

EXCEL™ XR

Metering Pump



You can rely on LMI



EXCEL™ XR METERING PUMP

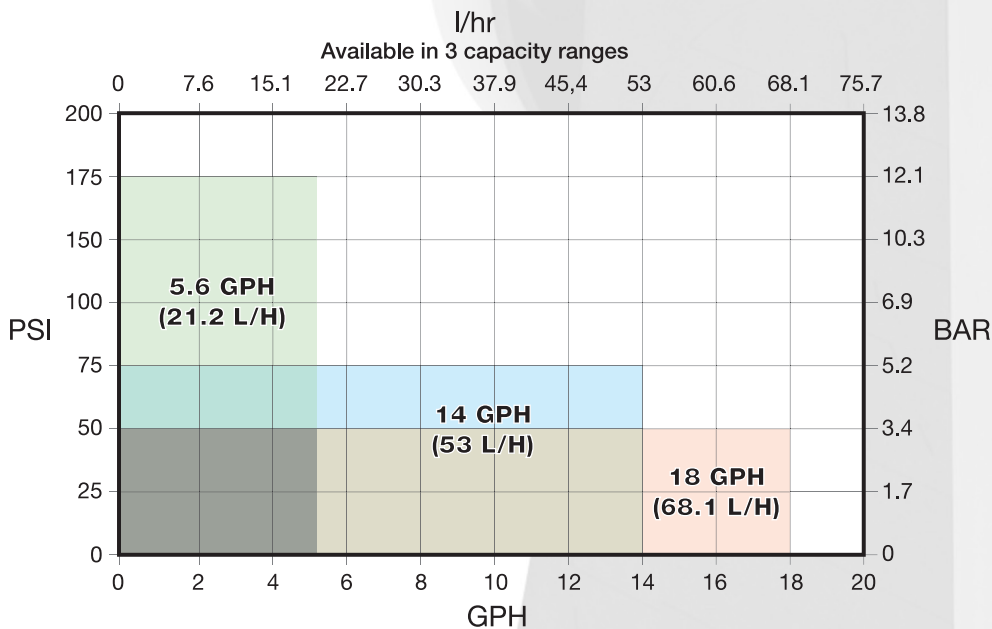
Introducing EXCEL™ XR chemical metering pumps: engineered to meet today's most demanding standards for accuracy, reliability, and process control flexibility. EXCEL XR is not just clever or smart, but a metering pump so intelligent and advanced that it's sure to make a name for itself.

LMI designed the EXCEL XR series from the ground up based on valuable feedback received from our customers as well as treatment plant maintenance, operators, and industry experts.

The EXCEL XR metering pump features enhanced performance and process control capabilities built on a universal technology platform with the ability to adapt as technology evolves.

Whatever your application, the EXCEL XR metering pump is ready to outperform and outsmart your most demanding application.

EXCEL XR Performance chart



Applications:

LMI manufactures controlled volume metering pumps for a wide range of industries and applications. EXCEL XR is designed for the specific requirements of municipal and industrial water and waste treatment but is suitable for many more applications.

- Water treatment
- Waste water treatment
- General Industry
- Agricultural
- Chemical
- Oil & Gas
- Power generation
- Pulp & paper
- Textiles
- Other (contact your local authorized representative)

Valued reputation

At LMI, we take pride in the relationships we've built and the partnerships we've formed. We work hard every day to earn the trust and confidence of our customers. We believe it's this reputation that sets us apart from the competition. Our goal is to manufacture world-class pumps and accessories and to respond to our customers' needs with a sense of urgency and mutual respect. Year after year, we continue to build more than just great pumps!

Culture of reliability

With 40 years of industry excellence, LMI continues to build superior products to meet our customers' toughest metering pump applications. LMI consistently delivers the most reliable, competitive range of metering pumps on the market today. Our professional and experienced research and development team continues to make huge strides in innovation for tomorrow.

Our global network

With strategically located manufacturing sites and channel partner experts to support you globally, LMI is with you wherever you are. Visit us online at Imipumps.com to find your local authorized representative.

Our commitment to quality

LMI is committed to delivering products of the highest quality standards to our customers. This commitment begins with a culture to continually improve our products and processes by implementing a quality management program based on best practices. Because of this commitment, LMI's pumps are the most reliable and well regarded pumps on the market.

Easy model selection

Selecting the right pump just got easier. No complicated configurations are necessary to find the right pump. With the Manual and Enhanced models offered, simply pick the features that fit your needs (see page 6 for a complete list). Both models offer a wide range of functionality including backlit display, multilanguage, and remote signals to name only a few.



Pictured: Manual model

Features and Benefits

LMI is setting the standard for accuracy and reliability

LMI continues its commitment to innovation and technological advances with the introduction of the EXCEL XR Metering Pump. Designed to meet the most challenging application needs, the EXCEL XR metering pump brings a new level of accessibility and performance to the field.

