General catalogue
Metering pumps

The right dosing choice
We make fluid

The company
Doseuro is a combination of two capabilities: the first is a solid technical knowledge, obtained during a multi-year experience in the dosing field, while the second is a commercial understanding of the changes in this field and sensitivity to our customers’ requirements. These two factors are supported by a strong company structure that meets our customers’ demands. The continuous research and principal effort directed to the customer satisfaction are the fundamental reasons of Doseuro success, which is widely confirmed by the thousands of plants working worldwide with our pumps.

The product
What makes Doseuro pumps unique? It’s the competitive price-quality ratio always aligned with the customer expectations.

Each of our products speaks for itself. High reliability is achieved by constant product development, updating production techniques, everlasting quality control and rigorous testing at all stages of production.

Each dosing pump model has been carefully designed, built and tested to ensure a long and useful life. If this alone is not sufficient, then please go further and ask us about our prices.

Main features
All Doseuro pumps are fitted as standard with top quality 4 pole electric motors that conform to the UNEL-MEC specifications, and range from 0.09-4.0 kW at European standard 3 phase voltages of 230/400V @ 50Hz.

Non standard motors are available to many alternative specifications, including different voltages and frequencies, insulation standards, and special explosion-proof versions.

The dosing rate is fully adjustable via a manually controlled eccentric cam mechanism with spring return, or positive displacement plunger according to API standard 675.

Automatic adjustment is available by means of servo-control motors, pneumatic control or motor frequency control, interface PROFIBUS or other BUS, if required. The reduction system, made of an endless screw coupled to a worm-wheel, makes the gearbox very strong.

Our pumps are complemented by a wide range of accessories which include, foot valve/strainers, pressure relief and loading valves, injection fittings and pulsation dampeners.

Special versions of construction are available to suit our clients specific applications.
A view over the production range
Doseuro chemical dosing pumps are available in three main versions. Plunger pumps with packed plungers, plunger/hydraulic diaphragms or mechanical diaphragms. High pressure pumps are available too, upon request. The range also includes various driving methods, such as electric motor or electromagnetic solenoid operation. The company also manufactures complete dosing packages, electric mixers, and fully automatic plants for the dissolution and mixing of polyelectrolyte, both as powder and emulsion.

The most common fields of application for Doseuro chemical dosing pumps include:

- Food Production
- Paper Industry
- Chemicals and Dyestuffs Tanning
- Water and Effluent Treatment
- Pharmaceuticals and Textiles
- Horticultural Applications
- Rubber and Plastics
- Oil and Gas
- Iron, Steel, Coal and Construction
- Naval and Civilian Marine
- Many Engineering Projects...
- ... and wherever there is a fluid
PDP series A-I type

Positive displacement plunger dosing pump

PDP series positive displacement plunger dosing pump are manufactured according to API standard 675. Multiplex drive units with different performances can be coupled between them, independently from the size and stroke number. Stroke adjustment can be carried with the pump at rest or in operation. Accuracy is better than 1% from 10 to 100% of maximum output. Minimum required NPSh depends on installed pump-head type.

<table>
<thead>
<tr>
<th>Max. capacity L/h</th>
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<tbody>
<tr>
<td>A-I 175</td>
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<td>164</td>
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<td>AP A-I 350</td>
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</table>

Fittings:
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
PDP series SDI type

Sandwich Hydraulic Diaphragm Dosing Pump
SDI Sandwich Hydraulic Diaphragm pumps are manufactured according API 675.
SDI pumps are suitable for use when:
- the liquid to dose contains small amounts of suspended solids
- the dosed liquid is a toxic solution
- liquid leaking are not accepted.
A built-in safety valve is installed in the hydraulic circuit, in order to protect the diaphragm against over pressure. The peculiarity of this pump is the special sandwich diaphragm and the reliability of the diaphragm rupture detection system. Accuracy is better than 1% from 10 to 100% of the stroke adjustment.

<table>
<thead>
<tr>
<th>Max. capacity L/h</th>
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<td>AP SD I 350</td>
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</table>

Fittings
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
Spring Return Plunger Dosing Pumps

Plunger metering pumps are suitable in case that:

- The dosed liquid is a non abrasive solution
- A drip proof system is not essential
- High pressure is required

Each pump is fitted with a standard gearbox reduction system and with a vertical mounted B14 shaped electric motor in accordance with UNEL-MEC specifications.

