	Diaphragm Case: Carbon Steel Diaphragm: NBR Shaft: 304L SS Yoke: Ductile Iron	Body: Extruded Aluminum End-Cap: Die-Cast Aluminum Piston: Die-Cast Aluminum Pinion: Alloy Steel Piston Bearing: PTFE/PTFE-Bronze Piston Guide: Nylon

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