

Building connections that last™



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 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, maintenance-design, multi-port/flanged floating ball 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.

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



Series 10



Series 12



Series 20B

Description

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	¼" to 2"	¼" to 2"	¼" to 4"
Port	Double Reduced Port	Double Reduced Port	Full Port to 1", Single Reduced Port Above 1"
Operating Limits	2000 PSI CWP, 150 WSP	2000 PSI CWP, 150 WSP	600 PSI 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 12	SS Latch-Lock Lever, SS Locking Oval , SS Tee Handle, See Page 12	SS Latch-Lock Lever, Stem Extension,, Balancing Stop, SS Locking Oval, See Page 12
Order Series #	10	12	20B
Pressure Temperature Ratings (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



Series 22B



Series 20C



Series 23



Series Q

Description

Two-Piece Ball Valve Specifications

	Series 22B	Series 20C	Series 23	Series Q
Features	Bronze Two-Piece Ball Valve, 600 CWP to 4" Size, Full Port to 1", Standard SS Handle on 316SS Trim Valves, ISO Mounting Pad	Two-Piece Construction Barstock Ball Valve, NACE, Tamper-Proof Locking Handles Available	Two-Piece Barstock High Pressure Ball Valve, Standard 316SS Trim, NACE	316 Stainless Steel Trim, Secure Locking Devices, Two-Piece Construction, Grease Fitting for Added Lubrication
Sizes	¼" to 4"	¼" to 4"	¼" to 1"	1" to 4"
Port	Full Port to 1", Single Reduced Port Above 1"	Single Reduced Port	Full Port ¼" to ½" Single Reduced Port ¾" -2"	Full and Reduced Port 1" to 4" Sizes
Operating Limits	600 PSI CWP, 250 WSP	2000 PSI CWP, 150 WSP	3000 PSI CWP, 150 WSP	Up to 5000 PSI CWP
Body Materials	CB B584 C84400	1017 CS	1017 CS	ASTM A395 Ductile Iron A216 GR WCB CS
Trim Materials	Plated CS or 316SS	Plated CS or 316SS	316SS Standard	316SS Standard
Seat Materials	TFM (R-TFE)	TFM (R-TFE)	TFM (R-TFE) or PEEK	Nylon + MoS2 or PEEK
Ends	Female NPT	Female NPT	Female NPT	Female NPT
Options	SS Latch - Lock Lever, SS Locking Oval, SS Tee Handle, SS Locking Bracket, Stem Extension, See Page 12	Latch-Lock Lever, SS Latch-Lock Lever, See Page 12	PEEK Seats, Latch-Lock Lever, SS Latch-Lock Lever, See Page 12	PEEK Seats, Square Drive Handle, See Page 12
Order Series #	22B	20C	23	Q

Pressure Temperature Ratings (psig) (Standard Seats)

Temperature (°F)	Series 22B	Series 20C	Series 23
100°F	600	2000	3000
200°F	480	1440	2155
300°F	375	885	1315
350°F	330	605	890
400°F	260	325	475
450°F	50	50	50
500°F	0	0	0

For all options consult a local sales representative or visit asc-es.com.

