



## **RESPONSE VOLUMETRIC FILLERS**



#### Versatile and accurate

The Response features a revolutionary head designed to handle liquids, creams, pastes, and solids in suspension efficiently. A variety of nozzle designs are available, including cut-off nozzles for a clean fill with no dripping. The forward and backward stroke can be varied independently to optimise filling characteristics, and it has the ability to fill volumes of 5ml to 1000ml, with an accuracy ±0.25%, using one of three interchangeable honed pump sets.



#### Simple and safe to use

Volumes are accurately and easily set by means of a hand wheel and digital counter, and the unit can be set to single shot or continuous operation. All controls are within easy reach of the operator at the front of the unit, with a foot switch as an option. With quick-release fittings and the need for just a single tool, strip-down for cleaning is quick and easy. All access is from the front of the machine without the need to remove the cover, and all moving parts are enclosed at all times. The unit is fully CE Marked.



#### Hygienic

The Response is designed to minimise cleaning time and to meet the highest standards of hygiene. A 304 stainless steel monocogue construction with curved and sloping surfaces meets GMP requirements, and all contact parts are manufactured in 316L stainless steel, PTFE and Viton. The innovative pumping system is designed to be clean and lubricant free, and all hose/hopper connections are triclover as standard.

	Specification	
MODEL	SINGLE HEAD	TWIN HEAD
Accuracy	±0.25%	±0.25%
Output (per minute)	<40	<80
Height without hopper / tank	340 mm	340 mm
Depth	840 mm	840 mm
Width without conveyor	343 mm	343 mm
Weight	41 kg	44 kg
Air consumption per cycle	5 litres at 6 bar	5 litres at 6 bar
Volume range	5 ml- 1 litre	5 ml-100ml

#### **Accessories**

#### **Standard Nozzles**

A wide variety of interchangeable nozzles are available for different products. A remote nozzle for dosing into or over food etc. can also be supplied.

#### **Special Nozzles**

Cut-off nozzles for a clean fill with no dripping are available, and are attached to the Response using the same fixings as any other nozzle. They are pneumatically operated and powered through the accessory ports on the front of the machine.

#### **Hoppers & Tanks**

Available in 316L stainless steel and in standard 20 litre and 50 litre sizes, our hoppers can be supplied plain, insulated for cold products or electrically heated for hot fills. All are connected with hygienic Tri-Clover type fittings.

#### Counter

A counter attachment is available to contol multiple shots.

#### Mixers & Stirrers

We can supply a variety of mixers and stirrers, free standing or lid mounted, in a variety of sizes.

#### **Other Accessories**

- Diving nozzles
- Remote cut-off nozzle
- · Level control sensor fitted to hopper
- Spinning table for filling irregular shaped jars
- 2-speed filling system
- Stainless steel benches and trolleys
- Bag and pouch filling system







## Response automation system

With the addition of an Automation Base, your Response fillers can be combined to create a fully automated filler with up to eight heads. By doing so you have the option of increasing output whilst retaining the ability to run your Response units individually as production demands dictate. Alternatively you may choose to simply run as an automated filler but without the need to write off your investment in bench top fillers. More information is available on request.

	Specification
MODEL	AUTOMATION BASE
Accuracy	±0.25%
Output (per minute)	Dependent
Height without hopper / tank	1800 mm
Depth	1070 mm
Width without conveyor	1650 mm
Weight	396 kg + Responses
Air consumption per cycle	40 litres per cycle
Volume range	5 ml–1 litre

#### **Key features and options**

- · Variable speed conveyor with adjustable guides, rails, and delrin or stainless steel slats
- Logic controls for gating and sensing systems and up to four Response fillers
- Neck location system
- Pneumatic cut-off nozzles to ensure a clean fill with no dripping
- 'Rise while fill' or 'bottom up fill' of container, into neck or fixed nozzle fill system
- Fully interlocked guarding around operating area
- Frame mounted hopper or tank with up to four triclover outlets, manifold and heated jacket
- Other bespoke additions depending on your



Operator's view from the front



## **RESPONSE VOLUMETRIC FILLERS**

# Response

machine.



