

MX115XXPU-SMX Pump



ADDITIONAL RESOURCES

For additional information or copies of your service manual, please visit us online at:

binks.com/en/library

Obey local or municipal regulations for product recycling and disposal.

IMPORTANT! DO NOT DESTROY
It is the Customer's responsibility to have all operators and service personnel read and understand this manual. Contact your local Binks representative for additional copies of this manual.
READ ALL INSTRUCTIONS BEFORE OPERATING THIS PRODUCT

Product Description / Object of Declaration:	104XXX, AX160L-X, AX110L-X, AX200L-XX, AX260L-XX, AX320X-X, MMX4****, MMX12****, MXL4****, MXL12****, MX114****, MX115****, MX12****, MX19****, MX2****, MX4****, MX68****, MX8****
This Product is designed for use with:	Solvent & Waterbased Materials
Suitable for use in hazardous area:	Zone 1/Zone 2
Protection Level:	II 2 G c X IIB T4 Ex h IIB T4 Gb X
Notified body details and role:	Element Materials Technology Rotterdam B.V. (2812)
	Lodging of ATEX Technical file
This Declaration of Conformity / Incorporation is issued under the sole responsibility of the manufacturer:	Binks U.K. Limited, Ringwood Road, Bournemouth, BH11 9LH. UK
Representative authorised to compile the technical file	President @. Binks France SAS 5 Place Pierre Semard, 94130 Nogent sur Marne , Paris, France

EU Declaration of Conformity



This Declaration of Conformity / Incorporation is issued under the sole responsibility of the manufacturer:

Machinery Directive 2006/42/EC

ATEX Directive 2014/34/EU

by complying with the following statutory documents and harmonised standards:

EN ISO 12100:2010 Safety of Machinery - General Principles for Design

EN 12621:2006+2010 Machinery for the supply and circulation of coating materials under pressure - Safety requirements

EN ISO 80079-36:2016 Explosive Atmospheres- Part 36:Non Electrical equipment for explosive atmospheres-Basic methods and requirements.

EN ISO 80079-37:2016 Explosive Atmospheres- Part 37: Non Electrical equipment for explosive atmospheres - protection by methods "c", "b" and "k".

EN 1127-1:2019 Explosive atmospheres - Explosion prevention - Basic concepts

Providing all conditions of safe use / installation stated within the product manuals have been complied with and also installed in accordance with any applicable local codes of practice.

Signed for and on behalf of Binks
U.K. Ltd:

Document Part No.

. EN

F. A. Sutter

22/04/25

Executive President: Engineering and
Operations, Shoreview, MN, 55126. USA

Product Description / Object of Declaration:	104XXX, AX160L-X, AX110L-X, AX200L-XX, AX260L-XX, AX320X-X, MMX4*****, MMX12****, MXL4*****, MXL12****, MX114****, MX115****, MX12*****, MX19*****, MX2*****, MX4*****, MX68****, MX8*****
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Protection Level:	II 2 G c X IIB T4 Ex h IIB T4 Gb X
Approved body details and role:	Element Materials Technology Warwick Ltd. UK. (0891)
	Lodging of UKEX Technical file
This Declaration of Conformity / Incorporation is issued under the sole responsibility of the manufacturer:	Binks U.K. Limited, Ringwood Road, Bournemouth, BH11 9LH. UK

UKCA Declaration of Conformity



This Declaration of Conformity / Incorporation is issued under the sole responsibility of the manufacturer:

Supply of Machinery (Safety) Regulations 2008
Equipment and Protective Systems Intended for use in Potentially Explosive Atmospheres Regulations 2016
by complying with the following statutory documents and designated standards:
BS EN ISO 12100:2010 Safety of Machinery - General Principles for Design
BS EN 12621:2006+2010 Machinery for the supply and circulation of coating materials under pressure - Safety requirements
BS EN ISO 80079-36:2016 Explosive Atmospheres- Part 36:Non Electrical equipment for explosive atmospheres-Basic methods and requirements.
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20/05/25

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 WARNING	 CAUTION	NOTE
Hazards or unsafe practices which could result in severe personal injury, death or substantial property damage.	Hazards or unsafe practices which could result in minor personal injury, product or property damage	Important installation, operation or maintenance information.
 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, DE-PRESSURISE, 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.



