



Automatic Centralized Lubrication System

Supply reliable lubrication system

ЦЕНТРАЛИЗОВАННАЯ СИСТЕМА ПОДАЧИ СМАЗКИ

CENTRAL LUBRICATING

For various processed machine, automatic operation equipment, machine e lubrication

Change without notice

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AMBITEC Corp.



關於AMBITEC

「誠信、敬業、創新、互利」是維繫誠灃科技股份有限公司生存成長之要素。公司的處事原則在以誠信、認真、懷恩敬業、創新求進，並追求和諧互利的服務。我們堅信「以人為本」「以和為貴」-待人以誠，處事以真，創新進步。有福同享，和諧互利之原則，提昇人文素養，創造產品價值。

潤滑設備是自動化機械不可或缺產品，唯有「可靠」才能贏得「信賴」。我們知道潤滑設備在機械業所負的責任使命重大，本公司全體同仁都深深體會，戰戰兢兢，盡心盡力，為目標向前邁進，期盼先進多予指導，批評，指正。

About AMBITEC

The key point to encourage AMBITEC LTD strongly growing is based the following principles: honesty, respect, innovation and mutual benefit.

AMBITEC LTD holds the spirit of honor, concentration, respect, innovation and mutual benefit to sever people.

As well as base the following principle “harmony is most precious, treat people with sincerity; process task is truly, improving innovation sharing our benefit, mutual harmony” to keep improving production value.

Lubrication system is indispensably device for automatic machine industry only provides a reliable can win the trust and AMBITEC well knows lubrication system is a such major product for machine industry with the great mission all of AMBITEC staff are dedicated to the highest possible standards at all levels of our operation process.

To stride forwarding the great goal welcome giving us advices.

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RESISTANCE LUBRICATION SYSTEM DIAGRAM



ARP-B



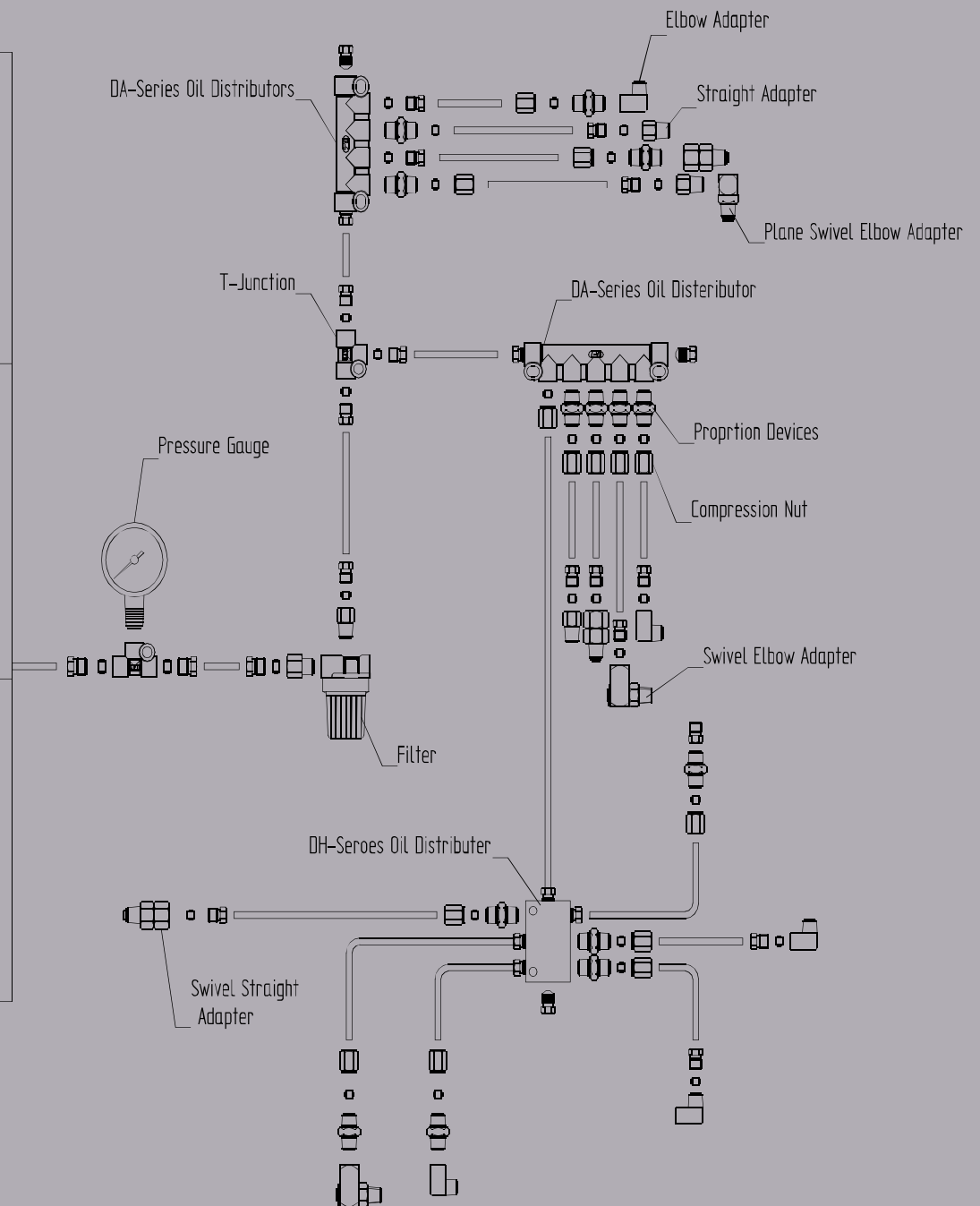
ARS-B



ARF-B



ART-B



Resistance Type



ARP B



ARP M



ARS B



ARF B



ARF M



ART B



ART M

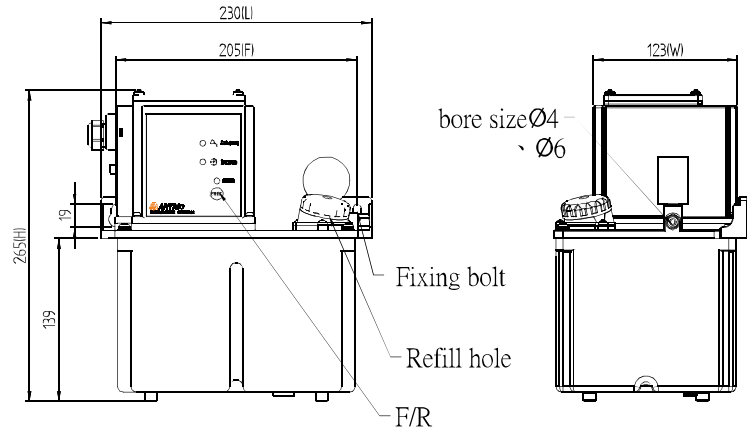
Features :

- ◆ Steady motor driven mechanical, low working noise.
- ◆ Precise gear pump design, steady oil supply.
- ◆ Equipped protection of electric circuit control system.
- ◆ Equipped oil tank level sensor, detect the oil level.
- ◆ Equipped pressure gauge, user could easily check the pressure.
- ◆ Patent for oil tank anti-transform.

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Service once friends forever

Resistance Type PLC Lubricator ARPB



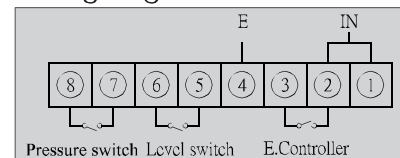
Features:

- 1.External oil supply system, continuous or intermittent oil supply.
- 2.Standard pressure setting 15kgf/cm².
- 3.Feed key can force the lubricator to function and feed oil by manual for safety concern. Please don't keep the key function over 3 mins.
- 4.Driven by shaded pole motor, the over temperature/ load protector is attached to protect the motor.
- 5.Equipped pressure gauge, user could check the current pressure.
- 6.Lubrication time can not over 3 mins.

Apply to:

- 1.Auto lubricant system for machines.
- 2.For machine center, process machining, special purpose machine, etc.
- 3.Process cutting machine, machining center,lathes.

Wiring diagram:



SPEC:

Model	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARPB	100W	150cc/min	15kgf/cm ²	110V	1.6A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C
				220V	0.9A			

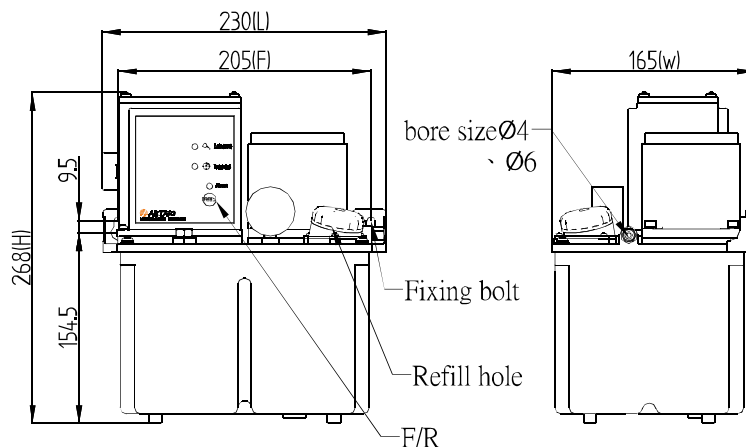
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L (mm)	W (mm)	H (mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARPB	02	Resin	177	208	129	267	2.6	○	○	×	Option
	03	Resin	205	230	165	268	3.8	○	○	×	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARPB	02	2	5	4	1
Resistance Type	02:2 Liters	2: Shaded Pole Motor40T	5:110V 50/60HZ	4:PLC Control	1:Ø4
	03:3 Liters		6:220V 50/60/HZ		2:Ø6

Resistance Type PLC Lubricator

ARPM



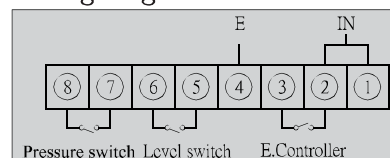
Features:

- 1.External oil supply system, continuous or intermittent oil supply.
- 2.Feed key can force the lubricator to function and feed oil by manual for safety concern. Please don't keep the key function over 3 mins.
- 3.Equipped external leakage valve device, user could adjust.
- 4.Driven by induction motor, the over temperature/ load protector is attached to protect the motor.
- 5.Steady motor operation, low vibration and noise.

Apply to:

- 1.Auto lubricant system for machines.
- 2.For machine center, process machining, special purpose machine, etc.
- 3.For linear guide, hard guide, bearing, screw.

Wiring diagram:



SPEC:

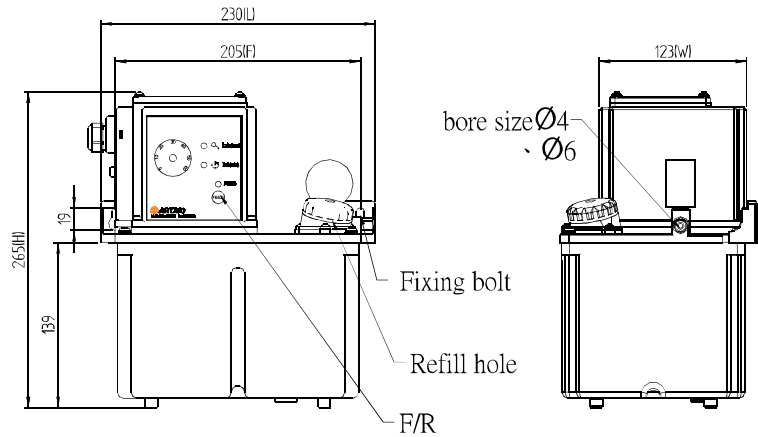
Model	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARPM	25W	250cc/min	15kgf/cm ²	110	0.5A	50/60Hz	Ø4 or Ø6	32~68cSt/40℃
				220	0.3A			

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARPM	03	Resin	205	230	165	268	3.8	○	○	×	Option
	04	Plate	250	310	185	273	5.6	○	○	×	
	08	Plate	338	355	197	261	10	○	○	×	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARPM	03	5	5	4	1
Resistance Type	03:3 Liters	5:shaded pole motor 25W	5:110V 50/60HZ	1:Intermittent	1:Ø4
	04:4 Liters		6:220V 50/60/HZ	2:Lubricant	2:Ø6
	08:8 Liters			3:Memory	
				4:PLC Control	

Resistance Type Single Switch Lubricator ARSB



Features:

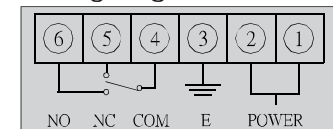
1. Lubricant time could be choose 3.5 sec or 8.5 sec. (Standard is 3.5 sec.)
2. Intermittent time control by lubricator panel, the intermittent time is less than 2 mins.
3. Standard pressure setting 15kgf/cm².
4. Feed key can force the lubricator to function and feed oil by manual.
5. Two operation modes as: The lubricator runs via lubrication time after the power is on or The lubricator runs via intermittent time after the power is on. (Standard: The lubricator runs via lubrication time after the power is on)
6. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Panel switch setting: Intermittent time 3 sec to 60 mins, lubricant time could choose 3.5 sec or 8.5 sec, the standard setting is 8.5 sec.
Malfunction, NO connect with COM point.
The voltage <250V, AC/DC current 2A.
9. Driven by shaded pole motor, the over temperature/ to load protector is attached.

Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.

