

General catalogue Metering pumps



DOSEURO®

The right dosing choice





DOSEURO®

Fluidity

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.



WATER AND EFFLUENT TREATMENT

CHEMICALS AND DYESTUFFS TANNING

PHARMACEUTICALS AND TEXTILES

HORTICULTURAL APPLICATIONS

FOOD PRODUCTION

PAPER INDUSTRY



The World Over

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 return 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 are listed in the pictures below.



* available for selected products

RUBBER AND PLASTICS



OIL AND GAS



IRON, STEEL, COAL AND CONSTRUCTION



NAVAL AND CIVILIAN MARINE



MANY ENGINEERING PROJECTS



AND WHEREVER THERE IS A FLUID



Positive Displacement Plunger

PDP series A-I type

Positive Displacement Plunger Dosing Pump

All series plunger dosing pumps comply with mechanical and performance **API 675 standards**. Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area. Mechanism is an internal worm gear, fully oil bath lubricated with possibility to be coupled with others independently from the size and stroke number to obtain multi-heads unit.

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

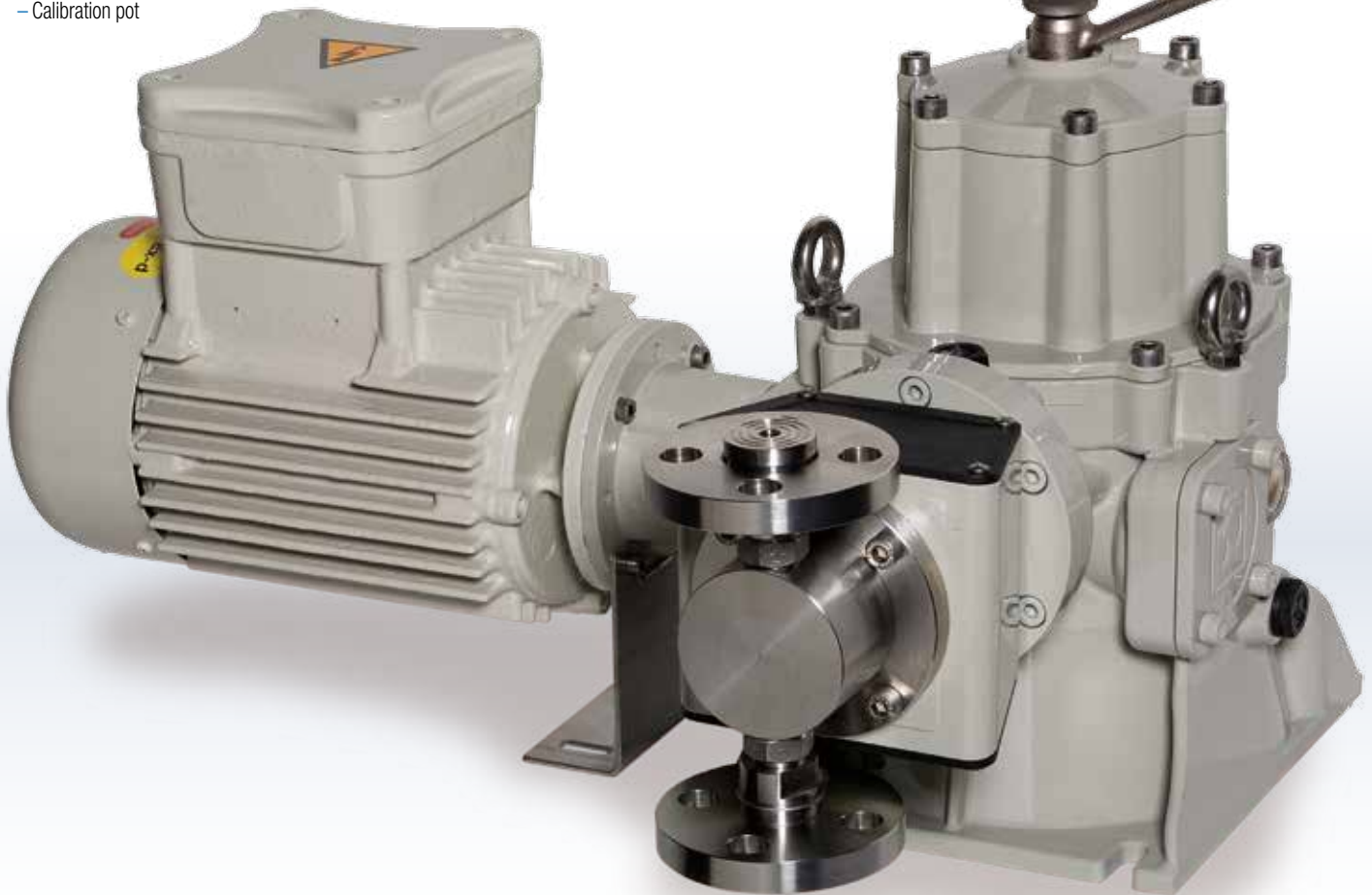
Accuracy within $\pm 1\%$ within 10-100% of rated capacity.

