







Design • Build • Test • Deliver



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PROPRIETARY NOTE: All drawings and specifications contained in the within catalogue constitute proprietary assets of Aerospace Systems and Components, Inc. and publication thereof is intended for informational purposes only. Any other use thereof will constitute an unauthorized use of our proprietary information and will subject the violator to all available civil sanctions.

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1-2	4402-50	Dash 5	Aluminum
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1-4	4711-51	Dash 12	CRES
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1-6	7700-50	0.25"	CRES
1-7	2201-50	1.0"	Aluminum
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1-10	4713-50	1.0"	CRES
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2-2	7701-50	1.0"	CRES
2-3	7702-50	1.25"	CRES
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2-5	1420-50	2.0"	Nickel Alloy
2-6	1420-53	2.0"	CRES
2-7	7705-50	2.0"	CRES
2-8	1424-50	2.5"	Nickel Alloy
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Modulating Valves

Page #	Drawing #	Line Size	<u>Material</u>
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3-7	1405-53	4.0"	CRES



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4-2	5303-51	0.125 NPT	Aluminum	3-Way
4-3	5303-52	Dash 3	Aluminum	3-Way
4-4	2506-50	Dash 4	Aluminum	3-Way
4-5	5307-50	Dash 4 & 6	CRES	6-Way



Check Valves

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5-3	4007-51	1.5"	CRES	HP / HT
5-4	4011-50	2.0"	CRES	HP / HT
5-5	4011-51	2.0"	Aluminum	LP / LT
5-6	4011-52	2.0"	Nickel Alloy	HP / HT
5-7	4011-53	2.0"	CRES	HP / HT
5-8	4005-50	2.5"	Nickel Alloy	HP / HT
5-9	4005-51	2.5"	CRES	HP / HT
5-10	4020-50	2.5"	Aluminum	LP / LT
5-11	4001-50	3.0"	Aluminum	LP / LT
5-12	4001-51	3.0"	CRES	HP / HT
5-13	4001-52	3.0"	Nickel Alloy	HP / HT
5-14	4003-50	3.5"	CRES	HP / HT
5-15	4004-51	4.0"	CRES	LP / HT
5-16	4004-52	4.0"	Aluminum	LP / LT
5-17	4016-50	5.0"	Aluminum	LP / LT
5-18	4016-51	5.0"	CRES	HP / HT
5-19	4018-50	7.0"	Aluminum	LP / LT
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6-8	2704-50	Pressure Regulating Valve
6-9	5812-50	Pressure Relief Valve



*HP = High Pressure; HT = High Temperature LP = Low Pressure; LT = Low Temperature

ASC Today

Located in the "Air Capital of the World," ASC is an ISO9001 / AS9100 certified company that specializes in the design, qualification, and manufacturing of a wide range of complex pneumatic components for the aerospace, defense, and marine industries. ASC has a portfolio of over 500 products, and we work diligently with each customer to develop customized solutions to meet their requirements.

ASC is a one stop shop. We can take a customer requirement from concept, to launch, through detailed design development, to prototype build, through qualification, and into production. With the collaboration of the customer, we can bring comprehensive solutions from launch to production in under one year.

Our products are often required to operate in the harshest of environments, and we give our customers highly engineered solutions with a focus on performance and reliability.

Project Launch

When a Customer has accepted a product proposal from ASC and placed an order, we move quickly to assign the appropriate Engineering and Project Management personnel. Detailed project plans and schedules are established and an Initial Technical Coordination Meeting is held.

Product Design

ASC specializes in designing custom pneumatic valve solutions to meet customer needs. Our internal design team works with our customers requirements, utilizing project engineers to work efficiently with the customer and utilize in-house FEA, CFD and system analysis capabilities to provide that unique design to most effectively meet performance, weight, cost and envelope requirements. ASC has over 50 years of experience designing custom solutions ranging from a single valve to a complete engine bleed air suite of valves. This provides a vast portfolio of existing designs to minimize lead time and development expenses.

Product Development

ASC has successfully reduced time to market through extensive vertical integration. These elements include internal solenoid design/manufacture, servovalve design/manufacture, motor actuator design/manufacture, precise machining of high temperature nickel alloys and a wide range of test capabilities, all within one facility. These test capabilities include but are not limited to:

- Air Lab 1: Up to 100 LB/MIN @ 330 PSIG & 1000°F (45 KG/MIN @ 23 BAR & 538°C)
- Air Lab 2: Up to 100 LB/MIN @ 580 PSIG & 1200°F* (18 KG/MIN @ 40 BAR & 649°C)
- Environmental Chambers: -100°F to +350°F (-73°C to 177°C), altitude, humidity
- Contaminated Air Testing to Various Criteria (Typical: MIL-E-5007 / SAE ARP 986C)

^{*1200°}F temperature capability limited to 40 LB/MIN continuous. Increased flow reduces sustained temperature capability.

Qualification Testing

The engineering team at ASC will assist writing project specific qualification test procedures in accordance with RTCA DO-160 or Military Test Standards based on customer requirements. We can support Qualification Test Plans, Safety of Flight Test Plans, as well as any development test plans as needed. Between ASC's many test capabilities and comprehensive environmental and electrical testing just minutes away at Wichita's National Institute for Aviation Research, virtually all testing can be completed quickly and efficiently. With local testing capabilities, in-house calibrated equipment, computer verification and multi-shift test schedules when needed, ASC's on-site engineering lab will complete test programs at a fast pace to meet difficult schedules.

Entry Into Service & Production

Every new product developed at ASC goes through a rigorous production readiness process. Design Engineers and Manufacturing Engineers work hand in hand with the Production Technicians during the development process to ensure the product which goes into production is fully optimized.

Our Manufacturing Engineers remain engaged through the life of the product to identify and implement continuous improvement ideas to eliminate waste.

We have state of the art manufacturing, machining and test facilities which provide full in-house capability to fabricate, assemble and test all of our products.

Aftermarket Support

ASC is an FAA and EASA approved Repair Station. We provide full repair and overhaul services for all of our products. All product support services are performed at ASC's facility in Wichita, Kansas by our highly skilled technicians.

ASC responds quickly to all AOG through our AOG hotline.

Services include:

- Functional Testing
- Recertification
- Repair
- Overhaul
- Exchange

Shutoff Valves



Features

- Aluminum and Stainless Steel
- Dash 4 to Dash 16 and 0.25 inch to 4.0 inch (0.63 cm to 10 cm) Line Sizes available
- · Flow Media: Air
- Pressures to 566 PSIG (39 BAR)
- Fluid Temperatures to 900°F (482°C)
- Ambient Temperatures to 250°F (121°C)
- Manually Operated or Solenoid Operated (13 to 32 VDC)
- Extremely low Pressure Drop and Internal Leakage (Gate type)
- Normally Open or Normally Closed
- · Solenoid Direct, Poppet, Gate or
- Butterfly types available

Shutoff Valves

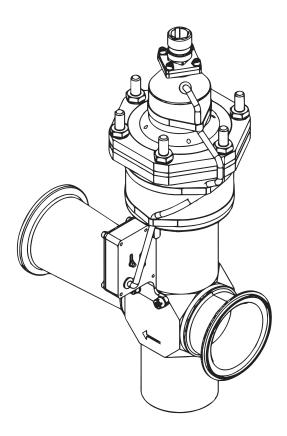
Aerospace Systems & Components has many flight proven Shutoff Valve designs currently installed on aircraft platforms.

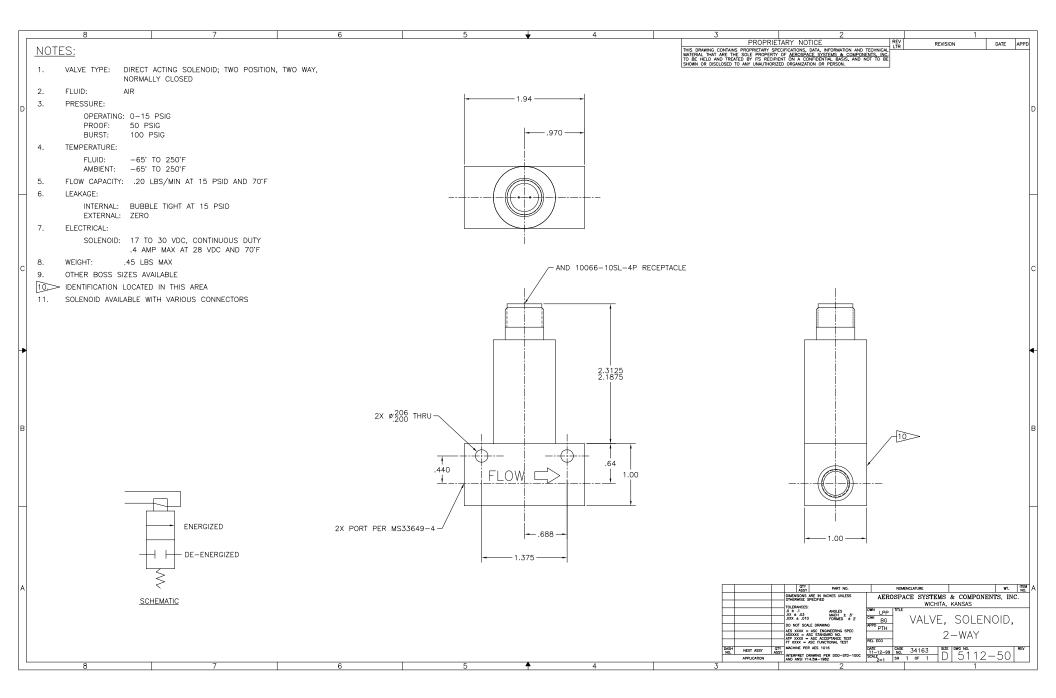
Solenoid type valves are provided for smaller line size applications.

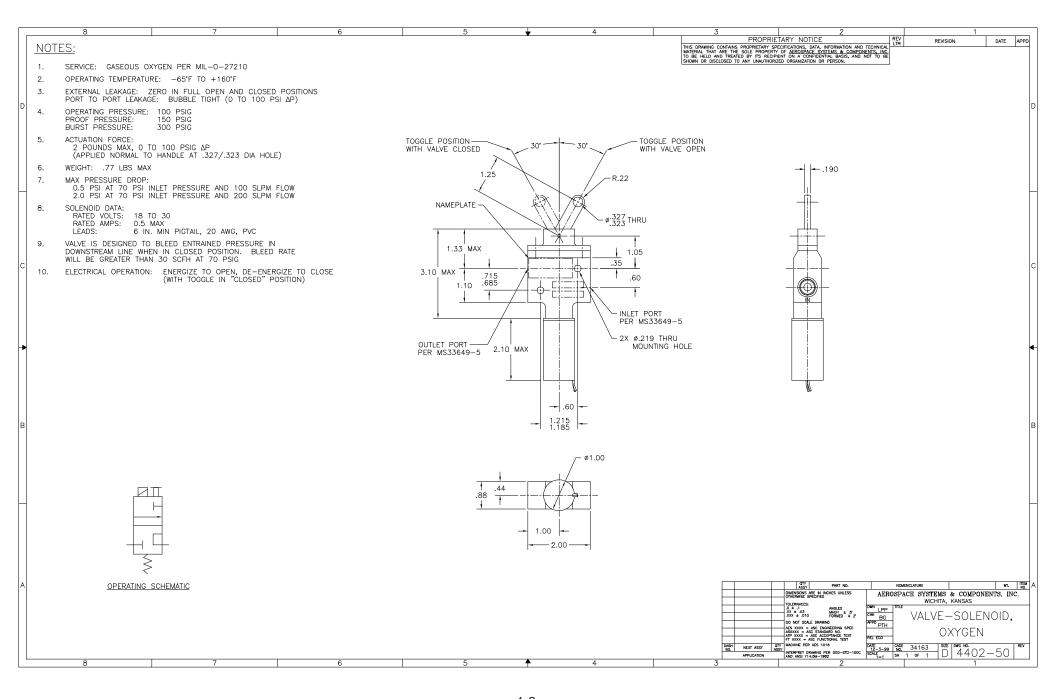
Gate type valves provide a shut-off or dual flow solution. They can be designed with extremely low full open pressure drop, internal leakage and the shortest installed length of any valve configuration on the market today.

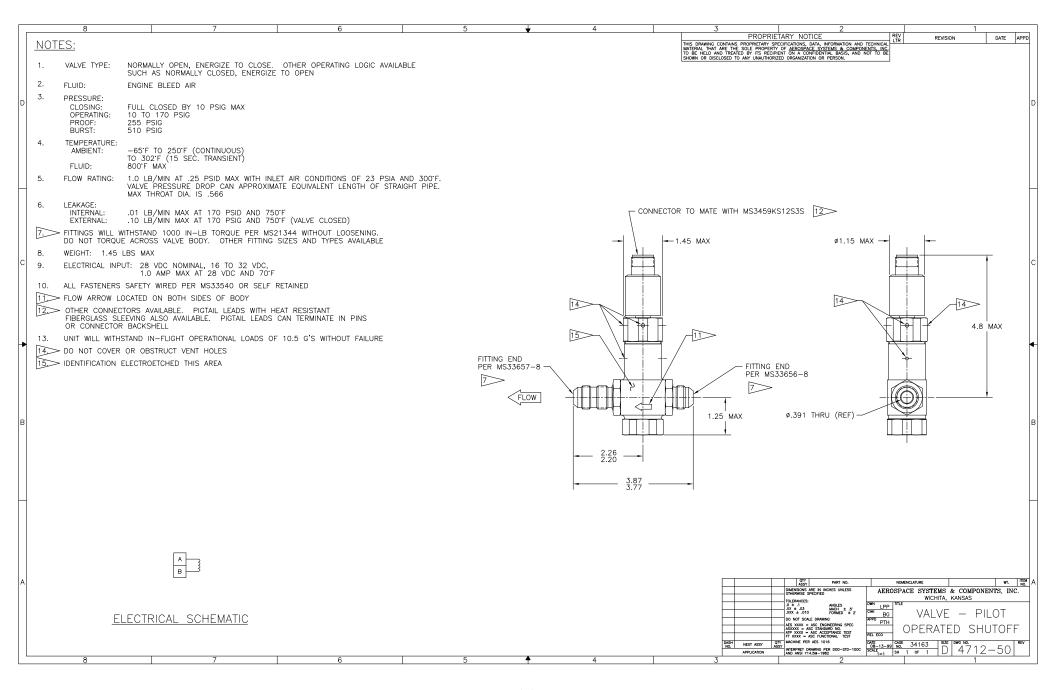
Butterfly type valves are utilized for larger line sizes or specific operating conditions as required. These type valves are especially suited for high temperature or high contamination environments.

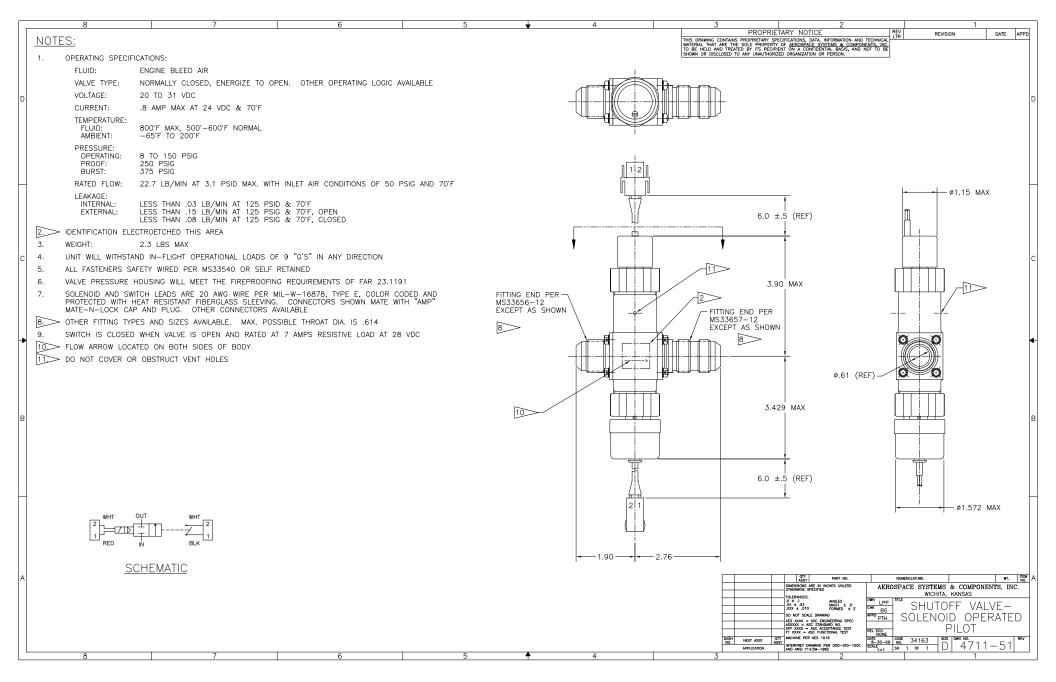
All of our shutoff valves can include options such as manual override and lockout, and position indication. ASC can custom design shutoff valves to operate in any pneumatic system providing the highest efficiency and resistance to the harshest environmental conditions at extreme temperatures.

