



Fluid Control Express

General Purpose Solenoid and Pneumatically Actuated Valves Shipped Within 24 Hours



ENGINEERING YOUR SUCCESS.



Parker Safety Guide for Selecting and Using Fluid Control Division Products including Valves, Assemblies and Related Accessories

WARNING: Failure or improper selection or improper use of Parker Fluid Control Division Products, including valves, assemblies or related accessories (“Products”) can cause death, personal injury and property damage. Possible consequences of failure or improper selection or improper use of these Products include but are not limited to:

- Gas leakage leading to explosion or rupture of a pressure vessel.
- Leakage or other release of toxic or otherwise hazardous liquids or gases.
- Unintended or mistimed cycling or motion of machine members, or failure of machine members to cycle.
- Sudden moving or falling objects.
- Work piece or component parts being thrown off at high speeds.
- Failure of a device to function properly. For example, failure to clamp or unclamp an associated item or device.
- Electrical shorts, burns, burn out of equipment or fires.

Before selecting or using any of these Products, it is important that you read and follow the instructions below.

1.0 GENERAL INSTRUCTIONS

1.1. Scope: This safety guide is designed to cover general guidelines on the selection, installation, operation, and maintenance of these Products. This safety guide is a supplement to and is to be used with the specific Parker publication for the valve, assembly or related accessory being considered for use. Parker publications are available at www.parker.com or by calling 1-800-CPARKER.

1.2. Fail-Safe: All Products can and do fail without warning for many reasons. Design all systems in a fail-safe mode so that failure of the Products will not endanger persons or property.

1.3 Distribution: Provide a copy of this safety guide to each person that is responsible for installation, operation, and maintenance of these Products. Do not select or use these Products without thoroughly reading and understanding this safety guide as well as the specific Parker publications for the Products considered or selected.

1.4 User Responsibility: Due to the wide variety of operating conditions and applications for these Products, Parker and its distributors do not represent or warrant that any particular Parker Fluid Control Product is suitable for any specific end use system. This safety guide does not analyze all technical parameters that must be considered in selecting a Product. The user, through its own analysis and testing, is solely responsible for:

- Making the final selection of the Product;
- Assuring that the user’s requirements are met and that the application presents no health or safety hazards;
- Providing all appropriate health and safety warnings on the equipment on which the Products are used; and
- Assuring compliance with all applicable government and industry standards.

1.5 Additional Questions: Call the appropriate Parker technical service department if you have any questions or require any additional information. See the Parker publication for the Product being considered or used, or call 1-800-CPARKER, or go to www.parker.com for telephone numbers of the appropriate technical service department.

Table of Contents

About Fluid Control Express Ship

Parker FCD knows timing is key. That's why we developed the **Fluid Control Express Ship Program**, to meet your specific time-critical requirements with our best in class products - *all available within 24 hours for quantities of 10 pieces or less.*

Our **Express Ship Program** includes solenoid and pneumatically actuated valves. They are available as full valves assemblies or as modular pressure vessels with separate coil options that include DIN and Conduit in NEMA, 4X, 7 and 9 classifications.

Use our TOMSPACE guide and worksheet to make selecting valves easy. Or if you need additional assistance, browse the Services section starting on page 7, where you'll find how you can **Live Chat with an Engineer** or use the **Online Product Selector tool**.

With superior testing for quality and performance, along with a vast number of Parker tools and support programs, we provide a customer-centric culture to put our product offerings in alignment with your business needs.

Our **Express Ship Program** is just one of the ways Parker FCD is working to help you focus on your operational needs to work smarter, faster and achieve optimal ROI.

That's why when you purchase our valve products, you don't just buy from Parker, you partner with Parker.

Introduction

2

Products

4

Design and Testing

6

Services

8

TOMSPACE Chart

12

How to Design Your Solution

14

Valves

15

2-Way Valves
3-Way Valves
4-Way Valves
Pneumatic

Options

25

Cartridge Valves
Manifolds

Repair Kits

26

Technical References

27

Valve Sizing
Fluid Compatibility
Glossary of Terms
Certifications
User responsibility
Application Worksheets (TOMSPACE)
Terms & Conditions

Coil Charts

32

Offer of Sale

37

This is Parker Fluid Control Division.



