

# Fisher® Rotary Valve Selection Guide

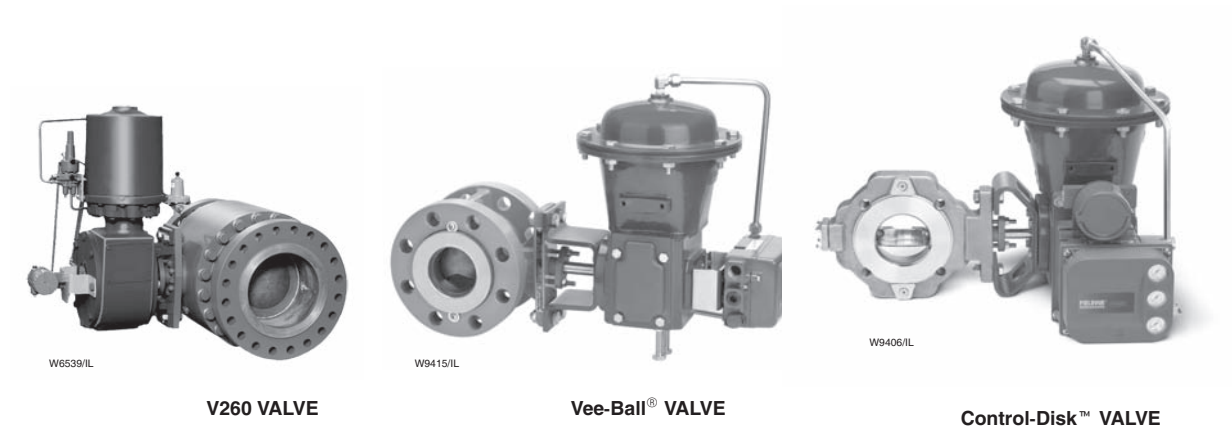


Figure 1. Typical Fisher Rotary Valves

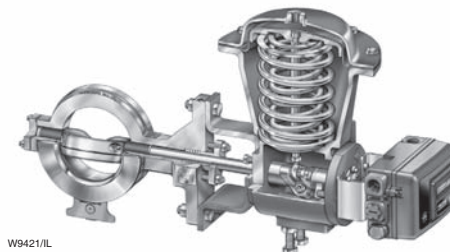
Control-Disk Valve	Expanded control range, lower process variability	Fisher Control-Disk Valve
Vee-Ball Valves	High-capacity, low-friction, non-clogging	Fisher V150, V200, V300, and V150S
High-Performance Butterfly Valves	Outstanding performance under extreme pressure and temperature conditions, available for a variety of throttling or on/off applications	Fisher 8510, 8532, 8580, 9500, and DSV Fisher POSI-SEAL® A11, A31A, A31C, A31D, and A81
Pipeline Valves	Full- or reduced-bore ball valves for throttling and severe service applications in gas transmission lines, gas distribution, or liquid pipelines	Fisher V250 and V260
Eccentric Plug Valves	Designed for throttling control for a broad range of industrial applications	Fisher V500 and CV500

- ENVIRO-SEAL® live-loaded packing systems are available to assist in compliance with environmental emissions requirements
- FIELDVUE® digital valve controllers offer digital control and remote diagnostics. The traditional proven line of Fisher positioners, controllers, transmitters, and switches also is available.
- Spring-return pneumatic diaphragm and double-acting piston actuators
- Contact your Emerson Process Management sales office for details



# Rotary Valve Selection Guide

## Fisher Control-Disk Valve



**Control-Disk VALVE**

*Figure 2. Fisher Control-Disk Valve*

<b>Control-Disk Valve</b>
<b>Applications</b>
Expanded control, lower process variability applications
<b>Style</b>
Wafer and single flange
<b>Sizes</b>
NPS 2, 3, 4, 6, 8, 10, 12
<b>Ratings</b>
PN 10 to 40 CL150 and CL300
<b>End Connections</b>
Raised-face (RF)
<b>Valve Body Materials</b>
<b>EN:</b> 1.0619 steel, 1.4409 stainless steel, CW2M, or M35-1 <b>ASME:</b> SA216 WCC steel, SA351 CF3M stainless steel, CW2M, or M35-1
<b>Disk Material</b>
SA351 CF3M stainless steel
<b>Seal Types (Material)</b>
Soft (PTFE or UHMWPE) or metal (S31600)
<b>Flow Characteristics and Maximum Flow Coefficients</b>
Equal percentage Maximum Cv from 60.7 to 4530
<b>Rangeability (Flow Coefficient Ratio)</b>
100 to 1
<b>Shutoff Class</b>
<b>Soft Seal:</b> Bubble-tight <b>Metal Seal:</b> 1% of Class IV
<b>Available Actuators (refer to page 12)</b>
Fisher 2052, 1051, 1052, and 1061