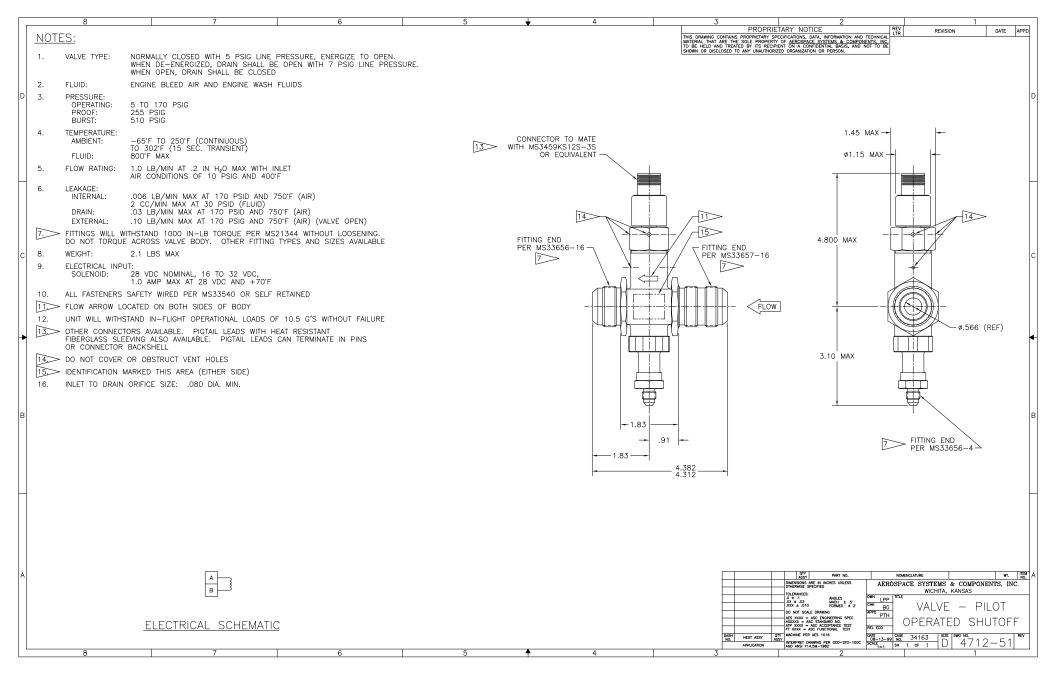


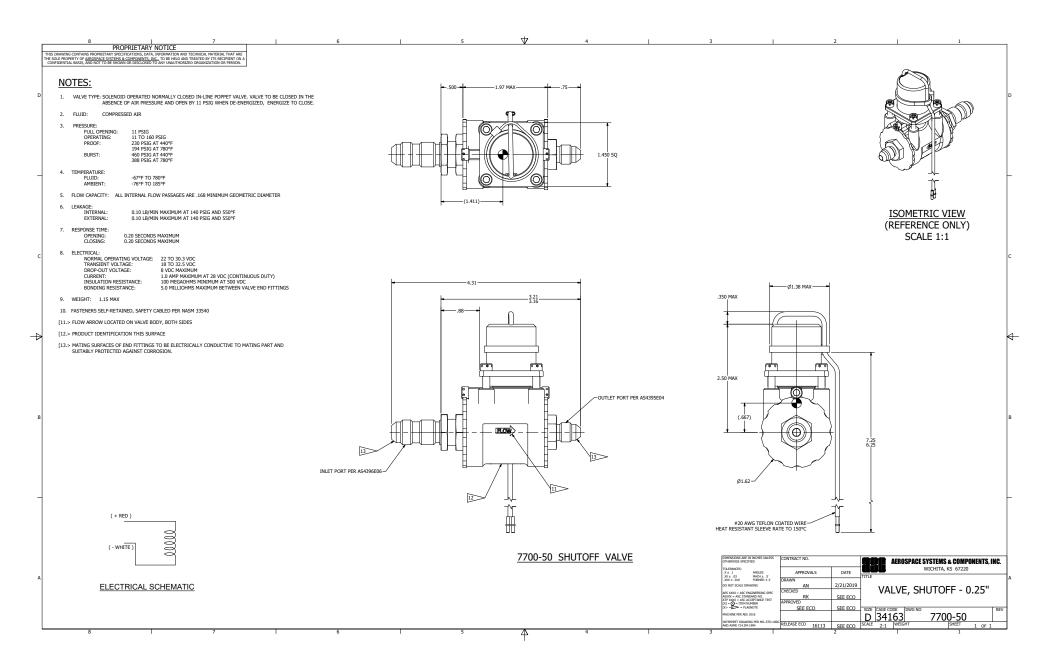


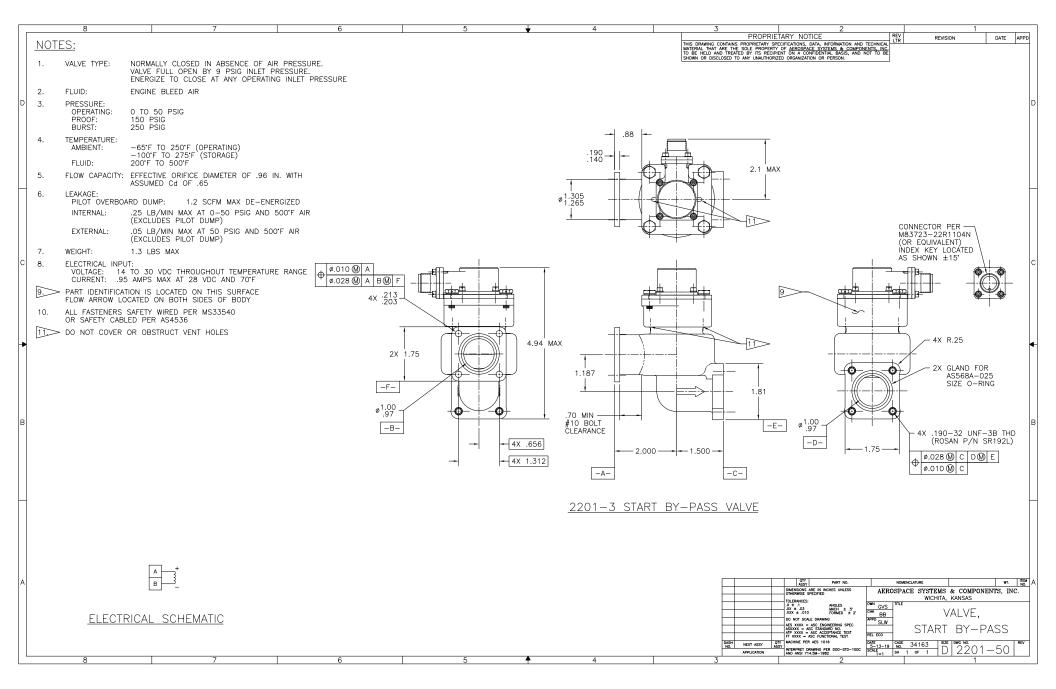


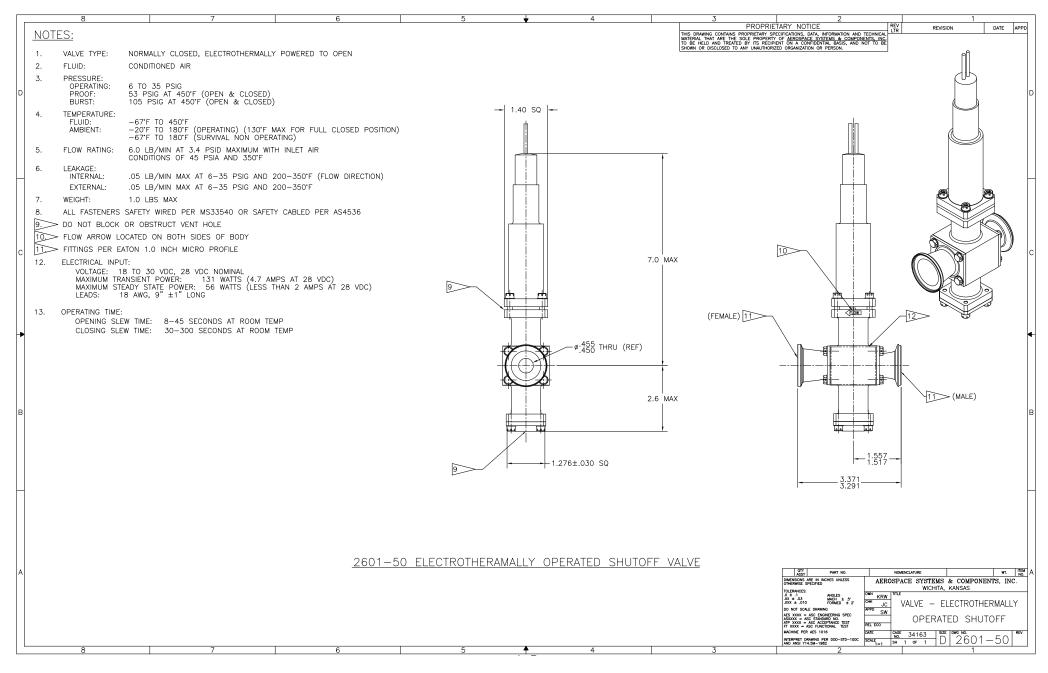


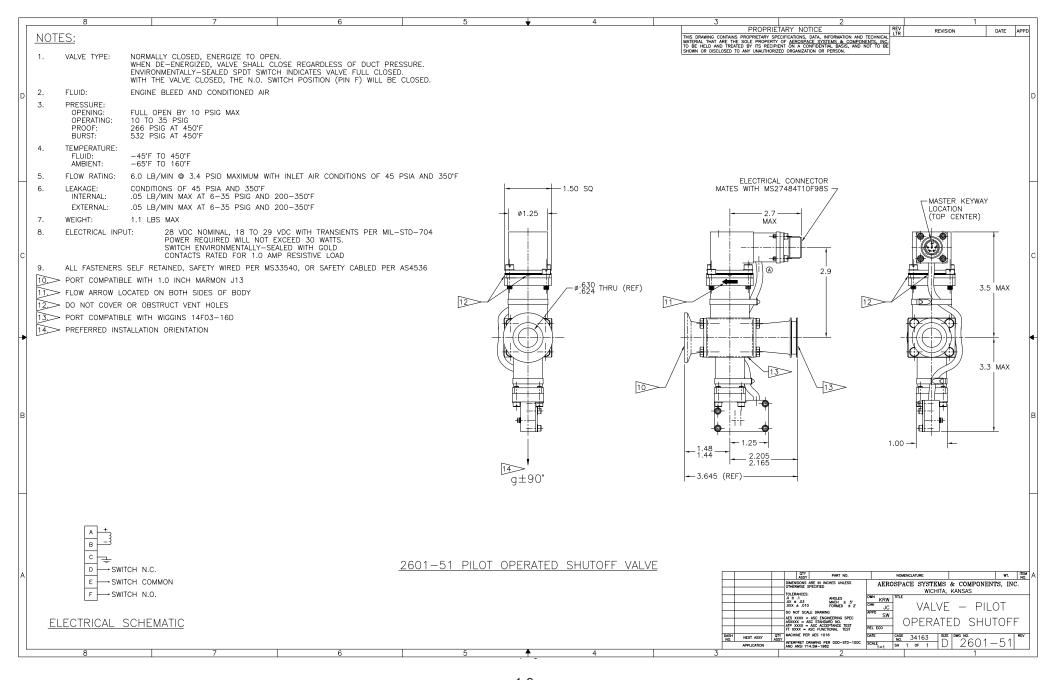


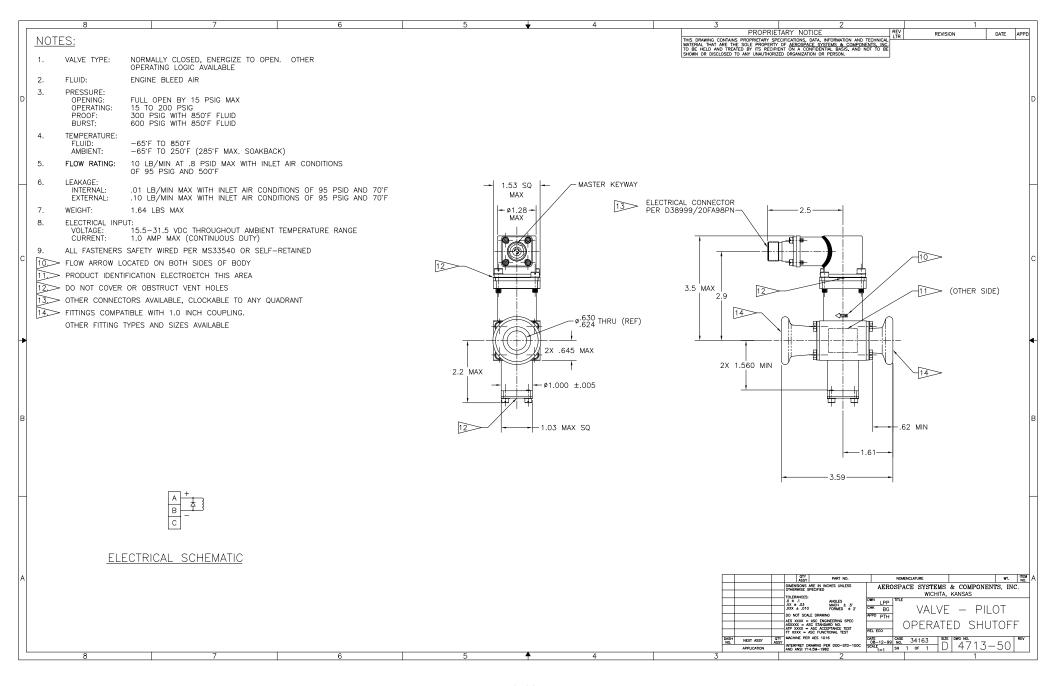


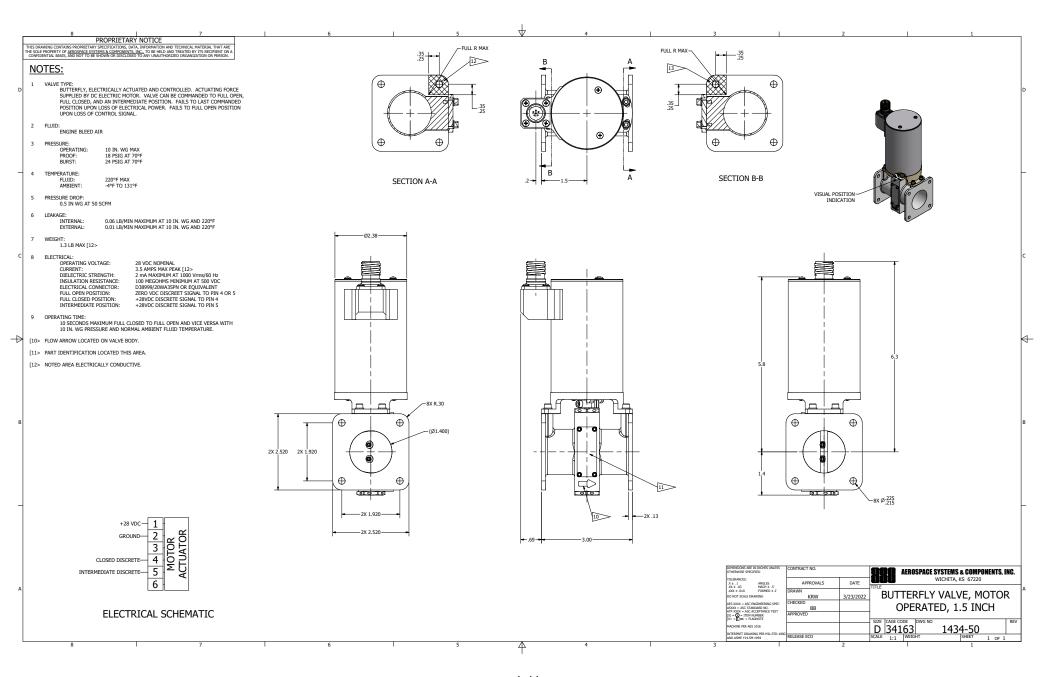


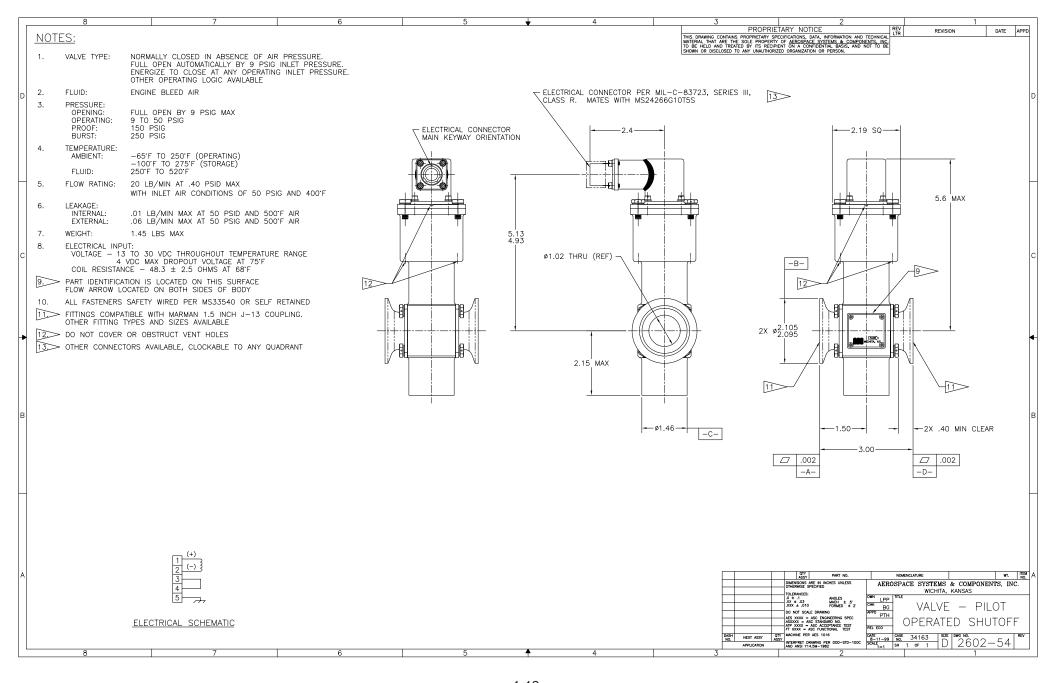


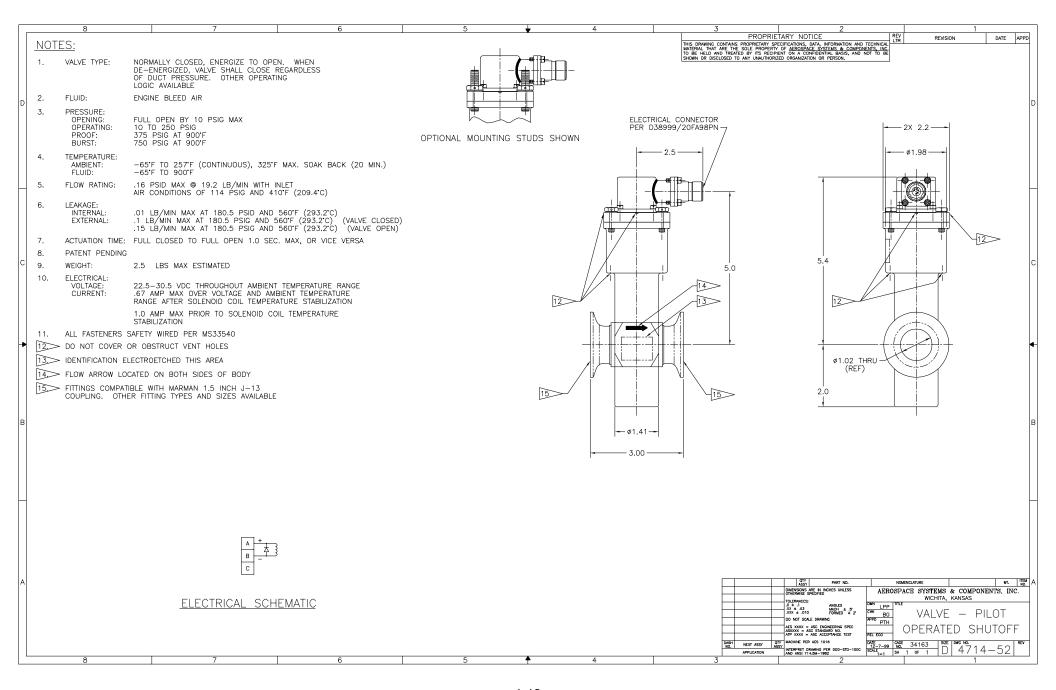


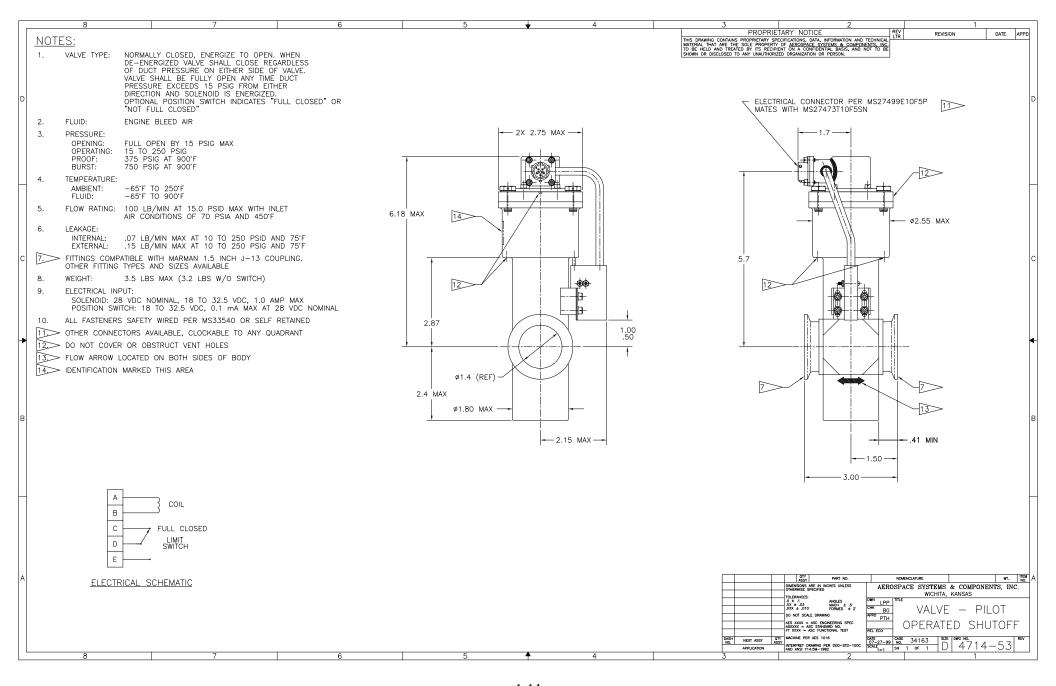


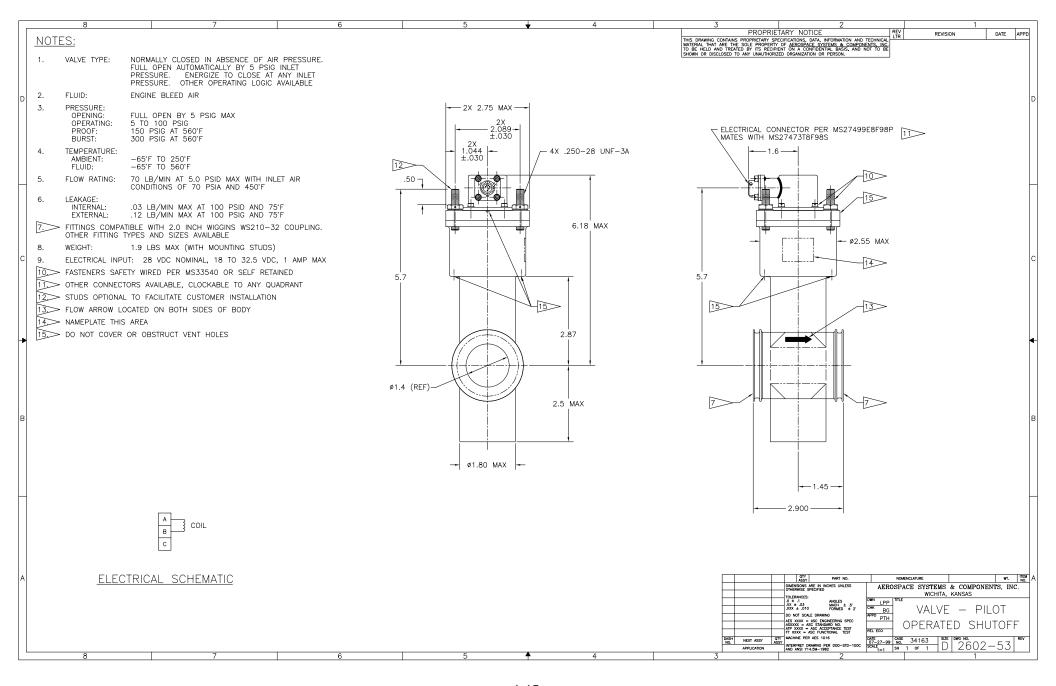


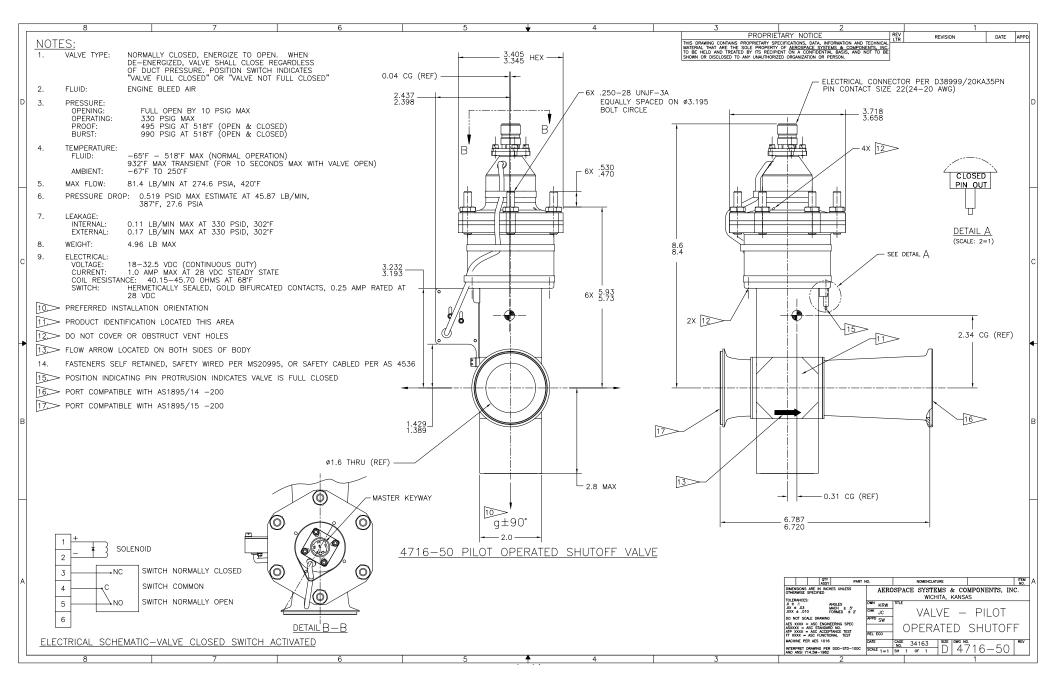


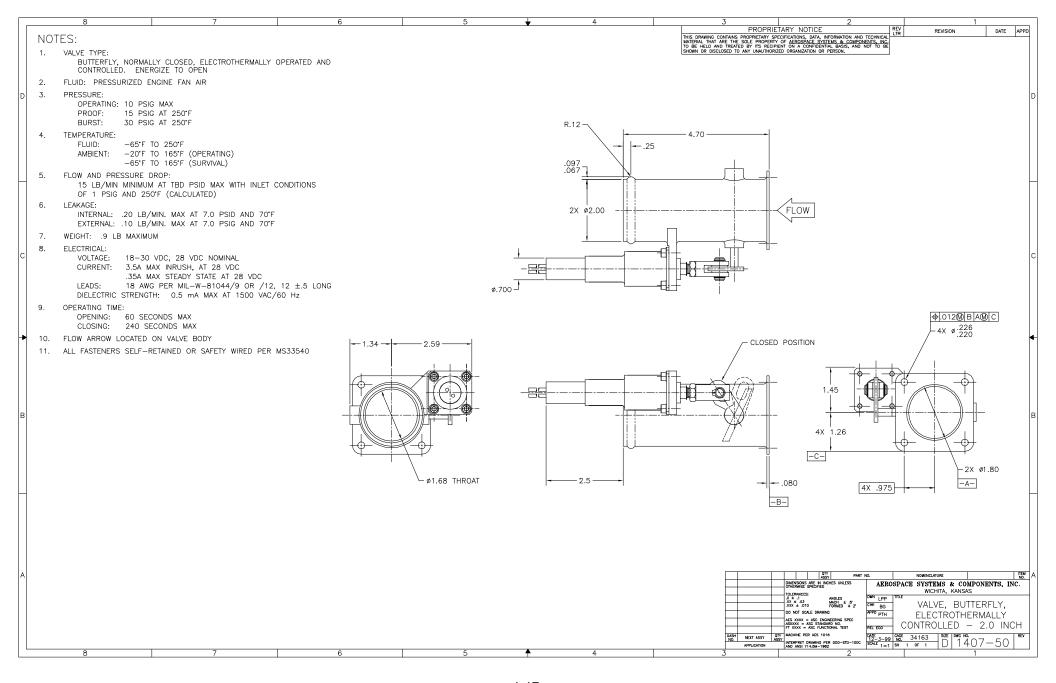


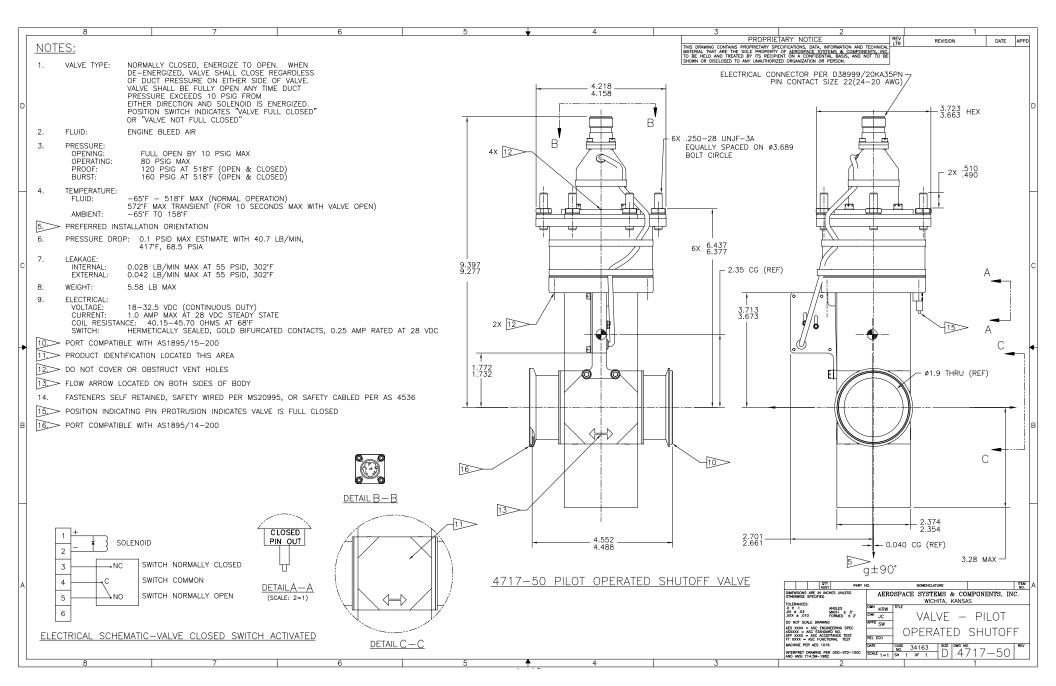


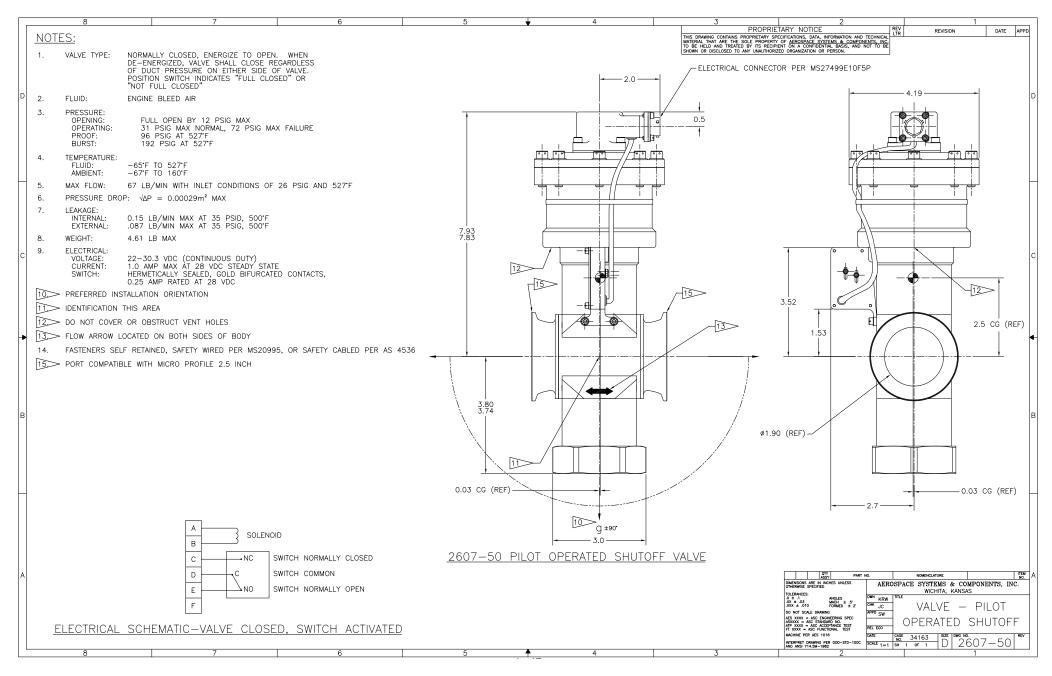


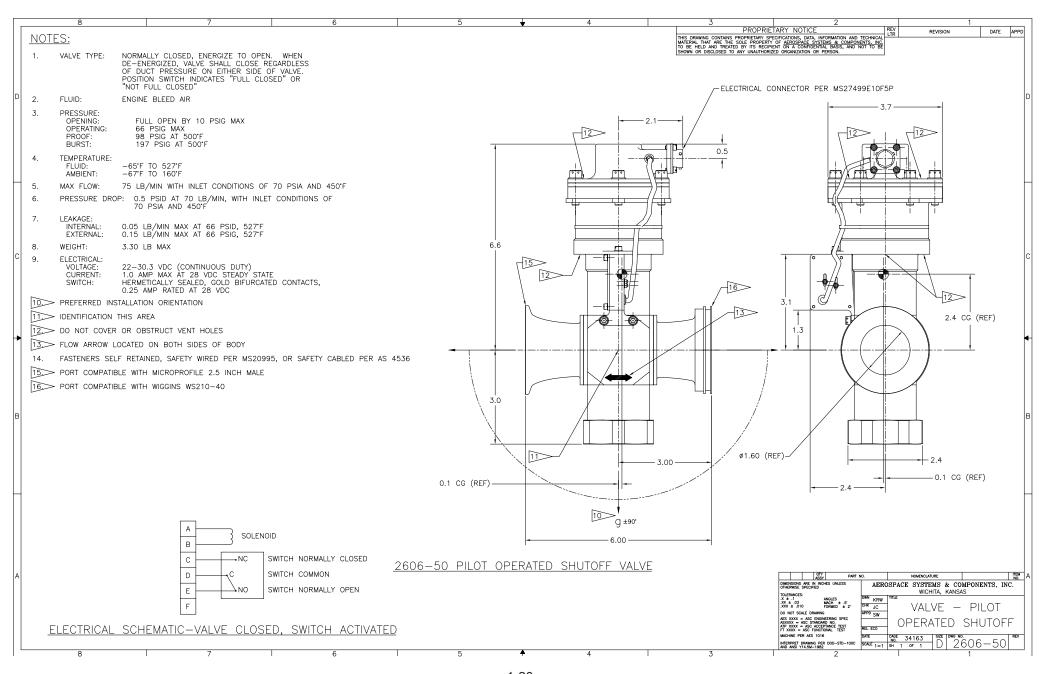


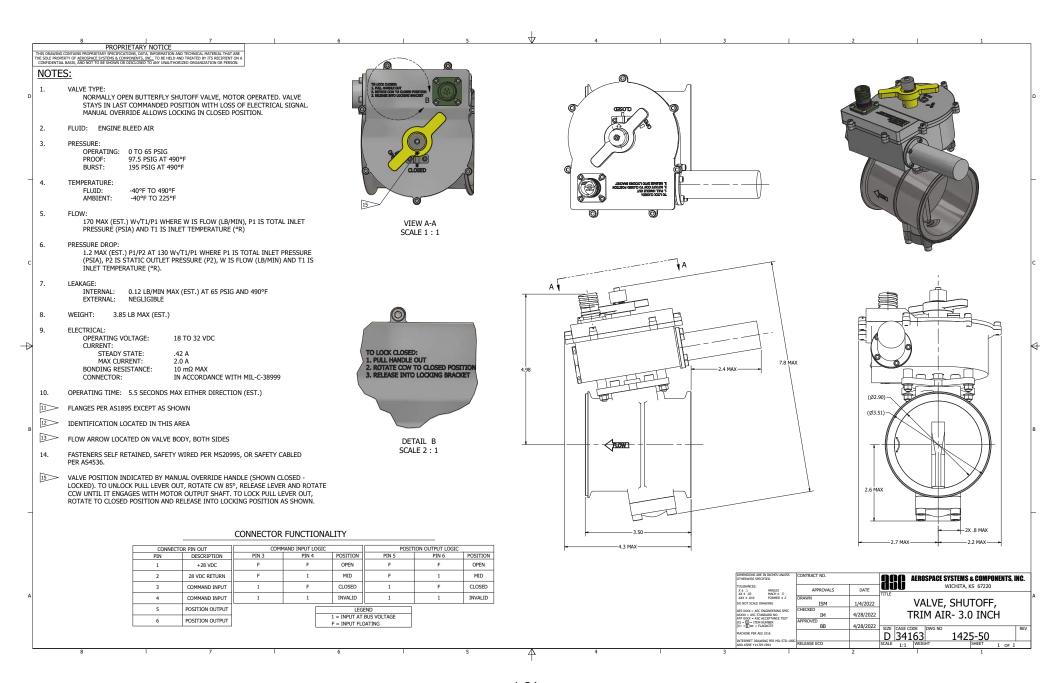


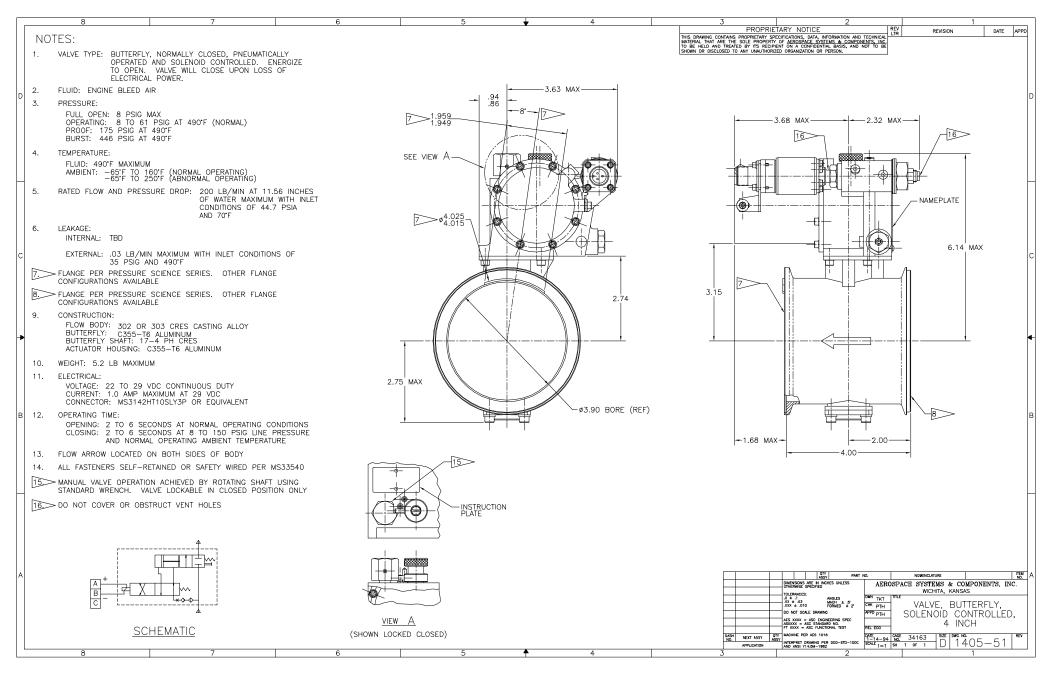


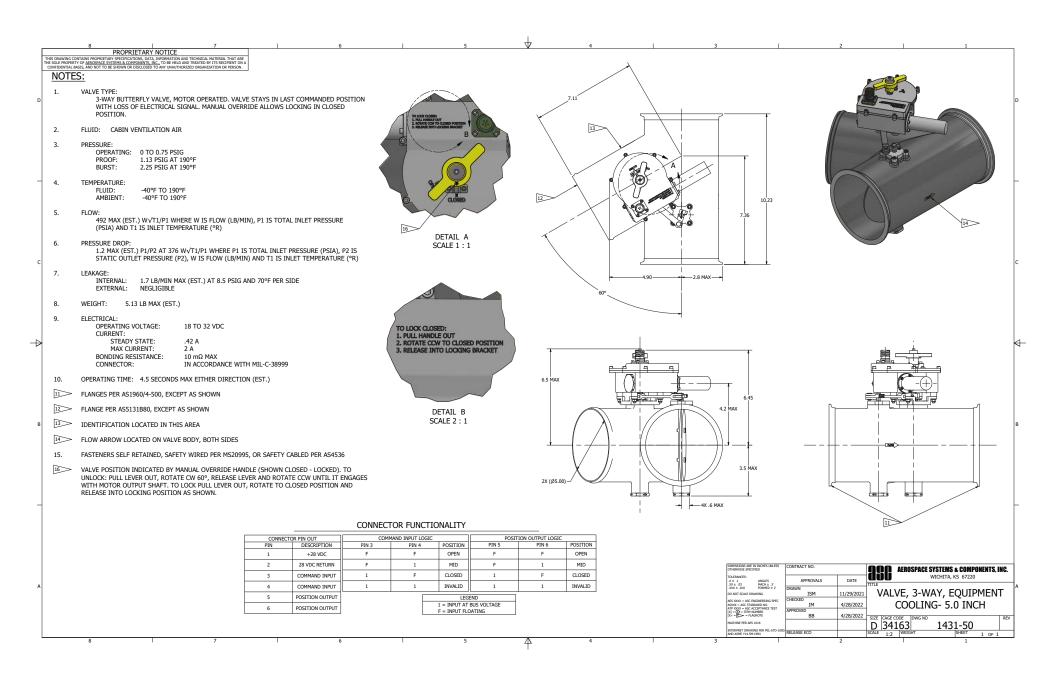


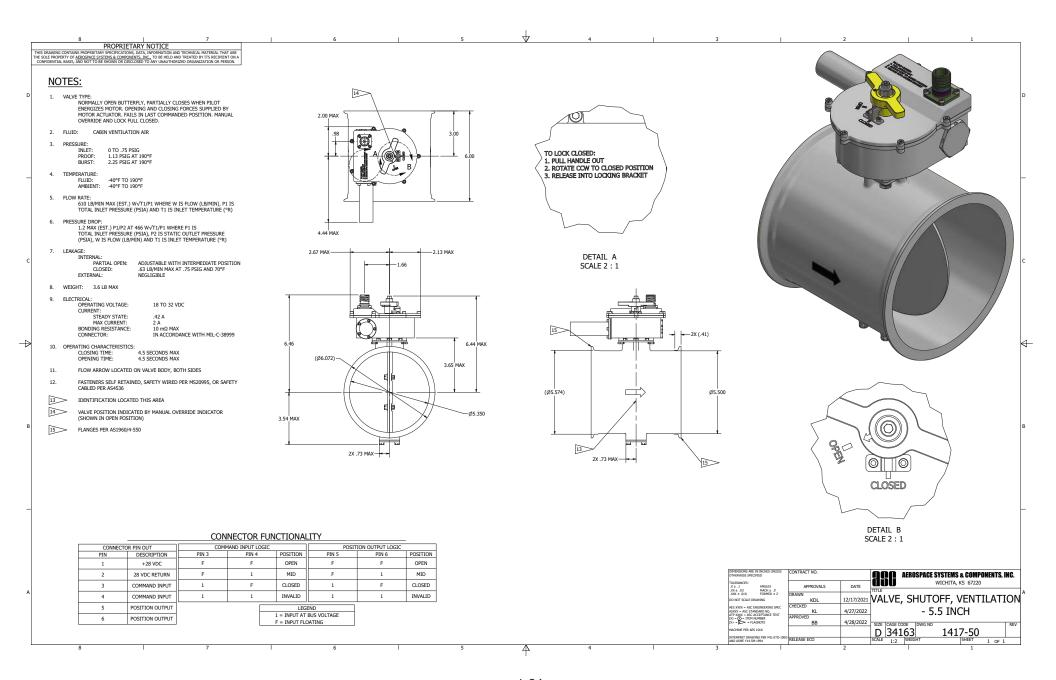


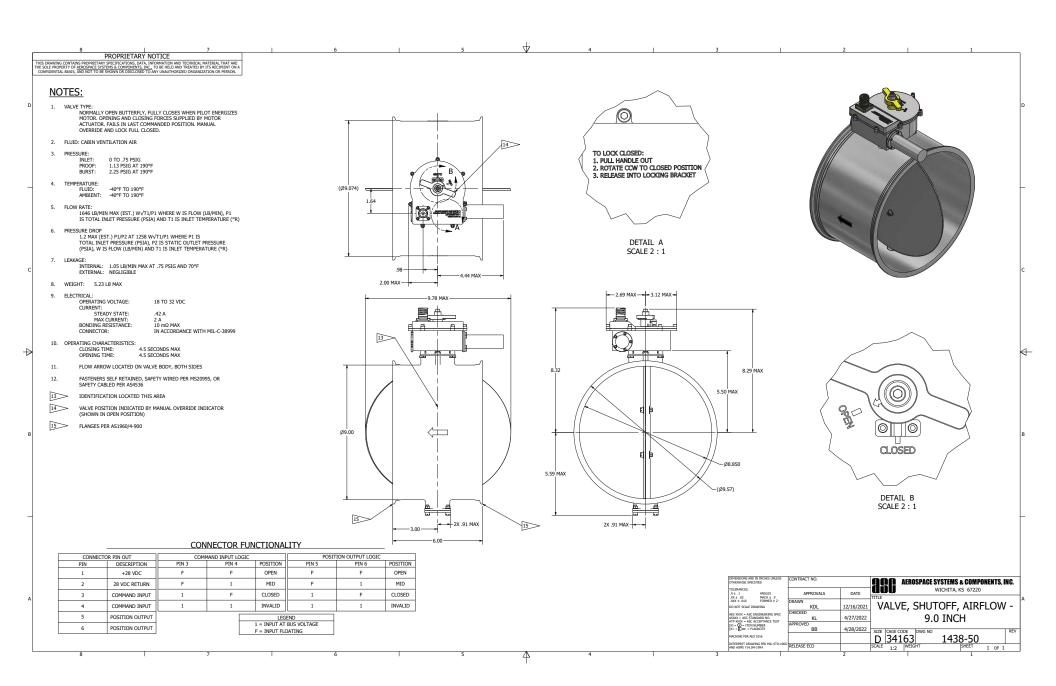