We are the Parker Fluid Control Division, (FCD) of North America headquartered in New Britain, CT and are part of the Automation Group of Parker Hannifin Corporation. Along with our Madison, MS facility, we design, manufacture and support a full line of valves, electrical components, value added assemblies and manifolds.

Our primary product offerings are solenoid and pneumatically actuated valves used for motion and flow control. Our product lines include Skinner[®], Gold Ring[™], the 3000 Series, 204/304 Series, Angle Body and Sinclair Collins.

Let's make creative and innovative ideas flow more freely.

Fluid Control Express products are available for same day shipping with our commitment to you of quality, support and impeccable customer service.



Process Control

- Valve Actuation
- Oil & Gas
- Chemical Processing
- Pharmaceutical



Commercial Equipment

- Medical Equipment
- Water Purification
- Sterilizers
- Welding



Food & Beverage

- Coffee Machines
- Beverage Dispensing
- Water Dispensing



Transportation

- Trucks, Bus & Coach
- Trains
- Marine
- Agriculture



Oil & Gas

- Valve Actuation
- Petro and Chemical Processing
- Emergency Exhaust



Industrial & Automation

- Compressors
- Blow Molding
- Textile



A Valve For Any Application.



2-Way and 3-Way Valves



4-Way Valves



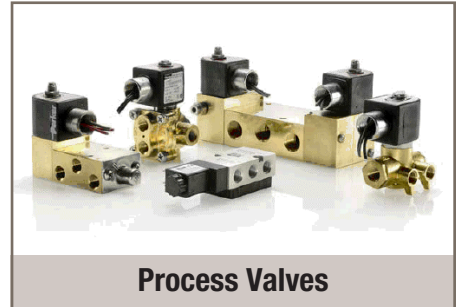
Electrical Coils



Sinclair Collins



Fluid Control Division Product Offering



Process Valves



Angle Body Valves



Steam Valves



Solenoid Valve Manifolds

A Message from the General Manager

With a long history of providing innovative fluid and motion control solutions as well as premier customer service, Parker Fluid Control Division (FCD) is a world-wide leader in solenoid valve technology with a broad variety of products designed for today's demanding markets and applications.

At Parker, we continually expand and improve our products and services to better serve the market. We offer premier service technologies, including Parker Winovation custom solutions and the latest in rapid prototyping. These technologies combined with USA regional and Global marketplace support make Parker FCD your single source for motion and fluid control products.

Our division headquarters in New Britain, Connecticut and manufacturing facility in Madison, Mississippi provide precision-engineered solutions for products, materials and processes, with state-of-the-art development, testing and performance technology.

Knowing that uptime and productivity are major drivers in your business success, we proudly present our Fluid Control Express Ship Program offering Parker's best-in-class valve products and services

Products

Parker Fluid Control Division - The Market Leader.

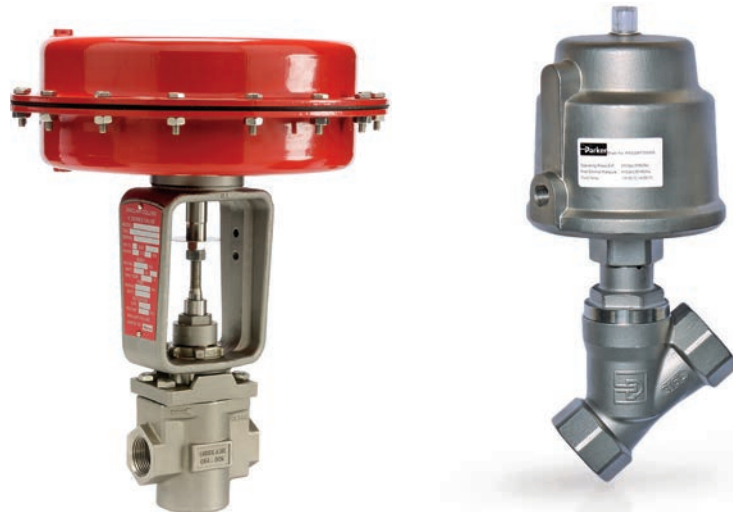
Backed by nearly 100 years of Parker technology innovation, our history of designing and manufacturing valves allows us to offer a wide variety of products, from general purpose fluid and motion control valves - to industry and application specific products.



