

GREASEBLAST Combats Fats, Oils & Grease with a Natural Biological Action

Used by many businesses globally, Environmental Biotech's GreaseBlast™ system is a cost-effective natural way to permanently free your drains from FOG (Fats, Oils and Grease) that account for over 75% of drain blockages.

The wall-mounted GreaseBlast™ automatic drain dosing system routinely delivers non-toxic bacteria directly into the drain line or grease trap. The bacteria simply consume the drain-clogging FOG, turning it into H₂O and CO₂.

GreaseBlast™'s multi-strained bacteria are specifically cultured for use in drain lines, and are proven to:

- Constantly maintain free-flowing drains using a 'biofilm' forming bacterial action
- Eliminate food related drain odours
- Save on unnecessary reactive call-outs and drain maintenance



The Problem

The disposal of high volumes of FOG (Fats, Oils and Grease) from commercial kitchens is unavoidable.

What is avoidable is the resulting blockages, slow drainage, and bad odours, which have an untold effect on health and hygiene.

The Environment Agency estimates 75% of sewer blockages are caused by the build-up of FOG, equating to 75,000 environmental incidents each year.

The traditional 'patch-job'

Chemicals, enzyme systems, and surfactants (soaps) will not solve the problem. Instead, they simply relocate the issue further into yours, your landlord's or the water authority's drain system.

Surfactants do not offer a permanent solution



1. Surfactants form a foamy barrier around the fatty acids and glycerol that make up FOG.

2. Once it cools, the surfactant dilutes and becomes much less effective.

3. FOG will return to its original form, further in your drain line.

Many resort to mechanical cleaning, which can damage pipe work as well as failing to resolve the issue. In the meantime, the costs associated with your own repairs and annual cleaning, not to mention the major risk of fines from water authorities, continue to be a real threat to the operation of your business.

Bio-technology – the way forward

Bioremediation is an established way of attacking fats, oils and grease deposited directly into kitchen drains and grease traps. The process simply involves grease-hungry microorganisms feeding on the problematic fat, sugar and starch wastes found clinging to drains, which is then turned into water and carbon dioxide. It is this biotechnology that GreaseBlast™ is founded on.

Bioremediation using multi strained bacteria

The dosing of live vegetative bacteria creates high count bacterial colonies throughout the drainage system to keep it free-flowing.



1. Fats clinging to drain lines are made up of fatty acids bonded to glycerol.



2. Once released into the drain line, GreaseBlast™ bacterial solution breaks down the bond between the fatty acids and glycerol by the LIPASE enzyme that is produced.



3. Once the bond is broken, the vegetative bacteria digest the fatty acids and transform them into harmless bi-products of water and carbon dioxide.

Tried & Tested

GreaseBlast™'s formula is the result of over 20 years' research at Environmental Biotech's company-owned R&D facility in Florida.

There is a reason why McDonalds use Environmental Biotech's bacteria at every drive-through across the UK and why Costa Coffee relies on the same company to take care of its sugar build-up.

Installation

GreaseBlast™ can be used in conjunction with a grease trap, where it is dosed prior to the trap, or as a standalone way of tackling the build-up of FOG.

Saving on valuable floor space, GreaseBlast™ is wall mounted and very simple to install and operate, with no water connection or power required (battery operated pump).

GreaseBlast™ can be fixed anywhere in a kitchen or facility and its stainless steel finish compliments existing fixtures and fittings. The GreaseBlast™ tube is simply inserted into a drain where the bacteria can be dispensed. A fixing kit, tubing and full instructions are provided. The non-toxic, non-corrosive ready-mixed containers of bacteria are very easy to change over and install.

Capacity

How frequently the container will need changing will depend on the number of meals being prepared each day. As a guide:

More than 300 meals – dosing fluid is replaced every 14 days

Less than 300 meals – dosing fluid is replaced every 30 days

A simple fluid level display also shows the kitchen operator how much bacteria remains in the container and when it is close to requiring a replacement. The GreaseBlast™ unit is also key-lockable to ensure restricted access. The unique dispensing technology removes the need for ongoing service/maintenance.

