



# *Mobile Hydraulic Pumps, Motors and Hydrostatic Steering Products*

*Catalog HY13-1553-001/NA,EU*



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**HINWEIS  WARNING**

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

**Offer of Sale**

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

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Wherever in the world machinery is designed, manufactured, or used, Parker is there to meet your hydraulic application requirements—with complete hydraulic component selection, worldwide availability, and technical assistance.

This catalog contains the information you need to order hydraulic pumps, motors and hydrostatic steering products. Arranged by product group, it contains complete specifications, dimensions, and ordering information on the complete line of Parker

hydraulic pumps, motors and hydrostatic steering products, including technical data and reference material for designers, builders, and users of motion control machinery. No more shuffling through dozens of separate catalogs from dozens of separate suppliers.

And when you're ready to order, call your local Parker hydraulic distributor for fast delivery and service. Or call your Parker Hydraulic Sales Office (see listing at the back of this catalog).

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In line with our policy of continuing product improvement, specifications and information contained in this catalog are subject to change.

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# Parker...Your Complete Source for Quality Fluidpower Motion & Control Products,

Parker's complete line of performance-matched motion control components and total systems capabilities represent industry's highest level of engineering and manufacturing skills.

The Parker system...is an international distribution network supported by strategically located manufacturing plants and fully stocked service centers, staffed by trained application and field service people.

## World's First and Largest Choice of Hydraulic & Pneumatic Linear Actuators

Parker's standard cylinder line includes: "Inch or Metric" hydraulic cylinders available with position and velocity sensing systems. Series "HMI" metric hydraulic cylinders; pneumatic cylinders featuring Parker Series "RC" rodless cylinders, Series "SR and SRM" stainless round steel body air cylinders, plus Series "MP" metric air cylinders...And specials to meet your specific application. Innovative features include: the exclusive "Jewel Rod Gland" with extrusion-proof no-leak seals, latest state of the art TS-2000 hydraulic rod seals, hydraulic stepped cushions to reduce shock up to 90% and decrease cushioning time up to 50%, Hi-Load pistons for virtually zero leakage, and other cost saving features. **Catalog 0106-5**

## Piston and Bladder-Type Accumulators

**Piston-Type Accumulators** can be used to: improve system efficiency, absorb shock, supplement pump delivery, emergency power supply, compensate for leakage.

Piston-type accumulators feature a patented five-blade V-O-ring to maintain full contact between the piston and wall, without rolling. Sealing remains effective even under rapid cycling at high operating pressure.

**Bladder-Type Accumulators** can be used in hydraulic systems to: maintain pressure, supplement pump flow, dispense fluid, act as a fluid barrier.

Bladder-type accumulators provide excellent gas and fluid separation. Bladders are designed without pleats which can have stress concentrations and cause potential early failure. Bladder-type accumulators are available in top and bottom repairable styles.

**Catalog 0106-5 & 1630-6**

## Hydraulic Rotary Actuators

Parker has the broadest offering of rotary actuators available in industry. Both the rack and pinion and vane designs will provide long life in pneumatic or hydraulic service. The full range of actuators produce torques to 50,000,000 lb-in with pressure ratings to 3000 PSI. An unlimited selection of options allows actuators to be customized to meet your specific application requirements.

**Catalog 0106-5**

## Modular Pneumatic and Vacuum Automation Components for Increased Productivity

Pneumatic Automation Components perform these basic functions — linear extension, horizontal translation, vertical lift, base rotation, wrist rotation, vacuum handling and mechanical gripping. These modules can be quickly combined to provide accurate robotic type movements for machine loading/unloading, part transfer, gantry mechanisms and pick-n-place motions. Guided cylinder innovations feature the patented alignment coupler which increases cylinder life when support shafts deflect. Integral air/oil rotators offer the controlled movement of oil without external fittings, tubing, and external oil tank. **Catalog 1835-5**

## ParFrame Structural Framework

The ParFrame™ system provides a speedy, economical alternative to building industrial machine frames, work stations, enclosures, and guarding. In today's fast-paced factory, traditional steel structures consume too much time and effort in cutting, welding, deburring, and painting. They also lack modularity and flexibility. ParFrame offers bundles of aluminum sticks for you to cut and machine, pre-machined packaged kits for your assembly, or complete fabricated structures built to your specifications.

**Catalog 1815**

## Performance-Proven Piston, Vane and Gear Pumps

Parker's broad range of energy-efficient lines include variable displacement axial piston pumps with pressure ratings to 5000 PSI. Medium pressure variable displacement axial piston pumps with speeds to 3000 RPM and pressure ratings to 3600 PSI, with a wide range of control options and low noise operation. Variable vane pumps with pressure ratings to 2500 PSI are also available. Vane and piston pumps are available with electrohydraulic servo pressure and flow controls and are capable of thru-shaft mounting a second pump. Single and double gear pumps with pressure ratings to 3600 PSI and flow rates to 46 GPM are available with options including flow dividers and built-in relief valves.

