

WORLDWIDE EXPORT



- The functional components are made with aluminum or hardened steel parts for best reliability and long life.
- The gear pump are manufactured with pressure balanced compensation plates. This technology reduces the mechanical clearings at the pressure increase, thus greatly improving the hydraulic efficiency, reducing heat generation and energy consumption.
- The integral motors are designed and optimized for typical mini power pack applications offering high starting torque, high power density and efficiency.
- Flexibility & Modularity.
- Easy to be assembled and commissioned.



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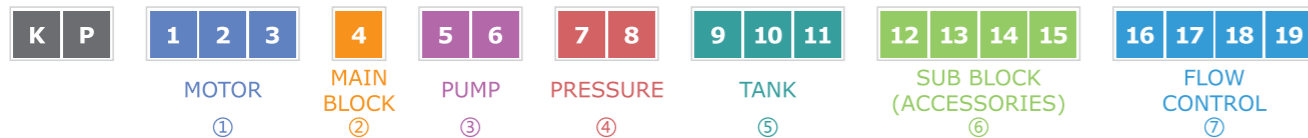
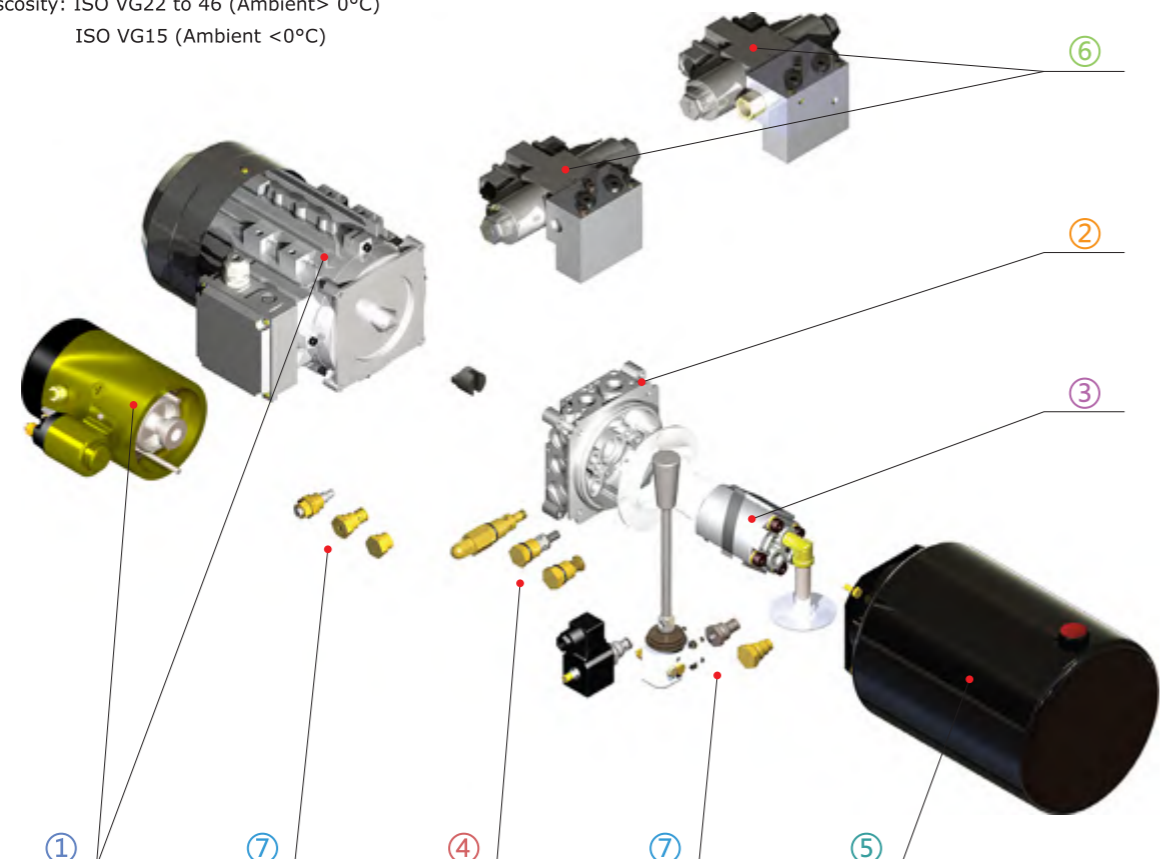
WEB: www.sinolift.com





■ Technical Specification

- Maximum Pressure: 210 Bar
- Hydraulic Fluid:
- Type: Mineral based Hydraulic Oil (HM or HV)
- Viscosity: ISO VG22 to 46 (Ambient > 0°C)
ISO VG15 (Ambient < 0°C)



■ Content

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② Main Block (Basic Circuit) P7

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⑤ Tank P8

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Key Applications P14



● Motor

1	2	3	Power Source	Power
M	1	1	DC 12V	0.2KW
M	2	1	DC 12V	0.5KW
0	1	1	DC 12V	0.8KW
0	2	1	DC 12V	1.6KW
0	3	1	DC 12V	2.0KW
M	1	2	DC 24V	0.2KW
M	2	2	DC 24V	0.5KW
0	1	2	DC 24V	0.8KW
0	2	2	DC 24V	2.2KW
0	2	2 F	DC 24V	2.2KW
0	3	2	DC 24V	3.0KW
1	0	2	AC 1Φ 220V	0.5KW
1	1	2	AC 1Φ 220V	0.75KW
1	2	2	AC 1Φ 220V	1.5KW
1	1	2 S	AC 1Φ 220V	0.75KW
1	2	2 S	AC 1Φ 220V	1.8KW
1	3	2	AC 1Φ 220V	2.2KW
3	0	3	AC 3Φ 220/380V	0.5KW
3	1	3	AC 3Φ 220/380V	0.75KW
3	2	3	AC 3Φ 220/380V	1.5KW
3	2	3 S	AC 3Φ 220/380V	1.8KW
3	3	3	AC 3Φ 220/380V	2.2KW