Quadrant Seal-Welded Ball Valves



Series S1



Series S2



Series SX



Series S5

Description

Seal-Welded Ball Valve Specifications

	Series S1	Series S2	Series SX	Series S5
Features	Seal -Welded CF8M Ball Valve, Full Port, Std. SS Latch-Lock Handle, NACE, Mounting Pad	Seal-Welded CF8M Ball Valve, 2000 CWP, Std. SS Latch-Lock Handle, NACE, Mounting Pad	Seal-Welded CF8M Ball Valve, Full Port, Std. SS Latch-Lock Handle, 2000 CWP to 2", NACE, ISO Mounting Pad, API 607 Firesafe	Seal -Welded CF8M Ball Valve, 5000 CWP, Std. SS Latch-Lock Handle, NACE, ISO Mounting Pad, API 607 Firesafe
Sizes	¼" to 3"	¼" to 2"	¼" to 4"	¼" to 2"
Port	Full Port - All Sizes	Single Reduced Port	Full Port - All Sizes	Full and Reduced Port
Operating Limits	1000 PSI CWP, 150 WSP	2000 PSI CWP, 150 WSP	2000 CWP to 2", 200 WSP	5000 PSI CWP,
Body Materials	ASTM A351 GR CF8M	ASTM A351 GR CF8M or ASTM A216 WCB	ASTM A351 GR CF8M or ASTM A216 WCB	ASTM A351 GR CF8M
Trim Materials	316SS	316SS	316SS	316SS or 17- 4PH
Seat Materials	TFM (R-TFE)	TFM (R-TFE)	TFM (R-TFE) or PEEK	Delrin® Acetal
Ends	Female NPT	Female NPT or MxF NPT	Female NPT or SW	Female NPT
Options	SS Locking Oval, SS Tee Handle, Spring Return Handle, Pneumatic or Electric Actuation, See Pages 11, 12	SS Locking Oval, SS Tee Handle, Spring Return Handle, Pneumatic or Electric Actuation, See Pages 11-12	SS Locking Oval, SS Tee Handle, Pneumatic or Electric Actuation, See Pages 11, 12	SS Locking Oval, SS Tee Handle, Pneumatic or Electric Actuation, See Pages 11, 12
Order Series #	S1	S2	SX	S5

Pressure Temperature Ratings (psig) (Standard Seats)

Temperature (°F)	Series S1	Series S2	Series SX	Series S5
100°F	1000	2000	2000*	5000
200°F	1000	1500	1500*	1800 @ 185°F
300°F	640	1000	1000*	0
350°F	400	650	650*	
400°F	200	300	300*	
450°F	50	50	50*	
500°F	0	0	0*	

*To 2" Size. Consult factory for additional information.

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



Series SB



Series S3



Series S6



Series S10

Description

Seal -Welded Ball Valve Specifications

	Series SB	Series S3	Series S6	Series S10
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	¼" to 2"	¼" to 2"	¼" to 2"	¼" to ½"
Port	Single Reduced Port	Full and Reduced Port	Full and Reduced Port	Reduced Port
Operating Limits	WCB: 2220 PSI CWP CF8M: 2160 PSI CWP 250 WSP	WCB: 3705 PSI CWP CF8M:3600 PSI CWP	WCB: 6170 PSI CWP CF8M: 6000 PSI CWP 250 WSP	WCB: 10,800 PSI 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, Stem Extension, Pneumatic or Electric Actuation, See Pages 11, 12	SS Locking Oval, Pneumatic or Electric Actuation, PEEK Seats, Socket Weld Ends, See Pages 12, 13	MxF NPT, Socket Weld Ends, Pneumatic or Electric Actuation, See Pages 11, 12	Pneumatic or Electric Actuation, See Pages 11, 12
Order Series #	SB	S3	S6	S10

Pressure Temperature Ratings (psig) (Standard Seats)

Temperature (°F)	Series SB	Series S3	Series S6	Series S10
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 3-Piece Ball Valves



Series M2



Series UU

Description

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	¼" to 2 ½"	¼" to 2"
Port	Full and Reduced Port	Full Port
Operating Limits	WCB: 1973 PSI CWP CF8M: 1920 PSI CWP 250 WSP	3000 PSI 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 11, 12, 13	PEEK Seats, SS Locking Lever, Pneumatic or Electric Actuation, See Pages 11, 12, 13
Order Series #	M2	UU

