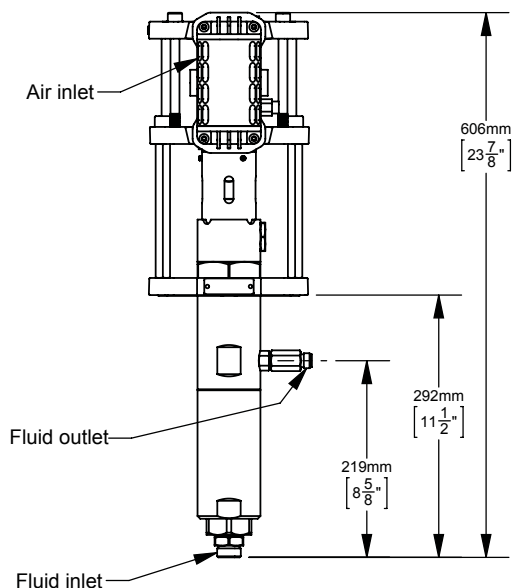
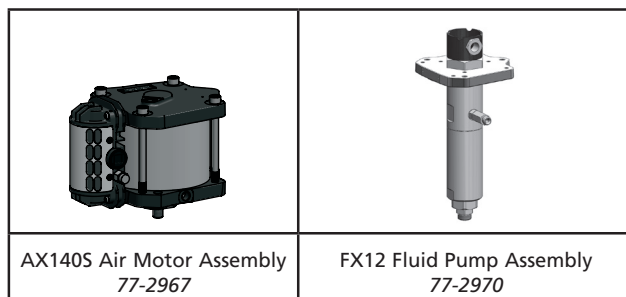


# **BINKS® MX1231 BARE PUMP ASSEMBLIES**

**Models: MX1231PL (PTFE/LEATHER CHEVRONS), MX1231PP (PTFE CHEVRONS),  
MX1231PU (PTFE/UHMW CHEVRONS), MX1231UC (UHMW U-CUP)**

Patent 7,603,855



SPECIFICATIONS	
Ratio:	31:1
Maximum air inlet pressure:	8 bar [116 psi]
Maximum fluid pressure:	248 bar [3596 psi]
Displacement per cycle:	72 cc [2.4 oz]
Output @ 60 cycles/min:	4.3 L/m [1.2 gal/m]
Air consumption @ 20 cycles/min and 8 bar [116 psi] air inlet pressure:	498 LPM [17.6 SCFM]
Maximum recommended continuous cycle rate:	20 cycles/min
Air inlet connection:	3/8" BSP(f)
Fluid inlet connection:	3/4" NPS(m)
Fluid outlet connection:	3/8" BSP(m) and 3/8" NPS(m)
Sound level:	97.3 dB
Weight:	16 kg [35.5 lbs]

In this part sheet, the words **WARNING**, **CAUTION** and **NOTE** are used to emphasize important safety information as follows:

<p><b>⚠ WARNING</b></p> <p>Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.</p>	<p><b>⚠ CAUTION</b></p> <p>Hazards or unsafe practices which could result in minor personal injury, product or property damage.</p>	<p><b>NOTE</b></p> <p>Important installation, operation or maintenance information.</p>
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## ⚠ WARNING

Read the following warnings before using this equipment.



### READ THE MANUAL

Before operating finishing equipment, read and understand all safety, operation and maintenance information provided in the operation manual.



### WEAR SAFETY GLASSES

Failure to wear safety glasses with side shields could result in serious eye injury or blindness.



### DE-ENERGIZE, DEPRESSURIZE, DISCONNECT AND LOCK OUT ALL POWER SOURCES DURING MAINTENANCE

Failure to De-energize, disconnect and lock out all power supplies before performing equipment maintenance could cause serious injury or death.



### OPERATOR TRAINING

All personnel must be trained before operating finishing equipment.



