



Power/mation[®]

Innovative Automation Solutions / Exceptional Customer Service

Capabilities Guide

www.powermation.com
800.843.9859





Founded in 1961 by Jim and Don Craighead, Power/mation has evolved to become the Midwest's foremost automation solution provider. It is the goal of our organization to maintain an entrepreneurial spirit while providing product expertise in partnership with the industry's most established brands.

With a robust Solutions Group and access to cutting-edge automation products, it is Power/mation's mission to provide innovative automation solutions with exceptional customer service.

Power/mation headquarters is in St. Paul, Minnesota with additional offices in Wisconsin and Illinois. The impact of our expertise is felt worldwide in a variety of industries.

- | | | | |
|-------------|--------------------|----------------------|-------------------|
| • Oil & Gas | • Machine Builders | • Building Materials | • Food & Beverage |
| • Mining | • Waste Water | • Agriculture | • Medical |
| • Energy | • Automotive | • Lumber | • Packaging |
| • Rail | • Motorsports | • Paper | • 3D Printing |



ST. PAUL, MINNESOTA



PEWAUKEE, WISCONSIN

Power/mation Solutions Group

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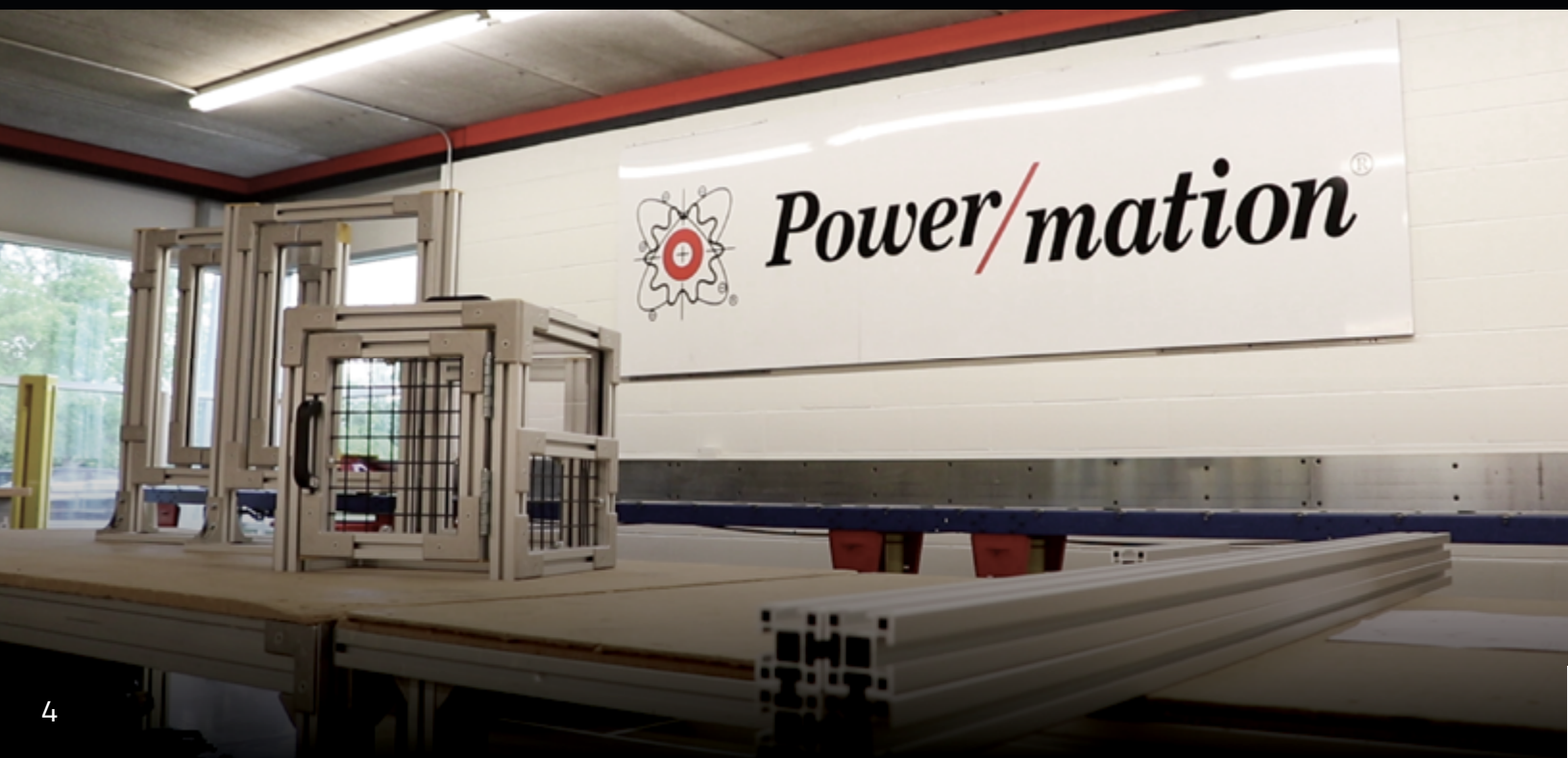


