

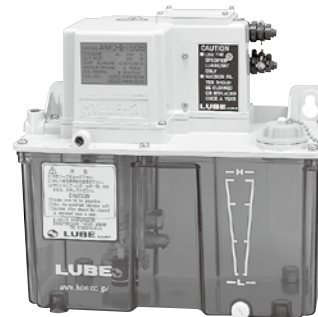
Automatic intermittent gear pump

AMO-II-150S

Automatic intermittent gear pump without controller. Capable of working with a wide range of oil viscosities.

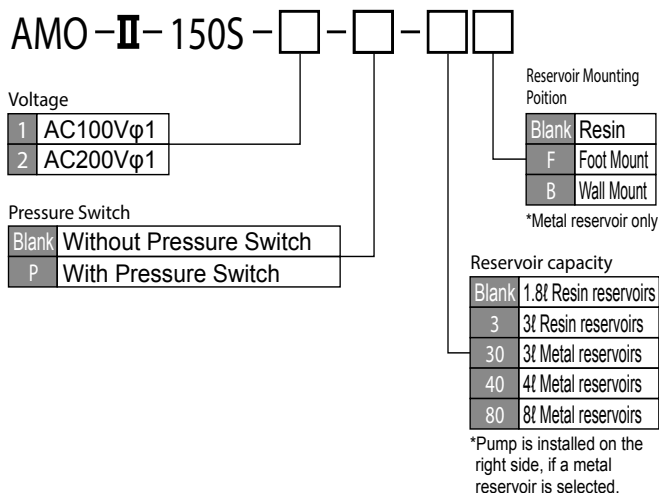


[1.8ℓ]



[3ℓ]

Model Reference



Directions for use

- This pump unit requires a separate control circuit to operate.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.
- Replace the suction filter at least once a year.
- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any special additive-contained oil, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace it, if necessary, with fresh oil immediately. Be sure to clean the reservoir before replacing oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint.
- Refer to the torque table. (P. 251)
- Low-oil viscosity versions are available. Contact LUBE for information.

* Should the pump malfunction, contact LUBE for consultation.

Model

Model	Part Number
AMO-II-150S-1	202067
AMO-II-150S-1-3	202069
AMO-II-150S-1-P	202071
AMO-II-150S-1-P-3	202073
AMO-II-150S-2	202068
AMO-II-150S-2-3	202070
AMO-II-150S-2-P	202072
AMO-II-150S-2-P-3	202074

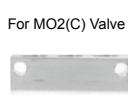
Specifications

Pump	Discharge volume	150mℓ/ min (50Hz), 180mℓ/ min (60Hz)
	Discharge pressure	2.0MPa (20kgf/cm ²) 284psi
Motor	Voltage/ current	AC100Vφ1/0.83A, AC200Vφ1/0.41A (50Hz) AC100Vφ1/0.64A, AC200Vφ1/0.33A (60Hz)
	Output	20W (50Hz/ 60Hz) Condenser Motor
Emergency detection	Oil level switch	Contact type (NO) ON at low level Contact capacity 0.5A AC DC200V/30W smaller
	Pressure switch	Contact type (NC) Operating pressure: 1.7MPa OFF Reset pressure: 0.9MPa ON Contact capacity AC DC250V/3A
Discharge time	Max. Discharge time:99sec Min. Interval time:1min	
Working viscosity range	68-1800mm ² /S (50Hz)	
Reservoir capacity	1.8ℓ, 3ℓ (plastic) 3ℓ, 4ℓ, 8ℓ (sheet metal)	
Weight	1.8ℓ Reservoirs: 3.2kg 3ℓ Reservoirs: 4kg (plastic)	

Related parts



MO2(C) Metering valve: P.115



For MO2(C) Valve
JVPA Junction : P.116



MO Metering valve: P.117



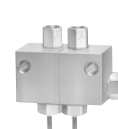
For MO Valve
PV Junction : P.118



MOS Metering valve : P.119



For MOS Valve
PVS Junction : P.121



MB Metering valve : P.123



MIX-S Metering valve : P.127



F-3D Filter : P.181



Pressure gauge : P.184



Tubing : P.203



Compression parts : P.201

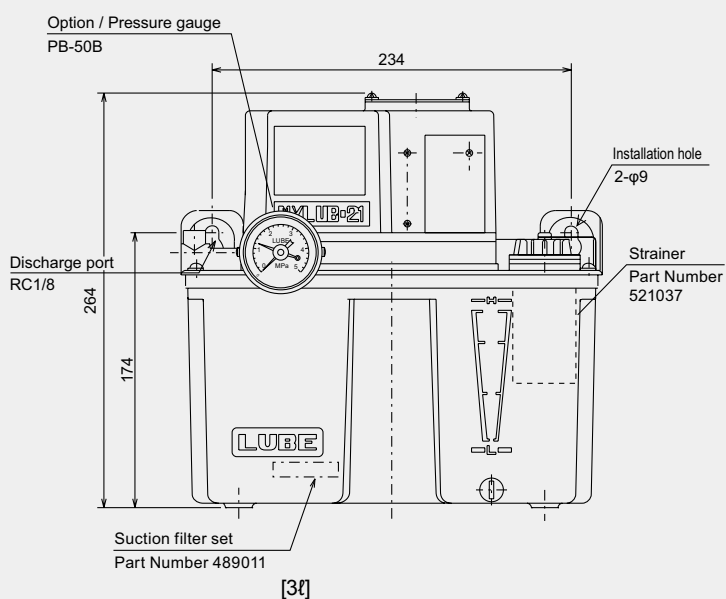
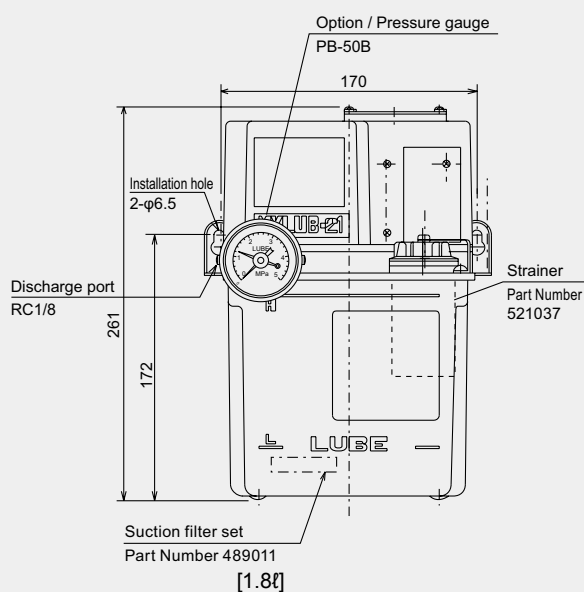
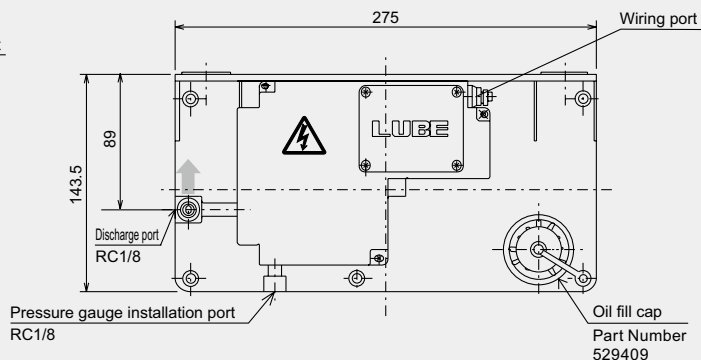
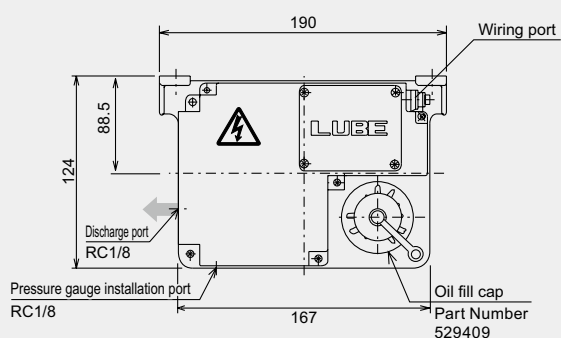


Adapters : P.207

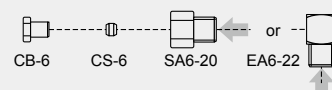


Reservoirs : P.171

Dimensional drawing



Parts for connecting to the discharge port



Improper handling can result in a death or serious injury

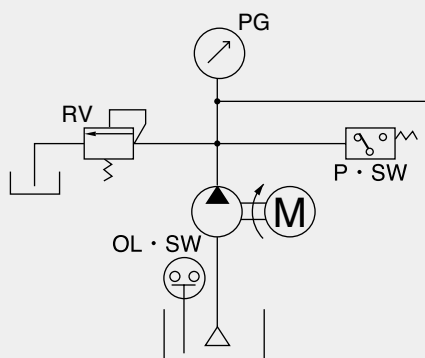


Electrical shock may be received under certain conditions

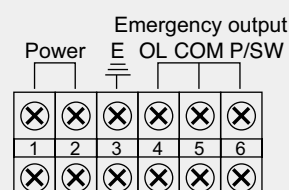


Be sure to ground.

Hydraulic circuit drawing



Wiring diagram



Automatic intermittent gear AMO-III DS

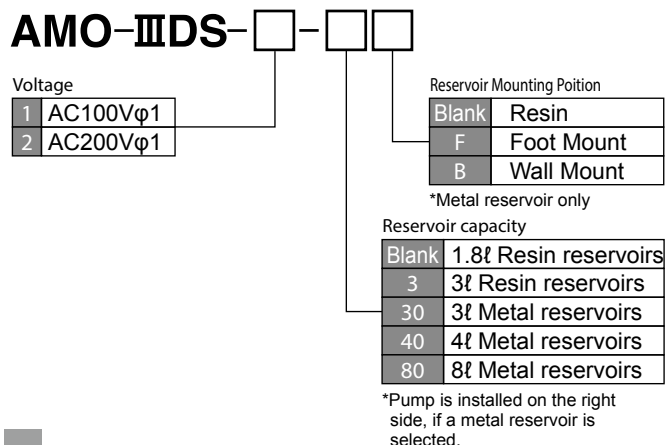
Capable of operating over a wide viscosity range.
Digital display gives on sight visual indication.
Interval can be a function of time or count.



[1.8ℓ]

[3ℓ]

Model Reference



Model

Model	Part Number
AMO-III DS-1	285301
AMO-III DS-1-3	285303
AMO-III DS-2	285302
AMO-III DS-2-3	285304

Low viscosity oil pump (On the page of AMO-IIIDSL)

No	Model	Part No.	Voltage	Tank capacity	Working viscosity range
1	AMO-IIIDSL-1	285331	100V	1.8L	10~1800mm ² /S
2	AMO-IIIDSL-2	285332	200V	1.8L	10~1800mm ² /S
3	AMO-IIIDSL-2	285333	100V	3.0L	10~1800mm ² /S
4	AMO-IIIDSL-2	285334	200V	3.0L	10~1800mm ² /S

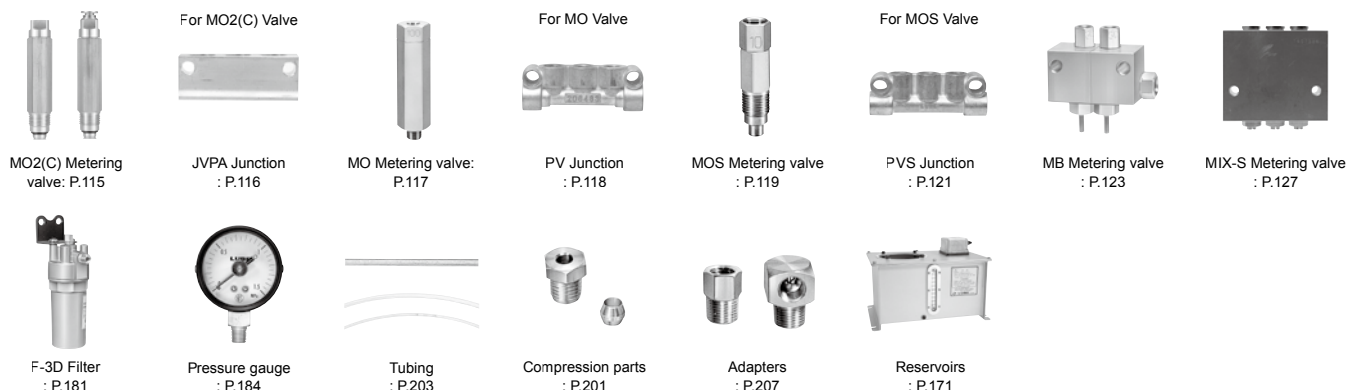
Directions for use

- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.
- Replace the suction filter at least once a year.
- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any special additive-contained oil, water soluble oil, or solvent.

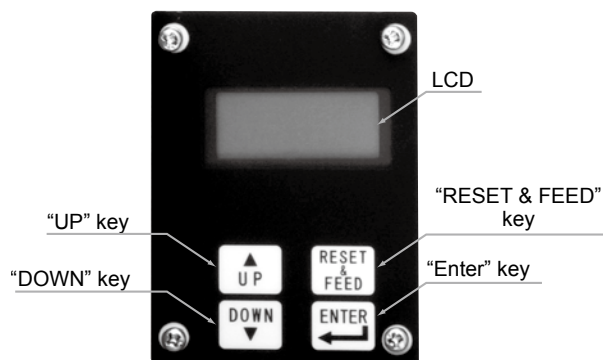
- Periodically check the oil in the reservoir for impurities. Replace it, if necessary, with fresh oil immediately. Be sure to clean the reservoir before replacing oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint.
- Refer to the torque table. (P. 251)
- Low-oil viscosity versions are available. Contact us for information.

* Should the pump malfunction, contact LUBE for consultation.

Related parts



Exterior features of the controller

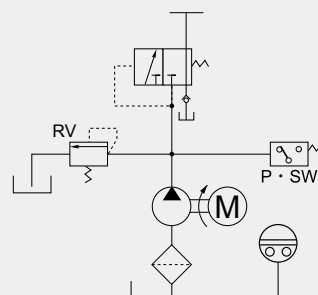


Operation panel of the controller

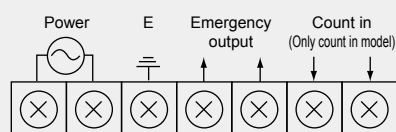
LCD shows the below:

INTERVAL → INT
 DISCHARGE → DIS
 ALARM → Low oil level OILLEVEL ERR
 Low pressure PRESSURE ERR

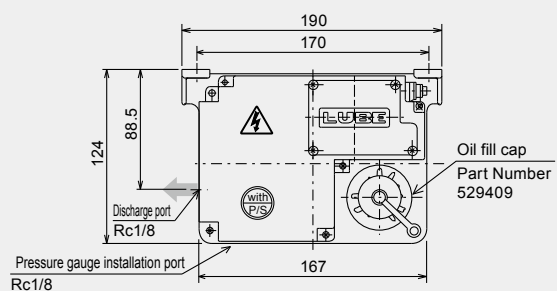
Hydraulic circuit drawing



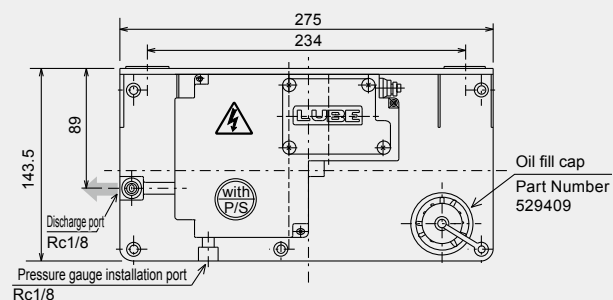
Wiring diagram



Dimensional drawing



[1.8L]



[3L]

Parts for connecting to the discharge port



⚠ Improper handling can result in a death or serious injury

⚡ Electrical shock may be received under certain conditions



Be sure to ground.

