

## Quadrant® Valve

## **Products Brochure**





# Stay Safe. Stay Ahead – Quadrant Valves.

Sometimes it all comes down to a single valve. That is why ASC Engineered Solutions provides the highest quality and best selection of rugged, reliable valves and ISO-compliant actuators and accessories for every critical point in your operations. Our extensive line of ball and butterfly valves are manufactured in conformance to API, ASTM, ASME, ANSI and other specifications. We can also custom-design solutions to meet specific challenges.

ASC Engineered Solutions' Quadrant® valves and actuators are the safest quarter-turn valve products available anywhere. Our product line includes threaded, seal-welded, maintenancedesign, multi-port/flanged floating ball valves, butterfly valves, actuators, gear operators and accessories. Ball valve sizes are available up to 10 inches with pressure ratings from 150 psig to 10,800 psig. Butterfly valves range up to 12 inches, with pressure ratings of 150–200 psig.

Our Quadrant valve solutions solve real-world safety and code-compliance issues while leading the way in valve technology, safety and compliance.

ASC provides the technologies, proven solutions, delivery and support capabilities to ensure the success of your project. We are committed to unmatched product reliability and performance to our customers – worldwide.



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## **Quadrant** Unibody and Two-Piece Ball Valves







**10 QVA** 

**12 QVA** 

20B QVA

Description			
Series	10 QVA	12 QVA	20B QVA
Features	Unibody Construction Barstock Ball Valve, NACE, Competitive Price	Investment Cast, Unibody Ball Valve, NACE, API 607 Fire Safe, Standard LL Handles	Bronze Two-Piece Ball Valve 600 CWP to 4" Size Full Port to 1" Standard SS Handle on 316SS Trim Valves
Sizes	½" to 2"	½" to 2"	½" to 4"
Port	Double Reduced Port	Double Reduced Port	Full Port to 1", Single Reduced Port Above 1"
Operating Limits	2000 CWP 150 WSP	2000 CWP 150 WSP	600 CWP 150 WSP
Body Materials	1017 CS	ASTM A216 WCB or ASTM A351 GR CF8M	CB B584 C84400
Trim Materials	Plated CS or 316SS	316SS Standard	Plated Brass or 316SS
Seat Materials	TFM™ (R-TFE)	TFM (R-TFE)	R-PTFE
Ends	Female NPT	Female NPT	Female NPT
Options	Latch-Lock Lever, SS Latch-Lock Lever, See Page 14	SS Latch-Lock Lever, SS Locking Oval , SS Tee Handle, See Page 14	SS Latch-Lock Lever, Extended Handle, Balancing Stop, SS Locking Oval, See Page 14
Order Series #	10 QVA	12 QVA	20B QVA
	Pressure Temperature Rating	gs (psig) (Standard Seats)	
100°F	2000	2000	600
200°F	1450	1440	450
300°F	875	850	300
350°F	600	590	200
400°F	325	300	120
450°F	50	0	50
500°F	0	0	0