**Piston Pump Mini Catalog 2600-100/USA & Gear Pump Mini Catalog 2600-200/USA**



## Air Control Valves for Every Application

Parker has the valve to satisfy your specific needs. Valves are available in 2, 3, and 4 way functions with 2 and 3 positions and ported from M5 to 1 1/2". A variety of operators that include solenoid, air pilot, manual and mechanical. Pressure up to 250 PSI. Mounting styles include inline, subbase and manifold. ISO 5599/1 and 5599/2 are also available. **Catalog 0600P-3/USA**

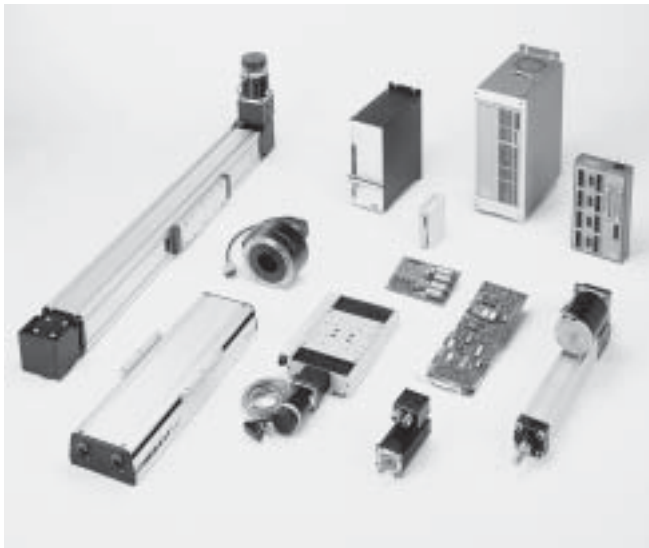
# Systems and Service...Worldwide

## Hydraulic Motors

Parker offers a broad range of hydraulic motors for a wide variety of rotary applications. These rugged motors are available in displacements up to 67 cu. in./rev and pressures to 4000 PSI. They are wear compensated for long, trouble-free life and capable of smooth, low speed operation. **Low Speed, High Torque Hydraulic Motor Mini Catalog 1540-001/USA**

## Hydrostatic Steering Units

Parker Hydraguide™ hydrostatic steering units provide performance options meet a broad range of off-highway steering system requirements. Hydraguide steering units are available in open-center, closed-center and load-sense configurations. Power Beyond five-line units are also available to combine steering and auxiliary functions. **Catalog 1560-000/USA**



## Air Preparation Units for Maintenance-Free Pneumatics

Protect your pneumatic production equipment with Parker's quality FRL units. Filters that remove water and rust; coalescing filters for critical application. Regulators that have a unique rolling diaphragm design and (2) styles of lubricators to solve your problems. A full range that is ported from 1/8" to 2" with flows up to 1000 SCFM. **Catalog 0703-3**

## Parker Hydraulic Valves

Parker's broad line of hydraulic valves includes virtually everything from simple checks and flow controls to sophisticated closed loop servo systems. **Catalog 2502/USA**

Parker is the leading manufacturer of hydraulic and Electrohydraulic control valves. All are used in a wide variety of different industrial and mobile applications. Parker's broad line of quality products includes: Servo Valves, Proportional Valves, Electronics/Digital Motion Controllers, Parker Industrial Drives, Directional Control Valves, Pressure Control Valves, Threaded and DIN Insert Cartridge Valves, Integrated Hydraulic Circuit Blocks, Colorflow Control Valves, ParTrol Control Valves, Ball Valves, Mobile Motion Valves and Republic Valves.

Detailed technical performance data, dimensional drawings, and ordering information is available in the following catalogs: **Catalog 2502/USA (Parker Hydraulic Products); Catalog 2550 (Electrohydraulic Motion Control Products); Catalog 3105 (Parker Threaded Cartridge Valves).**

## Step Motor & Servo Motor Systems and Controls

Compumotor pioneered microstepping techniques to electronically improve the smoothness and resolution of step motor applications. The leadership continues with the recent introduction of the ZETA Series packaged single axis drive and drive/indexer systems. Servo systems offer power and diversity in a multitude of form factors. Digital and analog drives are available in convenient packages that operate from AC or DC power input. Controllers and indexers complete the motion control system and operate stand-alone or in an AT-bus structure and are easily interfaced to PLCs, PCs, or other machine controllers. **Catalog 8000-1**