NOISE LEVELS. The A-weighted sound level of pumping and spray equipment may exceed 85 dB(A) depending on equipment settings. Actual noise levels are available on request. It is recommended that ear protection is worn at all times while equipment is in use.



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.



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



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



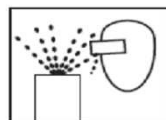
STATIC CHARGE. Fluid may develop a static charge that must be dissipated through proper grounding of the equipment, objects to be sprayed and all other electrically conductive objects in the dispensing area. Improper grounding or sparks can cause a hazardous condition and result in fire, explosion or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



PROP 65 WARNING. WARNING: This product contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.



AUTOMATIC EQUIPMENT. Automatic equipment may start suddenly without warning.



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



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.



OPERATOR TRAINING. All personnel must be trained before operating finishing equipment.



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



KEEP EQUIPMENT GUARDS IN PLACE. Do not operate the equipment if the safety devices have been removed.



NEVER MODIFY THE EQUIPMENT. Do not modify the equipment unless the manufacturer provides written approval.



PINCH POINT HAZARD. Moving parts can crush and cut. Pinch points are any areas where there are moving parts.

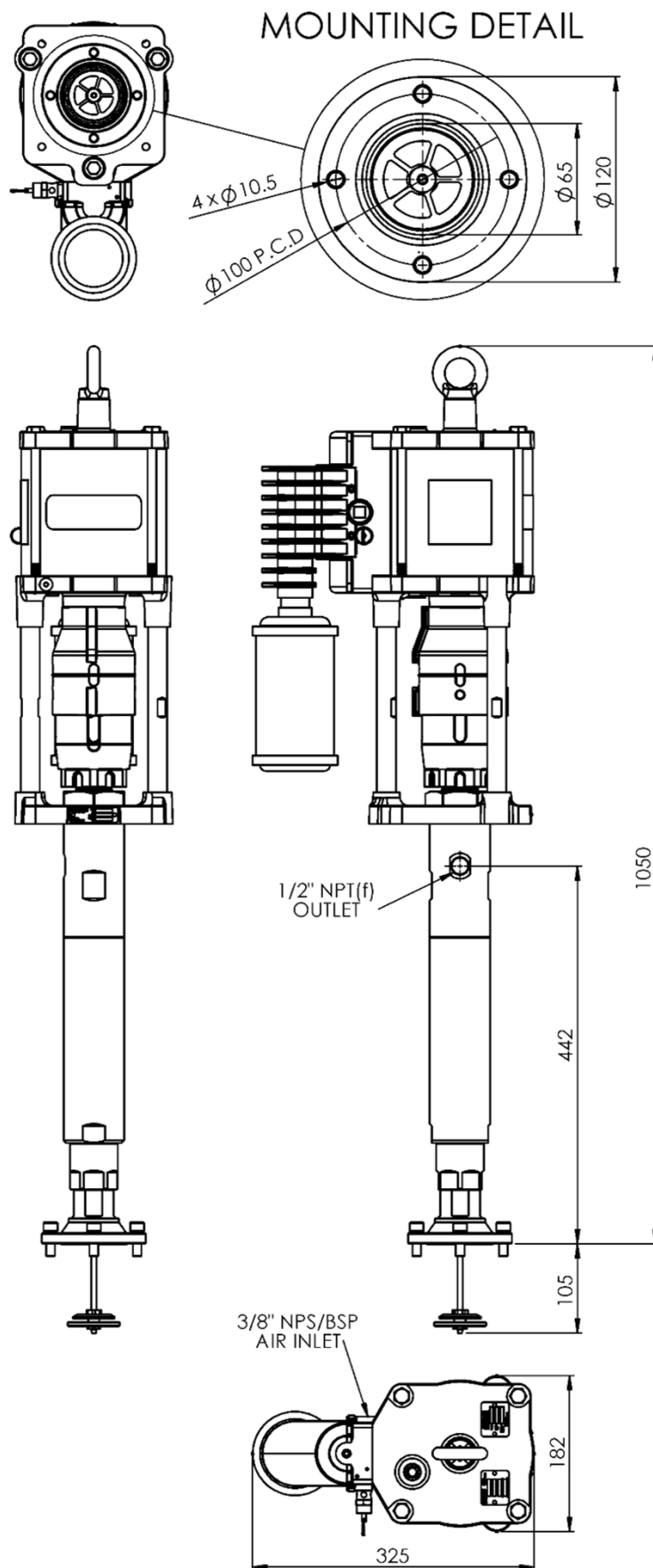
IT IS THE RESPONSIBILITY OF THE EMPLOYER TO PROVIDE THIS INFORMATION TO THE OPERATOR OF THE EQUIPMENT.