As plunger pumps they are reliable and easy for maintenance and with the possibility to have flushing or leakage recovery system (optional).

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot



Model	Max Capacity in Lt/h	Max pressure in Barg
A I 175	385	50
A I 250	1265	40
A I 350	3569	40
AP A I 175	44	230
AP A I 250	160	230
AP A I 350	477	250

Note: higher pressure are available

Sandwich Hydraulic Diaphragm

PDP series SDI type

Positive Displacement Sandwich Hydraulic Diaphragm Dosing pump

SDI Sandwich Hydraulic diaphragm dosing pumps comply with mechanical and performance **API 675 standards**.

Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area. Mechanism is an internal worm gear, fully oil bath lubricated with possibility to be coupled with others independently from the size and stroke number to obtain multi-heads unit.

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

Accuracy within $\pm 1\%$ within 10-100% of rated capacity.

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.

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

- Relief valves and back pressure valves
- Safety relief valve
- Injection valve
- Foot valve
- Pulsation dampeners
- Calibration pot

Model	Max Capacity in Lt/h	Max pressure in Barg
SD I 175	390	14
SD I 250	1264	14
SD I 350	4028	14
AP SD I 175	231	40
AP SD I 250	711	80
AP SD I 350	1496	56

Note: higher pressure are available



Spring Return Plunger

SR series A type

Spring Return Plunger Dosing Pump

A Plunger metering pumps are normally used when:

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

Each pump is fitted with a standard gearbox reduction system with a vertical mounted motor.

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

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

As plunger pumps they are reliable and easy for maintenance and with the possibility to have flushing or leakage recovery system (optional).

Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area.

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
A125N	156	20
A175N	408	20
A250N	1042	20
A350N	1458	4
AP A125N	15.6	230
AP A175N	28.6	230
AP A250N	57.4	230



Spring Return Mechanical Diaphragm

SR series D type

Spring Return Mechanical Diaphragm Dosing Pump

D mechanical diaphragm metering pumps are normally used when:

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

Each pump is fitted with a standard gearbox reduction system with a vertical mounted motor.

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

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

As mechanical diaphragm they are easy for maintenance.

Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area.

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
D050N	49	14
D100N	438	5
D101N	418	8
D121N	570	3
D122N	1400	6



Hydraulic Diaphragm

SR series B&BR type

Spring Return Hydraulic Diaphragm Dosing Pump

B & BR Hydraulic diaphragm metering pumps are normally used when:

- The dosed liquid contains small amounts of suspended solids
- A drip proof/air tight application is required
- The dosed liquid is a toxic solution
- High pressure is required

Each pump is fitted with a standard gearbox reduction system with a vertical mounted motor. The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearing, fully lubricated in oil bath.

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

BR version is equipped with built-in safety valve is installed in the hydraulic circuit, in order to protect the diaphragm against over pressure.

Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area. Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
B & BR 125N	108	20 / 13.5
B & BR 175N	418	20 / 14
B & BR 250N	1068	11 / 7.2
AP B & BR 125N	60	60 / 40
AP B & BR 175N	247	60 / 40
AP B & BR 250N	556	23 / 20.7



Sandwich Hydraulic Diaphragm

SR series SD type

Spring Return Sandwich Hydraulic Diaphragm Dosing Pump

SD Sandwich Hydraulic diaphragm metering pumps are normally used when:

- The dosed liquid contains small amounts of suspended solids
- No leakage are accepted
- The dosed liquid is a toxic solution
- High pressure is required

Each pump is fitted with a standard gearbox reduction system with a vertical mounted motor.

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

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual or automatic through automatic actuator driven by 4-20 mA; different BUS; pneumatic.

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.

Furthermore they comply with ATEX standard, therefore they can be installed in Hazardous area.

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
SD 125N	108	13.5
SD 175N	418	14
SD 250N	1068	7.2
AP SD 125N	60	40
AP SD 175N	247	40
AP SD 250N	556	20.7



Spring Return Mechanical Diaphragm

SR series FM type

Spring Return Mechanical Diaphragm Dosing Pump

FM mechanical diaphragm metering pumps are normally used when:

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

Each pump is fitted with a standard gearbox reduction system with a vertical mounted motor. The reduction gearbox is of a standard endless screw plus worm-wheel type, supported by bearing.

Stroke adjustment can be carried with the pump at rest or in operation and it can be manual.

As mechanical diaphragm they are easy for maintenance.

Peculiarity of this model is the complete plastic casing suitable for ACID environment.

Wide choice of wetted materials: S.S.316L; PVC; PP; PVDF; PTFE other materials available upon request.

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
FM 050N-30	14	10
FM 050N-50	47	5



Solenoid

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; 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 mt suction pipe; 1.5 mt delivery pipe
- Strainer

Fittings

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

Model	Max Capacity in Lt/h	Max pressure in Barg
S - -	20	20



Preparation of polyelectrolytes

H series HA-HE

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.

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.

Model	Version	Max Capacity in Lt/h
HA	Powder	5000
HE	Emulsion	5000

Note: higher capacity are available



Electric mixers

EM series D type

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.

Model	Version	Service
DMT	Fast mixer	≤ 1000Lt tank liquid ≤ 250cps
DMM	Fast mixer	≤ 1000Lt tank liquid ≤ 250cps
DEM	Fast mixer	≤ 3000Lt tank liquid ≤ 1000cps
DRV	Slow mixer	≤ 7000Lt tank liquid ≤ 2500cps
DRC	Slow mixer	≤ 40000Lt tank liquid ≤ 5000cps