## A Simple Solution for Your Complex Automation Projects

You can create just about any high performance system by combining Hauser linear positioners and Daedal Motorized tables. Modular structures, specialty vertical units, linear tables, rotary tables and long travel lengths are ideally suited for use in a wide range of industrial and clean room applications. Complete the project with structural elements to fabricate a strong, rigid, attractive multi-axis gantry or an automated workstation. **Catalog 9000**

## Power Units and Hydraulic Trainers

We produce everything in a Fluidpower system but the fluid. Parker's 50 plus years of Fluidpower experience includes designing and building systems with state of the art electrohydraulics...from Fixed and Variable Pump Vertical Power Units suitable for many applications, to complex systems for demanding, sophisticated applications such as aircraft and submarine simulators. The Parker Portable Hydraulic Trainer, utilizing industrial grade components, has been designed to be a tool for teaching hydraulic technology principles and circuitry. **Power Unit Mini Catalog**

## In-Depth Fluidpower Training Programs

Practical, comprehensive courses in hydraulic and pneumatics for anyone involved with designing, specifying, and maintaining fluidpower equipment. The Parker-developed "Involvement Training" approach uses the latest teaching techniques, visual aids and student involvement to produce fast, easy comprehension. Courses cover everything from Basic Fluidpower to Advanced Hydraulic & Pneumatic Circuit Design...and courses are available for local presentation. **Catalog 0200-1**

For detailed product information...contact your local Parker Fluidpower Motion & Control distributor, the nearest Parker Regional Sales Office, or call toll-free **1-800-272-7537**.

**Piston Pumps**

Series P2/P3	• Variable Displacement	A3 - A10
Series PAVC	• Variable Displacement • 10.4 to 47.5 GPM • 3000 PSI	A11 - A56
Series PVP	• Variable Displacement • 5.2 to 35.5 GPM • 3600 PSI	A57 - A122
Series PHP10	• Fixed Displacement • 3.0 to 4.8 GPM	A123 - A128
Series PHP40	• Fixed Displacement • 13.0 to 19.5 GPM	A129 - A136
Series PHP60	• Fixed Displacement • 19.5 to 28.2 GPM	A137 - A144

**Electrohydraulic Accessories for PAVC and PVV Series**

• Flow/PSI Driver Card	A145 - A158
• Pressure Driver Card	
• Feedback Card	
• Current to Voltage converter	
• Proportional Control Valves	

**Hydraguide™ Hydrostatic Steering Units**

HGF Series	• Open Center, Closed Center, Power Beyond • 1800 PSI (125 Bar) • 8 GPM (30.3 LPM) • 3.3 to 9.9 cu. in. (54.1 to 162.3 cu. cm.)	B12 - B17
HGA Series	• Open Center, Closed Center, Power Beyond, Load Sense • 2500 PSI (175 Bar) • 10 GPM (37.9 LPM) • 5.94 to 23.74 cu. in. (97.4 to 389.1 cu. cm.)	B18 - B29
HGB Series	• Open Center, Closed Center, Power Beyond, Load Sense • 2500 PSI (175 Bar) • 35 GPM (132.5 LPM) • 30 to 120 cu. in. (491.7 to 1966.8 cu. cm.)	B18 - B29

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**Torqlink™ Series**

**Low Speed, High Torque Motors and Hydraulic Brake Motors**

Small Frame	<ul style="list-style-type: none"><li>• 2.7 to 24 in<sup>3</sup>/rev (45 to 392 cc/rev)</li><li>• 1250 to 2500 PSI (86.2 to 172.4 Bar)</li><li>• 1905 to 4768 in-lb (215.2 to 538.7 Nm) Torque</li><li>• 785 to 835 RPM</li></ul>	C4 - C73
Medium Frame	<ul style="list-style-type: none"><li>• 2.7 to 24.0 in<sup>3</sup>/rev (45 to 390 cc/rev)</li><li>• 1250 to 2750 PSI (86.2 to 172.4 Bar)</li><li>• 624 to 4944 in-lb (70.5 to 558.6 Nm) Torque</li><li>• 143 to 805 RPM</li></ul>	C74 - C89
Large Frame	<ul style="list-style-type: none"><li>• 4.9 to 58.5 in<sup>3</sup>/rev (81 to 958 cc/rev)</li><li>• 3000, 4000 PSI (206.8, 275.8 Bar)</li><li>• 6027 to 12,636 in-lb (680.9 to 1489.7 Nm) Torque</li><li>• 660 to 749 RPM</li></ul>	C90 - C219

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**High Speed Hydraulic Motors**

	<ul style="list-style-type: none"><li>• 0.15 to 5.08 in<sup>3</sup>/rev (2.45 to 83.2 cc/rev)</li><li>• Up to 7500 RPM</li><li>• Starting torque typically 90% of running torque</li></ul>	C225 - C238
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## Parker Hannifin Corporation

### About Parker Hannifin Corporation

Parker Hannifin is a leading global motion-control company dedicated to delivering premier customer service. A Fortune 500 corporation listed on the New York Stock Exchange (PH), our components and systems comprise over 1,400 product lines that control motion in some 1,000 industrial and aerospace markets. Parker is the only manufacturer to offer its customers a choice of hydraulic, pneumatic, and electromechanical motion-control solutions. Our Company has the largest distribution network in its field, with over 7,500 distributors serving nearly 400,000 customers worldwide.

