## Reliable Dosing of Chemicals

Solenoid diaphragm dosing pumps play an important role in the reliable and accurate dosing of liquids.

The Encore® ED line of solenoid driven metering pumps are specifically designed for water treatment and the process industry.

## Wide Range of Applications

The Encore® ED is available in seven sizes for metering applications ranging to 14.98 lph with back pressures up to 16 bar. Double-ball valves ensure accurate, consistent dosing. To adapt the dosing performance, the stroke frequency can be adjusted manually or via an external control contact. You can thus dose with a flick of the wrist.

Several different materials and connections are available for suction and discharge side, depending on the specific applications. By using appropriate and recommended materials, the Encore can be used in a wide variety of process applications.

Matching accessory sets with hoses, injection nozzles and suction lines allow quick installation and reliable operation.

## Simple to Use and Space-saving

Thanks to the sturdy, low-maintenance solenoid drive, the media being supplied (for example acids, alkalis, coagulants and flocculants) is reliably and accurately dosed.

The combination of the Encore® ED's solid design and the easy-to-use digital controls allow for short set up times and efficient operation.

The compact design and the small footprint allow for easy integration into dosing systems even for installations with limited space available.

Wall mounting is possible provided the check valves remain in a vertical orientation by rotating the head.

## In Short

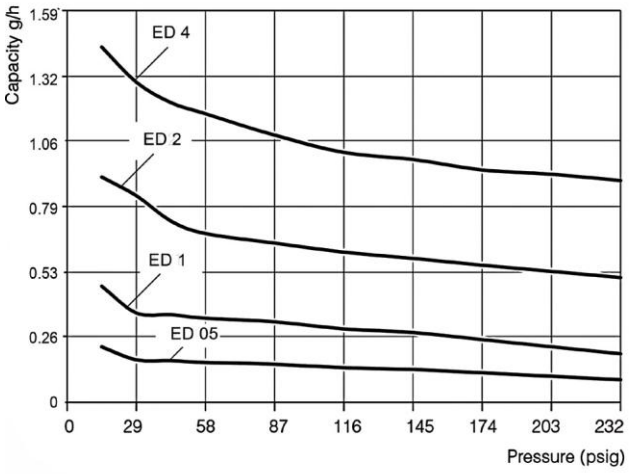
- Capacity range to 14.98 lph, up to 16 bar
- Power supply 230 VAC +/- 10%, 50/60 Hz, IP 65, max. 25 W or 115 VAC +/-10%, 50/60 Hz, IP 65, max. 25 W
- Graphical display
- Materials available: PVC, PP and PVDF
- Material consistency for the pumps and accessories
- Dosing head manual venting
- Wall and floor mounting
- Double-ball valves ensure accurate dosing
- Precise pump settings using the keypad
- External control via floating contacts with impulse increase and reduction
- Level input with early warning and main alarm Release input

## Technical Data

| Encore® ED | | | 05 | 1 | 2 | 4 | 6 | 10 | 15 |
|---|---|---|---|---|---|---|---|---|---|
| Delivery capacity at max. pressure | | lph | 0.34 | 0.75 | 1,89 | 3.36 | 6.20 | 9.08 | 12.98 |
| | | ml/stroke | 0.05 | 0.05 | 0.2 | 0.31 | 0.57 | 0.83 | 0.86 |
| Max. supply pressure | | psig | 16 | | | | 8 | 6 | 2.96 |
| Delivery capacity at medium pressure | | lph | 0.52 | 1.09 | 2,30 | 3.78 | 6.81 | 10.0 | 14.98 |
| | | ml/stroke | 0.08 | 0.07 | 0.24 | 0.35 | 0.63 | 0.92 | 1.0 |
| Average back pressure | | bar | 8 | | | | 4 | 2.96 | 0.96 |
| Max. stroke frequency | | SPM | 120 | 250 | 160 | | 180 | | 250 |
| Suction head for non-gassing media | | M $H_2O$ | 4.87 | | 2.75 | | 2 | | |
| Max. supply pressure | | bar | 0.75 bar | | | | | | |
| Nominal valve width | | | DN3 | | DN4 | | | | |
| Voltage supply | | | 230 V AC +/- 10%, 50/60 Hz or 115 V AC +/- 10%, 50/60 Hz | | | | | | |
| Power consumption | | W | 8 | 13 | 19 | | 25 | | 22 |
| Protection class | | | IP 65 (with covering caps on the connections) | | | | | | |
| Insulation class | | | F | | | | | | |
| Weight | PVC, PP, PVDF | lb | ~ 7.0 | | | | | | |
| Max. ambient temperature | | °C | PVDF 45° (40° with PVC parts) | | | | | | |
| Max. temperature of the medium | | °C | PVDF 80° (with PVC parts 35°; with PP parts 60°) | | | | | | |

## Flow Curves

The fl w curves are valid for ambient temperatures of 20°C (68°F) and dosing water at 100% stroke frequency. The delivery capacities depend on the medium (density and viscosity) and temperature.

