



Volumetric Doser

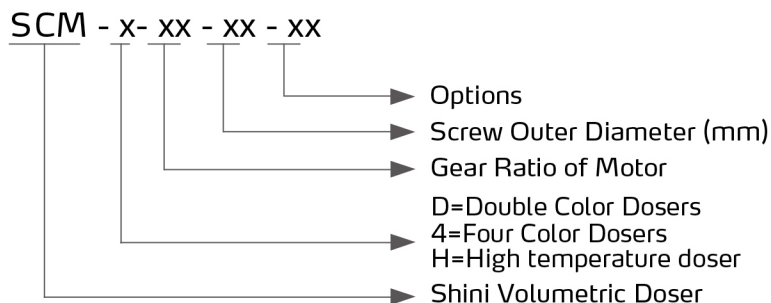
SCM Single Color Doser



Refer carefully to this manual before operation.

SCM Series

■ Coding Principle



■ Features

- Dosing screws are chrome plated for durability.
- Use brushless DC motor and free from maintenance.
- Unit is comprised of standard modules for easy of cleaning, disassembly and interchangeability
- Hopper magnets are equipped in standard base to avoid molding machine screw damage.
- External signals can be directly input to control box
- The current mode can be recorded without interrupted by power failure
- Compulsory material cleaning makes it easier to replace masterbatch
- Applicable to injection and extrusion molding
- Rotating speed can be automatically adjusted according to extruder processing speed , which maintains the fixed proportion of masterbatch
- 50 recipes are available for permanent recording of material discharging time and finished products weight (for extruder, it is max. throughput per minute).
- Both masterbatch blockage and overload can be detected, and then machine will halt and sound an alarm.
- Micro-metering mode is available, and mode cycle can be set to add additives periodically
- Equipped with the RS485 communication port (except SCM-4)



Options

- When collocating with SHD-100-300 or SHD-160U-450U dryers, heavy base should be selected, and add "HB" at the end of the model code.
- Blender is an option for customers to make materials evenly mixed, and add "MS" at the end of the model code.
- Main material hopper is optional equipment for customers to feed main material, and add "MH" at the end of the model code.
- Low level sensor can be opted to give an alarm when masterbatch is insufficient, and add "LS" at the end of the model code.
- Optional 100kg/220lb base to satisfy maximum discharge volume (without mixing function), and add "LB" at the end of the model code.



SCM-H



Heavy Base (optional)

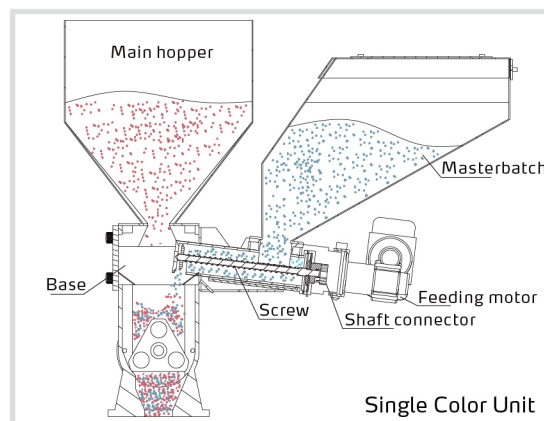
Application

SCM series volumetric dosers are suitable for auto-proportional mixing of virgin materials, regrinds, master batch or additives. A gear motor with gear ratio of 38:1 is coupled to a dosing screw of 12, 16, 20 or 30mm (0.47, 0.63, 0.79 or 1.18 inch) in diameter to give a total of four models with output ranging from 0.1~110kg/hr (0.22~242.5lb). Double-color doser is available for collocating with any two of single color dosers if required. Five components automatic mixing can be realized if customers adopt four-color dosers.

SCM supports the extruder mode. When working with the extruder, SCM only requires simple circuit adjustment that can achieve the linkage between the masterbatch metering and the rotating speed of extruder screw, so as to maintain stable additives proportion. Due to small additives proportion and dosage, SCM can work with the Venturi Loader VL to realize auto feeding of the masterbatch.