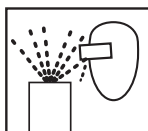
### EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.



### KEEP EQUIPMENT GUARDS IN PLACE

Do not operate the equipment if the safety devices have been removed.



### PROJECTILE HAZARD

You may be injured by venting liquids or gases that are released under pressure, or flying debris.



### PINCH POINT HAZARD

Moving parts can crush and cut. Pinch points are basically any areas where there are moving parts.



### PACEMAKER WARNING

You are in the presence of magnetic fields which may interfere with the operation of certain pacemakers.



### AUTOMATIC EQUIPMENT

Automatic equipment may start suddenly without warning.



### INSPECT THE EQUIPMENT DAILY

Inspect the equipment for worn or broken parts on a daily basis. Do not operate the equipment if you are uncertain about its condition.



### NEVER MODIFY THE EQUIPMENT

Do not modify the equipment unless the manufacturer provides written approval.



### KNOW WHERE AND HOW TO SHUT OFF THE EQUIPMENT IN CASE OF AN EMERGENCY



### PRESSURE RELIEF PROCEDURE

Always follow the pressure relief procedure in the equipment instruction manual.



### NOISE LEVELS

The A-Weighted sound level of pumping equipment and spray guns may exceed 85 dB (A) depending on the set-up being used. Details of actual noise levels are available on request. It is recommended that ear protection is worn at all times when spraying while pump is operating.



### HIGH PRESSURE CONSIDERATION

High pressure can cause serious injury. Relieve all pressure before servicing. Spray from the spray gun, hose leaks, or ruptured components can inject fluid into your body and cause extremely serious injury.



### STATIC CHARGE

Fluid may develop a static charge that must be dissipated through proper grounding of the equipment, objects to be sprayed and all other electrically conductive objects in the dispensing area. Improper grounding or sparks can cause a hazardous condition and result in fire, explosion or electric shock and other serious injury.

**IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT.**

**FOR FURTHER SAFETY INFORMATION REGARDING BINKS AND DEVILBISS EQUIPMENT, SEE THE GENERAL EQUIPMENT SAFETY BOOKLET (77-5300).**

## ! WARNING



**HIGH PRESSURE CAN CAUSE SERIOUS INJURY IF EQUIPMENT IS INSTALLED OR USED INCORRECTLY—READ, UNDERSTAND, AND OBSERVE ALL WARNINGS AND INSTRUCTIONS IN THIS MANUAL.**

### **INSTALL, OPERATE OR SERVICE THIS EQUIPMENT ONLY AFTER ALL INSTRUCTIONS ARE CLEARLY UNDERSTOOD.**

**It is the responsibility of the employer to place this information into the hands of the operator.**

#### **! WARNING**

Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.

#### **! CAUTION**

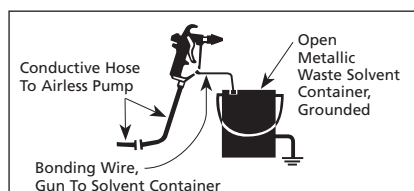
Hazards or unsafe practices which could result in minor personal injury, product or property damage.

#### **NOTE**

Important installation, operation or maintenance information.

#### **AVOID STATIC SPARKING**

1. Use Binks **NO-WIRE** conductive hose in all airless spraying operations. Be sure the gun and hose have continuity.
2. Make sure the pump is grounded. **NEVER** operate the unit when it is on a non-grounded platform.
3. When flushing or cleaning with a combustible solvent, always use an open metallic container for receiving the waste solvent. Ground the solvent receptacle.
4. **ALWAYS** remove spray tip when flushing the system. Operate the pump at the lowest possible pressure.



#### **GENERAL WARNINGS**

1. **NEVER** leave a pressurized sprayer unattended.
2. Periodically inspect all hoses for leaks and/or abrasions and tighten all connections before use. **DO NOT ATTEMPT TO REPAIR** a defective hose. **REPLACE** it with another conductive hose.
3. **ALWAYS** relieve pressure in the system by turning bypass valve to **BYPASS** or triggering spray gun before disassembly of any component parts.