## Fisher Vee-Ball Valves

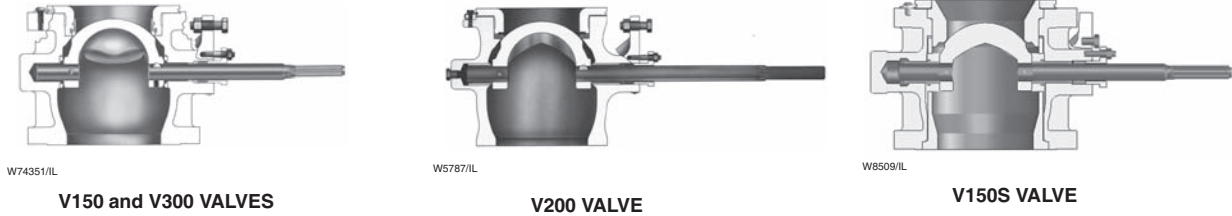


Figure 3. Fisher Vee-Ball Valves

V150 AND V300	V200	V150S
<b>Applications</b>		
Excellent for fibrous slurries as well as liquids, gas, and steam. Shearing V-notch ball for smooth, non-clogging action.	Excellent for fibrous slurries as well as liquids, gas, and steam. Shearing V-notch ball for smooth, non-clogging action.	Highly wear-resistant trim materials and an unrestricted flow path make this design ideal for controlling the most abrasive of slurries.
<b>Sizes</b>		
<b>V150:</b> DN 25 - 500 or NPS 1 - 24 x 20 <b>V300:</b> DN 25 - 500 or NPS 1 - 20	NPS 1, 1-1/2, 2, 3, 4, 6, 8, 10	NPS 3, 4, 6, 8, 10, 12
<b>Ratings</b>		
<b>V150:</b> PN 10/16 or CL150 <b>V300:</b> PN 25/40 or CL300	CL150, CL300, or CL600 depending on size.	CL150
<b>End Connections</b>		
Raised-face (RF) flanged	Flangeless	Raised-face (RF) flanged
<b>Valve Body Materials</b>		
<b>EN:</b> 1.0619 steel, 1.4409 stainless steel, M35-1, or CW2M <b>ASME:</b> SA216 WCC steel, SA351 CF3M, CG8M stainless steel, M35-1, or CW2M	<b>EN:</b> 1.0619 steel, 1.4409 stainless steel, M35-1, or CW2M <b>ASME:</b> SA216 WCC steel, SA351 CF3M, CG8M stainless steel, M35-1, or CW2M	SA216 WCC steel body liner: (high-chrome iron SA532 Class III Type A)
<b>Ball Material</b>		
SA351 CF3M, or CG8M stainless steel, CW2M	SA351 CF3M or CG8M stainless steel, CW2M	High-chrome iron SA532 Class III Type A (PSZ ceramic ball is optional)
<b>Seal Types (Material)</b>		
TCM Plus, metal (S31600), HD (heavy duty) metal, or flow ring	TCM Plus, metal (S31600), HD (heavy duty) metal, or flow ring	Flow ring construction
<b>Flow Characteristics and Maximum Flow Coefficients</b>		
Modified equal percentage Maximum Cv from 3.64 to 10,300	Modified equal percentage Maximum Cv from 8.4 to 3000	Modified equal percentage Maximum Cv from 170 to 2850
<b>Rangeability</b>		
300 to 1	300 to 1	
<b>Shutoff Class</b>		
<b>Composition Seal:</b> Class VI <b>Metal Seal:</b> Class IV <b>Flow Ring Construction:</b> 5% of wide-open capacity	<b>Composition Seal:</b> Class VI <b>Metal Seal:</b> Class IV <b>Flow Ring Construction:</b> 5% of wide-open capacity	Class I
<b>Available Actuators (refer to page 12)</b>		
Fisher 2052, 1051, 1052, 1061, and FieldQ®		