We offer a comprehensive line of valve assemblies ranging from miniature direct acting valves to large piloted and actuated globe valves available in 2-way, 3-way and 4-way configurations.

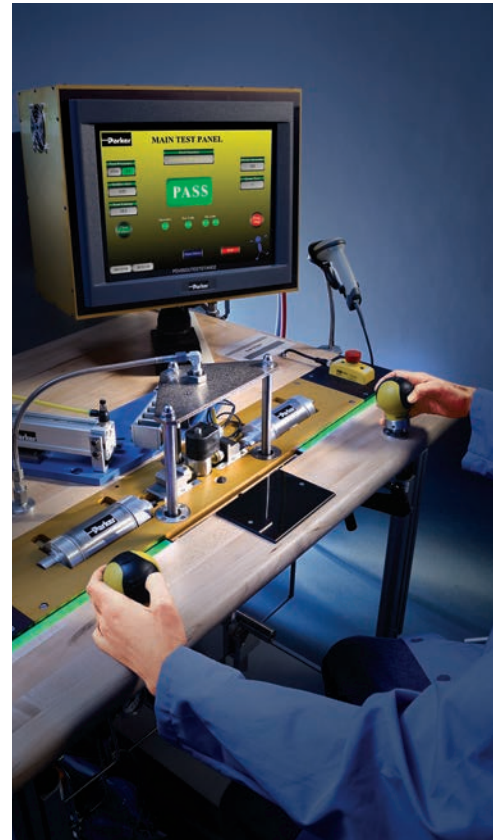


With world-wide production facilities, we provide Global Divisional Product Support.



The Motion and Fluid Control Supplier of Choice.

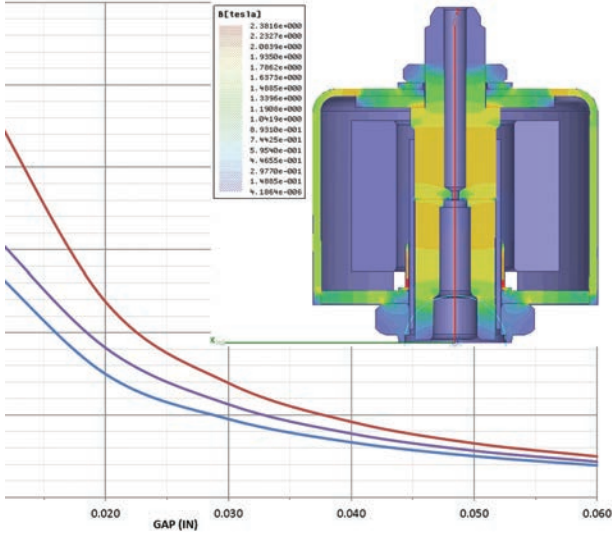
With a strong commitment to engineering, we stand behind our valves with quality assurance and support.



With valve sizes from 1/8" to 2" and operating pressures of 0 to 4500 psi, we offer the largest variety of general flow and motion control products for your industry specific applications.



Complete Design, Production and Testing.

