FreeGlide®

The only In-Line Powder Sampler guaranteed not to jam

Patent Pending
The smarter way to sample

FreeGlide®

Manually Operated (model shown is FG-1500M)

Pneumatic Actuation (model shown is FG-3000A)

TESTED TO HALF A MILLION CYCLES

Diaphragm

Sampling Cup

5” Gasket

Front Boss

Clamp 5”

Discharge Chute

2” Flange
The FreeGlide® is the world’s leading inline powder sampler. It has been designed to take samples efficiently and quickly as the powder falls under gravity down a pipe or chute. The FreeGlide® is used in hundreds of pharmaceutical and food factories around the world.

**Operation**

**Resting**
When the FreeGlide® is not in use the full bore of the downpipe is available for powder flow.

**Sampling**
The sampling cup is extended into the downpipe to catch the product as it falls.

**Discharging**
The sampling cup is then retracted and inverted. The powder sample falls down the discharge chute to where it is collected.

**Guaranteed not to jam**

**The Flexible Diaphragm**
At the heart of the FreeGlide® is an ingenious, patented, flexible diaphragm. The purpose of the diaphragm is to keep powder away from the working mechanisms of the sampler. By keeping the mechanisms clean the sampler will not jam in operation.

All product contact polymers used within the FreeGlide® are FDA acceptable.
FreeGlide® Advantages

Sampling Systems have spent many years developing and testing the FreeGlide®. This highly innovative device overcomes the problems inherent in other in-line powder samplers:

- It does not jam during use
- The sample is collected in a cup which does not alter the physical characteristics of the powder
- The full bore of the pipe is available for powder flow when the sampler is not in use
- Available for manual or automated sampling

Hygienic Applications

The FreeGlide® has been made to the latest Pharmaceutical GMP standards and so is ideal for hygienic applications. The product contact parts of the standard model are: 316 stainless steel, PTFE and silicone rubber (other materials are available on request).

Robust Construction

The FreeGlide® is exceptionally robust and is suitable for use in a wide range of industries including: pharmaceutical, food, chemical, general industrial and cosmetic.
Which FreeGlide?

How to determine the right FreeGlide®

The FreeGlide® is available in four sizes. The size required will depend upon the diameter of the pipe where the FreeGlide is to be installed.

Dimension A = distance to the centre line of the cup
Dimension B = distance to the end of the seal peg (this will be the minimum diameter of the pipe that the FreeGlide can be installed in)

<table>
<thead>
<tr>
<th>Minimum Downpipe Diameter</th>
<th>FreeGlide® Part Number</th>
<th>Manual</th>
<th>Actuated</th>
</tr>
</thead>
<tbody>
<tr>
<td>100mm</td>
<td>FG - 1000M</td>
<td>FG - 1000M</td>
<td>FG - 1000A</td>
</tr>
<tr>
<td>150mm</td>
<td>FG - 1500M</td>
<td>FG - 1500M</td>
<td>FG - 1500A</td>
</tr>
<tr>
<td>200mm</td>
<td>FG - 2000M</td>
<td>FG - 2000M</td>
<td>FG - 2000A</td>
</tr>
<tr>
<td>230mm</td>
<td>FG - 3000M</td>
<td>FG - 3000M</td>
<td>FG - 3000A</td>
</tr>
</tbody>
</table>

Pipes > 100mm
Model: FG-1000A & FG-1000M
A = 28mm (1.1”)
B = 94mm (3.7”)

Pipes > 150mm
Model: FG-1500A & FG-1500M
A = 52mm (2.0”)
B = 148mm (5.8”)

Pipes > 200mm
A = 100mm (3.9”)
B = 198mm (7.8”)

Pipes > 230mm
Model: FG-3000A & FG-3000M
A = 131mm (5.2”)
B = 227mm (8.9”)

QAQC LAB WHITE STONE VA 22578 TEL (866) 244-1578
www.qclabequipment.com
Installation
1. Cut a hole in your downpipe
2. Weld the Front Boss to your downpipe.
3. The main body of the FreeGlide® then clamps to the front flange

Note: The FreeGlide® can be easily removed for cleaning

Sample Collection
When the Sampling Cup is inverted the product falls down the Discharge Chute. The powder samples can be collected in a number of ways:
- Into a bottle attached using a PTFE Bottle Adapter
- Into a bag
- Collected using a cassette of continuous tubing which can be sealed and cut between sample collections

PTFE Bottle Adapter - A PTFE Bottle Adapter can be custom made to suit virtually any bottle thread. The Bottle Adapter clamps to the Discharge Chute and the sample collecting bottle screws into Bottle Adapter

High Containment Sampling
Sampling Systems can offer high containment sampling through a 50mm high containment Split Butterfly Valve.

