

Mobile and Industrial Hydraulic Power Solutions

Introducing Eaton's Hydraulics Group.

**Innovative solutions  
that solve the world's  
toughest challenges.**

**EATON**

*Powering Business Worldwide*

# Industry leadership and innovation that empower customer success

» Eaton's hydraulics business manufactures hydraulic power and motion control, fluid conveyance, and filtration products for a variety of mobile and industrial applications, including construction, mining, material handling, manufacturing, oil and gas, agriculture and forestry. Our pumps, motors, transmissions, cylinders, electrohydraulic valves, electronic controls, hoses, fittings and connectors are designed to deliver reliability, drive productivity and provide consistent performance – empowering our customers to engineer solutions that enable better results.

# Experience Dynamic Machine Control. Empowered by Eaton.

You want greater freedom and flexibility in the machine design process. Your customers want better performance, better safety and better fuel economy. They want more information about their operators and assets so they can proactively manage maintenance and curb downtime. Electrohydraulics are no longer a vision for tomorrow, they're a requirement for today.

The answer is **Dynamic Machine Control**.

## ➔ Streamlining and simplifying machine design and development

Machine design doesn't have to be a highly manual, months-long process. With easy-to-use software and a robust library of pre-programmed development tools, the Pro-FX® Technology Platform helps you connect and configure Pro-FX Ready™ products in just minutes – with the push of a button versus the turn of a wrench.

## ➔ Optimizing and improving machine controllability and safety

Even experienced machine operators can over-command a machine, potentially putting safety and productivity at risk. Pro-FX Ready products use innovative sensor technology and on-board electronics to automate decision-making, so when the operator commands the system, the machine responds smoothly and efficiently.



Visit [eaton.com/DMC](https://eaton.com/DMC) to discover how Eaton can help you design, engineer and build better, smarter machines.

# Best-in-class power and motion control solutions

## ➔ Mobile valves

Eaton's mobile valve portfolio offers a wide range of open center, directional control, advanced and specialty-type mobile valves. Our directional control and advanced mobile valve lines are engineered for superior control, better response and operator efficiency. Our specialty valve offering, which ranges from brake valves to hydraulic remote controls (joystick or pedal), are specifically designed for customer application requirements.

## ➔ Industrial valves

Our industrial valves and systems are designed to provide continuous, reliable performance under the most rigorous and demanding operating conditions – delivering better performance and productivity across the full spectrum of industrial applications.

## ➔ Screw-in cartridge valves

With industry-leading cartridge valve technology and a comprehensive product selection, we give machine manufacturers the power to design a manifold or hydraulic integrated circuit (HIC) that can meet virtually any application challenge or need.

## ➔ Pumps

We have one of the broadest portfolios of gear, piston and vane pumps in the industry, delivering unmatched functionality and durability for a variety of mobile and industrial systems. No matter what size or operating pressure you need, Eaton has the perfect pump for almost any application.

## ➔ Motors

Eaton's full line of hydraulic motors provides proven performance and reliability in the toughest conditions and environments. Our Geroler<sup>®</sup>, vane / gear and piston motors can suit a wide variety of requirements ranging from low-speed, high-torque (LSHT) to high-speed, low-torque and everything in between.

## ➔ Hydraulic power units

Our hydraulic power units are built with high-quality Eaton components using open-circuit design standards. Available with different capacities, controls, manifolds, pumps and configurations, they ensure reliable, cost-effective operation in a variety of mobile and industrial applications.

## ➔ Clutch and brake

Known for high quality, superior performance and long life, our industrial drivetrain products are designed to excel in a wide range of applications and meet the requirements of the most demanding jobs.

## ➔ Steering systems

As pioneers of hydraulic steering technology, Eaton's industry-leading portfolio of steering control units (SCUs) offer innovative solutions specifically designed to improve machine stability, reduce operator fatigue and enhance productivity and control. Our millions of SCUs in the field showcase our track record and commitment to provide performance, reliability and operator safety in all directional control applications.

## ↪ Cylinders

Available in standard or custom-engineered models, our threaded, welded, mill duty, and custom pneumatic, hydraulic and electrohydraulic cylinders and tie rods easily meet the needs of the most demanding applications around the world.

## ↪ Filters

From filters and elements to complete systems and contamination monitoring, Eaton has certified filtration solutions that help improve machine reliability and increase the service life of system components.