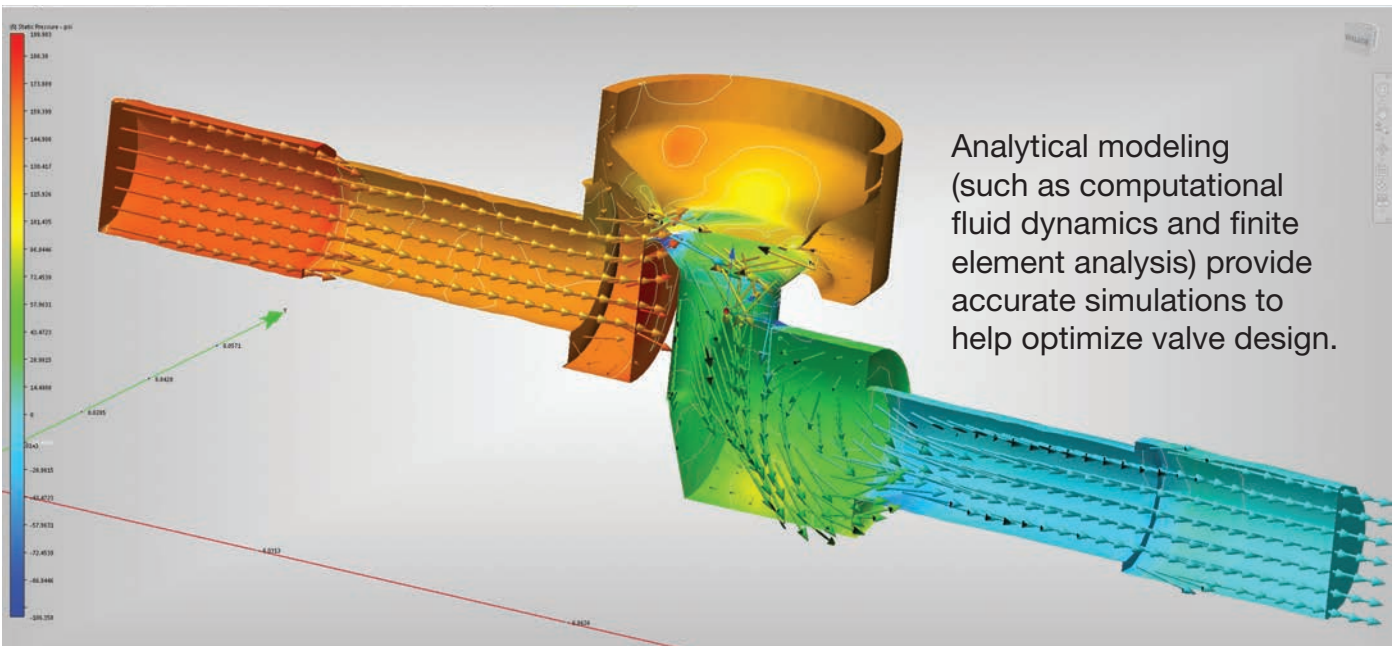


Our engineering team is focused on designing the right product for your application. Using the latest design software along with years of valve knowledge, our team is capable of providing custom solutions to meet your unique demands.

Putting designs to the test, our world class development and test capabilities provide our customers with product dependability and longevity.

In the field or in our advanced development and test facilities, Parker is unsurpassed in both technical knowledge and testing capabilities.

With the latest in technology and state-of-the-art materials our performance test labs are capable of determining baseline engineering properties and design requirements.



Analytical modeling (such as computational fluid dynamics and finite element analysis) provide accurate simulations to help optimize valve design.

Quality and Performance You Can Trust.

At Parker Fluid Control Division, we simulate application and environmental conditions encountered every day, both common and complex, to assure that the integrity of our products meet your needs.

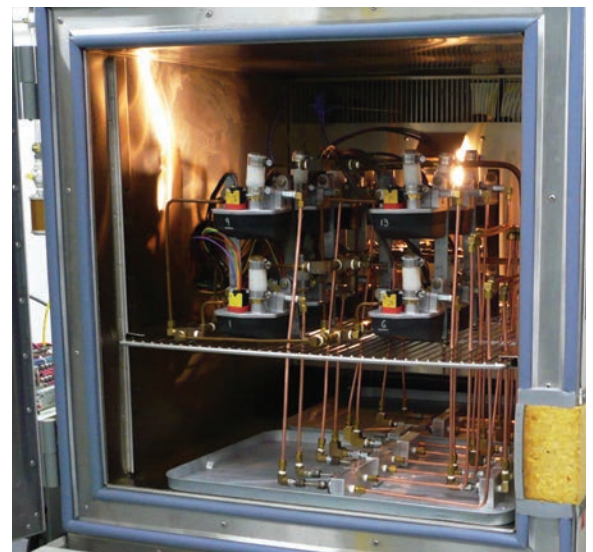
Our complete, in-house testing capabilities assures that the materials in our designs are engineered to withstand the extremes of heavy duty applications and environments.