#### **CAUTION**

Never store de-ionized, distilled, reverse osmosis or any pure grade of water in the pump. These fluids may cause corrosion.

#### **NOTE**

BINKS is not responsible for misapplication of pumps. Consult your BINKS representative for application assistance.

#### **NOTE**

Be sure that all fluids, solvents and fillers to be used are chemically and physically compatible with wetted parts in the pump. Consult your BINKS representative for pump materials of constructions and compatibility information. Consult the fluid manufacture for information regarding the fluids to be used.


#### **REPLACEMENT PARTS**

The pump is designed to use authorized parts only. When using this pump with parts that do not comply with the minimum specifications and safety devices of Binks, the user assumes all risks and liabilities.

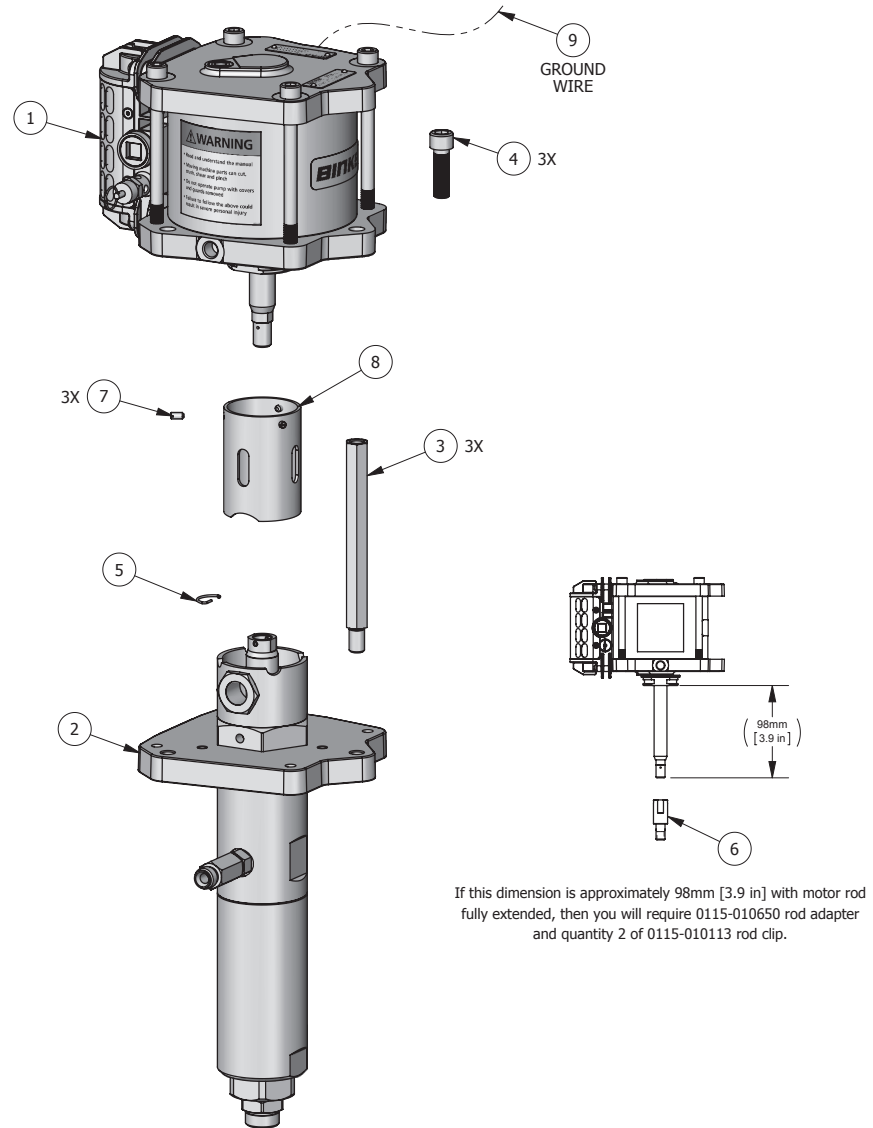
#### **! WARNING**

##### **EXCESSIVE AIR PRESSURE**

Can cause personal injury, pump damage or property damage. Do not exceed maximum inlet air pressure as stated on motor model plate.

