

# Fluid Control Solutions for Industrial Applications Proven automation solutions and local expertise help you overcome

Proven automation solutions and local expertise help you overcome your toughest challenges





In an increasingly competitive landscape, relationships with reliable expert partners become critical for your success.

# More complexity & connectivity across your industries creates challenges—and opportunities

Industrial manufacturing is facing an inflection point. Manufacturers are seeing a need for better operating models and more thoughtful investments which has driven the trend towards digitalization. Across industries we see customers faced with amplified pressure to increase productivity while building better machines that generate higher customer demand. Each decision on an individual component has long-term network effects on system efficiency and the potential to improve performance. In this evolving landscape, it is clear that better technologies, deeper expertise, and a stronger commitment to value-creating solutions guarantees a market advantage.

**Need for the latest technologies.** Your peers and customers are considering what's next—requiring you to invest in advanced technologies that can improve your performance and differentiate your business.



**Need for truly expert partners.** Your business is different from other manufacturers, requiring relationships with leading suppliers who have technical engineering knowledge and a true dedication to partnership.



Need for more than products—needing solutions for your applications. Your role requires critical decision making around the right components to purchase, but can also benefit from services that make your job easier.



# Turn to Emerson for reliable products and solutions for your applications

Emerson's fluid control & pneumatics portfolio is uniquely designed to address the quality and speed of performance required to lead industrial and commercial players into the future. Working with our brands ASCO™, AVENTICS™, TESCOM™ or TopWorx™ means you can expect rugged, durable products configured for your toughest environments and support from knowledgeable partners who understand your expectations of safety and cost.



### Leading fluid control solutions and technologies

- Partner with the founders of solenoid valve technology
- Explore over 100,000 fluid control valves worldwide—from solenoid to angle body
- Access a one-stop shop for rugged, highly reliable products and turnkey solutions

"ASCO is certainly one of our preferred vendors, and as such their quality of performance is very good."

- Burner-Boiler OEM



### Application experts around the globe

- Work with experts backed by ~100 years of experience in fluid control & pneumatics
- Take advantage of our knowledge of commercial component and system designs
- Access global omnichannel support and localized distribution to free your resources

"I was pleasantly surprised when product development engineers requested to visit our R&D facility to discuss our new instrument design and capability requirements."

-Aerospace OEM



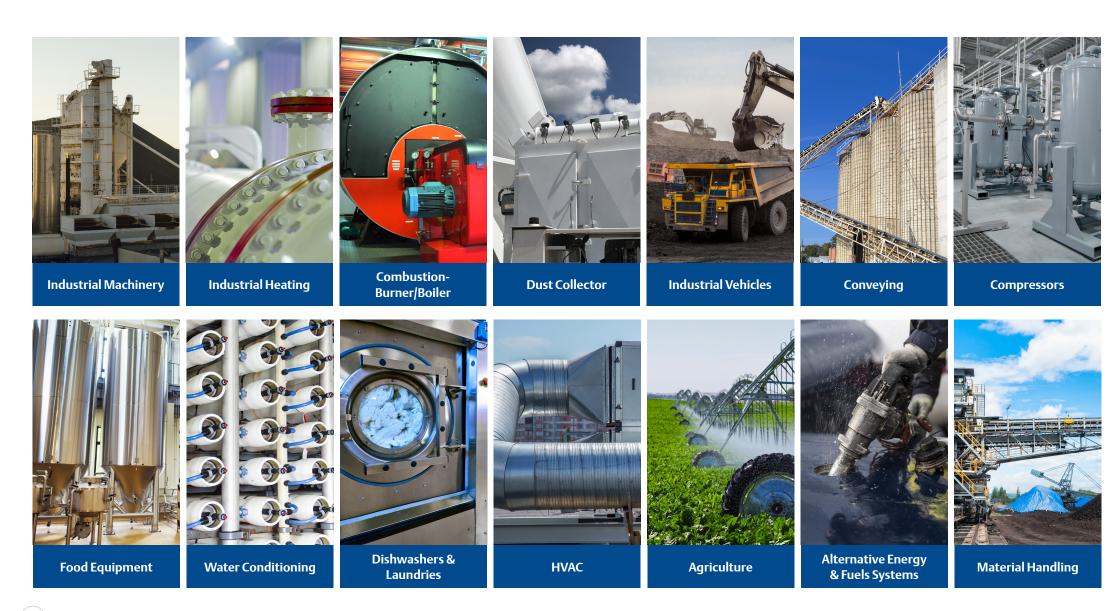
### **Engineered solutions and services**