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 Flanged End Ball Valves

ASME B16.34, API 608 Compliant



Series F1



Series F2-A



Description	Unibody Flanged-End Ball Valve Specifications	Two-Piece Flanged-End Ball Valve Specifications
Features	Unibody Construction ASME /API-Compliant Flanged-End Ball Valves in Class 150 and 300, 1½"- 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	Two-Piece Full Port ASME/API-Compliant Flanged-End Ball Valves in Class 150, 300 and 600, All Sizes with Patented "Submerged" Live-Load Stem Packing System for Direct-Mount of Any ISO 5211 Actuator or Gear Operator, Standard 316SS Trim, Locking Handles, Grounded Ball and Stem and TFM Seats
Sizes	½" to 6"	1" to 10"
Port	Single Reduced Port	Full Port
Pressure Limits	ASME Class 150 300	ASME Class 150, 300 600
Body Materials	ASTM A351 GR CF8M 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 TFM (R-TFE)	Standard TFM (R-TFE)
Ends	Raised-Face Flanged	Raised-Face Flanged Ring-Type Joint (Class 600)
Options	SS Locking Oval, SS Tee Handle, ISO Extended Handle, Pneumatic or Electric Actuation, Gear Operators, See Pages 11, 12	ISO Extended Handle, Pneumatic or Electric Actuation, Gear Operators, See Pages 11, 12
Order Series #	F1	F2-A

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
400°F	195	425	195	425	425

Quadrant Multi-Port Ball Valves



Series TB



3W & 4W QVA



Series G3



22B-ST QVA,
SB-ST QVA

Description

Series 22B-ST,
Series SB-ST

Features	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	¼" to 2"	¼" to 2"	½" to 2"	¼" to 2"
Port	Reduced "L" Port	Full and Reduced "L", "T" or "Double L" Port	Full and Reduced Port	Full and Reduced Port
Operating Limits	WCB: 2220 PSI CWP CF8M: 2160 PSI CWP 250 WSP	1000 PSI CWP 150 WSP	WCB: 3705 PSI CWP CF8M: 3600 PSI CWP 250 WSP	200 PSIG
Body Materials	ASTM A351 GR CF8M or A216 GR WCB	ASTM A351 GR CF8M	ASTM A351 GR CF8M or A216 GR WCB	CB or ASTM A351 GR CF8M
Trim Materials	316SS	316SS	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	Female NPT
Options	SS Locking Oval, SS Tee Handle, Spring Return Handle, Stem Extension, Pneumatic or Electric Actuation See Pages 11, 12	Cast CF8M Handle, Pneumatic or Electric Actuation See Pages 11, 12	SS Oval, Pneumatic or Electric Actuation See Pages 11, 12	SS Locking Oval, SS Tee Handle, Spring Return Handle, Stem Extension, Pneumatic or Electric Actuation See Pages 11, 12
Order Series #	TB	3W & 4W	G3	22B-ST, SB-ST

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 Actuators and Gear Operators



Series GO



Series C

Description

Actuator and Gear Operator Specifications

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 In.-Lbs.	125 to 11,000 In.-Lbs.
Output Shaft Style	Keyed Inserts	Female ISO Double Square
Input Shaft Style	N/A	5/8" 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 12, 13	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 12, 13
Order Series #	GO	C

Quadrant Ball Valve Options and Accessories

Handles



Oval Handles

Available On: 20B, 22B, 12, S1, S2, SB, S3, S5, S6, M2, F1



Tee Handles

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



Stainless Handles

Available On: All Except Large F1 and F2-A



Spring Return Handles

Available On: S1, S2, SB, 22B



Stem Extensions

Available On: SB, M2, 22B, F1, F2-A

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

Operators Actuators



Gear Operators

Available On: All, Except 20B, 20C, 10, 12, Plus All BFV



Electric Actuators

Available On: All, Except 20B, 20C, 10, 12



Pneumatic Actuators

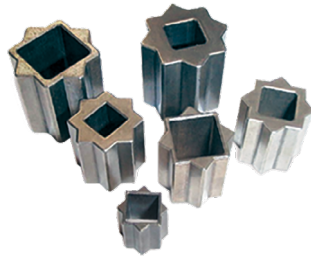
Available On: All, Except 20B, 20C, 10, 12

