

Gravimetric Blender

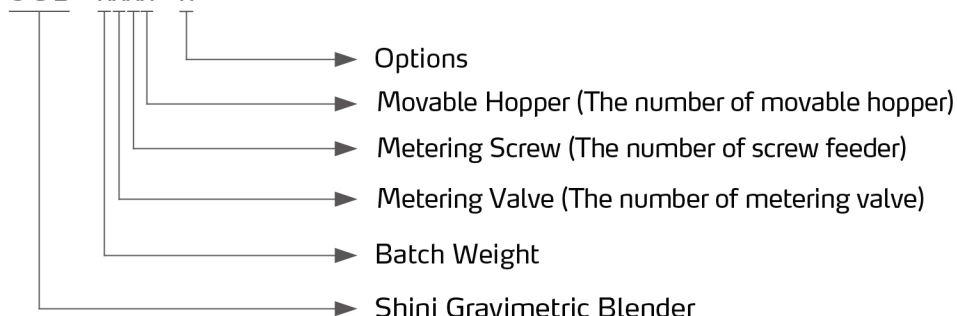
SGB-3400



Refer carefully to the manual before operation.

Coding Principle

SGB - xxxx - x



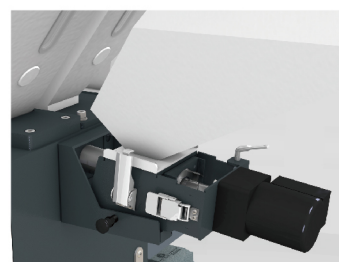
For example, model SGB-3410, indicating the batch size is 3kg., four sets of the standard vertical metering valves, one set of metering screws, zero movable hoppers, and the total is five components.

Features

- An optional movable hopper with a quick-release air connector is available for the SGB-1/3 series, making it easier to change masterbatches and perform cleaning and maintenance.
- The quick-detachable mixing tank and blade make it easy to disassemble and clean.
- Use a 7-inch colour touch panel to enhance user operation efficiency and overall experience.
- Support auto suction control function, and the vacuum generator SVG and the central hopper receiver SHR-U-ST are optional for auto material addition;
- Support production data record viewing and alarm record storing;
- Production data can be exported via a USB interface with a single click for convenient analysis.
- Support sandwich metering mode to solve the problem of differences in the bulk density of masterbatch materials.
- The unit supports regrind auto-compensation, which automatically adjusts the proportions of materials and masterbatches.
- Preset output is available, and the unit can stop automatically when it reaches the preset weight.
- Support auto update of PLC HMI programs via USB interface to achieve software upgrade;
- The auto-speed calibration function is performed after each material weighing, using the dosing rate to ensure the best proportioning accuracy.
- The recipe storage function can store up to 1000 recipes.
- The Ethernet communication function enables centralised connection and monitoring with the main process machine.
- Support multiple languages including Chinese, English, Spanish, French, Vietnamese, Japanese, and Polish.