DMT



DEM



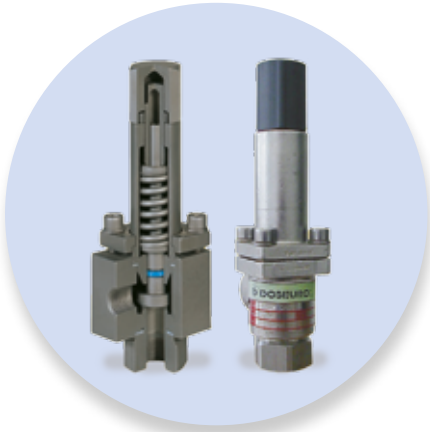
DRV



DRC

Accessories

Safety relief valve



Relief valves and back pressure valves



Polyethylene tanks



Suitable to be fitted with metering pump on its top

Pulsation dampener



Pulsation dampener



Type: HSTX

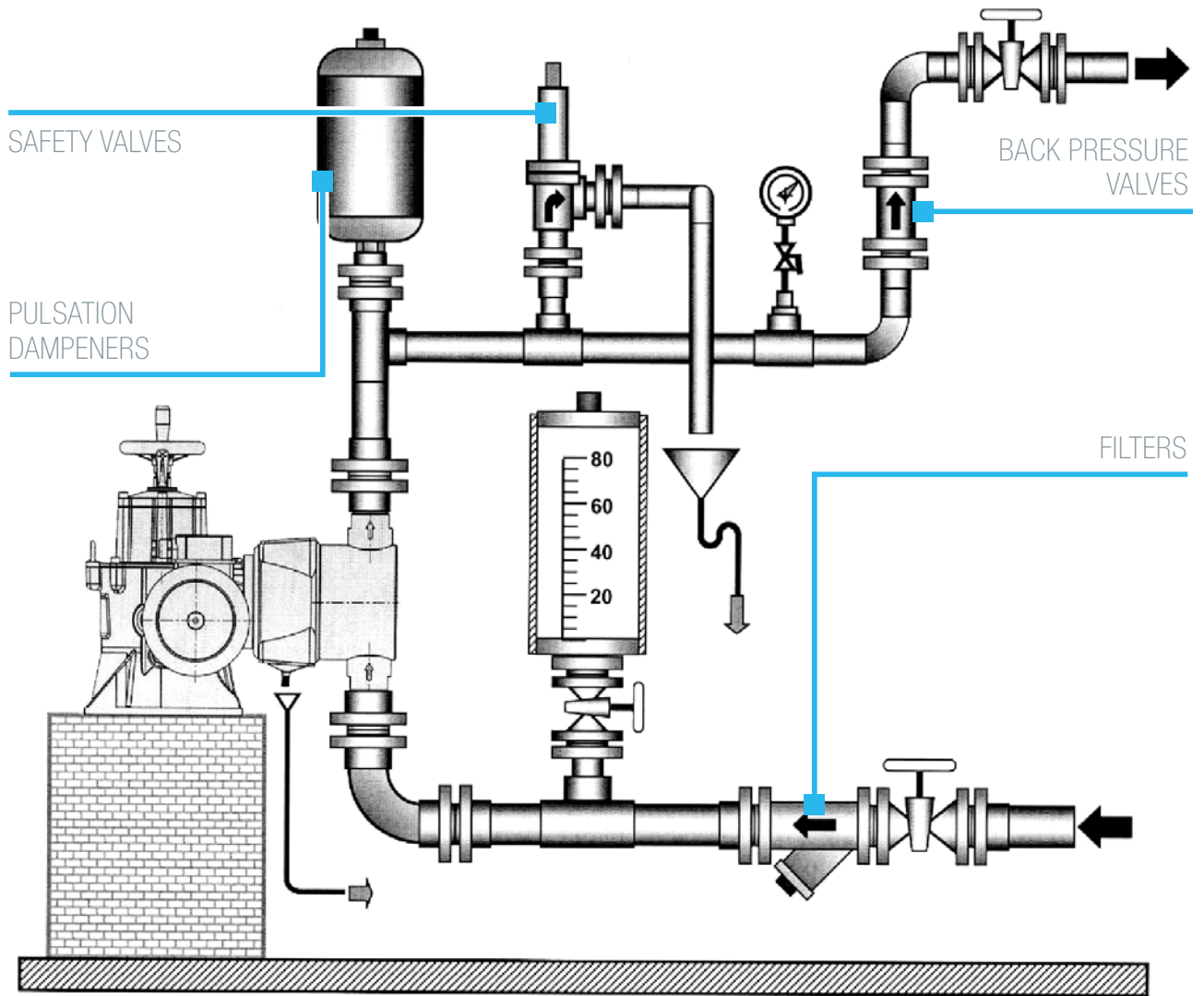
Body in S.S.316, composed by two parts assembled together by means of a special hosing that, under dynamic pressures, tends to close itself.

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.





DOSEURO®

The right dosing choice



Cert. n° 5942

HEAD OFFICE
DOSEURO srl

Via G. Carducci 141
20093 Cologno Monzese (MI) Italy
Tel.: +39 02 27301324
Fax: +39 02 26700883
e-mail: info@doseuro.com
www.doseuro.com

BRANCHES

DOSEURO (UK) LTD.

e-mail: enquiries@doseuro.co.uk
www.doseuro.co.uk

DOSEURO Portugal

e-mail: geral@doseuro.com.pt
www.doseuro.com.pt