■ Automatic intermittent piston pump

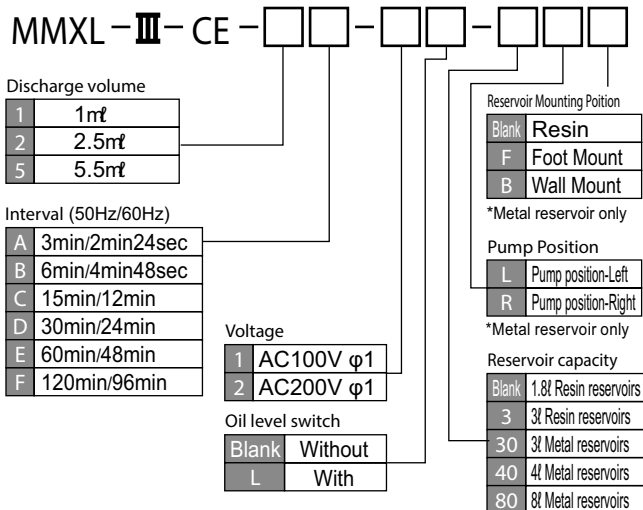
MMXL-III

Automatic intermittent pump incorporating a small energy-saving motor. Interval is controlled by the RPM of the motor so no external controllers or timers are needed. Widely used for small machines in many different industries.



[CE]

Model Reference



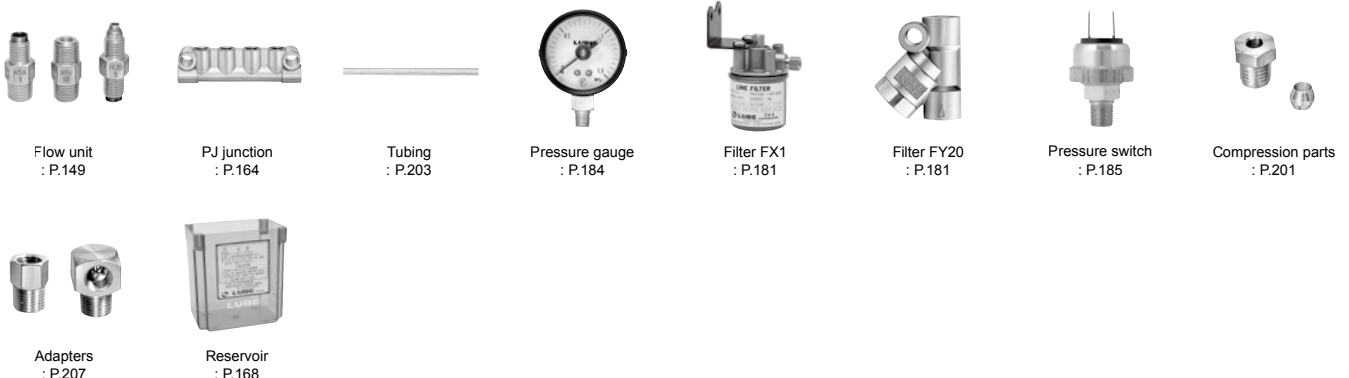
Specifications

Pump	Discharge volume	0.2-1.0ml/stroke 1.5-2.5ml/stroke 2.5-5.5ml/stroke
	Discharge pressure	0.3MPa
Motor (Other voltages available.)	Power	AC100Vφ1/50mA, AC200Vφ1/25mA (50Hz) AC100Vφ1/42mA, AC200Vφ1/18mA (60Hz)
	Output	3W Synchronous Motor
Emergency detection	Oil level switch	Contact type A contact (NO) ON at low level Contact capacity 0.5A, AC DC200V/30W smaller
Operation rating	Continuous	
Working viscosity range	32-1300mm ² /s	
Reservoir capacity	1.8l, 3l (plastic) 3l, 4l, 8l (sheet metal)	
Weight	1.8kg (With 1.8l Reservoirs)	
Protection class	IP54 (CE Approved type)	

Model

Model	Part Number	Model	Part Number	Model	Part Number
MMXL-III CE-1A-1	367001	MMXL-III CE-1D-1L	367058	MMXL-III CE-2A-2	367025
MMXL-III CE-1A-1L	367055	MMXL-III CE-1D-2	367010	MMXL-III CE-2A-2L	367079
MMXL-III CE-1A-2	367007	MMXL-III CE-1D-2L	367064	MMXL-III CE-2B-1	367020
MMXL-III CE-1A-2L	367061	MMXL-III CE-1E-1	367005	MMXL-III CE-2B-1L	367074
MMXL-III CE-1B-1	367002	MMXL-III CE-1E-1L	367059	MMXL-III CE-2B-2	367026
MMXL-III CE-1B-1L	367056	MMXL-III CE-1E-2	367011	MMXL-III CE-2B-2L	367080
MMXL-III CE-1B-2	367008	MMXL-III CE-1E-2L	367065	MMXL-III CE-2C-1	367021
MMXL-III CE-1B-2L	367062	MMXL-III CE-1F-1	367006	MMXL-III CE-2C-1L	367075
MMXL-III CE-1C-1	367003	MMXL-III CE-1F-1L	367060	MMXL-III CE-2C-2	367027
MMXL-III CE-1C-1L	367057	MMXL-III CE-1F-2	367012	MMXL-III CE-2C-2L	367081
MMXL-III CE-1C-2	367009	MMXL-III CE-1F-2L	367066	MMXL-III CE-2D-1	367022
MMXL-III CE-1C-2L	367063	MMXL-III CE-2A-1	367019	MMXL-III CE-2D-1L	367076
MMXL-III CE-1D-1	367004	MMXL-III CE-2A-1L	367073	MMXL-III CE-2D-2	367028

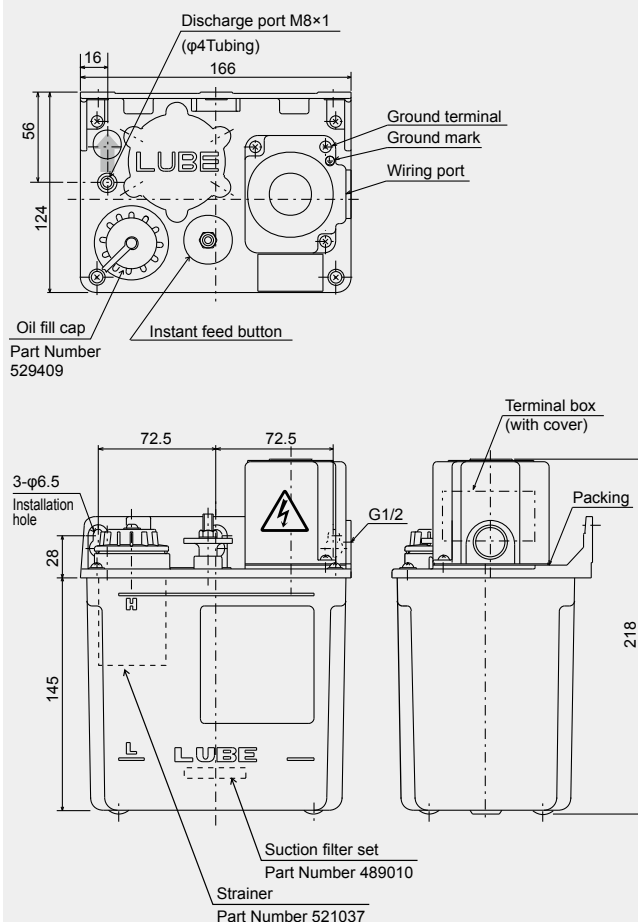
Related parts



Model

Model	Part Number
MMXL-III CE-2D-2L	367082
MMXL-III CE-2E-1	367023
MMXL-III CE-2E-1L	367077
MMXL-III CE-2E-2	367029
MMXL-III CE-2E-2L	367083
MMXL-III CE-2F-1	367024
MMXL-III CE-2F-1L	367078
MMXL-III CE-2F-2	367030
MMXL-III CE-2F-2L	367084
MMXL-III CE-5A-1	367037
MMXL-III CE-5A-1L	367091
MMXL-III CE-5A-2	367043
MMXL-III CE-5A-2L	367097
MMXL-III CE-5B-1	367038
MMXL-III CE-5B-1L	367092
MMXL-III CE-5B-2	367044
MMXL-III CE-5B-2L	367098
MMXL-III CE-5C-1	367039
MMXL-III CE-5C-1L	367093
MMXL-III CE-5C-2	367045
MMXL-III CE-5C-2L	367099
MMXL-III CE-5D-1	367040
MMXL-III CE-5D-1L	367094
MMXL-III CE-5D-2	367046
MMXL-III CE-5D-2L	367100
MMXL-III CE-5E-1	367041
MMXL-III CE-5E-1L	367095
MMXL-III CE-5E-2	367047
MMXL-III CE-5E-2L	367101
MMXL-III CE-5F-1	367042
MMXL-III CE-5F-1L	367096
MMXL-III CE-5F-2	367048
MMXL-III CE-5F-2L	367102

Dimensional drawing



(SLR) Single Line Resistance compact system for small machines with intermittent delivery

⚠ Improper handling can result in a death or serious injury

⚡ Electrical shock may be received under certain conditions

⏚ Be sure to ground.

Directions for use

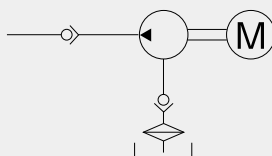
- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Do not press the discharge volume adjusting knob down by force.
- Adjust discharge volume only when the piston is fully relaxed (The knob is at the lowest position.).
- Replace the suction filter at least once a year.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.

* Should the pump malfunction, contact LUBE for consultation.

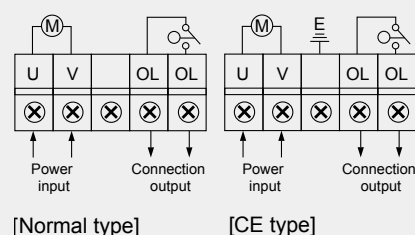
Replacement Motor Model

Interval		3min	6min	15min	30min	60min	120min	
Motor RPM (50Hz)		20	10	4	2	1	1/2	
Replacement Motor Model	100V	Model	M-A1	M-B1	M-C1	M-D1	M-E1	M-F1
		Part Number	521210	521194	521193	520062	520061	520060
	200V	Model	M-A2	M-B2	M-C2	M-D2	M-E2	M-F2
		Part Number	521328	521196	521195	520067	520066	520065

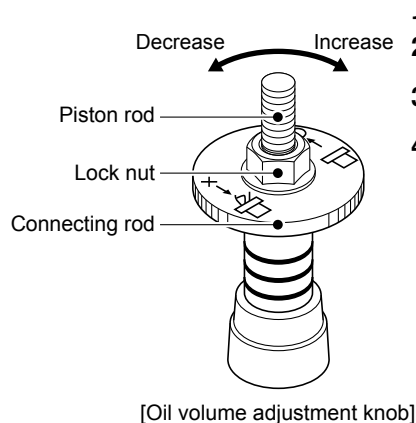
Hydraulic circuit drawing



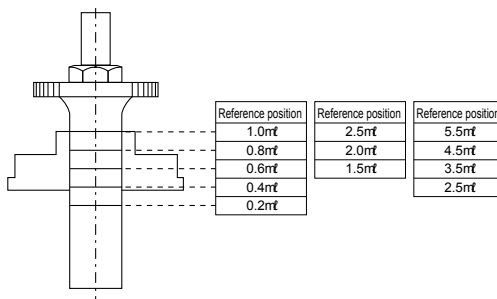
Wiring diagram



Discharge Volume Adjustment



1. Loosen lock-nut by turning it counter-clockwise.
2. After loosening lock-nut, turn and adjust the connecting rod to the desired discharge volume and tighten lock-nut.
3. Turn clockwise to increase discharge and turn counter-clockwise to decrease discharge.
4. Adjusting scale is shown below.



Automatic intermittent piston pump MMX-II

Highly reliable pump with a long history of service.
Now Discontinued.



* Refer to MMXL-III for replacement

Directions for use

- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Do not press the discharge volume adjusting knob down by force.
- Adjust discharge volume only when the piston is fully relaxed (The knob is at the lowest position.).
- Replace the suction filter at least once a year.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.
- Check the direction of motor rotation. Change U and W of the three-phase connection to change the direction of rotation.
- Do not place the pump sideways or upside down.

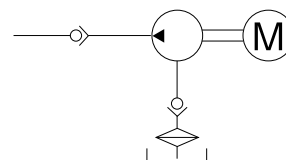
Specifications

Pump	Discharge volume	1.5 - 2.5cc/stroke 2.5 - 5.5cc/stroke
	Discharge pressure	0.4MPa
Motor (Capable of coping with a different voltage)	Working voltage/ Working current	AC100Vφ1/0.23A AC200Vφ3/0.11A (50Hz) AC100Vφ1/0.23A AC200Vφ3/0.10A (60Hz)
	Output	5W Direction of rotation: CW Induction generator E-class
Anomaly detection	Oil level switch	Contact type: NO Contact capacity 0.5A, AC DC200V/30W Smaller one
Operation rate	Continuous	
Working viscosity range	32 - 1300cSt	
Reservoir capacity	1.8ℓ, 3ℓ (plastic) 3ℓ, 4ℓ, 8ℓ (sheet metal)	
Weight	3kg (1.8ℓ plastic reservoirs)	
Others	2μF condenser is built into the terminal box at 100V motor	

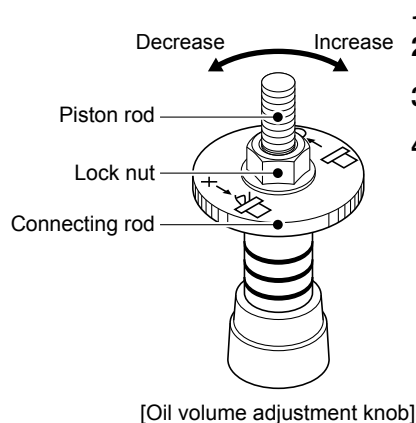
Replacement motor

Model	Working voltage
N-02	AC100Vφ1 5W
N-10	AC200Vφ3 5W
N-08	AC200Vφ1 5W

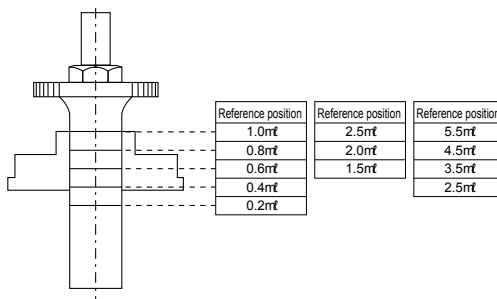
Hydraulic circuit drawing



Discharge Volume Adjustment



1. Loosen lock-nut by turning it counter-clockwise.
2. After loosening lock-nut, turn and adjust the connecting rod to the desired discharge volume and tighten lock-nut.
3. Turn clockwise to increase discharge and turn counter-clockwise to decrease discharge.
4. Adjusting scale is shown below.