The motor power range is from 0.18 Kw up to 0.75 KW as the European standard: 3 phase voltages of 230/400V @ 50/60Hz, 4 pole and 1 phase voltages of 230/50-60 Hz or 110/60 Hz.

As motors conform to UNEL-MEC specifications, there are many available alternative options, including different voltages, insulation classes and special explosion proof versions.

The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearings, fully lubricated in an oil-bath.

The mechanism for variation of the stroke length is a positive fore-stroke, spring return type, that is operated by an eccentric.

### SR series A type

<table>
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<td>A 350 N</td>
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</table>

Fittings

- Polyethylene tanks
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
SR series D type

Spring Return Mechanical Diaphragm Dosing Pump

Mechanical Diaphragm pumps are suitable in case that:
- The dosed liquid contains small amounts of suspended solids
- The dosed liquid is a toxic solution
- A drip proof/air tight application is required
- High pressure is not required

Each pump is fitted with a standard gearbox reduction system and with a vertical mounted B14 shaped electric motor in accordance with UNEL-MEC specifications.

The motor power range is from 0.18 Kw up to 0.37 KW as the European standard: 3 phase voltages of 230/400V @ 50/60Hz, 4 pole and 1 phase voltages of 230/50/60 Hz or 110/60 Hz.

As motors conform to UNEL-MEC specifications, there are many available alternative options, including different voltages, insulation classes and special explosion proof versions.

The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearings, fully lubricated in an oil-bath.

The mechanism for the variation of the stroke length is a positive fore-stroke, spring return type, that is operated by an eccentric.

Max. capacity L/h

<table>
<thead>
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<th>Capacity</th>
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<td>D 101 N</td>
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<td>D 121 N</td>
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</table>

Fittings
- Polyethylene tanks
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
SR series B&B R type

Hydraulic Diaphragm Dosing Pump

Suitable in case that
- The dosed liquid contains small amounts of suspended solids
- The dosed liquid is a toxic solution
- A drip proof/air tight application is required

Every pump is fitted with a standard gearbox reduction system and with vertical mounted B14 shaped electric motor in accordance with the UNEL-MEC specifications.

The motor power range is from 0.18 Kw up to 0.75 Kw at European standard: 3 phase voltages of 230/400V @ 50/60Hz, 4 poles and 1 phase voltages of 230/50-60Hz or 110/60Hz.

As motors conform to UNEL-MEC specifications, there are many available alternative options, including different voltages, insulation classes and special explosion proof versions.

The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearings, fully lubricated in an oil-bath.

The mechanism for the variation of the stroke length is a positive fore-stroke, spring return type, that is operated by an eccentric.

Max. capacity L/h

<table>
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<tr>
<th>Mod</th>
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<td>B x BR 250 N</td>
<td>1068</td>
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</tbody>
</table>

Fittings
- Polyethylene tanks
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
SR series SD type

Sandwich Hydraulic Diaphragm Dosing Pump
Sandwich Hydraulic Diaphragm pumps are suitable in case that:
- The dosed liquid contains small amounts of suspended solids
- The dosed liquid is a toxic solution
- No leakage is accepted
A built-in safety valve is installed in the hydraulic circuit, in order to protect the diaphragm against over pressure. The peculiarity of this pump is the special sandwich diaphragm and the reliability of the diaphragm rupture detection system.

Each pump has a standard gearbox reduction system and is available with an IEC B14 electric motor that meets UNEL – MEC specifications. The motor power range is from 0.18 Kw up to 0.75 Kw.
There are many available options including different voltages, insulation classes and special explosion proof versions.
The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearings, fully lubricated in an oil-bath.
The mechanism for the variation of the stroke length is a positive fore-stroke, spring return type, that is operated by an eccentric.