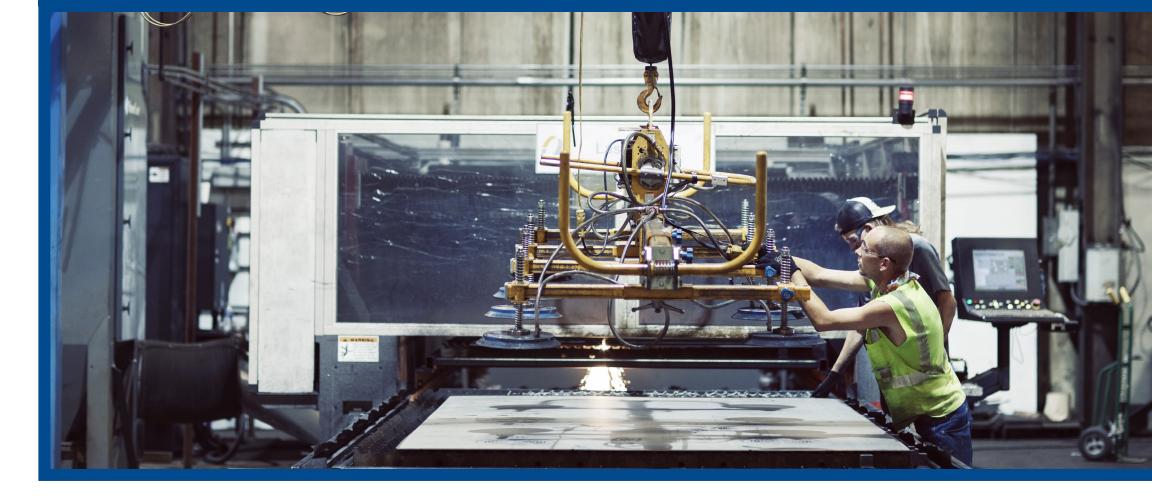
- Train your employees to rapidly master solutions with the help of our engineers
- Take advantage of local field service from a truly global engineering support team
- Turn to one point of accountability dedicated to quickly optimizing your performance

"Continuous improvement is a big KPI for us. They always look for different ways to help us continuously improve and be competitive."

-Compressor OEM

# High-quality engineering is our offering—applied industry expertise is our promise





# **Industrial & Commercial Machinery**

The most reliable fluid control technologies supported by machinery experts and catered to your timelines and applications. Learn more. > p6

### **Combustion Solutions**

Gas shutoff, angled seat, solenoid valves and other technologies designed to meet global approvals and changing environmental standards. Learn more. ▶ p8

# **Dust Collector Systems**

A broad portfolio of air filtration, material handling, and finishing applications to ensure the highest air quality. Learn more.  $\triangleright$  p10

# **Alternative Energy & Fuel Systems**

Proprietary technologies designed for CNG, LNG, Hydrogen, and Petro fuel dispensing needs. Learn more. ▶ p12

# **Industrial & Commercial Machinery**

Supporting the operational uptime of industrial and commercial businesses requires a partner that knows how to improve system performance while avoiding any risk of unnecessary downtime. Emerson's fluid control products are designed with performance in mind. With the most reliable solenoid valve technologies available, our application experts and sales force of over 500 problem solvers are ready to consult on your machinery challenge.



## What's your opportunity?

- Invest in rugged, reliable 2-way solenoid technologies and regulators that can support all media and quickly be sized to your application
- Take advantage of our global express program—offering reliable, quality products with the largest range of approvals and customized engineered solutions
- Select from the industry's broadest range of solenoid valve pipe size, pressures, temperature ratings, or flow coefficients available in stainless steel, composite, or leadfree brass





# Take control of all your fluid control applications needs.

Whether you're purchasing ASCO™ angle body valves or TESCOM™ precision fluid control products, Emerson always prioritizes quality, safety, reliability, and expertise. Work with a fluid control or pneumatics expert to solve your challenge.