● Tank



- 9 10 Tank Capacity
- 1~2L: Ø120 Circular
 - 4~12L: Ø200 Circular
 - 15, 25L: Rectangular
- 11 Tank Mounting Type
- H: Horizontal
 - V: Vertical

● Tank & Circuit (Box Type Only)



- 9 Tank Capacity (Liter)
- 5: 5L
 - 7: 7L
- 10 Cylinder
- S: Lift Type, D:PT Type
- 11 Wingspan Quantity
- 1~2

● Main Block



- 4
- P PT Type, Solenoid Valve Type
 - L Lift Type (Normal Closed, NC)
 - R Lift Type (Normal Open, NO)
 - M Lever Type Lift Circuit
 - X Box Type

● Pressure



Working Pressure Scope:
1~25 (MPa) 1MPa=0.1×1Kg/cm²
or can be reset as customer's requirement

Adjustable relief valve is standard.
Fix pressure type is also available.

● Sub Block (PT Type only)



- 12 Type of Sub Circuit
- S: Sub Block + Solenoid Valve
 - P: Pilot Check Block + Solenoid Valve
 - A: Cartridge Valve Block (NC)
 - O: Cartridge Valve Block (NO)
 - L: Cartridge Valve Block (Double Lock)
 - R: No Sub Circuit
- 13 Control Voltage
- N: DC 12V P:DC 24V A: AC 110V
 - B: AC 220V C: RAC 110V D: RAC 220V

14 Number of Same Circuit

- 15 Circuit of Solenoid Valve
- B: All Block
 - P: P-Block
 - C: PT Bypass
 - O: All Open
 - S: Single Valve

● Accessories (Box Type only)



K: Key Switch, H: Hand Pump
Accessory Nothing

● Pump

5	6	Q(cc/rev)	Pmax
M	1	0.25	200
M	2	0.5	200
M	3	0.75	200
M	4	1.0	180
M	5	1.25	180
M	6	1.5	180
	1	1.0	250
	2	1.25	250
	3	1.6	250
	4	2.0	250
	5	2.5	250
	6	3.15	230
	7	3.65	210
	8	4.2	170
	9	5.0	155
1	0	5.7	130
1	1	6.1	120
1	2	7.0	105
1	3	8.0	95
1	4	9.8	75

● Flow Control



- 16 Type of Return Valve
- A: Solenoid Valve (NC)
 - O: Solenoid Valve (NO)
 - L: Solenoid Valve (Double Lock)
 - M: Manual Valve (Double Lock)
- 17 Control Voltage
- N: DC 12V P:DC 24V
 - A: AC 110V B: AC 220V
 - C: RAC 110V D: RAC 220V
- 18 Type of Return Speed Control
- Blank (X): Non Throttle Valve
 - T: Normal Throttle Valve
 - P: Pressure Compensated Valve
- 19 Flow Rate (For LIFT Type)
- 1~13 Liter/min

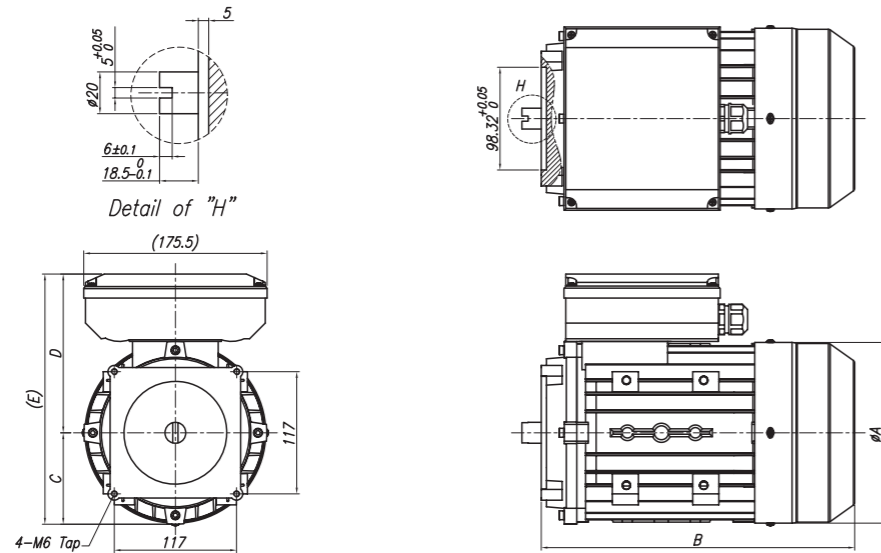
Additional option

Number of modular blocks, different kinds of modular blocks, kinds of modular valves, kinds of cartridge valves, etc.
For the additional options as listed above, please not on the order sheet after confirmation with us.