Power/mation®

SOLUTIONS GROUP

Over the course of two decades, Power/mation forged a team to creatively overcome automation challenges. The result is a full-time staff of engineers, designers and technicians to execute your custom applications with dedicated support along the way.

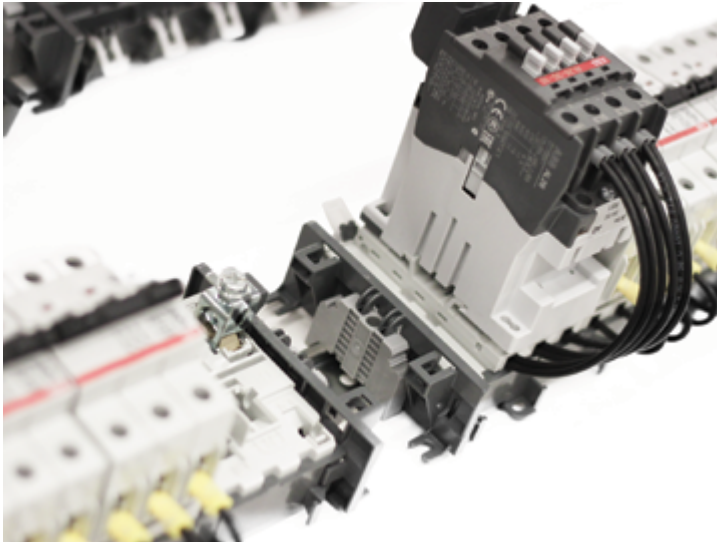
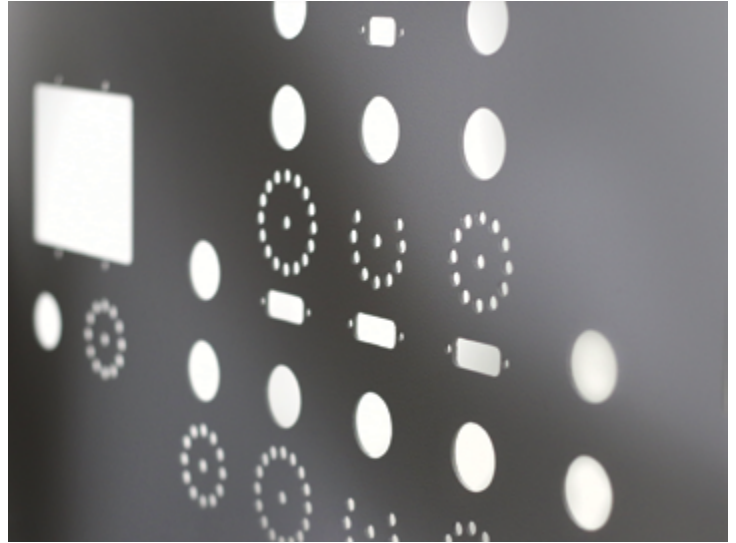
Combined with Power/mation's knowledgeable salesforce and longtime vendor partnerships, customers now gain access to an unparalleled suite of automation possibilities. This is the Power/mation Solutions Group.