Grease Traps

The capacity of a grease trap will determine how effective it is at managing FOG. Cleaning out grease traps and accessing them can be difficult and expensive. GreaseBlast™ offers a viable cost-effective solution. Installing a GreaseBlast™ system into the line that feeds directly into the trap, the bacteria will significantly reduce the amount of FOG in the trap. A grease trap also collects a build-up of food waste so will still require periodic cleaning.

| Part No | Description |
|---------|---|
| 450001 | <p>GREASEBLAST™ INSTALLATION KIT comprising stainless steel housing with integral dispensing pump, fixing kit, tubing and 4 x 4 litre containers of GreaseBlast™ fluid contents of each bottle is enough for: 30 days use in an establishment serving fewer than 300 meals a day 14 days in an establishment serving over 300 meals a day dimensions of housing: 410(H)x182(W)x146(D)mm weight 7.25kg (with full container of fluid) requires 2xC batteries (supplied)</p> |
| 450002 | <p>GREASEBLAST™ FLUID supplied as pack of 4 bottles, each containing 4 litres of fluid contents of each bottle is enough for: 30 days use in an establishment serving fewer than 300 meals a day or 14 days in an establishment serving over 300 meals a day</p> |

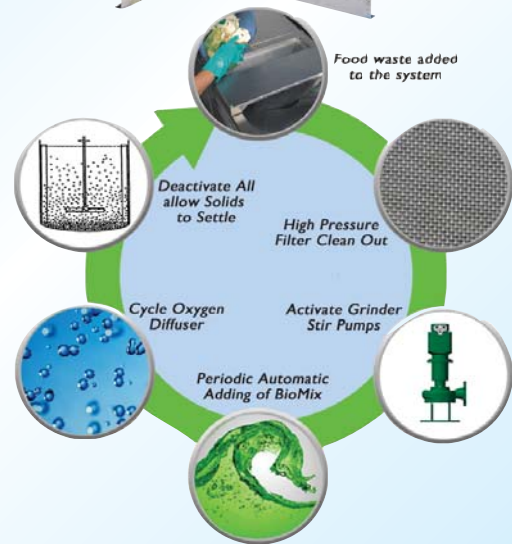


EPW FOOD WASTE MANAGEMENT

EPW is an aerobic food waste decomposition system providing rapid break down and elimination of food waste on-site where it is generated. The technology uses a combination of mechanical processing, heat, oxygen and an all-natural BioMix™ additive to accelerate the natural aerobic decomposition process to produce a grey water bi-product that meets or exceeds regulatory standards for safe disposal down the drain. The result is complete elimination of food waste in 24 hours.

BioMix™ is a natural vitamin extract that does not contain bacteria or enzymes to accelerate the natural decomposition process. It is effective with all food waste, including bones and fibrous materials such as coconut husks, and virtually eliminates fats and greases (FOG's). The EPW system has a proven track record in a wide range of different catering facilities such as hotels, schools, prisons and restaurants across America.

The system is available in a variation of sizes to match the food waste problem, with capacities from 54kg up to more than 6000kg a day. It can be used as a stand alone unit or integrated into a building wide system with a central unit taking waste from remote stations installed in different parts of a building, such as the dish-wash and food prep areas or even multiple kitchens.



EPW Food Waste System Cycle

- 1 **Loading** food waste **activates** the cycle
 - High pressure clean out of filters
 - Activate grinder pumps to grind incoming food, re-grind existing food waste and circulate settled solids in the tank
 - Cycle compressor pump and oxygen diffuser to ensure aerobic process
 - Deactivate pumps and grinders to allow settling of solids for sludge reduction
- 2 **BioMix is Automatically added** during cycle as required
- 3 **PLC auto-controlled repeat cycle**

Technical details below are for guidance only as all systems are custom manufactured to meet individual requirements