AC MOTOR

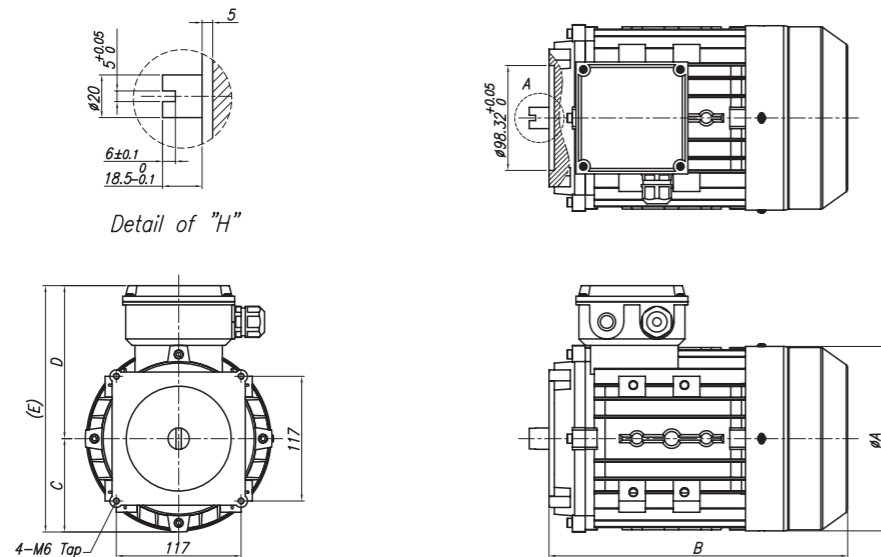
① 1 2 3

■ Single Phase



Order Code	Code	Frame No.	Pole	Power (Kw)	Speed (rpm)	Frequency (Hz)	Current (A)	Weight (Kg)	A	B	C	D	E	IC
1A*	KP102*	71	4	0.5	1430	50	4.0	6	119	150	59.5	102	161.5	F
1B	KP112	80	4	0.75	1430	50	5.3	10	157	250	78.5	145.5	224	
1C	KP122	90	4	1.5	1430	50	10.2	16	173	300	87.5	152	239.5	
1G*	KP122S*	90	4	1.8	1430	50	16.2	13	173	280	87.5	152	239.5	
1D	KP132	90	4	2.2	1430	50	13.4	19	173	370	87.5	150	239.5	

■ Three Phase



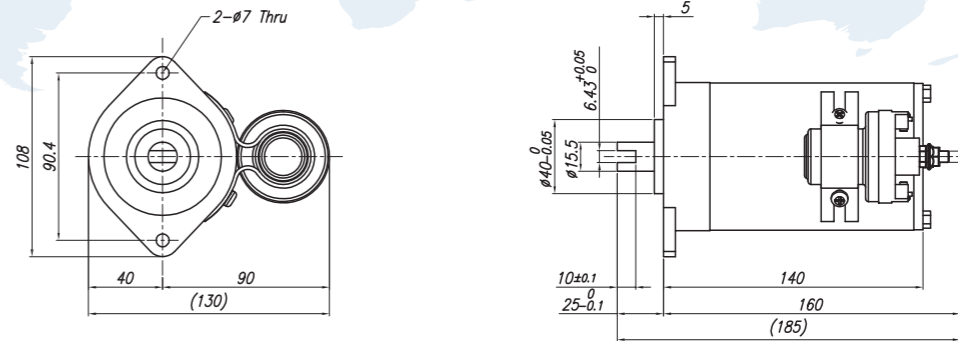
Order Code	Code	Frame No.	Pole	Power (Kw)	Speed (rpm)	Frequency (Hz)	Current (A)	Weight (Kg)	A	B	C	D	E	IC
3A*	KP303*	71	4	0.5	1650	50	1.84 / 1.06	6	119	150	59.5	59.5	119	F
3B	KP313	80	4	0.75	1680	50	3.25 / 1.85	10	157	245	78.5	137	215.5	
3C	KP323	90	4	1.5	1680	50	5.97 / 3.45	14	173	280	87.5	143.5	231	
(3C)	KP323S	90	4	1.8	1680	50	5.97 / 3.45	14	171	230	87.5	143.5	231	
3D	KP333	90	4	2.2	1680	50	8.16 / 4.65	18	173	310	87.5	143.5	231	

The motor marked with "*" is short working time type, for rated working time type please contact with us.