Pressure Regulating Shutoff Valves



Features

- · Aluminum, Stainless Steel, and Inconel
- Dash 4 and 1.0 inch to 2.5 inch (2.5 cm to 6.35 cm) Line Sizes available, Larger Possible
- Flow Media: Air
- Inlet Pressures to 380 PSIG (26 BAR)
- Regulated Pressures 10 to 68 PSIG (0.7 to 4.7 BAR) or as needed
- Fluid Temperatures to 1035°F (557°C)
- Ambient Temperatures to 300°F (149°C)
- Solenoid Operated for Shut-off or Bi-level (13 to 32 VDC)
- Flows to 170 LB/MIN (80 KG/MIN)
- Canted Axis Butterfly or Inline Sleeve types available
- Straight Axis Butterfly Possible for shortest Flange to Flange Length
- Pressure Regulation with Integral or Downstream Sense

Pressure Regulating Shutoff Valves

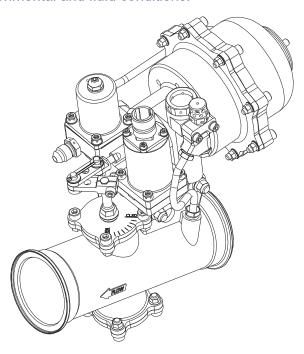
Aerospace Systems & Components has reliable Pressure Regulating Valves currently installed on many aircraft platforms including engine nacelle, engine pylon and tailcone applications.