ATEX is the name commonly given to the European Directive for controlling explosive atmospheres. Our Response Filler can be adapted to comply with directive 94/9/EC (also known as 'ATEX 95' or 'the ATEX Equipment Directive') on the approximation of the laws of Members States concerning equipment and protective systems intended for use in potentially explosive atmospheres.

There are three zones relating to ATEX compliancy – Adelphi can adapt our Response base unit or automation system to be Zone 1 (10 – 1,000 hours per year in the explosive atmosphere) and Zone 2 (0-10 hours per year in the explosive atmosphere) compliant. We will provide the relevant documentation to support your purchase and ensure peace of mind.

Our standard Response machines are adapted to adhere to ATEX requirements, and are made with qualified pneumatic components. We engineer-out any possible sources of static build up, and we ensure good earthing via an Earth Point included at the rear. Materials such as stainless steel are used to replace some aluminium and plastic parts, and the machine is raised on different feet to allow grounding. Additionally, the hopper comes with a lid to reduce fumes.

Our ATEX adapted Response fillers can come with various seal and O-ring options, which we will assess to ensure compatibility with your product:

- Fluoroelastomer (VITON)
- Perfluoroelastomer (KALREZ)

We have lodged a technical file (09XT005) with an approved body.

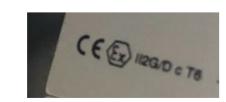
Please note that our ATEX machines do not cover explosive risks from dust; only gas.



**The Earth Point** 



**ATEX** compliant feet



Look for the 'EX' mark for assurance that our parts are **ATEX** approved



Adelphi manufactures the highly regarded Response range of filling machines, ideal for small to medium batch production environments.

## Response benchtop filler

Adelphi manufactures the highly regarded Response benchtop volumetric filling machine, and can deliver reliable after sales support wherever you are in the world. This pneumatically driven filler is suitable for filling liquids, creams or solids in suspension thanks to its versatile filling head design.

The Response is adaptable, accurate, hygienic and easy to use. It is available in single or twin-head configurations, with a comprehensive range of nozzles, hoppers and other accessories available to meet your individual requirements.

These machines are ideally suited to those wanting to start automating a previously manual filling process, and those that don't currently require the output levels offered by a fully automated solution. However, once production demands increase, Response units can be mounted onto an Automation Base to create an extremely flexible fully automatic filling machine.



(Below left) heated hopper for hot fills.

(Below right) pipe feed attached, for liquid fills.



(Above) with standard hopper for filling creams, pastes, and solids in suspension



## RESPONSE VOLUMETRIC FILLERS

# Response Monobloc filler



Key features and benefits:

- Capable of filling 3ml to 250ml containers
- Space-saving design
- Ten-minute strip down time
- Hygienic stainless steel construction; all wetted parts are 316 stainless steel
- Response volumetric filler fill-accuracy +/- 0.25%
- Quick and easy to change parts from one fill-size container to another
- Easy-to-use intuitive HMI touch screen controls for your operator
- Designed to effectively handle liquids, oils, creams, pastes and solids in suspension
- Speed of operation in the region of 35 per minute
- Reduced labour costs

The Response Monobloc Filler can incorporate the following elements to give a complete turnkey packaging line:

- In-feed table
- Bottle blower
- Filler
- Automatic cap placement
- Capper
- Labeller
- Collection table

	Specification
Accuracy	±0.25%
Output (per minute)	Dependent on fill volume
Height without hopper / tank	1850 mm
Depth	860 mm
Width without conveyor	1152 mm
Weight	265 kg (plus Response base unit and hopper)
Air consumption per cycle	7.5 litres at 6 bar
Volume range	5 ml – 250ml
Electrical consumption	3 phase with Neutral, 415VAC, 16A supply

The Response Monobloc Filler has been designed to work with our Adelphi Response Volumetric Fller, but it can also be configured to incorporate fillers from other suppliers. As production demands increase, a second head can easily be added for fill sizes 5ml - 100ml.

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