DC MOTOR

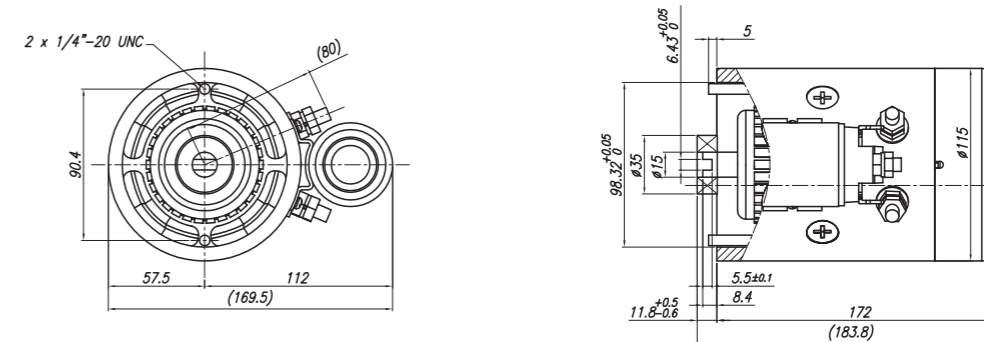
① 1 2 3

■ 500/800W, 12/24V



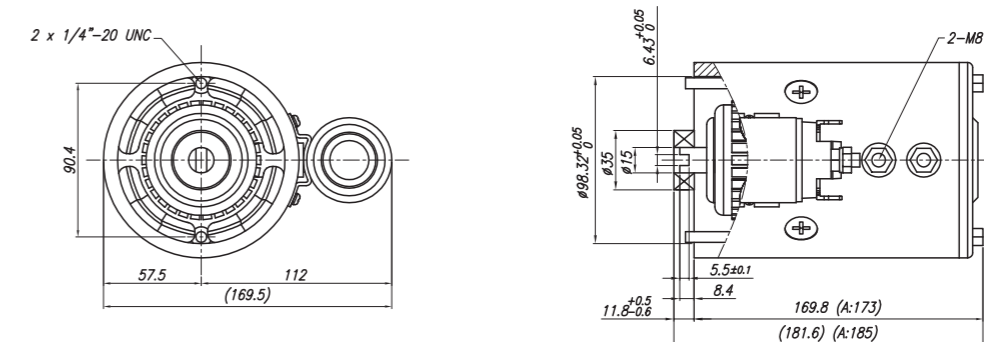
Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
7A	KPM21	0.5	12	3000	76	3	5	Fig.1	F
8A	KPM22	0.5	24	3000	38	3	5		
7B	KP011	0.8	12	3450	125	3	4		
8B	KP012	0.8	24	4600	54	3	4		

■ 2.2KW, 24V



Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
8D	KP022	2.2	24	2400	150	8	2	Fig.2	F

■ 1.6/2.2KW, 12/24V



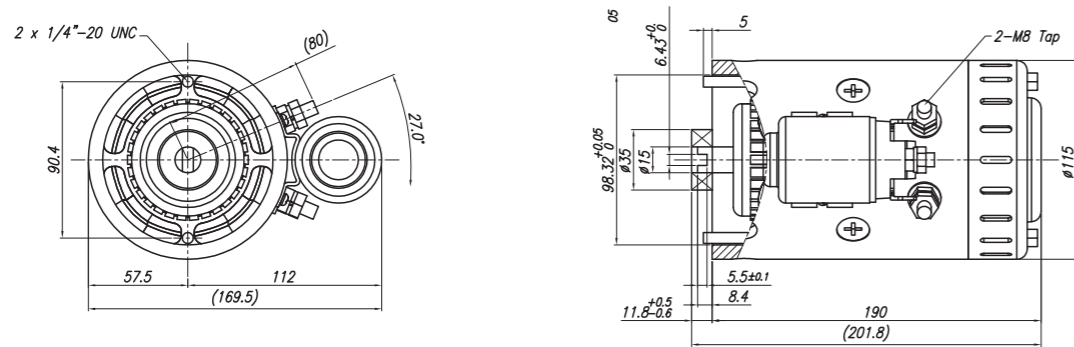
Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
7C	KP021	1.6	12	2630	215	8	3	Fig.2	F
(8DA)	KP022(A)	2.2	24	2800	150	8	2		



DC MOTOR

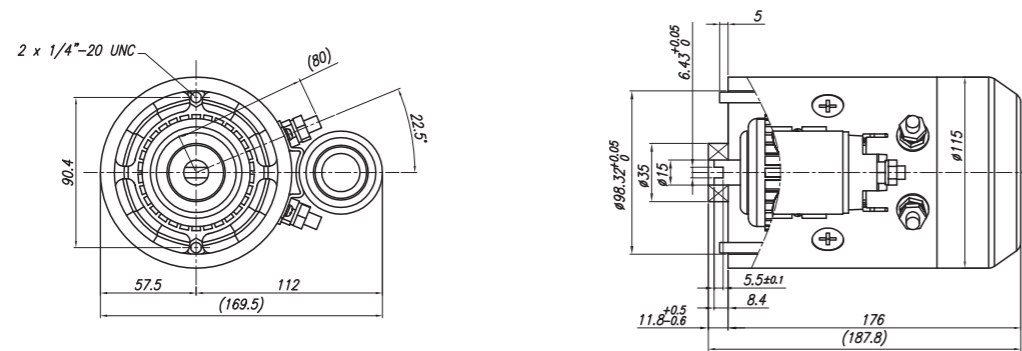
- ① 1 2 3

■ 2.2KW, 24V



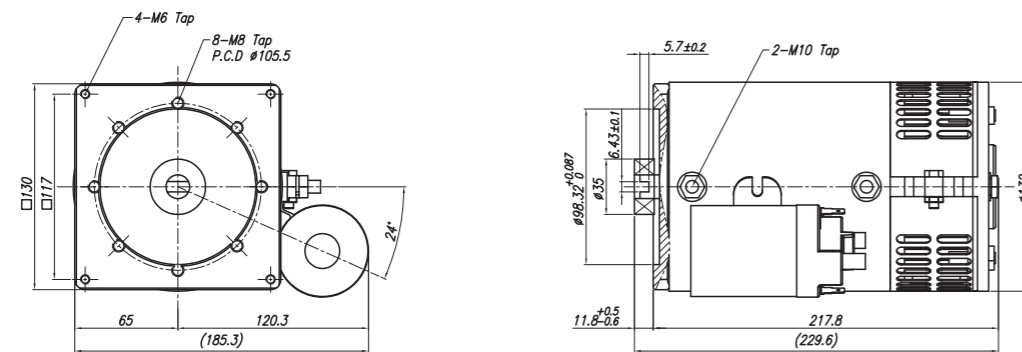
Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
(8DF)	KP022F	2.2	24	2400	130	8	5	Fig.2	F