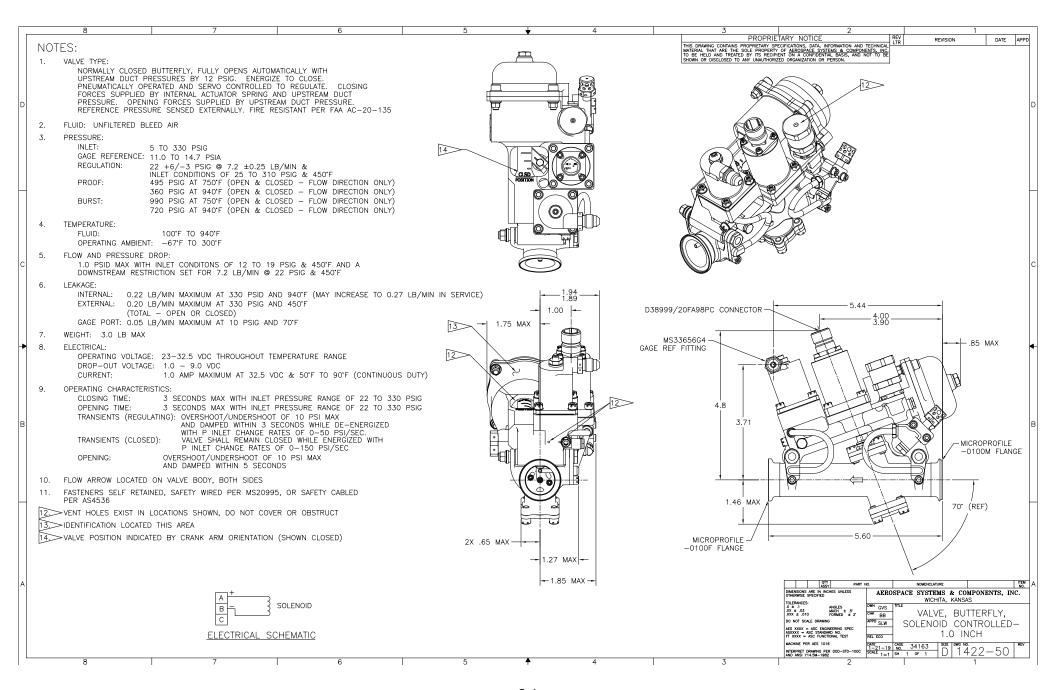
Butterfly type pressure regulating valves provide extreme fluid temperature and contamination resistance while providing a low pressure drop and high configuration flexibility.

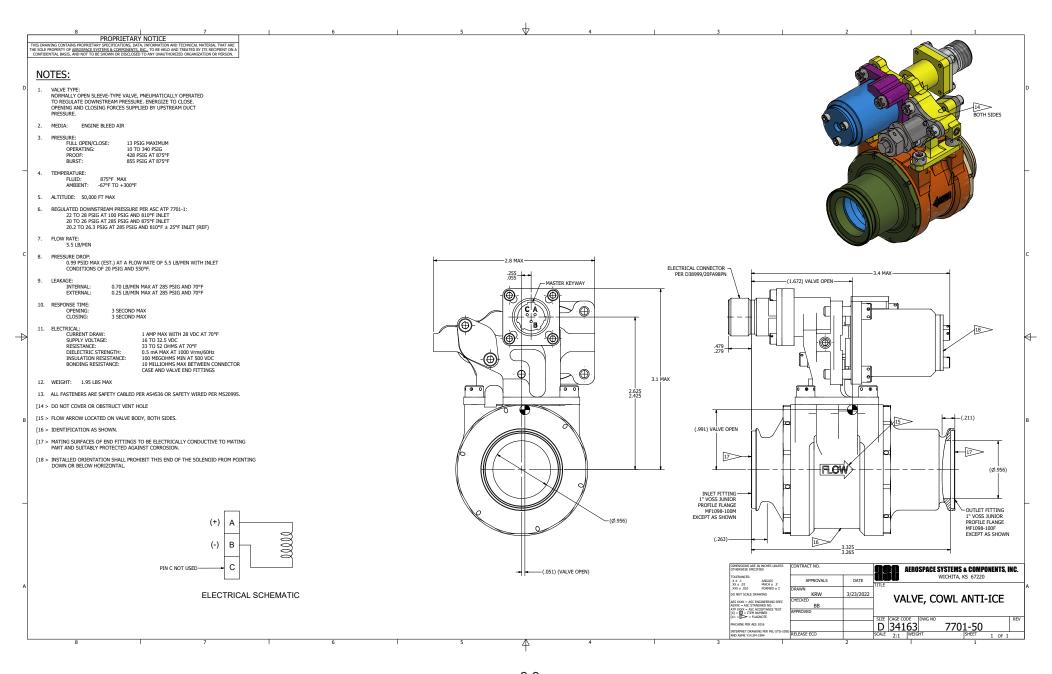
Inline sleeve type pressure regulating valves provide an extremely small installation envelope and fast operation when needed.

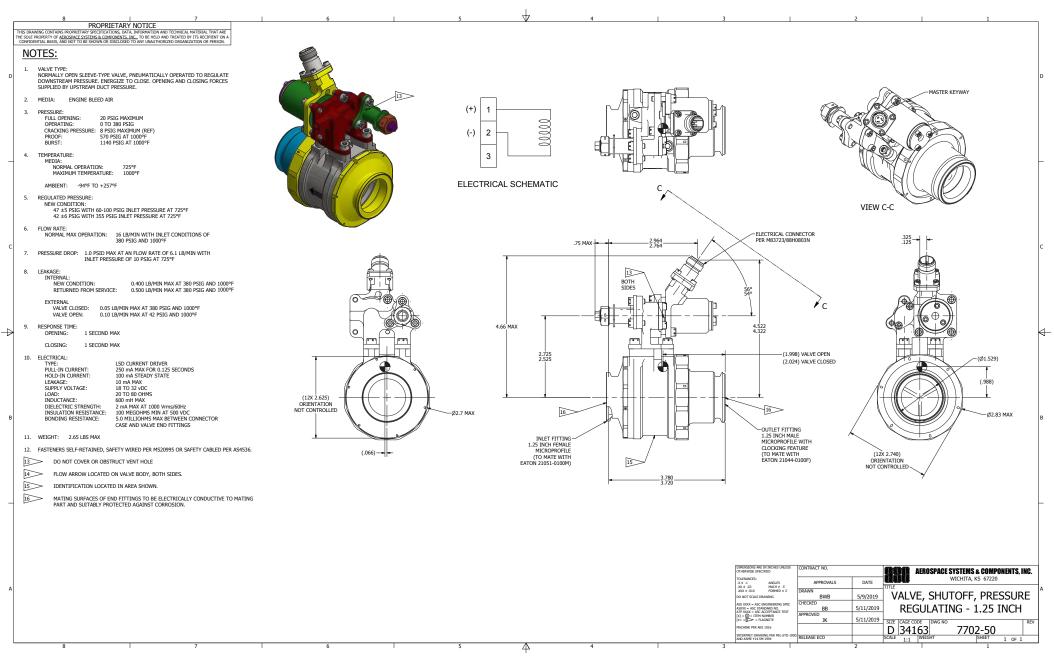
All of our pressure regulating valves can include options such as shut-off functionality, bi-level regulation, manual override and lockout, position indication, multi-level redundancy and innovative fire resistance.

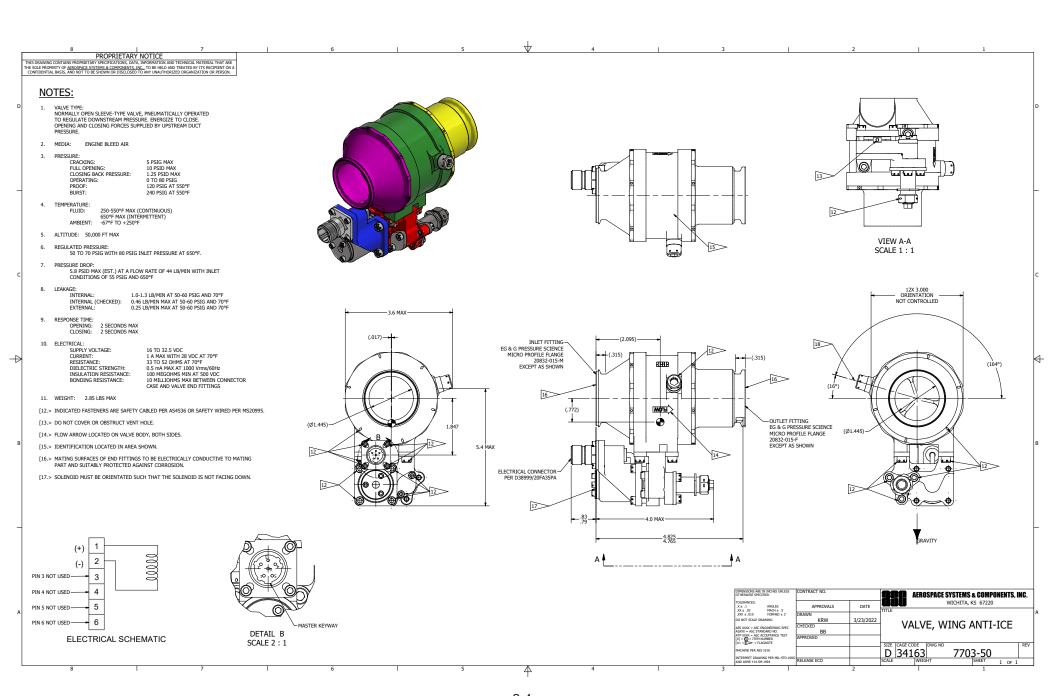
ASC can custom design pressure regulators to operate in any pneumatic system providing the highest efficiency and resistance to the harshest environmental and fluid conditions.