IN-HOUSE SOLUTIONS

Enclosure Modifications

The Power/mation Solutions Group has engineers, drafters and technicians on staff to customize enclosures to your exact specifications. A platinum partnership with Rittal Corporation ensures product stock for quick turnaround shipping and industry-best pricing. Whether it's a one-off custom job, or standardizing multiple enclosures, our CNC machine accurately cuts, drills and taps multiple materials including steel, stainless steel, aluminum and non-metallics. Our enclosure modification shop is proudly located at our office in St. Paul, Minnesota.



Custom Kits & Assemblies

The core of the Power/mation Solutions Group purpose is to ease our customers' experience in tackling their own applications. Each of the custom products we produce is assigned its own part number, which eases the ordering process and inventory management. Examples of the custom components in our portfolio:

- Cable Assemblies
- Din Rail Assemblies
- Bus Bar Assemblies
- Graphic Overlays
- Mounting Assemblies
- Built-to-Order Kits

Custom Safety Fencing

Produced in our Pewaukee, Wisconsin office, our machine hard guard fencing is among the industry's most versatile safety solutions. Available in multiple configurations and colors, Power/mation's custom safety fencing is designed and cut to our customers' exact specifications. After the safety cell has been designed, we'll work with you to supply the complementary safety components necessary to safeguard your application and most importantly — your personnel.



MANAGED SOLUTIONS

The Power/mation Solutions Group collaborates with our network of trusted integrators and specialty providers. We manage the project from concept to completion and deliver a total solution to you.

Outsourced Services

- UL 508 & 698
- CE Testing & Self-Certification
- Electrical & Mechanical Design Drafting
- Safety Risk Assessments
- Millwright Service



Robotics & Drive Services

- Sizing Requirements
- Application Specifications
- Programming
- Startup & Commissioning
- Simulation, Prototyping & Evaluation

Software & Programming

- SCADA
- PLCs
- HMIs
- Drives
- Motion



PARTNERED SOLUTIONS

If your application needs something that Power/mation cannot provide, we will work to find the solution provider that can. We are dedicated to seeing our customers succeed.

To discuss your application, please call us at 800.843.9859.

SENSING & INSPECTION



Photoelectric

- Banner Engineering (MN, WI, ND & SD)
- IDEC
- Datalogic
- Contrinex (IA & NE)
- SICK (IL)

Proximity

- Turck
- SICK (IL)

Machine Vision

- Banner Engineering (MN, WI, ND & SD)
- Datalogic
- Tamron
- Festo (MN, ND & SD)

Web Sensing

- Roll-2-Roll Technologies
- MAGPOWER

Temperature, Flow & Measurement

- ABB
- Banner Engineering (MN, WI, ND & SD)
- Turck
- Watlow
- Festo (MN, ND & SD)

RFID

- Turck
- RFID Inc.

Limit Switches

- ABB
- Turck
- Euchner
- Festo (MN, ND & SD)

Rotary & Linear Measurement

- Turck
- Encoder Products Company
- Electro Cam
- Ametek
- Red Lion

Task Lighting

- Banner Engineering (MN, WI, ND & SD)
- Phoenix Contact
- Horner Lighting

Indication / LED Lighting

- Banner Engineering (MN, WI, ND & SD)
- Phoenix Contact
- Patlite
- Werma

PANEL COMPONENTS



Power Supplies & UPS

- Phoenix Contact
- IDEC
- PULS
- Sola/Hevi-Duty

Protection, Filtering & Conditioning

- Phoenix Contact
- Enerdoor
- TCI

Relays

- Phoenix Contact
- ABB
- IDEC
- Turck
- Eurotherm

Enclosure Lighting

- Banner Engineering (MN, WI, ND & SD)
- Rittal Corporation
- Haewa (IL, IA & NE)
- Phoenix Contact

Transformers

- Hammond Manufacturing
- Sola/Hevi-Duty

Motor Control Centers

- ABB
- GE Automation & Controls

Terminal Blocks

- Phoenix Contact
- ABB
- Entrelec

Temperature Controls

- Watlow
- ABB
- Red Lion

Starters & Contactors

- ABB
- Phoenix Contact
- Sprecher + Schuh

Timers & Counters

- IDEC
- Red Lion
- ABB
- Phoenix Contact
- Crouzet

Soft Starters

- ABB
- Nidec (Control Techniques)