■ 2KW, 12V



Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
7D	KP031	2	12	2200	250	8	2.5	Fig.2	F

■ 3KW, 24V

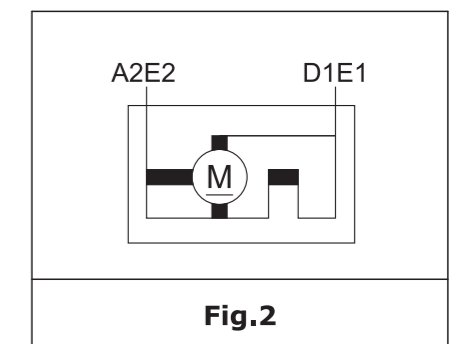
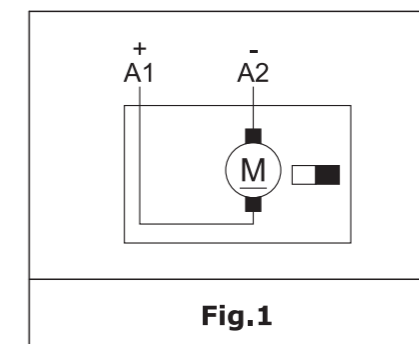
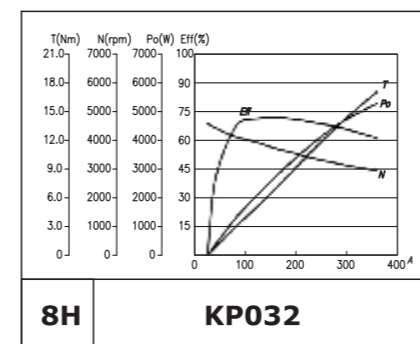
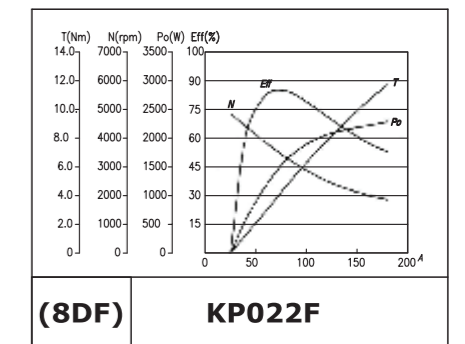
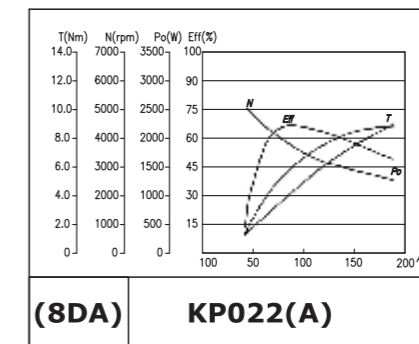
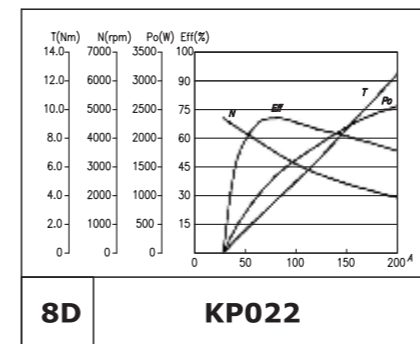
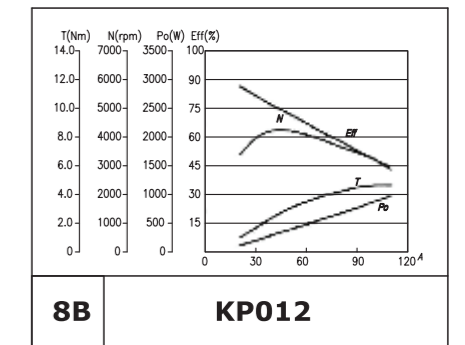
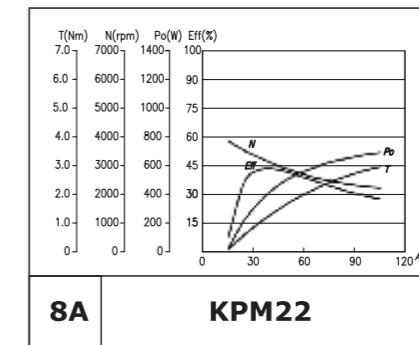
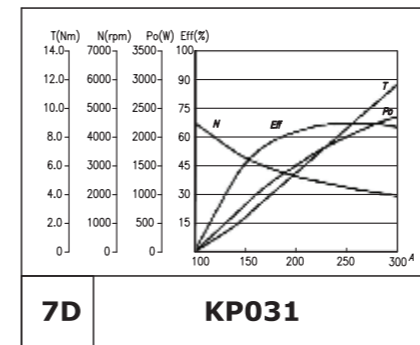
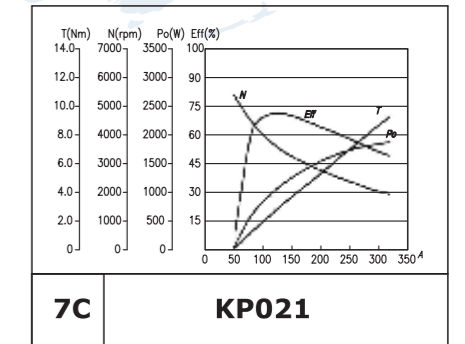
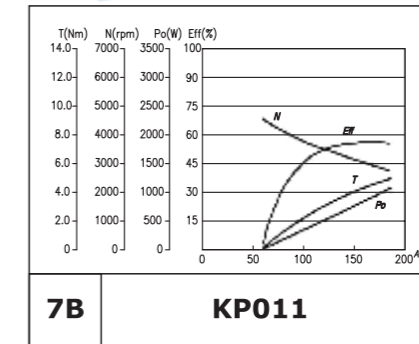
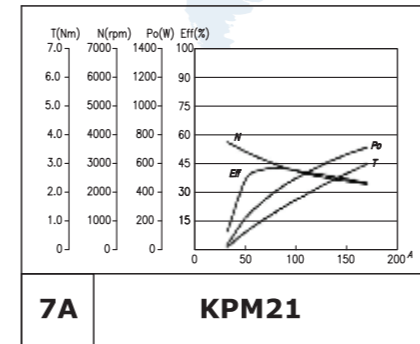