Containment levels of < 10 µg/m3 (lower levels can be achieved depending on the product)
Available in both 316 stainless steel and hastelloy with a range of seals including EPDM and Kalrez® Suitable for use with either stainless steel or plastic containers.
**Technical**

<table>
<thead>
<tr>
<th>Contact parts:</th>
<th>- 316 stainless steel</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- PTFE</td>
</tr>
<tr>
<td></td>
<td>- Silicone rubber, Viton or EPDM</td>
</tr>
<tr>
<td>Non contact parts:</td>
<td>- 304 grade stainless steel</td>
</tr>
<tr>
<td></td>
<td>- Other materials as required.</td>
</tr>
<tr>
<td>Sample Volume:</td>
<td>50ml (nominal)</td>
</tr>
<tr>
<td>Finishes:</td>
<td>All welds ground and polished.</td>
</tr>
<tr>
<td></td>
<td>All product contact surfaces are finished to Ra 0.5µm or finer</td>
</tr>
<tr>
<td>Actuation:</td>
<td>Manual or Pneumatic actuated</td>
</tr>
<tr>
<td></td>
<td>Actuated FreeGlides® are supplied with reed and limit switches so they can be connected directly to your PLC. Please contact us for more information.</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>Please contact us for planning in drawings</td>
</tr>
</tbody>
</table>

**Suitability:**

The FreeGlide® is designed for the collection of powder samples from a vertical downpipe. The product needs to be dispersed in air and in free fall.

| Pipe Pressure:         | The internal pressure differential across the device (inside/outside of the downpipe) needs to be within 0.1 barg of surrounding atmospheric pressure. |
| Flexible Parts:        | Silicone, Viton or EPDM (FDA acceptable materials) |
| Temperature:           | Product Temperature 10 to 60°C (50 to 140°F) |
| ATEX:                  | Ex II 2GD T4 (extra cost option). |
Further Information

If you are planning a new facility or looking to replace an old sampler please contact Sampling Systems. We will be able to supply full planning in drawings and quotes by return. With installations in a wide range of industries around the world we are sure we can help.

Worldwide Enquires

Sampling Systems have trained and experienced agents around the world who will be pleased to help with your enquiry. Please contact us for details of your local dealer.
# FreeGlide® Options & Accessories

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Price Each USD $</th>
<th>Discount %</th>
<th>Sketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>6753003K01</td>
<td>Blank Clamps to Front Boss to cover the sampling hole when the FreeGlide® is removed for cleaning</td>
<td>$90</td>
<td></td>
<td><img src="blanking_plate.png" alt="Blanking Plate" /></td>
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<tr>
<td>6753003L01</td>
<td>ATEX Rating – Manual FreeGlide®: Ex II 2GD T4, It is the customer’s responsibility to ensure that this is suitable for use in their work environment</td>
<td>$550</td>
<td></td>
<td><img src="atex_rating.png" alt="ATEX Rating" /></td>
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</table>

### Options

- **Blanking Plate**
  - Clamps to Front Boss to cover the sampling hole when the FreeGlide® is removed for cleaning
  - 316 stainless steel
  - Finish 1.0 µm Ra
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Price Each USD $</th>
<th>Discount %</th>
<th>Sketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>6753003H01</td>
<td>Bottle Adapter (Size 1)</td>
<td>$271.25</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>6753003H02</td>
<td>Bottle Adapter (Size 2)</td>
<td>$386.75</td>
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<tr>
<td>6758126H125</td>
<td>Sample Bottle 125ml</td>
<td>$8.66</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>6758126H250</td>
<td>Sample Bottle 250ml</td>
<td>$13.28</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900341</td>
<td>Spare Silicone Diaphragm</td>
<td>$252.00</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900364</td>
<td>Spare Viton Diaphragm</td>
<td></td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900269</td>
<td>Spare Silicone End Cap</td>
<td>$59.50</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900373</td>
<td>Spare Viton End Cap</td>
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<td></td>
<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900269</td>
<td>Spare Silicone Gasket 5”</td>
<td>$42.00</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>675SS900290</td>
<td>Spare Viton Gasket 5”</td>
<td>$56.00</td>
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<td><img src="image" alt="Sketch" /></td>
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<tr>
<td>673003X20</td>
<td>Air Filter for manually operated FreeGlides</td>
<td>$24.50 per pack</td>
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<td><img src="image" alt="Sketch" /></td>
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</table>

### Documentation

<table>
<thead>
<tr>
<th>O&amp;M</th>
<th>Operator &amp; Maintenance Manual</th>
<th>Free of Charge</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Operating Instructions</td>
<td></td>
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<tr>
<td></td>
<td>Installation Instructions</td>
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<tr>
<td></td>
<td>Maintenance Instructions</td>
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<tr>
<td></td>
<td>CE Certificate</td>
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<tr>
<td></td>
<td>Certificate of Conformity</td>
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<tr>
<td></td>
<td>Recommended Spares List</td>
<td></td>
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<tr>
<td></td>
<td>General Arrangement Drawing and Parts List</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electrical Wiring Diagram (Pneumatic)</td>
<td></td>
</tr>
<tr>
<td>Part Number</td>
<td>Description</td>
<td>Price Each USD $</td>
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<tr>
<td>-------------</td>
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</tr>
<tr>
<td>6753003X30</td>
<td>XRF Testing &amp; Report</td>
<td>$175</td>
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</tbody>
</table>

All product contact metallic parts in the FreeGlide are positively identified using XRF Spectrometer (X-Ray Fluorescence). A bit map and the test certificate are included to the O&M Manual.