| Model | CAPACITY | | OVERALL DIMENSIONS cm | | | WEIGHT Empty kg | WATER litres/h | ELECTRICS 400V/3ph |
|------------|----------|----------|-----------------------|-------|--------|-----------------|----------------|--------------------|
| | kg/day | tons/mth | width | depth | height | | | |
| EPW-120i | 54 | 1.8 | 86 | 166 | 152 | 408 | 5 | 20A |
| EPW-240i | 108 | 3.6 | 86 | 198 | 210 | 454 | 10 | 30A |
| EPW-360i | 164 | 5.4 | 122 | 212 | 210 | 636 | 15 | 30A |
| EPW-480i | 218 | 7.2 | 132 | 228 | 210 | 998 | 20 | 30A |
| EPW-600i | 272 | 9.0 | 152 | 254 | 210 | 1044 | 25 | 30A |
| EPW-720i | 326 | 10.8 | 194 | 298 | 224 | 1134 | 30 | 40A |
| EPW-1000i | 454 | 15.0 | 194 | 298 | 236 | 1180 | 36 | 40A |
| EPW-1500i | 680 | 22.5 | 238 | 334 | 236 | 1224 | 54 | 40A |
| EPW-2000i | 908 | 30.0 | 270 | 360 | 260 | 1360 | 72 | 40A |
| EPW-240GT | 108 | 3.6 | 132 | 198 | 210 | 680 | 10 | 40A |
| EPW-360GT | 164 | 5.4 | 132 | 212 | 210 | 862 | 15 | 40A |
| EPW-480GT | 218 | 7.2 | 132 | 228 | 210 | 1224 | 20 | 40A |
| EPW-600GT | 272 | 9.0 | 152 | 254 | 210 | 1270 | 25 | 45A |
| EPW-720GT | 326 | 10.9 | 194 | 288 | 224 | 1360 | 30 | 45A |
| EPW-1000GT | 454 | 15.0 | 194 | 288 | 236 | 1406 | 36 | 45A |
| EPW-1500GT | 680 | 22.5 | 238 | 334 | 236 | 1452 | 54 | 45A |
| EPW-2000GT | 908 | 30.0 | 270 | 364 | 260 | 1588 | 72 | 45A |
| EPW-3000GT | 1360 | 45.0 | 280 | 364 | 280 | 1678 | 86 | 45A |

DRAINMAJOR/MINOR GREY WATER LIFTING STATIONS

Automatically pumps hot waste water from combi ovens, dishwashers and other catering/laundry machines when a low level drain is not available. Drainminor FC30 is suitable for a single oven machine, while Drainmajor FC30 has the capacity to handle grey water from several ovens. High pumping capability to handle awkward or long discharge pipe runs. Corrosion resistant pump suitable for mildly diluted chemicals in water. Durable tank is manufactured from polyester/glass fibre laminate, pigmented throughout with an externally smooth isophthalic polyester gel coat and resin enriched lining. Vertical centrifugal type pump with submersible motor with built-in thermal cut-out. Outlet connection 1 1/4" BSP brass fitting with integral non return valve. Requires 1 1/4" minimum vent to air or ceiling void, or where this is not possible, vent should terminate with a Charcovent (supplied) which contains an activated carbon filter to remove unpleasant odours. 2" vent is required for use with glasswashers, dishwashers and washing machines or if the water is extremely hot. Suitable for inlet connection at height of 110mm above floor level.



| Part No | Description |
|---------|-------------|
|---------|-------------|

DRAINMAJORFC30SL DRAINMAJOR FC30SL WASTE WATER LIFTING SYSTEM

PTL30E vertical centrifugal type 0.32kW pump.
 Electrical supply of 230V/50Hz/1ph/1.4A f/c
 Output 94 litres a minute at 2 metre head
 Maximum head 5m or 50m horizontally
 48 litres capacity approx
 Inlet connection 110mm from floor minimum
 Outlet pipe 32mm
 Dimensions 400 x 550 x 420mm (h x w x d)