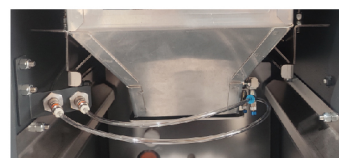
Vertical Metering Valve



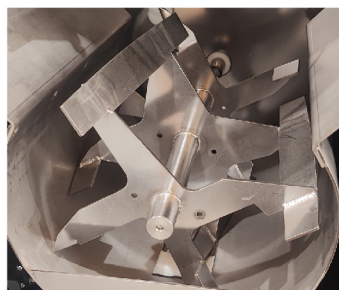
Metering Screw



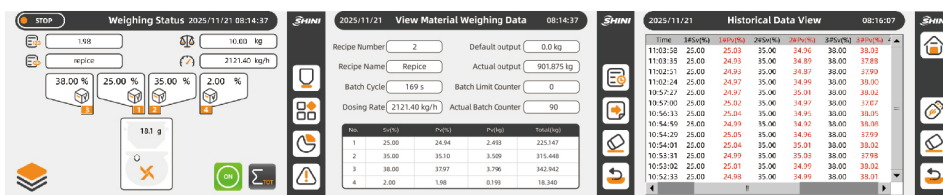
Movable Hopper



Quick detachable Air Connection



Quick Detachable Structure



Home Page

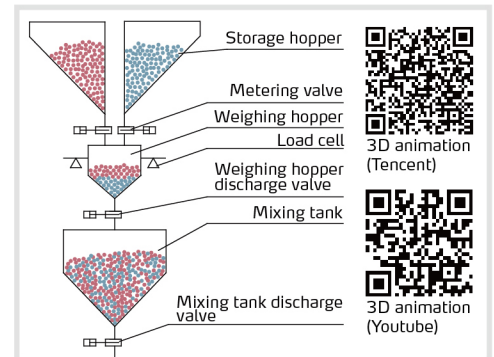
Production Status

History Record Inquiry

Options

- Material hopper low-level sensors can provide an early alarm when materials are low. Add "LS" at the end of the model code.
- A special metering valve, including a bridge-breaking device. It is for flake or irregular material while the diameter is less than 12*12*12mm/0.47*0.47*0.47 inch. Add "FF" at the end of the model code.
- The micro-pulse metering valve (suitable for SGB-1 series model) is optional, which is suitable for receipt ratio from 0.5% and 1%, and add "MF" at the end of the model code.
- For high-temperature materials processing above 80°C and below 120°C, add "H" at the end of the model code.
- SGB series with floor stand. Add "GS" at the end of the model code.