Note: We do not offer mill certificates as they are frequently illegible

<table>
<thead>
<tr>
<th>Delivery</th>
<th>Description</th>
<th>Price Each USD $</th>
<th>Sketch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery</td>
<td></td>
<td>Per quote</td>
<td></td>
</tr>
</tbody>
</table>

**Terms and Conditions**

1.0 Prices:

Prices are quoted in US Dollars.

Prices may be subject to change at any time.

2.0 Despatch:

Despatch of the goods will be approximately 4 weeks from our confirming acceptance of the order and/or the resolution of all technical queries, whichever is the latest. This applies at the time of making the offer, based on the best information available at this time but will be reconfirmed at the time of order acceptance.

Our despatch estimate will be not used as a basis for penalty clauses.

Each FreeGlide® will be packed into a heat treated wooden crate (all crates comply with ISPM 15 regulations).

3.0 Penalty Clauses:

We do not accept Penalty Clauses unless expressly approved in writing by us. We reserve the right to amend delivery and prices if Penalty Clauses are to form part of the Contract.

4.0 Payment & Terms:

Invoices will be rendered for final payment upon dispatch.

5.0 Exclusions:

Our offer is for the supply of equipment only. It does not cover installation or commissioning.

6.0 Documentation:

- Operator & Maintenance Manual – 1 copy
  - Summary of contract details
  - Equipment description
  - Equipment Safety
  - Operating Instructions
  - Maintenance Instructions
  - Spares List
  - CE certification & Certificate of Conformity
  - General Arrangement Drawing & Parts List

NB. All documentation will be provided in English. Documentation can be provided in other languages but this will have to be quoted for separately, please ask for details. Additional hard copies of the documentation will be charged for.

7.0 Technical Standards:

We reserve the right to vary our specification of the equipment prior to the acceptance of any orders placed. Thereafter, variations will be agreed with the Customer.

8.0 Shipping:
9.0 Acceptance Trials:
All goods are thoroughly tested for conformity to specification before dispatch.

10.0 Material Certification:
Our Offer includes for a Certificate of Conformity which is included free of charge in the Operator & Maintenance manual.

We do not offer Mill Certificates but as an extra cost option we do offer analysis of the product contact parts by XRF - see option 3003X-30 (Note: Certification to this level must be requested when the order is placed).

11.0 Quality Systems:
Manufacturer is approved as an ISO 9001:2008 company (Certificate Number 14128455). All goods are made to this standard.

12.0 Cleaning:
This equipment is manufactured in a metal working factory. All equipment must be thoroughly cleaned by the end user prior to use.

13.0 Cancellations:
In the event of order cancellation after order placement, we reserve the right to charge 30% of order value or for all work carried out if this is a greater amount, calculated on our standard hourly rates and usage of materials.

14.0 Insurance Liability.
We insure the goods in carriage to the point of, but not including, unloading.
Goods should be examined on receipt and either signed for as accepted or the delivery note signed for "unexamined". If accepted "unexamined" then any damage must be notified within three days of receipt. No claims will be accepted after three days or if the goods have been accepted.

15.0 Warranty
12 Months from dispatch on the following basis:-
1. Free replacement parts and carriage to site only for standard proprietary components such as electrical, pneumatic and hydraulic items (relays, sensors, lamps, solenoid valves etc). It does not cover the costs incurred by customers maintenance staff in diagnosing faults.
2. Parts and labor for failure of structural or design elements.
3. Polymer parts (i.e. diaphragm and closing plug) must be treated as consumable parts and are excluded from the warranty.

Note: The equipment specified is of an inherently simple nature and fault diagnosis is relatively straightforward for a competent maintenance technician. QAQC LAB will provide telephone assistance where required free of charge.

Should it be requested that a technician attends site to correct a fault, which is subsequently established as falling under item 1 above, then costs for the visit (but not parts) will be chargeable at our normal rates for such work.

Should any request during a Warranty visit be made to change the functionality of the machine from the original specification verified at FAT or commissioning, this will be charged for at our normal rates for both labor and materials.

16.0 Copyright:
This Offer, the specifications, drawings and any other documentation supplied with it and the design concepts incorporated, are our copyright and may not be copied or reproduced in any other way, or used to obtain other offers, or used for any other purpose without our written approval. This condition applies until any order placed for the items offered is completed.

17.0 Trademarks & Patents
FreeGlide® is a registered Trademark belonging to Sampling Systems Ltd.
Patent applied for.

18.0 Custom Tariff Nos.
H.S. No: Sampler 73269098

**** End of Document ****