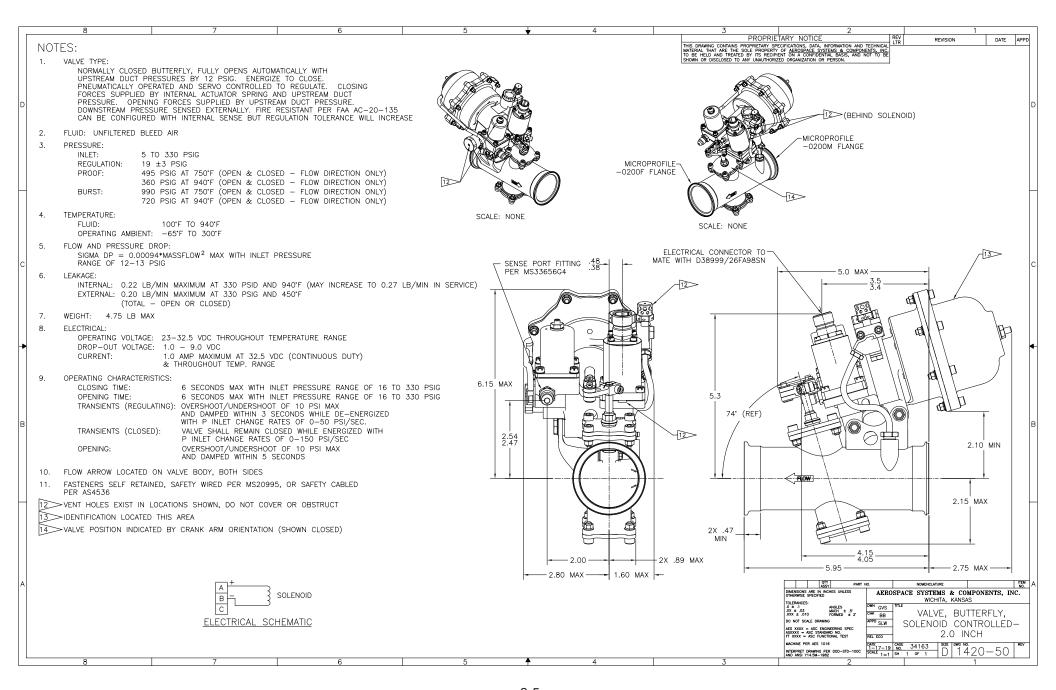


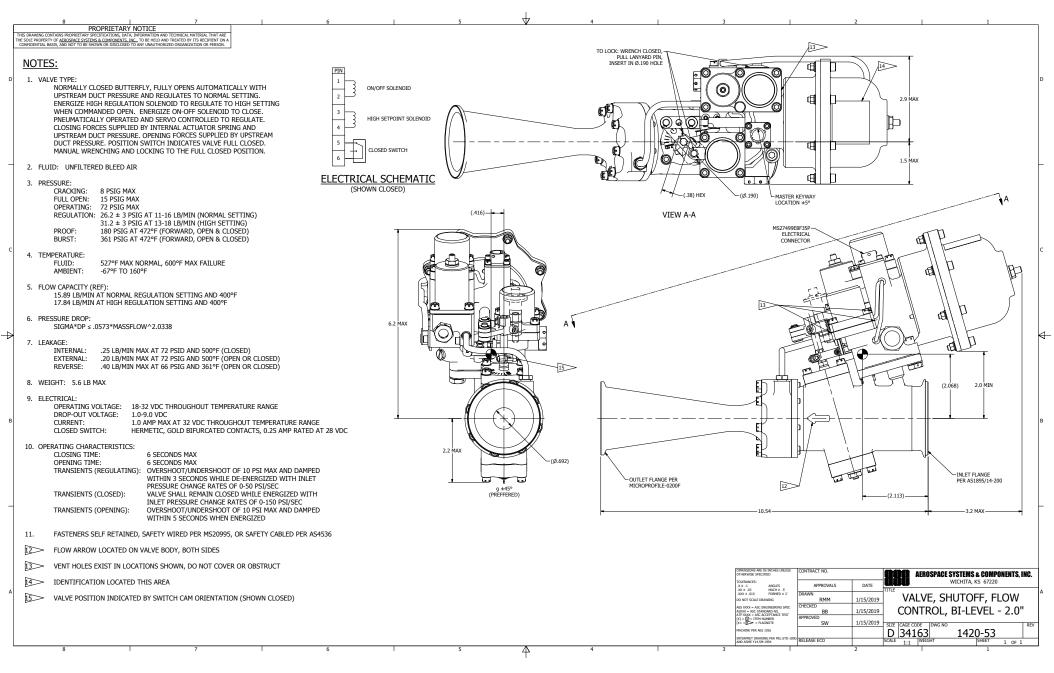


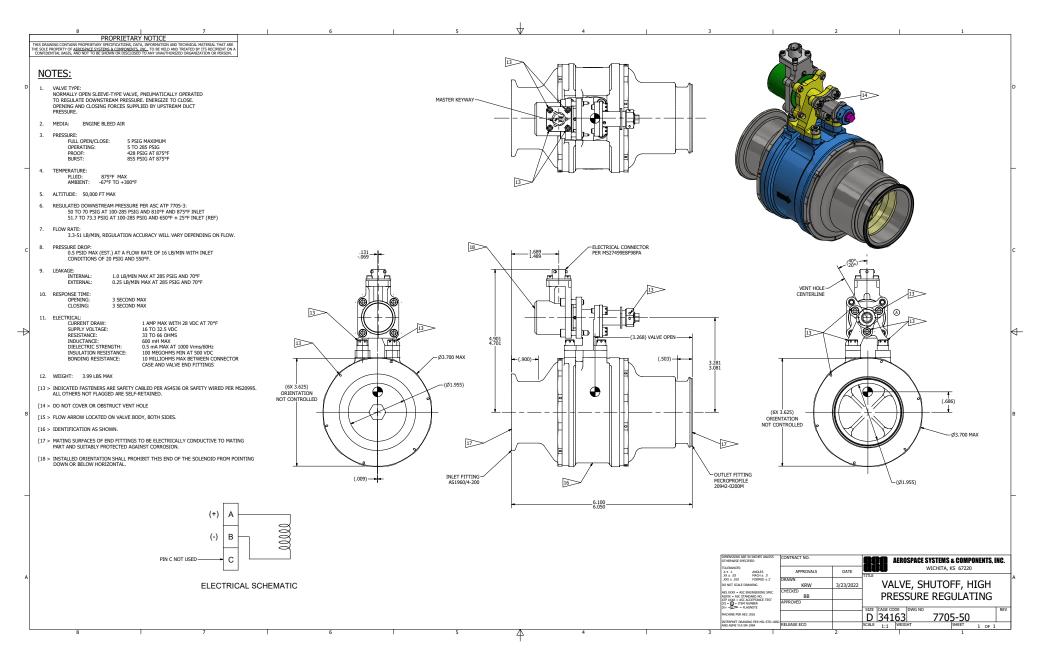


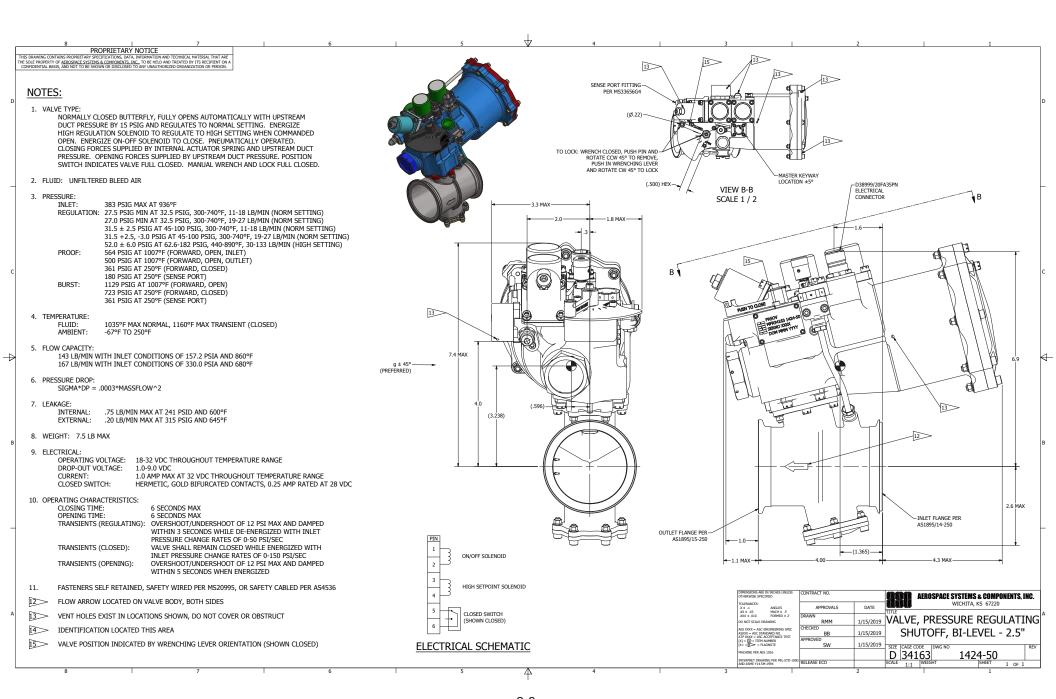


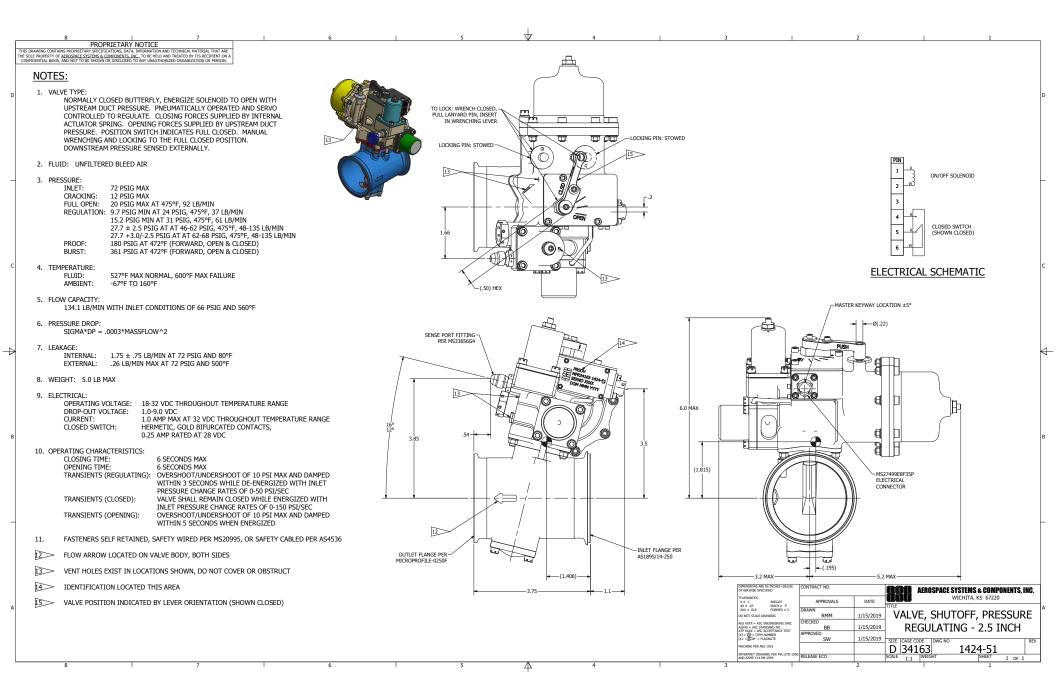












Modulating Valves

Modulating Valves

Aerospace Systems & Components has Modulating Valves in use on a wide variety of applications including APU load control, temperature control, flow control and pressure control.

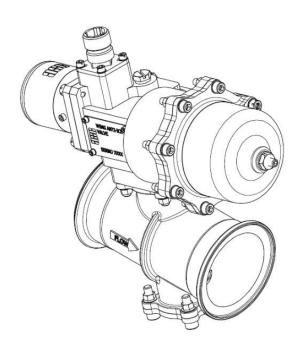
Butterfly type modulating valves provide extreme fluid temperature and contamination resistance while providing a low pressure drop and high configuration flexibility. Designs available which utilize electropneumatic servo control or motor operation.

Inline sleeve type modulating valves provide an extremely small installation envelope and fast operation when needed.

All of our modulating valves can include options such as manual override and lockout, position indication, and innovative fire resistance.

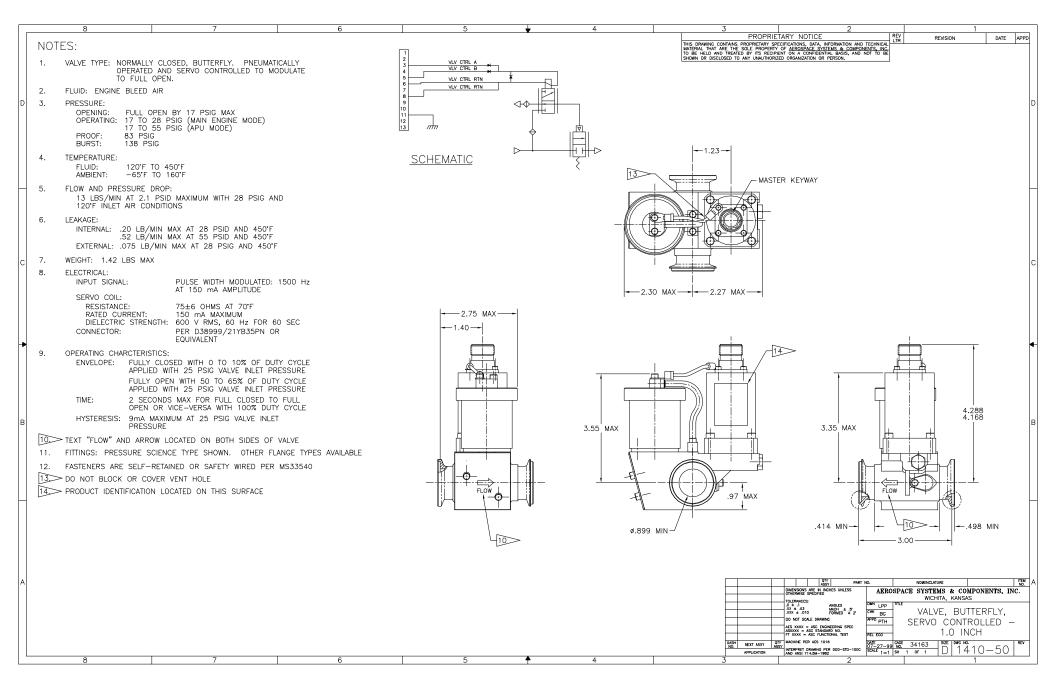
ASC can custom design modulating valves to operate in any pneumatic system.

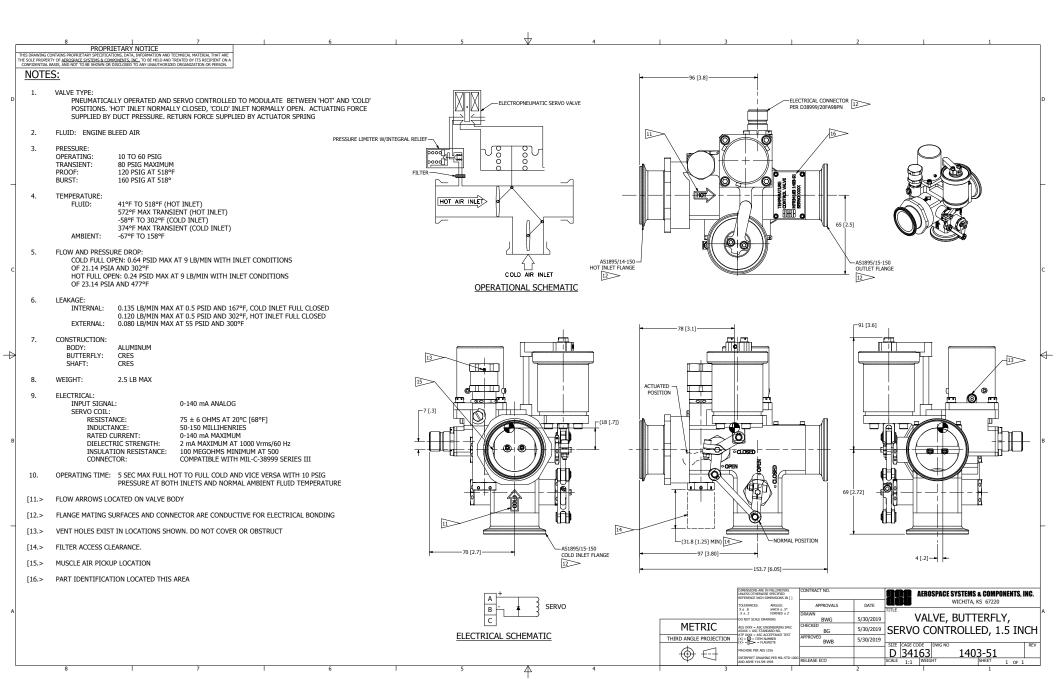


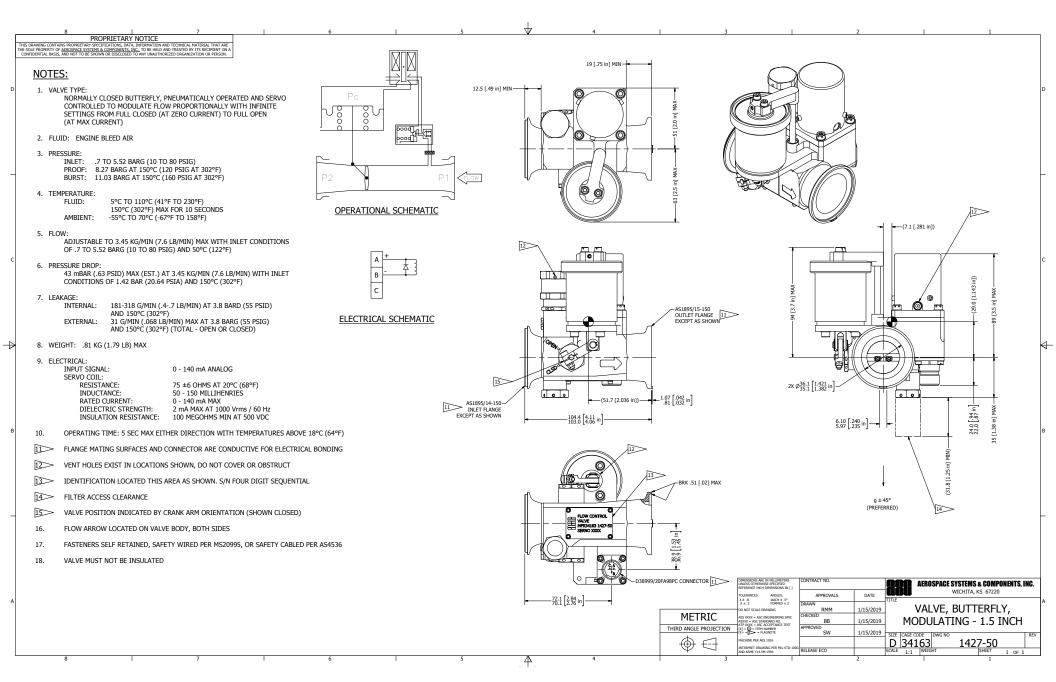


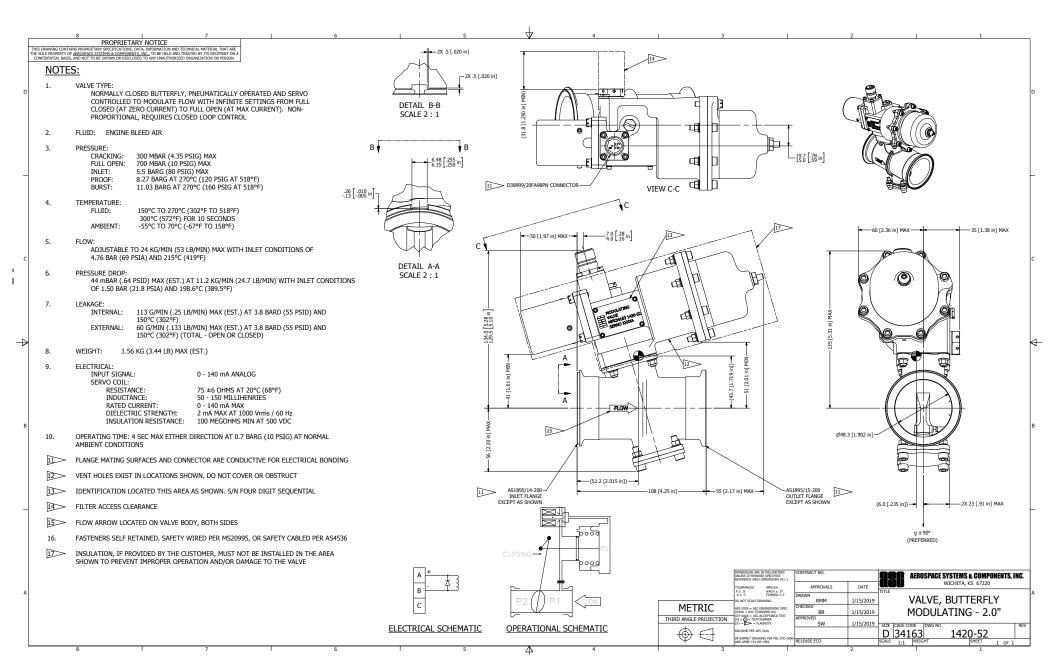
Features

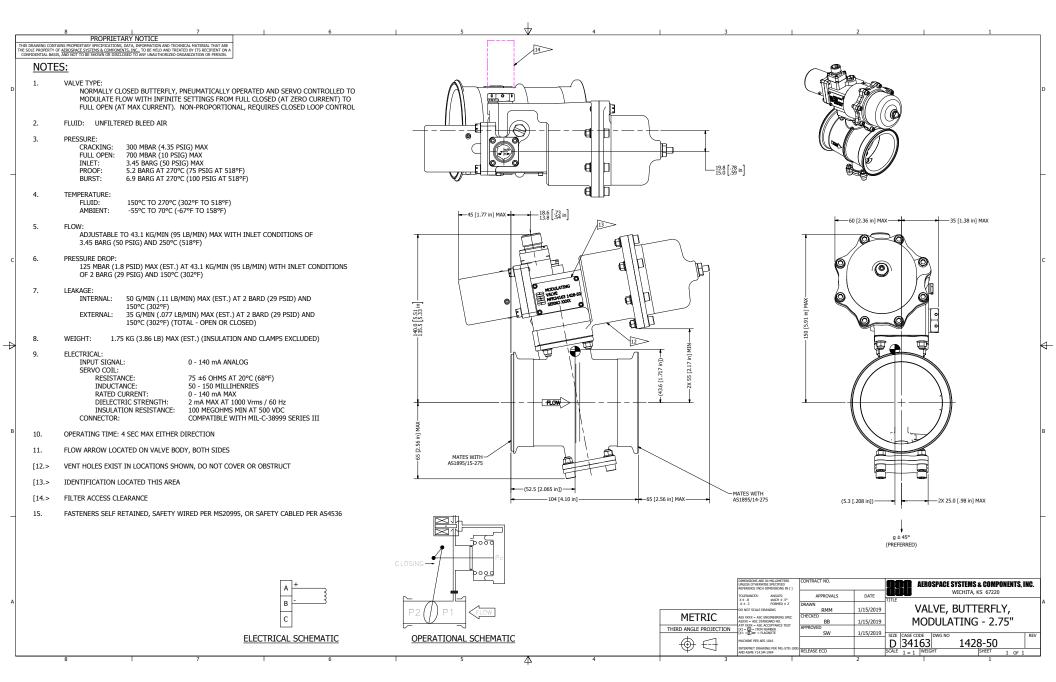
- Aluminum, Stainless Steel, and Inconel
- 1.0 inch to 4.0 inch (2.5 cm to 10 cm) Line Sizes available
- Flow Media: Air
- Inlet Pressures to 120 PSIG (8.3 BAR)
- Fluid Temperatures to 850°F (454°C)
- Ambient Temperatures to 300°F (149°C)
- Servo Operated (0-100 mA or 0-140 mA analog or PWM inputs)
- Motor Operated (Brush, Brushless, Stepper)
- Controller can be Internal or External
- Optional Position Feedback (Discrete or Continuous)
- Canted Axis Butterfly or Inline Sleeve types available
- Straight Axis Butterfly Possible for shortest Flange to Flange Length

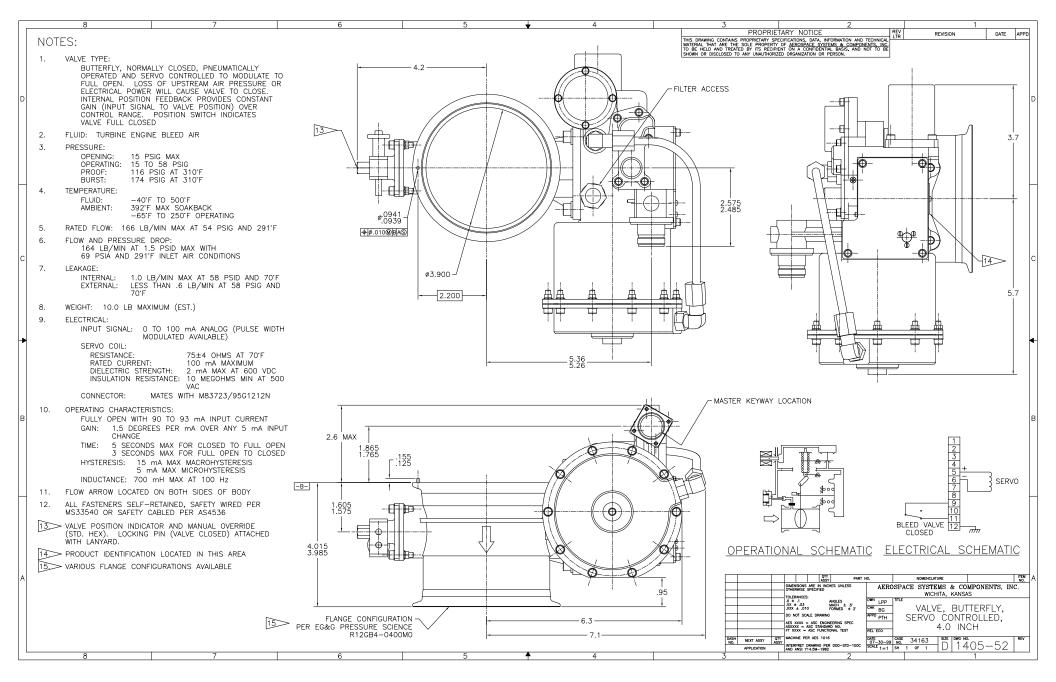


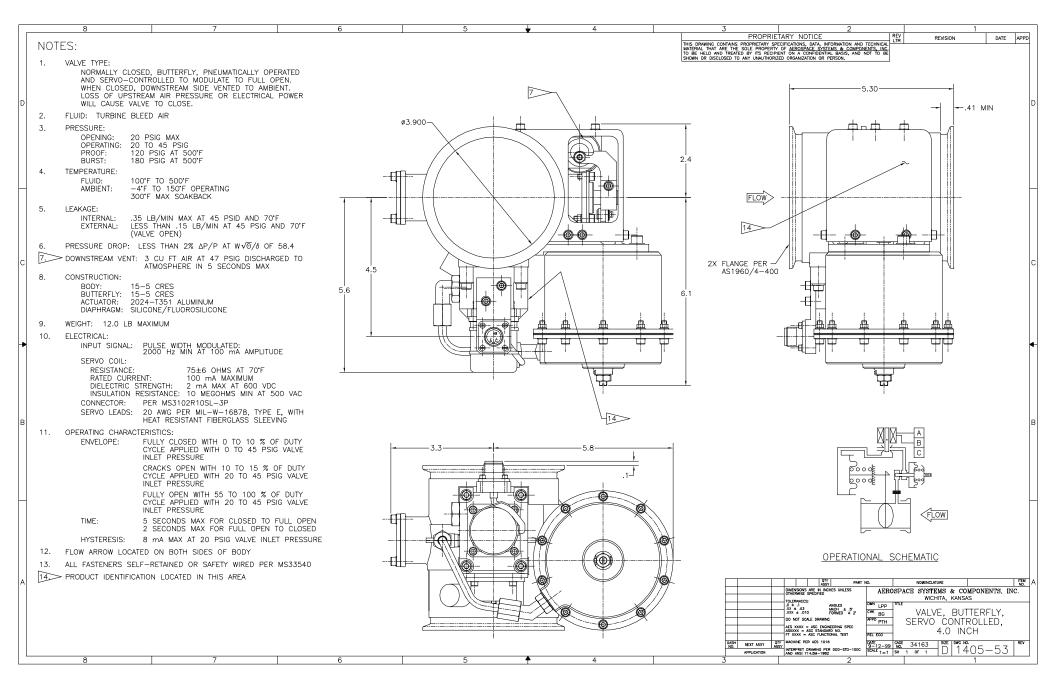












3-Way & 6-Way Solenoid Valves



Features

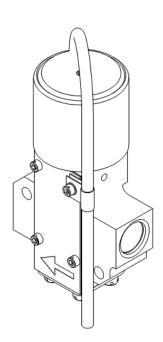
- Aluminum and Stainless Steel
- Dash 3 to Dash 6 Line Sizes available
- Flow Media: Oxygen, Air, Fuel
- Pressures to 3100 PSIG (214 BAR)
- Fluid Temperatures to 550°F (288°C)
- Ambient Temperatures to 250°F (121°C)
- Solenoid Operated (10 to 32 VDC)
- Three and Six Way; Two Position
- Soft and Hard Seat
- Balanced Spool available
- Normally Open or Normally Closed