Din Rail & Wireduct

- Phoenix Contact
- ABB/Thomas & Betts

Circuit Breakers

- ABB
- Phoenix Contact

Marking & Labeling

- Phoenix Contact
- Datalogic

Fuses

- Mersen

Hand-Held Pendants

- Euchner

ENCLOSURES



Freestanding & Wall Mount

- Rittal Corporation
- Haewa (IL, IA & NE)
- Hammond Manufacturing

Rack Mounted

- Rittal Corporation
- Haewa (IL, IA & NE)
- Hammond Manufacturing

Hazardous Location

- Adalet

Stainless Steel

- Rittal Corporation
- Haewa (IL, IA & NE)
- Hammond Manufacturing

Non-Metallic

- Stahlin
- Allied Moulded
- Vynckier
- Hammond Manufacturing

Custom

- Power/mation Solutions Group
- Rittal Corporation
- Haewa (IL, IA & NE)
- Hammond Manufacturing

Climate Control

- Rittal Corporation
- Haewa (IL, IA & NE)
- Hammond Manufacturing

Cable Entry Systems

- Phoenix Contact
- Roxtec
- ABB/Thomas & Betts
- Turck

PANEL MODIFICATIONS & MORE

The St. Paul Power/mation office houses our CNC cutting machine and custom assembly workspace.

Additionally, the Power/mation Solutions Group has grown to include a unique team of dedicated engineers, customer service experts and project management leaders.

To find out how the Power/mation Solutions Group can guide you through your next automation challenge, call us at 800.843.9859 or visit www.powermation.com.



Power/mation is one of the few Rittal Platinum Modification Partners. For our customers this means competitive pricing and guaranteed stock on a wider selection of enclosures.



LOGIC CONTROL & VISUALIZATION



Logic Control / PLC

- Phoenix Contact
- GE Automation & Controls
- Horner APG
- ABB
- IDEC
- Red Lion
- Turck
- Lenze
- Festo (MN, ND & SD)

SCADA

- GE Automation & Controls
- ABB
- RRAMAC
- Kepware

HMI / Touch Screens

- Horner APG
- Phoenix Contact
- GE Automation & Controls
- ABB
- IDEC
- Red Lion
- Maple Systems
- Turck

Panel Meters

- Red Lion

I/O

- Phoenix Contact
- GE Automation & Controls
- Turck
- Lenze
- Festo (MN, ND & SD)

Industrial PC & Monitors

- Phoenix Contact
- GE Automation & Controls
- Lenze
- Maple Systems



Power/mation is proud to be the exclusive Phoenix Contact Automation Elite Distribution Partner. Phoenix Contact also offers a limited lifetime warranty applying to a wide range of its products. Contact your sales representative for details.



INDUSTRIAL INTERNET & NETWORKING



Ethernet Switches

- GE Automation & Controls
- Phoenix Contact
- Red Lion
- Turck

Routers & Firewalls

- GE Automation & Controls
- Phoenix Contact
- Red Lion

Media Converters

- Phoenix Contact
- Turck
- Red Lion

Copper & Fiber Media

- Turck
- Phoenix Contact

Protocol Converters

- Phoenix Contact
- Red Lion
- Secomea
- Turck

Industrial Wireless

- GE Automation & Controls
- Phoenix Contact
- Banner Engineering (MN, WI, ND & SD)
- ABB

Cellular

- Verizon
- Red Lion
- Phoenix Contact
- Banner Engineering (MN, WI, ND & SD)
- Secomea

Cloud Visualization & Control

- RRAMAC
- GE Automation & Controls

Cybersecurity Solutions

- Phoenix Contact
- Red Lion
- Secomea
- GE Automation & Controls

Remote Access

- Phoenix Contact
- Secomea
- Red Lion

CONNECTING INDUSTRY TO THE INTERNET

Securely connect isolated islands of automation to each other, corporate systems and other service providers. Transform secure industrial data into information that empowers business leaders, operators and customers to improve all aspects of system performance.

With the right partners and technology, the real value of this information can be harnessed to improve quality, reduce downtime, manage assets and reduce costs.