Order Code	Code	Power (KW)	Voltage (V)	Speed (rpm)	Current (A)	Weight (kg)	Time Rating (min)	Connection DIA.	IC
8H	KP032	3	24	3500	175	11	3	Fig.2	F

DC MOTOR

- ① 1 2 3

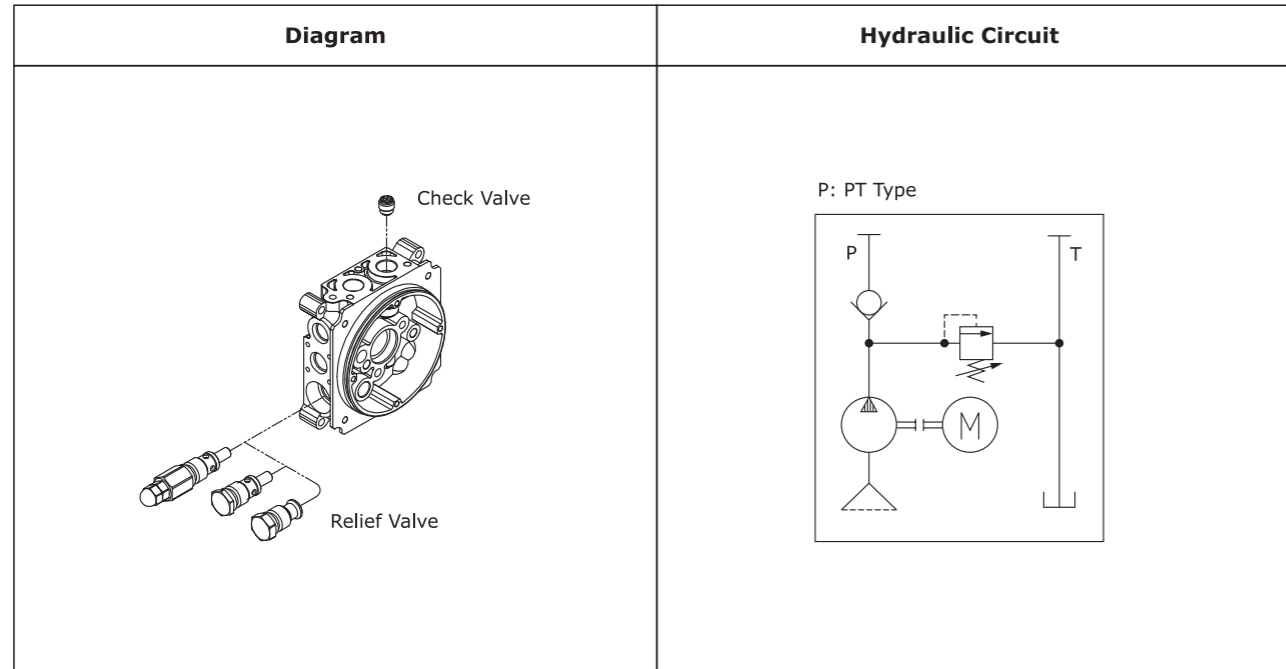
■ Characteristic Curves & Connection Diagram