Working Principle

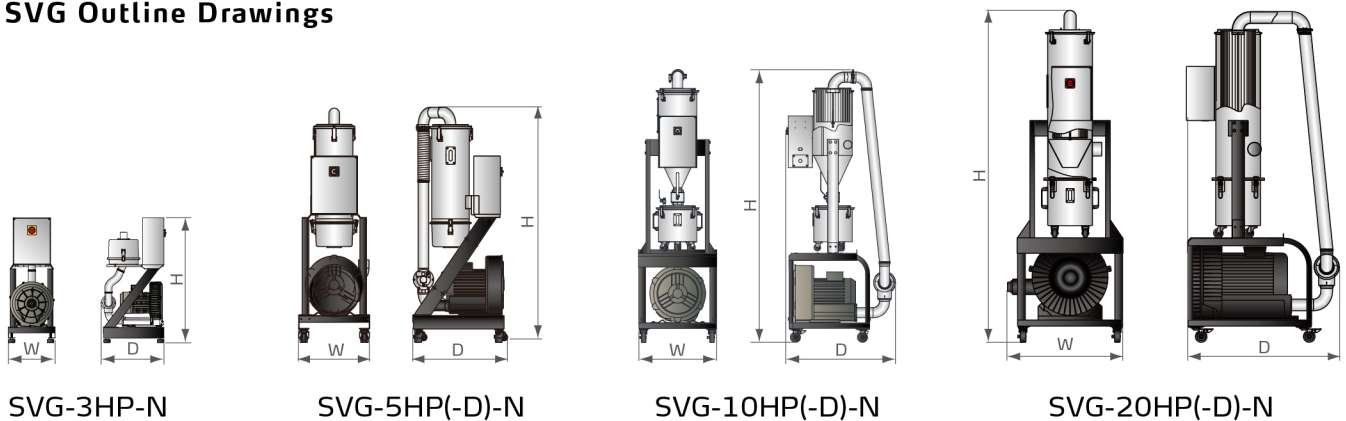


Accessories

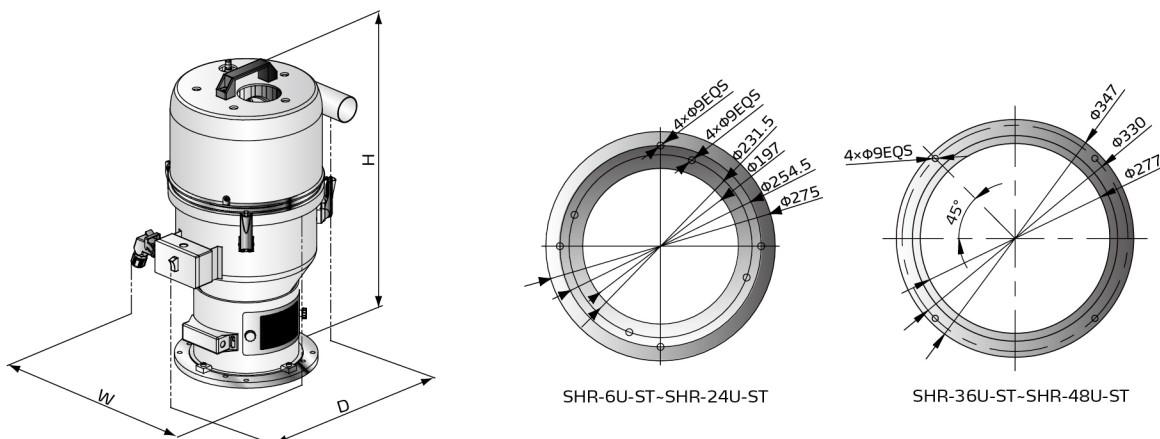
SVG&SHR-U-ST

SVG can work with SGB and SHR-U-ST vacuum hopper directly to convey materials into the storage hopper of the SGB. The controller of SVG is integrated into the SGB, so it can control all the functions of SVG through the touch panel to make it more useful. The T-shape design of SHR-U-ST's suction pipe that worked with the SVG makes it easy to connect the vacuum hoppers, which only needs one suction pipe that can connect the SVG and the vacuum hoppers as to give well organized pipe layout.

SVG Outline Drawings



SHR-U-ST Outline Drawings



SGB Series

Specifications

Model	SVG					SHR-U-ST		
	SVG Model	Power(kW)	Vacuum pipe (inch)	Dimension(H×W×D)	Weight(kg)	SHR Model	Material pipe (inch)	Vacuum pipe (inch)
SGB-1202	3HP-N	1.85	2	933×350×450	60	2×SHR-6U-ST	1.5	2
SGB-1400						4×SHR-6U-ST	1.5	2
SGB-3200	5HP-N	3.75	2	1359×426×593	74	2×SHR-12U-ST	1.5	2
SGB-3210						2×SHR-12U-ST	1.5	2
SGB-3220						SHR-6U-ST	1.5	2
						2×SHR-12U-ST	1.5	2
SGB-3222						2×SHR-6U-ST	1.5	2
						2×SHR-12U-ST	1.5	2
SGB-3400						2×SHR-6U-ST	1.5	2
						4×SHR-12U-ST	1.5	2
SGB-3410						4×SHR-12U-ST	1.5	2
						SHR-6U-ST	1.5	2
SGB-3420						4×SHR-12U-ST	1.5	2
						2×SHR-6U-ST	1.5	2
SGB-10400	10HP-N	7.5	2.5	2031×580×818	185	4×SHR-36U-ST	2.0	2.5
SGB-10410						4×SHR-36U-ST	2.0	2.5
SGB-10420						SHR-6U-ST	1.5	2.0
						4×SHR-36U-ST	2.0	2.5
SGB-10600						2×SHR-6U-ST	1.5	2.0
						6×SHR-36U-ST	2.0	2.5
SGB-10610						6×SHR-36U-ST	2.0	2.5
						SHR-6U-ST	1.5	2.0
SGB-10620	6×SHR-36U-ST	2.0	2.5					
	2×SHR-6U-ST	1.5	2.0					
SGB-20400	20HP-D-N	11	3	2200×745×1000	192	4×SHR-48U-ST	2.5	3.0
SGB-20410						4×SHR-48U-ST	2.5	3.0
SGB-20600						SHR-6U-ST	1.5	2.0
						6×SHR-48U-ST	2.5	3.0
SGB-20610						6×SHR-48U-ST	2.5	3.0
						SHR-6U-ST	1.5	2.0
SGB-20800						8×SHR-36U-ST	2.0	2.5

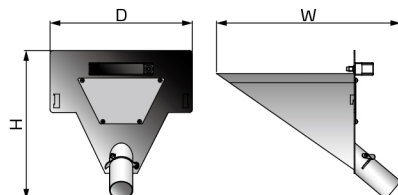
Note: 1) SVG Power: 3 Φ, 400VAC, 50Hz

2) SHR Power: AC24V

Discharging hopper SGB-DH

The discharging hopper can be directly mounted on the SGB for easy cleaning during material replacement.