# Rotary Valve Selection Guide

Product Flier

PF51.3:010

November 2009

## Fisher High-Performance Butterfly Valves



Figure 4. Fisher High-Performance Butterfly Valves

8580	8532	8510
<b>Applications</b>		
Precise throttling service for process temperatures from -129 to 454°C	Throttling service, high-temperature, and cryogenic applications; -196 to 816°C	General-purpose valve for a variety of liquids and gasses
<b>Style</b>		
Wafer and single flange	Wafer and single flange	Wafer and single-flange
<b>Sizes</b>		
NPS 2, 3, 4, 6, 8, 10, 12	NPS 14, 16, 18, 20, 24	DN 350, 400, 500, 600 NPS 14, 16, 18, 20, 24
<b>Ratings</b>		
PN 10 to 40 CL150 and CL300	CL150 and CL300	PN 16 CL150
<b>End Connections</b>		
Raised-face (RF)	Raised-face (RF) and ring-type joint (RTJ)	Raised-face (RF)
<b>Valve Body Materials</b>		
<b>EN:</b> 1.0619 steel, 1.4409 stainless steel <b>ASME:</b> SA216 WCC steel, SA351 CF3M stainless steel High-alloy materials are available	SA216 WCC steel or SA351 CF8M stainless steel High-alloy materials are available	SA216 WCC steel or SA351 CF8M stainless steel; high-alloy materials are available
<b>Disc Material</b>		
SA351 CF3M stainless steel	SA351 CF8M stainless steel	SA216 WCC steel or SA351 CF8M stainless steel
<b>Seal Types (Material)</b>		
Soft (PTFE or UHMWPE) or metal (S31600)	Soft (PTFE), NOVEX, and Phoenix III	Soft (PTFE) or metal (S31600)
<b>Flow Characteristics and Maximum Flow Coefficients</b>		
Approximately linear Maximum $C_v$ from 83.7 to 5080	Modified equal percentage Maximum $C_v$ from 4550 to 21500	Approximately linear Maximum $C_v$ from 7040 to 21800
<b>Rangeability</b>		
100 to 1	100 to 1	100 to 1
<b>Shutoff Class</b>		
<b>Soft Seal:</b> Class VI <b>Metal Seal:</b> 1% of Class IV	<b>Soft Seal:</b> Class VI <b>NOVEX Seal:</b> SP-61 <b>Phoenix III Seal:</b> Class VI	<b>PTFE Seal:</b> Bidirectional Class VI <b>S31600 Seal:</b> 1/10 of Class IV
<b>Available Actuators (refer to page 12)</b>		
Fisher 2052, 1051, 1052, and 1061	Fisher 1051, 1052, and 1061	Fisher 2052, 1051, 1052, and 1061

## Fisher High-Performance Butterfly Valves (Continued)



Figure 5. Fisher High-Performance Butterfly Valves (Continued)

9500	DSV
<b>Applications</b>	
Fully lined butterfly valve for on/off or throttling service for tight-shutoff applications	Rapid on/off, high-cycle applications; temperatures to 232°C
<b>Style</b>	
Wafer	Wafer
<b>Sizes</b>	
NPS 2, 3, 4, 6, 8, 10, 12	NPS 4, 6, 8, 10, 12, 14
<b>Ratings</b>	
PN10, PN13, CL125B, CL150, or CL300 depending on size and material	CL300
<b>End Connections</b>	
<b>Cast Iron Bodies:</b> Mate with PN 10 (NPS 2, 3, 6, 8, 10) or CL125B FF flanges <b>Steel and Stainless Steel Bodies:</b> Mate with PN16, CL150, CL300 RF flanges	Mates with CL300 RF flanges
<b>Valve Body Materials</b>	
Cast iron, carbon steel, S31600 stainless steel	SA240 S31600 stainless steel
<b>Disc Material</b>	
Aluminum bronze, S31600 stainless steel	SA351 CG8M stainless steel
<b>Seal Types (Material)</b>	
Fully lined nitrile or PTFE	No seal
<b>Flow Characteristics and Maximum Flow Coefficients</b>	
Approximately equal percentage through 90° rotation for FISHTAIL® disc and through 60° rotation for conventional disc Maximum Cv from 91 to 7020	On/off service Maximum Cv from 434 to 7040
<b>Rangeability</b>	
100 to 1	100 to 1
<b>Shutoff Class</b>	
Class VI	5% of valve capacity
<b>Available Actuators (refer to page 12)</b>	
Fisher 2052, 1051, 1052, and 1061	Fisher 1061

# Rotary Valve Selection Guide

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## Fisher POSI-SEAL High-Performance Butterfly Valves