### Services offered...

- Rapidly engineered solutions specific to your applications, quickly designed, and express delivered
- Digital product sizing and configuration tools

### Featured Solenoid Valves

### ASCO Series 210 and 262



General service direct acting solenoid valves.

- Wide range of pressure ratings, sizes, and resilient materials provide long life and low internal leakage
- High flow valves for liquid, corrosive, and air/inert gas service
- Industrial applications include: car wash, air compressors, pumps, laundry equipment, industrial water control

### **ASCO Series 320**



General-service and electronically enhanced solenoid valves designed for a broad range of applications.

- All NPT connections are in the valve body to allow better in-line piping
- No minimum operating pressure differential required
- Available in brass and stainless-steel constructions
- Mountable in any position

### **ASCO Series 220**



Steam and hot water valves that provide up to 60% more flow than competitive offerings.

- Longer life cycles: tested to 1 million cycles on hot water and 50 psi steam; 500,000 cycles on 125 psi steam
- Lower power operation: smaller operator reduces energy consumption on 5 psi differential pressure applications
- DC constructions have quiet designs that work with 0 psi differential pressure on hot water and 50 psi steam

### Featured Angle Valves, Precision Regulators, and Proximity Sensors

### **ASCO Series 290**



Pressure-operated, direct acting angle-body piston valve built for demanding applications.

- Proven durability in handling aggressive fluids such as steam, ho water, solvents, and light slurries
- Optional features include position indication and proportional control
- Rugged water-tight actuator made from tough fiber composite and protected with a double O-ring seal

### **TESCOM ER5000 + 26-2000 Series**



When paired together, the TESCOM ER5000 electropneumatic controller and 26-2000 Series Regulator provide an optimal solution to automate your pressure control for improved accuracy.

- Ideal for use in pressure filling applications, calibration testing, component testing, and product cycle testing
- Electronpneumatic closed loop system provides extensive data acquisition, removes inaccuracies, and provides precise and consistent results every time

### **TopWorx GO Switch Models 21 and 52M**



One-of-a-kind technology offering high current ratings and providing reliable, durable proximity sensing in the most demanding conditions.

- Wider range of current ratings
- Higher pressure ratings
- More extreme temperature ratings
- Global Hazardous area ratings
- Superior resistance to physical abuse







# **Combustion Solutions**

Industrial and commercial leaders using combustion valve technology know that reliability, safety, and energy efficiency is critical. Whether it's for gas engine, district heating, or even furnace applications, Emerson's products meet all major global approvals across industries, and Emerson's team will work with local agencies to attain any outstanding required approvals you need.



# What's your opportunity?

- Partner with a supplier committed to designing products with the Nitrogen Monoxide (NOx) requirement in mind
- Rest assured the products you invest in—like safety shutoff valves—improve your business's combustion efficiency safely
- Explore valves for industrial heating as well as for packaged burner and boiler application





# Turn to the experts on industrial heating applications.

With a diverse offering of solenoid valves for piloting, safety single and double shutoff valves, and angle body valves—we have what you need and a deep understanding of industrial heating. Work with an Emerson expert to find solutions for your burners & boilers, paint curing, reactors & heat exchanges, or grain dryer applications.



### Services offered...

- Online tools to adjust flow sizing or configure control of the media
- Specialty distributors that understand and are service leaders in combustion solutions

### **Featured Gas Shutoff Valves**

### **ASCO Series 040**



Broad ambient temperature lightweight 2-way direct acting gas shutoff valves.

- 2-way normally closed operation
- For gas pilot control of commercial and industrial gas burners
- Direct lift with resilient soft seating for tight shut-off
- Valves provided with 1/8" NPT downstream pipe tap with plug for routine testing
- Mountable in any position

### **ASCO Series 214**



General purpose and watertight enclosure gas shutoff valves.

- Modular and unique double disc design with overtravel provides redundant sealing for leak tight shutoff
- Visual indication of open and shut position
- Proof of closure switch 1 amp & visual indicator
- Silicon-free construction
- On-off control of fuel gas in commercial and industrial gas burners

### **ASCO Series V170 and AH Actuator Motorized Safety Shutoff Valves**



Family of modular gas safety shut-off valves with a compact double valve footprint and the industry's highest flow rates.

- High flow
- Compact footprint
- Flexible field mounting
- Mountable in any position
- Broad ambient temperature range

### Featured Fuel Gas and Oil Vavles

### **ASCO Series 215**



Low pressure solenoid pilot operated valves available in normally closed and normally open constructions.