### Quadrant Two-Piece Ball Valves



### Quadrant Seal-Welded Ball Valves



## Quadrant Seal-Welded Ball Valves ASME B16.34, API 608 Compliant









**SB QVA** 

S3 QVA

S6 QVA

S10 QVA

Description	Seal -Welded Ball Valve Specifications					
Series	SB QVA					
Features	Seal-Welded CF8M Ball Valve, ASME Class 900, Std. SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Firesafe	Seal-Welded CF8M Ball Valve, ASME Class 1500, Std. SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Firesafe	Seal-Welded CF8M Ball Valve, ASME Class 2500, Std. SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Firesafe	Seal-Welded CF8M Ball Valve, ASME Class 4500 Std. SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Firesafe		
Sizes	1/4" to 2"	½" to 2"	1/4" to 2"	1/4" to 1/2"		
Port	Single Reduced Port	Full and Reduced Port	Full and Reduced Port	Reduced Port		
Operating Limits	WCB: 2220 CWP CF8M: 2160 CWP 250 WSP	WCB: 3705 CWP CF8M:3600 CWP	WCB: 6170 CWP CF8M: 6000 CWP 250 WSP	WCB: 10,800 CWP		
Body Materials	ASTM A351 GR CF8M or A216 GR WCB	ASTM A351 GR CF8M or A216 GR WCB	ASTM A351 GR CF8M or A216 GR WCB	ASTM A351 GR CF8M		
Trim Materials	316SS	316SS or 17- 4PH	316SS or 17- 4PH	316SS or 17- 4PH		
Seat Materials	TFM (R-TFE), PEEK, and UHMW Optional	Delrin® Acetal or PEEK	PEEK	PEEK		
Ends	Female NPT	Female NPT, MNPT x FNPT, SW	Female NPT Male NPT or SW	Female NPT, SW, MxF NPT, or SW x FNPT		
Options	SS Locking Oval, SS Tee Handle, Spring Return Handle, ISO Extended Handle, Pneumatic or Electric Actuation, See Pages 12, 14	SS Locking Oval, Pneumatic or Electric Actuation, PEEK Seats, Socket Weld Ends, See Pages 12, 15	M x F NPT, Socket Weld Ends, Pneumatic or Electric Actuation, See Pages 12, 14	Pneumatic or Electric Actuation, See Pages 12, 14		
Order Series #	SB QVA	S3 QVA	S6 QVA	S10 QVA		
	Pressure	e Temperature Ratings (psig) (Standa	ard Seats)			
100°F	2160	3600	6000	10,800		
200°F	1650	1800 @ 185°F	5250	6000		
300°F	1200	0	4000	4000		
350°F	850		3500	3500		
400°F	620		3000	3000		
450°F	325		1500	1500		
500°F	 50		200	200		

## Quadrant Maintenance-Design Ball Valves





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**UU QVA** 

Description		
Series	M2 QVA	UU QVA
Features	ASME B16.34 /API 608 Class 800 Three-Piece Ball Valve, CF8M or WCB, 316SS Trim, ISO Mounting Pad, NACE, API 607 Firesafe	Double Union-End Full Port Ball Valve, 3000 CWP, Actuator Mounting Pad, NACE, Stainless Steel Handle
Sizes	½" to 2 ½"	½" to 2"
Port	Full and Reduced Port	Full Port
Operating Limits	WCB: 1973 CWP CF8M: 1920 CWP 250 WSP	3000 CWP 150 WSP
Body Materials	ASTM A351 GR CF8M or A216 GR WCB	ASTM A351 GR CF8M or A216 GR WCB
Trim Materials	316SS	316SS
Seat Materials	TFM (R-TFE), PEEK and UHMW Optional	TFM (R-TFE), PEEK
Ends	Female NPT, SW, Extended SW or Extended BW	Female NPT or Socket Weld
Options	UHMW Seats /Seals, PEEK Seats, SS Locking Oval, Live Load Packing, Pneumatic or Electric Actuation, See Pages 12, 14, 15	PEEK Seats, SS Locking Lever, Pneumatic or Electric Actuation, See Pages 12, 14, 15
Order Series #	M2 QVA	UU QVA
	Pressure Temperature Ratings (psig) (Standard Seats)	
100°F	1920	3000
200°F	1600	2250
300°F	1050	1500
350°F	800	800
400°F	500	400
450°F	300	50
500°F	50	0

### Quadrant Multi-Port Ball Valves









**TB QVA** 

**3W & 4W QVA** 

22B-ST QVA, G3 QVA SB-ST QVA

Description	
Series	

TB OVA

3W & 4W OVA

G3 OVA

22B-ST QVA, SB-ST QVA

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Seal-Welded CF8M Three-Way Ball Valve, ASME /API Class 900, "L" Port, Standard SS Latch-Lock Handle, NACE, ISO Mounting Pad

Three-Way and Four-Way Safe 4-Seated Ball Valve, Live-Load Stem Packing, ISO Direct-Mount Pad, "L", "T" and Double "L" Porting Available

Seal-Welded CF8M Gauge Valve, ASME Class 1500, Standard SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Fire Safe

Bronze or CF8M Body, Safety-Exhaust, Valves Bleed Downstream Pressure When Handle Closed

