# 3. Functions

## Overview of functions

| | DDA | | | DDC | | DDE | | |
|---|---|---|---|---|---|---|---|---|
| Control variant: | FCM | FC | AR | AR | A | PR | P | B |
| **General** | | | | | | | | |
| Digital Dosing: Internal stroke speed and frequency control | ● | ● | ● | ● | ● | ● | ● | ● |
| Mounting plate (basic/wall mounting) | ● | ● | ● | ● | ● | ● | ● | ● |
| **Control panel, see page 9** | | | | | | | | |
| Control cube mountable in three positions: front, left, right | ● | ● | ● | ● | ● | | | |
| Control panel position: front-fitted | | | | | | ● | ● | ● |
| Transparent protective cover for control elements | ● | ● | ● | ● | ● | | | |
| Capacity setting in millilitres, litres or US-gallons | ● | ● | ● | ● | ● | | | |
| Graphical display with background light in four colours for status indication: white, green, yellow, red | ● | ● | ● | ● | ● | | | |
| Plain-text menu in different languages | ● | ● | ● | ● | ● | | | |
| Turn-and-push knob (click wheel) for easy navigation | ● | ● | ● | ● | ● | | | |
| Capacity adjustment knob (0.1 - 100 %) | | | | ● | ● | ● | ● | ● |
| Start/Stop key | ● | ● | ● | ● | ● | | | |
| 100 % key (deaearation) | ● | ● | ● | ● | ● | ● | ● | |
| Operation mode switch (manual/pulse) | | | | | | ● | ● | |
| **Operation modes, see page 11** | | | | | | | | |
| Manual speed control | ● | ● | ● | ● | ● | ● | ● | ● |
| Pulse control in ml/pulse | ● | ● | ● | ● | ● | | | |
| Pulse control (1:n) | | | | | | ● | ● | |
| Analog control 0/4-20 mA | ● | ● | ● | ● | | | | |
| Batch control (pulse-based) | ● | ● | ● | | | | | |
| Dosing timer cycle | ● | ● | ● | | | | | |
| Dosing timer week | ● | ● | ● | | | | | |
| Fieldbus control | ● | ● | ● | | | | | |
| **Functions, see page 13** | | | | | | | | |
| Auto deaeration also during pump standby | ● | ● | ● | | | | | |
| FlowControl system with selective fault diagnosis | ● | ● | | | | | | |
| Pressure monitoring (min/max) | ● | ● | | | | | | |
| Flow measurement | ● | | | | | | | |
| AutoFlowAdapt | ● | | | | | | | |
| SlowMode (anti-cavitation) | ● | ● | ● | ● | ● | | | |
| Calibration mode | ● | ● | ● | ● | ● | | | |
| Scaling of analog input | ● | ● | ● | | | | | |
| Service information display | ● | ● | ● | ● | ● | | | |
| Relay setting: alarm, warning, stroke signal, pump dosing, pulse input* | ● | ● | ● | ● | | ● | | |
| Relay setting (additionally): timer cycle, timer week | ● | ● | ● | | | | | |
| **Inputs/outputs, see page 14** | | | | | | | | |
| Input for external stop | ● | ● | ● | ● | ● | ● | ● | |
| Input for pulse control | ● | ● | ● | ● | ● | ● | ● | |
| Input for analog 0/4-20 mA control | ● | ● | ● | ● | | | | |
| Input for low-level signal | ● | ● | ● | ● | ● | ● | ● | |
| Input for empty tank signal | ● | ● | ● | ● | ● | ● | ● | |
| Output relay (2 relays) | ● | ● | ● | ● | | ● | | |
| Output analog 0/4-20 mA | ● | ● | ● | | | | | |
| Input/Output for GENIbus | ● | ● | ● | | | | | |
| Input/Output for E-box (e.g. E-box 150 with Profibus DP) | ● | ● | ● | | | | | |

\* DDE-PR: relay 1: alarm; relay 2: low-level signal, stroke signal, pulse input