Log on to www.powermation.com to review the entire suite of IIoT solution documentation.



The Industrial Internet of Things (IIoT) is about enhancing the end user's experience through ease-of-use tools and intuitive interfaces. For an OEM, it is essential to incorporate these new technologies and methodologies into its products and services so customers choose them for a solution.



MOTION CONTROL & ROBOTICS



YOUTH IN STEM

Power/mation is proud to sponsor a variety of FIRST Robotics teams from our territories. Our experts provide mentorship and help craft the future of this very industry, starting with the best and brightest minds of today's youth.



Motion Drives

- ABB Motion
- Lenze
- Nidec (Control Techniques)
- Oriental Motor
- Festo (MN, ND & SD)

VFDs

- ABB Drives
- KB Electronics
- Lenze
- Nidec (Control Techniques)

Integrated Motor & Control

- Exlar
- Dunkermotoren
- IAI
- Festo (MN, ND & SD)

Bearings

- Bishop-Wisecarver
- IGUS

Actuators

- Exlar
- Tolomatic (MN, WI, ND & SD)
- Bishop-Wisecarver
- IAI
- Macron Dynamics
- Oriental Motor
- Joyce/Dayton
- Festo (MN, ND & SD)

Motion Controllers

- ABB Motion
- Lenze
- Trio Motion
- Festo (MN, ND & SD)

Couplings

- GAM
- Zero-Max
- NBK

Grippers

- IAI
- Festo (MN, ND & SD)
- Zaytran (Festo)

Robotics

- ABB Robotics
- IAI
- Macron Dynamics

Servo Motors

- ABB
- Lenze
- Nidec (Control Techniques)
- Exlar
- Oriental Motor
- Festo (MN, ND & SD)

Stepper Motors

- Oriental Motor
- Festo (MN, ND & SD)

Precision Gearboxes

- Apex Dynamics
- GAM
- Nexen

Rail

- Bishop-Wisecarver
- Rollon (IL)

POWER TRANSMISSION



BALDOR • RELIANCE®



Lenze



nexen



Motors

- ABB
- Baldor - Reliance
- Lenze
- Leeson Electric
- Brook Crompton
- Nord Drivesystems
- U.S. Motors (Nidec)

Gear Boxes

- Lenze
- Nord Drivesystems
- Grove Gear
- Hub City

Web Tension

- ABB
- MAGPOWR
- Cleveland Motion Controls
- Contrex
- Nexen
- Roll-2-Roll Technologies

Brakes

- Nexen
- Dings

Couplings

- GAM
- NBK
- Zero-Max

Gear Motors

- Lenze
- Nord Drivesystems
- Baldor - Reliance
- Leeson Electric

Power/mation offers assistance in selecting the necessary drives and accessories for your new power transmission application. Additionally, Power/mation provides application support in maintaining, repairing and upgrading legacy systems. Talk to your sales representative to explore your options.

CONNECTORS & CABLING



Thomas & Betts
A Member of the ABB Group



Cordsets

- Turck
- Phoenix Contact
- Banner Engineering (MN, WI, ND & SD)

Bulk Cable

- Turck
- Phoenix Contact
- SAB

Fiber Optic

- Phoenix Contact
- Banner Engineering (MN, WI, ND & SD)

Connectors

- Turck
- Phoenix Contact
- ABB/Thomas & Betts
- Meltric

Cable Management

- ABB
- IGUS
- Phoenix Contact
- ABB/Thomas & Betts

Multi-Ports

- Phoenix Contact
- Turck

Cable Glands

- Phoenix Contact
- Rittal Corporation
- Roxtec
- ABB/Thomas & Betts

MACHINE SAFETY



ABB Jokab Safety



EUCHNER
More than safety.