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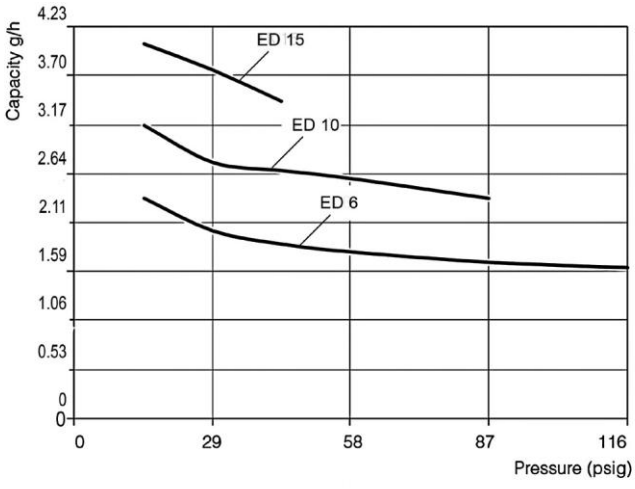


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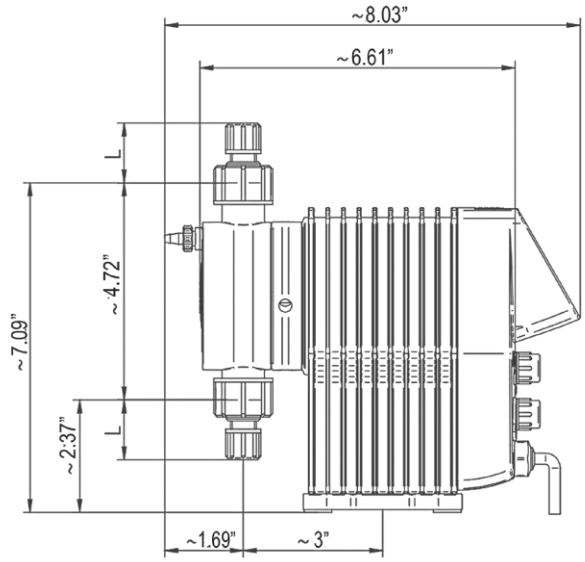
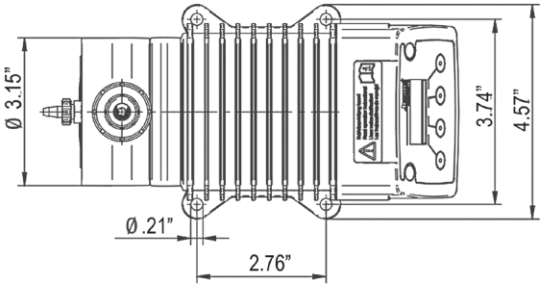
## Dimensions



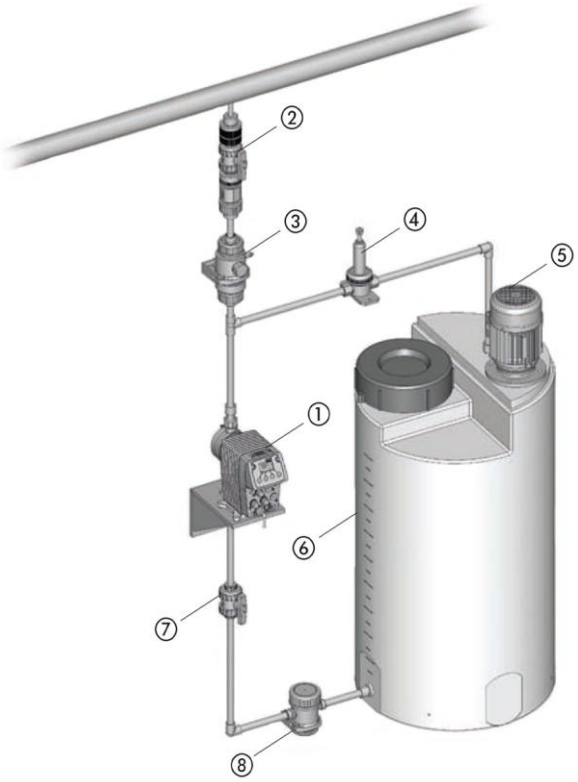




| Material | Size | L |
|---|---|---|
| PVC, PP, PVDF | 1/4" x 3/8" | 1.34" |
| | 1/4" x 7/16" | 1.34" |
| | 1/4" FNPT | 1.34" |

## Accessories

Even the best pump can be improved – simply by the addition of appropriate accessories.

Suitable sets of accessories, consisting of suction/ discharge tubing, foot valve and injection nozzle, are available for the dosing pumps.




**Legend**

① Encore® ED
② Injection nozzle with shut-off valve
③ Pulsation dampener
④ Pressure relief valve
⑤ Electrical agitatator
⑥ Dosing tank
⑦ Shut-off valve
⑧ Suction pressure regulator

To turn your dosing pump into an efficient dosing system, we recommend using the following accessories:

- Injection nozzles - to dose the medium into the main line and to prevent it from flowing back into the pressure line
- Back pressure and pressure relief valves - to increase dosing accuracy or to protect the system against excessive pressure
- Pulsation dampener - to dampen supply flow as well as to reduce discharge flow pulsations
- Priming aids - to significantly ease priming of dosing pumps with low supply volumes per stroke, for large suction heights, highly viscous dosing media, for initial priming or when priming after the system has been idle
- Suction pressure regulator - to prevent medium flow when the dosing pump is not running or to prevent a vacuum being formed in the event of a pipe failure

Please contact us for more information on accessories and metering pump systems.