<table>
<thead>
<tr>
<th>Max. capacity L/h</th>
<th>SD 125 N</th>
<th>SD 175 N</th>
<th>SD 250 N</th>
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<td></td>
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<td>418</td>
<td>1068</td>
</tr>
</tbody>
</table>

Fittings
- Polyethylene tanks
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
Spring Return Mechanical Diaphragm Dosing Pump

Mechanical Diaphragm pumps are suitable for the applications in which:
- the dosed liquid contains small amounts of suspended particles
- the dosed liquid is a toxic solution
- a drip proof/air tight application is required
- high pressures are not required

Each pump is built with a standard gearbox reduction system and a vertically mounted B14 shaped electric motor in compliance with UNEL-MEC specifications.

Motors power is usually 0.09 Kw with 4 poles: 3-phase 230/400 Volts 50/60 Hz, and single phase 230V/50 Hz or 110V/60 Hz.

As the motors comply to UNEL-MEC specifications, there are many available options with different voltages, frequencies and insulation classes, whereas explosion proof versions are not allowed.

The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearings, fully lubricated in an oil-bath.

The mechanism for the variation of the stroke length is a positive fore-stroke, spring return type, that is operated by an eccentric; this makes the diaphragm move forward (discharging phase) for all the stroke length, while the spring in continuous tension causes the comeback of the diaphragm (suction phase).
SDP series S type

Solenoid Dosing Pumps
The SDP family provide an alternative solution in lower rates application field where end users look forward reliable results and simple operation. Using a built-in microprocessor, with its own flexibility, makes the SDP series extremely complete and suitable for a wide range of applications, thanks to several functions included in the same pump, even with few models.

Common features for every model:
- Foot mounted dosing pump
- Corrosion-proof reinforced polypropylene housing
- Solid PTFE diaphragm
- Water-resistant IP65 protection
- Wide choice of wetted materials: PP; PVC; S.S. 316; PTFE; PVDF
- Standard power supply: 230V 50/60 Hz
  On request: 24V d.c., 12V d.c., 24V a.c., 110V 50/60 Hz

All chemical dosing pumps are complete of accessories to improve the operation and accuracy of the chemical dosing pump:
- Injection valve
- 1.5 suction pipe
- 1.5 delivery pipe
- Strainer

Max. capacity L/h

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<thead>
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<tbody>
<tr>
<td>S</td>
<td>22</td>
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</table>

Fittings
- Polyethylene tanks
- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot
Automatic plants for dissolution and preparation of powder/emulsion polyelectrolytes
These plants produce from 300 to 5000 lt/h of fully polyelectrolyte solution at constant solution strength from powder/emulsion stock. Their compact design in Stainless steel AISI 304 or High Density PolyPropylene includes all necessary controls for water make up and polymer feed and incorporates the following equipment and features:
- Dissolution, dilution and ageing tanks.
- Polymer and water feed rate controls.
- All mixers.
- Control panel, fitted and fully interwired.
- Polyelectrolyte chemical dosing pumps.

<table>
<thead>
<tr>
<th>Max. capacity L/h</th>
<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td>HA</td>
<td>300</td>
<td>5000</td>
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The Powder dilution plant is fitted with a stocking hopper and a volumetric endless screw, while the Emulsion dilution plant works thanks to a Plunger metering pump, dosing the Emulsion into a static mixer.
Electric mixers for chemical mixing

Type DMT and type DMM
High speed mixers directly coupled to the motor, for small tanks up to 1000 litres capacity, with polypropylene coated shaft and propeller.

Type DEM
High speed mixers, directly coupled to the motor, supported by a protection lantern, housing an extra bearing kit, for increased shaft stability, and an extra seals kit, for increased protection from the mixed chemical.

Type DRV
Slow speed mixers for light applications, with close coupled worm wheel/endless screw reduction gear box.

Type DRC
Heavy duty slow speed mixers with co-axial reducer, outrigger bearings and protective seals.
Accessories

Safety relief valve

Relief valves and back pressure valves

Polyethylene tanks

Suitable to be fitted with metering pump on its top

Pulsation dampeners

Type: HSTX
Body in S.S.316, composed by two parts assembled together by means of a special hosing that, under dynamic pressures, tends to close itself. Various diaphragm materials available, for wide chemical compatibility. Built accordingly to the ASME VIII® Div. 1 rules.

Type: HSTPVC
Body in PVC, composed by two parts assembled together by means of a special hosing that, under dynamic pressures, tends to close itself. Maximum temperature: + 50 °C. Various diaphragm materials available, for wide chemical compatibility.