SPEC:

Wiring diagram:



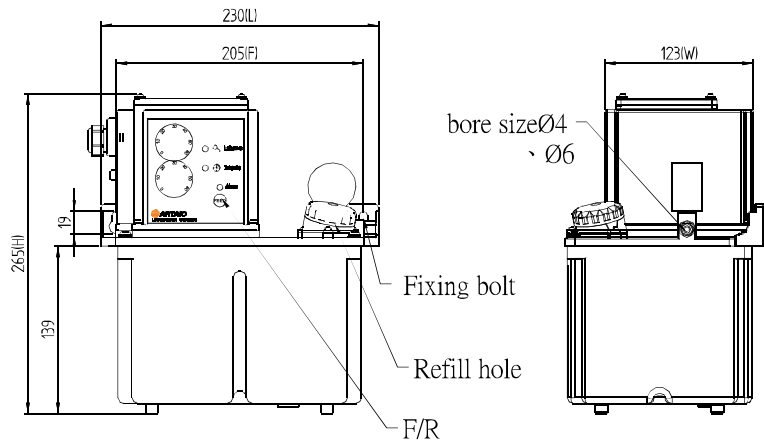
Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARSB	3.5 sec	30 sec-60min	100W	150cc/min	15kgf/cm ²	110V 220V	1A 1.3A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARSB	02	Resin	177	208	129	267	2.6	○	○	○	Option
	03	Resin	205	230	165	268	3.8	○	○	○	
	04	Plate	250	310	185	273	5.6	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARSB	02	2	5	1	1
Resistance Type	02: 2 Liters	2: Shaded Pole Motor 40T	5: 110V 50/60HZ 6: 220V 50/60/HZ	1: Intermittent 2: Lubricant	1: Ø4 2: Ø6
	03: 3 Liters				
	04: 4 Liters				

Resistance Type Dual Switch Lubricator ARFB



Features:

1. Lubrication and intermittent time are controlled by panel knob.
2. Lubrication time is less than 2 mins/ Intermittent time is more than 2 mins.
3. Standard pressure setting 15kgf/cm².
4. Feed key can force the lubricator to function and feed oil by manual for safety concern. Please don't keep the key function over 3 mins.
5. Two operation modes as: The lubricator runs via lubrication time after the power is on or The lubricator runs via intermittent time after the power is on. (Standard: The lubricator runs via lubrication time after the power is on)
6. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Panel switch setting: Intermittent time 3 sec to 60 mins.
Lubricant time 2 sec to 180 sec.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by shaded pole motor, the over temperature/ to load protector is attached.

Apply to:

1. Auto lubricant system for machines.
2. For machine center, process machining, special purpose machine, etc.
3. For linear guide, hard guide, bearing, screw.

SPEC:

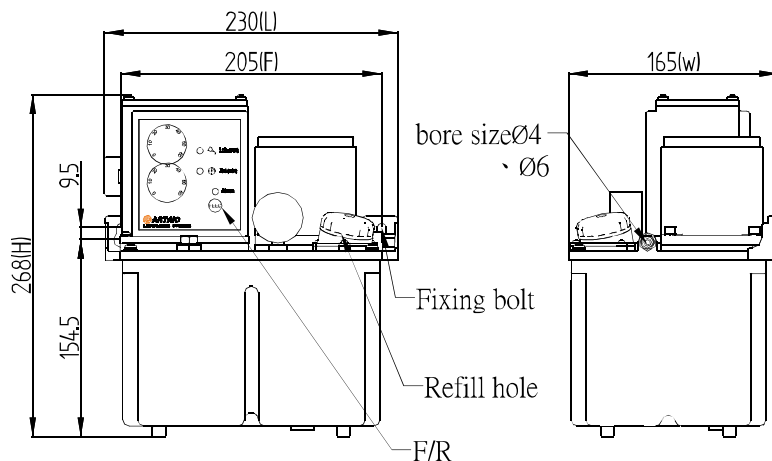
Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARFB	2-180 sec	30 sec-180 min	100W	150cc/min	15kgf/cm ²	110V 220V	1.6A 0.9A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L (mm)	W (mm)	H (mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARFB	02	Resin	177	208	129	267	2.6	○	○	○	Option
	03	Resin	205	230	165	268	3.8	○	○	○	
	04	Plate	250	310	185	273	5.6	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARFB	02	2	5	1	1
Resistance Type	02: 2 Liters	2: Shaded Pole Motor40T	5: 110V 50/60HZ	1: Intermittent	1: Ø4
	03: 3 Liters		6: 220V 50/60/HZ	2: Lubricant	2: Ø6
	04: 4 Liters				

Resistance Type Dual Switch Lubricator ARFM



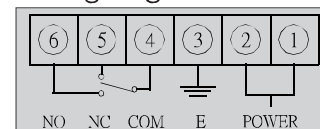
Features:

1. Lubrication and intermittent time are controlled by panel knob.
2. Feed key can force the lubricator to function and feed oil by manual for safety concern.
3. Two operation modes as: The lubricator runs via lubrication time after the power is on or The lubricator runs via intermittent time after the power is on. (Standard: The lubricator runs via lubrication time after the power is on)
4. Equipped external leakage valve device, user could adjust.
5. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Panel switch setting: Intermittent time 3 sec to 60 mins.
Lubricant time 2 sec to 180 sec.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by induction motor, the over temperature/ load protector is attached to protect the motor.

Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.
3. The machine needs lubrication after power-on.

Wiring diagram:



SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARFM	2-180 sec	30 sec-180 min	25W	250cc/min	15kgf/cm ²	110V	0.5A	50/60Hz	Ø4 or Ø6	32~68cSt/40℃
						220V	0.3A			

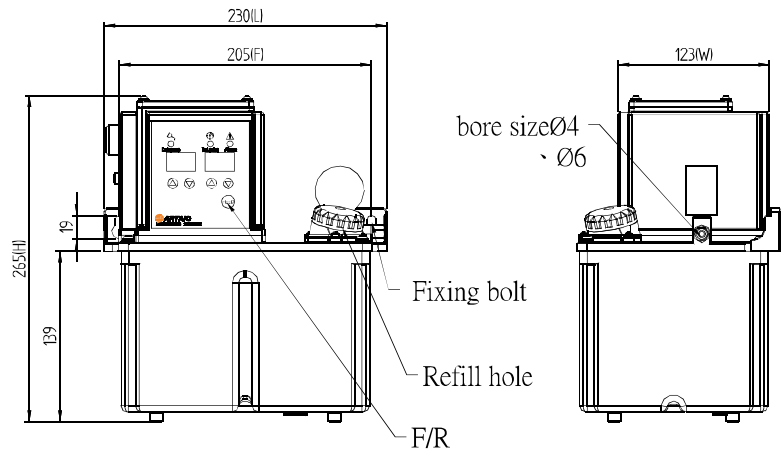
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L (mm)	W (mm)	H (mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARFM	03	Resin	205	230	165	268	3.8	○	○	○	Option
	04	Plate	250	310	185	273	5.6	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARFM	03	5	5	1	1
Resistance Type	03:3 Liters	5:shaded pole motor 25W	5:110V 50/60HZ 6:220V 50/60/HZ	1:Intermittent	1:Ø4
	04:4 Liters			2:Lubricant	2:Ø6

Resistance Type Digital Display Lubricator

ARTB



Features:

1. Lubrication and intermittent time are controlled by panel knob.
2. Lubrication time is less than 2 mins/ Intermittent time is more than 2 mins.
3. Standard pressure setting 15kgf/cm².
4. Feed key can force the lubricator to function and feed oil by manual for safety concern.
5. Counting Unit could be change as follows, 0.1 sec, 1 sec, 1 min, 1 hour.
6. Three operation models: Intermittent, memory, Lubrication (Standard: Lubrication)
7. Three indication lights: Lubrication, Intermittent, unusual.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by shaded pole motor, the over temperature/ to load protector is attached.

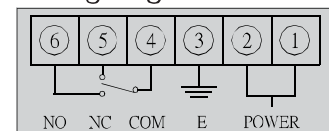
Setting value before shipment

	Lubricant display	Intermittent display
Value	15	30
Unit	Second	Min
Power on mode	Power on and start lubricant	
Voltage	AC220V	

Apply to:

1. Process cutting machine, injection molding machine.

Wiring diagram:



SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARTB	1-999 sec	1-999 min or 1-999 sec	100W	150cc/min	15kgf/cm ²	110V 220V	1.6A 0.9A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

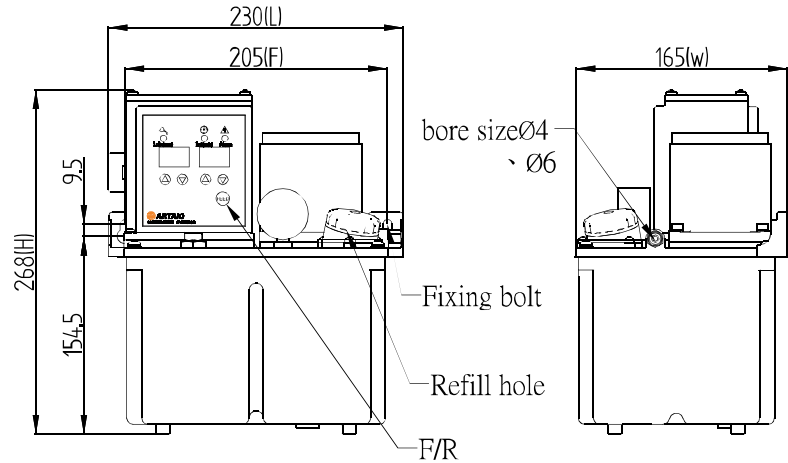
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARTB	02	Resin	177	208	129	267	2.6	○	○	○	Option
	03	Resin	205	230	165	268	3.8	○	○	○	
	04	Plate	250	310	185	273	5.6	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARTB	02	2	5	1	1
Resistance Type	02: 2 Liters	2: Shaded Pole Motor 40T	5: 110V 50/60HZ 6: 220V 50/60/HZ	1: Intermittent	1: Ø4
	03: 3 Liters			2: Lubricant	2: Ø6
	04: 4 Liters			3: Memory	

Resistance Type Digital Display Lubricator

ARTM



Features:

1. Lubrication and intermittent time are controlled by panel knob.
2. Lubrication time is less than 2 mins/ Intermittent time is more than 2 mins.
3. Feed key can force the lubricator to function and feed oil by manual for safety concern.
4. Counting Unit could be change as follows, 0.1 sec, 1 sec, 1 min, 1 hour.
5. Equipped external leakage valve device, user could adjust.
6. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Three indication lights: Lubrication, Intermittent, unusual.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by induction motor, the over temperature/load protector is attached to protect the motor.

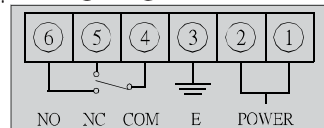
Setting value before shipment

	Lubricant display	Intermittent display
Value	15	30
Unit	Second	Min
Power on mode	Power on and start lubricant	
Voltage	AC220V	

Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.

Wiring diagram:



SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
ARTM	1-999 sec	1-999 min or 1-999 sec	25W	250cc/min	15kgf/cm ²	110V 220V	0.5A 0.3A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight(kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
ARTM	03	Resin	205	230	165	268	3.8	○	○	○	Option
	06	Plate	250	328	187	303	8	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
ARTM	03	5	5	1	1
Resistance Type	03:3 Liters 06:6 Liters	5:shaded pole motor 25W	5:110V 50/60HZ 6:220V 50/60/HZ	1:Intermittent 2:Lubricant 3: Memory	1:Ø4 2:Ø6

Piston Type

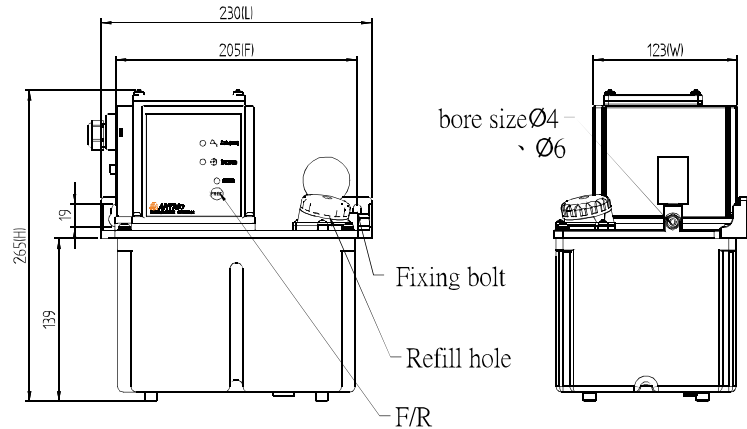


Features :

- ◆ Steady mechanical of motor , low working noise.
- ◆ Precise gear pump design, steady oil supply.
- ◆ Equipped protection of eldctric circuit control system.
- ◆ Equipped oil tank level sensor, detect the oil level.
- ◆ Equipped pressure gauge, user could easily check the pressure.
- ◆ Patent for oil tank anti-transform.

Piston Type PLC Lubricator

AVPB



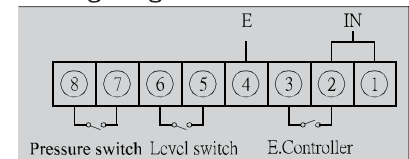
Features:

1. Lubrication and intermittent time are controlled by external machine.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Feed key can force the lubricator to function and feed oil by manual for safety concern.
4. Standard pressure setting 15kgf/cm².
5. Driven by shaded pole motor, the over temperature/ to load protector is attached.
6. Need to collocate with Piston type distributors.
7. Need to collocate with straight type connectors.

Apply to:

1. For those need the precise oil supply and more oil output volume machines.
2. Process cutting machine, injection molding machine.