Outline Drawings

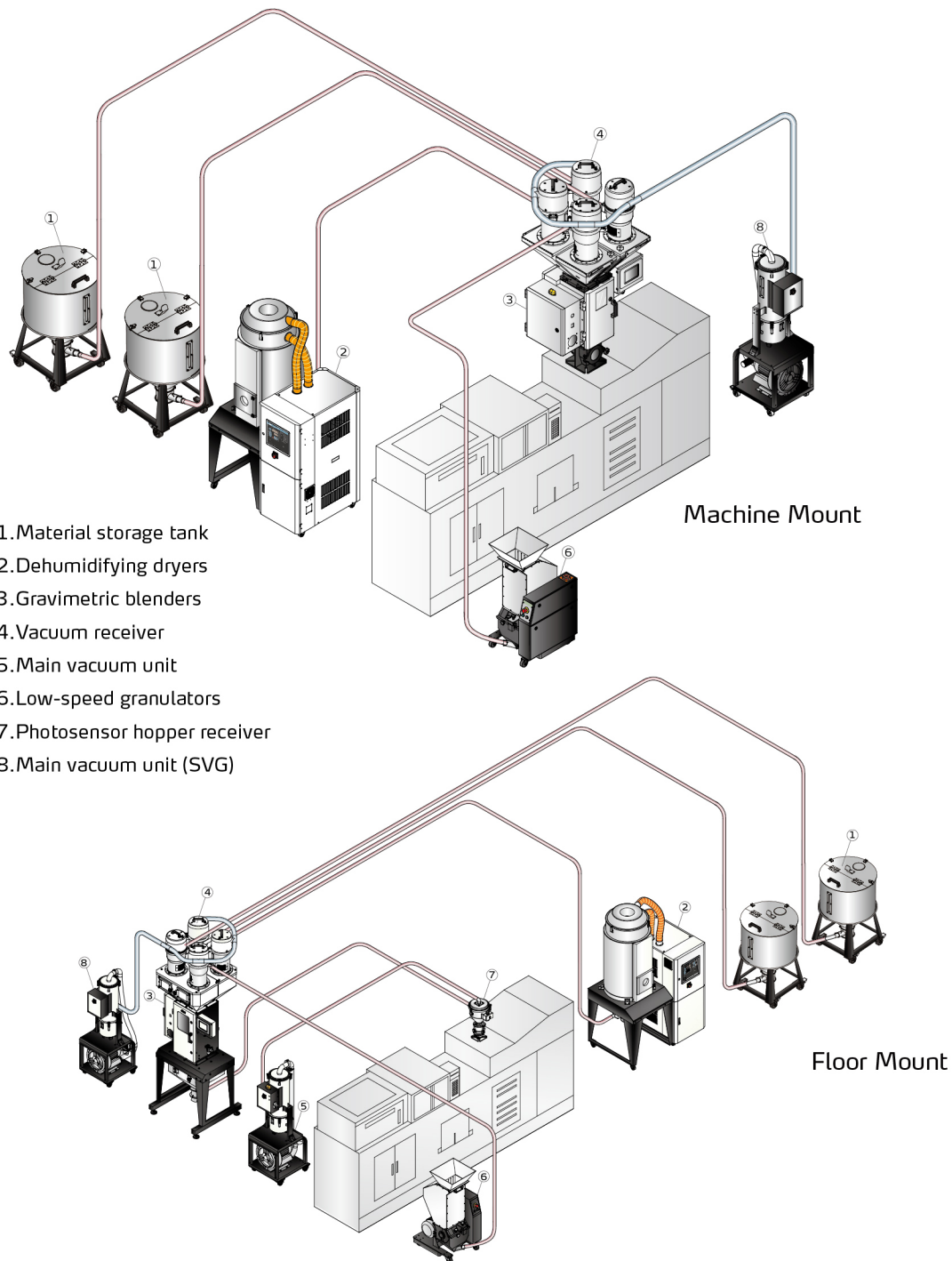


Specifications

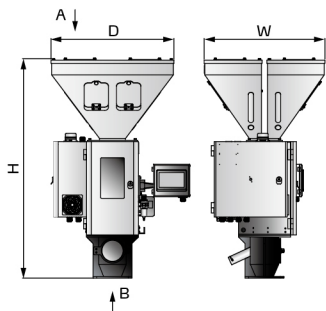
Model	SGB-DH	W×D×H
SGB-3 series	SGB-DH-3	310×405×325
SGB-10 series	SGB-DH-10	410×495×415
SGB-20 series	SGB-DH-20	570×515×445