## ↪ Electronic controls and software

Featuring easy-to-use software and a robust library of pre-programmed development tools, Eaton's Pro-FX Technology Platform streamlines application development and simplifies hardware setup – empowering you to build better, smarter machines more quickly and cost-efficiently.



Visit [eaton.com/hydraulics](https://eaton.com/hydraulics) for additional tools and detailed product information.



## A high-performance portfolio for the highest customer standards

With a core portfolio of high-quality hoses, fittings and connectors that meets or exceeds nearly every major specification in the industry, Eaton makes it easy to find the right product for your unique application. Plus, with some of the most well-known product brands in the business, you can trust that when you specify Eaton you're getting superior performance, exceptional value and ultimate peace of mind.



# Industry-leading fluid conveyance solutions

## ↻ Rubber hydraulic hose and fittings

With a variety of medium to very high pressure braided and spiral hose and fitting products, Eaton has a high-performance solution for virtually any mobile or industrial application where safety and productivity are top priorities. When you choose an Eaton hydraulic hose and fitting, you're choosing an industry-leading hose assembly that's proven to stand up to higher pressures, higher temperatures and higher levels of abrasion – a hose assembly that delivers superior service life, requiring less maintenance and downtime. We don't just meet industry specifications – we often exceed them. That's why more machine manufacturers are choosing Eaton.

Plus, Eaton now offers our patented LifeSense® hydraulic hose condition monitoring system that not only extends hose life but also helps prevent costly system downtime.

## ↻ Industrial and specialty hoses

Every industrial hose application requires something different, whether it's high or low pressure, fast or slow transfer rates, or materials that range from air to water to hazardous chemicals. Eaton has an extensive portfolio of industrial and specialty hoses to suit a range of markets and applications with unique requirements, including chemical service, cleaning service, steam service, food service, beverage dispensing, material handling, sub-sea and many more. And we use a variety of compounds and reinforcements to achieve maximum quality and durability while also delivering flexibility and ease of use. When safety and performance matter, the hose you choose matters. That's why more engineers are choosing Eaton.



## ➔ Fuel, A/C and truck

With the lowest permeation rates on the market, Eaton's fuel, air conditioning and refrigeration hoses and assemblies meet our customers' most stringent emissions requirements and the growing demand for more efficient, reliable systems. No matter the need – whether it's a specification for duty cycle, temperature, pressure, or fuel or refrigerant type – we have solutions for trucks, buses, specialty vehicles, and agriculture and construction equipment that are proven to perform under the toughest conditions. Our technical center and state-of-the-art testing facilities are ISO 9001 and QS 9000 certified, ensuring every single product that bears the Eaton name offers the highest possible level of quality.

## ➔ Connectors

Eaton offers an extremely robust portfolio of connector solutions that includes brass and steel adapters, quick disconnect couplings, metric tube fittings, swivel joints, patented threadless connectors and more – making it easy to make the right connection each and every time. Precision-engineered to deliver superior reliability and corrosion resistance, Eaton connectors meet or exceed a variety of industry and custom specifications for a variety of mobile and industrial applications.





# Backed by the best service and support in the business

Built on a strong legacy of solving some of the industry's toughest challenges, Eaton's hydraulics business, together with our global network of Eaton-certified channel partners, has been supporting manufacturers with world-class products and expert service and support for more than 100 years. We're a brand recognized the world over not just for what we sell, but also for how we help our customers succeed.

## Application and Commercial Engineering (ACE) services

Superior products and systems need superior design and engineering support, which is exactly what the Eaton Application and Commercial Engineering (ACE) teams deliver by providing:

- Customer project execution, consultation and collaboration
- Product selection for complex hydraulic and electrohydraulic applications
- System architecture definition and design
- Prototype evaluation and validation
- Product launch support
- Development of application aids and education materials

The ACE team includes specialists in markets such as automotive, discrete manufacturing, primary metals, renewable energy, marine / off-shore, construction, agriculture, material handling and commercial vehicles. We are also experts in key disciplines such as hydrostatic transmissions, fan drives, steering, work circuits, electrohydraulics, electronic control, open- and closed-loop axis control, packaged systems, and pump and motor drive systems.

## Expert assembly and system design services

Our growing network of Eaton-certified distribution partners is trained to help with everything from specifying to prototyping and system assembly to commissioning. You can count on them for end-to-end application support that helps simplify the design process and speed time to market.



Visit [eaton.com/locatedistributor](https://eaton.com/locatedistributor) to find an Eaton-certified distributor near you.

