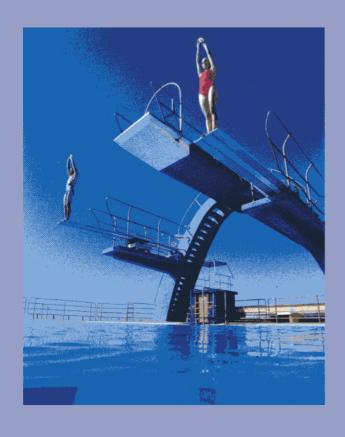
# SWIMMING POOLS, THERMAL AND GARDEN IRRIGATION

# Catalogue

Compact dosing and control systems

Dosing Pumps











#### COMPACT DOSING AND CONTROL SYSTEMS





#### **Control Basic**

Control Basic is the product preferred by most users of private pools. Small in size, it was designed to prevent siphoning. The product requires little maintenance and is easy to install and protected by the spraying of chemical products.

The device automatically measures and checks the pool's pH/Redox.

Use with Astra Sel and Astra Sel Basic is recommended.

Supplied without sensors or calibration solutions. Installation kit included.

- · Plastic container with IP55 protection
- Backlit LCD display
- Protected against inappropriate settings
- Self-calibration of electrodes
- Quality control of electrodes
- Direct reading of set point
- Dosing pause during alarms and notification by means of a blinking LED
- · Proportional dosing
- Easy and quick programming of set point
- · Adjustable set point
- Power supply: 230 VAC (115 VAC upon request)



Flow rate:	1.5 l/h or 5 l/h
Back pressure:	1.5 baı
pH measurement interval:	0.00-14.00 pH
Redox measurement interval:	-999 - +999 mV

	Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
Control Basic 1.5 l/h	36002	1	2,2	0,01	
Control Basic 5.0 l/h pH electrode	36003	1	2,2	0,01	
with calibration solutions Redox electrode	36004	1	0,4	0,001	
with calibration solutions	36005	1	0,3	0,001	





#### **Redox Basic EV**

Device for the measuring and automatic control of the level of Redox in the pool and therefore of the value of free chlorine. Recommended for use with "Astral Sel" and "Astral Sel Basic" salt electrolysis devices for controlling generated chlorine. It uses the solenoid valve to open and close the dosing units according to the measurements.

Supplied with sensors and calibration solutions. Installation kit included.

Redox measurement interval: -999 - +999 mV

	Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
Redox Basic SV	36006	1	2,1	0,01	
Redox electrode with calibration solutions	36005	1	0,3	0,001	

Kit de instalación	-		Ō:	8
Control Basic		•	•	•
Redox Basic EV			•	•





# COMPACT DOSING AND CONTROL SYSTEMS



#### pH-Redox Basic

Dual pH and Redox dosing and control system, for total control of the pool's water quality.

Supplied with sensors and calibration solutions. Installation kit included.

Flow rate:	1.5 l/h or 5 l/h
Back pressure:	1.5 bar
pH measurement interval:	6,28.0
Redox measurement interval:	configurable

pH – Redox Basic 1,5 l/h pH – Redox Basic 5,0 l/h

Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
34542	1	5,2	0,055	
34541	1	5,2	0,055	



# General characteristics

- Input for the level probe
- Pressure switch input (no voltage)
- Pressure switch input (230 VAC, for connection to circulation pump)
- PT100 temperature sensor input (optional)

- Control relay for indicating dosing pumps in operation (230 VAC contacts)
- Chemical product minimum level alarm
- Pumps on "HOLD" alarm due to calibration or alarm status
- OFA dosing cycle alarm (Over Feed Alarm)



### **DOSING PUMPS**





## **OPTIMA** dosing pump

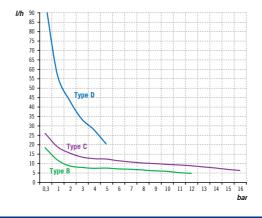
The OPTIMA dosing pump represents over the development of more than 30 years of experience in the automatic dosing field. This new series reduces the number of pumps required to meet the various dosing needs.

The OPTIMA dosing pumps of thanks to the new powe suplly technology from 90 ti 265 Vac at 50-60 Hz, ensures a precision and reliability never seen before.

Integration of many other functions thanks to simple programming, an alphanumeric display, the possibility of multilingual programming of the menu and new technology which permits controlled flow rate and back pressure. This makes it possible to cover the same number of pumps with fewer models and to meet the various dosing needs using a single pump model, without giving up an accurate dosing.



Systems produced according to EC standards. IP65 protection. 90-65 VAC 50/65 Hz electrical power supply. Materials in contact with the chemical product are made of polypropylene, Viton, Teflon and PVC (other materials possible upon request). Anti-acid plastic container. Moisture-resistant membrane buttons. Built-in relief valve. No lubrication necessary, minimum maintenance.







## OPTIMA constant flow rate analog dosing pump

The analog dosing pumps of the OPTIMA series only require electrical power supply. The flow rate can be set as a percentage using the potentiometer under the front panel, which modifies the pump's operation frequency.

The dosing pumps are equipped with a level sensor input which indicates when the chemical product runs out and which can be easily accessed for quick connection and easy installation.