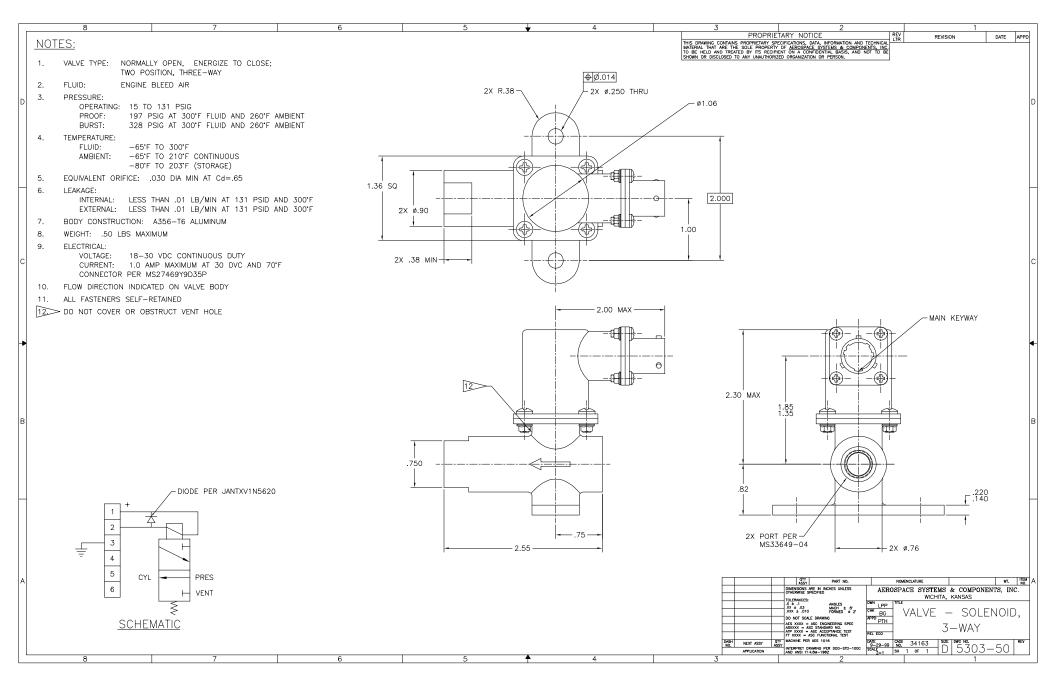
3-Way & 6-Way Solenoid Valves

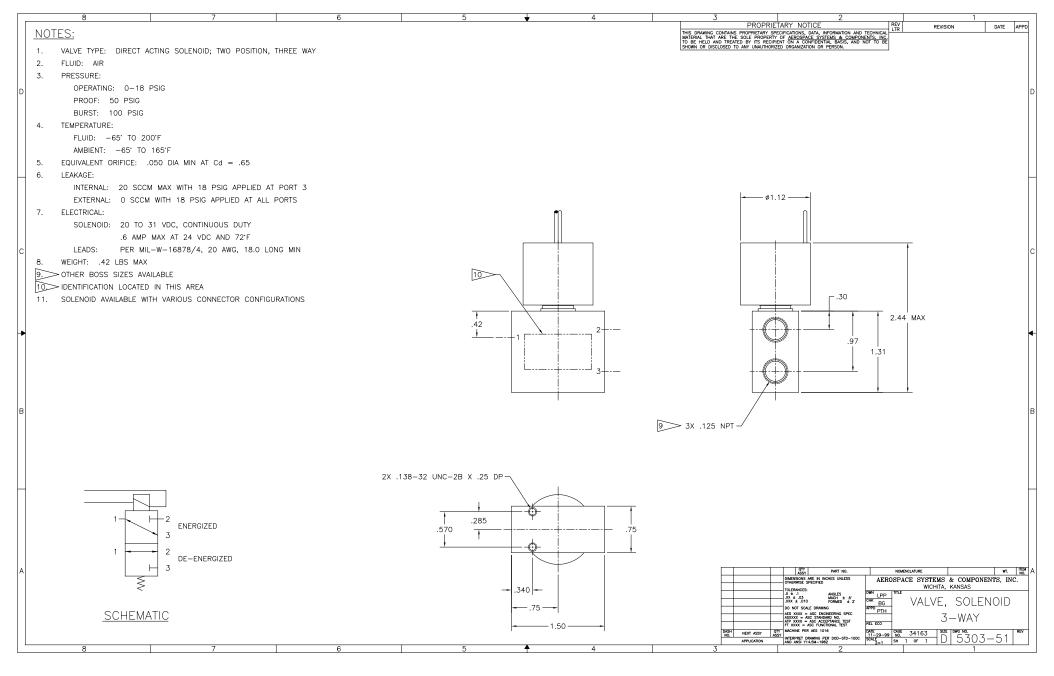
Aerospace Systems & Components has flight proven 3-Way & 6-Way Solenoid Valve designs currently installed on many aircraft platforms.

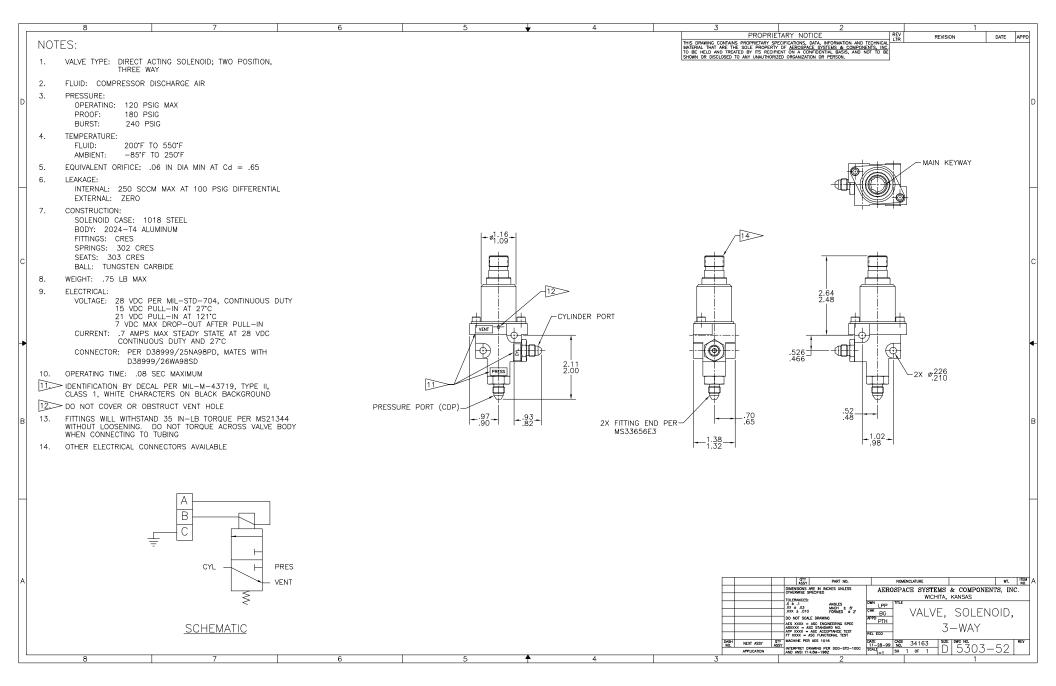
A large variety of types, media and operating pressures are offered.

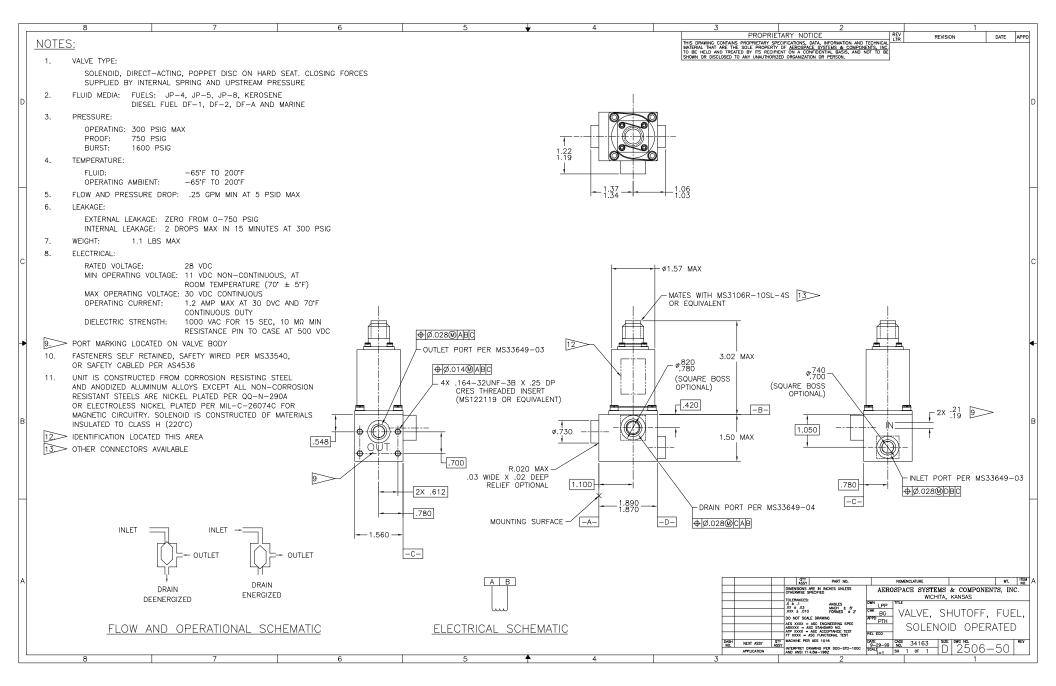
ASC can custom design solenoid valves to meet many needs in pneumatic, hydraulic and fuel systems.

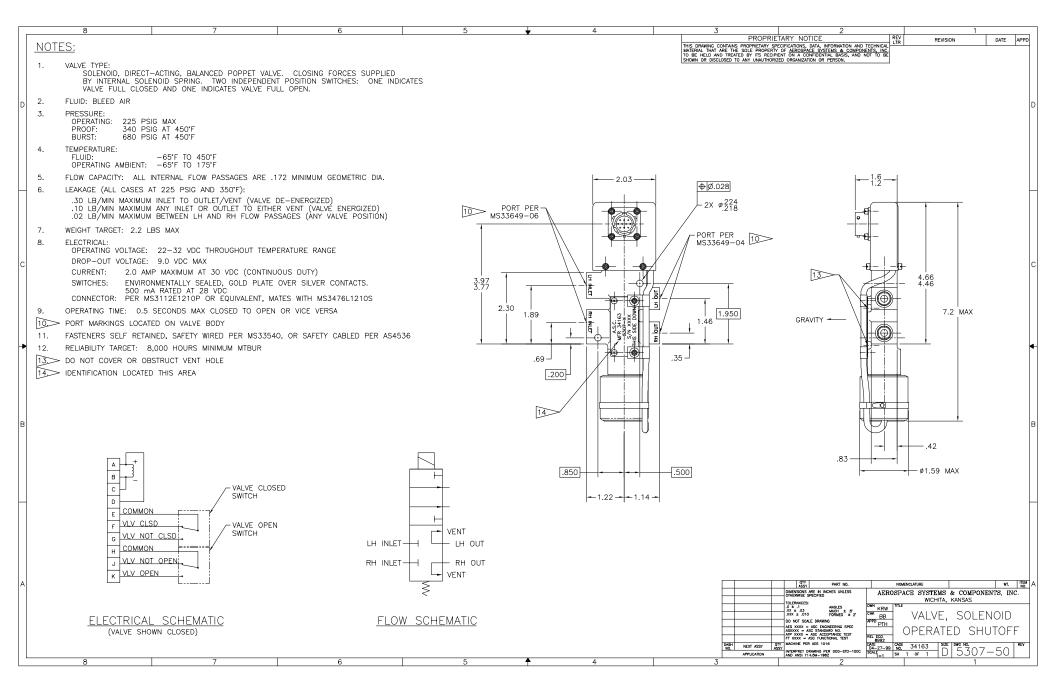












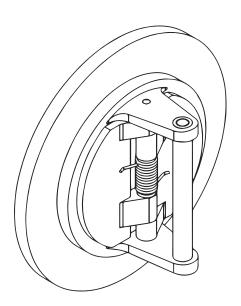
Check Valves

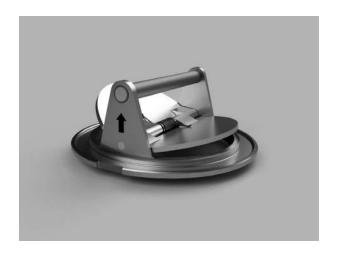
Check Valves

Aerospace Systems & Components has flight proven Check Valve designs currently installed on many aircraft and military land vehicle platforms across pressure extremes from inches of water to high pressure engine bleed applications. Common applications are HP/LP bleed intersect, negative pressure relief in cabins, reverse pressure protection in environmental system supply.

All of our check valves can include options such as closing spring and center of percussion stop. Mounting options include bulkhead, flange or housing mounted.

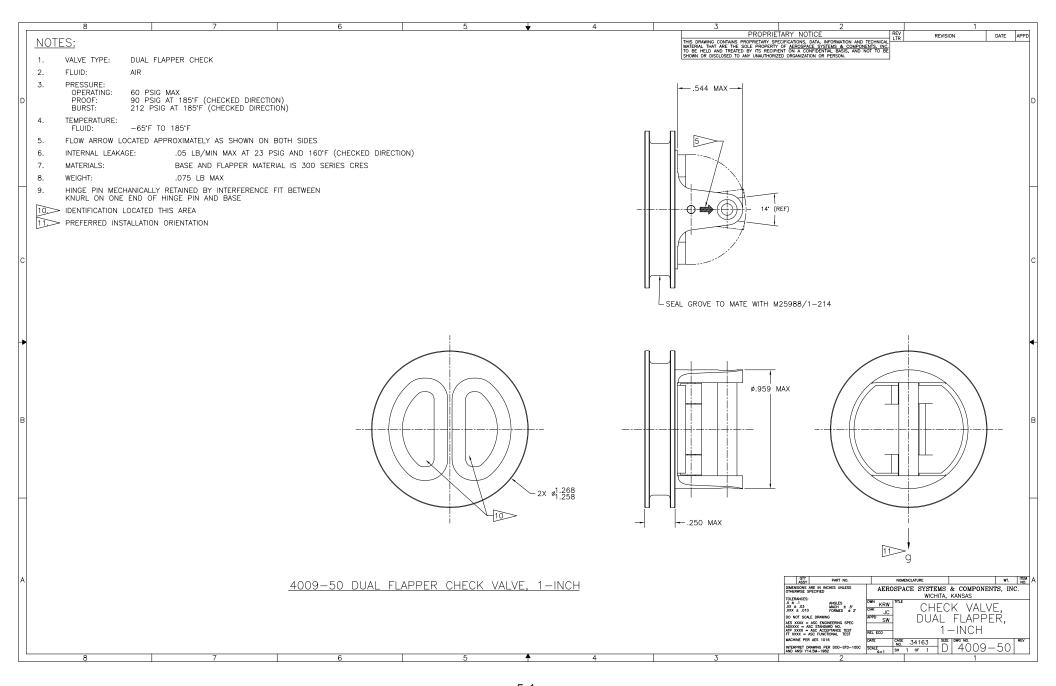
ASC can custom design check valves to perform in systems with extremely low cracking pressure, low internal leakage, single point failure considerations with multiple flappers, high impact, and flutter resistance when needed.