- Lightweight, low-cost valves for air service
- Ideal for low pressure applications
- Provides high flow, Cv up to 138 (Kv118)
- Air and vacuum service

### ASCO Series HOV1B and HOV13B



Push-type, self-contained fuel oil valve with a single stemquided seat; hydramotor® operated oil safety shutoff valves.

- Flexible two-piece actuator and body design
- HOV1(B) comes standard with valve seal overtravel and electrical interlock proof of closure switch
- Broad ambient operating temperature range
- Improved installation and service
- Short lead time

### **ASCO Series 266**



Direct acting fuel oil valves.

- General Purpose Enclosure
- 2-way normally closed or normally open operation
- Zero differential lever actuated
- For on-off control of fuel oil in commercial and industrial oil burners
- Suitable for light and heavy fuel oils









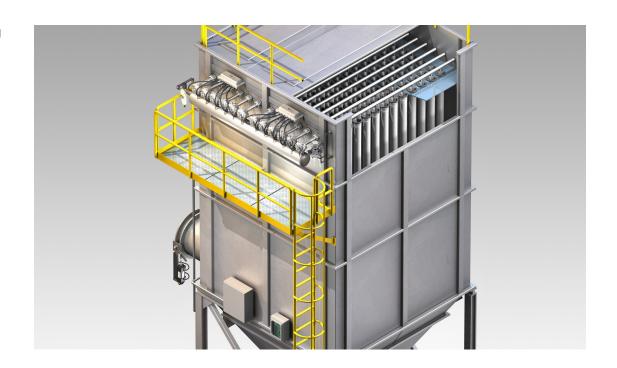
# **Dust Collector Systems**

Environmental standards for air quality are on the rise, creating new regulations for industrial leaders requiring dust collectors. Emerson is your global partner in meeting changing demands for improved air quality: understanding your unique business, promising quick shipments of guaranteed available products, and continually developing new solutions for dust collection. When air quality is the challenge, Emerson's diaphragm or pilot valves are part of the solution.



## What's your opportunity?

- Optimize your system's performance with ASCO dust collector pulse valves, engineered for the highest air filtration efficiencies
- Explore air preparation and management systems that enhance air quality through high performing, modular packaging
- Partner with experts who can shorten your lead times and offer unmatched technical support and service





# Benefit from a full portfolio of products designed for better uptime.

Whether you need pressure switches, pulse valves, header tanks, or pneumatic cylinders and actuators—ASCO, AVENTICS, or TopWorx products can optimize your dust collection system. Explore Emerson's brands for your air filtration, bulk material handling, or powder conveying needs.



### Services offered...

- Engineering activities like cycle count or performance testing completed side-by-side
- Air filtration optimization

### Featured Solenoid Main Pulse Valves, Pilot Valves, and Systems

### **ASCO Series 353**



Diaphragm-operated solenoid valve designed to deliver fast pulsing in reverse-jet dust collector systems.

- Specially designed for reverse jet-type dust collector systems
- High flow Cv(s) to 140 for effective bag cleaning
- High cycle life and fast opening/closing
- Quick mount connection eliminates thread cutting and sealing

### ASCO Series 262 and 257 Pilot Valves



General purpose and panel mounted pilot valves designed to pilot large dust collector pulse valves.

- Brass bodied valve has threaded exhaust port for optional muffler installation, and screw or leaded terminals
- Plastic body valve designed for plastic or metallic tubing, with spade terminals
- Wide range of pressure ratings, sizes, and resilient materials provide long service life
- High flow valves for liquid, corrosive, and air/inert gas

### **ASCO Tank Systems**



Tank system using aluminum profile and end covers with CE approval according to Pressure Equipment Directive 2014/68/E modules B1+D.

- For use in dust collector applications requiring high flow capacity and accurate process control
- Thermoplastic polyester elastomer (TPE) piston/ diaphragm for highest peak pressure and best flow performance
- Easy to connect to other tank systems

### Featured Proximity Sensors, Valve Controllers, and Actuators

### **TopWorx GO Switch Proximity Sensors**



Proximity sensors engineered to meet tough applications while offering high reliability, installation flexibility and dependability in all environments.