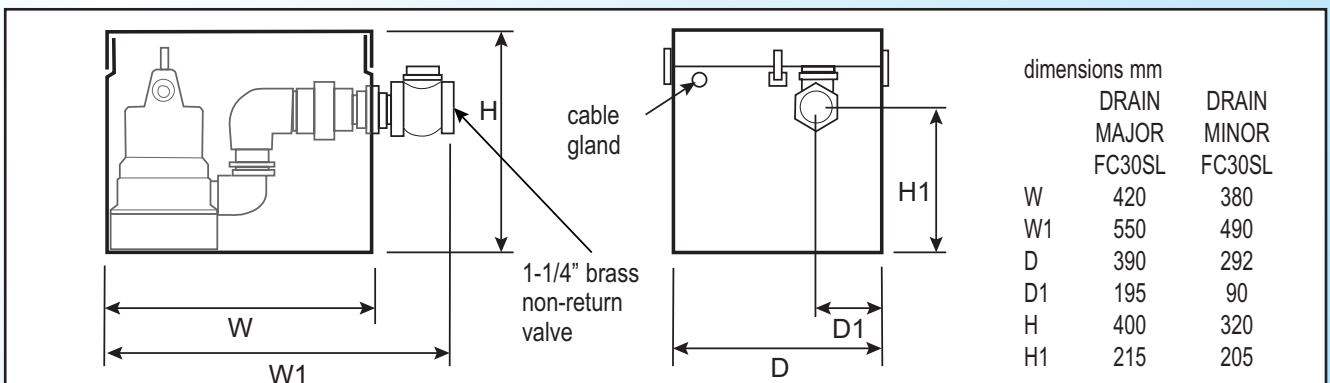


DRAINMINORFC30SL DRAINMINOR FC30SL WASTE WATER LIFTING SYSTEM

PTL30E vertical centrifugal type 0.32kW pump.
 Electrical supply of 230V/50Hz/1ph/1.4A f/c
 Output 94 litres a minute at 2 metre head
 Maximum head 5m or 50m horizontally
 25 litres capacity approx
 Inlet connection 110mm from floor minimum
 Outlet pipe 32mm
 Dimensions 320 x 490 x 292mm (h x w x d)



| MODEL | Pump | Voltage 50Hz | P1 kW | P2 kW | f/c A | RPM | Overload Protection | Maximum Solid Size |
|------------------|--------|--------------|-------|-------|-------|------|---------------------|--------------------|
| DRAINMAJORFC30SL | PTL30E | 230V | 0.32 | 0.2 | 1.4A | 2720 | Integral thermostat | 10mm |
| DRAINMINORFC30SL | PTL30E | 230V | 0.32 | 0.2 | 1.4A | 2720 | Integral thermostat | 10mm |



HT PIPEWORK FOR COMBI OVEN DRAINAGE

| Part No | Description |
|-----------|---|
| 60.70.464 | COMBI WATER/DRAIN INSTALLATION KIT comprising 2m long water hose with 50mm drain and fittings suitable for all makes and sizes of combi ovens with 50mm/2" drain connection |
| 8720.1031 | COMBI DRAIN INSTALLATION KIT comprising 50mm drain fittings suitable for all makes and sizes of combi ovens with 50mm/2" drain connection (water supply hose not included) |

Items in the kit are available as individual items

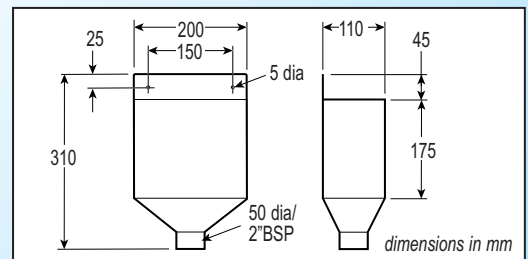
| | |
|-----------|---------------------------------|
| 2070.0054 | 50mm HT-SYSTEM PIPE 250mm |
| 2070.0052 | 50mm HT-SYSTEM PIPE 500mm |
| 2070.0043 | 50mm HT-SYSTEM 87° ELBOW |
| 2070.0047 | 50mm HT-SYSTEM 45° ELBOW |
| 2070.0048 | 50/50mm HT-SYSTEM TEE |
| 2070.0051 | 50/50mm HT-SYSTEM DOUBLE SOCKET |



DRAIN TUNDISH

suitable for combi ovens drainage systems
stainless steel construction and outlet for 2" pipework
choice of threaded 2" BSP or plain outlet with rubber connector
capacity 4.5 litres (approximately)
overall dimensions 200(W)x110(D)x310(H)mm

| Part No | Description |
|---------|--|
| 408002 | DRAIN TUNDISH WITH 2" BSP OUTLET with 2" BSP threaded connection for screw fit trap/pipework |
| 408001 | DRAIN TUNDISH WITH 2" PLAIN OUTLET supplied with rubber connector for 2" push fit pipework |



rubber connector is also available separately

| | |
|------|---|
| PC56 | RUBBER CONNECTOR for pipe size 48-56mm |
|------|---|



RATIONAL CONDENSATION BREAKER

accelerates the expulsion of steam and other vapours from the vent pipe
enables steam and vapours to be diverted into an extract system