### Parker's Charter

To be a leading worldwide manufacturer of components and systems for the builders and users of durable goods. More specifically, we will design, market and manufacture products controlling motion, flow and pressure. We will achieve profitable growth through premier customer service.

### Product Information

North American customers seeking product information, the location of a nearby distributor, or repair services will receive prompt attention by calling the Parker Product Information Center at our toll-free number: 1-800-C-PARKER (1-800-272-7537). In Europe, call 00800-C-PARKER-H (00800-2727-5374).

The Aerospace Group is a leader in the development, design, manufacture and servicing of control systems and components for aerospace and related high-technology markets, while achieving growth through premier customer service.



The Climate & Industrial Controls Group designs, manufactures and markets system-control and fluid-handling components and systems to refrigeration, air-conditioning and industrial customers worldwide.



The Fluid Connectors Group designs, manufactures and markets rigid and flexible connectors, and associated products used in pneumatic and fluid systems.



The Seal Group designs, manufactures and distributes industrial and commercial sealing devices and related products by providing superior quality and total customer satisfaction.



The Hydraulics Group designs, produces and markets a full spectrum of hydraulic components and systems to builders and users of industrial and mobile machinery and equipment.



The Filtration Group designs, manufactures and markets quality filtration and clarification products, providing customers with the best value, quality, technical support, and global availability.



The Automation Group is a leading supplier of pneumatic and electromechanical components and systems to automation customers worldwide.



The Instrumentation Group is a global leader in the design, manufacture and distribution of high-quality critical flow components for worldwide process instrumentation, ultra-high-purity, medical and analytical applications.



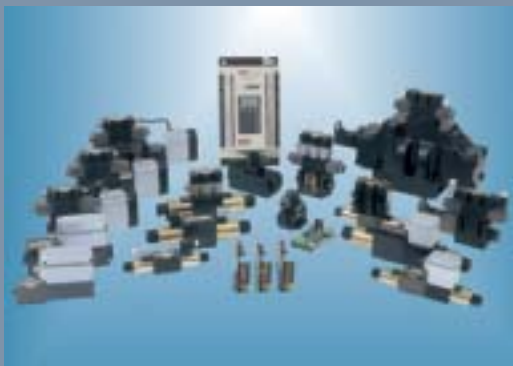
## A Wide Range of Products for Hydraulic Applications



**Catalog 0106-5** Cylinder Division  
Actuator Products Des Plaines, IL 60016  
Tel: (847) 298-2400  
Fax: (847) 294-2655



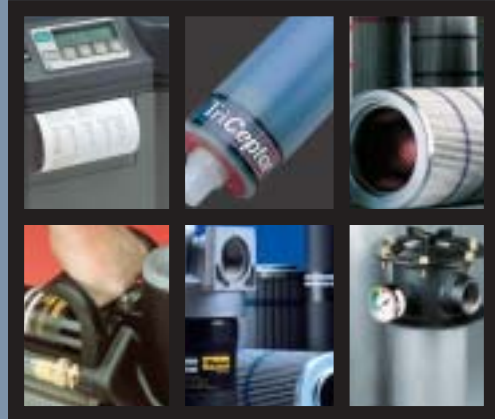
**Catalog 3105** Integrated Hydraulics Division  
Threaded Cartridge Valves Lincolnshire, Illinois/Ohio 44035  
Tel: (847) 955-5000  
Fax: (847) 821-9622



**Catalog HY14-2550/US** Hydraulic Valve Division  
Electrohydraulic Elyria, Ohio 44035  
Motion Control Products Tel: (440) 366-5200  
Fax: (440) 366-5253



**For information on Parker  
Pneumatic and Electromechanical  
Products, call 1-800-CPARKER.**



**Catalog 2300-9** Hydraulic Filter Division  
Hydraulic and Lube Filtration Products Metamora, Ohio 43540  
Tel: (419) 644-4311  
Fax: (419) 644-6205



**Catalog 2502** Hydraulic Valve Division  
Industrial Hydraulic Valves Elyria, Ohio 44035  
Tel: (440) 366-5200  
Fax: (440) 366-5253

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