Programmable Safety Controllers

- ABB Jokab Safety
- ABB
- Banner Engineering (MN, WI, ND & SD)
- Lenze
- Euchner
- Phoenix Contact
- REER
- Pilz
- SICK (IL)

Safety Relays

- ABB Jokab Safety
- Phoenix Contact
- Pilz
- Banner Engineering (MN, WI, ND & SD)
- Euchner
- SICK (IL)

Safety Switches

- ABB Jokab Safety
- Fortress Interlocks
- Euchner
- Banner Engineering (MN, WI, ND & SD)
- IDEC
- Pilz

Hard Guard Fencing

- Power/mation Solutions Group
- ABB Jokab Safety
- Frame-World

Presence Sensing & Light Curtains

- Banner Engineering (MN, WI, ND & SD)
- ABB Jokab Safety
- Contrinex (IA & NE)
- Recora
- REER
- SICK (IL)

SAFETY SOLVED

Power/mation offers a complete suite of safety components including custom hard guard fencing designed and manufactured in our Pewaukee, Wisconsin office.

Power/mation fencing systems are modern, attractive, modular and easy to assemble. Our fencing design team will create a custom cell for your application, revising it until you are completely satisfied.

Check out the Safety Solutions documentation and custom fencing design worksheet available at www.powermation.com. Contact your sales representative to learn more.



Custom Safety Fencing by
 **Power/mation**
 SOLUTIONS GROUP

PROCESS AUTOMATION



Measurement Sensors

- ABB
- Turck
- Banner Engineering (MN, WI, ND & SD)
- NOSHOK
- Festo (MN, ND & SD)

Connectivity

- Turck
- Phoenix Contact
- Banner Engineering (MN, WI, ND & SD)
- ABB

Controllers

- ABB
- GE Automation & Controls
- Turck
- Phoenix Contact

Visualization

- ABB
- GE Automation & Controls
- Phoenix Contact
- RRAMAC

Data Management

- ABB
- GE Automation & Controls
- RRAMAC

Power Reliability

- Phoenix Contact
- Enerdoor
- GE Automation & Controls

Valve Actuators

- Festo (MN, ND & SD)
- Exlar

Temperature Control

- ABB
- Red Lion
- Watlow
- Turck
- Chromalox

Valving

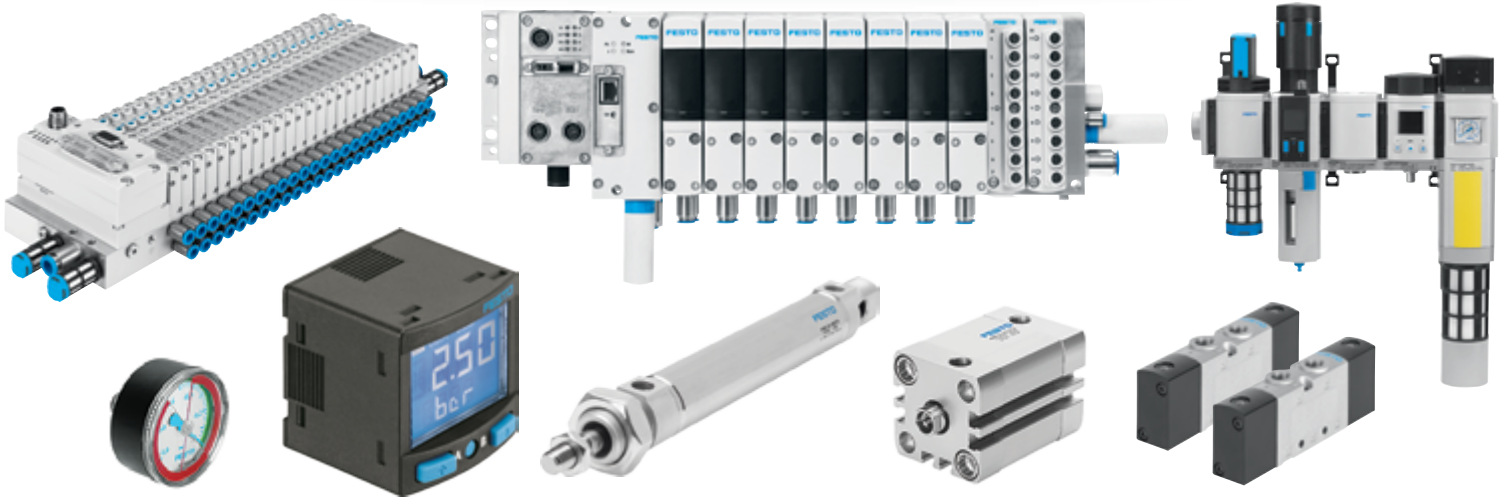
- NOSHOK
- Turck
- Festo (MN, ND & SD)