SPECIFICATION

Ratio: MX11543PU-SMX		43:1
Ratio: MX11568PU-SMX		68:1
Output @ 60 cycles / min:		6.9 l/m [1.8 US gal/m]
Nominal flow volume / cycle:		0.115 l [0.03 US gal]
Maximum recommended intermittent cycle rate:Cycles/min		20 cycles/min
Stroke		5" [127mm]
Maximum fluid pressure: MX11543PU-SMX		344 Bar [5000 psi]
Maximum fluid pressure: MX11568PU-SMX		476 Bar [6900 psi]
Fluid inlet connection:		Ram - Chop Check
Fluid outlet connection:		1/2" NPT (f)
Weight: MX11543PU-SMX		20 kg / 44 lbs
Weight: MX11568PU-SMX		25 kg / 55 lbs
Rod Surface Treatment	SMX	Ceramic Coated Stainless Steel
Rod Upper Packing Seal Options	PU	PTFE + UHMW-PE
Rod Lower Packing Seal Options	PU	PTFE + UHMW-PE
Air Inlet: MX11543PU-SMX		3/8" NPS/BSP
Air Inlet: MX11568PU-SMX		3/4" NPS/BSP
Air Quality ISO 8573.1 Class 3.3.2		Dirt: 5 microns Water: -20°C @ 7bar [0.1g/m ³] Oil: 0.1mg/m ³

