

## Volumetric Doser

SCM



Refer carefully to this manual before operation.



Coding Principle









Extrusion mode



Injection mode

### Features

- Adopt high precision servo motor to ensure fast and smooth dosing.
- Equipped with 1:5 gear box to increase the torque and reduce overload
- The throughput with a range of 0.1~130kg/h per screw.
- Easy and user-friendly touch screen control.
- Chrome coating dosing screw for longer durability.
- Modular design for easy color change and maintenance;
- Synchronize of masterbatch dosing ratio with extruder speed in the extrusion mode.
- Uninterrupted production recovery in case of power failure.
- Material purge cleaning for easy replacement of masterbatch.
- Up to 50 memory slots for material receipts
- Ability to monitor, alarm, and stop the unit during the masterbatch blockage via overload
- Support micro-dosing mode; masterbatch will dose once per X cycle.
- The high temp. volumetric doser with water cooling tank can process materials reaching 180℃ drying temp.
- Modbus RTU data communication via RS485.



### Application

SCM series volumetric doser is suitable for injection molding and extrusion blow molding occasions, which can be used for auto proportional mixing of virgin materials, regrinds, masterbatch, or additives. The injection molding mode supports multiple external signal input modes. The dual-doser is available for multiple component applications. SCM can work with the Venturi Loader VL to realize the auto conveying of the masterbatch to the dosing unit.

### Working Principle



### **Outline Drawings**



Single Color Doser



Double-color Doser



# SCM Series

Specifications

| Model                      |   | Single Color Doser |                 | Double-color Doser |                 |
|----------------------------|---|--------------------|-----------------|--------------------|-----------------|
|                            |   | SCM/SCM-H          |                 | SCM-D              |                 |
| Motor Power (kW,50Hz/60Hz) |   | 0.4                |                 | 0.4×2              |                 |
| Screw External Dia.        |   | 16mm               | 0.63″           | 16mm               | 0.63″           |
| Output Capacity            |   | 0.1~130kg/hr       | 0.22~286.6lb/hr | 0.2~260kg/hr       | 0.44~573.2lb/hr |
| Storage Hopper             |   | 10L                | 2.6gal          | 10L                | 2.6gal          |
| Dimensions                 | Н | 420mm              | 16.5″           | 420mm              | 16.5″           |
|                            | W | 585mm              | 23″             | 1030mm             | 40.6″           |
|                            | D | 300mm              | 11.8"           | 300mm              | 11.8"           |
| Weight                     |   | 18kg               | 39.7lb          | 30kg               | 66.1lb          |

Notes:1) The outputs of above models are measured under the conditions of 1.0kg/L bulk density and, masterbatch particles in diameter of 2-3mm by continuous operation. Actual output capacity depends on actual material's characteristics, the actual material, such as bulk density, flow ability, particle size, which is also depended on the setting recipe.

2) When the master batch hopper is mounted with the auto conveying device, the total weight of the hopper shall not exceed 25KG (including the master batch).

3) Power supply: 1Φ, 230VAC, 50Hz.

### Options

Optional masterbatch low-level sensor. Add "LS" at the end of the model code.

### Accessories

Mixer CMB-1 enhances the mixing uniformity



| Model | Motor power(kw) |     |     | D(mm) |
|-------|-----------------|-----|-----|-------|
| CMB-1 | 0.25            | 364 | 347 | 371   |

Notes: 1) Power supply: 3Φ, 400VAC, 50Hz.

- Main Material Hopper for Costonner to add main materialsImage: Coston end of add materials<
- Main Material Hopper for customer to add main materials

Heavy base(Used with SEHD/SHD-E/SHD-EB-75~300 or SHD-160U~SHD-450U)





в

| Heavy | base | dim |
|-------|------|-----|

| Model | Н   | D   | W   |
|-------|-----|-----|-----|
| HB-1  | 332 | 374 | 374 |
| HB-2  | 527 | 374 | 374 |

Notes: 1) When collocating with standard SCM, the model is HB-1 2) When collocating with standard SCM+CMB-1, the model is HB-2

#### • Long hopper is worked with the heavy base



| Model | Capacity(L) | Material | н   | D   | W   |
|-------|-------------|----------|-----|-----|-----|
| LH-15 | 15          | SUS201   | 411 | 608 | 281 |

Note: When the long hopper is mounted with the auto conveying device, the total weight of the hopper shall not exceed 20KG (including the master batch).

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