Automatic intermittent piston pump MMX-II

Highly reliable pump with a long history of service.
Now Discontinued.



* Refer to MMXL-III for replacement

Directions for use

- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Do not press the discharge volume adjusting knob down by force.
- Adjust discharge volume only when the piston is fully relaxed (The knob is at the lowest position.).
- Replace the suction filter at least once a year.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.
- Check the direction of motor rotation. Change U and W of the three-phase connection to change the direction of rotation.
- Do not place the pump sideways or upside down.

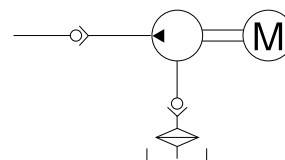
Specifications

Pump	Discharge volume	1.5 - 2.5cc/stroke 2.5 - 5.5cc/stroke
	Discharge pressure	0.4MPa
Motor (Capable of coping with a different voltage)	Working voltage/ Working current	AC100V ϕ 1/0.23A AC200V ϕ 3/0.11A (50Hz) AC100V ϕ 1/0.23A AC200V ϕ 3/0.10A (60Hz)
	Output	5W Direction of rotation: CW Induction generator E-class
Anomaly detection	Oil level switch	Contact type: NO Contact capacity 0.5A, AC DC200V/30W Smaller one
Operation rate	Continuous	
Working viscosity range	32 - 1300cSt	
Reservoir capacity	1.8 ℓ , 3 ℓ (plastic) 3 ℓ , 4 ℓ , 8 ℓ (sheet metal)	
Weight	3kg (1.8 ℓ plastic reservoirs)	
Others	2 μ F condenser is built into the terminal box at 100V motor	

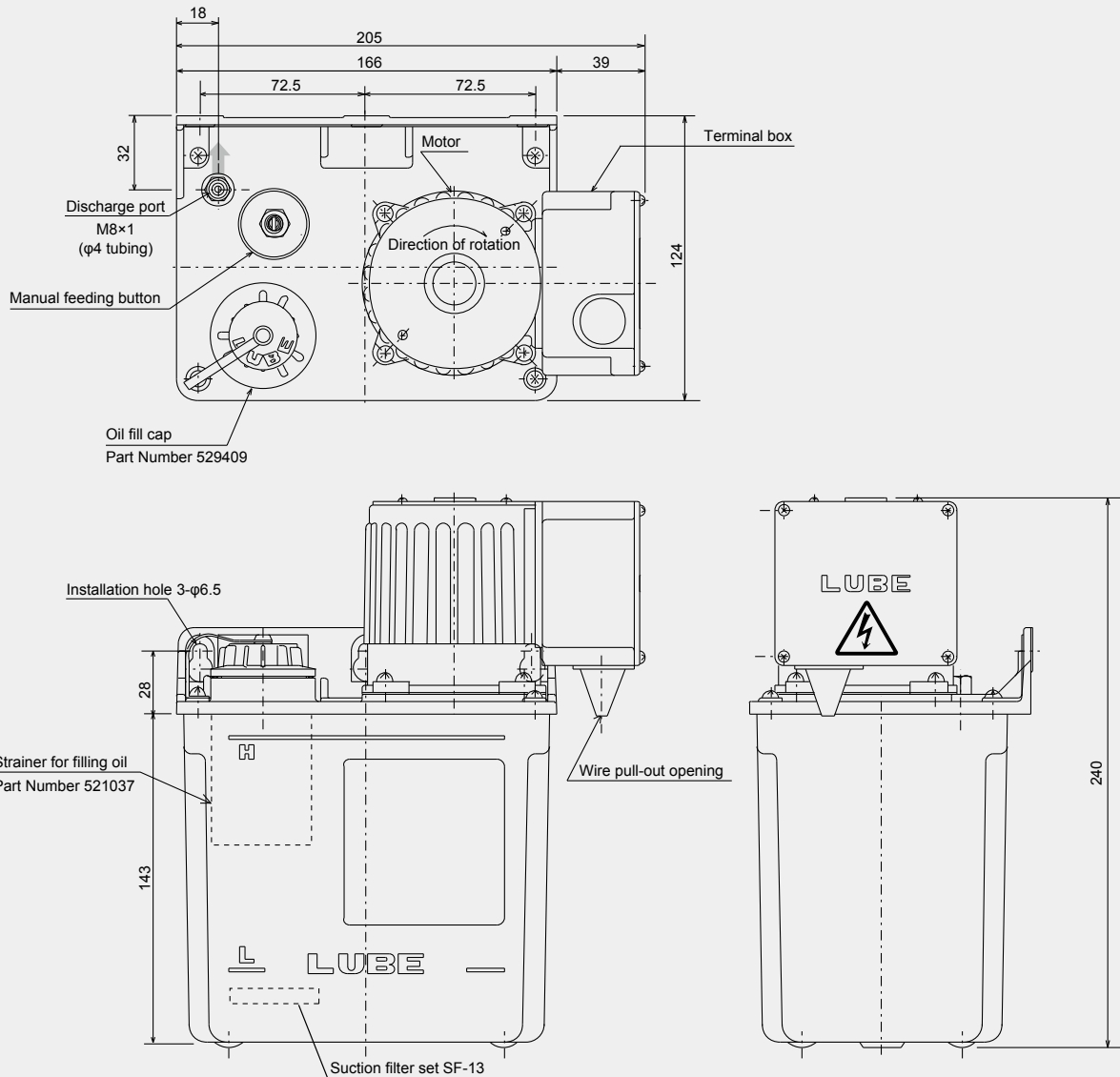
Replacement motor

Model	Working voltage
N-02	AC100V ϕ 1 5W
N-10	AC200V ϕ 3 5W
N-08	AC200V ϕ 1 5W

Hydraulic circuit drawing

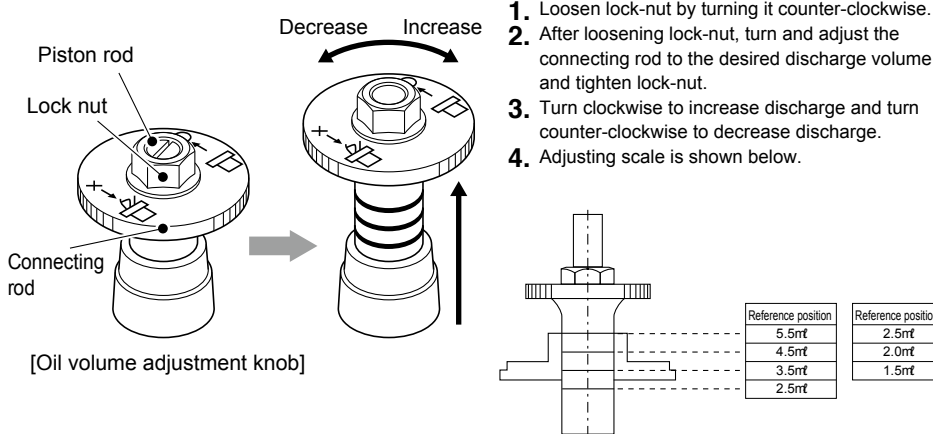


Dimensional drawing



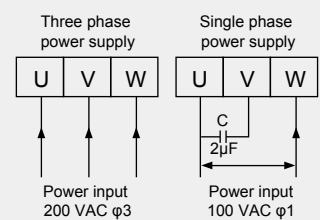
⚠ Improper handling can result in a death or serious injury ⚡ Electrical shock may be received under certain conditions ⚡ Be sure to ground.

Discharge Volume Adjustment



Wiring diagram

Oil level switch	OL	OL	
Motor	U	V	W
Power input	V	V	W
Oil level switch connection output	OL	OL	



Automatic intermittent piston pump MLZ

Compact version of MMXL-III. Ideal for small machines with limited installation space.



[CE]

Model Reference

MLZ-CE-□-□□

Interval (50Hz/60Hz)

A	6min/4min48sec
B	15min/12min
C	30min/24min
D	60min/48min
E	120min/96min

Oil level switch

Blank	Without
L	With

Voltage

1	AC100V φ1
2	AC200V φ1

Model

Model	Part Number
MLZ-CE-A-1	367201
MLZ-CE-A-1L	367216
MLZ-CE-A-2	367206
MLZ-CE-A-2L	367221
MLZ-CE-B-1	367202
MLZ-CE-B-1L	367217
MLZ-CE-B-2	367207
MLZ-CE-B-2L	367222
MLZ-CE-C-1	367203
MLZ-CE-C-1L	367218

Model	Part Number
MLZ-CE-C-2	367208
MLZ-CE-C-2L	367223
MLZ-CE-D-1	367204
MLZ-CE-D-1L	367219
MLZ-CE-D-2	367209
MLZ-CE-D-2L	367224
MLZ-CE-E-1	367205
MLZ-CE-E-1L	367220
MLZ-CE-E-2	367210
MLZ-CE-E-2L	367225

Specifications

Pump	Discharge volume	1.5-2.5ml/stroke
	Discharge pressure	0.3MPa
Motor	Voltage/current	AC100Vφ1/50mA, AC200Vφ1/25mA (50Hz) AC100Vφ1/42mA, AC200Vφ1/18mA (60Hz)
	Output	3W Synchronous
Emergency detection	Oil level switch	Contact type A contact (NO) ON at low level Contact capacity 0.5A, AC DC200V/30W smaller
Operation rating		Continuous
Working viscosity range		30-1300mm ² /s
Reservoir capacity		0.8ℓ
Weight		1.2kg
Protection class		IP54 (CE Approved type)

Directions for use

- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Do not press the discharge volume adjusting knob down by force.
- Adjust discharge volume only when the piston is fully relaxed (The knob is at the lowest position.).
- Replace the suction filter at least once a year. Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.

* Should the pump malfunction, contact LUBE for consultation.

Related parts



Flow unit
: P.149



PJ junction
: P.164



Tubing
: P.203



Pressure gauge
: P.184



Filter FX1
: P.181



Filter FY20
: P.181



Pressure switch
: P.185



Compression parts
: P.201



Adapters
: P.207

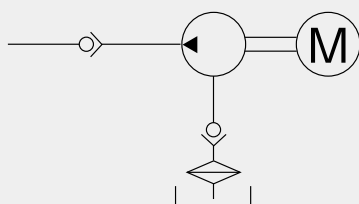


Reservoir
: P.168

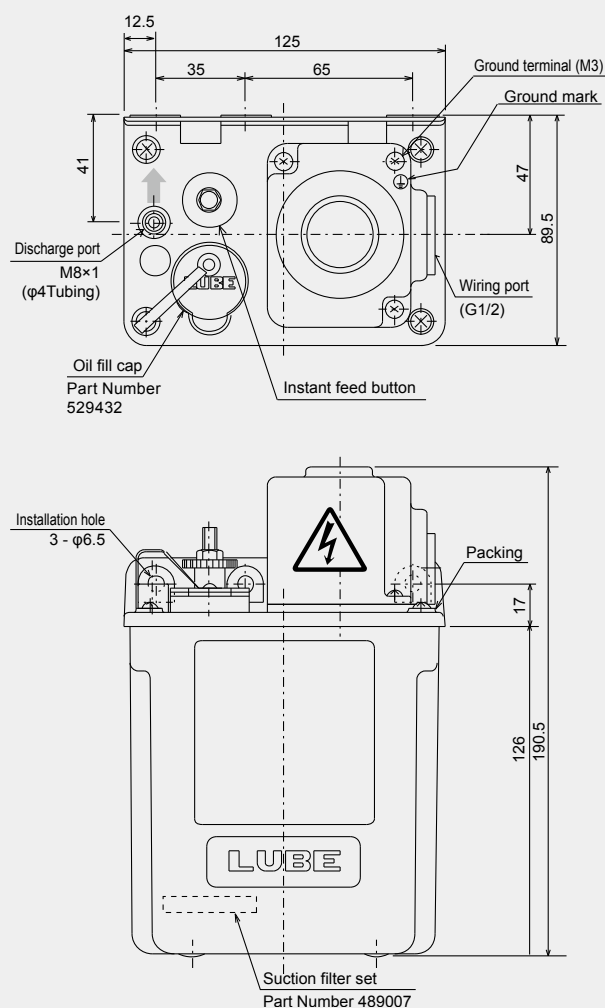
Replacement Motor Model

Interval		6min	15min	30min	60min	120min	
Motor RPM (50Hz)		10	4	2	1	1/2	
Replacement Motor Model	100V	Model	M-B1	M-C1	M-D1	M-E1	M-F1
		Part Number	521194	521193	520062	520061	520060
	200V	Model	M-B2	M-C2	M-D2	M-E2	M-F2
		Part Number	521196	521195	520067	520066	520065

Replacement Motor Model



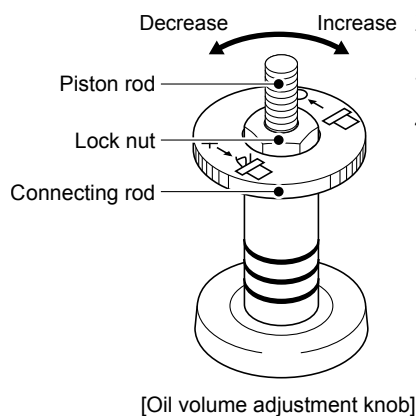
Dimensional drawing



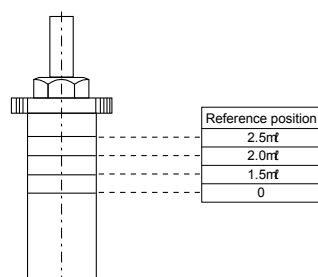
[CE]

⚠ Improper handling can result in a death or serious injury ⚡ Electrical shock may be received under certain conditions ⚡ Be sure to ground.

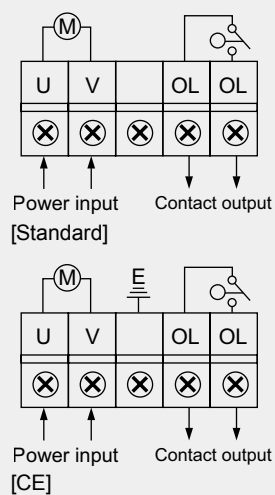
Discharge Volume Adjustment



1. Loosen lock-nut by turning it counter-clockwise.
2. After loosening lock-nut, turn and adjust the connecting rod to the desired discharge volume and tighten lock-nut.
3. Turn clockwise to increase discharge and turn counter-clockwise to decrease discharge.
4. Adjusting scale is shown below.