Wiring diagram:



SPEC:

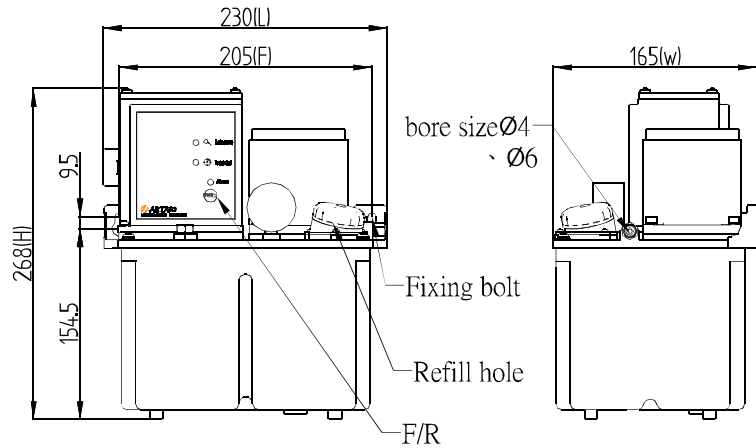
Model	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
AVPB	100W	150cc/min	15kgf/cm ²	110V	1.6A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C
				220V	0.9A			

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L (mm)	W (mm)	H (mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
AVPB	02	Resin	177	208	129	267	2.6	○	○	×	Option
	03	Resin	205	230	165	268	3.8	○	○	×	
	04	Plate	250	310	185	273	5.6	○	○	×	
	06	Plate	250	328	187	303	8	○	○	×	
	08	Plate	338	355	197	261	10	○	○	×	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
AVPB	02	2	5	1	1
Piston Type	02: 2 Liters 03: 3 Liters 04: 4 Liters 06: 6 Liters 08: 8 Liters	2: Shaded Pole Motor40T	5: 110V 50/60HZ 6: 220V 50/60/HZ	1: Intermittent 2: Lubricant 3: Memory	1: Ø4 2: Ø6

Piston Type PLC Lubricator AVPM



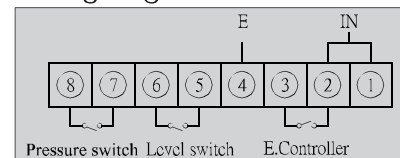
Features:

1. Lubrication and intermittent time are controlled by external machine.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Feed key can force the lubricator to function and feed oil by manual for safety concern.
4. Equipped external leakage valve device, user could adjust.
5. Driven by induction motor, the over temperature/ load protector is attached to protect the motor.
6. Steady motor operation, low vibration and noise.
7. Need to collocate with Piston type distributors.
8. Need to collocate with straight type connectors.

Apply to:

1. Auto lubricant system for machines.
2. For machine center, process machining, special purpose machine, etc.
3. For linear guide, hard guide, bearing, screw.

Wiring diagram:



SPEC:

Model	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
AVPM	25W	250cc/min	15kgf/cm ²	110	0.5A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C
				220	0.3A			

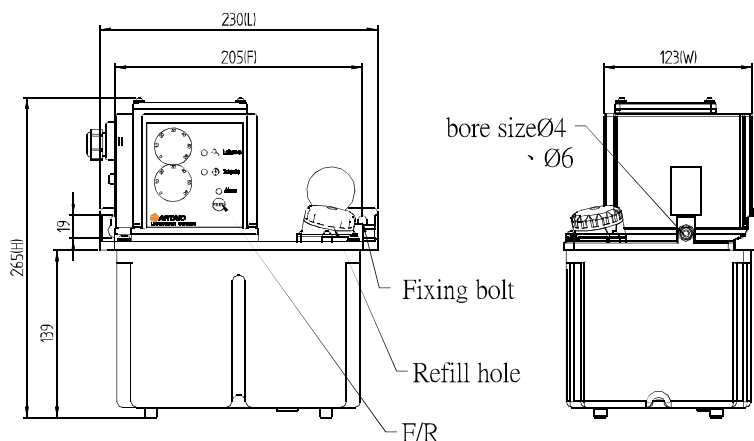
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L (mm)	W (mm)	H (mm)	Weight (kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
AVPM	03	Resin	205	230	165	268	3.8	○	○	×	Option
	04	Plate	250	310	185	273	5.6	○	○	×	
	06	Plate	250	328	187	303	8	○	○	×	
	08	Plate	338	355	197	261	10	○	○	×	

Order Code:

Model	Tank Volume	Motor Type	Voltage	Function	Bore Size
AVPM	03	5	5	1	1
Piston Type	03:3 Liters	5:shaded pole motor 25W	5:110V 50/60HZ 6:220V 50/60/HZ	1:Intermittent 2:Lubricant	1:Ø4 2:Ø6
	04:4 Liters				
	06:6 Liters				
	08:8 Liters				

Piston Type Dual Switch Lubricator

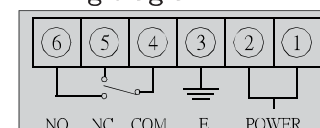
AVFB



Features:

1. Lubrication and intermittent time are controlled by panel switch.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Standard pressure setting 15kgf/cm².
4. Feed key can force the lubricator to function and feed oil by manual for safety concern.
5. Two operation modes as: The lubricator runs via lubrication time after the power is on or The lubricator runs via intermittent time after the power is on. (Standard: The lubricator runs via lubrication time after the power is on)
6. Three indication lights: Lubrication, Intermittent, unusual.
7. Panel switch setting: Intermittent time 3 sec to 60 mins.
Lubricant time 2 sec to 180 sec.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by shaded pole motor, the over temperature/ to load protector is attached.
10. Need to collocate with Piston type distributors.
11. Need to collocate with straight type connectors.

Wiring diagram:



Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.

SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage(V)	Current(A)	Frequency (Hz)	Bore size	Oil viscosity
AVFB	2-180 sec	30 sec-180 min	100W	150cc/min	15kgf/cm ²	110V 220V	1.6A 0.9A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

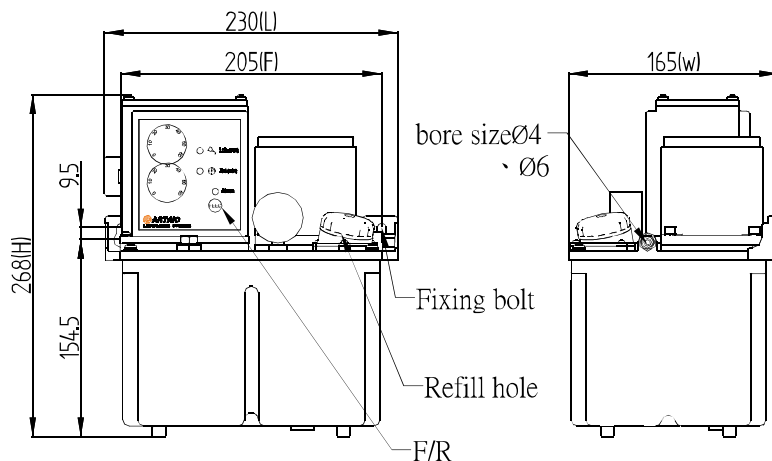
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight(kg)	Level Switch	Pressure Gauge	Buzzer
AVFB	02	Resin	177	208	129	267	2.6	○	○	○
	03	Resin	205	230	165	268	3.8	○	○	○

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
AVFB	02	2	5	1	1
Piston Type	02: 2 Liters 03: 3 Liters	2: Shaded Pole Motor 40T	5: 110V 50/60HZ 6: 220V 50/60/HZ	1: Intermittent 2: Lubricant	1: Ø4 2: Ø6

Piston Type Dual Switch Lubricator

AVFM



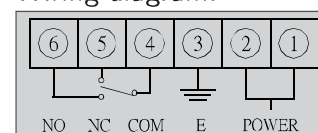
Features:

1. Lubrication and intermittent time are controlled by panel switch.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Feed key can force the lubricator to function and feed oil by manual for safety concern.
4. Equipped external leakage valve device, user could adjust.
5. Two operation modes as: The lubricator runs via lubrication time after the power is on or The lubricator runs via intermittent time after the power is on. (Standard: The lubricator runs via lubrication time after the power is on)
6. Three indication lights: Lubrication, Intermittent, unusual.
7. Panel switch setting: Intermittent time 3 sec to 60 mins.
Lubricant time 2 sec to 180 sec.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by induction motor, the over temperature/ load protector is attached to protect the motor.
10. Need to collocate with Piston type distributors.
11. Need to collocate with straight type connectors.

Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.

Wiring diagram:



SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
AVFM	2-180 sec	30 sec-180 min	25W	250cc/min	15kgf/cm ²	110V 220V	0.5A 0.3A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

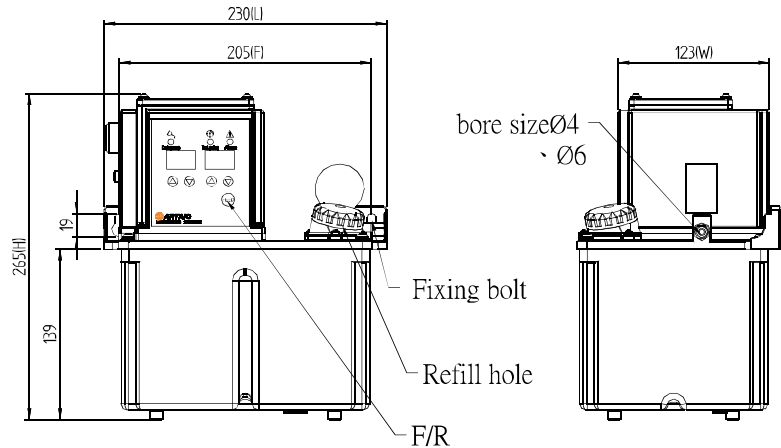
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight(kg)	Level Switch	Pressure Gauge	Buzzer
AVFM	03	Resin	205	230	165	268	3.8	○	○	○

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
AVFM	03	5	5	1	1
Piston Type	03:3 Liters	5:shaded pole motor 25W	5:110V 50/60HZ 6:220V 50/60/HZ	1:Intermittent 2:Lubricant	1:Ø4 2:Ø6

Piston Type Digital Display Lubricator

AVTB



Features:

1. Lubrication and intermittent time are controlled by panel switch.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Standard pressure setting 15kgf/cm².
4. Feed key can force the lubricator to function and feed oil by manual for safety concern.
5. Counting Unit could be change as follows, 0.1 sec, 1 sec, 1 min, 1 hour.
6. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Three indication lights: Lubrication, Intermittent, unusual.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by shaded pole motor, the over temperature/ to load protector is attached.
10. Need to collocate with Piston type distributors.
11. Need to collocate with straight type connectors.

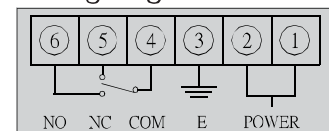
Apply to:

1. For those need the precise oil supply and more output volume machines.
2. Process cutting machine, injection molding machine.

Setting value before shipment

	Lubricant display	Intermittent display
Value	15	30
Unit	Second	Min
Power on mode	Power on and start lubricant	
Voltage	AC220V	

Wiring diagram:



SPEC:

Model	LUB. Time	INT. TIME	Power (W)	Max. output volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
AVTB	1-999 sec	1-999min or 1-999sec	100W	150cc/min	15kgf/cm ²	110V 220V	1.6A 0.9A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

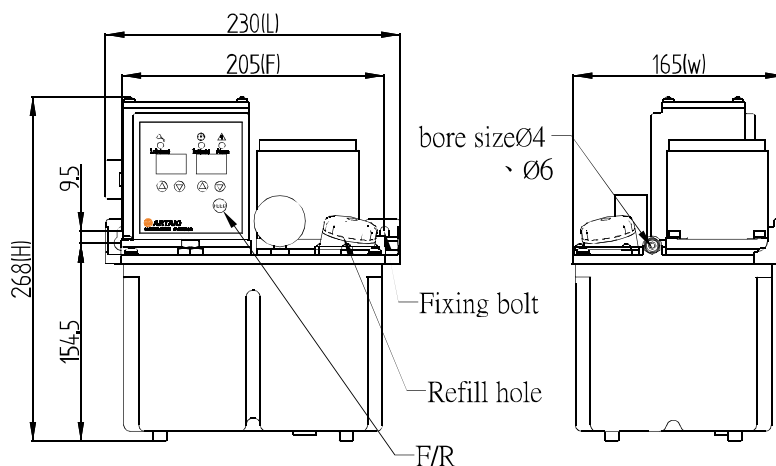
Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight(kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
AVTB	02	Resin	177	208	129	267	2.6	○	○	○	Option
	03	Resin	205	230	165	268	3.8	○	○	○	
	04	Plate	250	310	185	273	5.6	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
AVTB	2	2	5	1	1
Piston Type	02: 2 Liters	2: Shaded Pole Motor40T	5: 110V 50/60HZ	1: Intermittent	1: Ø4
	03: 3 Liters		6: 220V 50/60/HZ	2: Lubricant	2: Ø6
	04: 4 Liters			3: Memory	

Piston Type Digital Display Lubricator

AVTM



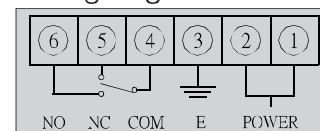
Features:

1. Lubrication and intermittent time are controlled by panel switch.
2. Pressure release design, equipped (regular volume supply). (Piston type distributor, same output flow volume)
3. Feed key can force the lubricator to function and feed oil by manual for safety concern.
4. Equipped external leakage valve device, user could adjust.
5. Counting Unit could be change as follows, 0.1 sec, 1 sec, 1 min, 1 hour.
6. Three operation models: Intermittent, memory, Lubrication (Standard: lubrication)
7. Three indication lights: Lubrication, Intermittent, unusual.
8. Detect unusual: Regular, NC connect with COM.
Unusual, NO connect with COM.
contact voltage <250V, AC/DC current 2A.
9. Driven by induction motor, the over temperature/load protector is attached to protect the motor.
10. Need to collocate with Piston type distributors.
11. Need to collocate with straight type connectors.

Setting value before shipment

	Lubricant display	Intermittent display
Value	15	30
Unit	Second	Min
Power on mode	Power on and start lubricant	
Voltage	AC220V	

Wiring diagram:



Apply to:

1. For those need the precise oil supply and more oil output volume machines.
2. Process cutting machine, injection molding machine.