Sizes

Port

1/4" to 2"

1/4" to 2" Full and Reduced "L", "T" or "Double L" Port

Full and Reduced Port WCB: 3705 CWP

½" to 2"

1/4" to 2" Full and Reduced Port

**Operating Limits** 

WCB: 2220 CWP CF8M:2160 CWP 250 WSP

Reduced "L" Port

1000 CWP

CF8M: 3600 CWP 250 WSP

200 PSIG

**Body Materials** 

ASTM A351 GR CF8M or

150 WSP

ASTM A351 GR CF8M

ASTM A351 GR CF8M or

CB or

**Trim Materials** 

A216 GR WCB 316SS

316SS

A216 GR WCB ASTM A351 GR CF8M 316SS or 17-4PH Plated Brass or 316SS

**Seat Materials** 

TFM (R-TFE), PEEK, and UHMW Optional TFM (R-TFE)

PEEK

TFM (R-TFE)

**Ends** 

Female NPT

Female NPT

Mx F NPT

SS Locking Oval, SS Tee Handle, Spring Return Handle, ISO Extended Handle, Pneumatic or Electric

Female NPT

**Options** 

SS Locking Oval, SS Tee Handle, Spring Return Handle, ISO Extended Handle, Pneumatic or Electric Actuation See Pages 12, 14

Cast CF8M Handle, Pneumatic or Electric Actuation See Pages 12, 14

SS Oval, Pneumatic or Electric Actuation See Pages 12, 14

G3 QVA

Actuation See Pages 12, 14

Order Series #

TB QVA

3W & 4W QVA

22B-ST QVA, SB-ST QVA

Pressure Temperature Ratings (psig) (Standard Seats)

100°F	2160	1000	3600	200
200°F	1650	1000	3095	200
300°F	1200	600	2795	200
350°F	850	400	1900	150
400°F	620	200	1500	100
450°F	325	50	500	50
500°F	50	0	200	0

## Quadrant Flanged End Ball Valves ASME B16.34, API 608 Compliant









#### F1 QVA

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	FIQVA		F2 QVA		
Description	Unibody Flanged-End B	Unibody Flanged-End Ball Valve Specifications		Two-Piece Flanged-End Ball Valve Specifications	
Series	F1 (	QVA		F2 QVA	
Features	Unibody Construction ASME /API-Compliant Flanged-End Ball Valves in Class 150 and 300, 11/2" - 6" Sizes with Patented "Submerged" Live-Load Stem Packing for Direct-Mount of Any ISO 5211 Actuator or Gear Operator, All Sizes With ISO 5211 Mounting Pad, Standard 316SS Trim, Stainless Locking Handles, Grounded Ball and Stem and TFM Seats		Flanged-E All Sizes Stem Pac 5211 Act	Piece Full Port ASME/API-Co nd Ball Valves in Class 150, 3 with Patented "Submerged" king System for Direct-Moun uator or Gear Operator, Stanc cking Handles, Grounded Ball and TFM Seats	000 and 600, Live-Load t of Any ISO dard 316SS
Sizes	1/2" †	to 6"		1" to 10"	
Port	Single Red	duced Port		Full Port	
Pressure Limits	ASME Clas	ss 150 300	ASME Class 150, 300 600		
Body Materials	ASTM A351 GR CF8	BM or A216 GR WCB	ASTM A351 GR CF8M or A216 GR WCB		
Trim Materials	Standard 316SS, Optional: Alloy -20		Standard 316SS, Optional: Alloy -20		
Seat Materials	Standard T	FM (R-TFE)		Standard TFM (R-TFE)	
Ends	Raised-Fa	ce Flanged	Raised-Fa	ace Flanged Ring-Type Joint	(Class 600)
Options	SS Locking Oval, SS Tee Handle, ISO Extended Handle, Pneumatic or Electric Actuation, Gear Operators, See Pages 12, 14		ISO Extended Handle, Pneumatic or Electric Actuation, Gear Operators, See Pages 12, 14		
Order Series #	F1 (	QVA		F2 QVA	
		Pressure Temperature Ratings	(psig) (Standard Seats)		
	Class 150 (CF8M)	Class 300 (CF8M)	Class 150	Class 300	Class 600
100°F	275	720	275	720	1440
200°F	235	620	235	620	1100
300°F	215	560	215	560	760
350°F	205	475	205	475	595