Wiring diagram



■ Electric Pump for LHL

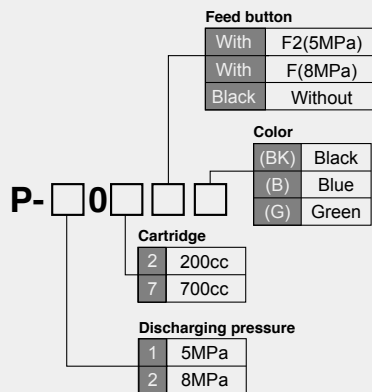
P-102/107/202/207

Small, low cost pump, exclusively for our LHL original cartridge grease.



[P-107F-BK]

Model Reference



Specifications

Power	DC24V
Power Consumption	24W
Discharging pressure	5MPa/8MPa
Discharging time	No restriction
Minimum interval time	10 seconds
Wiring method	Terminal connection
Manual override switch	Yes (Optional)
Grease level switch	Yes
Cover	Non combustible plastic (UL94-V0)
NEMA rating	IP54
CE approval	Yes
Pump air bleeding valve	Yes
Weight	P-102:1.2kg, 107:1.6kg, 202:1.2kg, 207:1.6kg

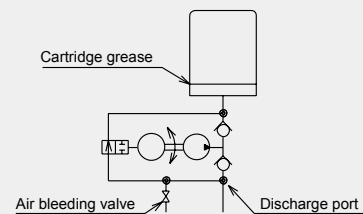
Model

Model	Part Number	Model	Part Number
P-102(BK)	101002	P-202(BK)	101032
P-102(B)	101006	P-202(B)	101036
P-102(G)	101008	P-202(G)	101038
P-102F2(BK)	101082	P-207(BK)	101033
P-102F2(B)	101086	P-207(B)	101037
P-102F2(G)	101088	P-207(G)	101039
P-107(BK)	101003	P-202F(BK)	101042
P-107(B)	101007	P-202F(B)	101046
P-107(G)	101009	P-202F(G)	101048
P-107F2(BK)	101083	P-207F(BK)	101043
P-107F2(B)	101087	P-207F(B)	101047
P-107F2(G)	101089	P-207F(G)	101049

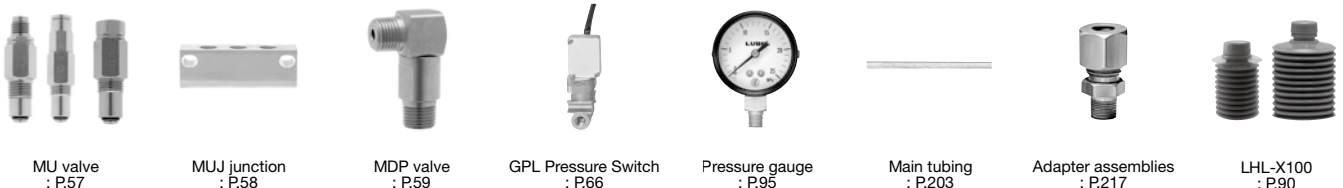
Directions for use

- Use LUBE original LHL cartridge grease.
- When the cartridge is changed, take care that foreign particles are not getting inside.
- Do not discharge continuously.
- After changing the cartridge, bleed the air inside the pump by opening the air bleeding valve.

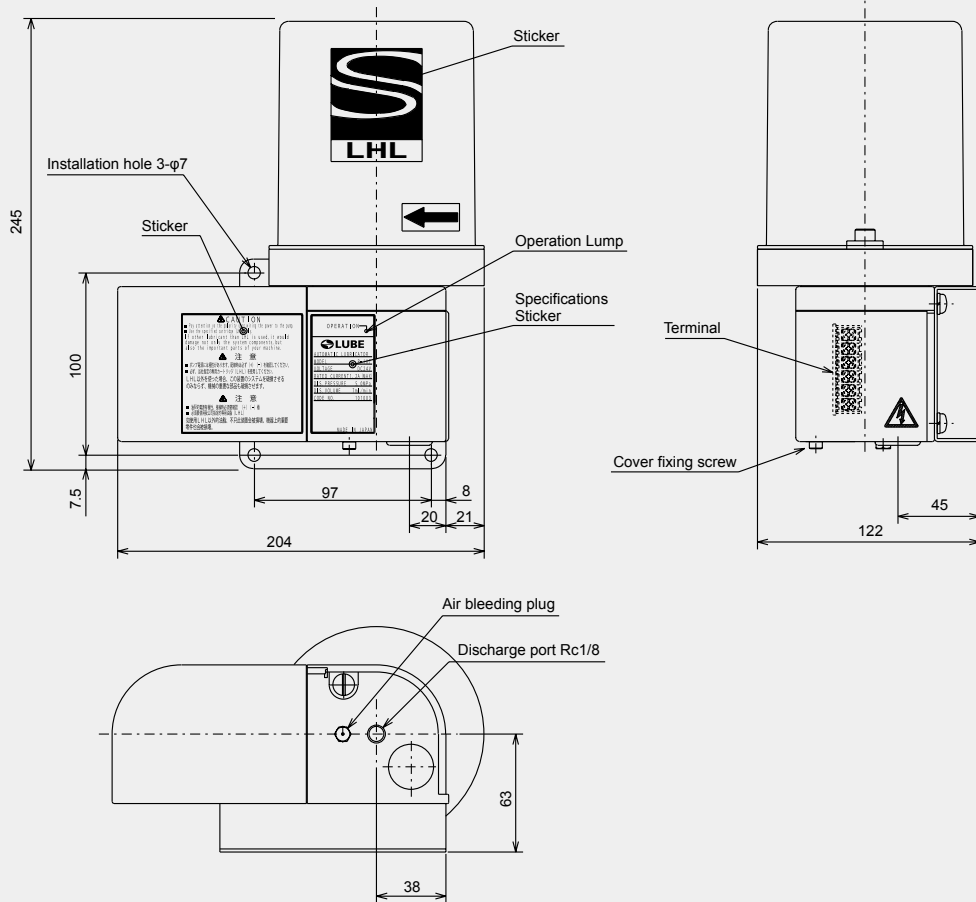
Hydraulic circuit diagram



Related parts

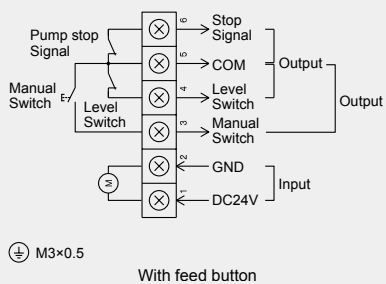
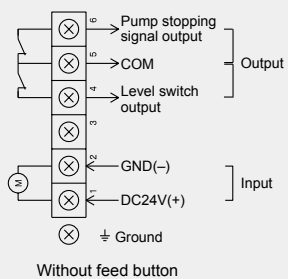


Dimensional drawing



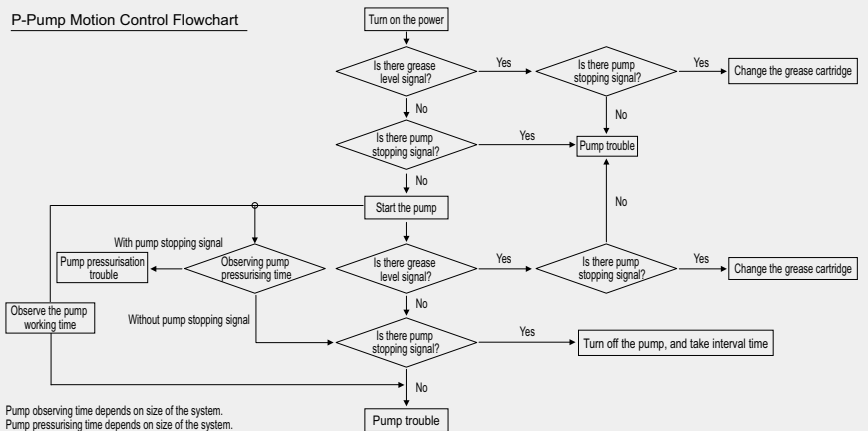
Positive Displacement
Injector (PDI) System for
Small-Medium Machines

Wiring diagram



P-107 Pump motion control flowchart

P-Pump Motion Control Flowchart



■ Dual-function motorized pump

EGM-T

Designed to operate both PDI and series progressive systems by use of its built-in solenoid valve.



[EGM-10T-4-4C]



[EGM-10T-4-7C]

Model Reference

EGM-10T - 4 - C

Cartridge type	
C Cartridge type	
Cartridge	
4 400mℓ	
7 700mℓ	

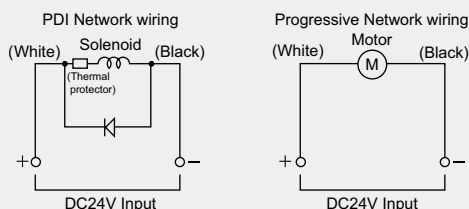
Model

Model	Part Number
EGM-10T-4-4C	103834
EGM-10T-4-7C	103835

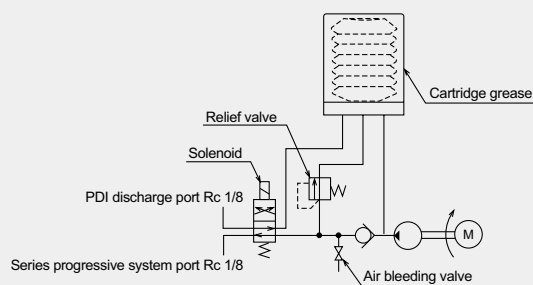
Specifications

Pump	Discharge volume	10mℓ/min
	Discharge pressure	10MPa (safety valve set pressure)
Power DC24V	Motor	20W/0.8A
	Pressure relief solenoid	26W/1.1A
	Total	46W/1.9A
Pressurization	Max. ON time: 7.5 min. (PDI Port)	
Power distribution rate	Max.25% (20°C)	
Working Viscosity	Cartridge Grease No.000,00,0,1	
Recommended grease	MP0, FS2, MT1	
Cartridge size	200mℓ, 400mℓ, 700mℓ	
Weight	1.78kg (2C), 1.83kg (4C), 1.8kg (7C)	
Pressure relief	Built-in solenoid	

Wiring diagram



Hydraulic circuit drawing



Directions for use

- Use recommended grease only.
- Never use greases containing molybdenum disulfide.
- Use lithium grease. (Contact LUBE for consultation when non-lithium greases must be used.)
- Do not use any greases containing substances that attack brass or rubber.
- Avoid continuous operation.
- Normal operation or when filling grease into the (PDI) main tubing, please remember to adhere to the 3 to 1 ratio for off time to running time not exceeding 7.5 minutes. Failure to follow this could result in permanent damage to the solenoid not allowing the pump to ever build pressure.
- When filling grease into the (progressive) main tubing there is no limitation of time which will damage the pump. Be cautious not to over lubricate your bearing surfaces.

Related parts



MG2 metering valve
: P.61



MG2C metering valve
: P.61



JVPA Junction
: P.62



MG2I metering valve
: P.63



MGLA metering valve
: P.65



GPL pressure switch
: P.66



Pressure gauge
: P.95



Main tubing
: P.203



Adapter assemblies
: P.217



LUBE original grease
: P.89



Controller
: P.93



Power box
: P.93

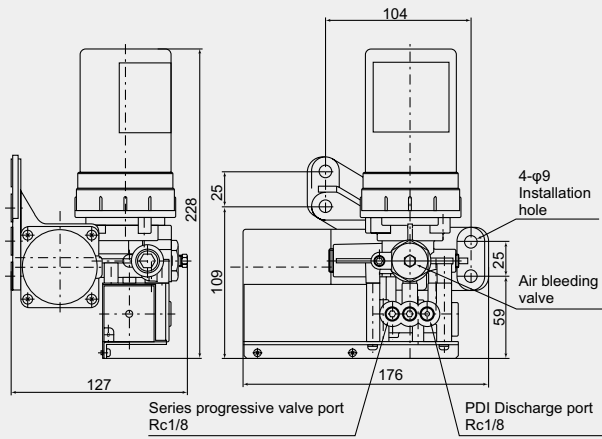


SP series progressive valve
: P.77

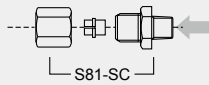


AP series progressive valve
: P.77

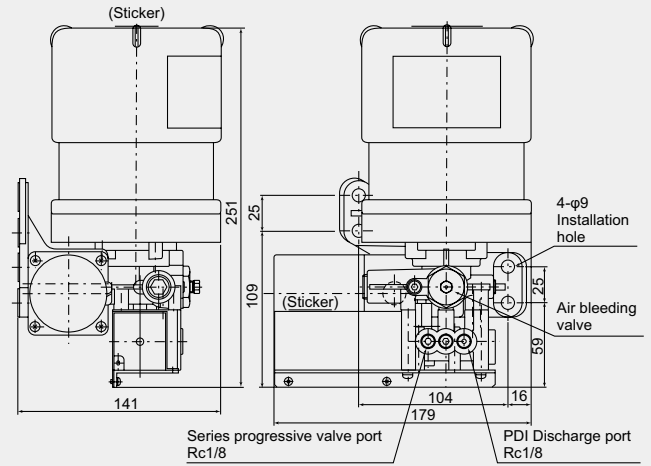
Dimensional drawing



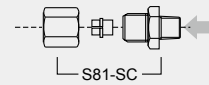
Parts for connecting to the discharge port



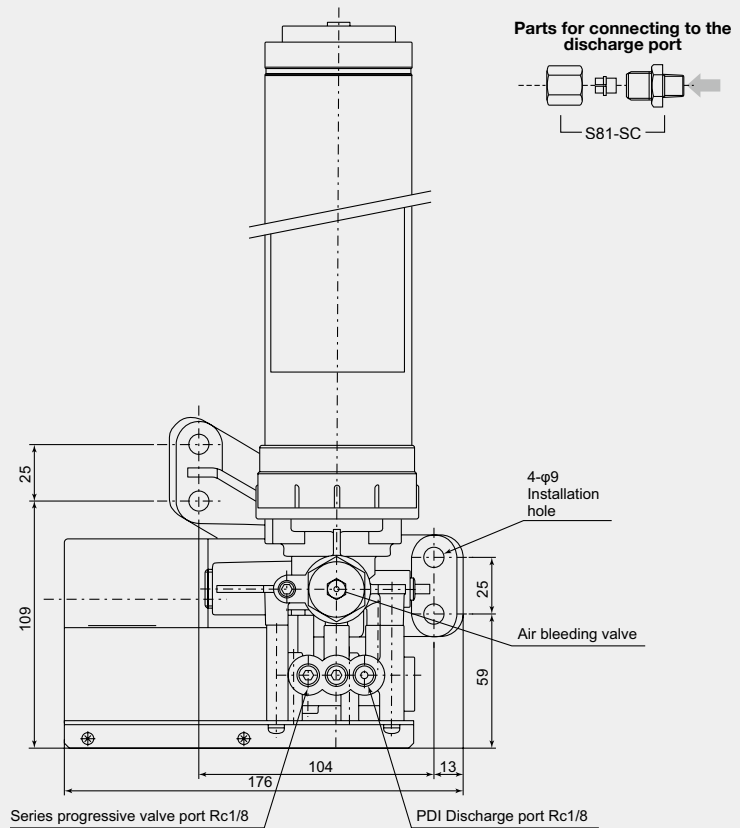
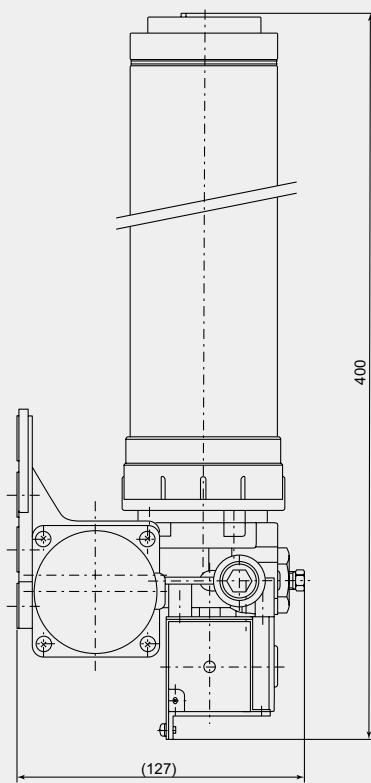
[EGM-10T-4-2C]



Parts for connecting to the discharge port



[EGM-10T-4-7C]



[EGM-10T-4-4C]

■ Dual-function motorized pump

EGME-T

Operates both PDI and series progressive systems by use of its built-in-solenoid valve. EGME pumps utilize an internal solenoid protection circuit which eliminates the 7.5 minute maximum running time of other EGM pumps.