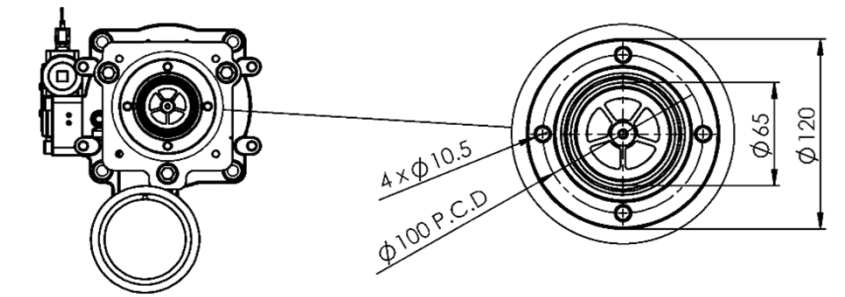
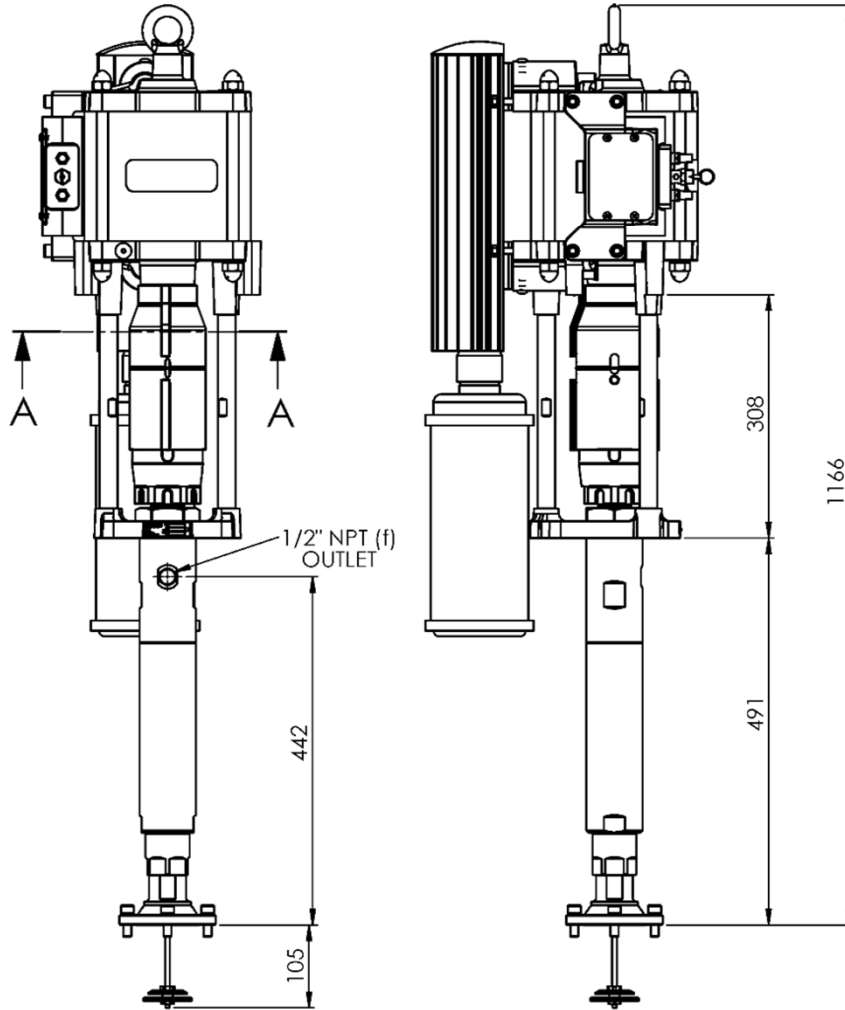
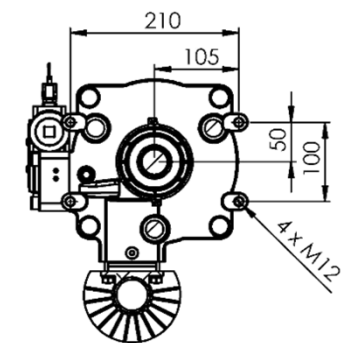
NOTES

MX11543PU-SMX

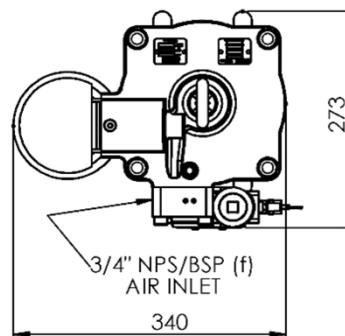


MX11568PU-SMX

MOUNTING DETAIL



SECTION A-A



GENERAL DESCRIPTION

The MX115XPU-SMX fluid paint pump is designed for pumping High Viscosity materials such as Mastic, PVC, Underseals, Sound deadeners and other similar materials.

The fluid section is a 'ROD' type design which means the rod displaces the material and is the only wear contact with the packings. A ball check valve system in the rod and a chop check inlet valve system ensure a precise, smooth volume output. Tungsten Carbide ball seats ensure maximum operating life between servicing.

The interior design maintains high flow capacity with minimum pressure drop ensuring high efficiency; special surface treatments provide a smooth micro surface making cleaning and flushing easier.

The piston and rod seals are the chevron type, which can be adjusted by means of a gland nut, should wear occur, a preloaded wave spring is employed to adjust and maintain the lower chevron packing preload when wear occurs. A built in Solvent cup cleans and lubricates the pump rod and seals to prolong working life.