425

195

400°F

195

425

425

## **Quadrant** Butterfly Valves







BFV-C QVA



BFV-A QVA

Description	Butterfly Valve Specifications				
Series	BFV-T QVA	BFV-C QVA	BFV-A QVA		
Features	Threaded-End Nickel-Plated Cast Iron Body, BFV With 416SS Shaft, Aluminum-Bronze Disc, 304SS Fasteners Detented Handle	Ductile Iron Body, "Short-Neck" Lug Wafer Style BFV, Patented Topworks Allows Direct-Mount of ISO 5211 Operators, Lug Style is Rated for Full-Pressure Dead-End Service With No Downstream Flange, Internal Disc Drive System	USCG Category "A" Certified BFV, Ductile Iron Lug and Wafer Styles, Same Direct-Mount System as BFV-C, Bi-Directional Dead-End Service with No Downstream Flange, Two-Piece Shaft with Internal Drive System Provides High-Flow/Low-Pressure Drop		
Sizes	2", 3" and 4"	2" to 12"	2" to 12"		
Port	Bolted to Shaft	Internal Keyed Drive	Internal Keyed Drive		
Operating Limits	200 PSIG, 120°F	200 PSIG, Up To 375°F	200 PSIG, Up To 375°F		
Body Materials	Cast Iron ENP Plated	ASTM A536 Ductile Iron	ASTM A395 Ductile Iron		
Trim Materials	Shaft: 416SS Disc: Aluminum-Bronze Internal Fasteners: 304SS	Shaft: 416SS Standard Disc: ENP-DI, Aluminum-Bronze, CF8M or Nylon-Coated DI	Shaft: 416SS Standard Disc: ENP-DI, Aluminum-Bronze or CF8M		
Seat Materials	Buna-N Standard Optional: Viton®	Buna-N	Buna-N or Viton		
Ends	Female NPT	Lug or Wafer Style	Lug or Wafer Style		
Options	Viton Seals	Infinite Position Lever, 2-Position Lever, SS Topworks, Gear-Op, Pneumatic or Electric Actuation, See Pages 12, 14, 15	All CF8M/316SS Construction, Infinite or 2-Position Lever, SS Topworks, Gear-Op, Pneumatic or Electric Actuation, See Pages 12, 14, 15		
Order Series #	BFV-T QVA	BFV-C QVA	BFV-A QVA		
	Pressure Tempe	erature Ratings (psig)			
Buna-N Seats	200 @ 120°F	200 @ 180°F	200 @ 180°F		
EPDM Seats	N/A	200 @ 250°F	200 @ 250°F		
Viton Seats	200 @ 300°F	200 @ 375°F	200 @ 375°F		

\*Up To 24" Size

## **Quadrant** Actuators and Gear Operators





GO QVA

#### C ACT QVA

Description	Actuator and Gear Operator Specifications	
Series	GO QVA	C ACT QVA
Features	High-Efficiency Cast Iron Worm Gear GOP, ISO 5211 and Namur Mounting Patterns, All Torque Ratings Based on 80-Lb. Rimforce per MSS/API Standards, External Lube Fitting, External Failure When Over-Torqued	Double Rack Pinion Pneumatic Actuators, Double-Acting and Spring- Return Models, Dual Position Limit Stops, Encapsulated Spring Assemblies, Dual ISO Patterns and Namur Solenoid/Topworks Mounting, CW CCW Rotation Available for SR Units, SS External Hardware, Epoxy-Coated End Caps
Torque Output	2500 to 68,000 InLbs.	125 to 11,000 InLbs.
Output Shaft Style	Keyed Inserts	Female ISO Double Square
Input Shaft Style	N/A	5/₀" Male Square
Handwheel Sizes	6" to 36"	N/A
Body Materials	Cast Iron	Hard Anodized Aluminum
Internal Materials	Ductile Iron and Plated CS	Aluminum and Plated CS
Seal Materials	Buna-N	Standard: Buna-N Optional: Viton
Options	Top-Mounted Namur Limit Switch, Locking Device, Blank Output Shaft Inserts, See Pages 14, 15	Namur-Mounted Solenoid Valves, Top-Mount Namur Limit Switch, Breather Block for SR Service, Reducing Double-Square Inserts, 304SS Brackets Drivers, CCW SR Operation, See Pages 14, 15
Order Series #	GO QVA	C ACT QVA