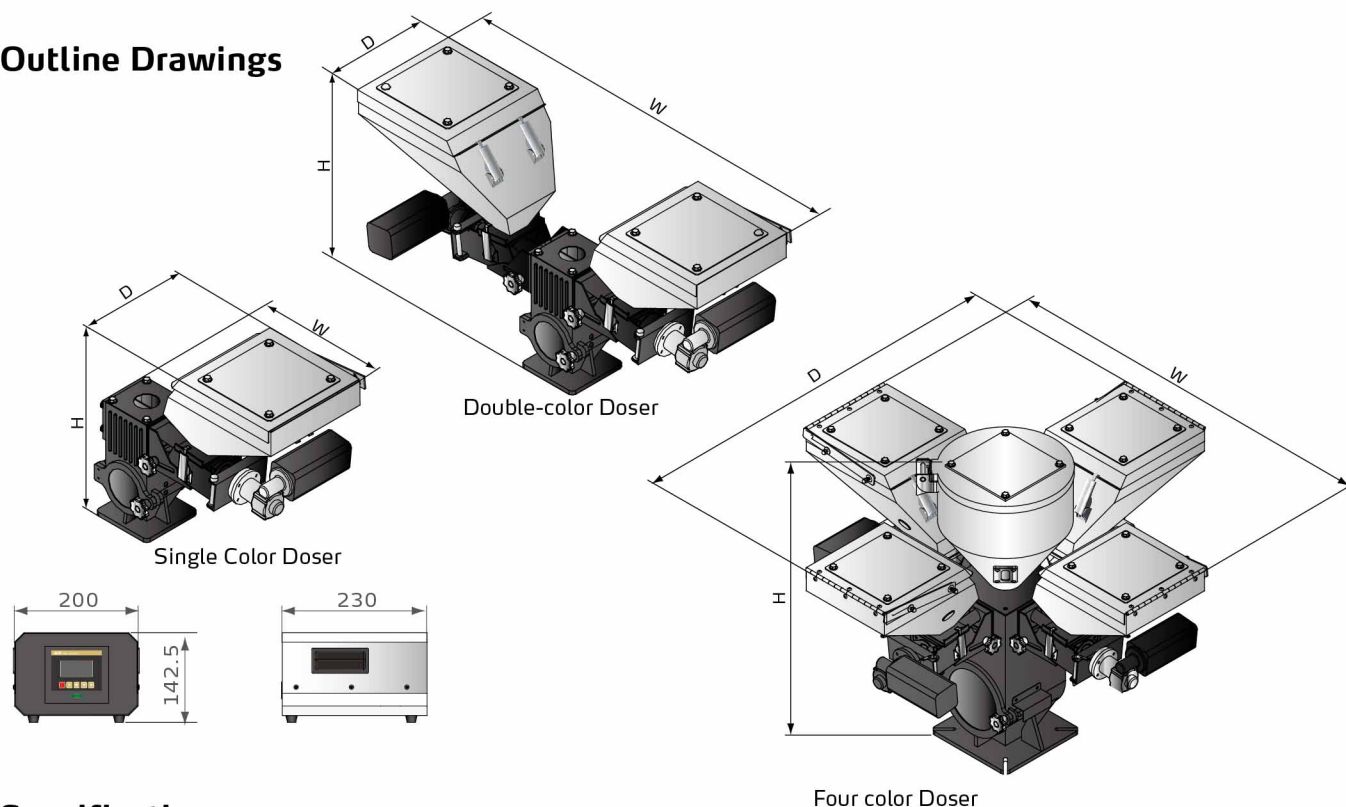
Working Principle

Signals from control cabinet are sent to motor, and then motor begins to work. The rotary force is transferred to the dosing screw through shaft connector. Color additives in hopper fall into the groove of conveying screw, then are taken to hopper base by rotating action of the screw.



SCM Series

Outline Drawings



Specifications

Model	SCM-12	SCM-16	SCM-20	SCM-30	SCM-D	SCM-4
Motor Power (kW, 50/60Hz)	0.06	0.06	0.06	0.06	0.06 × 2	0.06 × 2
Output Power of Mixer (kW, 50/60Hz)	0.09	0.09	0.09	0.09	0.09	0.09
Screw External Dia.	12mm/0.47"	16mm/0.63"	20mm/0.79"	30mm/1.18"	**	**
Output Capacity	0.1~8	0.5~17	3~35	8~102	*	*
Masterbatch Standard Hopper (L)	10	10	10	10	10	10
Option heavy-duty base	15	15	15	15	15	-
Gear Ratio	38:1	38:1	38:1	38:1	38:1 / 38:1	38:1
Main Material Hopper(L)	○(15)	○(15)	○(15)	○(15)	○(15)	●(15)
Mixer	○	○	○	○	○	●
Heavy-duty Base	○	○	○	○	○	-
Dimensions	H	mm	520	520	520	736
		inch	20.5	20.5	20.5	29
	W	mm	610	610	1045	1125
		inch	24	24	41	44.3
	D	mm	335	335	410	1125
		inch	13	13	16	44.3
Weight	kg		22	22	34	75
	lb		48.5	48.5	75	163

Notes: 1) "*" stands for the output capacity depends on model selected, data of the single color doser can be a reference. For example: SCM-D-12 / 16, output capacity 0.6~40kg/hr(1.3~88lb/hr).

2) "***" stands for external dia. of screw is up to model selected.

3) The outputs of above models are measured under the conditions of 0.8kg/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.

4) ● stands for standard, ○ stands for options, - stands for none.

5) Power supply: 1Φ, 115/230V, 50/60Hz.