The air motor also utilises the Binks quick exhaust technology to prevent air valve freezing conditions when high cycle speeds are employed.

The air motor is furnished with an exhaust muffler to control air exhaust noise emission. An adapter kit is also available to facilitate connection to a piped exhaust system if required.

INSTALLATION

This pump should be flushed with a suitable compatible solvent prior to use.

It is recommended that a propriety 1/2" BSP Filter / Regulator is used to provide final control of the compressed air to the air motor.

Mount the pump securely and position the pump at a convenient height to allow for maintenance, visual observation, and periodic inspection.

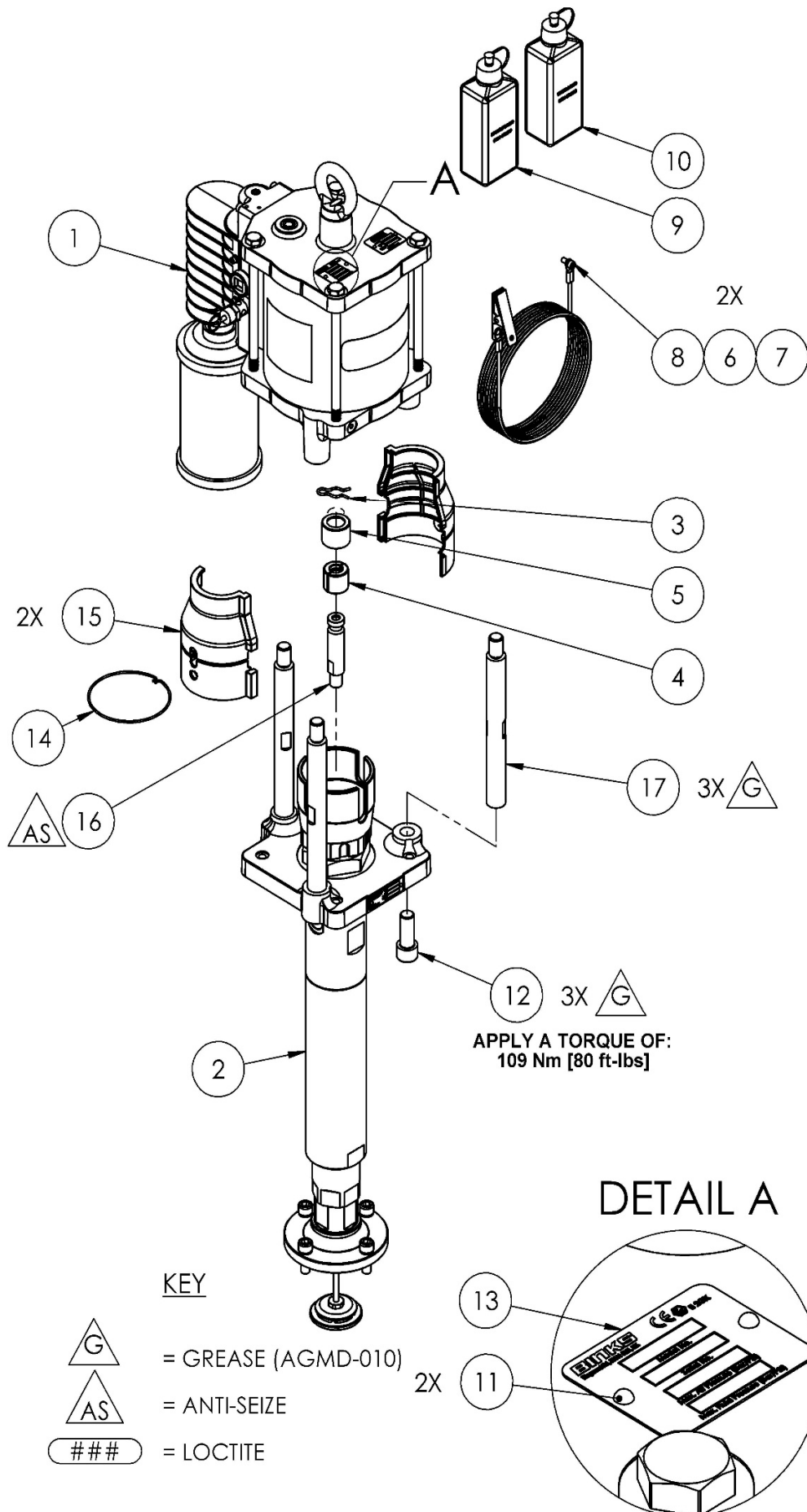
The Pump Assembly must be connected to a suitable earth ground to ensure that there is no possibility of static build up.