[EGME-10T-4-2C]

Model Reference

EGME-10T- 4 - □ C

Cartridge type	
C	Cartridge type
Cartridge	
2	200mℓ
4	400mℓ
7	700mℓ

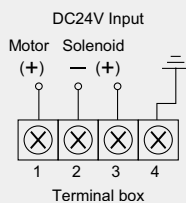
Model

Model	Part Number
EGME-10T-4-2C	103902
EGME-10T-4-7C	103911

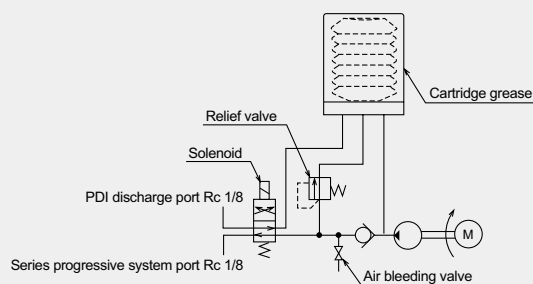
Specifications

Pump	Discharge volume	10mℓ/min
	Discharge pressure	10MPa (safety valve set pressure)
Power DC24V	Motor	20W/0.8A
	Pressure relief solenoid	10W/0.4A
	Total	30W/1.2A
Working Viscosity	Cartridge Grease No.000,00,0,1	
Recommended grease	MP0, FS2, MT1	
Cartridge size	200mℓ, 400mℓ, 700mℓ	
Weight	1.8kg (4C), 2.8kg (7C)	
Pressure relief	Built-in solenoid	

Wiring diagram



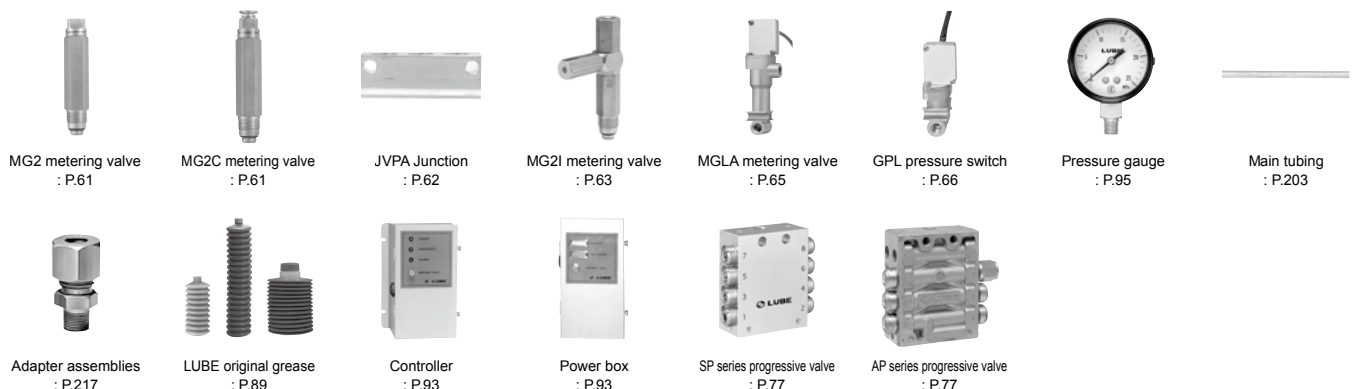
Hydraulic circuit drawing



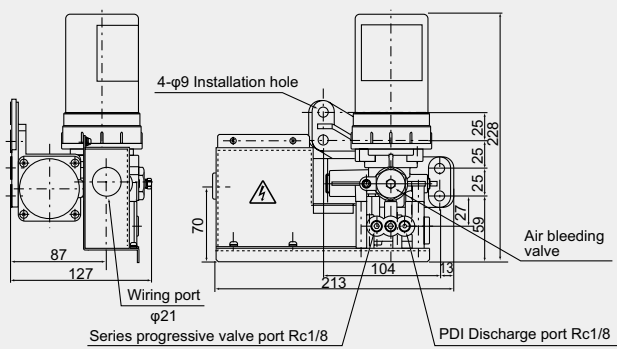
Directions for use

- Use recommended grease only.
- Never use greases containing molybdenum disulfide.
- Use lithium grease. (Contact LUBE for consultation when non-lithium greases must be used.)
- Do not use any greases containing substances that attack brass and rubber.
- Avoid continuous operation.

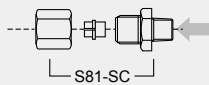
Related parts



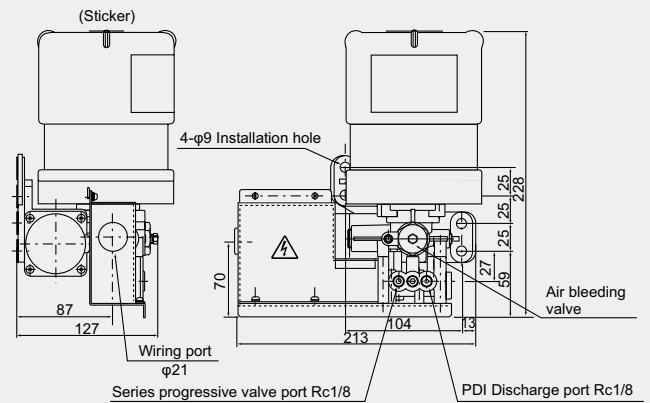
Dimensional drawing



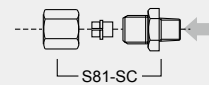
Parts for connecting to the discharge port



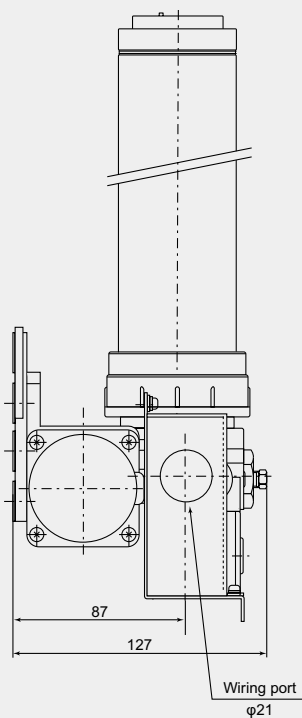
[EGME-10T-4-2C]



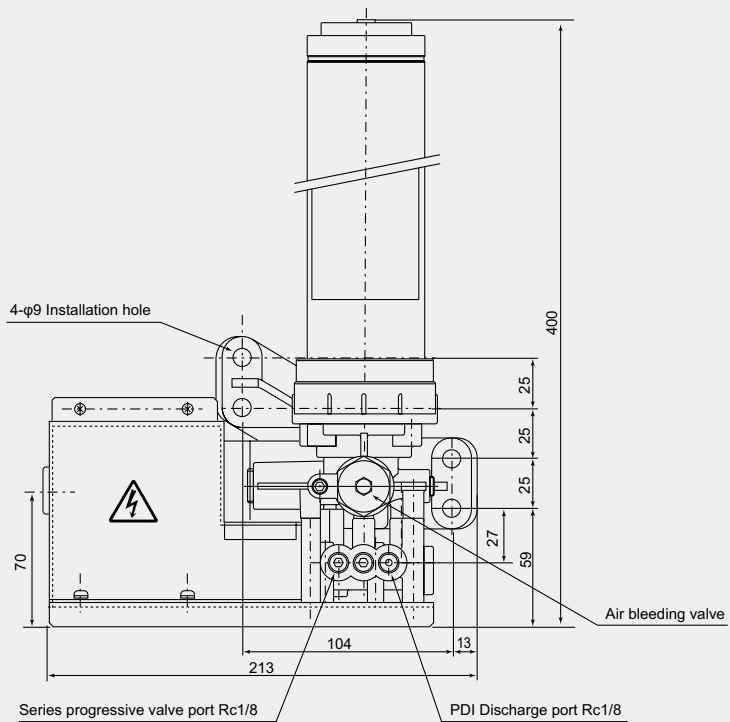
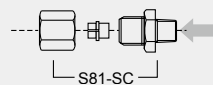
Parts for connecting to the discharge port



[EGME-10T-4-7C]



Parts for connecting to the discharge port



[EGME-10T-4-4C]

Positive Displacement Injector Electric Pump with solenoid protection PDI plus Progressive Twin Electric Pump (for "T" series pumps)

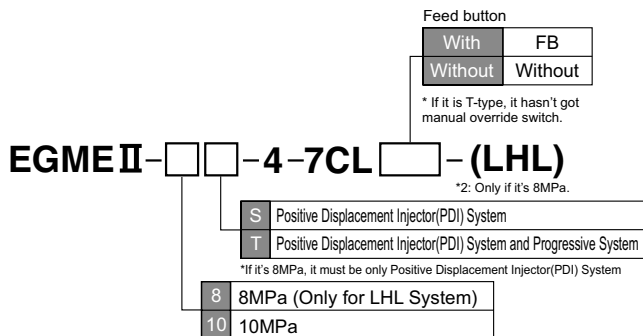
EGME II

Small, low cost pump for use with our original cartridge grease. EGME-II pumps have a built in solenoid protection circuit which eliminates the 7.5 minute maximum running time of other EGM pumps.



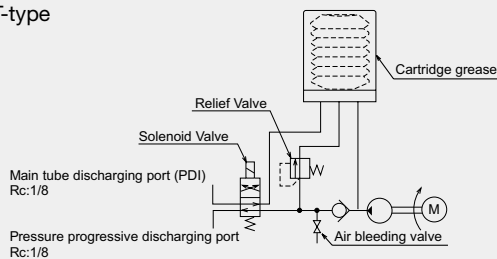
[EGME II]

Model Reference

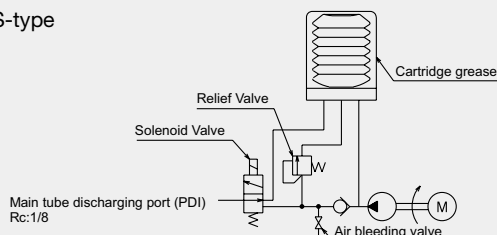


Hydraulic circuit diagram

T-type



S-type



Related parts



Model

Model	Part Number
EGMEII-10S-4-7CL	103922
EGMEII-10S-4-7CLFB	103923
EGMEII-10T-4-7CL	103932
EGMEII-8S-4-7CLFB-LHL	103921
EGMEII-8S-4-7CL-LHL	103920

Specifications

Power	DC24V
Power Consumption	28.8W
Discharge pressure	8MPa (Only for LHL System) 10MPa
Maximum discharging time	No restriction
Minimum interval time	10 seconds
Wiring method	Terminal connection
Manual override switch	Yes (Optional: Only PDI system) *
Grease level switch	Yes
Solenoid cover	Non combustible plastic (UL94-V0)
Protection class	IP54
CE approval	Yes
Pump air bleeding valve	Yes
Weight	2.0kg (With manual operating switch: 2.1kg)

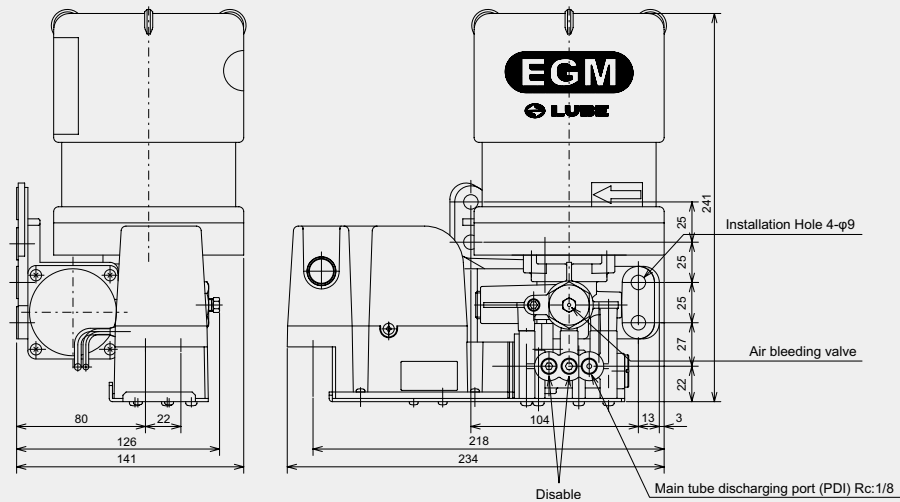
* Although the Manual Override Switch provides a dry contact to activate the pump, its capacity is not sufficient to sustain the power required to operate the pump. Therefore, the power needs to be provided directly to the pump from the machine control panel. See wiring diagram P.42.