SPEC:

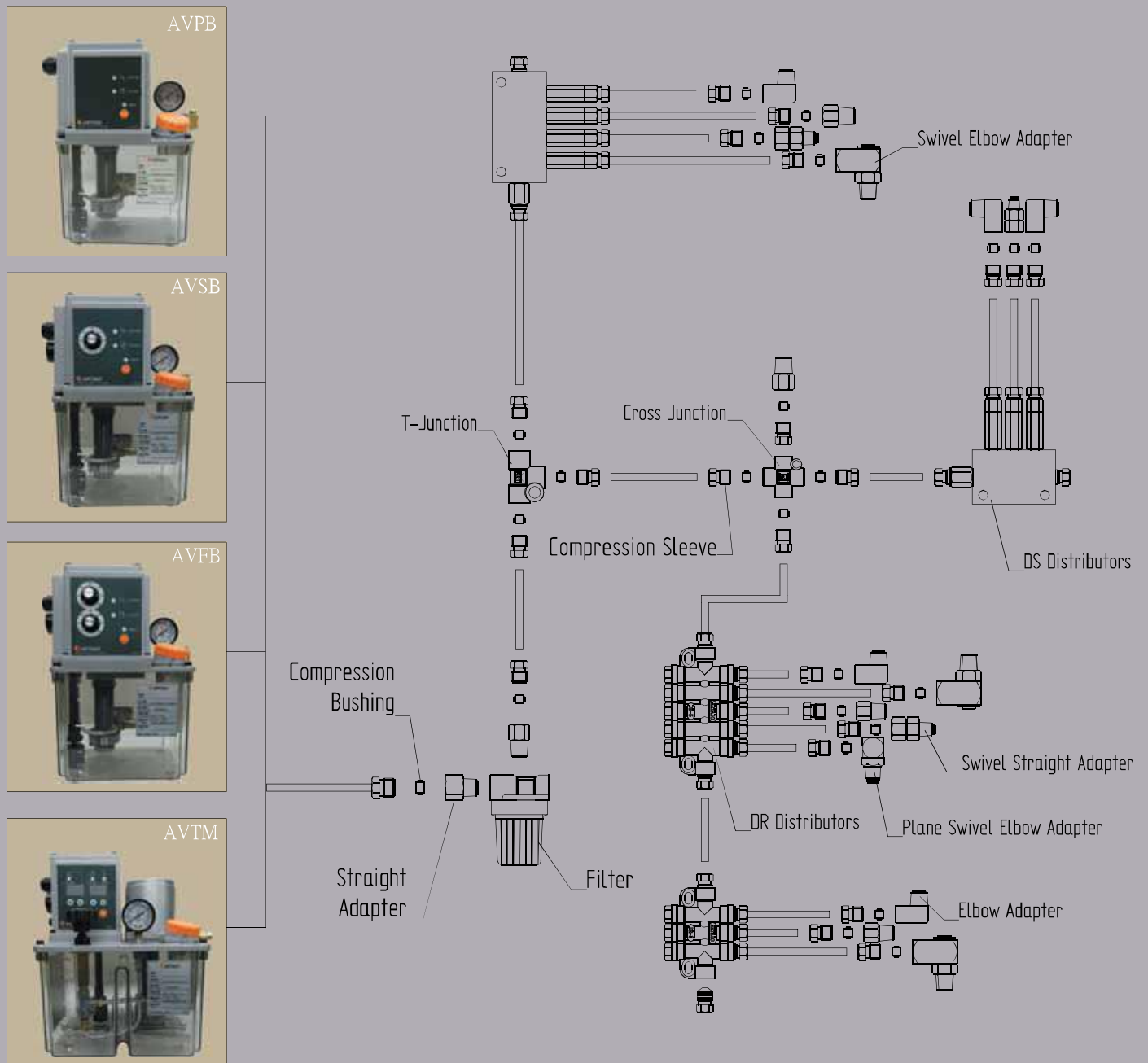
Model	LUB. Time	INT. TIME	Power (W)	Max. Output Volume	Max. pressure	Voltage (V)	Current (A)	Frequency (Hz)	Bore size	Oil viscosity
AVTM	1-999 sec	1-999sec or 1-999min	25W	250cc/min	15kgf/cm ²	110V 220V	0.5A 0.3A	50/60Hz	Ø4 or Ø6	32~68cSt/40°C

Model	Tank Volume	Tank material	Fixing bolt distance F(mm)	L(mm)	W(mm)	H(mm)	Weight(kg)	Level Switch	Pressure Gauge	Buzzer	Pressure Switch
AVTM	03	Resin	205	230	165	268	3.8	○	○	○	Option
	04	Plate	250	310	185	273	5.6	○	○	○	
	06	Plate	250	328	187	303	8	○	○	○	
	08	Plate	338	355	197	261	10	○	○	○	

Order Code:

Model	Tank Volume	Motor type	Voltage	Function	bore size
AVTM	03	5	5	1	1
Piston Type	03: 3 Liters	5: shaded pole motor 25W	5: 110V 50/60HZ 6: 220V 50/60/HZ	1: Intermittent 2: Lubricant 3: Memory	1: Ø4 2: Ø6
	04: 4 Liters				
	06: 6 Liters				
	08: 8 Liters				

PISTON LUBRICATION SYSTEM DIAGRAM



Manual Type

P.19



AHB-6

P.19



AHB-8

P.19

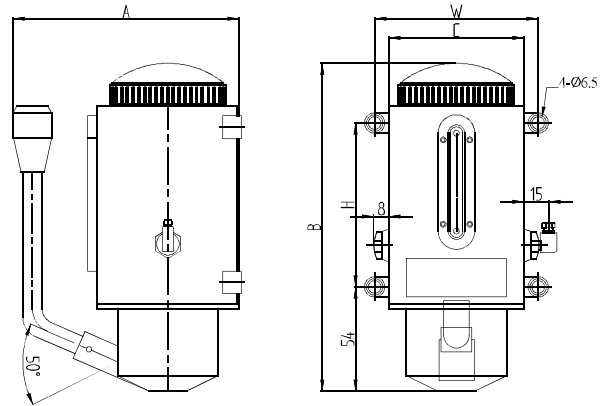


AHC-8

Features :

- ◆ Manual operation, easy to install and easy to use.
- ◆ Oil output direction could be chosen.
- ◆ Provide the oil mirror, convenient for check the oil level.
- ◆ Equipped with check valve, prevent the oil reverse.
- ◆ Suggestion oil type: 32~68cSt.

Manual Type AHB



Type	Oil Volume	Capacity	Outlet	Pressure	Bore size	Output holes	Fixed hole	A	B	C
AHB-6	350 cc	250 cc	8 cc	15kg/cm ²	Ø4, Ø6	Both size	H85xW85	128	170	70
AHB-8	600 cc	450 cc			Ø4, Ø6		H110xW110	145	195	85

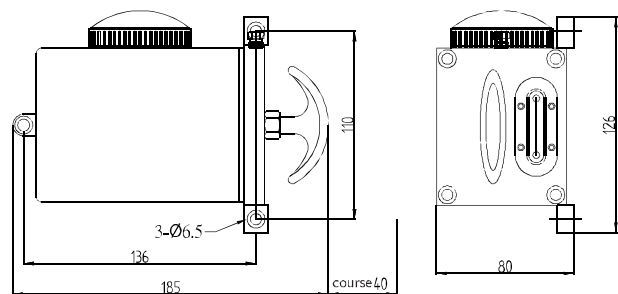
Features:

1. Use hand bar to control the output volume.
2. Include check valves to prevent the reverse flow.
3. Compact size for installation.
4. The output direction could be choose left, right or both size. (Before order)
5. Bore size can choose $\phi 4$, $\phi 6$.

Apply to:

1. The system is recommended to applied to easier machinery with the few lubricant oil requirement.
2. Unfixed lubricant machinery.
3. For linear guide, hard guide, bearing, screw.

Pull Type AHC



Type	Oil Volume	Capacity	Outlet	Pressure	Bore size	Output holes
AHC-8	600 cc	500 cc	8 cc	3kg/cm ²	Ø4	Up/Down

Features:

1. Use hand bar to control the output volume.
2. Include check valves to prevent the reverse flow.
3. Easy installation and easy for maintenance.

Apply to:

1. The system is recommended to applied to easier machinery with the few lubricant oil requirement.
2. Unfixed lubricant machinery.
3. For linear guide, hard guide, bearing, screw.

Circulation Type



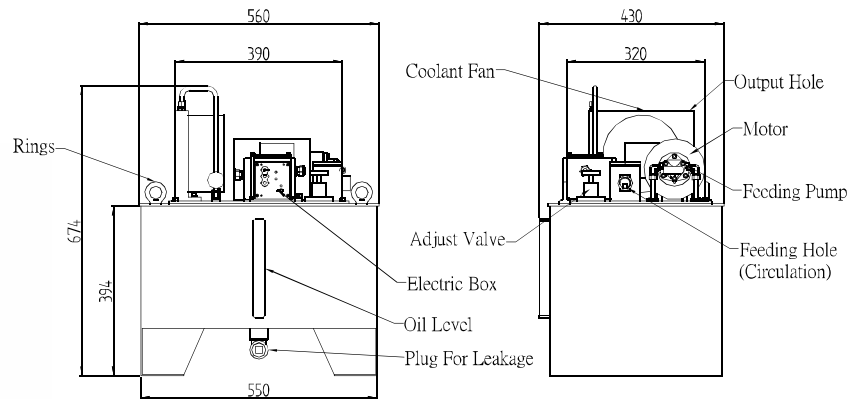
P.21

AWPA

Features :

- ◆ Machine controlled by PLC, could select the lubricant and intermittent time.
- ◆ Equipped powerful filtration magnetic stone, nice filter function.
- ◆ With pressure adjust function, could adjust the correct pressure.
- ◆ Provide level sensor, with output signal.
- ◆ Equipped pressure gauge, user could check the current pressure.
- ◆ Suggestion oil: 32~68cSt.

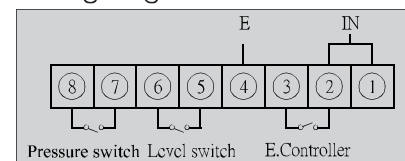
Coolant Circulation PLC Type Lubricator AWPA



Features:

1. Equipped with coolant recycle device: provide coolant and de-burr function.
2. External oil supply system, continuous or intermittent oil supply.
3. Equipped with pressure adjust device, user could adjust the pressure by themselves.
4. With low oil level detector, low oil level alarm (Connector)
5. Equipped pressure gauge, user could check the current pressure.
6. Powerful magnetic filter net, keep the circulation oil clean.
7. The oil tank can be custom-made.

Wiring diagram:



Apply to:

1. CNC lathes machine, gear box.
2. The machine needs more lubricant oil.

SPEC:

Tank size (L)	Output volume (L/min)	Coolant Fan	Max. Output pressure(kg/cm ²)	Bore Size (Ø)	Voltage	Total power (W)	Weight (Kg)	Suitable viscosity
20L/40L	50HZ/1.9L	220V single phase	5kgf/cm ²	Ø6.Ø8.Ø10	220V/380V (three phase)	250	52± 1%	>30Cst<250Cst
60L/80L	60HL/2-3L	380V single phase						

Order Code:

Model	Tank Size	Motor SPEC	Voltage	Function	Feed pump model
AWPA	020	2	5	1	1
Circulation	020:20 Liter	2: Connecting motor-iron case	5:110V 50/60HZ	1:Intermittent	1:Feed pump TOP11A
	040:40Liter	5:Connecting moto case	6:220V 50/60/HZ	2:Lubricant	2:Feed pump TOP12A
	060:60Liter	7: Induction motor	A:220V/380V	3:Memory	3:Feed pump TOP13A
	080:80Liter				

Distributor Type

P.23



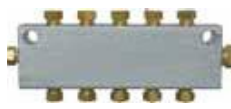
B032/DA

P.24



DC

P.24



DH

P.25



DR

P.25



DS

P.25

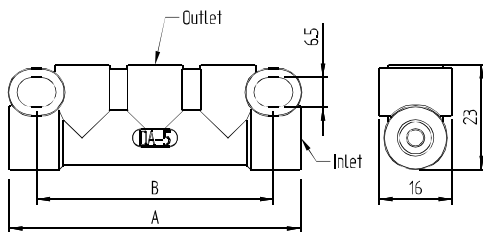


P37

Standard Distributor B032



B032

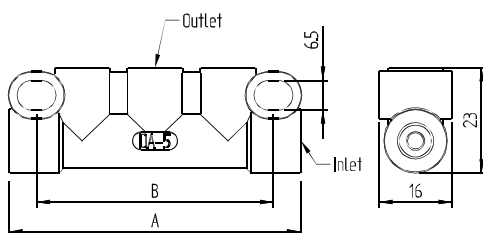


Ø4 model	Number of outlets	Bore size	A (mm)	B (mm)	Ø6 model	Bore size
B032101	4	Ø4xM8	48	36	B032109	Ø6xM10
B032102	5		64	52	B032110	
B032103	6		80	68	B032111	
B032104	7		96	84	B032112	
B032105	8		112	100	B032113	
B032106	9		128	116	B032114	
B032107	10		144	132	B032115	
B032108	12		176	164	B032116	

Standard Distributor DA



DA

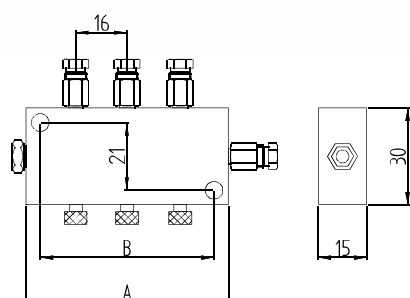


Number of outlets	Inlet bore size	Bore size	A (mm)	B (mm)
DA04	04	04		
DA04 : 4 of outlets	04:Ø4 06:Ø6	04:Ø4 06:Ø6	48	36
DA05 : 5 of outlets			64	52
DA06 : 6 of outlets			80	68
DA07 : 7 of outlets			96	84
DA08 : 8 of outlets			112	100
DA09 : 9 of outlets			128	116
DA10 : 10 of outlets			144	132
DA12 : 12 of outlets			176	164

Standard Distributor DC



DC

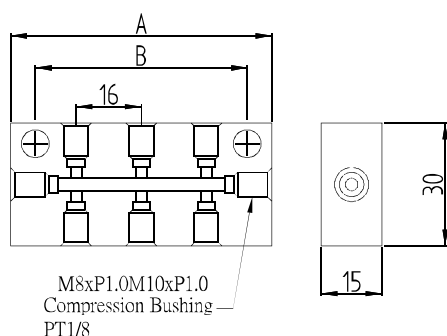


model	Number of outlets	Inlet bore size	Number of outlets	A(mm)	B(mm)
DC02	2	Ø4 or Ø6	Ø4 or Ø6	48	39
DC03	3			63	54
DC04	4			78	69
DC05	5			93	84
DC06	6			108	99
DC07	7			123	114
DC08	8			138	129
DC09	9			153	144
DC10	10			168	159
DC12	12			198	189