Attach suitable pipework or flexible hoses designed to meet the working pressure of the pump assembly (dependent on pump ratio) to the inlet and outlet connections, e.g. 1/2" Outlet.

Set the pump speed to a slow cycle rate and start the pump to remove any air from the fluid circuit. Inspect for any air or fluid leaks.

The pump should only be run on a minimum of the below air quality			
Air Quality	ISO 8573.1 Class 3.3.2	Dirt:	5 µm
		Water:	-20°C @7bar (0.1g/m³)
		Oil:	0.1 mg/m³

Pump Assembly - MX11543PU-SMX



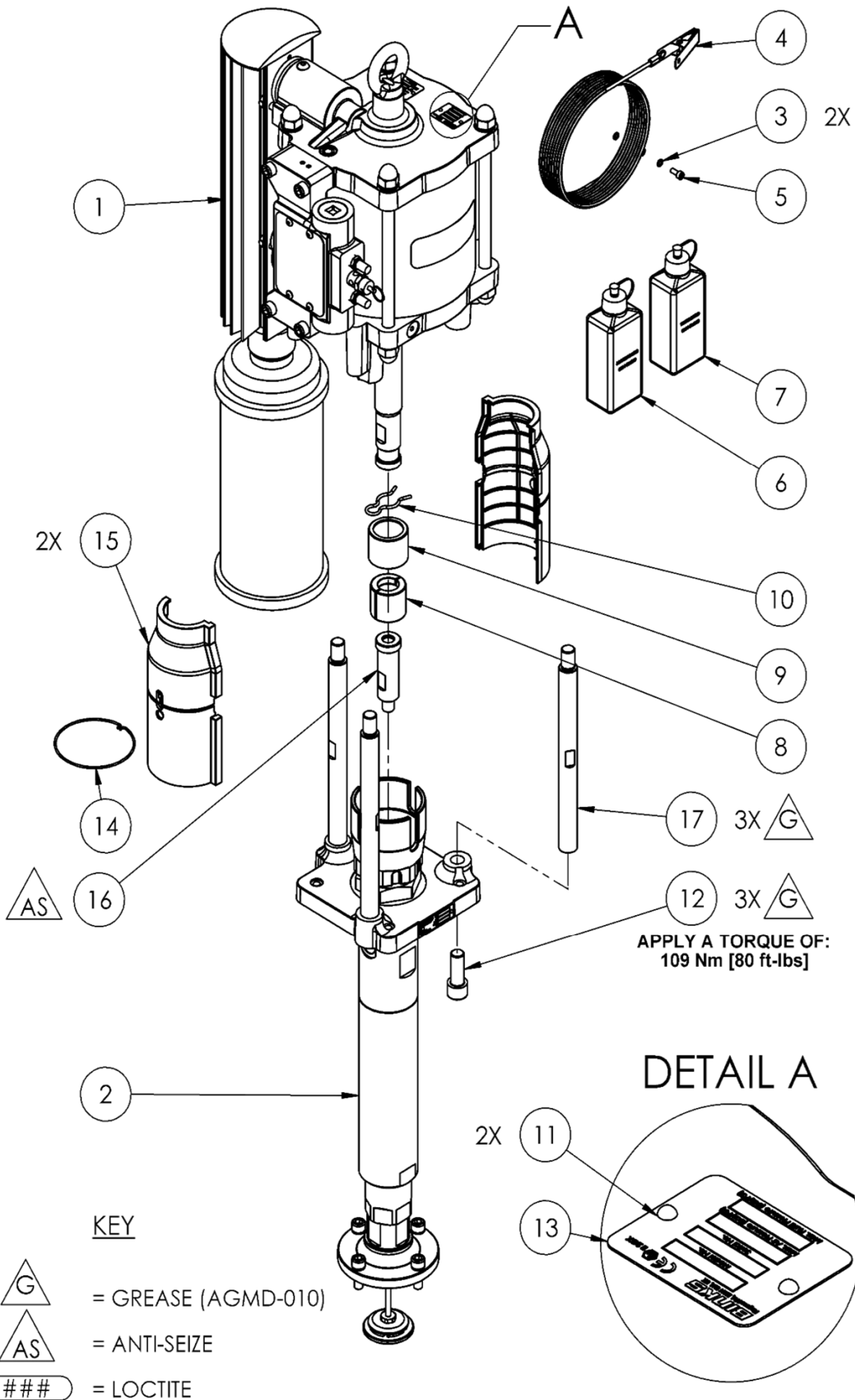
Parts list - MX11543PU-SMX - Pump Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY	REMARKS
1	AX160L	AX160L AIR MOTOR ASSEMBLY	1	
2	FX115PU-SMX	FX115 FLUID SECTION ASSEMBLY	1	
3	20-6871	RETAINING CLIP	1	
4	101-9421	MOTOR ROD SPLIT COLLAR	1	
5	101-9422	SPLIT COLLAR SLEEVE	1	
6	0114-009743	SPRING LOCK WASHER	2	
7	0114-011798	GROUNDING CABLE 4M	1	
8	0114-014179	SOCKET HEAD CAP SCREW	1	
9	0114-016099	PUMP LUBE-SOLVENT BASED	1	
10	0114-016100	PUMP LUBE-WATER BASED	1	
11	164838	No 2 x 4.75 RIVET	2	
12	165590	M16 x 40 SHCP - PLATED	3	
13	193540	NAMEPLATE	1	
14	193543	COVER CLIP	1	
15	193801	PUMP GUARD	2	
16	193803	AX160 QD ADAPTER	1	
17	194115	MX115/122 TIE ROD FOR AX160	3	