## Quadrant API 641 (Fugitive Emissions) – Certified Designs



ASC Engineered Solutions' Quadrant valves offer eight product lines that are fully API 641-certified. This rigorous specification is the current gold standard of low-emission valve technology and regulates numerous designs, temperature ratings and sealing components for quarter-turn valves. In selecting Quadrant products, you can be confident of making a wise long-term decision to safeguard the environment and enhance your business goals.

Product Line	Size Range (Inches)	Pressure Rating
12 QVA	1/4" - 2"	2000 PSI CWP
SB QVA	1/4" - 2"	Class 900
S3 QVA	1/4" - 2"	Class 1500
S5 QVA	1/4" - 2"	5000 PSI CWP
TB QVA	1/4" - 2"	Class 900
M2 QVA	1/2" - 2-1/2"	Class 800
F1 QVA	1/2" - 6"	Class 150 - 300
F2 QVA	1/2" - 10"	Class 150 - 600

## **Quadrant Ball & Butterfly Valve Options and Accessories**

#### Handles



**Oval Handles** Available On: 20B, 22B, 12, S1, S2, SB,





**Spring Return Handles** Available On: S1, S2, SB, 22B



Tee Handles Available On: 22B, 12, S1, S2, SB



Stem Extensions Available On: SB, M2, 22B, F1, F2



Stainless Handles Available On: All Except Large F1 and F2

- · Onsite Modifications and Installation
- NDE Service Available Onsite
- PMI
- Hydro-test

#### **Operators Actuators**



**Gear Operators** Available On: All BV Except 20B, 20C, 10, 12, Plus All BFV



**Electric Actuators** Available On: All BV Except 20B, 20C, 10, 12, Plus All BFV



**Pneumatic Actuators** Available On: All BV Except 20B, 20C, 10, 12, Plus All BFV

## **Quadrant Ball & Butterfly Valve Options and Accessories**



**High-Temperature Seats**Available Option for: SB, SX, S3, S6, S10, F1, F2, and M2 series valves



**Stainless Two-Position Stop Plates** Available for: BFV-D, BFV-C, BFV-A



**Actuator Inserts** Available for: C ACT, GO



**Limit Switches**Available with: C ACT, GO



**Breather Blocks**Available for: C ACT



**Solenoids**Available with: C ACT

Neither ASC Engineered Solutions nor any of its affiliated entities assumes responsibility for the selection, use, or maintenance of any product. Responsibility for the selection, use, and maintenance of any product remains solely with the purchaser and end user.

ASC Engineered Solutions reserves the right to modify or improve the designs or specifications of any product at any time without notice.

#### **About ASC Engineered Solutions**

ASC Engineered Solutions is defined by quality—in its products, services and support. With more than 1,400 employees, the company's portfolio of precision–engineered piping support, valves and connections provides products to more than 4,000 customers across industries, such as mechanical, industrial, fire protection, oil and gas, and commercial and residential construction. Its portfolio of leading brands includes ABZ Valve®, AFCON®, Anvil®, Anvil EPS, Anvil Services, Basic–PSA, Beck®, Catawissa, Cooplet®, FlexHead®, FPPI®, Gruvlok®, J.B. Smith, Merit®, North Alabama Pipe, Quadrant®, SCI®, Sharpe®, SlideLOK®, SPF® and SprinkFLEX®. With headquarters in Commerce, CA, and Exeter, NH, ASC also has ISO 9001:2015 certified production facilities in PA, TN, IL, TX, AL, LA, KS, and RI.

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