

Micro Dispenser

Originally developed for the CSIRO (Aust) Molecular and Health Division, the Micro Dispenser is designed for powders and granules with variable flow rates from as low as 2 grams/hour to 2000 grams/hour. Popular in applications for laboratory, chemistry and extruding industries the Micro Dispenser features 2 modular dispensers, digital speed controller and provisions for temperature control.



Modular Dispensing Heads DH01 & DH02

Digital Speed Controller

Modular Kit

Twin Kit 2g – 2000g/hr

The twin kit combination includes two modular dispensers:

- **Modular Dispenser Head (DH) and Motor Drive (MD) Selection**
Dispensing Head DH01 = Screw Barrel DIA 12.7mm x 10mm
Dispensing Head DH02 = Screw Barrel DIA 19mm x 16mm
- Variable Speed Motor Drive MD01 = 15rpm max
Variable Speed Motor Drive MD02 = 30rpm max
Interchangeable Gearbox MD03 = 54rpm max
- Two downspout air or gas blower pipes
- Specialised plunging tools
- Fine, Medium and Course Augers (screws)
Feed Rate Combination = 2g/hr - 2000g/hr

Feed rates are based upon 1g/cm weight density material in powder

*Granules should not exceed 3.5mm DIA

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Product Information

The Barrell Micro Dispenser was designed specifically for minimal feed rates with a maximum linear and volume accuracy, achieving weights as low as 2g/hr. This dispenser has been designed volumetric specific because at such low volumes of material a gravimetric system would struggle to achieve a consistent linear accuracy. This dispenser is capable of dispensing difficult to manage powders and granules.

Accuracy

Tight tolerances of screw and barrel to maximise material transfer producing excellent linear and volumetric accuracy.

Temperature Control

The dispensing head and screw barrel have an inbuilt porting system enabling the entire dispensing head and screw barrel to be temperature controlled. This will enable stabilisation of material and combat against any heat that may be generated by friction. This also enables the screw and barrel to run at tight tolerances when dispensing heat sensitive materials.

Modular Systems: Dispensing Head (DH) and Motor Drive (MD) selection

The modular system enables different size (output) dispensing heads, DH01 or DH02, to be simply mounted to the different speed range drive systems. Motor Drive: Frequency controller supplied by 240 volt. This controls a 3 phase, 220v AC motor. The controller has a digital display in 0.1 increments.

Downspout Blower Pipes

Blower pipes will assist in gently blowing powder off the screw when exiting the machine (particularly if static is present). The blower pipe can also be used to add gas if needed.

Safety

The micro dispenser also features a slip clutch system on the agitator for finger safety. The stainless steel extension hopper is only required if larger amounts of materials need to be stored in machine.

Feeder Screws and Barrels

Feeder screws and barrels are made from 316 stainless steel. A selection of three feeder screws for dispensing a wide range of powders or granules are available. Custom screws can be supplied to suit customer requirements.

Dispensing Head

The dispensing head is fully machined anodised aluminium, hosting bearings, seals, stainless steel agitator, screw and barrel and mini hopper and is ported for cooling (temperature control). 316 stainless steel can be made to order for food and pharmaceutical usage

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Dispenser with Plunging Tool

The Barrell micro dispenser has an inbuilt agitator; however some materials may require a plunger tool to help direct feed the auger (feed screw). This will assist in preventing a bridging effect inside the dispenser hopper.



Overall Dimensions