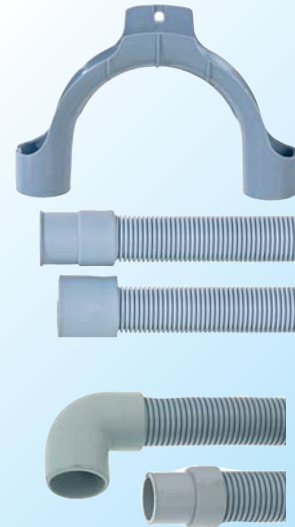
| Part No | Description |
|-----------|--|
| 60.72.591 | CONDENSATION BREAKER - MODELS 61/62/101 |
| 60.72.592 | CONDENSATION BREAKER - MODEL 102 |
| 60.72.593 | CONDENSATION BREAKER - MODELS 201/202 |



FLEXIBLE DRAIN HOSES

supplied with 'U' bracket for use with standpipes

| Part No | Description |
|---------|---------------------------------------|
| 404001 | 19x22mm CONNECTIONS x 1.6m LONG |
| 404002 | 19x22mm CONNECTIONS x 2.5m LONG |
| 404003 | 22x29mm CONNECTIONS x 1.6m LONG |
| 404004 | 22x30mm CONNECTIONS x 2.5m LONG |
| 404005 | 22x29mm CONNECTIONS x 3.6m LONG |
| 404006 | 21mm 90° ANGLE CONNECTION x 1.6m LONG |
| 404007 | 21mm 90° ANGLE CONNECTION x 2.5m LONG |



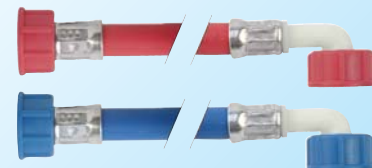
DISHWASHER CONNECTION HOSES

WRAS approved PVC hose with straight/angled plastic fittings. For hot and cold water with working pressure of 10bar at 60°C.



| Part No | Description |
|---------|---|
| Q16000 | RED INLET HOSE 3/4" x 3/4"BSP x 1500mm |
| WM15B | BLUE INLET HOSE 3/4" x 3/4"BSP x 1500mm |

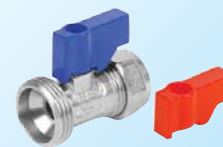
1/2" 90° ELBOW F/FACED X 1/2" FEMALE F/FACED



WASHING MACHINE TAP

supplied with a red and a blue lever for hot or cold water supplies

| Part No | Description |
|---------|----------------------------------|
| 8136 | WASHING MACHINETAP 15mm x 3/4BSP |



PLASTIC 2 WAY Y CONNECTOR

| Part No | Description |
|---------|--|
| 409001 | PLASTIC 2 WAY Y CONNECTOR 3/4"F x 3/4"M x 3/4" M |



BRASS 2 WAY Y CONNECTOR

| Part No | Description |
|---------|---|
| 904015 | BRASS 2 WAY Y CO NECTOR 3/4"F x 3/4"M x 3/4" M3449061 |

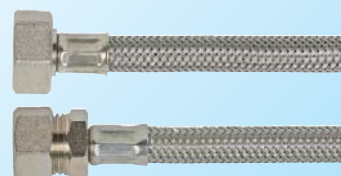


PEX TAP CONNECTION HOSES

Flexible tap connection PEX (cross-linked polyethylene) hoses with a stainless steel braid. Approvals include WRAS, ISO9001-2008, W270 approval and are suitable for use in Department of Health/NHS properties as being manufactured from approved materials that comply with their Estates and Facilities Alert DH (2010) 03. Internal diameter of 13mm and suitable for hot and cold water at up to a max pressure of 15 bar with a maximum temperature of 70°C.



| Part No | Description |
|---------|--|
| 402014 | 1/2" F/FACED x 15mm COMPRESSION x 300mm PEX HOSE |
| 402015 | 1/2" F/FACED x 15mm COMPRESSION x 500mm PEX HOSE |



EPDM ST ST BRAIDED TAP CONNECTION HOSES

WRAS approved flexible tap connection EPDM hoses with a stainless steel braid. Suitable for hot and cold water at -20°C to +85°C a max pressure of 15 bar.