## Hydraulics training services

At Eaton, we don't just talk about training – we deliver. With more than 145 years of combined fluid power and education experience, our instructors have made Eaton's Hydraulics Training Services the industry standard. We offer more than 30 technical and product courses plus training aids such as manuals, multimedia and hands-on equipment, making our training ideal for anyone – from newcomers to seasoned pros.

### ➔ Two state-of-the-art facilities

We have world-class training facilities in Maumee, Ohio and Eden Prairie, Minnesota that are fully-equipped and designed to accommodate all training offerings.

### ➔ Customized, on-site training

We also offer specialized, custom-tailored training at one of our facilities or at your location. Our instructors can provide simulators, cut-aways, take-aparts and other training aids that will help attendees learn by doing.

### ➔ Fully accredited and certified

Our technical instructors are Fluid Power Society Certified, Fluid Power Specialists and Fluid Power Accredited Instructors, ensuring a consistent and high-quality experience for you and your staff.



Visit [eaton.com/hydraulicstraining](https://eaton.com/hydraulicstraining) to register for courses or order training products.



# The power of One Eaton

At Eaton, we help companies around the world manage power more reliably, efficiently, safely and sustainably. Our products and solutions can be found in millions of machines, buildings, vehicles and aircraft across the globe – working hard to help customers successfully and confidently meet their toughest power management challenges.

**10,000+**  
**PATENTS**  
HELD GLOBALLY

APPROXIMATELY  
**97,000**  
EMPLOYEES

CUSTOMERS IN  
**175+**  
COUNTRIES

**5** INNOVATION  
CENTERS  
AROUND THE WORLD

## Meeting customer needs across Eaton's five key market sectors

### Aerospace

Our aerospace business provides products and solutions that help ensure the world's commercial and military aircraft operate safely and efficiently. We make hydraulic power generation and distribution solutions for flight controls and landing gear, fuel pumps for aircraft engines, aerial refueling systems and more.

### Automotive

Eaton's vehicle business supplies critical components and technologies that improve performance and efficiency for cars, trucks, and medium- and heavy-duty commercial vehicles. Primary products include engine valves and valve trains, transmissions, clutches, fluid conveyance systems, switches and power conversion solutions, and more.

### Electrical

Our electrical business delivers integrated solutions that help ensure reliable, efficient and safe power is available when its needed most. We build systems that include circuit breakers, power distribution assemblies, surge protection devices, operator interface hardware, power management software and more.

### Filtration

Eaton's filtration business provides industrial filters and filtration systems for customers in chemical processing, food and beverage, industrial process, marine, pharmaceuticals and biotech, and oil and gas. Solutions include filters, strainers, separators, treatment products and more.

### Hydraulics

Our hydraulics business provides components and custom-engineered solutions that help mobile and industrial machines dig, haul, lift, shape and mold more safely and efficiently. From pumps, valves, motors and transmissions to hoses, cylinders and controls – Eaton's hydraulics solutions provide a faster path to smarter, more productive machines.



Visit [eaton.com](https://www.eaton.com) to learn more.

MOELLER BEGEROW  
 CHAR-LYNN AIRFLEX  
 SANTAK WALTERSCHEID  
 BOSTON CROUSE-HINDS  
 INTERNORMEN SYNFLUX  
 POWERWARE SEL MEM  
 JEIL CARTER VICKERS  
 B-LINE COOPER HAYWARD  
 HYDRO-LINE ARGO-TECH  
 CUTLER-HAMMER COOPER  
 BEGEROW SANTAK  
 WEATHERHEAD CARTER  
 BUSSMANN SYNFLUX  
 INTEGRATED HYDRAULICS  
 COOPER HOLEC AEROQUIP  
 B-LINE HAYWARD  
 MEM AIRFLEX BOSTON  
 SEL MOELLER  
 POWERWARE INTERNORMEN  
 WALTERSCHEID VICKERS  
 AEROQUIP FULLER  
 JEIL SYNFLUX BUSSMANN

## MORE POSSIBILITIES. POWERFUL SOLUTIONS.

Eaton has been serving the power management needs of our customers for more than a century. Over the years, we have expanded our expertise and portfolio of products and services by uniting some of the world's most respected names with Eaton's strong heritage of innovation.

Our goal is simple: to provide unique solutions across a wide range of markets that keep businesses on the leading edge of change. That's the power of One Eaton.