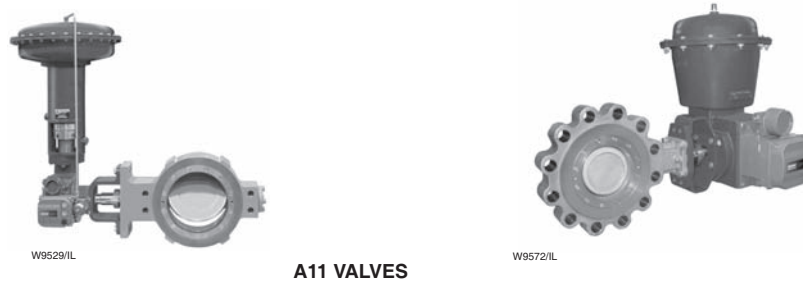


Figure 6. Fisher POSI-SEAL High-Performance Butterfly Valves

A11
<b>Applications</b>
Throttling and automated on/off service, high-pressure, high-temperature, and cryogenic applications; -254 to 816°C
<b>Style</b>
Wafer and single flange
<b>Ratings and Sizes</b>
<b>CL150/150 and CL150:</b> NPS 30, 36, 42, 48, 54, 60, 66, 72 <b>CL300:</b> NPS 30, 36, 42, 48 <b>CL600:</b> NPS 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36, 42, 48 (CL300 trim available for NPS 3 through 48) <b>CL900:</b> NPS 6, 8, 10, 12, 14, 16, 18, 20, 24, 30, 36 (CL300 and CL600 trim available for NPS 3 through 48) <b>CL1500:</b> NPS 10, 12, 14, 16, 18, 20 (CL300 and CL600 trim available for NPS 3 through 48, CL900 trim available for NPS 6 through 36) <b>CL2500:</b> Consult your Emerson Process Management sales office
<b>End Connections</b>
Raised-face (RF), ring-type joint (RTJ), and buttwelding ends (BWE) NPS 3 through 24 comply with ASME B16.5 NPS 30 through NPS 60 comply with MSS-SP-44
<b>Valve Body Materials</b>
SA216 WCC steel or SA351CF8M stainless steel Other carbon steel, stainless steel, and high-alloy materials are available
<b>Disc Material</b>
<b>CL150/150, CL150, and CL300:</b> SA351 CF8M stainless steel or SA216 WCC steel <b>CL600:</b> SA351 CF8M stainless steel <b>CL900 and CL1500:</b> CB7Cu-1
<b>Seal Types (Material)</b>
<b>CL150 and CL300:</b> Soft (PTFE), NOVEX (S31600), Phoenix III (S31600/PTFE), and cryogenic (CTFE) <b>CL600, CL900, and CL1500:</b> Soft (ETFE), Metal (S20910), high-pressure (S20910), Phoenix III (S31600/ETFE), and cryogenic (CTFE)
<b>Flow Characteristics and Maximum Flow Coefficients</b>
Maximum Cv from 182 to 106000
<b>Rangeability (Flow Coefficient Ratio)</b>
100 to 1
<b>Shutoff Class</b>
<b>Soft Seal:</b> Bidirectional bubble-tight (Class VI or better) <b>NOVEX Seal:</b> Class V (standard), Class VI (optional) <b>Metal Seal:</b> 20% of Class IV <b>High-Pressure Seal:</b> Class V (standard), Class VI (optional) <b>Phoenix III Seal:</b> Class VI <b>Cryogenic Seal:</b> 0.1% of Class IV
<b>Available Actuators (refer to page 12)</b>
Fisher 2052, 1051, 1052, 1061, FieldQ, and Bettis®

## Fisher POSI-SEAL High-Performance Butterfly Valves (Continued)



Figure 7. Fisher POSI-SEAL High-Performance Butterfly Valves (Continued)