Directions for use

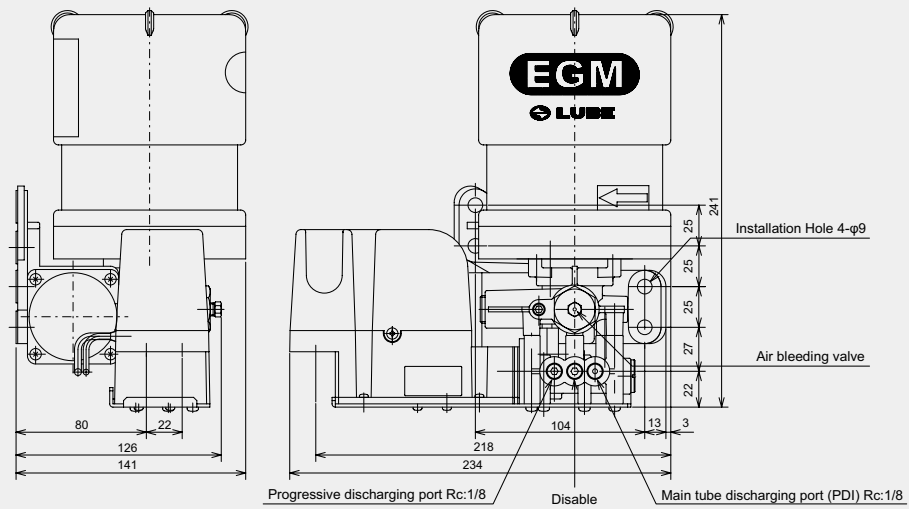
- Use recommended grease only.
- Never use greases containing molybdenum disulfide.
- Use lithium grease. (Contact LUBE for consultation when non-lithium greases must be used.)
- Do not use any greases containing substances that attack brass or rubber.
- When the cartridge is changed, take care that foreign particles are not introduced to pump.
- Do not discharge continuously.
- After changing the cartridge, bleed the air inside the pump by opening the air bleeding valve.

Dimensional drawing

[EGME II-10S-4-7CLFB]

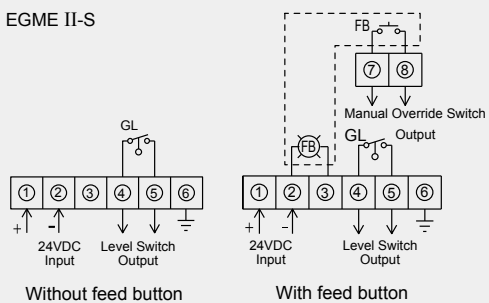


[EGME II-10T-4-7CL]

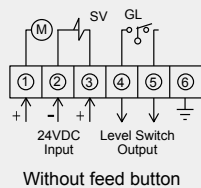


Wiring diagram

EGME II-S

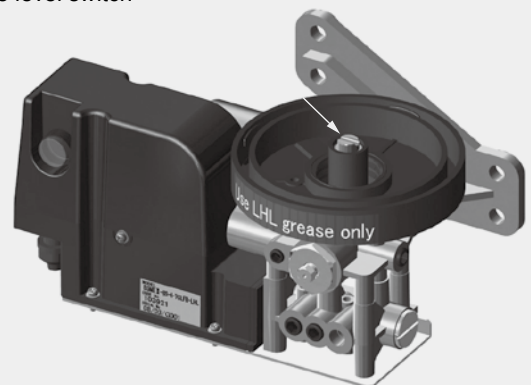


EGME II-T



Grease level switch

Grease level switch



■ Positive Displacement Injector (PDI) System

EGM

Motor driven piston pump for cartridge grease



[EGM-10S-4-4C]



[EGM-10S-4-7C]

Model Reference

EGM - 10S - 4 - C

Type of reservoir	
C	Cartridge type
Cartridge	
2	200mℓ
4	400mℓ
7	700mℓ

Model

Model	Part Number
EGM-10S-4-2C	103809
EGM-10S-4-4C	103810
EGM-10S-4-7C	103811

Directions for use

- Use recommended grease only.
- Never use greases containing molybdenum disulfide.
- Use lithium greases. (Contact LUBE for consultation when non-lithium greases must be used.)
- Do not use any greases which may contain substances that attack brass or rubber.
- When refilling, take care not let foreign matter in the grease.
- Avoid continuous operation.
- For normal operation or when filling grease into the main tubing, please remember to adhere to the 3 to 1 ratio for off time to running time not exceeding 7.5 minutes. Failure to follow this could result in permanent damage to the solenoid not allowing the pump to ever build pressure.

Related parts



MG2 metering valve
: P.61



MG2C metering valve
: P.61



JVPA Junction
: P.62



MG2I metering valve
: P.63



MGLA metering valve
: P.65



GPL pressure switch
: P.66



Pressure gauge
: P.95



Main tubing
: P.203



Adapter assemblies
: P.217



LUBE original grease
: P.89



LHL-X100
: P.90



Controller
: P.93

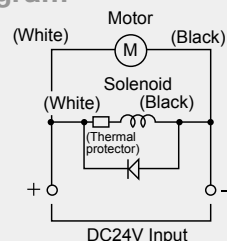


Power box
: P.93

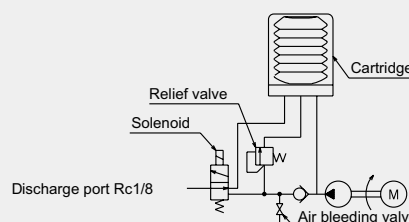
Specifications

Pump	Discharge volume	10mℓ/min
	Discharge pressure	10MPa
Power DC24V	Motor	20W/0.8A
	Pressure relief solenoid	26W/1.1A
	Total	46W/1.9A
Maximum run time	7.5 min.	
Power distribution rate	Max.25% (20°C)	
Working consistency	NLGI No.000,00,0,1	
Recommended grease	MP0, FS2, MT1	
Cartridge size	200mℓ , 400mℓ , 700mℓ	
Weight	1.8kg (4C) , 2.8kg (7C)	
Pressure relief	Built-in solenoid	

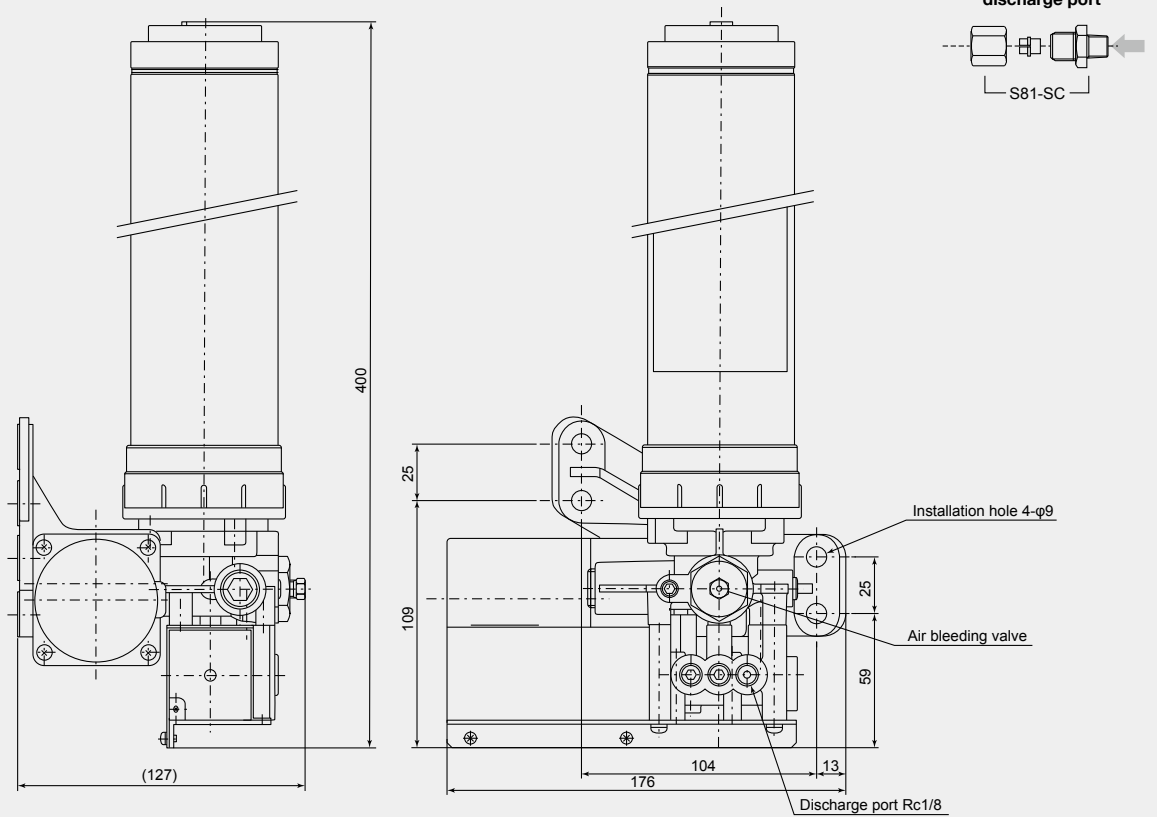
Wiring diagram



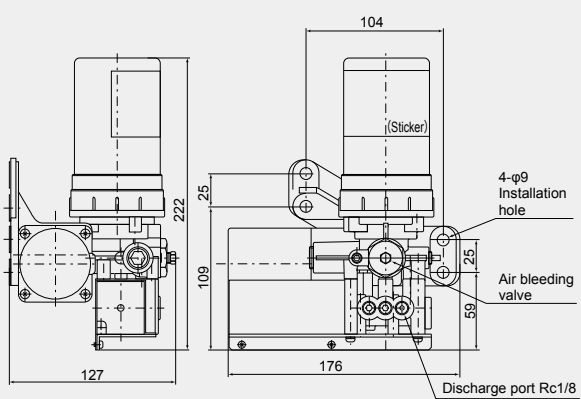
Hydraulic circuit drawing



Dimensional drawing

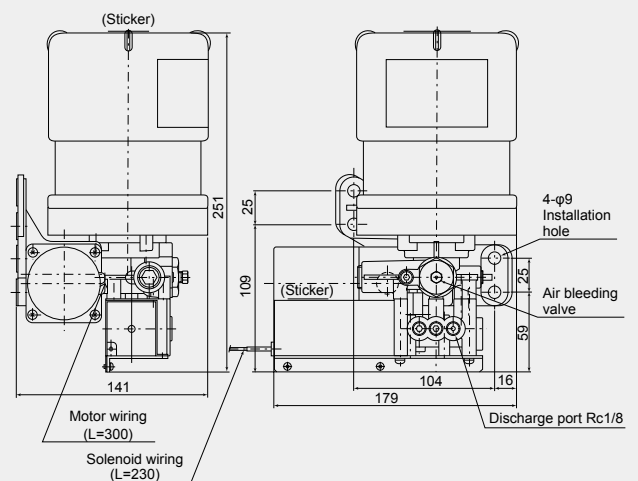
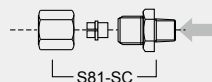


[EGM-10S-4-4C]



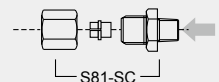
[EGM-10S-4-2C]

Parts for connecting to the discharge port



[EGM-10S-4-7C]

Parts for connecting to the discharge port



■ Positive Displacement Injector (PDI) System

EGH

Compact, low-cost manually operated pump

■ Model Reference

EGH-

Type of reservoir (effective capacity)	
3P	Reservoir type (260mℓ)
2C	Cartridge type (200mℓ)
4C	Cartridge type (400mℓ)

■ Model

Model	Part Number
EGH-2C	103780
EGH-3P	103783
EGH-4C	103782

■ Directions for use

- Use recommended cartridge grease only.
- Never use greases containing molybdenum disulfide.
- Use lithium greases. (Contact LUBE for consultation when non-lithium greases must be used.)
- Do not use any greases containing substances that attack brass or rubber.
- When refilling reservoir or replacing cartridge, take care not to let foreign matter into the grease or pump.
- After refilling reservoir or replacing cartridge, bleed air from the pump by opening the air bleeding valve.
- Always return operating lever to locked position to relieve system pressure.

■ Related parts



MG2 metering valve
: P.61



MG2C metering valve
: P.61



JVPA Junction
: P.62



MG2I metering valve
: P.63



Pressure gauge
: P.95



Main tubing
: P.203



Adapter assemblies
: P.217



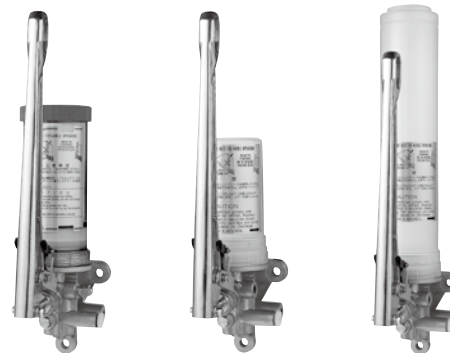
Pneumatic pump for pail
: P.96



Hand grease gun
: P.96



LUBE original grease
: P.89



Reservoir type
[EGH-3P]

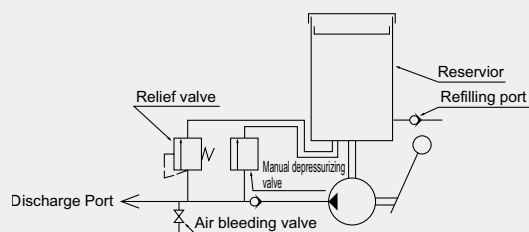
Cartridge type
[EGH-2C]

Cartridge type
[EGH-4C]