EPDM HOSES 8mm BORE

| Part No | Description |
|-----------|---------------------------------------|
| MONO10SWS | 10mm SHORT x 15mm COMPRESSION x 300mm |
| MONO10SWL | 10mm LONG x 15mm COMPRESSION x 300mm |

EPDM HOSES 10mm BORE

| Part No | Description |
|-----------|--|
| MONO12S&L | 12mm LONG/SHORT x 15mm COMPRESSION x 300mm |

EPDM HOSES 10mm BORE

| Part No | Description |
|----------|---|
| TT01/300 | 1/2" F/FACED x 15mm COMPRESSION x 300mm |
| Q10207 | 1/2" F/FACED x 15mm COMPRESSION x 500mm |
| TT13/300 | 3/4" F/FACED x 15mm COMPRESSION x 300mm |
| Q10214 | 3/4" F/FACED x 15mm COMPRESSION x 500mm |

EPDM HOSES WITH SERVICE VALVE 10mm BORE

| Part No | Description |
|------------|---|
| TT02/300 | 1/2" F/FACED x 15mm COMPRESSION x 300mm |
| TT02RW/500 | 1/2" F/FACED x 15mm COMPRESSION x 500mm |

EPDM HOSES WITH SERVICE VALVE 12mm BORE

| Part No | Description |
|------------|---|
| TT25RW/300 | 1/2" F/FACED x 15mm COMPRESSION x 300mm |
| TT27RW/500 | 3/4" F/FACED x 15mm COMPRESSION x 500mm |



EPDM ST ST BRAIDED CONNECTION HOSES

WRAS approved braided hose with nickel plated brass fittings.
For hot and cold water -15 to +70°C and pressure of 10bar at 20°C



1/2" 90° ELBOW F/FACED X 1/2" FEMALE F/FACED

| Part No | Description |
|---------|---|
| 401021 | FLEXIBLE S/S HOSE ø 12mm BORE x 1000mm LONG |
| 401023 | FLEXIBLE S/S HOSE ø 12mm BORE x 1500mm LONG |
| 401024 | FLEXIBLE S/S HOSE ø 12mm BORE x 2000mm LONG |

3/4" 90° ELBOW F/FACED X 3/4" FEMALE F/FACED

| Part No | Description |
|---------|---|
| 401001 | FLEXIBLE HOSE ø 10mm BORE x 1000mm LONG |
| 401002 | FLEXIBLE HOSE ø 10mm BORE x 1200mm LONG |
| 401003 | FLEXIBLE HOSE ø 10mm BORE x 1500mm LONG |
| 401004 | FLEXIBLE HOSE ø 10mm BORE x 2000mm LONG |
| 401005 | FLEXIBLE HOSE ø 12mm BORE x 1000mm LONG |
| 401006 | FLEXIBLE HOSE ø 12mm BORE x 1200mm LONG |
| 401007 | FLEXIBLE HOSE ø 12mm BORE x 1500mm LONG |
| 401008 | FLEXIBLE HOSE ø 12mm BORE x 2000mm LONG |
| 401025 | FLEXIBLE HOSE ø 19mm BORE x 1000mm LONG |
| 401026 | FLEXIBLE HOSE ø 19mm BORE x 1200mm LONG |
| 401027 | FLEXIBLE HOSE ø 19mm BORE x 1500mm LONG |
| 401028 | FLEXIBLE HOSE ø 19mm BORE x 2000mm LONG |



AQUAVEND WATER CONNECTION HOSES

Food quality flexible hoses designed to deliver safe and taint free drinking water.
WRAS approved and tested to BS6920 standard. Aquavend hoses combine a multi-layered pressure hose with TPE mirror smooth inner and nickel plated brass fittings.
Suitable for hot and cold water feeds at temperatures of -15°C to +70°C and working pressure of 10 bar at 20°C.



3/4" 90° ELBOW F/FACED X 3/4" FEMALE F/FACED

| Part No | Description |
|---------|--|
| 402001 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1000mm |
| 402002 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1200mm |
| 402003 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1500mm |
| 402004 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 2000mm |

3/4" FEMALE F/FACED X 3/4" FEMALE F/FACED

| Part No | Description |
|---------|--|
| 402005 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1000mm |
| 402006 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1200mm |
| 402007 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 1500mm |
| 402008 | AQUAVEND FOODSAFE HOSE ø 12.5mm x 2000mm |