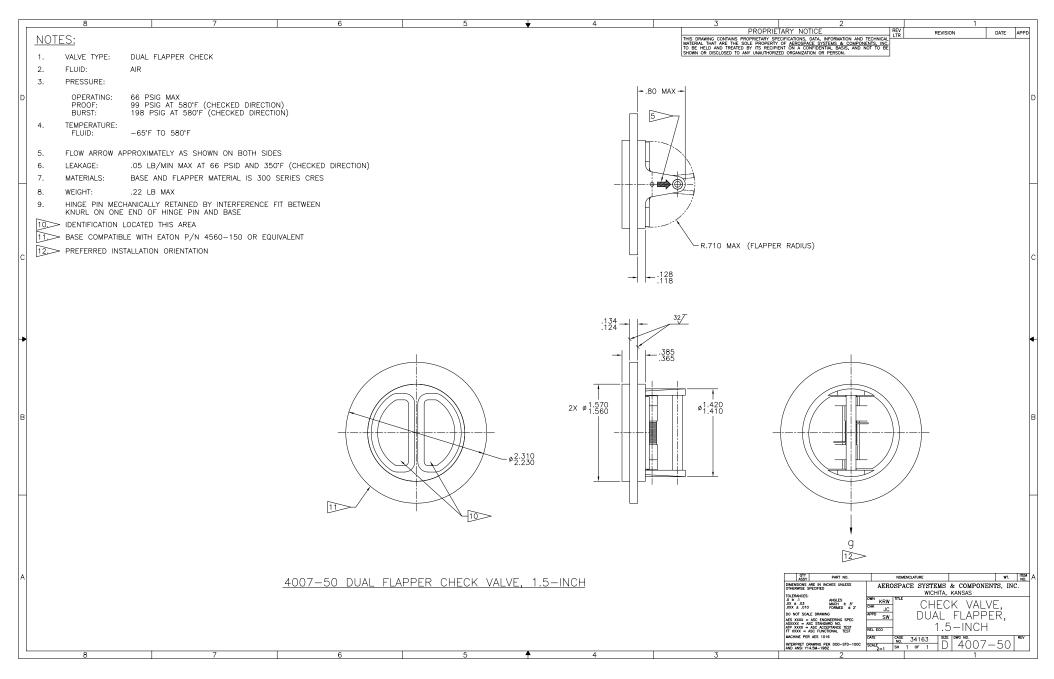


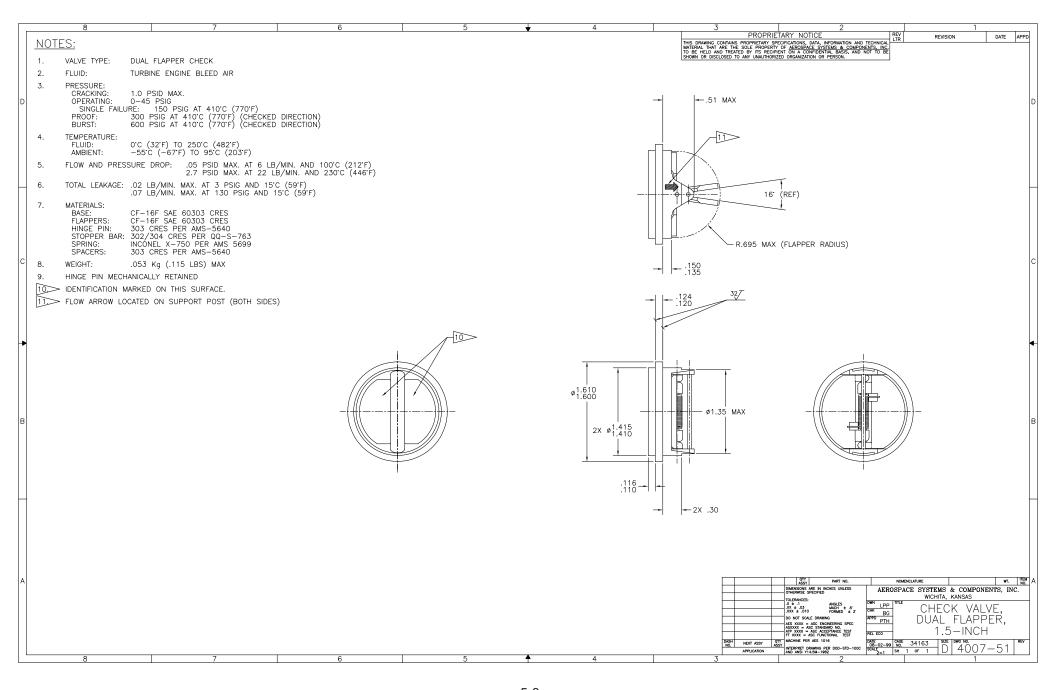


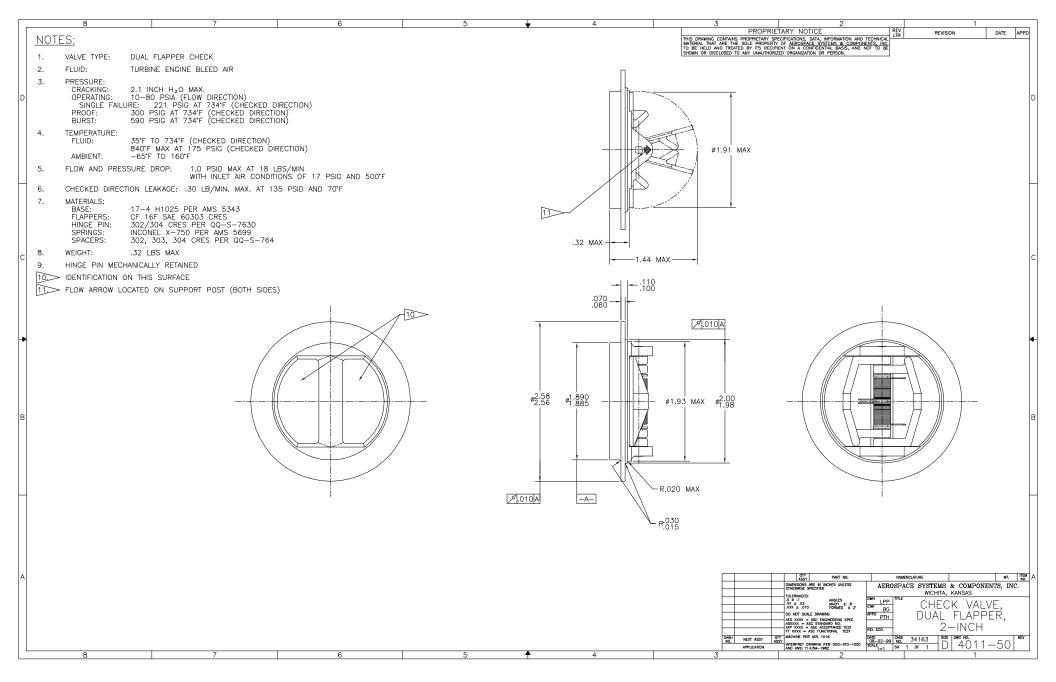
Features

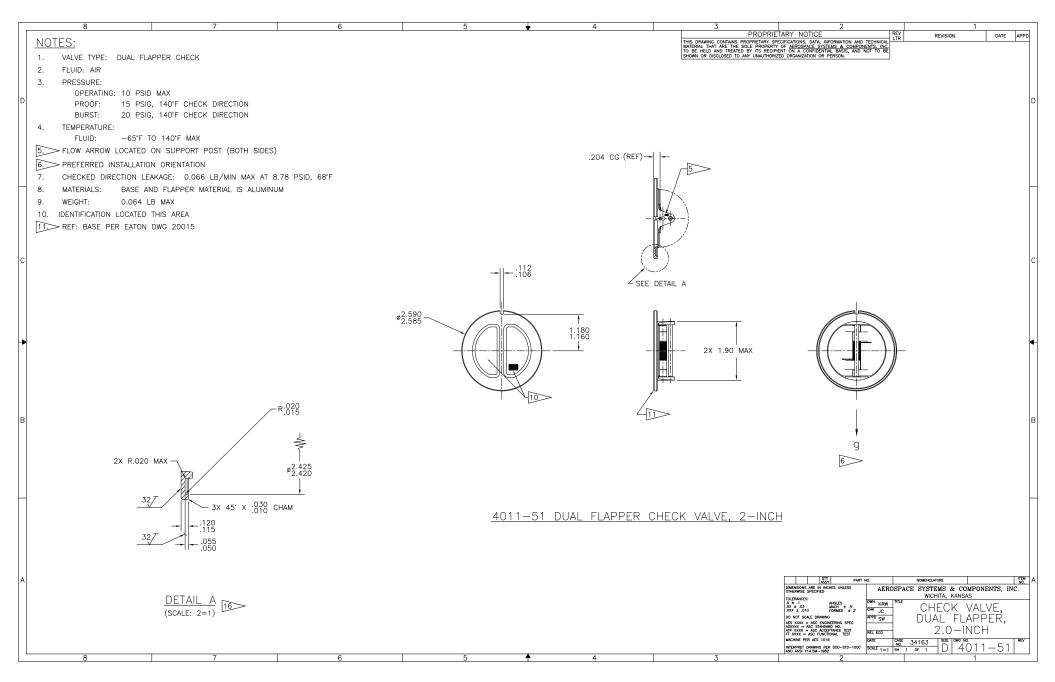
- · Aluminum, Stainless Steel, and Inconel
- 1.0 inch to 7.5 inch (2.5 cm to 19 cm) Line Sizes available
- Pressures to 535 PSIG (37 BAR)
- Temperatures to 1200°F (649°C)
- Cracking Pressures as low as 1 inch H2O (0.0025 BAR)