Standard Distributor DH



DH

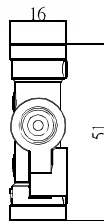
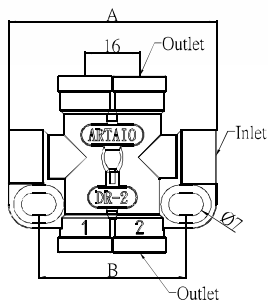


model	Number of outlets	Inlet bore size	Bore size	A(mm)	B(mm)
DH06	6	Ø4 or Ø6	Ø4xM8 Ø6xM10	48	36
DH08	8			64	52
DH10	10			79	67
DH12	12			96	84
DH14	14			110	98
DH16	16			127	115
DH18	18			140	128
DH20	20			152	140

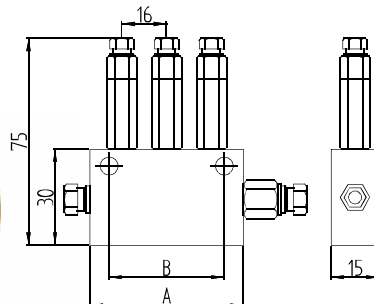
Piston Type Distributor DR



model	Number of outlets	Inlet bore size	Number of outlets	A (mm)	B (mm)	C (mm)	output volume
DR2	2	standard Ø4 or Ø6	Ø4 xM8	60	42.5	15	0.1
DR3	3			75	57.5	30	0.2
DR4	4			90	72.5	45	0.3
DR5	5			105	87.5	60	0.4
DR6	6			120	102.5	75	0.5

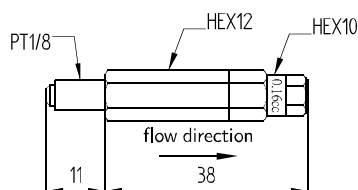


Piston Type Distributor DS



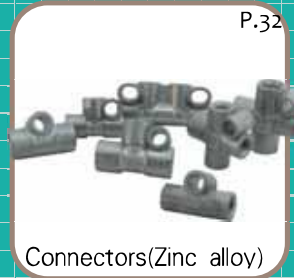
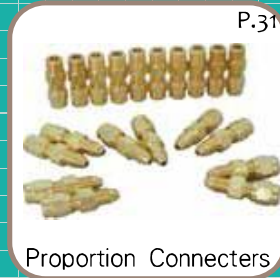
model	Number of outlets	A(mm)	B(mm)	output volume
DS2	2	48	36	0.03 0.06 0.1 0.13 0.16
DS3	3	64	52	
DS4	4	79	67	
DS5	5	96	84	
DS6	6	110	98	
DS7	7	127	115	
DS8	8	140	128	
DS9	9	152	140	
DS10	10	175	163	

Piston Type Distributor P37



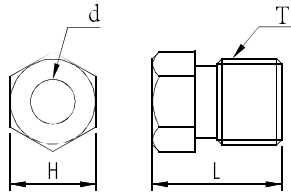
model	mark	output volume
P370301	003	0.03 cc
P370601	006	0.06 cc
P371001	010	0.1 cc
P371301	013	0.13 cc
P371601	016	0.16 cc
P373001	30	0.3 cc

Various Connector Type



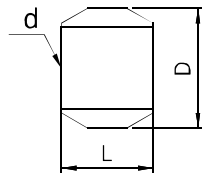
Copper Connectors

P



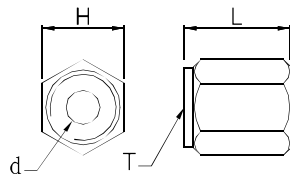
Model	Bore	d	L	T	H
P0104	Ø4	Ø4.1	12	M8xP1.0	8
P0106	Ø6	Ø6.1	12.5	M10xP1.0	10
P0108	Ø8	Ø8.1	14	M14xP1.5	14
P0110	Ø10	Ø10.1	15	M16xP1.5	16

Compression Bushing



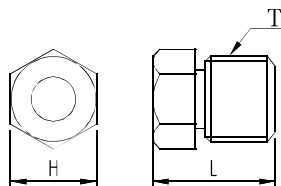
Model	Bore	d	D	L
P0204	Ø4	Ø4.1	Ø6	4.6
P0206	Ø6	Ø6.1	Ø8	4.6
P0208	Ø8	Ø8.1	Ø11	7
P0210	Ø10	Ø10.1	Ø13.5	8

Compression Sleeve



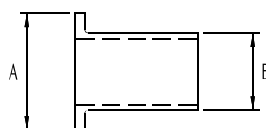
Model	T	d	L	H
P030408	M8xP1.0	Ø4.2	12	10

Compression Nut



Model	Bore	T	L	H
P040408	Ø4	M8xP1.0	15	8
P040610	Ø6	M10xP1.0	15	10

Connector insert

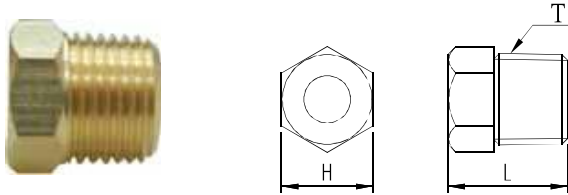


Model	Bore	A	B
P0504	Ø4	Ø10	Ø1.95
P0506	Ø6	Ø12	Ø3.95

Connector Insert

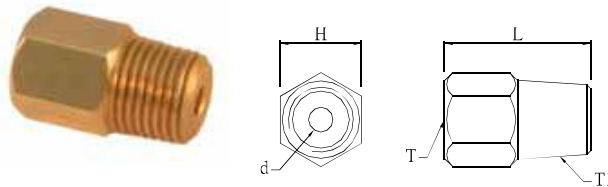
Copper Connectors

P



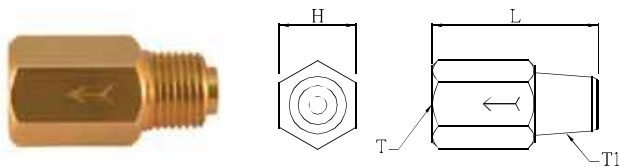
Model	T
P0601	PT1/8
P060408	M8xP1.0

Outer Hex Plug



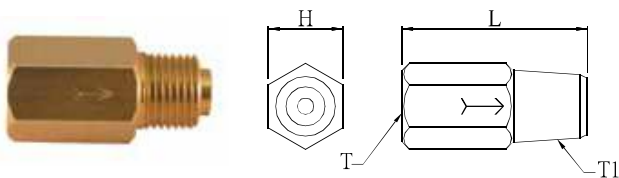
Model	Bore	d	L	H	T	T1
P070801	Ø4	Ø3	18	10	M8xP1.0	PT1/8
P070802	Ø4	Ø3	18	14	M8xP1.0	PT1/4
P070803	Ø4	Ø3	18	17	M8xP1.0	PT3/8
P071001	Ø6	Ø4	18	12	M10xP1.0	PT1/8
P071002	Ø6	Ø5	18	14	M10xP1.0	PT1/4
P071003	Ø6	Ø5	18	17	M10xP1.0	PT3/8
P071401	Ø8	Ø5	26	17	M14xP1.5	PT1/8
P071402	Ø8	Ø6	26	17	M14xP1.5	PT1/4
P071403	Ø8	Ø7	26	17	M14xP1.5	PT3/8
P071602	Ø10	Ø7	30	19	M16xP1.5	PT1/4
P071603	Ø10	Ø9	30	19	M16xP1.5	PT3/8

Straight Adapter



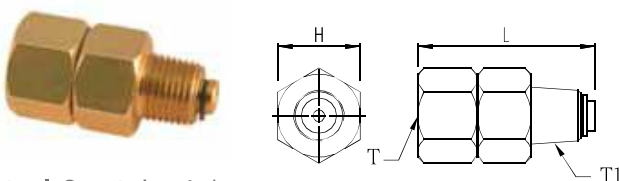
Model	Bore	d	L	H	T	T1
P080801	Ø4	Ø4.9	25	10	M8xP1.0	PT1/8
P081001	Ø6	Ø4.9	26	12	M10xP1.0	PT1/8

One-Way Straight Adapter



Model	Bore	d	L	H	T	T1
P090801	Ø4	Ø4.9	25	10	M8xP1.0	PT1/8
P091001	Ø6	Ø4.9	26	12	M10xP1.0	PT1/8

Reverse-Flow Straight Adapter

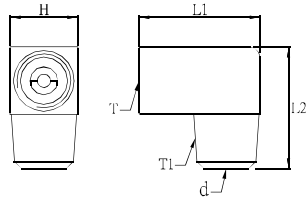


Model	T	T1	L	H
P130801	M8xP1.0	PT1/8	30	14
P130101	PT1/8	PT1/8	30	14

Swivel Straight Adapter

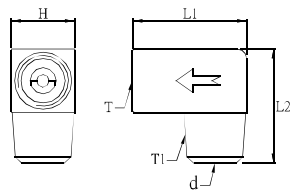
Copper Connectors

P



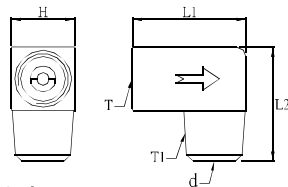
Elbow Adapter

Model	Bore	d	L1	L2	H	T	T1
P100806	Ø4	Ø2	18	18	10	M8xP1.0	M6xP1.0
P100808	Ø4	Ø3	18	18	10	M8xP1.0	M8xP1.0
P100801	Ø4	Ø4	18	18	10	M8xP1.0	PT1/8
P100802	Ø4	Ø5	20	21	14	M8xP1.0	PT1/4
P101008	Ø6	Ø4	20	21	12	M10xP1.0	M8xP1.0
P101001	Ø6	Ø4	20	20	12	M10xP1.0	PT1/8
P101002	Ø6	Ø5	20	21	14	M10xP1.0	PT1/4
P101401	Ø8	Ø4	26	29	17	M14xP1.5	PT1/8
P101402	Ø8	Ø6	26	29	17	M14xP1.5	PT1/4
P101403	Ø8	Ø8	26	29	17	M14xP1.5	PT3/8
P101602	Ø10	Ø7	29	31	19	M16xP1.5	PT1/4
P101603	Ø10	Ø8	29	31	19	M16xP1.5	PT3/8



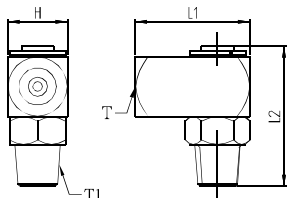
One-Way Elbow Adapter

Model	Bore	d	L1	L2	H	T	T1
P110801	Ø4	Ø4.9	18	19.5	10	M8xP1.0	PT1/8
P111001	Ø6	Ø4.9	20	21.5	12	M10xP1.0	PT1/8



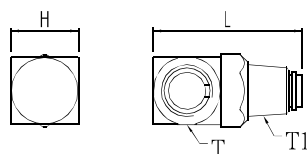
Reverse-Flow Straight Adapter

Model	Bore	d	L1	L2	H	T	T1
P120801	Ø4	Ø4.9	18	19.5	10	M8xP1.0	PT1/8
P121001	Ø6	Ø4.9	20	21.5	12	M10xP1.0	PT1/8



Swivel Straight Adapter

Model	T	T1	L1	L2	H
P140801	M8xP1.0	PT1/8	24.5	30	12.7
P140101	PT1/8	PT1/8	24.5	30	12.7

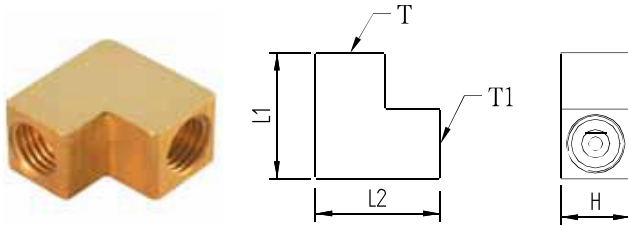


Plane Swivel Elbow Adapter

Model	T	T1	L	H
P16S101	PS1/8	PT1/8	28	12.7

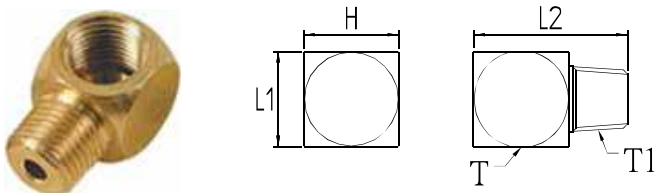
Copper Connectors

P



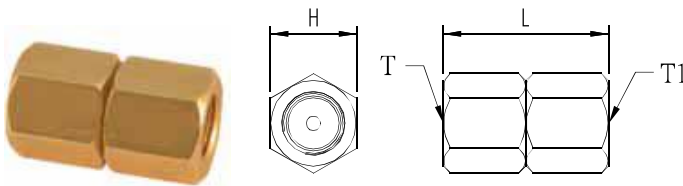
Model	Bore	L1	L2	T	T1	H
P220808	Ø4	18	18	M8xP1.0	M8xP1.0	10
P221414	Ø8	29	31	M14xP1.5	M14xP1.5	19
P2216S2	Ø10	29	31	M16xP1.5	PS1/4	19
P22S1S1		20	22	PS1/8	PS1/8	14
P22S2S2		26	29	PS1/4	PS1/4	17

Two-Inner Straight Adapter



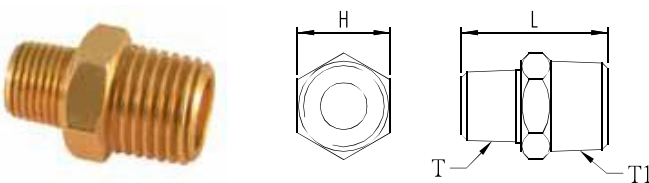
Model	L1	L2	T	T1	H
P170806	12	20	M8xP1.0	M6xP1.0	12
P170808	12.7	21	M8xP1.0	M8xP1.0	12.7
P170801	12.7	21	M8xP1.0	PT1/8	12.7
P170802	12.7	23	M8xP1.0	PT1/4	12.7
P171001	12.7	21	M10xP1.0	PT1/8	12.7
P170106	12	20	PT1/8	M6xP1.0	12
P170108	12.7	20	PT1/8	M8xP1.0	12
P170101	12.7	21	PT1/8	PT1/8	12.7
P170102	12.7	23	PT1/8	PT1/4	12.7