■ Application

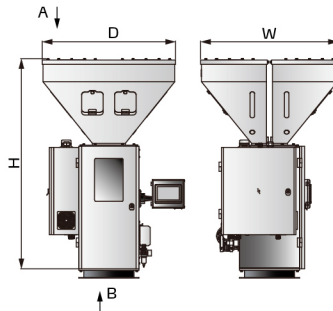
The SGB Gravimetric Blender is equipped with a PLC controller, making it ideal for applications that require precise mixing of multiple materials based on weight proportions. It is suitable for processes like injection, extrusion, or hollow moulding. The blender can be installed in two ways: as a floor stand or a direct mount. The floor stand version is designed for a flat ground foundation and is typically used in conjunction with a material storage tank or suction box. In contrast, the direct-mount version can be installed directly at the injection moulding machine's feeding port.



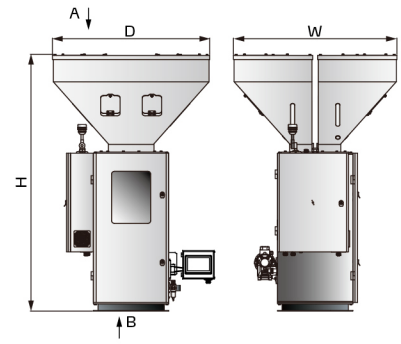
Outline Drawings



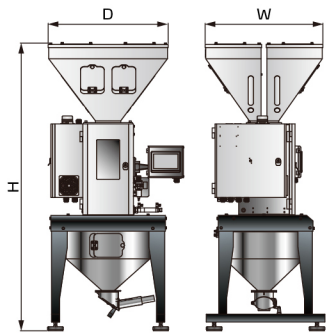
SGB-1XXX/3XXX (standard mode)



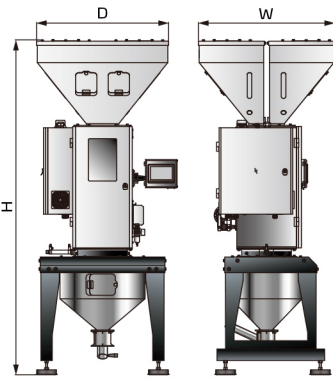
SGB-10XXX (standard mode)



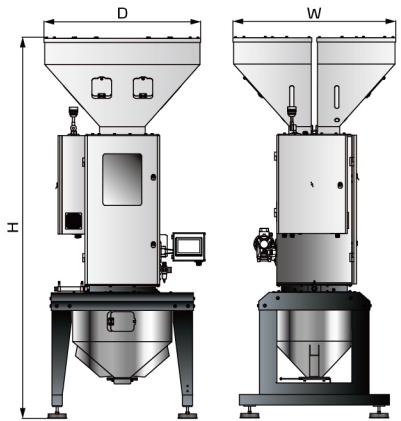
SGB-20XXX (standard mode)



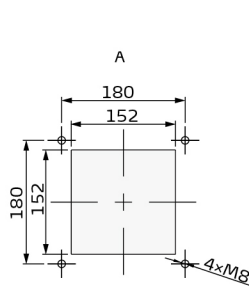
SGB-3XXX-GS (floor stand mount)



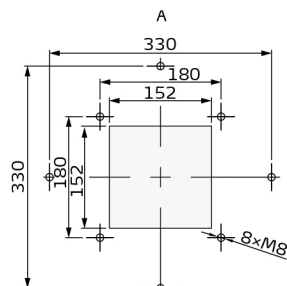
SGB-10XXX-GS (floor stand mount)



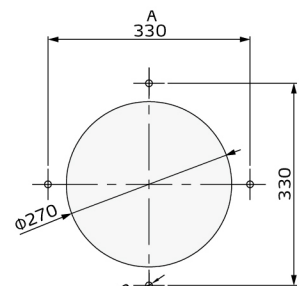
SGB-20XXX-GS (floor stand mount)