MX11543PU-SMX - Replacement Spares Kits

No.	PART NUMBER	DESCRIPTION	REMARKS
1	250721	Seal Kit	See AX160L Air Motor Manual
2	250722	Cylinder Seal Kit	
3	0115-010226	Valve Repair Kit	
4	250724	Hardware Kit	
5	250725	Exhaust Seal Kit	
6	250719	Fluid Section Seal Kit	All O-rings All Packings
Check Main Parts List in Air Motor & Fluid Section Manuals for details of individual Kit Contents			

Pump Assembly - MX11568PU-SMX



Parts list - MX11568PU-SMX - Pump Assembly

ITEM	PART NUMBER	DESCRIPTION	QTY	REMARKS
1	AX200L-7	AX200L-7 AIR MOTOR ASSEMBLY	1	
2	FX115PU-SMX	FX115 FLUID SECTION ASSEMBLY	1	
3	0114-009743	SPRING LOCK WASHER	2	
4	0114-011798	GROUNDING CABLE 4M	1	
5	0114-014179	SOCKET HEAD CAP SCREW	1	
6	0114-016099	PUMP LUBE-SOLVENTBASED	1	
7	0114-016100	PUMP LUBE-WATERBASED	1	
8	0115-010445	MOTOR ROD SPLIT COLLAR	1	
9	0115-010448	SPLIT COLLAR RETAINER	1	
10	0115-010450	HAIRPIN CLIP	1	
11	164838	No 2 x 4.75 RIVET	2	
12	165590	M16 x 40 SHCP - PLATED	3	
13	193540	NAMEPLATE	1	
14	193543	COVER CLIP	1	
15	193546	SPLIT GUARD	2	
16	194086	QD ADAPTER FOR AX200	1	
17	194087	MX115/122 TIE ROD FOR AX200	3	

