



# When performance is vital

## ELADOS<sup>®</sup> EMP IV

- ▲ High delivery capacity at low number of strokes
- ▲ Electronics with display and mode switch for simple pre-selection of menu
- ▲ Mechanical stroke adjustment
- ▲ Empty signal and stroke signal output
- ▲ Extensive range of accessories

**ECOLAB<sup>®</sup>**  
Everywhere It Matters.

## The ELADOS® EMP IV within the metering system

- ▲ Modular structure permits simple all-in solutions
- ▲ In-house project planning team ensures application-driven system engineering
- ▲ Variant-configurator guarantees need-orientated selection of materials

### Metering valve

Precision metering with no after-dripping, secure isolation of metering line from process zone



### Flowmeter (optional)

Registration of consumptions, flow monitoring

### Pulsation attenuator

Elimination of pressure surges, reduction of pressure peaks

### Multi-function valve

4 functions in 1 valve!  
Cost-efficient safety

### ELADOS® EMP IV diaphragm metering pump

When performance is vital

### Suction lance

Safe and trouble-free chemicals sampling with reserve and empty signalization

### Safety catch tray

An integral component of professional standard chemicals storage and handling

Chemical storage



# ELADOS® EMP IV

Motor-driven diaphragm metering pump for delivery rates from 140 to 750 l/h

- ▲ Self-priming
- ▲ High metering accuracy
- ▲ Low-noise
- ▲ Careful materials selection for high resistance to chemicals
- ▲ Flexible use thanks to electronic variants
- ▲ Extensive range of accessories



**Pump capacity:** 140 l/h (10 bar); 210 l/h (8 bar); 450 l/h (6 bar); 630 l/h (4 bar); 750 l/h (3 bar)

**Electrical version:**

- E00** Terminal box on motor, mechanical stroke adjustment
- E10** On/Off switch, terminal box on motor, mechanical stroke adjustment
- E60** Mechanical stroke adjustment
  - back-lit graphic display, 4 operating keys
  - Single stroke control (each stroke is completely executed)
  - Metering monitoring via stroke-signal output or via external metering-monitoring system (e.g. oval gear meter) possible
  - Registration of operating and consumption data
  - Diaphragm failure detection (optional)

Selectable operating modes:

Internal mode	External mode
Selection of metering rate/ metering frequency via: <ul style="list-style-type: none"> <li>• Strokes/min</li> <li>• Percent</li> <li>• Liter/h (or gallon/h)</li> </ul>	<ul style="list-style-type: none"> <li>• Pulse mode (actuation via pulses)                             <ul style="list-style-type: none"> <li>- Pulse multiplication (one incoming pulse = n metering strokes)</li> <li>- Pulse division (n incoming pulses = 1 metering stroke)</li> </ul> </li> <li>• Standard signal mode (actuation via external standard signal 0/4-20mA or 20-0/4mA)</li> <li>• Charge mode (a previously selected quantity is metered, with initiation via an external initiation pulse)</li> </ul>
<b>Inputs:</b> <ul style="list-style-type: none"> <li>• Level monitoring, package vessel (reserve and empty signal)</li> <li>• Pulse</li> <li>• Standard signal</li> <li>• Enable</li> </ul>	<b>Outputs:</b> <ul style="list-style-type: none"> <li>• Level monitoring package vessel</li> <li>• Stroke signal</li> <li>• Malfunction</li> </ul>

**E60<sup>PLUS</sup>** (E60 + Dongle Plate E60) as E60, but additional display of real metering quantity/time and automatic readjustment of pump output (only in combination with external flow monitoring system, e.g. oval gear meter)

**Pump head material:** PP = Polypropylen, PV = PVDF (Polyvinylidenfluorid); VA = stainless steel 1.4571

**Valve ball material:** GL = glass; VA = stainless steel 1.4401; KE = ceramics; PT = PTFE (Teflon)

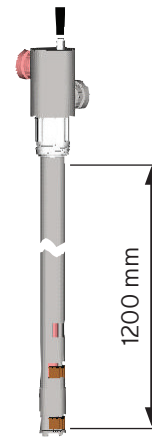
**Sealing material:** FP = FPM (Viton B); EP = EPDM; KA = FFPM (Kalrez); PT = PTFE (Teflon)

**Power supply:** 230 V 50/60Hz; 115 V 50/60 Hz; 3 PE 400/230 V 50/60 Hz

## DN 25 suction lance

- ▲ Robust construction
- ▲ Reserve and empty signalization
- ▲ Integrated drum adapter
- ▲ With return line option

<b>Length:</b>	1200 mm
<b>Suction lance material:</b>	PVC
<b>Sealing material:</b>	FPM (Viton B) / EPDM
<b>Valve ball material:</b>	glass



## Multi-function valve

- ▲ Maximum process reliability
- ▲ Simple installation
- ▲ Easy operation
- ▲ **4 in 1** for cost savings

<b>Thread connecting side:</b>	G1 1/4" oder G2"
<b>Housing material:</b>	PP or PVDF
<b>Sealing material:</b>	FPM (Viton B) or EPDM
<b>Diaphragm material:</b>	EPDM/PTFE coated
<b>Valve ball:</b>	glass



## 4 functions in 1 valve!

1. Pressure control function: adjustable 0.5 - 3 bar (preset to 0.5 bar)
2. Pressure relieve function: adjustable 1 - 10 bar (preset to 3 bar)
3. Manual degassing function
4. Drain function

