



**Accelerated product development
through collaborative partnership**

Oxygen Therapy Equipment
Proven solutions and local expertise to help you
overcome your toughest challenges





Designing prototypes with a component supplier lacking experience with oxygen therapy equipment can jeopardize product reliability and delay project timelines.

Challenged by aggressive timelines and changing industry requirements?

Chronic respiratory ailments and a global aging population are leading to an increase in demand for oxygen therapy devices. This presents opportunities, but also creates challenges related to product design and development. The need for more precise and reliable oxygen control requires greater fluidic path expertise and application experience. Fierce market competition puts pressure on development timelines, which necessitates accelerated design and prototype phases. New medical device regulations create more comprehensive and mandatory standards, while demanding end user comfort and convenience requirements make it harder to find a supplier with application knowledge and a comprehensive product offering.

“It takes about 18-to-24 months to bring a new medical device to market. This can be even longer if there is inadequate information about component/material options.”

– Manufacturing.net



“82% of survey respondents are adopting more collaborative business models with suppliers to accelerate the development and delivery of innovative solutions.”

– Forbes survey



“International consensus is moving towards more stringent regulations for medical technology devices slowing the release dates of new products. Ignorance of regulatory compliance creates huge problems.”

– Mercer Capital, Insights



Proven solutions and a trusted partner for improved oxygen concentrator development

Precision and reliability are required to efficiently control flow within oxygen concentrators. Emerson's extensive range of fluid control and pneumatics solutions enables you to source a full fluidic control solution from a single supplier, shortening the development timeline. Emerson's global team of experts enables you to partner with a supplier that delivers the appropriate solution to meet your highest product specifications.



Broad range of standard and customizable gas control products

- Choose from a wide variety of valves, regulators, assemblies and more
- Access to versatile product configurations that are easy to configure and install
- Receive a complete solution that meets your rigorous design constraints

“The Emerson technology is the best. If we find ourselves buying a standard product we are doomed to failure. My company cannot survive without the right tech.”
– Leading oxygen concentrator manufacturer, US



Extensive expertise to support your design and development processes

- Support from global experts with 30 years of experience with oxygen concentrators
- Take advantage of cutting-edge technologies for precise fluidic control
- Access to application engineers who create customized solutions meeting your unique requirements

“Emerson's modular products and solutions enable us to develop prototypes much quicker, this really helps us to catch the timeline”
– Engineering Manager, Oxygen concentrator OEM



Proven experience helps you to meet highest industry standards

- Assembling our products in ISO Class 8 equivalent cleanrooms help assure product quality and reliability
- Technology competency that shortens the total development time
- Facilities and manufacturing processes that are certified and compliant with related standards

“As medical companies, we put a lot of effort to audit our vendor qualifications. Working with Emerson simplifies the process.”
– Sourcing Manager, Global Oxygen concentrator OEM

Emerson enables you to meet your unique flow control challenges

Feed/Waste

- Maximize air flow with optimized designs and customized assemblies
- Ensure excellent repeatability at low pressure, improving device performance
- Reduced noise increasing comfortability/usability

Pressure Equalization

- Improve system performance through quick pressure balancing
- Low power devices require smaller batteries or extend the operating time.



Continuous/Pulse Flow Delivery

- Continuously control oxygen delivery using proportional valves
- Enable device portability by using low power valves

Oxygen Regulation

- Simplify assembly, maintenance and usage with lightweight, compact designs offering manifold mount interfaces
- Meet varied system requirements with customizable pressure range options



Broad fluid control range

Develop turnkey solutions faster through access to one of the broadest fluid control and pneumatic product portfolios. Learn more. ► [p6](#)

Responsive design & development partner

Work with a dedicated partner that understands your technology and unique application requirements. Learn more. ► [p6](#)

Rapid engineered solutions

Customized products and production-ready systems available at unprecedented speeds with Emerson's rapid engineered solution program. Learn more. ► [p6](#)

Compliance with highest industrial standards

Ensure regulatory compliance and deliver advanced solutions to a rapidly developing market by selecting the right supplier. Learn more. ► [p6](#)

Broad range of fluid control products

Emerson offers an extensive range of key components for oxygen concentrators including miniature general service valves, pressure regulators, proportional control valves, fittings, manifolds and tubing. Not only do our products offer unlimited customizations, but they also provide the highest levels of compactness, functionality, safety and efficiency, and the lowest energy consumption in the industry.



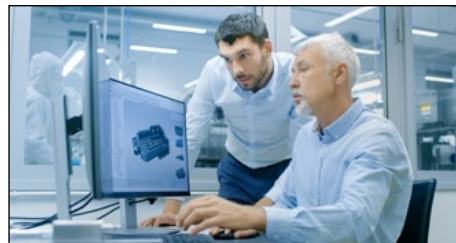
What's your opportunity?

- Simplify procurement through access to a comprehensive range of valves, fittings, manifolds, pressure regulators and tubing
- Reduce system and manufacturing complexity with complete fluidic systems, delivered fully-engineered and production-ready through Emerson's Rapid Engineered Solutions program



Partner with Emerson to simplify your fluidic solutions, streamline your design process and reduce development time.

Complete solutions can ensure your product development is unaffected by time or resource constraints. Emerson's products are available immediately, supported by responsive application engineers.



Services offered...

- Rapid custom assembly delivery
- Technology and application support
- Reduced regulatory risk by certificated process and high technical standard

Featured General Service Valves

ASCO Series 084



The ASCO Series 084 solenoid cartridge valve is ideal for applications where high-flow control is required.

- High flow-size ratio, capable of 140+ L/min slpm
- Low holding power of 0.61W
- Long service lifetime of 25 million cycles

ASCO Series 090



The ASCO Series 090 solenoid valve is a compact, light-weight product with a flow-to-size ratio ideal for portable medical devices.

- Low power consumption
- Service lifetime of 50 million cycles
- Designed for use with air and inert gases

ASCO Series RB



These 2-way and 3-way normally closed valves are designed for use with air and inert gases in analytical and medical equipment.

- Highly customizable construction, suitable for a wide variety of gas applications
- Exceptional service lifetime increases OEM device reliability

Featured Pressure Regulators

ASCO Series 624



This non-relieving regulator is designed to control the air pressure to match the requirements of oxygen concentrator systems.

- Lightweight and compact POM-body construction makes these regulators ideal for portable devices
- The ASCO Series 624 manifold mount regulator can be used with up to 95% oxygen

Featured Proportional Valves

ASCO Series 202



These 2-way normally closed Preciflow solenoid valves are designed to proportionally control the flow of air and inert gases by varying the electrical input signal to the coil.

- Low hysteresis, excellent repeatability and high sensitivity make these valves ideal for high precision flow control
- Compact frictionless architecture saves valuable space in analytical and medical instrumentation

Featured Custom Assemblies

Customized Assemblies



Assemblies with integrated diaphragm technology and customized general service valve manifolds designed to meet specific oxygen concentrator requirements. The manifold assemblies can be customized to operate alternately to fill individual sieve-bed cartridges that are designed to absorb nitrogen from ambient air. The result is purified oxygen delivered to the patient.



For more information, visit Emerson.com/ASCO





Get started



Emerson delivers time-tested and innovative fluid control and pneumatic solutions designed to help you improve your overall time-to-market, efficiency and product reliability. Contact us now for world-class technologies and services that can maximize your fluid control in oxygen therapy equipment. Getting started is easy.

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