MX11568PU-SMX - Replacement Spares Kits

No.	PART NUMBER	DESCRIPTION	REMARKS
1	250703	Seal Kit	See AX200L Air Motor Manual
2	250702	Cylinder Seal Kit	
3	250649	Valve Repair Kit	
4	250701	Hardware Kit	
5	250651	Exhaust Seal Kit	All O-rings All Packings
6	250719	Fluid Section Seal Kit	
Check Main Parts List in Air Motor & Fluid Section Manuals for details of individual Kit Contents			

Pump Accessories

PART NO.	DESCRIPTION	REMARKS
192506	Exhaust Tube Adapter (1½" NB hose)	For piped exhaust (AX200L)
192820	Exhaust Tube Adapter (1¼" NB hose)	For piped exhaust (AX160L)
MXA-C13ALM5-H34	Air Control Including Hose	Air Filter Regulator (0.5m Hose)
AGMD-010	Kluber Isoflex Topas NB 52 (Grease type #)	50 ml Tube
0114-016099	0.25L Pump Lubricant (Solvent based)	
0114-009433	0.5L Pump Lubricant (Solvent based)	
0114-016100	0.25L Pump Lubricant (Water based)	
0114-014871	0.5L Pump Lubricant (Water based)	

Preventative Maintenance

Check daily to ensure that there is the correct type of lubricant material present in the solvent cup; this should be compatible with the material being pumped. Confirmation from the material supplier should be sought to ensure compatibility to prevent the risk of contamination.

Check daily for excessive material leaks into the solvent cup

A universal lubricant is available - Wet Sol 'Plus' Binks Part Number 863009

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Motor will not run.	a. No Air supply. b. Air piston seal worn. c. Pilot valve assemblies inoperable. d. Main air valve inoperable. e. QE valve defective.	a. Check air and fluid supply ball valves and supply hoses. b. Replace Piston seal. c. Switch/interchange pilot valves to isolate faulty pilot valve and clean/replace. d. Check clean/replace Air valve. e. Check for constant exhaust air when pump is not in a stalled condition. Check/replace QE cups .
Pump runs but has excessive pulsation	a. Worn piston seal. b. Worn/failed shaft seals. c. Damaged Exhaust Valve. d. Damaged Pilot Valve. e. Air exhaust restricted.	a. Replace seal. b. Replace shaft bearing / seal housing. c. Inspect / clean and replace as required. d. Inspect / clean and replace as required. e. Inspect / clean and replace as required.
Leak from rod seal packings	Seal wear or damage to packing material	Stop the pump and relieve all material pressure. Tighten the gland nut until the resistance of the packings clamping the shaft can be felt. Do not over-tighten. Ensure solvent cup has the correct lubricant for the material being pumped present at all times.
	Damaged rod.	Replace.
Low material flowrate, pump running fast or will not stall (stalling - 1 stroke should not occur in less than 30 seconds).	Contaminates trapped between ball and seat.	Strip and clean pump. Check for damage.
	Worn or damaged balls/seats.	Check for wear; replace balls and / or seats.
	Worn bottom rod seals.	Replace.
Air entering system.	Loose joint on suction side.	Check and reseal fittings.

NOTES

WARRANTY POLICY

This product is covered by Binks materials and workmanship limited warranty.

The use of any parts or accessories, from a source other than Binks, will void all warranties. Failure to reasonably follow any maintenance guidance provided, may invalidate any warranty.

For specific warranty information please contact Binks.

For technical assistance or to locate an authorised distributor, contact one of our international sales and customer support locations below.

REGION	BINKS CONTACT
Americas	Tel: 1-888-992-4657
Europe, Africa, Middle East	Tel: +44 (0)1202 571 111
India	marketingroa@binks.com
China	Tel: +8621-3373 0108
Korea	Tel: +82313663303
Japan	Tel: +81 45 785 6421
Australia	Tel: +61 (0) 2 8525 7555

WARRANTY PAGE





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