A81	A31A	A31D
<b>Applications</b>		
On/off service, rack-and-pinion actuator for temperatures from -129 to 454°C	On/off service, high-temperature and cryogenic applications; -196 to 816°C	On/off and throttling service, high-temperature and cryogenic applications; -196 to 816°C
<b>Style</b>		
Wafer and single flange	Wafer and single flange	Double flange
<b>Sizes</b>		
NPS 2, 3, 4, 6, 8, 10, 12	NPS 14, 16, 18, 20, 24	NPS 3, 4, 6, 8, 10, 12, 14, 16, 18, 20, 24
<b>Ratings</b>		
PN 10 to 40 CL150 and CL300	CL150 and CL300	CL150 and CL300
<b>End Connections</b>		
Raised-face (RF)	Raised-face (RF) and ring-type joint (RTJ)	Raised-face (RF) and ring-type joint (RTJ)
<b>Valve Body Materials</b>		
<b>EN:</b> 1.0619 steel, 1.4409 stainless steel <b>ASME:</b> SA216 WCC steel, SA351 CF3M stainless steel High-alloy materials are available	SA216 WCC steel or SA351 CF8M stainless steel High-alloy materials are available	SA216 WCC steel or SA351 CF8M stainless steel High-alloy materials are available
<b>Disc Material</b>		
SA351 CF3M stainless steel	SA351 CF8M stainless steel	SA351 CF8M stainless steel
<b>Seal Types (Material)</b>		
Soft (PTFE or UHMWPE) or metal (S31600)	Soft (PTFE), NOVEX, and Phoenix III	Soft (PTFE), NOVEX, and Phoenix III
<b>Flow Characteristics and Maximum Flow Coefficients</b>		
Maximum Cv from 83.7 to 5080	Maximum Cv from 4550 to 21500	
<b>Rangeability</b>		
100 to 1	100 to 1	100 to 1
<b>Shutoff Class</b>		
<b>Soft Seal:</b> SP-61 <b>Metal Seal:</b> SP-61	<b>Soft Seal:</b> Class VI <b>NOVEX Seal:</b> SP-61 <b>Phoenix III Seal:</b> Class VI	<b>Soft Seal:</b> Bidirectional bubble-tight (Class VI or better) <b>NOVEX Seal:</b> Class V (standard); Class VI (optional) <b>Phoenix III Seal:</b> Class VI
<b>Available Actuators (refer to page 12)</b>		
FieldQ	Bettis	Fisher 2052, 1051, 1052, 1061, and Bettis

## Cryogenic Butterfly Valves



W7449/L

**TYPICAL CRYOGENIC BUTTERFLY VALVE**

*Figure 8. Fisher Cryogenic Butterfly Valves*

A31C	8532	A31A	A11
<b>Applications</b>			
A31C stainless steel cryogenic valves for liquified natural gas and other special chemical and hydrocarbon applications with temperatures to -254°C	8532 stainless steel cryogenic valves for liquified natural gas and other special chemical and hydrocarbon applications with temperatures to -254°C.	A31 stainless steel cryogenic valves for liquified natural gas and other special chemical and hydrocarbon applications with temperatures to -254°C.	A11 stainless steel cryogenic valves for liquified natural gas and other special chemical and hydrocarbon applications with temperatures to -254°C.
<b>Style</b>			
Wafer and single flange	Wafer and single flange	Wafer and single flange	Wafer and single flange
<b>Ratings and Sizes</b>			
<b>CL150 and CL300:</b> NPS 3 – 12	<b>CL150 and CL300:</b> NPS 14 – 24	<b>CL150 and CL300:</b> NPS 14 – 24	<b>CL150/150, CL150, CL300:</b> NPS 30 – 48 <b>CL600:</b> NPS 3 - 24 <b>CL900:</b> NPS 6 – 24 <b>CL1500:</b> NPS 10 – 20
<b>End Connections</b>			
Raised-face (RF), ring-type joint (RTJ)	Raised-face (RF), ring-type joint (RTJ)	Raised-face (RF), ring-type joint (RTJ)	Raised-face (RF), ring-type joint (RTJ)
<b>Valve Body Materials</b>			
SA351 CF8M stainless steel	SA351 CF8M stainless steel	SA351 CF8M stainless steel	SA351 CF8M stainless steel
<b>Disc Material</b>			
SA351 CF8M stainless steel	SA351 CF8M stainless steel	SA351 CF8M stainless steel	SA351 CF8M stainless steel
<b>Seal Types (Material)</b>			
NOVEX and Cryogenic (CTFE and CTFE/aluminum)	NOVEX and Cryogenic (CTFE and CTFE/aluminum)	NOVEX and Cryogenic (CTFE and CTFE/aluminum)	<b>CL150 and CL300:</b> NOVEX and Cryogenic (CTFE) <b>CL600, CL900, and CL1500:</b> HPS and cryogenic (CTFE)
<b>Flow Characteristics and Maximum Flow Coefficients</b>			
Maximum Cv from 188 to 4940	Maximum Cv from 4550 to 21500	Maximum Cv from 4550 to 21500	Maximum Cv from 182 to 106000
<b>Rangeability</b>			
100 to 1	100 to 1	100 to 1	100 to 1
<b>Shutoff Class</b>			
<b>NOVEX Seal:</b> Class VI <b>Cryogenic (CTFE) Seal:</b> 0.1% of Class IV <b>Cryogenic (CTFE/Aluminum) Seal:</b> Class VI	<b>NOVEX Seal:</b> Class VI <b>Cryogenic (CTFE) Seal:</b> 0.1% of Class IV <b>Cryogenic (CTFE/Aluminum) Seal:</b> Class VI	<b>NOVEX Seal:</b> Class VI <b>Cryogenic (CTFE) Seal:</b> 0.1% of Class IV <b>Cryogenic (CTFE/Aluminum) Seal:</b> Class VI	<b>NOVEX Seal:</b> Class VI <b>Cryogenic (CTFE) Seal:</b> 0.1% of Class IV <b>Cryogenic (CTFE/Aluminum) Seal:</b> Class VI <b>HPS:</b> Class VI
<b>Available Actuators (refer to page 12)</b>			
Fisher 2052, 1051, 1052, and 1061 and FieldQ and Bettis		FieldQ and Bettis	Fisher 2052, 1052, and 1061 and FieldQ and Bettis