HAZARD	CAUSE	SAFEGUARDS
<p><b>EXPLOSION</b></p> 	<p><b>STATIC ELECTRICITY</b></p> <p>Use of this equipment in a potentially explosive atmosphere.</p> <p>Vapors from flammable liquids can catch fire or explode from static electricity discharges.</p>	<ol style="list-style-type: none"> <li>1. If installing this equipment in a potentially explosive atmosphere, check the ATEX equipment category and temperature ratings meet the requirements for the zoned area.</li> <li>2. Check electrical continuity of the air supply to earth — should be no greater than <math>10^6 \Omega</math>.</li> <li>3. Electrically bond all metallic equipment to earth. Should be no greater than <math>1 \Omega</math>.</li> </ol>
<p><b>SPECIAL CONDITIONS FOR SAFE USE REQUIRED BY ATEX CERTIFICATION</b></p>	<p>Over pressurization of equipment can cause equipment failure or injury.</p> <p>Use lubricating medium resistant to carburisation.</p> <p>Improper operation or maintenance may create a hazard.</p>	<ol style="list-style-type: none"> <li>1. Do not exceed the stated maximum working pressures and motor speed as specified in this manual.</li> <li>2. Only a suitably approved static dissipating or conductive air supply hoses shall be attached to the equipment and terminated to the air supply.</li> <li>3. Air supplies (compressors, etc.) shall be sited in a non-hazardous area with a filter on the air intake system to prevent the ingress of dust or similar foreign material into the parts where compression takes place.</li> <li>4. Use lubricating medium resistant to carburisation and has an auto ignition temperature of more than <math>185^\circ\text{C}</math> for T4 equipment.</li> <li>5. User shall ensure all metallic parts of the equipment are suitably bonded to earth. Should be no greater than <math>1 \Omega</math>.</li> </ol>