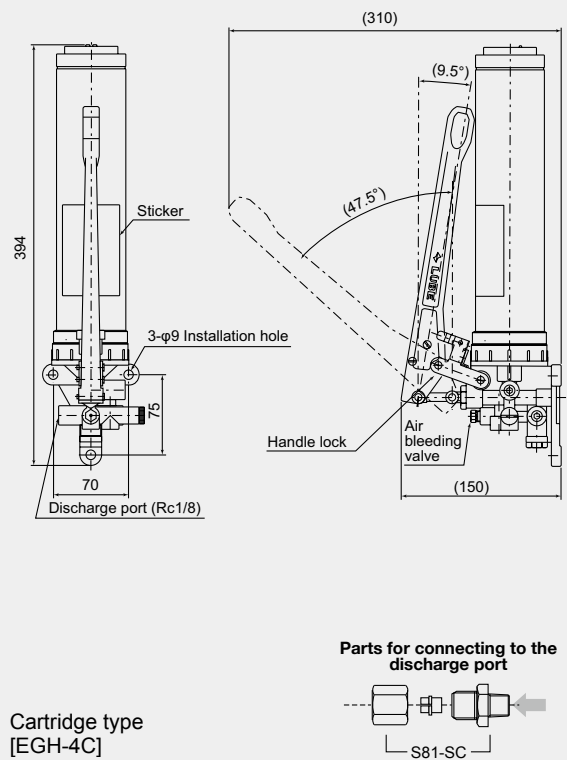
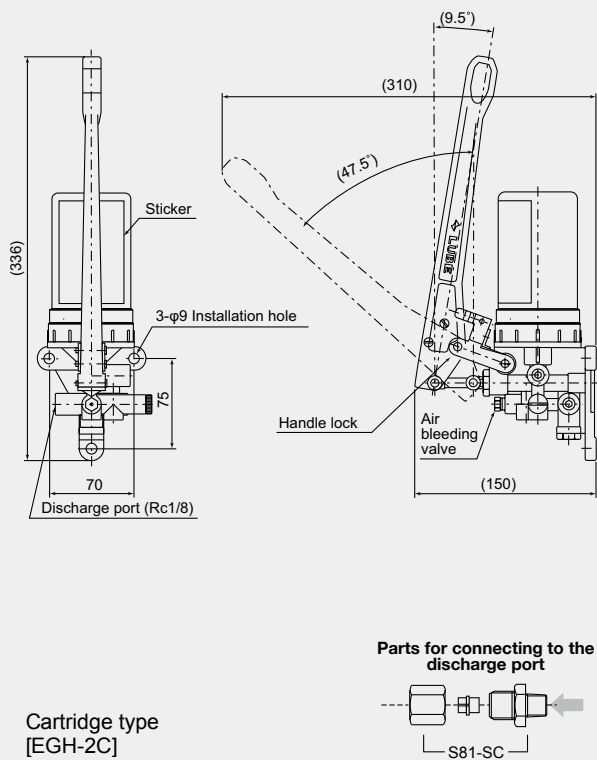
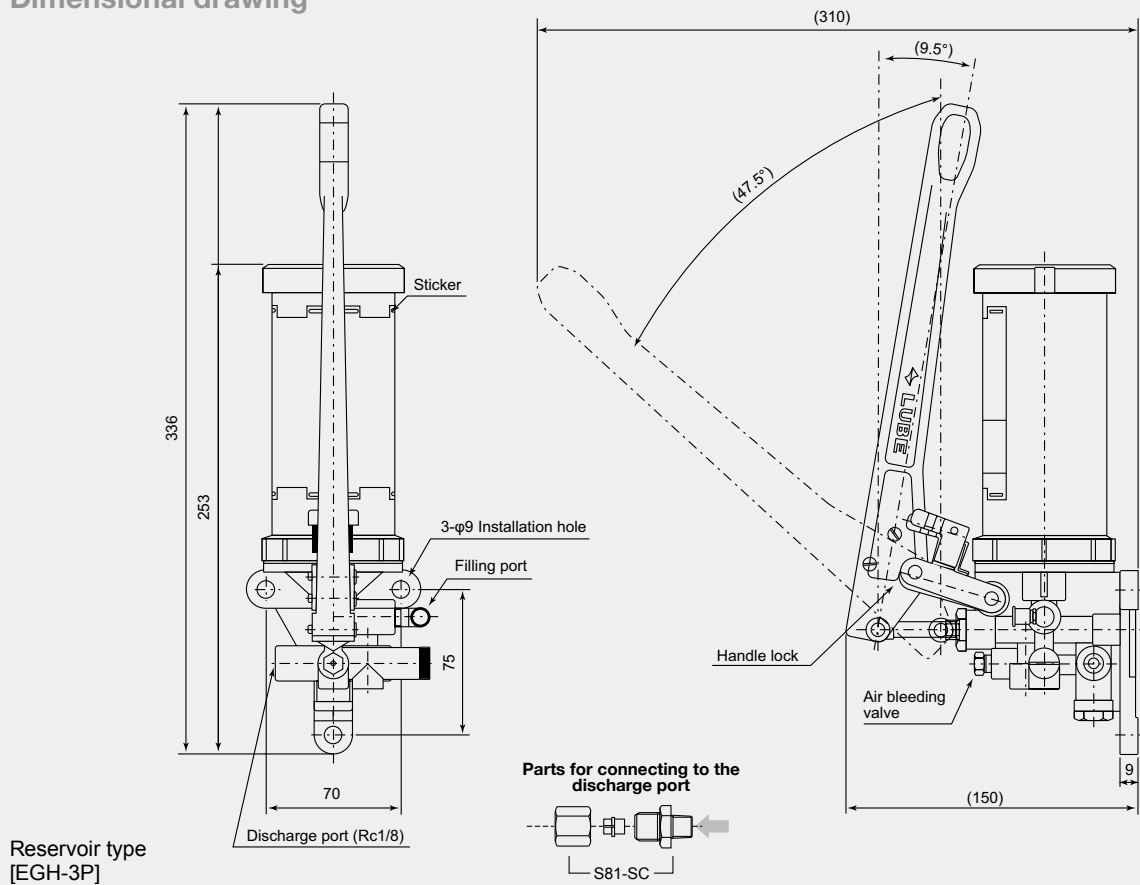
■ Specifications

EGH-3P		
Pump	Discharge volume	1mℓ/stroke
	Discharge pressure	10MPa (safety valve set pressure)
Working consistency		NLGI No.000, 00, 0, 1 (lithium grease)
Recommended grease		MP0, FS2, MT1
Reservoir Size		260mℓ
Weight		1.4kg
Pressure relief		Manual pressure relief lever
EGH-2C / EGH-4C		
Pump	Discharge volume	1mℓ/stroke
	Max Discharge pressure	10MPa (safety valve set pressure)
Working consistency		Cartridge grease No.000, 00, 0, 1 (lithium grease)
Recommended grease		MP0, FS2, MT1
Cartridge size		200mℓ, 400mℓ Cartridge
Weight		1.4kg
Pressure relief		Manual pressure relief lever

■ Hydraulic circuit drawing



Dimensional drawing



Automatic intermittent gear pump

AMZ - III [CE]

Lightweight and compact pump unit without controller.
Conforms to European Safety Standard. Oil level and pressure switches are standard equipment.

Model Reference

AMZ - III - - -

Voltage

1	AC100Vφ1
2	AC200Vφ1
23	AC230Vφ1

Reservoir Mounting Poition

Blank	Resin
F	Foot Mount
B	Wall Mount

*Metal reservoir only

Reservoir capacity

Blank	1.8ℓ Resin reservoirs
3	3ℓ Resin reservoirs
30	3ℓ Metal reservoirs
40	4ℓ Metal reservoirs
80	8ℓ Metal reservoirs

*Pump is installed on the right side, if a metal reservoir is selected.

Model

Model	Part Number
AMZ-III-1	285017
AMZ-III-1-3	285024
AMZ-III-2	285016
AMZ-III-2-3	285023
AMZ-III-23	285433

Low viscosity oil pump (On the page of AMZ-III)

No	Model	Part No.	Voltage	Tank capacity	Working viscosity range
1	AMZ-3-100SL-18LP	285224	100V	1.8L	22~800mm ² /S
2	AMZ-3-100SL-18LP	285426	200V	1.8L	22~800mm ² /S



[1.8ℓ]



[3ℓ]

Specifications

Pump	Discharge volume	90ml/min (50Hz), 110ml/min (60Hz)
	Discharge pressure	1.5MPa/217.5psi (safety valve set pressure)
Motor	Voltage / current	AC100Vφ1/1.5A, AC200Vφ1/0.8A (50Hz) AC100Vφ1/1.3A, AC200Vφ1/0.7A (60Hz)
	Output	19W (50Hz), 18W (60Hz) Shading motor
Emergency detection	Oil level switch	Contact type (NO) ON at low level Contact capacity 0.5A, AC DC200V/30W smaller
	Pressure switch	Contact type (NO) Operating pressure: 1.3M ON Reset pressure: 0.9MPa OFF Contact capacity AC DC250V/2A
Operation	Max. discharge time: 1 min. Min.interval time: 3 min.	
Working viscosity range	50-1300mm ² /S (50Hz)	
Reservoir capacity	1.8ℓ, 3ℓ (plastic) 3ℓ, 4ℓ, 8ℓ (sheet metal)	
Weight	1.8ℓ: 2.7kg 3ℓ: 3.6kg	
External fuse	100V/2.0A, 200V/1.0A	

* Should the pump malfunction, contact LUBE for consultation.

Directions for use

- This pump unit requires a separate control circuit to operate.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.
- Replace the suction filter at least once a year.
- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any special additive-contained oil, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace it, if necessary, with fresh oil immediately. Be sure to clean the reservoir before replacing oil.
- Make sure that proper voltage is applied.
- Do not over tighten the discharge joint.
- Refer to the torque table. (P. 251)
- Low-oil viscosity versions are available. Contact us for information.

Related parts



MO2(C) Metering valve: P.115



JVPA Junction : P.116



MO Metering valve: P.117



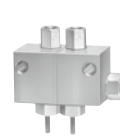
PV Junction : P.118



MOS Metering valve : P.119



PVS Junction : P.121



MB Metering valve : P.123



MIX-S Metering valve : P.127



F-3D Filter : P.181



Pressure gauge : P.186



Tubing : P.203



Compression parts : P.201



Adapters : P.207

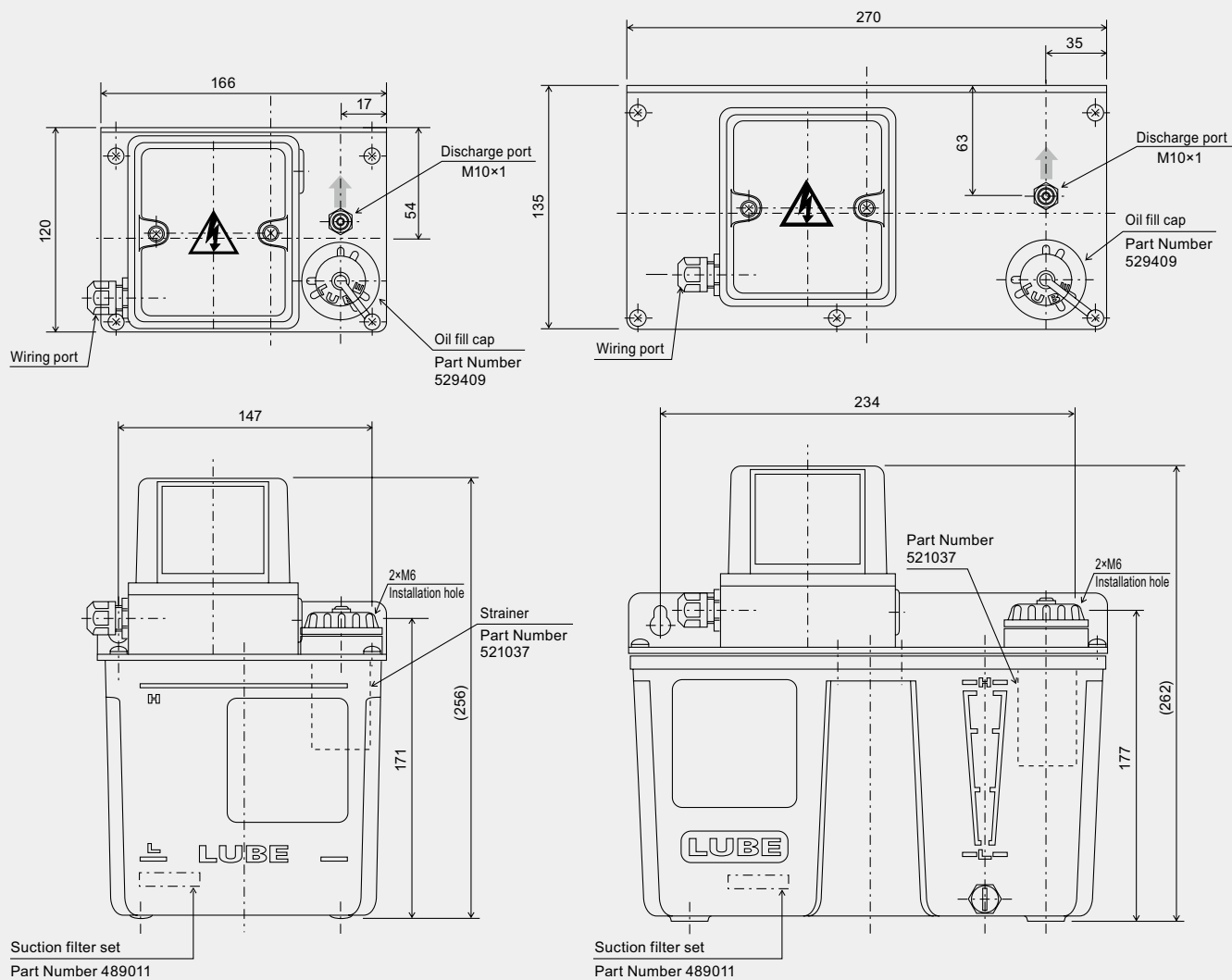


Reservoirs : P.171



Flexible pipe nozzle with metering valve: P.195

Dimensional drawing



[1.8ℓ]

[3ℓ]

Parts for connecting to the discharge port



Improper handling can result in a death or serious injury

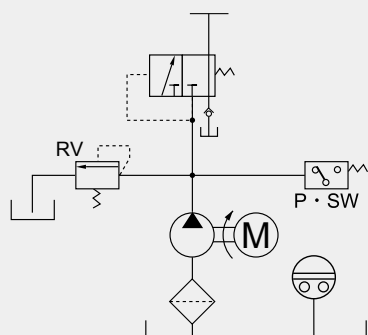


Electrical shock may be received under certain conditions

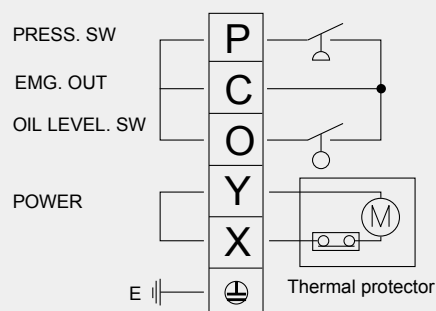


Be sure to ground.

Hydraulic circuit drawing



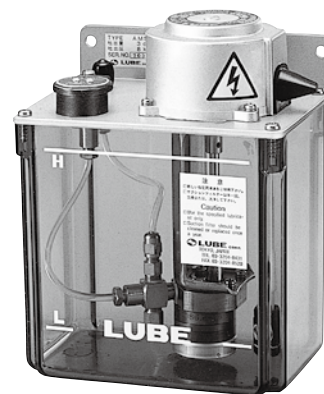
Wiring diagram



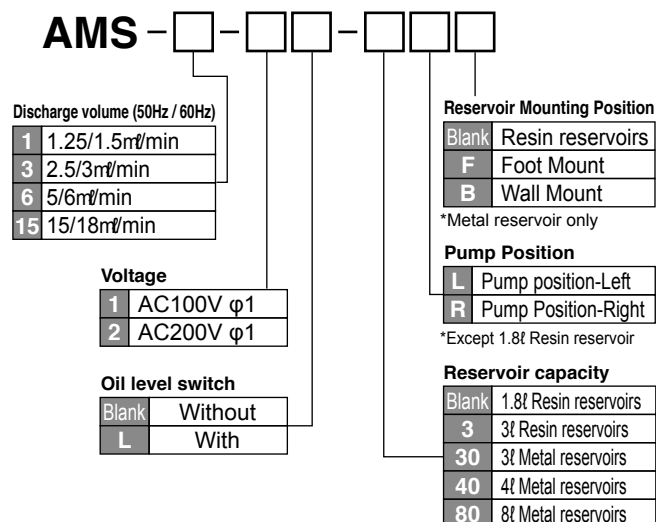
Automatic small discharge volume gear pump

AMS

Motor driven gear pump for continuous micro-volume lubrication used with a resistance type centralized lubrication equipment



Model Reference



Specifications

AMS-1, AMS-3

Pump	Discharge volume	AMS-1: 1.25ml/min (50Hz), 1.5ml/min (60Hz) AMS-3: 2.5ml/min (50Hz), 3ml/min (60Hz) AMS-6: 5ml/min (50Hz), 6ml/min (60Hz)
	Discharge pressure	0.8MPa (safety valve setting)
Motor (Other voltages available.)	Power	AC100Vφ1/50mA AC200Vφ1/25mA (50Hz) AC100Vφ1/42mA AC200Vφ1/18mA (60Hz) AC100Vφ1/25mA (50Hz) AC200Vφ1/18mA (60Hz)
	Output	3W Synchronous Motor
	Oil level switch	Contact type A contact (NO) ON at low level Contact capacity 0.5A, AC DC200V/30W smaller
Emergency detection	Oil level switch	Contact type A contact (NO) ON at low level Contact capacity 0.5A, AC DC200V/30W smaller
Operation rate	Continuous	
Working viscosity range	32-1300mm ² /s	
Reservoir capacity	1.8l, 3l (plastic) 3l, 4l, 8l (sheet metal)	
Weight	1.8kg	

Model

Model	Part Number	Model	Part Number
AMS-1-1	102401	AMS-3-1	102405
AMS-1-1L	102403	AMS-3-1L	102407
AMS-1-2	102402	AMS-3-2	102406
AMS-1-2L	102404	AMS-3-2L	102408
AMS-15-1	102416	AMS-6-1	102489
AMS-15-1L	102418	AMS-6-1L	112094
AMS-15-2	102417	AMS-6-2	102490
AMS-15-2L	102419	AMS-6-2L	112095

* Should the pump malfunction, contact LUBE for consultation.