Plane Straight Adapter



Model	Bore	H	L	T	T1
P180808	Ø4	10	23	M8xP1.0	M8xP1.0
P181010	Ø6	12	25	M10xP1.0	M10xP1.0
P181414	Ø8	17	33	M14xP1.5	M14xP1.5
P181616	Ø10	19	36	M16xP1.5	M16xP1.5
P180801	Ø4	12	23	M8xP1.0	PT1/8
P181001	Ø6	12	25	M10xP1.0	PT1/8
P181402	Ø8	17	33	M14xP1.5	PT1/4
P181602	Ø10	19	36	M16xP1.5	PT1/4

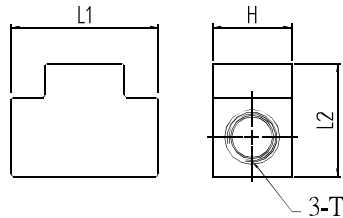
Inner Connector



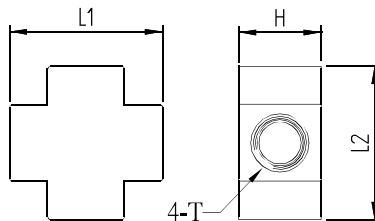
Model	H	L	T	T1
P190808	10	23	M8xP1.0	M8xP1.0
P191010	12	25	M10xP1.0	M10xP1.0
P190101	10	24.5	PT1/8	PT1/8
P190102	14	27	PT1/8	PT1/4
P190202	14	30	PT1/4	PT1/4
P190302	17	30	PT3/8	PT1/4

Outer Connector

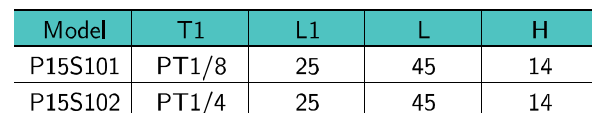
100



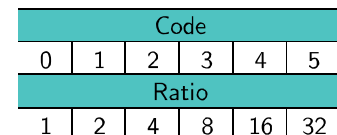
3-Way Connector



4-Way Connector

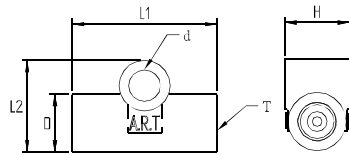


Brass Swivel Fitting



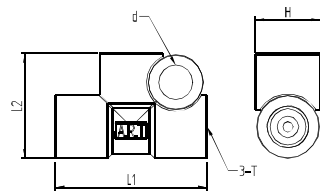
Proportion Connecters

Zinc Alloy P



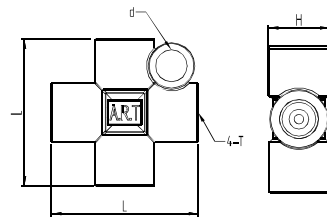
Model	Bore	d	D	L1	L2	T	H
P260808	Ø4	Ø6.5	Ø13	30	19	M8xP1.0	13.5
P260810	Ø6	Ø6.5	Ø13	30	19	M10xP1.0	13.5
P261010	Ø6	Ø6.5	Ø13	30	19	M10xP1.0	13.5

Elbow Adapter



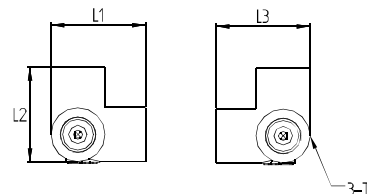
Model	Bore	L1	L2	H	d	T
P3008	Ø4	29	19.5	12	Ø6.2	M8xP1.0
P3010	Ø6	34	24	15		M10xP1.0
P3014	Ø8	42	31	19	Ø6.6	M14xP1.5
P3016	Ø10	51	37	24		M16xP1.5

One-Way Elbow Adapter



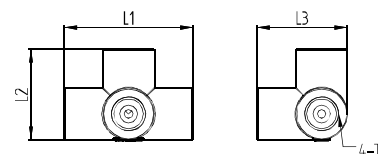
Model	Bore	L	H	d	T
P3108	Ø4	30	11	Ø5.3	M8xP1.0
P3110	Ø6	34	15.5	Ø5.8	M10xP1.0
P3114	Ø8	42	22	Ø6.8	M14xP1.5

One-Way Elbow Adapter



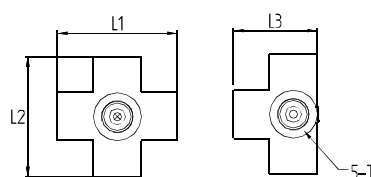
Model	Outlets	Bore	L1	L2	L3	T
P2708	3	Ø4	21	21	21	M8xP1.0

Reverse-Flow Straight Adapter



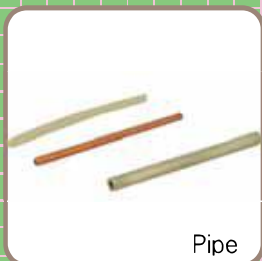
Model	Outlets	Bore	L1	L2	L3	T
P2808	4	Ø4	30	21	21	M8xP1.0

Swivel Straight Adapter



Model	Outlets	Bore	L1	L2	L3	T
P2908	5	Ø4	30	30	21	M8xP1.0

Plane Swivel Elbow Adapter



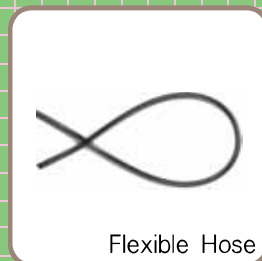
Pipe



Pressure Gauge



Pipe Clip



Flexible Hose



straight cooling spare



Cooling spare



Valve



Adjustable valve



Oil filter



Oil filter



Oil filter



Oil filter



Oil level



Oil level



Oil level



Oil filter

Accessories



Motor



Motor



Pump



Pump



Motor



Water Box



Pump



Pump



Cooling fan



Pump

Custom made is welcome for every type

Service once friends forever

Pipe NC/NA/NR/NL



Model	Bore size	Length
NC	4	50
NC: Copper pipe	4:Ø4	50:50 meter per roll
NA: Aluminum pipe	6:Ø6	100:100 meter per roll
NR: Plastic pipe	8:Ø8	
NL: Nylon pipe		

High Pressure Hose K03

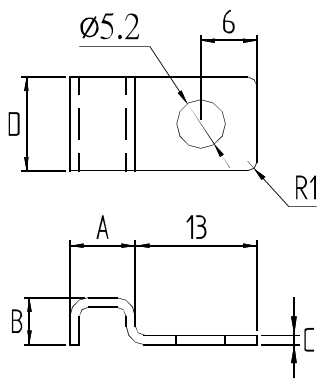


Type	Pipe diameter	Inner hole	Length(m/m)
K03040403	Ø4	2	300
K03040410	Ø4	2	1000
K03040415	Ø4	2	1500
K03040620	Ø6	3	2000
K03040630	Ø6	3	3000

Type	Pipe diameter	Inner hole	Length(m/m)
K03050405	Ø4	2	500
K03050412	Ø4	2	1200
K03050425	Ø4	2	2500
K03050603	Ø6	3	300
K03050615	Ø6	3	1500

Custom made is welcome for every type

Pipe Clip B050



Model	Fixed holes	Bore size	A	B	C	D
B0501104	One side clip	Ø4	7	5	1	10
B0501106		Ø6	10	7	1	12
B0501108		Ø8	11	9	1.2	12
B0501110		Ø10	12	11	1.4	14
B0501112		Ø12	14	13	1.4	16
B0501204	Double side clip	Ø4	11	5	1	10
B0501206		Ø6	15	7	1	12
B0501208		Ø8	20	9	1.2	12
B0501304	Three holes	Ø4	14	5	1	10
B0501306		Ø6	20	7	1	12
B0501404	Four holes	Ø4	18	5	1	10

Oil Level FA



Model	Type	Fixed distance
FA	A	200
Oil level	A:ball cock (acrylic) B:acrylic level display C:Plastic material with iron case D:Plastic material with aluminum	200mm

Pressure Gauge T



Model	Type	Specification
T	WA	007
Pressure Gauge	WA:Horizontal pressure gauge WL:Horizontal oil gauge WS:Vertical pressure gauge	007:7kgf/cm ² 014:14kgf/cm ² 015:15kgf/cm ² 035:35kgf/cm ² 040:40kgf/cm ² 070:70kgf/cm ²

Cooling Fan FB



Model	Exit/ Enter	Fan numbers	Fan size	Voltage
FB	01	12	06	01
Cooling fan	01:1/8" 02:1/4" 03:3/8" 04:1/2"	12:12 15:15	06:6" 08:8" 10:10" 12:12"	1:110V 2:220V 3:380V

Oil Filter MF



Model	Bore size(PT)	D(mm)	L(mm)	H(mm)	B(mm)	Precision
MF-02	1/4"	58	96	90	22	100
MF-03	3/8"	58	60	52	22	100
MF-03	3/8"	58	96	90	22	100

Coolant Spear APA-21



Straight type air-cool Gun

			Air in Temp	
Compressed air	Total air volume 100%	Cool air volume 35%~100%	Temp. (Volume at 35%)	Air& temp. comparison
4kgf/cm ²	180L/min	65~180L/min	-24.1°C	39.1°C
5kgf/cm ²	210L/min	75~210L/min	-28.2°C	43.2°C
6kgf/cm ²	240L/min	85~240L/min	-32.3°C	47.3°C
7kgf/cm ²	270L/min	95~270L/min	-36.4°C	51.4°C
8kgf/cm ²	300L/min	105~300L/min	-40.5°C	55.5°C

Length	Height	Weight
7cm	4cm	800g

1. Driven by compressed air, could supply the coolant air and oil mist(option) no need to use electricity and freon.
2. Quickly provide the low temperature air, no consumption parts, long usage time, low cost.
3. The air volume and temperature can be adjust.
4. Include the magnetic base, easy to install.

Oil Mist Coolant Spear APA-11MS



Patent for oil supply device combine with magnetic base, could easy to install to any position.

Length	Height	Weight	Oil viscosity
29cm	6cm	1kg	under 300 cst

Straight type oil&air spray system

1. Driven by compressed air, could supply the coolant air and oil mist(option) no need to use electricity and freon.
2. No consumption parts, long life time usage, and low cost.
3. Can easily adjust the cool air temperature, air volume to reach the best situation.
4. With the dripping window, could easily adjust the oil dripping frequency.
5. Equipped the nice cool air host, reduce influence for the environment temperature, and prevent the cool air host get frozen.
6. Effective for cooling the router bits temperature, extend the life time for router bits, or could prevent the bits became solid, bits broken and surface damage.
7. Could neutralize the cutting partical, prevent the tooling transform and influence the tooling precision.
8. Could decrease the friction, extend the router bits life time.
9. Include the fixing magnetic base, easy to install.

Feed Pump TOP/TRA

Model	Outlet L/min		Max. pressure kgf/cm ²	Max. revolution rpm	Weight kg
	1500rpm	1800rpm			
TOP-11A	2.2	2.7	5.0	2000	0.55
TOP-12A	3.7	4.5	5.0	1800	0.6
TOP-13A	6.7	7.5	5.0	1800	0.6

Model	Outlet L/min		Max. pressure Kgf/cm ²	Max. revolution rpm	Weight kg
	1500rpm	1800rpm			
TRA-2FS	2.2	2.7	5.0	2000	0.55
TRA-3FS	3.7	4.5	5.0	2000	0.6



TOP Adjusting Valve B037

Model	Pressure Range
B073	0~5 kgf/cm ²



Filterable Cooling Pump ASP

CONSTRUCTION & FEATURES

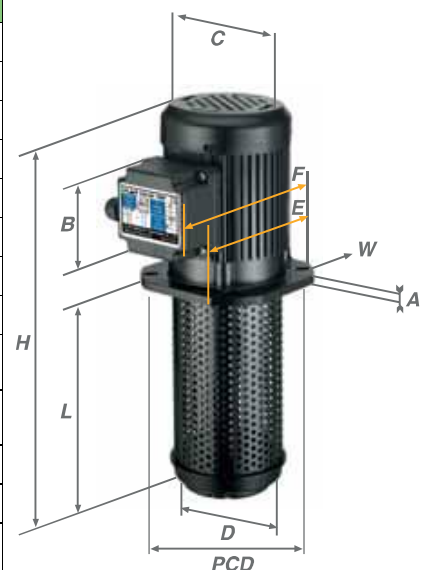
- Water outlet capacity is 25% higher than that of competitive models.
- The entire product series is fully certified by ISO-9001 and European CE.
- Specially designed wide range of voltage allows one pump to accommodate various voltages and frequencies. This not only enables the pump to resist higher instant voltage fluctuations during running, but also simplifies inventory models for saving costs.
- The series employs special heat dissipation blades, featuring no wind tunnel effect and minimum turbulence. In addition, the pump is designed with tunnel type heat dissipation to ensure uniform heat dissipation and fully control temperature growth.
- Filter screens can be selected as desired to meet specific requirements, which effectively filtrate impurities. The filter screen prevents oil nozzle from choking by impurities, which may affect cooling performance.
- Water tube is manufactured by stainless steel for maximum durability and long service life without rusting.
- Slot type mounting holes are suitable for various sizes of mounting holes, facilitating maintenance and installation.
- Separated wiring provides safety. Wiring direction can be adjusted to various directions according to mounting space to avoid interference of installation. The pumps meet IP54 international standard and are both water-proof and dust-proof.