A valued product offering:

- EXCEL XR series flow rates extend from 0.006 to 18 GPH (0.023 to 68 l/hr)
- Mechanically actuated diaphragm for years of reliable service
- +/- 1% steady state accuracy over 1000:1 turndown ratio
- Backed by a three-year warranty



Pictured: Enhanced model

Multilanguage, user-friendly navigation

EXCEL XR's backlit color display allows for convenient navigation in five languages: English, French, Portuguese, Spanish, and Chinese. The enhanced control version is ready for digital or analog control interface and an extensive variety of inputs and outputs for various digital and analog devices. EXCEL XR provides everything you need to assure you have complete control of your process.



Superior control and accuracy

An innovative drive system creates superior $\pm 1\%$ steady state accuracy over 1000:1 turndown ratio by controlling EXCEL XR's stroke profile. As a result, EXCEL XR provides consistent operation and greater flexibility for handling difficult chemicals such as polymers and other viscous fluids.

Capacity Setting

100%



50%



20%



High viscosity settings allow decreased suction speed.
50% suction speed and 50% capacity



Time →

Features and Benefits

Electronic control by model

Control Version

Manual model
Enhanced model

| User Interface | | |
|---|--------------|----------------|
| | Manual model | Enhanced model |
| Four Color Backlit graphical display | ● | ● |
| Flow rate or volume display (GPH, L/hr) | ● | ● |
| Capacity setting display | ● | ● |
| Start/Stop button | ● | ● |
| Mode/Select button | ● | ● |
| Full capacity (100%) button | ● | ● |
| Prime button | ● | ● |
| Active operation mode indication on display | ● | ● |
| Active alarm indication on display | ● | ● |
| Calibration status indication on display | ● | ● |
| Operation Modes | | |
| Manual (Internal) | ● | ● |
| Analog [0/4-20 mA] (External) | | ● |
| Pulse [volume/pulse] (External) | | ● |
| Batch (External) | | ● |
| Cycle Timer (Internal) | | ● |
| Timed event (Internal) | | ● |
| Control Input | | |
| Programmable digital contacts | 1 | 4 |
| Single level float switch | ● | ● |
| Dual low level float switch | | ● |
| Pulse control | | ● |
| Remote start/stop | ● | ● |
| Remote internal/external mode selection | | ● |
| Programmable analog inputs | 0 | 2 |
| Pacing | | ● |
| Tank level | | ● |

Control Version

Manual model
Enhanced model

| Control Output | | |
|---|--------------|----------------|
| | Manual model | Enhanced model |
| Programmable digital contacts | 0 | 2 |
| Pump running | | ● |
| Pump standby/stopped [not pumping but ready] | | ● |
| Alarm status | | ● |
| User alarm status | | ● |
| Internal/External mode indication | | ● |
| Pump stopped | | ● |
| Stroke pulse | | ● |
| Timed event running | | ● |
| Programmable analog output | 0 | 1 |
| Flow rate [4-20 mA correlates to 0 - max capacity] | | ● |
| Mirror analog input 1 | | ● |
| Power supply for remote device [24V] (eg. Flow sensor) | 0 | 1 |
| Operation functions | | |
| Capacity control by motor speed variation | ● | ● |
| Variable stroke profile (variable discharge speed/constant suction speed) | ● | ● |
| Slow suction mode for viscous or degassing media | ● | ● |
| Calibration function (single point) | ● | ● |
| Prime feature (max capacity) button, timer | ● | ● |
| Totalizer (strokes, volume, hours motor operation, number of power cycles) | ● | ● |
| Keypad lock (software driven with password) | ● | ● |
| Clock feature (date and 12 hour time) | ● | ● |
| Diaphragm replacement mode (sets stroke to extended position) | ● | ● |
| Display firmware revision | ● | ● |
| Load factory defaults | ● | ● |
| Battery to maintain date and time settings when main power is removed | ● | ● |
| EEPROM nonvolatile memory (configurations saved/powers up in last used mode) | ● | ● |
| Internal/External input control mode configuration | ● | ● |
| Alarm output mask configuration (configure which events trigger alarm output relay) | ● | ● |
| Analog input response curve customization | | ● |
| Input pulse width setting | | ● |
| Stat/Stop via remote signal | ● | ● |
| Pump switch off on tank empty | ● | ● |

Making EXCEL XR pumps work for you

For integrators

Specifying EXCEL XR metering pumps for critical systems gives process systems integrators the best guarantee of reliability, accuracy, and performance in challenging environments.



For operators

Consider the value of installing an EXCEL XR metering pump when making updates to your equipment. The EXCEL XR pump series offers field-proven dosing technology, a state-of-the-art technology platform, and an easy-to-use navigation system all backed by authorized industry experts to support you long after the installation.

Options and accessories

A wide range of options and accessories are available to customize the EXCEL XR metering pump to your application.

Mechanically actuated diaphragm liquid end materials:

- Polypropylene
- PVDF
- 316L stainless steel

EXCEL XR accessories include:

- Backpressure valves
- Safety valves
- Pulsation dampeners
- Calibration columns
- Degassing valves and systems



We are a proud member of Accudyne Industries, a leading global provider of precision-engineered, process-critical and technologically advanced flow control systems and industrial compressors. Delivering consistently high levels of performance, we enable customers in the most important industries and harshest environments around the world to accomplish their missions.



Contact your local representative to find out more about EXCEL™ XR the intelligent pump that's making a name for itself.

www.lmipumps.com
www.excelxrpumps.com



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