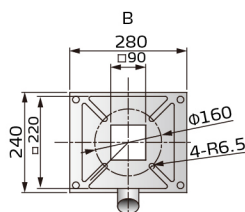
SGB-1XXX/3XXX Series
Hopper mount size



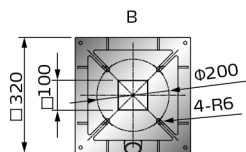
SGB-10XXX Series
Hopper mount size



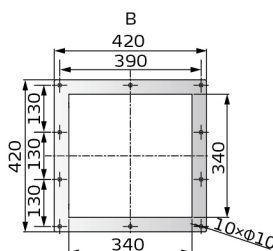
SGB-20XXX
Hopper mount size



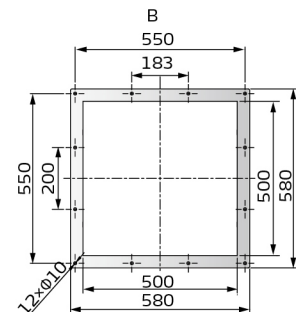
SGB-1XXX
Magnetic Base Size



SGB-3XXX
Magnetic Base Size



SGB-10XXX
Magnetic Base Size



SGB-20XXX
Magnetic Base Size

Specifications

Series	Model	Batch weight (kg)	Components	Metering valve (main / secondary)	Main Metering Valve	Secondary Metering valve	Metering Screw	Movable Hopper	Max. Batch (kg/hr)	Mixing Motor (kW)	Dimension(W×D×H)		Weight (kg)
											Standard type	Foot frame type	
1 Series	SGB-1200	1	2	2	1	1	-	-	80	0.25	620×540×1100	620×540×1620	105/130
	SGB-1400		4	4	3	1	-	-			750×600×1100	750×600×1620	115/145
3 Series	SGB-3200	3	2	2	1	1	0	0	300	0.25	745×845×1357	745×865×1935	115/155
	SGB-3210		3	2	1	1	1	0			745×1065×1520	745×1065×2100	125/165
	SGB-3220		4	2	1	1	2	0			745×1365×1520	745×1365×2100	135/175
	SGB-3222		6	2	1	1	2	2			760×850×1350	760×850×1820	130/170
	SGB-3400		4	4	3	1	0	0			745×860×1357	745×860×1935	125/165
	SGB-3410		5	4	3	1	1	0			780×1110×1515	780×1110×2090	135/175
	SGB-3420		6	4	3	1	2	0			780×1455×1515	780×1455×2090	145/175
10 Series	SGB-10400	10	4	4	3	1	0	-	1200	0.55	960×1000×1540	960×1005×2363	350/450
	SGB-10410		5	4	3	1	1	-			960×1230×1680	960×1230×2510	370/460
	SGB-10420		6	4	3	1	2	-			960×1530×1540	960×1530×2363	380/470
	SGB-10600		6	6	4	2	0	-			960×1000×1540	960×1000×2363	390/480
	SGB-10610		7	6	4	2	1	-			960×1230×1680	960×1230×2510	400/490
	SGB-10620		8	6	4	2	2	-			960×1530×1540	960×1530×2363	410/500
20 Series	SGB-20400	20	4	4	3	1	0	-	2800	0.75	1260×1210×1980	1260×1210×2950	670/800
	SGB-20410		5	4	3	1	1	-			1380×1210×1980	1380×1210×2950	680/810
	SGB-20600		6	6	4	2	0	-			1480×1400×1980	1480×1400×2950	700/930
	SGB-20610		7	6	4	2	1	-			1620×1400×1980	1620×1400×2950	710/940
	SGB-20800		8	8	4	4	0	-			1700×1630×1980	1700×1630×2950	750/980

Note: 1) Above mentioned are common models.

2) The above data are obtained based on even granules with bulk density of 0.8kg/l and diameter of 3-4mm in a test criteria of continuous process. The value may varies with the material characteristics. If doubtful materials are used, please make further discussion.

3) Typically, vertical metering valves are suitable for material ratios above 1%, and metering screws are for material ratios below 1%.

4) Voltage: 3 Φ, 400/460/575VAC, 50/60Hz.

5) The output may vary by material type, shape, fluidity, density, and production process. For other special cases, don't hesitate to contact us.

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