Hazardous Location

- Adalet
- NOSHOK
- Turck
- ABB
- Phoenix Contact
- Festo (MN, ND & SD)

PNEUMATICS

FESTO



Compressed Air Preparation

- Festo (MN, ND & SD)

Valves

- Festo (MN, ND & SD)

Vacuum Technology

- Festo (MN, ND & SD)

Pneumatic Caliper Brakes

- Nexen

Air Supply Components

- Festo (MN, ND & SD)

Valve Manifolds

- Festo (MN, ND & SD)

Pneumatic Actuators

- Festo (MN, ND & SD)

Pneumatic Clutches

- Nexen

Handling Systems

- Festo (MN, ND & SD)

Servo-Pneumatic Control Components

- Festo (MN, ND & SD)

Grippers

- Festo (MN, ND & SD)
- Zaytran (Festo)

ON THE AIR

Power/mation and Festo are working together to help our customers make their products faster, smarter and more precisely.

Festo is an industry leader of research and development in current and emerging automation technologies. From full pneumatic architecture to innovative components inspired by the natural world and its lifeforms, Festo is ready to creatively approach automation challenges.

Go to www.powermation.com to download the Pneumatic Solutions document to learn how Festo adds to Power/mation's complete automation offering.



PRODUCT TRAINING

Power/mation hosts training sessions ranging from brief lunch and learns to multiple day programming courses. Typically led by Power/mation Automation Specialists, the goal is for our customers to gain a high level of understanding and insight into modern automation.

Visit www.powermation.com for a complete listing.



POWER/MATION CUSTOMER PORTAL



Visit portal.powermation.com and register with your company information to access real time order status, inventory and more. The product catalog is available to browse 24/7.

For registration or other inquiries regarding the Customer Portal contact the development team at portal@powermation.com.

JOIN OUR COMMUNITY

Follow us on LinkedIn, Facebook, Twitter and YouTube to be the first to hear about exciting industry news and Power/mation events!



ASSOCIATIONS

Power/mation regularly contributes to the associations that guide the future of the automation industry. To remain at the forefront of industry technology trends, our company is an official member of multiple distributor organizations.



A

ABB
ABB/Thomas & Betts
ABB Controls
ABB Drives
ABB Jokab Safety
ABB Motion
ABB Robotics
Adalet
Allied Moulded
Ametek
Apex Dynamics

B

Baldor - Reliance
Banner Engineering (MN, WI, ND & SD)
Bishop-Wisecarver
Bodine Electric
Brad Harrison
Brook Crompton

C

Chromalox
Cleveland Motion Controls (CMC)
Contrex
Contrinex (IA & NE)
Control Techniques (Nidec)
Control Technology Corporation
Crouzet

D

Datalogic
Dings
Dunkermotoren
Durant

E

Eaton/Cutler-Hammer (IL)
Electro Cam
ElectroCraft
Emerson (Nidec)
Encoder Products Company
Enerdoor
Entrelec
Euchner
Eurotherm
Exlar

F

Fairchild Industrial Controls
Festo (MN, ND & SD)
Ferraz (Mersen)
Fortress Interlocks
Frame-World

G

GAM
Gardasoft
GE Automation & Controls
Grove Gear

H

Haewa (IL, IA & NE)
Hammond Manufacturing
Horner APG
Horner Lighting
Hub City

I

IAI
IDEC
IGUS
Industrial Enclosures Corporation
Inertia Dynamics
Intercon 1

J

Joyce/Dayton

K

KB Electronics
Kepware
Killark
Kraus and Naimer

L

Leeson Electric
Lenze

M

Macron Dynamics
MAGPOWR
Maple Systems
Meltric
Mersen

N

NBK
Nexen
Nidec (Control Techniques)
Nord Drivesystems
Norstat
NOSHOK

O

Oriental Motor

P

Patlite
Phoenix Contact
Pilz
Power/mation Solutions Group
Pro-face
PULS

R

Recora
Red Lion
REER
RFID Inc.
Rittal Corporation
Roll-2-Roll Technologies
Rollon (IL)
Roxtec
RRAMAC