## Fisher Pipeline Valves

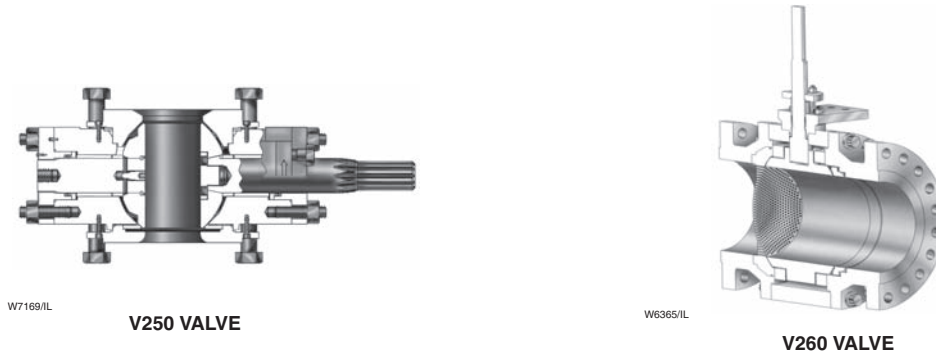


Figure 9. Fisher Pipeline Valves

V250	V260
<b>Applications</b>	
Heavy-duty, flangeless throttling ball valves. Often used for controlled flow applications in gas transmission lines, gas distribution, and liquid pipelines. Temperatures from -40 to 204°C, depending on seal type	Large, flanged throttling ball valves. Used for demanding pipeline applications such as pump bypass and pipeline take-off. Temperatures from -29 to 93°C, depending on seal type
<b>Style</b>	
Flangeless	Flanged
<b>Sizes</b>	
NPS 4, 6, 8, 10, 12, 16, 18, 20, 24	NPS 8, 10, 12, 16, 20, 24
<b>Ratings</b>	
CL600 or CL900	CL150, CL300, or CL600
<b>End Connections</b>	
Raised-face (RF) or ring-type joint (RTJ)	Raised-face (RF)
<b>Valve Body Materials</b>	
Carbon steel (LCC)	Carbon steel (LF2)
<b>Ball Material</b>	
Chrome-plated WCC steel	Chrome-plated WCC steel
<b>Seal Types (Material)</b>	
V250: Single or dual Seal (POM) or flow ring	Single or dual seal (PEEK/PTFE or POM)
<b>Flow Characteristics and Maximum Flow Coefficients</b>	
Modified equal percentage Maximum Cv from 499 to 18,300	Modified linear or modified equal percentage Maximum Cv from 4960 to 31000
<b>Rangeability</b>	
100 to 1	100 to 1
<b>Shutoff Class</b>	
<b>Single and Dual Seal:</b> Less than 1% of Class IV <b>Flow Ring:</b> 1% of valve capacity	<b>Single or Dual Seal:</b> Less than 10% of Class IV <b>PEEK/PTFE Seal:</b> Less than 10% of Class IV <b>POM Seal:</b> Less than 10% of Class IV
<b>Available Actuators (refer to page 12)</b>	
Fisher 1051, 1052, 1061, and Bettis	Fisher 1051, 1052, 1061, and Bettis

# Rotary Valve Selection Guide

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## Fisher Eccentric Plug Valves