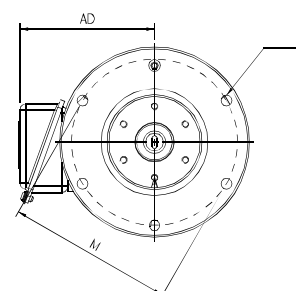
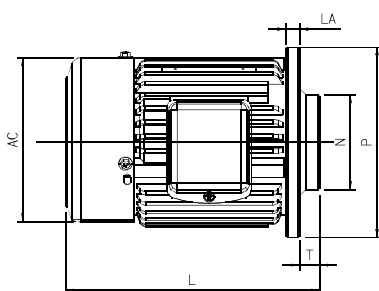
Frequency:60HZ

Sepcification Motor Power	Discharge Bore	Max.Output L/mim		Lift / Meter kg / cm ²		Weight (kg)
		(Single ph)	(Three ph)	(Single ph)	(Three ph)	
1/8 HP (0.09 KW)	3/8" PT	37	40	0.47	0.5	3.6
	1/2" PT	43	48	0.43	0.48	3.6
1/6 HP (0.13 KW)	3/8" PT	39	43	0.53	0.56	4.0
	1/2" PT	46	52	0.49	0.54	4.0
1/4 HP (0.18 KW)	1/2" PT	74	79	1.1	1.2	6.8
	3/4" PT	84	90	0.95	1.1	6.8
1/3 HP (0.25 KW)	3/4" PT	-	95	-	1.25	7.3
1/2 HP (0.37 KW)	3/4" PT	-	150	-	1.4	8.2
	1" PT	-	165	-	1.3	8.2
3/4 HP (0.56 KW)	1" PT	-	180	-	1.43	9
1 HP (0.75 KW)	1" PT	-	230	-	1.7	12
	1 1/4" PT	-	250	-	1.6	12
1.5 HP (1.12 KW)	1 1/4" PT	-	285	-	1.8	13

M odeN o.	Power HP (K W)	H	L	A	B	C	D	E	F	PCD	W
ASP-8100	1/8(009)	250	100	72	69	106	97	124	156	115~129	72
ASP-8130	1/8(009)	280	130	72	69	106	97	124	156	115~130	72
ASP-8150	1/8(009)	300	150	72	69	106	97	124	156	115~131	72
ASP-8180	1/8(009)	330	180	72	69	106	97	124	156	115~132	72
ASP-8200	1/8(009)	350	200	72	69	106	97	124	156	115~133	72
ASP-8220	1/8(009)	370	220	72	69	106	97	124	156	115~134	72
ASP-8270	1/8(009)	420	270	72	72	106	97	124	156	115~135	72
ASP-6100	1/6(012)	250	100	72	69	106	97	124	156	115~136	72
ASP-6130	1/6(012)	280	130	72	69	106	97	124	156	115~137	72
ASP-1650	1/6(012)	300	150	72	69	106	97	124	156	115~138	72
ASP-6180	1/6(012)	330	180	72	69	106	97	124	156	115~139	72
ASP-6200	1/6(012)	350	200	72	69	106	97	124	156	115~140	72
ASP-6220	1/6(012)	370	220	72	69	106	97	124	156	115~141	72
ASP-6270	1/6(012)	420	270	72	69	106	97	124	156	115~142	72



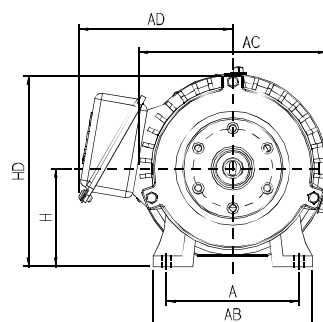
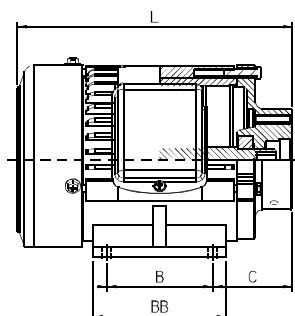
Connecting motor equipped iron case E0101



4P	Circles	Phase	AC	AD	L	LA	M	N	P	S	T	Weight(kg)
1	80	three phase	177	139	248	10	180	130	205	12	12	16,5
1	90	single phase	195	154	280	10	200	130	230	12	10	24
2	90	three phase	195	148	258	10	200	130	230	12	10	24
2	90	single phase	196	155	306	10	200	130	230	12	10	30
3	112	three phase	230	166	285	11	225	180	225	14	9	32
3	112	single phase	230	175	325	11	225	180	225	14	9	42,5
5	112	three phase	230	166	285	11	225	180	255	14	9	37
7.5	132	three phase	268	195	345	13.5	265	230	230	15	5	61
10	132	three phase	268	195	380	13.5	265	230	230	15	5	71

Custom-made products is welcome, please contact with our sales dept.

Connecting motor equipped iron case E0111



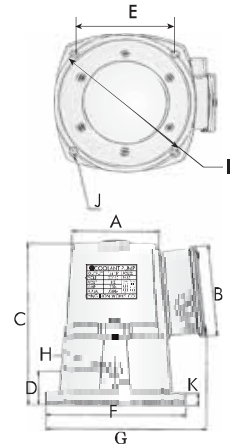
4P	Circles	Phase	A	AB	AC	AD	B	BB	C	H	HD	L
1/4HP	110	three phase	100	130	129	110	80	102	51,5	62	126,5	209
1/2HP	80	three phase	125	155	175	135	100	130	51	80	168	230
1HP	80	three phase	125	155	175	135	100	130	53,5	80	168	235
2HP	90L	three phase	140	175	196	147	125	156	52	90	188	270
1/2HP	80	single phase	125	155	175	138	100	130	58	80	168	265
1HP	90L	single phase	140	175	196	155	125	157	60	90	200	290
2HP	90L	single phase	140	175	196	155	125	157	64	100	200	300

Self-absorbent Cooling pump

E0101



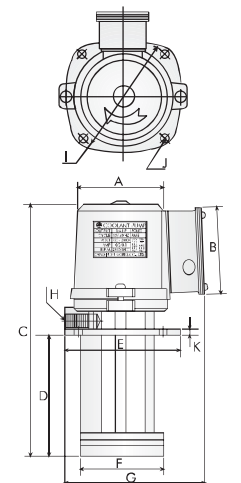
Model	Power HP(KW)	A	B	C	D	E	F	G	H	I	J	K
AMC-8000	1/8HP (0.09kw)	96	95	175	35	105	140	172	3/8"PT	140	8	8
AMC-6000	1/6HP (0.12kw)	96	95	175	35	105	140	172	3/8"PT	140	8	8
AMC-4000	1/4HP (0.18kw)	131	95	233	55	131	180	206	3/8"PT 1/2"PT	184	10	10
AMC-2000	1/2HP (0.77kw)	162	95	310	72	151.5	188	215	3/4"PT 1"PT	215	11	15
AMC-1000	1HP (0.75kw)	175	95	354	75	154	204	230	1"PT	219	11	15
AMC-Y000	1.5HP (1.12kw)	175	95	354	75	154	204	230	1"PT	219	11	15



Submerged Pump

E0111

Model	Power HP(KW)	A	B	C	D	E	F	G	H	I	J	K
AMC-8100	1/8HP (0.09kw)	96	95	251	105	121	90	156	3/8"PT	128	8	6
AMC-8130	1/8HP (0.10kw)	96	95	281	134	121	90	156	3/8"PT	128	8	6
AMC-8150	1/8HP (0.11kw)	96	95	298	152	121	90	156	3/8"PT 1/2"PT	128	8	6
AMC-8180	1/8HP (0.12kw)	96	95	328	180	121	90	156	3/8"PT 1/2"PT	128	8	6
AMC-8180ST	1/8HP (0.13kw)	96	95	328	180	121	90	156	3/8"PT	128	8	6
AMC-8220	1/8HP (0.14kw)	96	95	370	220	121	90	156	1/2"PT	128	8	6
AMC-6150	1/6HP (0.12kw)	96	95	307	150	121	90	156	3/8"PT 1/2"PT	128	8	6
AMC-6180	1/6HP (0.12kw)	96	95	336	185	121	100	160	1/2"PT	128	8	6
AMC-6210	1/6HP (0.12kw)	96	95	369	210	121	100	160	1/2"PT	128	8	6
AMC-4155	1/4HP (0.18kw)	131	95	346	155	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4180	1/4HP (0.18kw)	131	95	378	180	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4200	1/4HP (0.18kw)	131	95	390	200	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4220	1/4HP (0.18kw)	131	95	410	220	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4240	1/4HP (0.18kw)	131	95	425	240	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4270	1/4HP (0.18kw)	131	95	460	270	164	126	195	1/2"PT 3/4"PT	158	10	7
AMC-4270ST	1/4HP (0.18kw)	131	95	460	270	164	126	195	3/4"PT	158	10	7
AMC-4350	1/4HP (0.18kw)	131	95	540	350	164	126	195	1/2"PT 3/4"PT	158	10	7



Technical Data

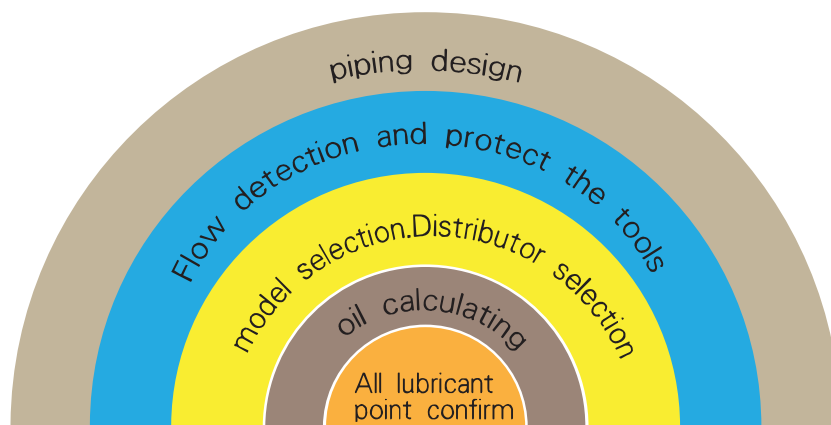
- 1.The requirement of lubricant oil volume
- 2,Resistance type lubricator requirement volume for lubricant
- 3.Piston type lubricator requirement volume for lubricant.
- 4.Oil grade viscosity and temprature relation chart
- 5.CPC oil grade viscosity and temprature relation chart

The Requirement Of Lubricant Oil Volume

Technical document

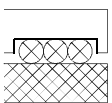
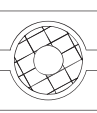
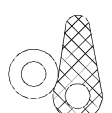
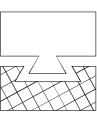
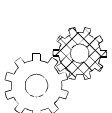
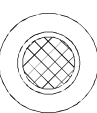
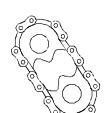
For the lubricant oil requirement, for the different area or different country, it has different kinds of formula. Related to influence of lubricant position, such as material, system, or the rotation speed, overload, different factors will influence the lubricant oil selection and the lubricator model selection. The technical document is for reference only. The calculating quantity of lubricant must be proper calculating and adjust. For increase the high performance of machine and protect the machine tools.

The steps for lubricant oil calculation.



Provide the below formulas, to calculate the lubricant oil requirement:

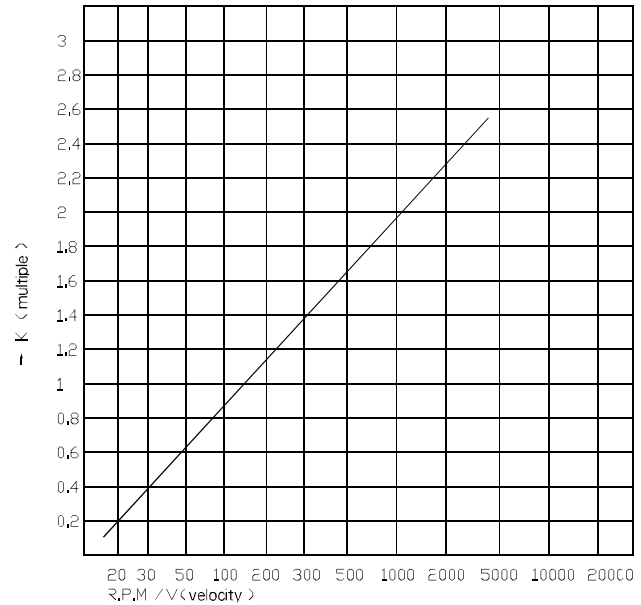
- Chart, oil volume Q, for the clean oil lubricant, unit mL/h.
- Chart, oil volume Q, for the heavy oil lubricant, unit MI/4h.
- The unit is cm in the chart.

 Ball bearing Oil volume $Q=0.04 \times \text{diameter} \times \text{number}$	 Linear track Oil volume $Q=0.012 \times \text{movement length} \times \text{number} \times K$
 Moving bearing Oil volume $Q=0.023 \times \text{rolling diameter} \times \text{bearing length} \times K$	 Cam Oil volume $Q=0.013 \times \text{contact circle} \times \text{width} \times K$
 Sleeves track a.Oil volume $Q=0.0017 \times \text{contact measure} \times K(\text{horizontal})$ b.Oil volume $Q=0.006 \times \text{contact measure} \times K(\text{vertical})$ contact measure = moving length x width	 Gear Oil volume $Q=0.046 \times \text{gear diameter} \times \text{gear width} \times K$
 Circle type moving track a.Oil volume $Q=0.023 \times \text{contact measure} \times K(\text{horizontal})$ b.Oil volume $Q=0.07 \times \text{contact measure} \times K(\text{vertical})$ contact measure =moving diameter x 3.14 x moving length	 Chain Oil volume $Q=0.008 \times \text{length} \times$

Resistance Type Lubricator Requirement Volume For Lubricant

Technical document

Moving speed (RPM/ Speed ratio V)– multiple K relation.
Factor K is the multiple value, with absolutely relation of moving speed.



Appendix 2 Resistance model Centralized clean oil system

1. Suitable for <AR> model lubricator and need to collocate with proportion distributor.

Make sure the lubricant point, calculating each point requirement. →

Setting the less oil volume requirement and collocate with less flow chart proportion device. For the other lubricant point, please select the right oil volume of distributors.→

Depend on the total flow volume and the total oil supply volume to select the correct lubricator output volume. →

If there is no suitable oil supply volume, and you need to re-calculate and oil requirement and the distributors.