Quadrant Ball Valve Options and Accessories



High-Temperature Seats

Available Option for: SB, SX, S3, S6, S10, F1, F2-A, and M2 series valves



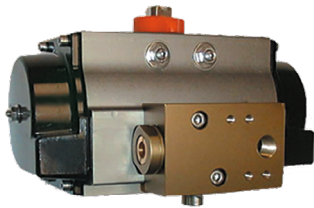
Actuator Inserts

Available for: Series C, GO



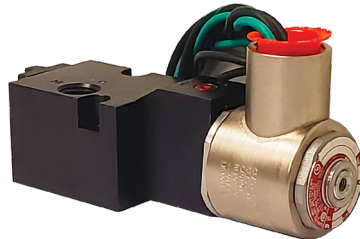
Limit Switches

Available with: Series C, GO



Breather Blocks

Available for: Series C

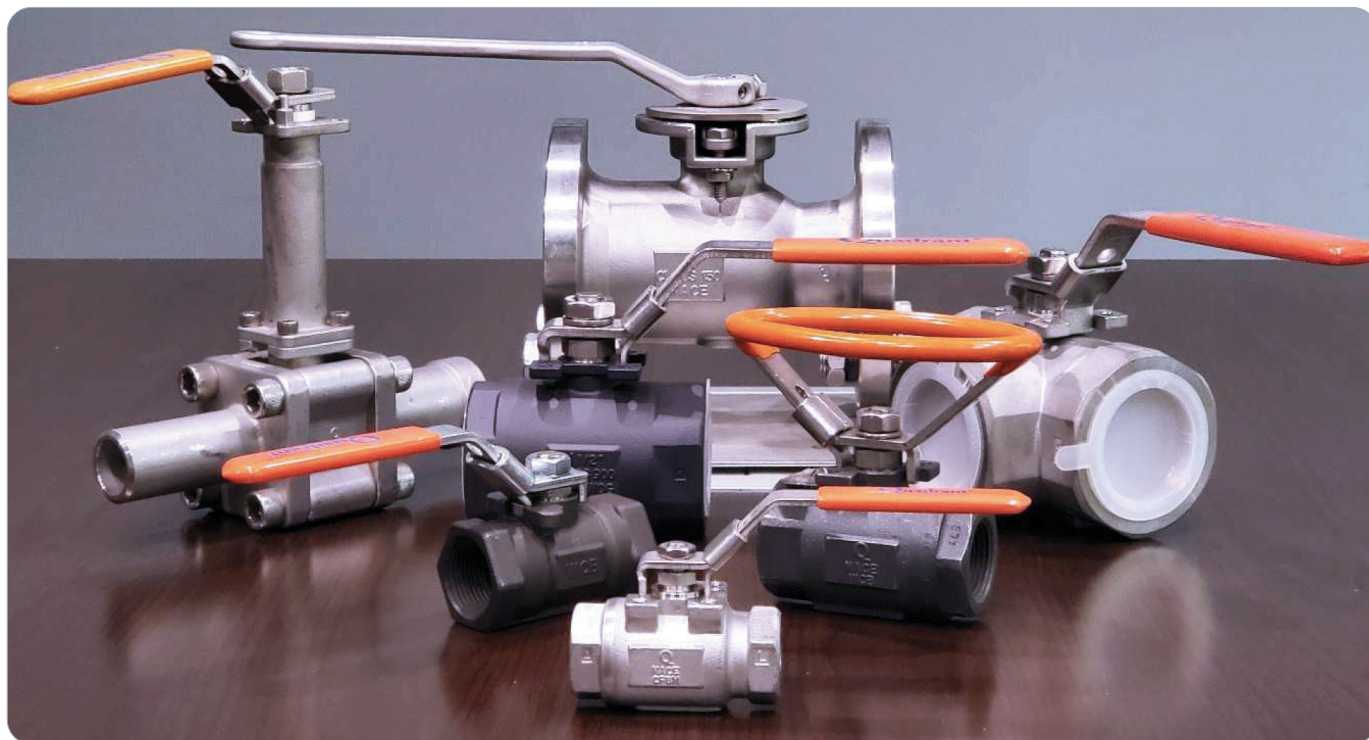


Solenoids

Available with: Series C

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
Series 12	1/4" - 2"	2000 PSI CWP
SB QVA	1/4" - 2"	Class 900
Series S3	1/4" - 2"	Class 1500
Series S5	1/4" - 2"	5000 PSI CWP
Series TB	1/4" - 2"	Class 900
Series M2	1/2" - 2-1/2"	Class 800
Series F1	1/2" - 6"	Class 150 - 300
	1/2" - 10"	Class 150 - 600

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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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