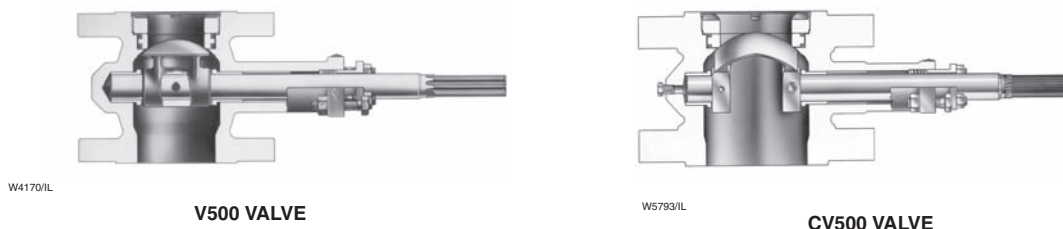


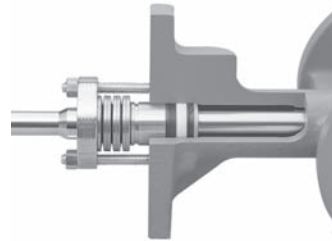
Figure 10. Fisher Eccentric Plug Valves

V500	CV500
<b>Applications</b>	
Flanged or flangeless eccentric plug rotary control valve for erosive, coking, and other hard-to-handle fluids. Throttling or on/off. Temperatures from -198 to 538°C, depending on materials.	Rugged flanged or flangeless cammed-segmented V-notch ball valve offering erosion resistance and pressure control for gases, liquids, and fibrous slurries. Throttling or on/off. Temperatures from -198 to 538°C, depending on materials.
<b>Style</b>	
Flanged or flangeless	Flanged or flangeless
<b>Sizes</b>	
DN 25 - 200 or NPS 1 - 8	DN 80 - 300 or NPS 3 - 12
<b>Ratings</b>	
PN 10 - 100 or CL150 - CL600	PN 10 - 100 or CL150 - CL600
<b>End Connections</b>	
Raised-face (RF) or ring-type joint (RTJ)	Raised-face (RF) or ring-type joint (RTJ)
<b>Valve Body Materials</b>	
WCC steel or 316 stainless steel	<b>EN:</b> 1.0619 steel or 1.4581 stainless steel <b>ASME:</b> WCC steel or CF3M and CF8M stainless steel
<b>Plug Material</b>	
Chrome-plated CF8M, solid alloy 6, or ceramic	CF3M stainless steel
<b>Flow Characteristics and Maximum Flow Coefficients</b>	
Modified linear Maximum Cv from 12.2 to 1050	Modified equal percentage Maximum Cv from 181 to 3080
<b>Rangeability</b>	
100 to 1	200 to 1
<b>Shutoff Class</b>	
Class IV	Class IV
<b>Available Actuators (refer to page 12)</b>	
Fisher 2052, 1051, 1052, 1061, and FieldQ	Fisher 2052, 1051, 1052, 1061, and FieldQ

## Other Valve Options



W9177/IL  
**V150S VALVE TRIM**



W7557/IL  
**ENVIRO-SEAL Packing System**



W7555/IL  
**Vee-Ball VALVE BALL WITH ATTENUATOR**

### **Cavitating Liquids and Noisy Gasses . . .**

Severe-service attenuator reduces liquid cavitation and aerodynamic noise.

**Materials for Sour Service . . .** Materials and manufacturing procedures are available for compatibility with NACE MR0103 and MR0175/ISO 15156.

### **Alloy Valve Guidelines**

- Emerson Process Management expertise has combined its knowledge of metals and foundry techniques with valve user experience in creating high alloy valves that fight corrosion successfully.
- Guidelines have been developed to help the valve user specify alloy valves correctly. Techniques have also been implemented that verify a foundry's ability to cast alloy valves properly and has established stringent specifications that guide the foundry in providing quality results.
- Valve user guidelines include — Avoid the use of alloy tradenames, Don't specify wrought for cast, Forego non-destructive testing

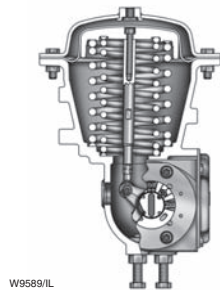
### **Protection Against Process Fluid Emissions . . .**

Optional ENVIRO-SEAL packing systems provide an improved shaft seal to help prevent the loss of valuable or hazardous process fluids. These live-loaded systems provide longer packing life and reliability.