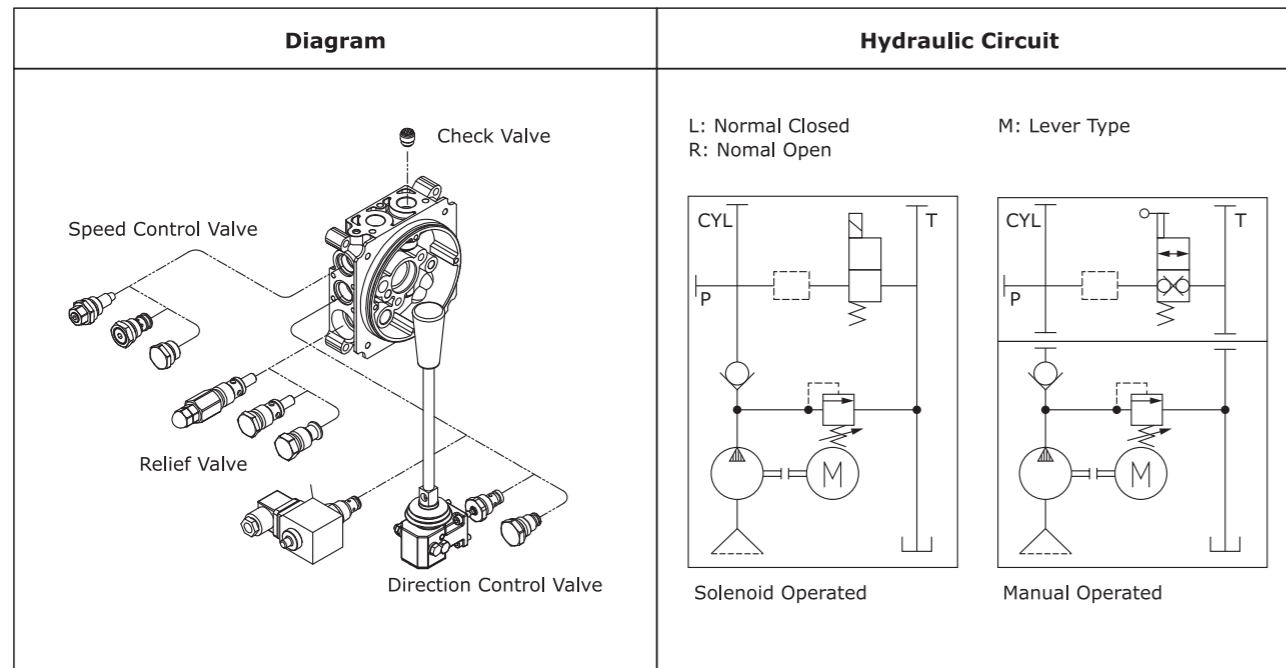
BASIC CIRCUIT

② ④

■ PT Type & Solenoid Valve Type



■ Lift Type



Note:
Above is the basic circuit, for other special circuit, please contact with us.

PUMP

③ ⑤ ⑥

See from axis direction, the direction of rotation is clockwise.

Order Code	Code	q (cc/rev)	Q (l/min@1700rpm)	Pmax (bar)	Order Code	Code	q (cc/rev)	Q (l/min@1700rpm)	Pmax (bar)
1P	M1	0.25	0.43	200	2E	5	2.5	4.25	250
1Q	M2	0.5	0.85	200	2F	6	3.15	5.36	230
1R	M3	0.75	1.28	200	2G	7	3.65	6.21	210
1S	M4	1.0	1.7	180	2H	8	4.3	7.14	170
1T	M5	1.25	2.13	180	2I	9	5.0	8.5	155
1U	M6	1.5	2.55	180	2J	10	5.7	9.65	130
2A	1	1.0	1.7	250	2K	11	6.1	10.37	120
2B	2	1.25	2.13	250	2L	12	7.0	11.9	105
2C	3	1.6	2.72	250	2M	13	8.0	13.6	95
2D	4	2.0	3.4	250	2N	14	9.8	16.66	75



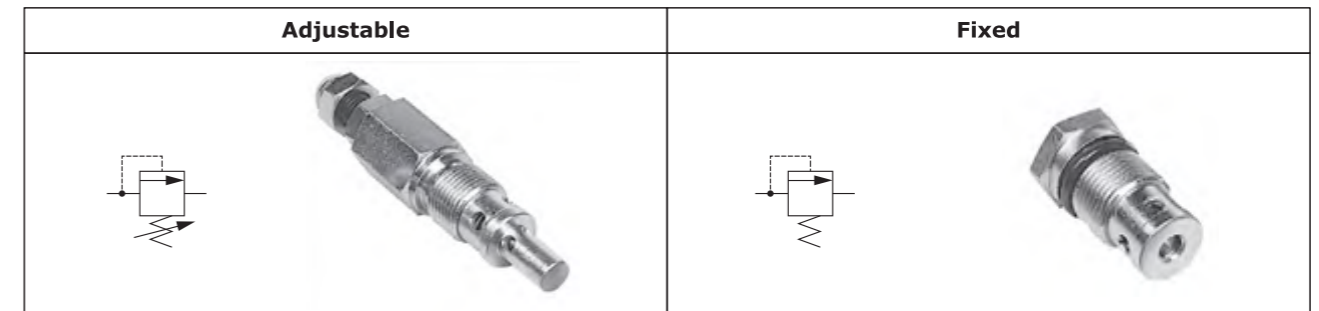
Note:

The displacement will be change as the DC motor load change, for further details, please contact with us.

PRESSURE

④ ⑦ ⑧

- 0~25: Pressure (MPa)
- The range is 0~250 Kg/cm², it can be controlled according to users' requirements



Note:

Any adjustment of the pressure may cause serious problems to the system. If need to be adjusted, please contact with us.

TANK

⑤ ⑨ ⑩ ⑪

Tank Capacity [Liter]
1,2: Ø120 Circular
4~12: Ø200 Circular
12,15,25,40: Rectangular

Mounting Type
H: Horizontal
V: Vertical



Note:

Above is our standard size, for any special size, please contact with us.

SUB BLOCK ⑥ 12 13 14 15

■ **Type of Sub Circuit (Modular Block)**

S: Sub Block + Solenoid Valve A: Cartridge Valve Block (NC) L: Cartridge Valve Block (Double Lock)
 P: Pilot Check Block + Solenoid Valve O: Cartridge Valve Block (NO) R: No Sub Circuit

S	P	A,O,L

Valves are not included in the code.

