

Data-Driven Liquid / Powder Quantitative Dosing Platform

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PRECISION · INTELLIGENCE · AUTOMATION

< NO PLC REQUIRED — LOWER SETUP COST, EASIER MAINTENANCE



Product Overview

Product Name	Data Driven Liquid or Powder Quantitative Dosing Platform
Applied Target	Precision conveying, discharge, and dosing for powders and liquids
Drive Method	Single motor-shaft-based modular drive
Powder Transfer Structure	Two-stage special screw, anti-bridging structure, horizontal transfer, split dosing
Liquid Transfer Structure	Precision liquid pump module connected to the same motor shaft
Control Method	System controlled by interlocking scale and pump
PLC Dependency	No complex PLC system required → lower setup cost
Flow Stabilization	Suppresses clumping, bridging, clogging, and unstable drop flow
Energy Efficiency	Maximizes efficiency with special dampers and low-power screws
Operability	Simple manual, good field applicability, compact and lightweight
Scalability	Applicable to both powder and liquid processes
Key Advantages	Precision, repeatability, maintainability, flexibility

Key Technical Specifications

- 1 Special screw (patent-pending)
- 2 Special damper with anti-bridging protection device
- 3 Split device applied at the outlet side
- 4 Two-shaft motor drive for dosing liquid and powder
- 5 Scale range: 0.000 g ~ 150 kg
- 6 Easy manual operation
- 7 Usable for both filling and discharging of materials
- 8 Particle range: micro particles to several-inch particles (even fish roe can be dispensed)
- 9 Compatible with high-viscosity materials
- 10 No complex PLC system needed — significantly lower installation & maintenance cost NO PLC
- 11 Custom-developed program for finer, precise control
- 12 Less affected by surrounding environmental conditions
- 13 Margin of error comparable to a precision scale
- 14 Low-energy-consumption stepping motor drive

Product Description

This product is a modular dosing system that precisely handles both powders and liquids and sends data on a single drive platform. Powder flow is stabilized by a two-stage special screw and anti-bridging structure, while the liquid module enables accurate discharge through a precision pump on the same motor shaft. Precision and usability are achieved through scale-linked control and multi-stage speed regulation alone — with no PLC system required — substantially reducing installation and maintenance costs.