Directions for use

- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Make sure that proper voltage and pressure are proper.
- Replace the suction filter at least once a year.

Related parts



control unit
: P.161



PJ junction
: P.164



Tubing
: P.203



Pressure gauge
: P.184



Filter
FX1: P.181



Filter
FY20: P.181



Pressure switch
: P.185



Compression parts
: P.201



Adapters
: P.207



Reservoir
: P.174

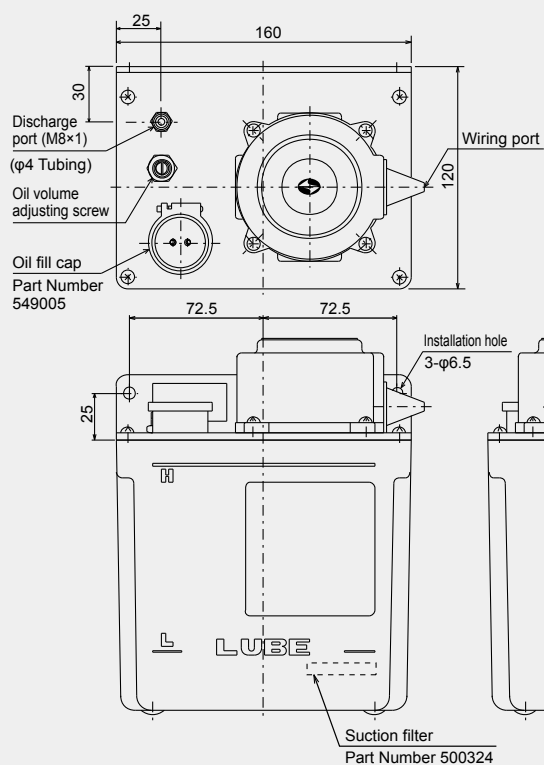
Specifications

AMS-15		
Pump	Discharge volume	15ml/min (50Hz) 18ml/min (60Hz)
	Discharge pressure	0.8MPa (safety valve setting)
Motor (Other voltages available.)	Power	AC100V ϕ 1/0.25A (50Hz/60Hz) 200V ϕ 1
	Output	5.0W Accessory - Condensor 3.0 μ F
Gear Head	Speed Reduction Ratio: 1/25	
Working viscosity range	32-1300mm ² /s	
Reservoir capacity	1.8 ℓ , 3 ℓ (plastic) 3 ℓ , 4 ℓ , 8 ℓ (sheet metal)	
Weight	2.3kg	

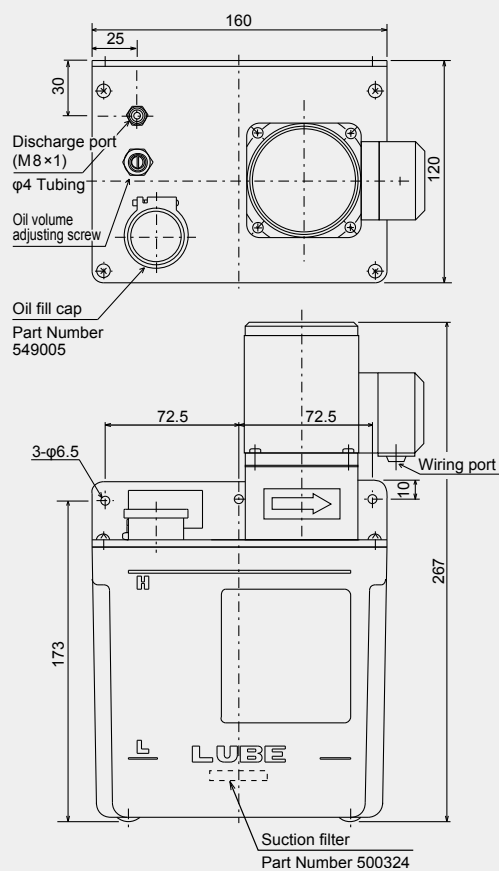
Replacement Motor Model

Pump	Part Number	Voltage	Replacement Motor Model
AMS-1	521194	100V	M-B1
	521196	200V	M-B2
AMS-3	521194	100V	M-B1
	521196	200V	M-B2
AMS-6	521210	100V	M-A1
	521328	200V	M-A2

Dimensional drawing



[AMS-1, 3]



[AMS-15]

Improper handling can result in a death or serious injury

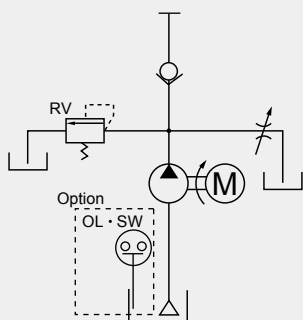


Electrical shock may be received under certain conditions

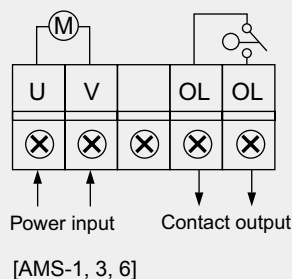


Be sure to ground.

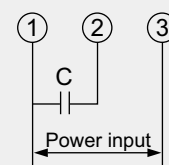
Hydraulic circuit drawing



Wiring diagram



[AMS-1, 3, 6]



[AMS-15]

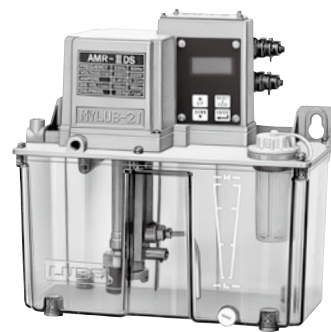
Automatic intermittent gear pump

AMR-III DS

Capable of operating over a wide viscosity range.
Digital display gives on sight visual indication.
Interval can be a function of time or count.

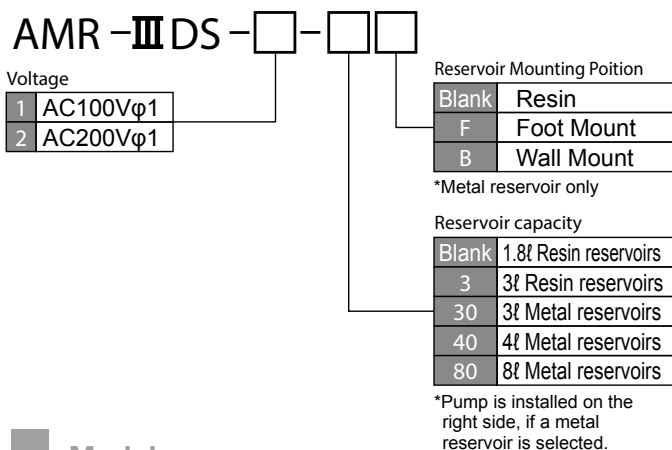


[1.8L Reservoir type]



[3L Reservoir type]

Model Reference



Model

Model	Part Number
AMR-III DS-1	112141
AMR-III DS-1-3	112143
AMR-III DS-2	112142
AMR-III DS-2-3	112144

Directions for use

- Oil viscosity varies with oil temperature. Be sure to use oil within the working viscosity range. Refer to the viscosity table. (P.237)
- Do not use any oil containing special additives, water soluble oil, or solvent.
- Periodically check the oil in the reservoir for impurities. Replace with fresh oil immediately, if necessary. Be sure to clean the reservoir before oil adding new oil.
- Do not over tighten the discharge joint. Refer to the tightening torque table. (P.251)
- Make sure that proper voltage and pressure are proper.
- Replace the suction filter at least once a year.
- Do not remove the oil fill strainer in order to keep the pump clear of foreign matter.

Related parts



Flow unit
: P.149



PJ junction
: P.164



Tubing
: P.203



Pressure gauge
: P.184



Filter FX1
: P.181



Filter FY20
: P.181



Pressure switch
: P.185



Compression parts
: P.201



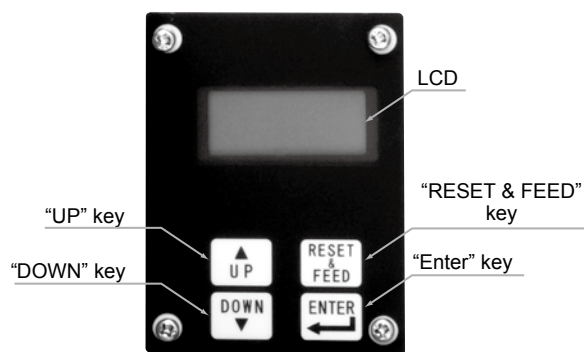
Adapters
: P.207

Specifications

Pump	Discharge volume	150mL/min (50Hz) 180mL/min (60Hz)
	Discharge pressure	0.8MPa (safety valve set pressure)
Motor	Power	AC100Vφ1/0.83A, AC200Vφ1/0.41A (50Hz) AC100Vφ1/0.64A, AC200Vφ1/0.33A (60Hz)
	Output	20W (50Hz/60Hz) Capacitor motor
Controller	Timer counter	Discharge time adjustable range: 1-99 seconds (2.5-247.5mL) 50Hz, (3-297mL) 60Hz Interval time adjustable range: 1 to 9999 minutes 1 to 9999 counts
	Emergency output	Contact type A contact (NO) Contact capacity AC250V 1.5A
	Emergency detection	Oil level switch Contact type A contact (NO) ON at low level
		Pressure switch Contact type A contact (NO) ON at low pressure
	Liquid crystal display	INTERVAL display 'INT'
		DISCHARGE display 'DIS'
Working viscosity range	68-1300mm ² /s (50Hz)	
Reservoir capacity	1.8L, 3L (plastic) 3L, 4L, 8L (sheet metal)	
Weight	1.8L Reservoirs: 3.2kg, 3L Reservoirs: 4kg	

* Should the pump malfunction, contact LUBE for consultation.

Exterior features of the controller

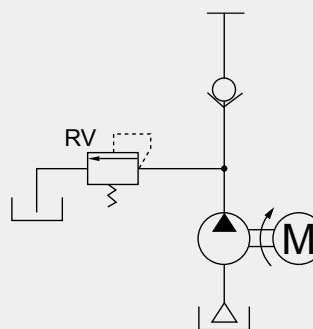


Operation panel of the controller

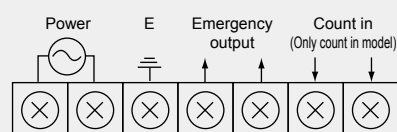
LCD shows the below:

INTERVAL → INT
DISCHARGE → DIS
ALARM → Low oil level OILLEVEL ERR
Low pressure PRESSURE ERR

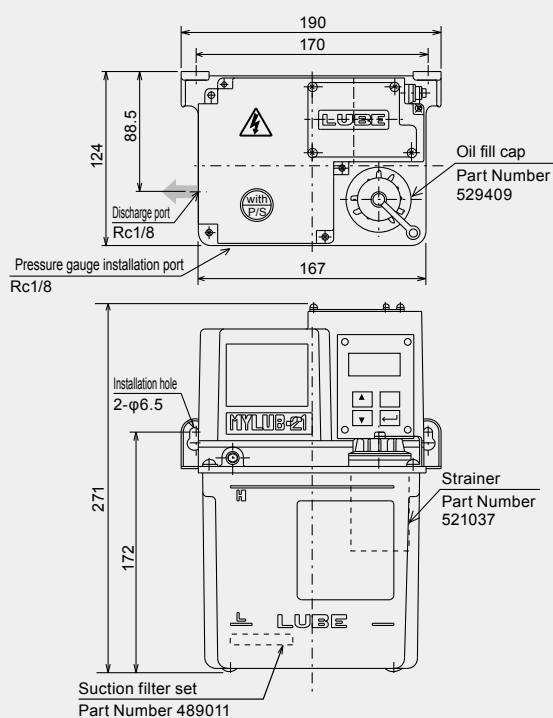
Hydraulic circuit drawing



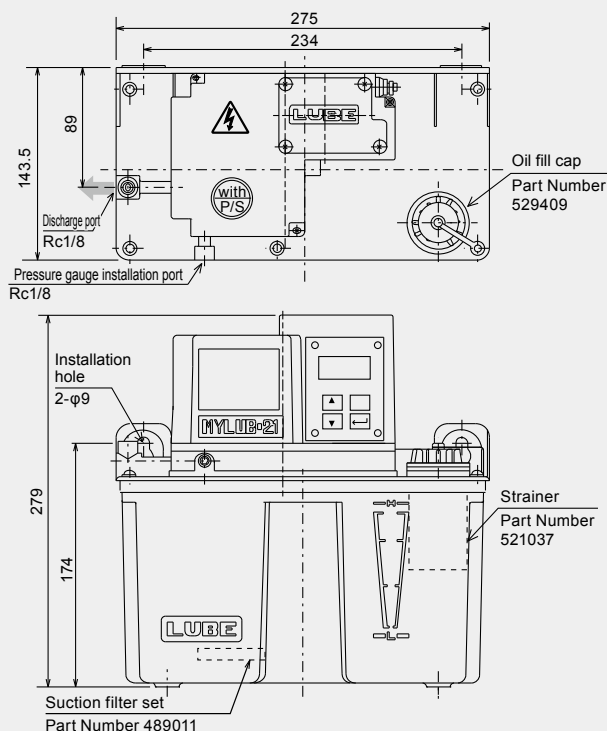
Wiring diagram



Dimensional drawing



[1.8ℓ reservoir type]



[3ℓ reservoir type]

Parts for connecting to the discharge port



⚠ Improper handling can result in a death or serious injury

⚡ Electrical shock may be received under certain conditions

⏚ Be sure to ground.