## MX1231 BARE PUMP ASSEMBLIES

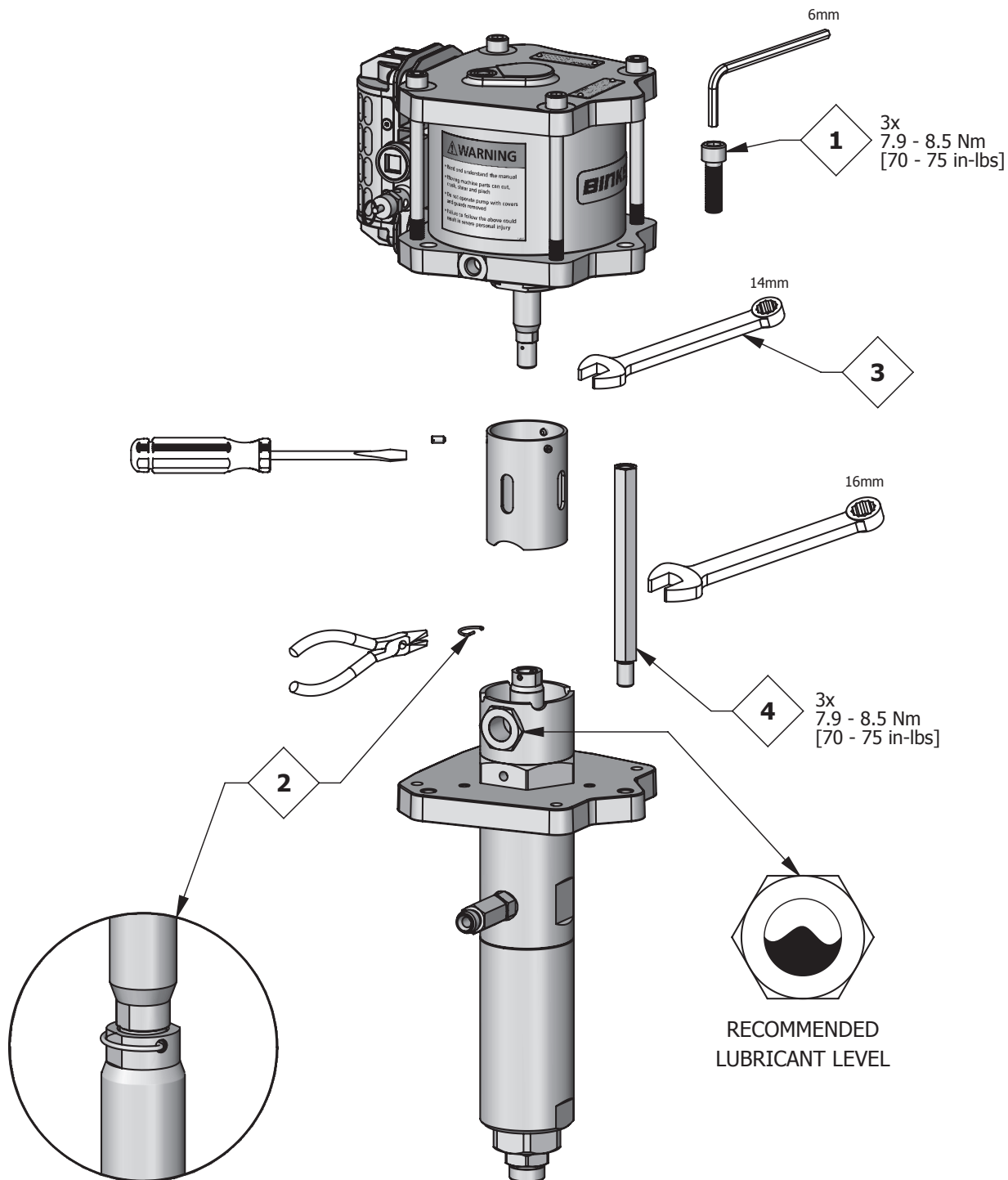


ITEM NO.	PART NUMBER	DESCRIPTION	MX1231PL QTY.	MX1231PP QTY.	MX1231PU QTY.	MX1231UC QTY.	SERVICE MANUAL
1	AX140S	AX140S AIR MOTOR ASSEMBLY	1	1	1	1	77-2967
2	FX12PL	FX12 FLUID SECTION ASSEMBLY (PTFE/LEATHER)	1	—	—	—	77-2970
	FX12PP	FX12 FLUID SECTION ASSEMBLY (PTFE)	—	1	—	—	
	FX12PU	FX12 FLUID SECTION ASSEMBLY (PTFE/UHMW)	—	—	1	—	
	FX12UC	FX12 FLUID SECTION ASSEMBLY (U-CUPS)	—	—	—	1	
3	0115-010648	TIE ROD	3	3	3	3	
4	0115-010114 □	SOCKET HEAD CAP SCREW	3	3	3	3	
5	0115-010113 •	LOCKING CLIP	1	1	1	1	
6	0115-010650	MOTOR ROD ADAPTER	REF.	REF.	REF.	REF.	
7	166001	SLOTTED SET SCREW	3	3	3	3	
8	0115-010655	GUARD	1	1	1	1	
9	0114-016243	GROUND WIRE KIT	1	1	1	1	

□ Part not sold separately. Available in AX140 Hardware kit: 0115-010300.