From Shaker table testing to help us better understand real world environmental vibration conditions, to End of Line testing to ensure non-failure in valve operation, we deliver performance.

Validation & performance testing is our ongoing commitment to you.

Want to know how a valve will perform out in the field? Our Environmental Chambers accurately replicate real environment conditions and perform reliable design validation, assuring our customers that our products will meet and exceed their application demands.



Services

Easy to do business with.



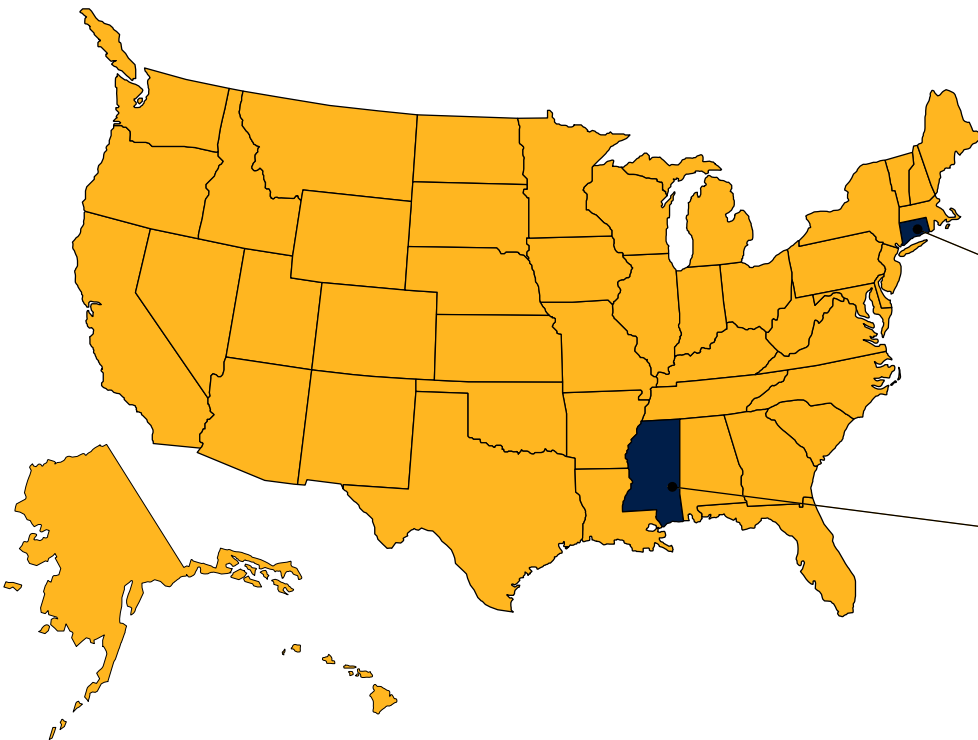
Live Chat saves you time with quick response.



With our ASK AN ENGINEER Live Help located on parker.com/fcd, you can get immediate answers on any product, with just the click of a button. Live Help is just one of the ways we accommodate our customers before, during and after a purchase.

Made in the USA - Serving the World

From coast to coast, we have an extensive network to support your local needs.



Fluid Control Division Headquarters, New Britain, CT.



Fluid Control Division Facility, Madison, MS.

How to Contact Us – Nationwide



For Customer Service or Tech Support:
1-800-825-8305



To Reach Sales by Email:
parkerfcd_sales@parker.com