S

SAB
Secomea
Servo Solutions, Inc.
SICK (IL)
Sola/Hevi-Duty
Sprecher + Schuh
Stahlin

T

Tamron
TCI
Thomas & Betts/ABB
Tolomatic (MN, WI, ND & SD)
Trio Motion
Turck

UVWXYZ

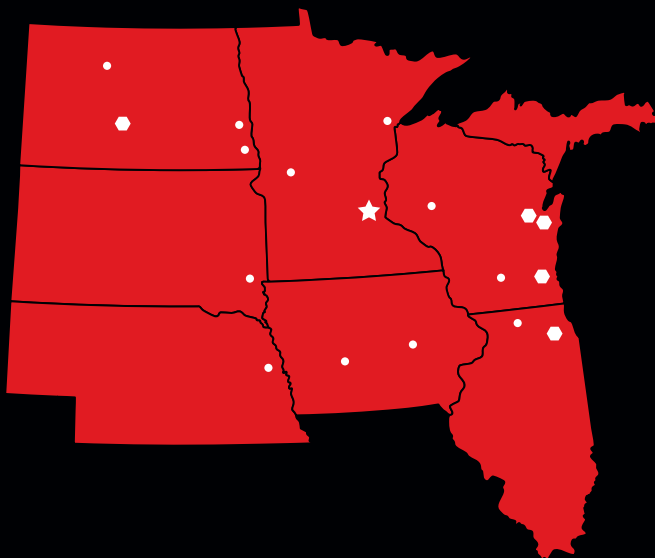
U.S. Motors (Nidec)
Verizon
Vynckier
Watlow
Werma
Winsmith
Zero-Max
Zaytran (Festo)

Power/mation has product warehouses in Roseville, Minnesota and Pewaukee, Wisconsin. With a dedicated operations staff, we are determined to provide innovative automation solutions with exceptional customer service, from design to delivery.



Corporate Headquarters

St. Paul, MN
1310 Energy Lane
St. Paul, MN 55108
(800) 843-9859
(651) 605-3300
(651) 605-4400 Fax



Office Locations

Pewaukee, WI
N28 W23566 Creative Way
Pewaukee, WI 53072
(800) 242-2060
(262) 408-6100
(262) 523-0611 Fax

Appleton, WI
5485 W Grande Market Dr
Suite A
Appleton, WI 54913
(800) 242-2060
(920) 969-9917

Green Bay, WI
2221 Starr Ct
Green Bay, WI 54303
(800) 924-6260
(920) 497-6354
(920) 496-4363 Fax

Wood Dale, IL
581 N Edgewood Ave
Wood Dale, IL 60191
(800) 847-9896
(630) 475-4240
(630) 860-9177 Fax

Bismarck, ND
1307 Grumman Lane
Bismarck, ND 58504
(833) 200-5086
(651) 605-4400 Fax

Sales Territories

Minnesota

Alexandria
(800) 843-9859 Customer Service
(320) 766-5878 Sales

Duluth
(800) 843-9859 Customer Service
(218) 628-6063 Sales
(218) 628-6063 Fax

Wisconsin

Madison
(800) 242-2060 Customer Service
(262) 523-0611 Fax

Eau Claire
(800) 843-9859 Customer Service
(715) 723-0730 Sales

North Dakota

Fargo
(800) 843-9859 Customer Service
(651) 605-4400 Fax

Minot
(800) 843-9859 Customer Service
(651) 605-4400 Fax

Wahpeton
(800) 843-9859 Customer Service
(651) 605-4400 Fax

South Dakota

Sioux Falls
(800) 843-9859 Customer Service
(605) 335-3046 Sales

Illinois

Rockford
(800) 847-9896 Customer Service
(630) 860-9177 Fax

Iowa

Des Moines
(800) 322-4589 Customer Service
(319) 395-0929 Fax

Cedar Rapids
(800) 322-4589 Customer Service
(319) 395-0929 Fax

Nebraska

Omaha
(800) 428-9036 Customer Service
(402) 445-8728 Fax



Power/mation®

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