2. The below chart is for reference, to select and calculate the oil requirement.

NO	Name of lubricant point	Ref. value		Resistance Ref. value			Oil supply volume mL/h
		Oil requirement mL/h	Oil volume ratio	Multiplier	Flowfactor	Serial No.	
		①	②	③	④	⑤	⑥
1	Flat guide track	0.17	1.7	2	5	0#	0.2
2	Flat guide track	0.1	1	1	2.5	02#	0.1
3	Circle pillar guide track	1.1	11	16	40	3#	1.6
4	Moving bearing	0.9	9	16	40	3#	1.6
5	Ball bearing	0.36	3.6	4	10	1#	0.4
6	Ball bearing	0.36	3.6	4	10	1#	0.4
7	Guide track	0.6	6	8	20	2#	0.8
8	Guide track	0.6	6	8	20	2#	0.8
	Total	4.19			Φ=147.5	Total	Q ₀ =5.9

Resistance Type Lubricator Requirement Volume For Lubricant

Technical document

Appendix 2 Resistance model Centralized clean oil system

- 2.1 Follow appendix 1, the chart 1 formula, calculate the each point requirement, and the write down to form ①.
- 2.2 Divide blank ① each oil volume to the blank ① less oil volume, the result is the oil ratio, please write down blank ②.
- 2.3 Set the multiplier 1 for smallest oil volume ratio, and write down to blank ③, and find the chart 3, multiplier is 1, and the proportion serial No. is 02#, flow factor is 2.5, and follow the steps write down to blank ④ and ⑤.
- 2.4 The rest lubricant point follow the ratio is similar to multiplier, and the multiplier can not smaller than oil ratio, and find the opposite multiplier and write down to the opposite blank.
(Ex. The oil ratio is 5.2, and find the multiplier is 8, flow factor is 20, proportion device is 2#.)
- 2.5 Basis of blank ①, the smallest oil requirement, multiply blank ③ each multiplier, the value is the each point oil which need to supply volume mL/h, write down to blank ⑥.
- 2.6 Recode blank ④ each flow factor and blank ⑥ each oil supply volume, and sum total overall flow factor Φ and overall oil supply volume Q_o .
- 2.7 Follow the overall connectors and overall flow factor Φ can not bigger than chart 4, the max. permit value Φt under this terms ($\Phi / \Phi t \leq 75\%$), and you could find the smallest permit lubricant.
Lubricator supply volume (mL/CY)
No recode on chart 4, metering connector middle value, can be calculate by alternative function, ex. connectors total 8 pcs, lubricator output volume 1.0mL/CY, by the alternative function is about Φt 208.
- 2.8 Lubricator total output volume per hour can not smaller than system total oil requirement volume Q_o (mL/h).
- 2.9 Follow the above calculating and process, try to suit 2.7 and 2.8 terms, and choose our suitable lubricator for your machines.

Metering Serial No.	Flow factor Φ	Multiplier
02#	2.5	1
0#	5	2
1#	10	4
2#	20	8
3#	40	16
4#	80	32
5#	160	64

Φt Total connectors Qty.	Lubrication system oil output volume mL/CY					
	0.5	1	2	3	4	5
5	150	250	450	700	800	
10	115	180	320	560	680	750
15	96	150	255	450	570	640
20	82	128	225	360	480	550
25	68	108	180	320	400	470
30	58	90	155	280	330	400
40	48	65	120	215	250	290
50		60	94	155	185	215
60			72	115	135	160
70				84	84	125
80						96

3. Related instructions

3.1 Follow the above formula to design the lubrication system requirement oil volume, real test for each point oil supply volume and calculate value is smaller than 20% (On the same serial No. connector and distributor oil output volume.)

3.2 The lubricator oil output volume must bigger, can not be smaller.

Selection for metering proportion device, (flow factor Φt value), must be smaller, can not bigger.

3.3 When the lubricant point more, can not find the suitable oil output lubricator in chart 4, and you could rely on smallest oil requirement volume as basis, and decrease the oil flow factor in chart 3 value for the other lubricant point, decrease the total flow factor value Φ to 50%, at mean time, you could get more times of lubricant, and maintain the other lubricant point output volume.

Piston Type Lubricator Requirement Volume For Lubricant

Technical document

Appendix 3 Piston Type Lubrication System

Regarding the Piston type Lubrication system, it's our S/N <AV> model type, and also, it has another name, which called regular type lubrication system. The master function inside the lubricator equipped the pressure release device, while gear pump stop pumping, the inner system will auto release oil pressure.

This type of lubricator need to collocate with DR piston type distributor, can be precisely output the correct oil volume to each lubricant point.

1.Design process:

Make sure each lubricant point and calculate each lubricant oil volume→ According to the less oil requirement setting and collocate with DR type smallest oil supply distributor (0.1mL/CY), the other lubricant point follow its oil ration to choose the oil requirement volume.→ Set up and make sure the cycle time of lubricating.

2.Calculate the oil requirement and the suitable oil supply volume.

Please refer to below chart, to select and calculate the oil requirement.

Lubricant NO	Name of lubricant	Oil value		DR Type distributor oil value		Times (CY/h)	Cycle (min)	Real oil supply volume (mL/h)
		Oil volume	Ratio	Output volume	Model			
		①	②	③	④	⑤	⑥	⑦
1	Sleeves track	0.17	1	0.1	DR-1	1.7	30	0.2
2	Roller track	0.6	3.5	0.4	DR-4	1.5		0.8
3	Moving track	0.6	3.5	0.4	DR-4	1.5		0.8
4	Ball bearing	0.85	5	0.5	DR-5	1.7		1
5	Moving bearing	0.38	2.2	0.3	DR-3	1.3		0.6
	Sum	2.6	Sum	⑩1.7	Choose 2 as oil supply times	Sum	Sum	3.4

DR type piston distributor					
Model /output holes	DR -2	DR-3	DR-4	DR-5	DR -6
Output volume single hole, ml/cy	With 0.1 、0.2 、0.3 、0.4 、0.5 outputvolume User could choose by themselves.				

2.1 The oil requirement please refer to appendix 1, each friction and contact surface and the K value, after calculate please fill up form ①.

2.2 NO.1 is the smallest oil requirement, ratio ② is 1, the smallest oil supply is ③ 0.1, choose type④ DR-1.

2.3 NO.5 oil requirement is 0.38/0.17 (oil requirement/ smallest value)= oil ratio ② is 2.2.

2.4 The smallest oil requirement is 0.17, setting 0.1 oil supply volume, and 0.1 multiply 2.2 times is equal to 0.22, refer to chart 9, need to choose the type ④DR-3, fixed oil output volume is ③ 0.3. For the other lubricant point, same and so on.

2.5 Oil requirement ① each lubricant point divide to ③ fixed output oil volume, each result fill up to blank⑤, and choose the max. value (rounding), that's the oil supply times per/hour.

2.6 60 divide to blank ⑤, and choose the biggest value, and you could get the result of blank ⑥ lubricating cycle/ min.

2.7 Blank ⑤ every hour oil supply time multiply blank ③ each oil output volume, and you could get the real oil supply volume per hour, and fill up to blank ⑦.

3. Make sure real oil supply volume.

Performance				Lubricator design								
1	Oil type		N32	9	Pipe oil full volume		⑧90ml/cy	14	Distributor recovery time		1.5s	
2	Temp. range	20℃-40℃		10	Distributor working time		⑨1.5s	15	Device fewest stop time		⑩+⑪=⑬	
		80cSt-32cSt									13.8 s	
3	* oil pipe total length		20m	11	Pressure raise time	Hard pipe	⑧8.4s	Fewest lubricant time		⑬+⑱=⑲29.7s		
4	Hard type pipe		18m			Soft pipe	⑪6 s			Lubricant device	AV_B-150C	
5	Soft type pipe		2m			Device	⑩+⑪=⑫14.4s			Voltage	AC220V 50Hz	
6	* The longest distance of pipe		15m	12	Fewest working time		⑨+⑫=⑬15.9s	Oil tank	Plastic type	2L/3L		
7	Distributor max.output volume		1.7ml/CY		13	Pressure release time	Hard pipe		⑭6.8s	Plate type		
8	Single hole output volume		0.5ml/CY	Soft pipe			⑮5.5s	Time setting	Lub.:To=17s			
					Device	⑭+⑮=⑯12.3s	Steop:Ts=1783s					

Piston Type Lubricator Requirement Volume For Lubricant

Technical document

Appendix 3 Piston Type Lubrication System

* The total oil pipe length means the master oil pipe hard pipe and soft pipe total length.

* The longest distance means the device to the farthest terminal master oil pipe length.

Follow above chart and choose the <AV> type lubricator, the lubricator output volume is 150mL/h.

3.1 According to chart 8, the oil viscosity and oil pipe total length, and follow the chart 3, <150 Gear pump character curve chart> find out while the DR distributor working, the oil requirement of oil pipe. And record to blank ⑧, and then, calculate the lubricator can be suit the 2.6 lubricating cycle time and make sure the lubricator and other connectors selection.

At mean time, also need to make sure the lubricating time T_o and intermittent time T_s adjust value.

Pressure raise time (0-Max. Pressure/s)		
	AV-B	
	Hard pipe/s	Soft pipe/s
2	3.5	6
5	4.5	7.5
10	6	10.5
15	7.5	13.5
20	9	16.9
25	10.5	
30	12	
35	13.5	
40	15	
45	16.5	
50	18	

Pressure release time (2.5-5.0MPa/s)		
	AV-B	
	Hard pipe/s	Hard pipe/s
2	5.5	5.5
5	5.5	6
10	6	7
15	6.5	7.5
20	7	8.5
25	7.5	9
30	8	10
35	8.5	
40	9	
45	9.5	
50	10	

3-3Follow the hard/soft oil pipe length, from chart 10, and find out the lubricator max. pressure raise up time and record to blank ⑩, ⑪, ⑫ .

3-4According to distributor working and pressure raise up time, blank⑨+⑫ could get the lubricator fewest lubricating time and record to blank ⑬.

3-5From chart 11, find out the soft/hard pipe pressure release time and record to blank ⑭, ⑮, ⑯.

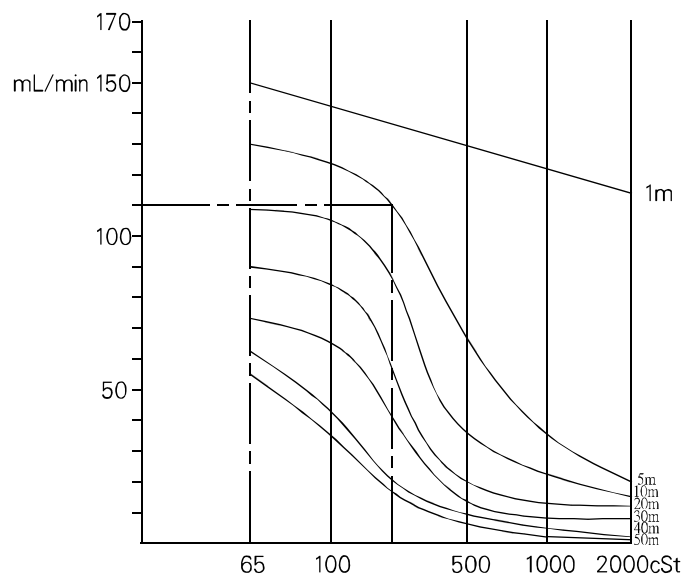
3-6Follow the pressure release time and distributor recovery time(1.5s is the fixed value)and calculate the fewest stop time, and record to blank⑰.

3-7Lubricator fewest working time ⑬ plus the fewest stop time ⑰, it ' s the lubricator ' s fewest lubricating cycle ⑱ and record to blank.

3-8Check the lubricating cycle is suit 2.4 requirement.

3-8-1From the trial balance, if the fewest operating cycle $⑱ \leq ⑥$, and the lubricator can be work normally. And under the real operating, could follow the lubricating status and function, adjust the $T_o=⑬$ and $T_s=⑥-T_o$ properly.

3-8-2If the lubricator fewest operating cycle $⑱ \geq$ lubricating cycle ⑥, the oil regular supply will be broken, the distributor can not provide the regular lubricating.The design need to re-calculate, and you could choose further SPEC for each output volume, raisep the fixed output volume, and reduce the oil supply times, extend the lubricating cycle times.



Technical document

A Viscosity-Temperature Index Table (Unit:cSt)

Temperature	N32	N68	N100	N150	N220	N380	N460
0	265	880	1500	2700	4200	9000	13000
1	245	785	1390	2300			
2	226	715	1280	2100			
3	210	650	1170	1930			
4	195	590	1060	1780			
5	182	540	950	1650			
6	170	495	890	1520			
7	160	465	830	1400			
8	150	440	770	1300	2000		
9	142	410	710	1200	1800		
10	135	380	650	1100	1650	3500	4500
11	127	350	604	1000	1500		
12	121	330	558	900	1400		
13	116	315	512	850	1300		
14	108	290	466	800	1200		
15	102	270	420	750	1000		
16	98	250	400	700	950		
17	92	240	375	650	900	2000	2500
18	87	230	355	600	850	1800	2300
19	83	210	330	560	800	1600	2100
20	80	200	310	520	750	1500	1900
21	75	190	290	480	700	1350	1750
22	70	180	275	460	650	1250	1600
23	67	170	255	440	600	1150	1500
24	65	160	240	420	560	1050	1400
25	62	152	220	380	520	950	1300
26	58	144	210	360	490	900	1200
27	55	127	200	320	460	850	1100
28	52	120	190	300	430	800	1000
29	50	115	180	280	405	750	920
30	48	110	170	265	380	700	850
31	46	105	160	250	360	650	800
32	44	100	155	235	340	610	750
33	42	95	145	225	320	580	700
34	40	90	140	215	300	550	650
35	38	85	130	200	280	520	610
36	36	81	125	190	260	490	580
37	35	77	120	180	245	460	550
38	34	74	110	170	235	430	520
39	33	71	105	160	227	405	490
40	32	68	100	150	220	380	460
41	31	65		142	213	355	430
42	30	62		135	206	330	400
43	29	60		128	200	316	375

Technical document

A Viscosity-Temperature Index Table (Unit:cSt)

cSt @40°C	ISO Viscosity rank	AGMA No.	SAE Gear oil viscosity No.	SAE Viscosity No.	COMMON common use oil	cSt @100°C
850						42
775						40
700						38
625						36
550						34
500	460	7	140		1508rl	32
450						30
400						28
365						26
315	320	6				24
280						22
240	220	5	90	50		20
205						18
175						16
140	150	4		40	650N	14
115	100	3	85W			12
85				30	500N	10
60	68	2	80W		300N	8
40	46	1		20	200N	6
20	32		75W	10W		4
10	22			5W	100N	2