- Proximity triggering with ferrous metal and magnetic targets - no exposed moving parts
- Extended sensing with use of target magnets
- Immune to electrical noise, weld fields, and radio frequency interference
- Consume no power to operate

### **ASCO Sequential Valve Controller**



Electronic controller designed to control up to 48 solenoid valves in a dust collector system.

- Controls solenoid valves in dust collector systems
- ON/OFF filter cleaning cycle from external switch
- Microprocessor management
- Supply and output voltage selectable via jumper
- Adjustable pulse and interval times

### **Actuators and Cylinders**



Round or square, repairable or not, compact or large, rodless or not, ASCO and AVENTICS cylinders are sure to meet your requirements for performance, cost, materials, or standards.

- Comprehensive range of linear and rotary actuators to meet wide-ranging specifications.
- Rack and pinion-style rotary actuators
- ISO/CETOP and ISO/VDMA standards







# **Alternative Energy and Fuel Systems**

Designing multiple fuel dispensing systems and multiple dispensing configurations can be complex—particularly across multiple suppliers. Few suppliers understand the difficulty involved with extracting, transporting, or dispensing fuel. Emerson uniquely provides a wide variety of proprietary solutions for fuel dispension applications and specific products for CNG applications that are easy to install and take advantage of.



## What's your opportunity?

- Rest assured that your shutoff applications are safely designed, installed and managed with ASCO or TESCOM precision fluid control products
- Meet the critical increasing global demands for CNG, LNG, Hydrogen and Petroleum vending
- Improve the accuracy of your fuel dispensing systems while limiting loss through precision engineering and testing approaches





# Reduce cost of ownership without compromising on quality.

Emerson is committed to the highest quality solutions for alternative energy and fuel systems. We offer robust engineering and testing of our valve solutions, so you can optimize performance without sacrificing quality. Work with a partner who understands the criticality of your applications.



### Services offered...

• Labs dedicated to testing products across various types of energy media

### **Featured Pressure Controllers and Regulators**

### **TESCOM ER5000 Series Electropneumatic Actuator**



Microprocessor based PID (Proportional, Integral, Derivative) controller that brings precise algorithmic pressure control to a wide range of applications.

- Closed loop PID control
- 25 ms update rate
- Controls pressure up to 20,000 psi
- Controls pressure and flow rates
- Provides data acquisition

### **TESCOM VA/VG Valve Series**



VA and VG Series are air-operated valves delivering superior tightness and a small footprint fit for your operations. Valve manifold blocks are also available for your fuel management systems.

- Normally open/normally closed capabilities
- Operating pressures of 6000, 10,000, and 15,000 psig / 414, 690, and 1034 bar
- High cycle life
- Optional integrated solenoid valve
- Suitable for liquid and gas applications

### **TESCOM 20-1100 Series Gas Pressure Regulator**



This lightweight regulator is designed for onboard compressed natural gas vehicles.

- Designed with lightweight aluminum construction for onboard compressed natural gas (CNG) vehicles 7 liter engines
- Accessory options available: solenoid valve and pressure sensors

### **Featured Solenoid Valves for Alternative Fuel Systems**

### **ASCO Series 215**



Direct acting or piloted aluminum body solenoid valves.

- Lightweight, low-cost valves for air service
- Ideal for low pressure applications
- Provides high flow, Cv up to 138 (Kv 118)
- Air and vacuum service

### **ASCO Fuel Dispensing Valves**



High quality petrol dispensing solenoid valves and dual flow valves specifically designed for petrol vending applications.

- Explosion proof operators, intended for use in potential explosive areas, according to Directive ATEX 94/9/EC
- Easy electrical installation by means of the moulded-in supply cable
- Mountable in any position without affecting operations
- Satisfies all relevant EC directives
- High flow valves for liquid, corrosive, and air/inert gas

### **ASCO Series 291 for CNG**



Rugged stainless steel valve with high flow piston design built to withstand pressure ratings over 5,000 psi and ensure fast CNG dispensing.

- Ambient temperature range -40°F to 158°F (-40°C to 70°C)
- PEEK piston provides tight sealing and durable operation
- Suitable for use in Class I, Div. 1 hazardous locations
- Mountable in any position
- Easy to connect to other tank systems







# Engineered solutions for diverse applications backed by the experience of Emerson

Emerson's fluid control and pneumatics portfolio applies industry expertise and clever solutions to your unique business challenges today and tomorrow. We are forward-thinkers—ready to help you with smart technologies, unmatched product reliability and a proactive, consultative partnership approach designed to improve your performance.