• Part not sold separately. Available in repair kits: 0115-010305, 0115-010307, 0115-010309 & 0115-010387.

## MX1231 BARE PUMP ASSEMBLIES – MAINTENANCE



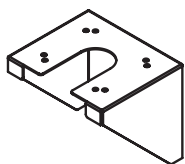
MAINTENANCE SYMBOLS	
#	ITEM NUMBER
#	MAINTENANCE ORDER (Reverse for assembly)

## MX1231 BARE PUMP ASSEMBLIES – TROUBLESHOOTING

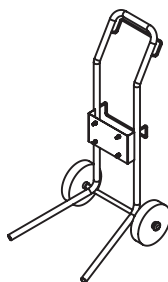
PROBLEM	CAUSE	SOLUTION
<b>Pump will not start</b>	No compressed air. Spray tip is blocked.	Check compressed air supply. Clean or replace the spray tip.
<b>Erratic operation of air motor, air motor stops</b>	Worn poppet assemblies. Worn or dirty spool and sleeve assembly.	Replace the poppet assemblies. Clean or replace the spool and sleeve assembly, as necessary.
<b>Continuous air leak from the exhaust</b>	Worn poppet assemblies. Worn piston seal. Worn diaphragm.	Replace poppet assemblies. Replace piston seal. Replace diaphragm.
<b>Material in solvent cup</b>	Worn or dirty upper packings.	Replace or clean upper packings as necessary.
<b>Pump does not stop on the down stroke</b>	Worn or dirty lower ball check.	Replace or clean the parts as necessary.
<b>Pump does not stop on the up stroke</b>	Worn or dirty upper ball check. Worn or dirty lower packings.	Replace or clean the parts as necessary.
<b>Pump runs erratically</b>	Blocked siphon kit. Blocked inlet filter or strainer. Low material level.	Replace or clean the siphon kit. Replace or clean the inlet filter or strainer. Replace or refill material container.
<b>Pump runs, with no output</b>	Loose connection in between pump and siphon kit. Stuck lower ball.	Check that all connections are tight. Replace or clean the parts as necessary.

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## ACCESSORIES FOR YOUR MX1231 BARE PUMP



BRACKET  
0115-010179



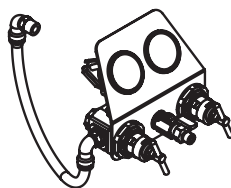
TROLLEY ASSEMBLY  
0115-010186  
Service Bulletin 77-2919



LUBRICATING OIL FOR  
FX-12 FLUID PUMP  
0114-009433 (Solvent Based Materials)  
0114-014871 (Water Based Materials)



SIPHON KITS  
41-17262 (5 GAL)  
0115-010381 (55 GAL)  
Service Bulletin 77-2919



AIR CONTROLS  
0115-010180 (Air Assist)  
Service Bulletin 77-2919



FLUID FILTER (100 MESH)  
0115-010326  
FLUID FILTER (200 MESH)  
0115-010630  
Service Bulletin 77-2919

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**NOTES**

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## WARRANTY POLICY

This product is covered by Carlisle Fluid Technologies' materials and workmanship limited warranty. The use of any parts or accessories, from a source other than Carlisle Fluid Technologies, will void all warranties. Failure to reasonably follow any maintenance guidance provided may invalidate any warranty.

For specific warranty information please contact Carlisle Fluid Technologies.

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Americas	Tel: 1-800-992-4657 Fax: 1-888-246-5732	Tel: 1-800-445-3988 Fax: 1-800-445-6643
Europe, Africa, Middle East, India	Tel: +44 (0)1202 571 111 Fax: +44 (0)1202 573 488	
China	Tel: +8621-3373 0108 Fax: +8621-3373 0308	
Japan	Tel: +81 45 785 6421 Fax: +81 45 785 6517	
Australia	Tel: +61 (0) 2 8525 7555 Fax: +61 (0) 2 8525 7575	

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