**Double control scale:** OPTIMA analog dosing pumps can divide the maximum dosing frequency by 5. This double scale allows the user to employ two pumps with a single model. The selector under the front panel provides easy changeover.

	Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
<b>Type B-</b> Optima Manual Adjustable Pump (5-10 bar and 2-5 l/h)	36007	1	3,5	0,01	
<b>Type C-</b> Optima Manual Adjustable Pump (5 bar and 10 l/h)	36008	1	4,5	0,01	
<b>Type D-</b> Optima Manual Adjustable Pump (5 bar and 20 l/h)	36009	1	4,5	0,01	



### **DOSING PUMPS**



## **OPTIMA** proportional and volumetric digital dosing pump

OPTIMA proportional and volumetric digital dosing pumps provide all the functions of proportional dosing in a single model.

The user can easily set the pump thanks to the multilingual menu and alphanumeric display.

#### **Available functions:**

- Proportional with analog signals 0/4-20 mA
- Proportional with digital signals and the possibility of:
- Multiplying the input impulses (1:n)
- Dividing the input impulses (n:1)
- Function in ppm: the dosing pump automatically calculates the time between two input signals and adjusts the number of impulses according to chemical product concentration and desired ppm
- The pump has a memory function for processing input impulses during dosing

#### Other adjustable parameters:

- Flow rate in liters/hour, gallons/hour, milliliters/minute, impulses/minute, percentage
- Pump calibration for absolute precision dosing
- Level alarm with pump disconnection or simple warning of lack of product by means of the alarm relay
- Dosing statistics
- Maximum dosing pump flow rate for preventing overdosing
- Password for protecting programmed data
- Language: French, English, Italian, German, Spanish.

#### Available alarms:

- Chemical product level alarm
- Software malfunction alarm

90-265 VAC 50/60 Hz power supply

Optima 4-20 mA Proportional/Volumetric Digital Pump

ASTRAL POOL A	

Code	Package Standard	Standard	Standard	RI € (retail price)
36010	1	3,5	0,01	
36011	1	4,5	0,01	
36012	1	4,5	0,01	
	36010 36011	Standard   36010 1   36011 1	Standard Standard   36010 1 3,5   36011 1 4,5	Standard Standard Standard Standard   36010 1 3,5 0,01   36011 1 4,5 0,01



### **DOSING PUMPS**





### OPTIMA dosing pump with pH/Redox analyzer

AstraPool has integrated a completely new range of OPTIMA series dosing pumps, whose quality of measurement and control comes from years of designing and creating systems in the industrial instrumentation sector, with built-in pH/Redox control. pH/Redox instrument: OPTIMA series dosing pumps with built-in control, measure and proportionally adjust dosing to regulate pH/Redox, meeting most requirements for treating water in small installations. Automatic calibration: Calibration by simply pressing a key, with the possibility of controlling the level of sensor efficiency, makes this product an ideal tool during startup and system maintenance. The user can easily set the pump thanks to the multilingual menu and alphanumeric display.

#### **Available functions:**

- Manual dosing
- Proportional dosing with proportional band setting
- Automatic or manual calibration of the sensor, which can be disabled

#### **Pump characteristics:**

- 90-265 VAC 50/60 Hz power supply
- pH measurement interval: 0.00-14.00 pH with selectable 0.1 or 0.01 pH measurement resolution
- Redox measurement interval: -999 +999 mV, 1 mV measurement resolution
- Manual compensation of temperature for pH or automatic compensation by means of PT100
- 4-20 mA output for graphic recorder or transmitting the measured value

#### Other parameters:

- Flow rate in liters/hour, gallons/hour, milliliters/minute, impulses/minute, percentage
- Pump calibration for absolute precision dosing
- Level alarm with pump disconnection or simple warning of lack of product by means of the alarm relay
- Dosing statistics
- Set point deviation alarm, programmable for the entire measurement interval
- O.F.A. time (Over Feed Alarm) to prevent the dosing pump from injecting product if the sensor malfunctions
- Maximum dosing pump flow rate for preventing overdosing
- Password for protecting programmed data
- Language: French, English, Italian, German, Spanish

#### Available alarms:

- Chemical product level alarm
- Software malfunction alarm
- No probe calibration
- Measurement value beyond programmed alarm limits
- O.F.A. alarm for preventing overdosing

Code	Package	Weight (kg)	Volume m3	RT €
	Standard	Standard	Standard	(retail price)

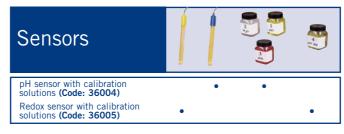
Type C- Optima Redox/pH control dosing pump (10 bar and 5 l/h, 5 bar and 10 l/h)

36013

1

4,5

0,01





# **DOSING PUMP ACCESSORIES**



# Automatic relief valve

Gas inside the dosing pump head may compromise proper operation of the pump.

The relief valve automatically eliminates gas that forms inside the pump's head. The relief valve must be installed directly on the dosing unit's delivery valve.



Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
36829	1	0.1	0.001	



### Bracket for mounting above tank

Optional support for mounting the OPTIMA series and Control Basic horizontally; for example, above chemical product tanks.

Code	Package Standard	Weight (kg) Standard	Volume m3 Standard	RT € (retail price)
36830	1	0.1	0.002	









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