Working with Emerson means you can entrust your business operations to expert partners who are invested in your performance. Emerson understands the commitment to continuous improvement and measurable outcomes required for your industry and foresees how fluid control and pneumatics can improve your business.



### **Consulting Services**

- Application-specific expert consultations
- Auditing and walkdown services
- Ready-to-install customized packages



# **Project Services**

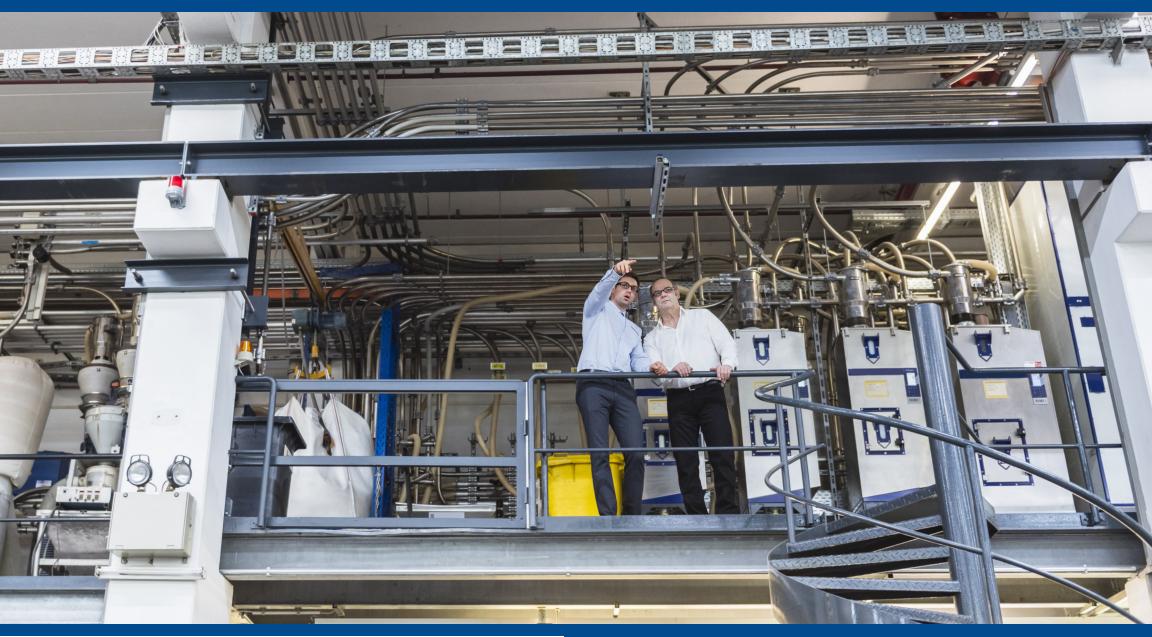
- On-site service within 24 hours
- Malfunction analysis beyond our products



### **Educational Services**

- Emerson Solution Centers for customers
- Trainings for your salesforce





Emerson addresses the world's most critical needs. Reach out to become part of our powerful global network and speak with our dedicated, industry experts in fluid control and pneumatics.

# **Get started**



Emerson delivers time-tested and innovative fluid control & pneumatics solutions designed to help you maximize performance today and cut costs tomorrow. Contact us now for world-class technologies, and services that can optimize your factory's performance. Getting started is easy. Visit **Emerson.com** 

#### **Emerson Automation Solutions**

ASCO L.P. – United States 160 Park Avenue Florham Park, NJ 07932 T. (+1) 800-972-2726

E. info-valve@asco.com

#### **Emerson Automation Solutions**

ASCO SAS – France 53 Rue de la Beauce 28111 Lucé T +33 (0)2 37 24 47 72

#### **Emerson Automation Solutions**

ASCO ASIA – Singapore Blk 4008, Ang Mo Kio Avenue 10 #4-17/22, TECHplace 1 Singapore 569625 T+65 6556 1100

#### **Emerson Automation Solutions**

AVENTICS GmbH - Germany Ulmer Str. 30880 Laatzen T +49 (511) 2136-0

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