- Steps used to qualify a foundry include — Weldability tests to gauge the foundry's ability to pour alloy materials, Dedicating casting patterns solely to high-alloy service
- Stringent specifications developed by Emerson Process Management include — Raw Material Composition and Quality, Heat Qualification, Visual Inspection, Weld Repair, Heat Treatment, and Nondestructive Testing

# Rotary Valve Selection Guide

## Fisher 2052, 1051, 1052, and 1061 Actuators



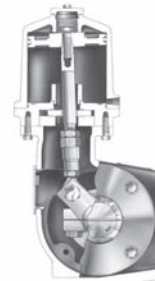
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**2052 ACTUATOR**



W3813/IL

**1051 AND 1052 ACTUATORS**



W3827/IL

**1061 ACTUATOR**

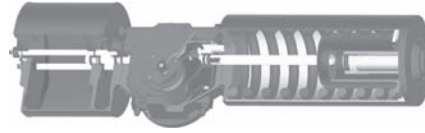
*Figure 11. Rotary Valve Actuators*

2052	1051 AND 1052	1061
<b>Features</b>		
Heavy-duty actuator with enclosed linkage and splined actuator-valve connection for minimized lost motion		
<b>Style</b>		
Spring-return pneumatic diaphragm actuator	Spring-return pneumatic diaphragm actuator	Double-acting pneumatic piston actuator
<b>Typical Operating Torque Range (Varies with Operating Pressure and Construction)</b>		
50.8 to 565 N•m	85 to 1370 N•m	282 to 19800 N•m
<b>Accessories</b>		
Pneumatic or electro-pneumatic valve positioners, FIELDVUE digital valve controllers, limit switches, position transmitters, handwheels, travel stops, lock-out device to disable actuator during maintenance, supply pressure filter-regulator.		

## FieldQ and Bettis G Actuators



**FieldQ ACTUATORS**



W8305/IL

**BETTIS G-SERIES ACTUATOR**

Figure 12. Rotary Valve Actuators

FieldQ	Bettis G
<b>Features</b>	
Compact rack-and-pinion pneumatic actuator for quarter-turn applications. for mounting to Fisher valves	Scotch yoke type actuator for mounting to Fisher rotary valves.
<b>Style</b>	
Double-acting or spring-return pneumatic piston actuator	Double-acting or spring-return series single power module pneumatic actuator
<b>Typical Operating Torque Range (Varies with Operating Pressure and Construction)</b>	
40 to 2444 N•m	531 to 5650 N•m
<b>Accessories</b>	
Pneumatic or electro-pneumatic valve positioners, FIELDVUE digital valve controllers, limit switches, position transmitters, travel stops.	Pneumatic or electro-pneumatic valve positioners, FIELDVUE digital valve controllers, limit switches, position transmitters, handwheels, travel stops, supply pressure filter-regulator

## Fisher Valve Controllers



Figure 13. FIELDVUE Digital Valve Controllers

FIELDVUE digital valve controllers are communicating, microprocessor-based controllers that convert a current signal to a pressure signal to operate the actuator.

Through the HART® or FOUNDATION™ fieldbus communications protocol, the controller gives easy access to critical valve information. AMS® ValveLink® Software allows easy access to valve assembly performance characteristics. Vital information can be obtained without removing the valve from the line.

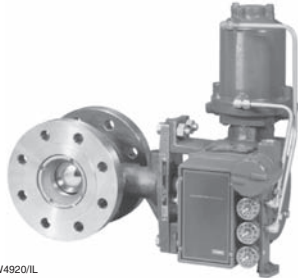
Performance diagnostic tests, including on-line

friction, deadband analysis, and trending can be run while the valve is in service and operating.

Valve signature, dynamic error band, and step response are displayed in an intuitive user-friendly environment that allows easy interpretation of data.

FIELDVUE models include the DVC6000, the DVC6000 SIS for safety applications, the DVC6000f, and the DVC2000 with local user interface for calibration.

## Fisher Valve Positioners



W4920/L

**3610J POSITIONER MOUNTED ON 1061  
ACTUATOR**



W8693-1/L

**3610J POSITIONER MOUNTED ON 1052 ACTUATOR  
WITH i2P-100 TRANSDUCER**

*Figure 14. Fisher Valve Positioners*

Several pneumatic and electro-pneumatic valve positioners are available, including the 3610, 3610JP, and 3620JP positioners.

### Note

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# Rotary Valve Selection Guide

Product Flier

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