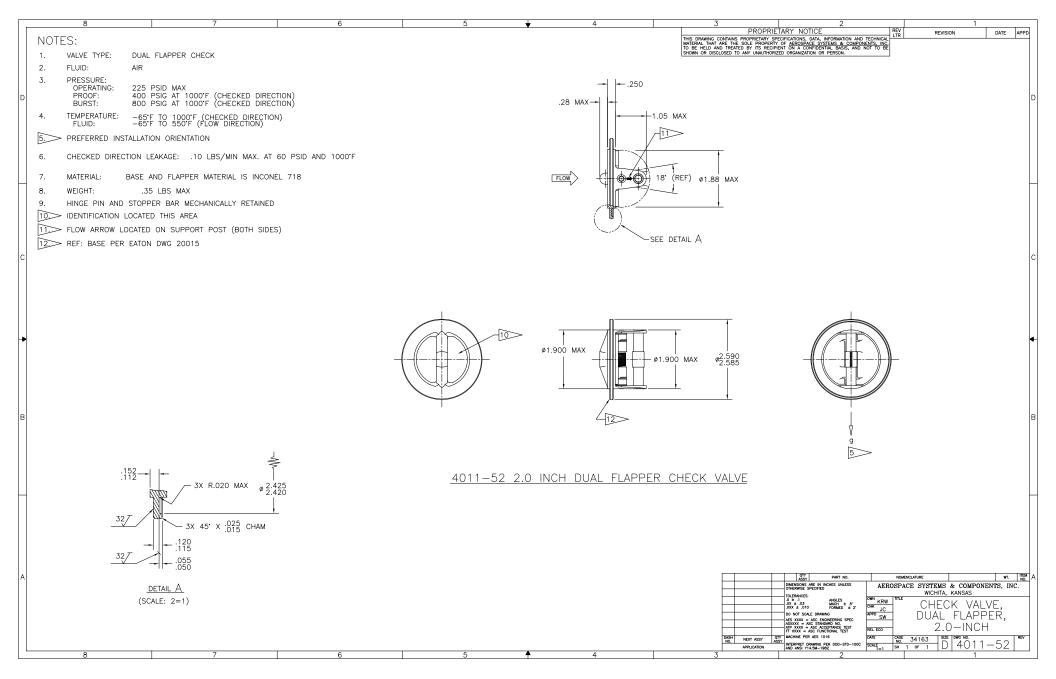


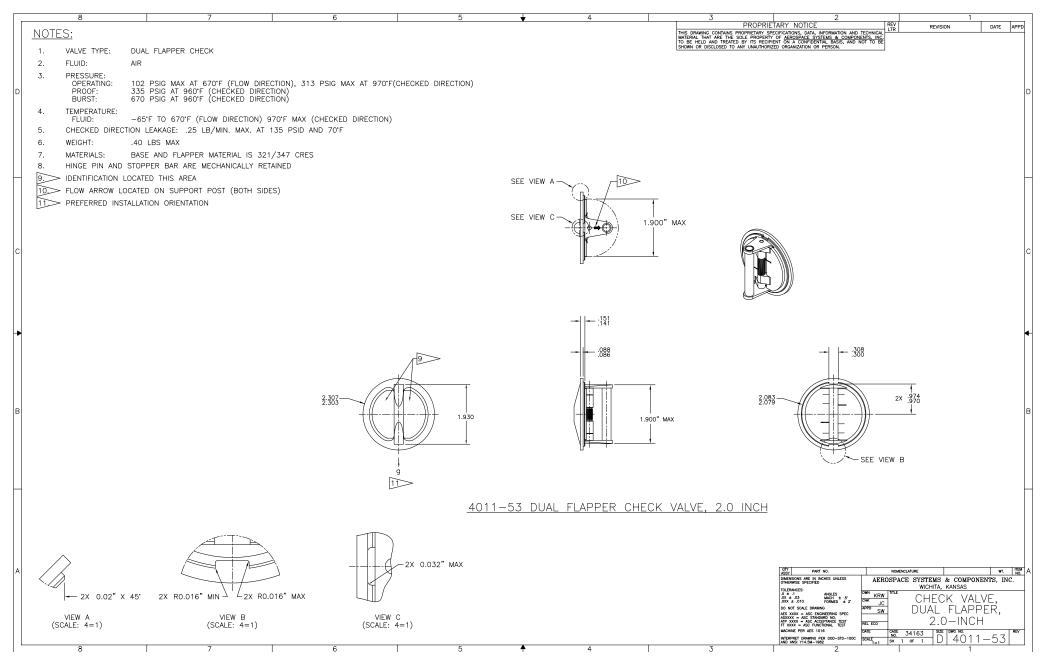


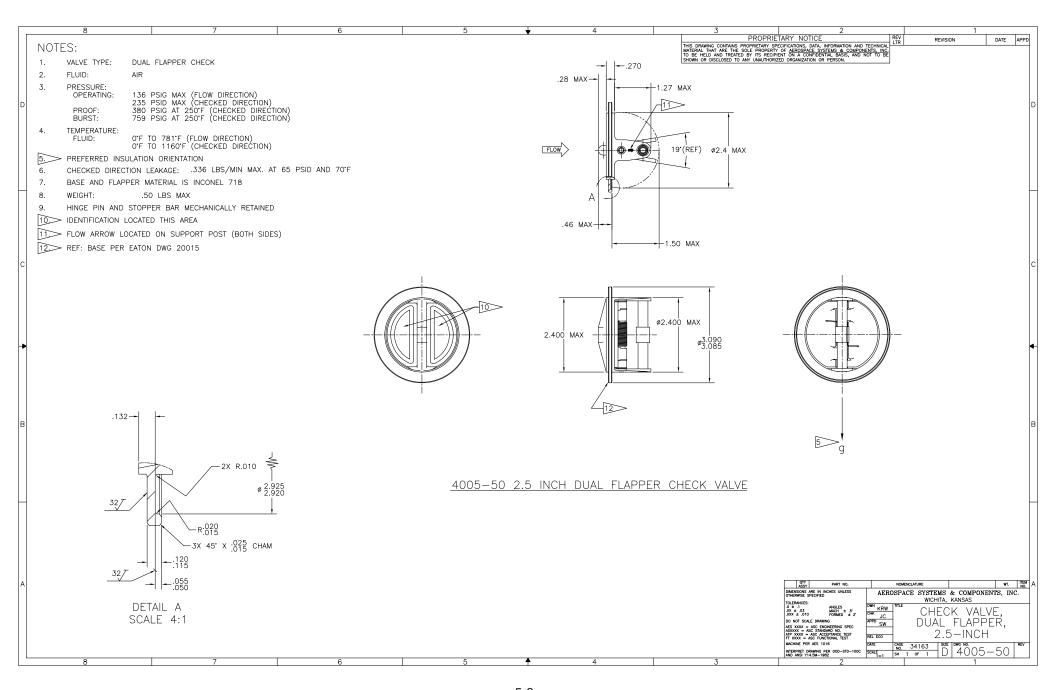


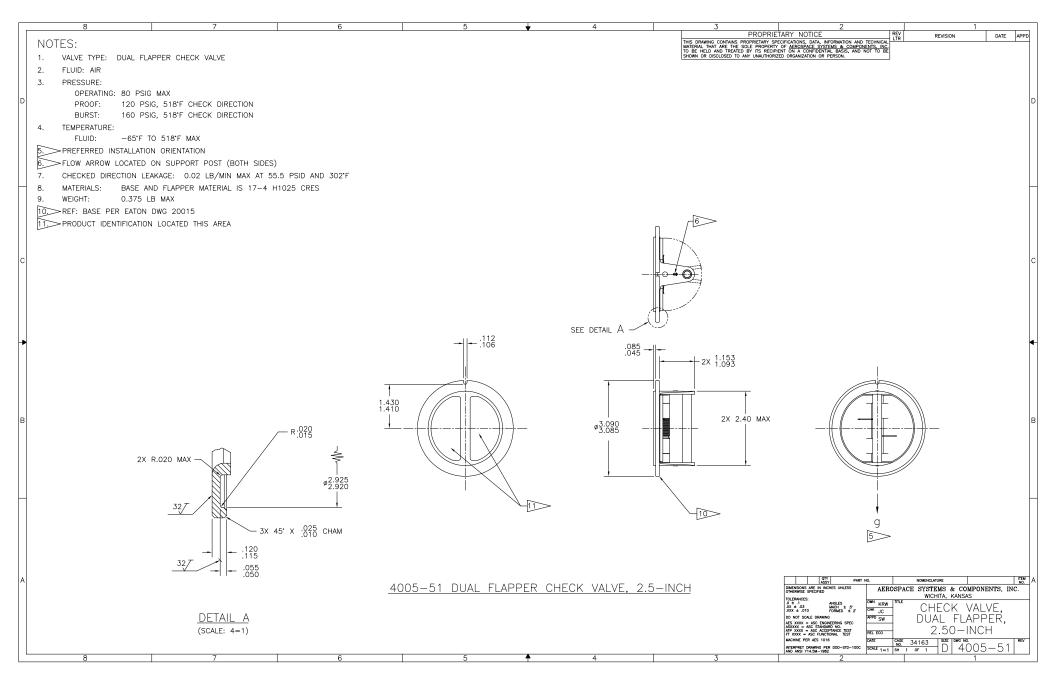


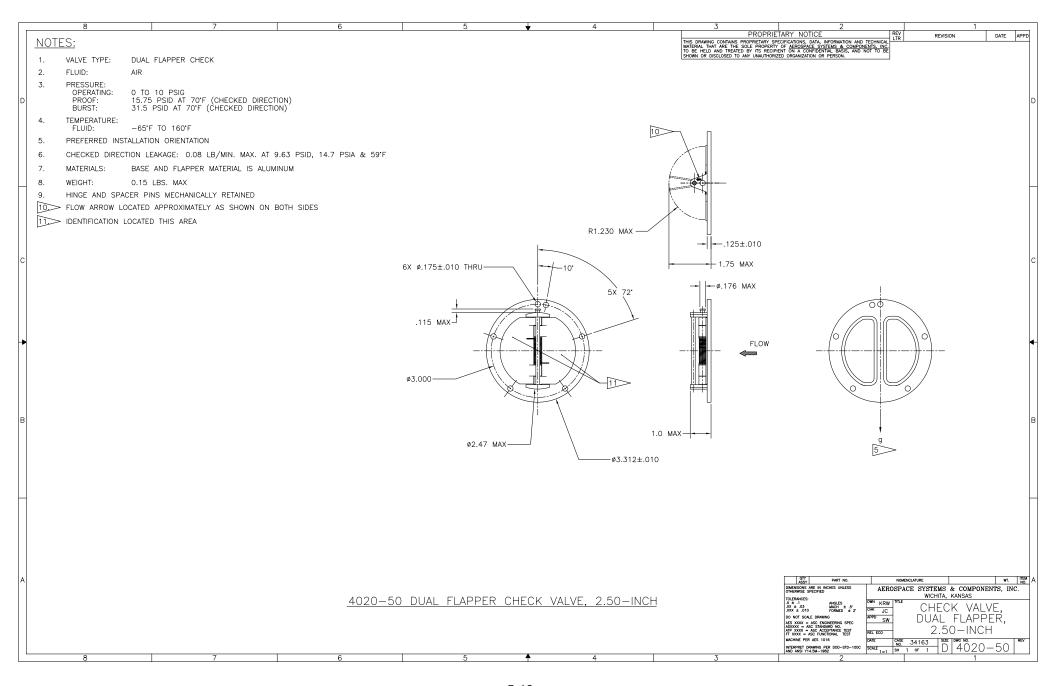


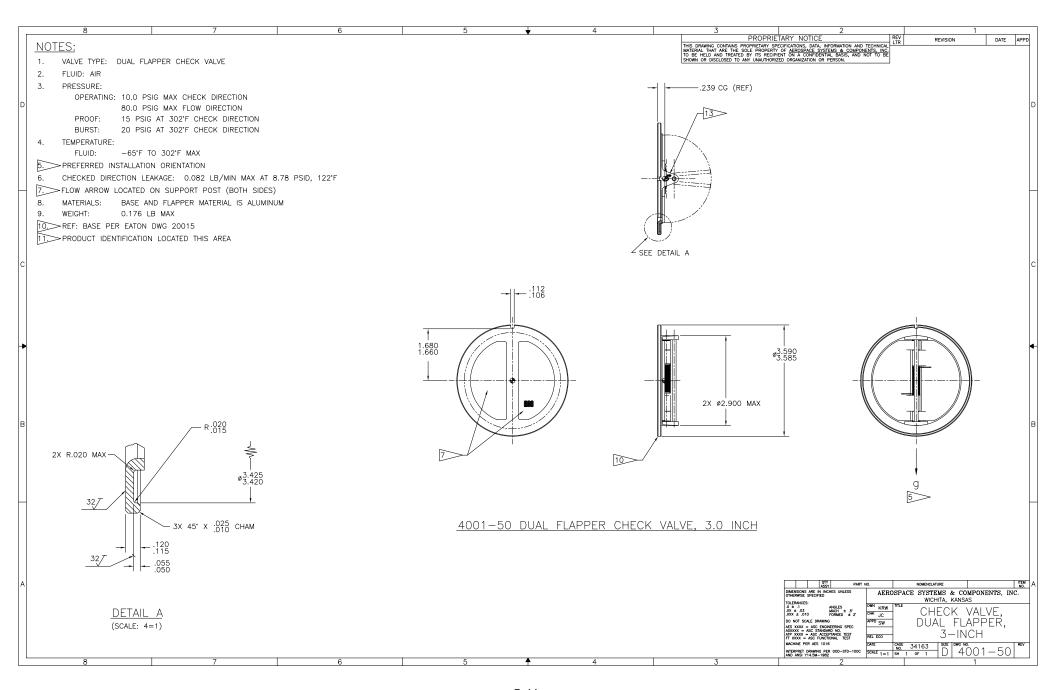


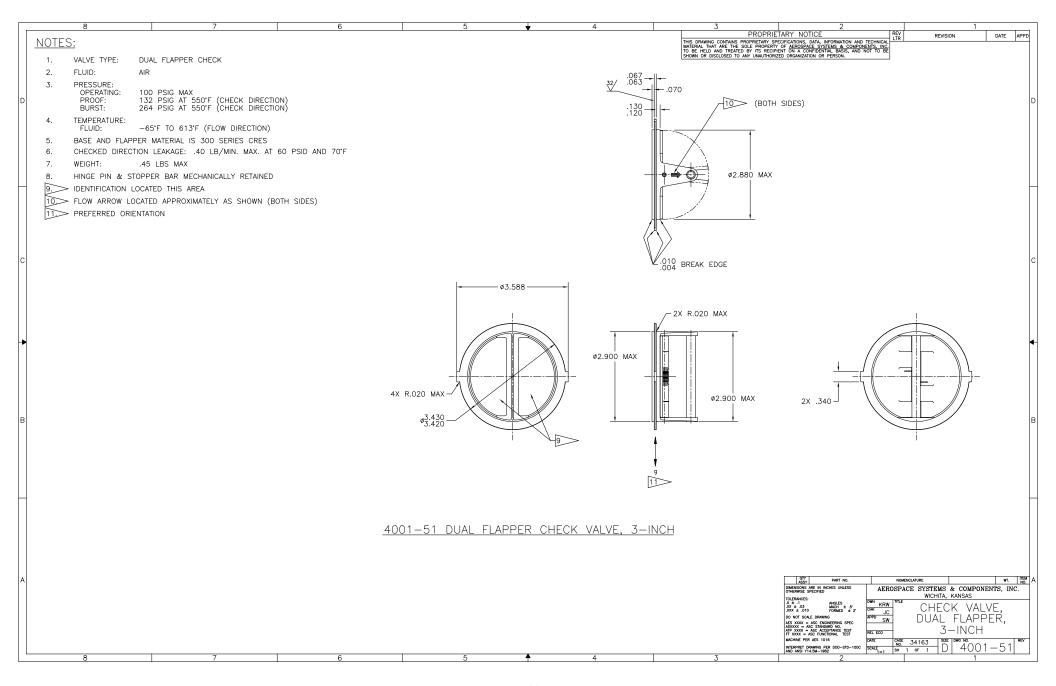


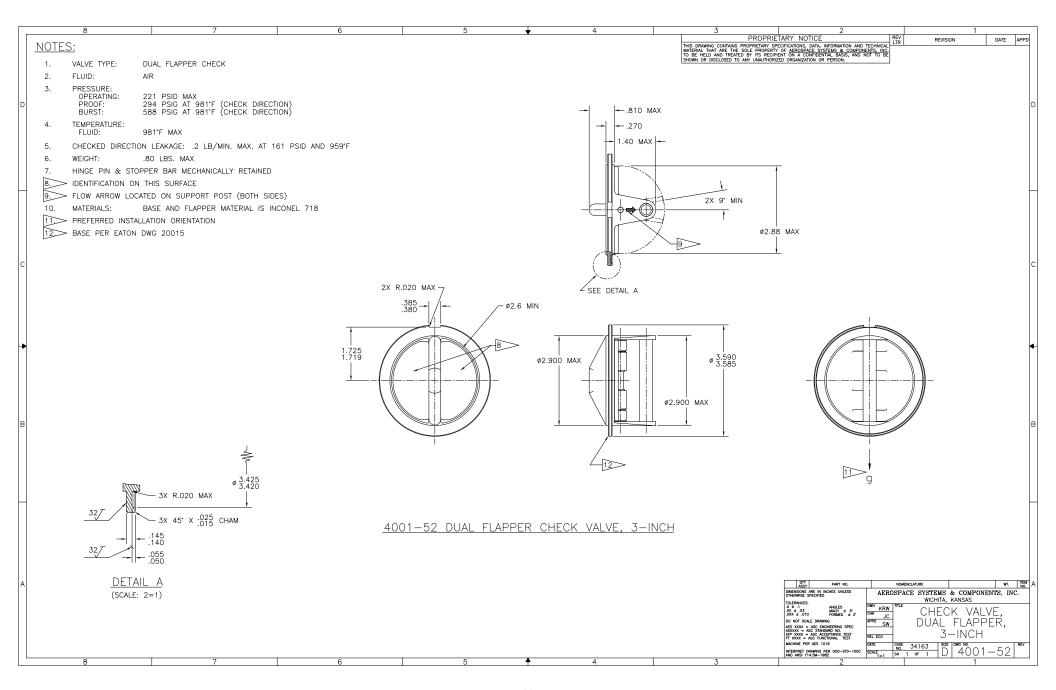


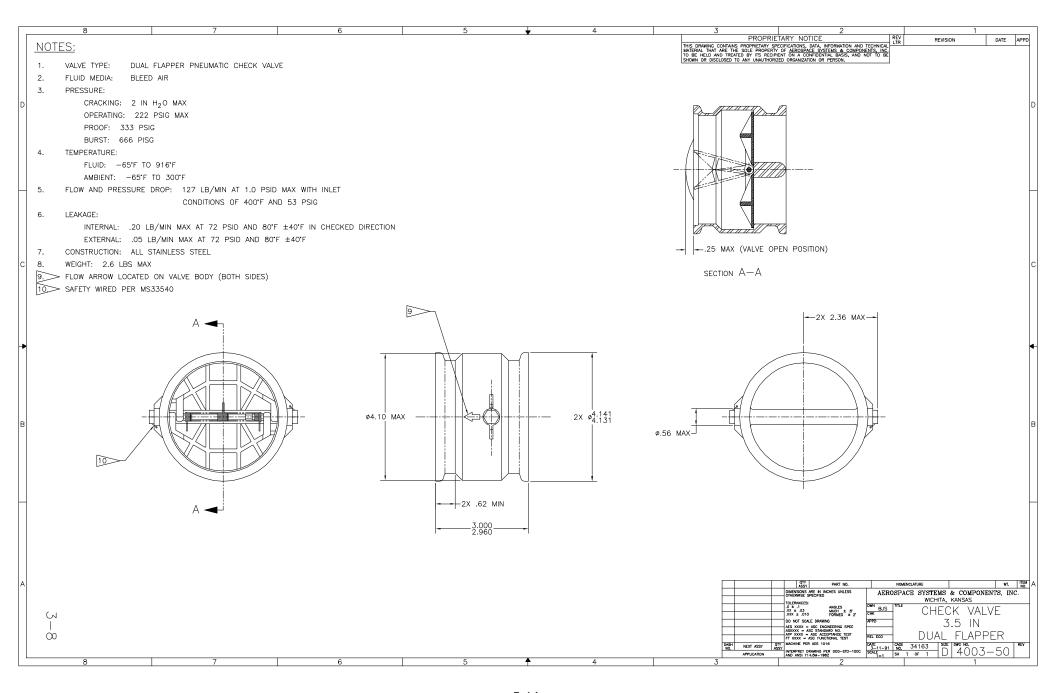


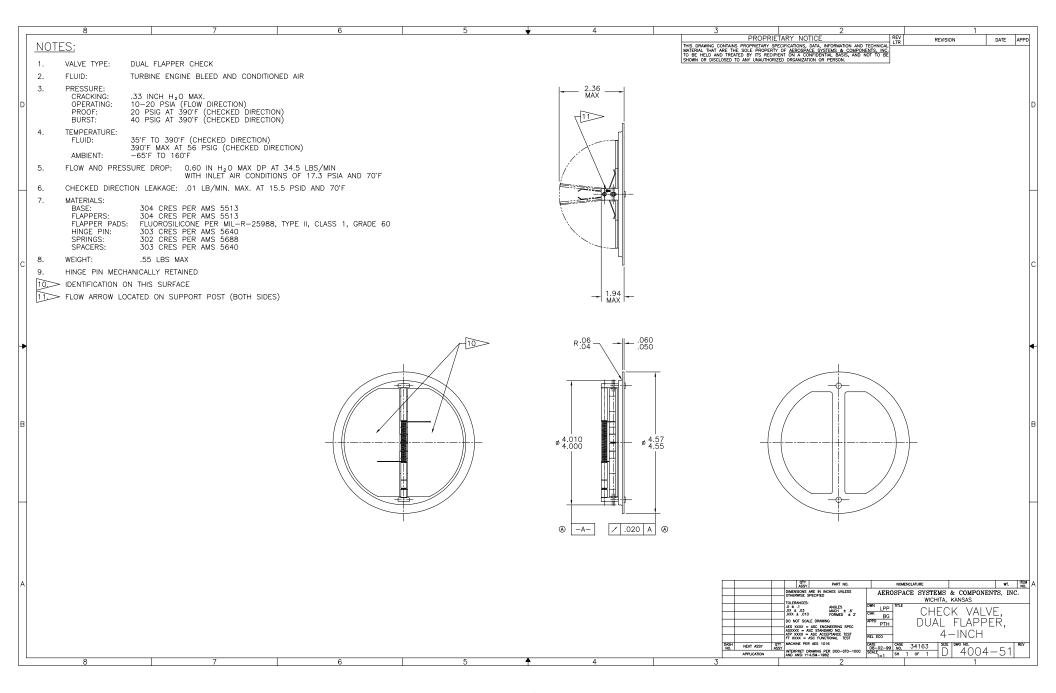


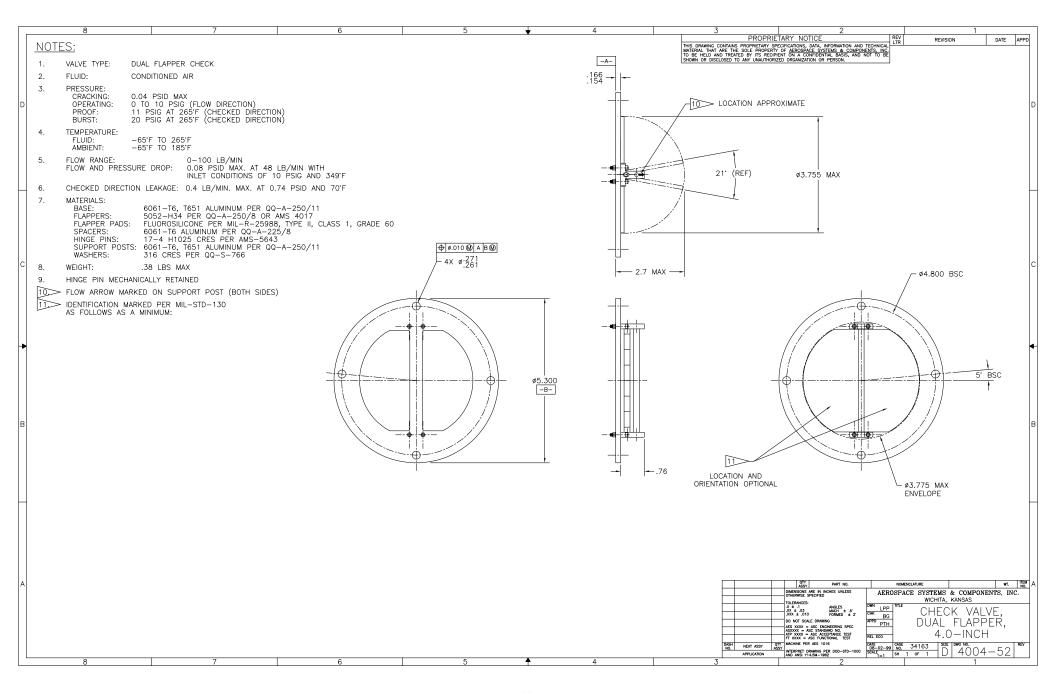


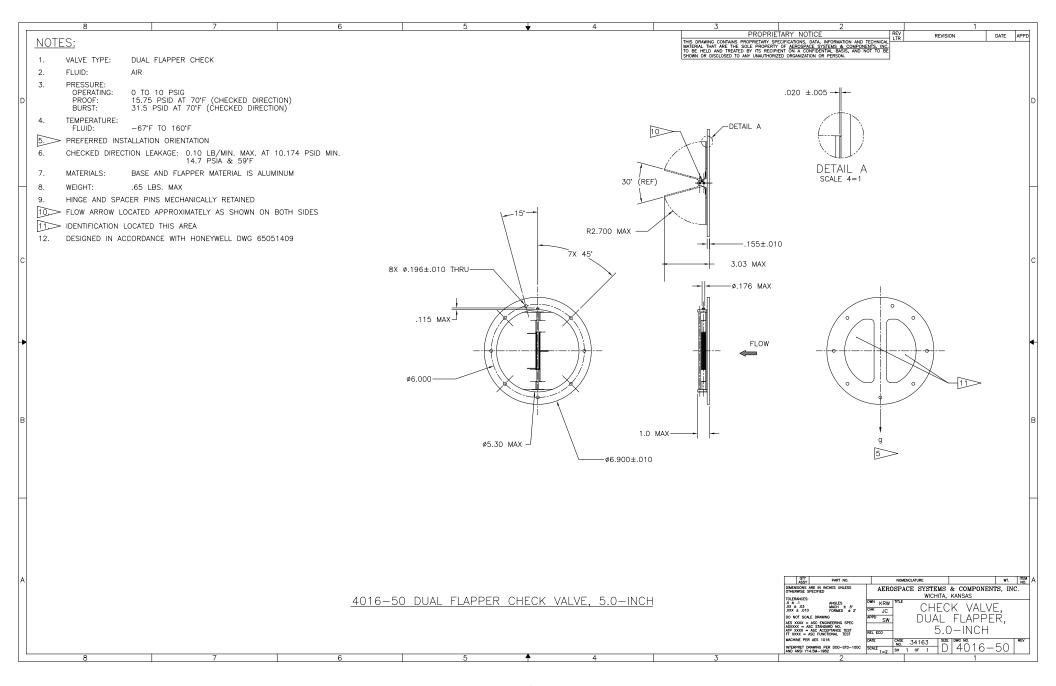


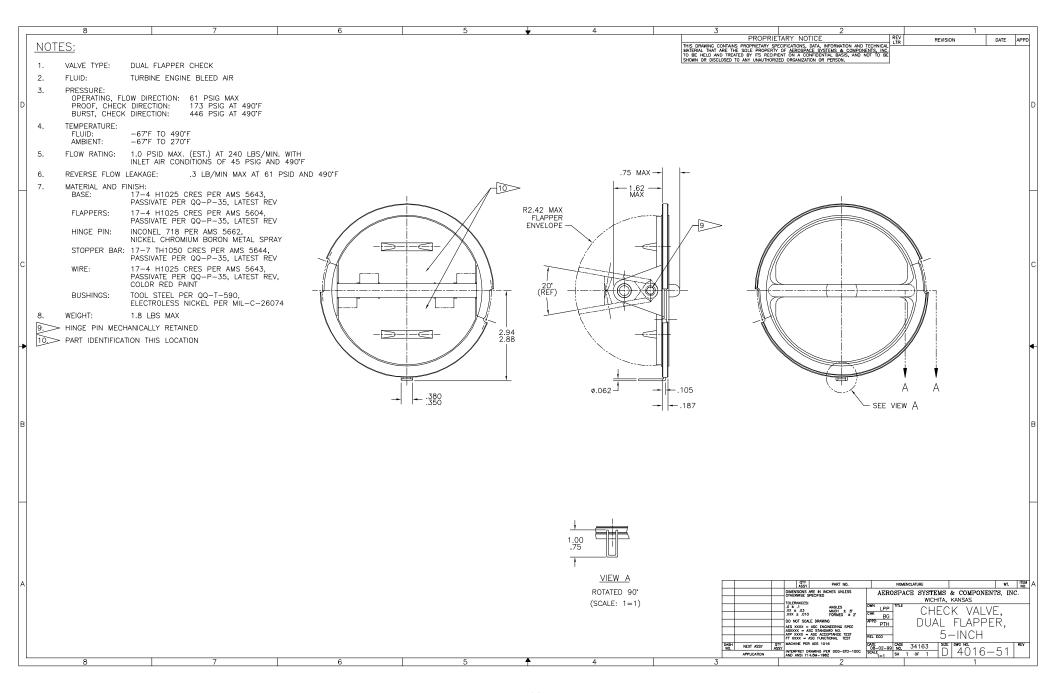


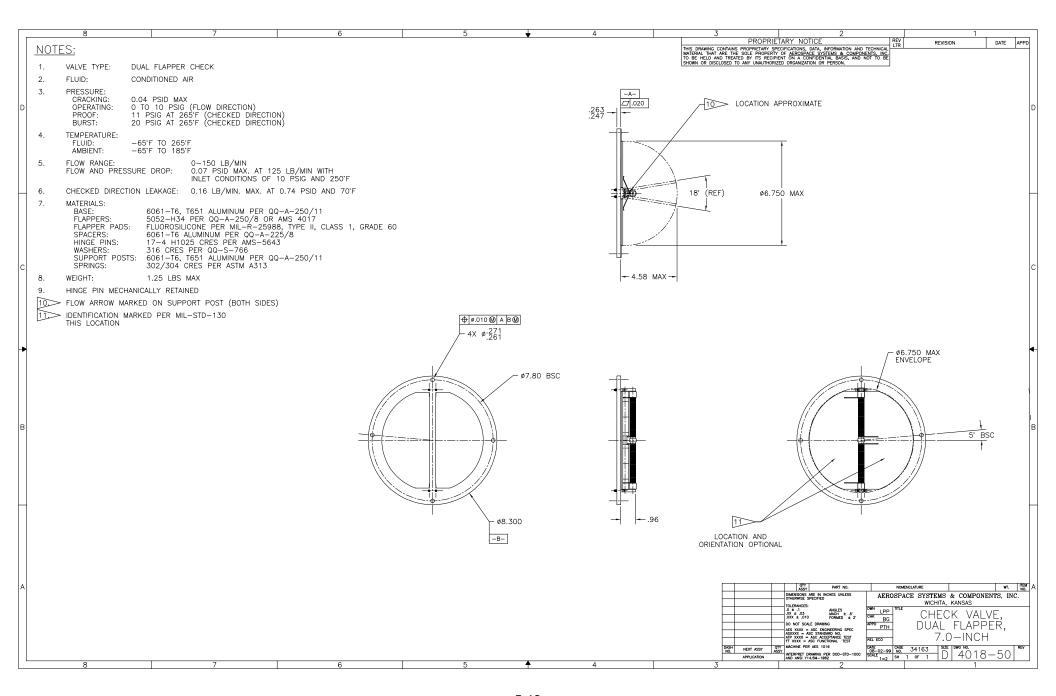


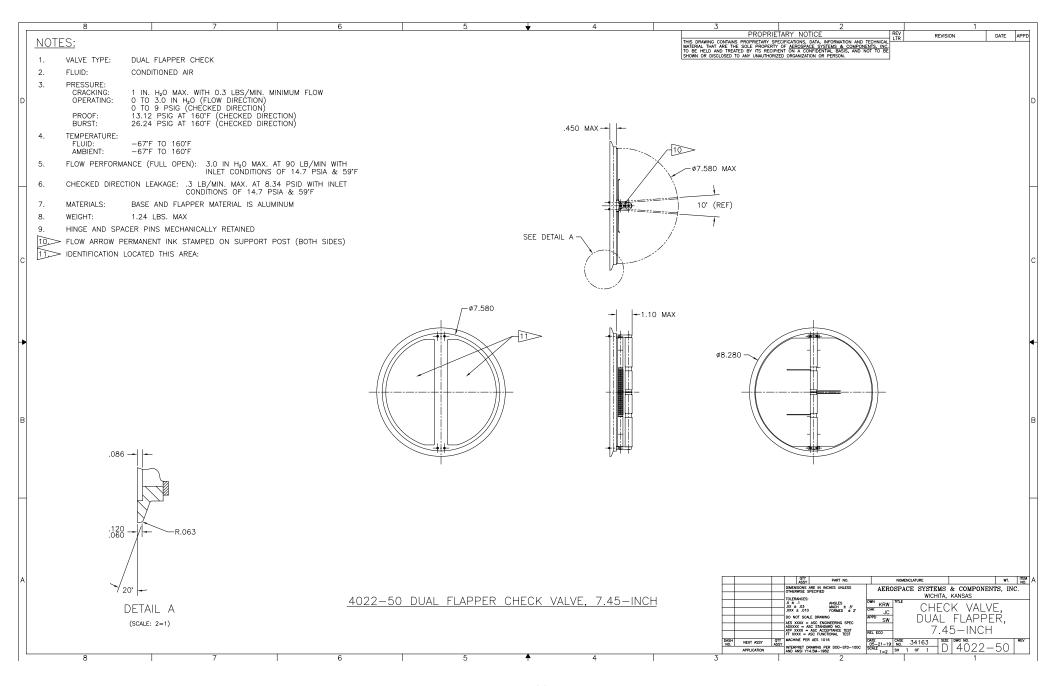










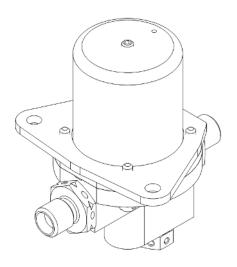


Other Products

Other Products

Aerospace Systems & Components has a large variety of aerospace products outside of our popular valve lines.

With an innovative and responsive engineering team and an extensive product line, we can offer solutions to your technical challenges





Other Product Offerings

- Thermal Actuators
- Pneumatic Filters
- Flow Restrictors
- Pneumatic Actuators
- Pressure Relief Valve
- Pressure Regulating Valve