■ **Control Voltage**

N: DC 12V P: DC 24V A: AC 110V B: AC 220V C: RAC 110V D: RAC 220V

■ **Number of same circuit**

1~4, if over 4 Circuits of solenoid, please contact with us.

■ **Circuit of Solenoid Valve (Modular Valve)**

B: All Block P: P-Block C: PT Bypass O: All Open S: Single Valve

B	P	C	O	S

■ **Sub Block Dimension**

FLOW CONTROL ⑦ 16 17 18 19

■ **Type of Return Valve (Cartridge Valve)**

A: Solenoid Valve (NC) L: Solenoid Valve (Double Lock)
 O: Solenoid Valve (NO) M: Manual Valve (Double Lock)

A	O	L	M

■ **Control Voltage**

N: DC 12V P: DC 24V A: AC 110V B: AC 220V C: RAC 110V D: RAC 220V

■ **Speed Control**

Blank (X)	T	P
Non Throttle Valve	<p>Throttle Valve</p> <ul style="list-style-type: none"> It is adjustable Only for few changed load use 	<p>Pressure Compensated Throttle Valve</p> <ul style="list-style-type: none"> The flow rate have been set in our factory, often for rated load use, or the flow rate have no any relations with the load Flow rate: 1~13 L/min

■ **Lift Valve Block**

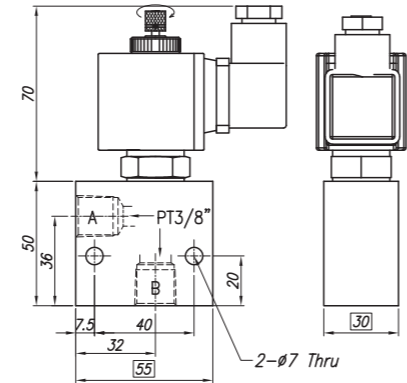
<p>HYDRAULIC DIAGRAM</p>	
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POWER PACK ACCESSORIES

■ **Return Valve Block**

SPECIFICATION

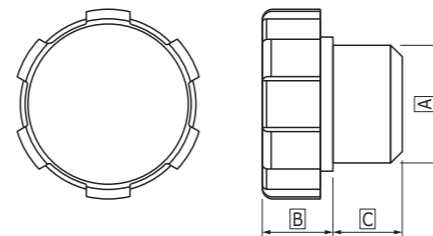
Code	B00121-S00100	B00121-S00200	B00121-S00500	B00121-S00300
Hydraulic Diagram				



■ **Airbreather**

SPECIFICATION

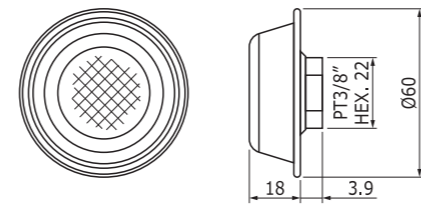
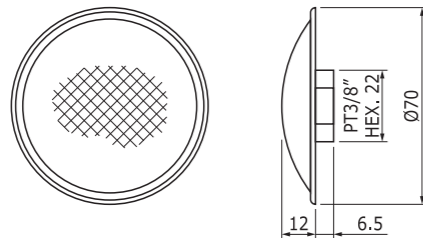
Code	Circular	Rectangular
A	PF 1/2"	PF 3/4"
B	11.8	12
C	12	12



■ **Strainer**

Model Name	Filtration
Filter 01	25 Micron

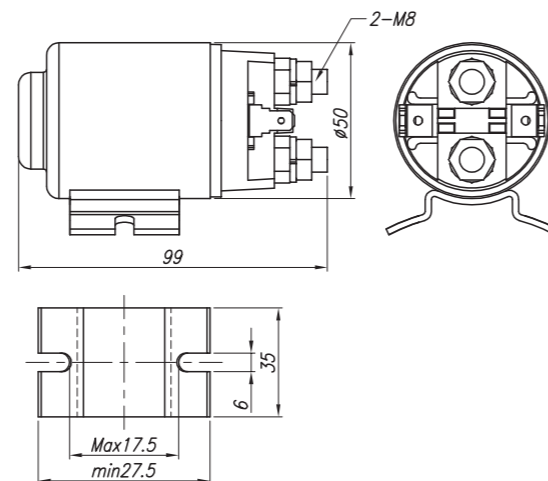
Model Name	Filtration
Filter 02	25 Micron



■ **Magnet Switch**

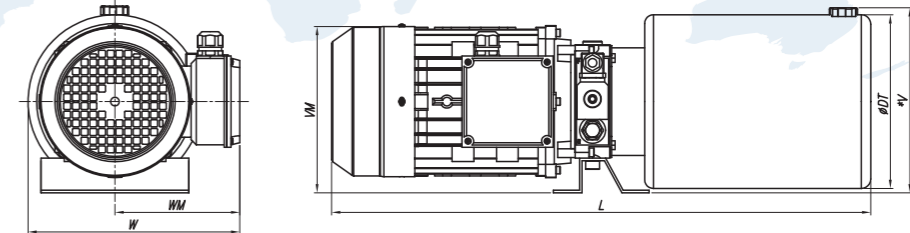
SPECIFICATION

	12V	24V
Rated Voltage	12V	24V
Rated Current	150A	150A
Max. Transient Current	<300A	<300A
Reduced Voltage	400mV	400mV
Rated Voltage	12V	24V
Short Circuit Voltage	>8.5V	>18V
Rated Power	40W	32W



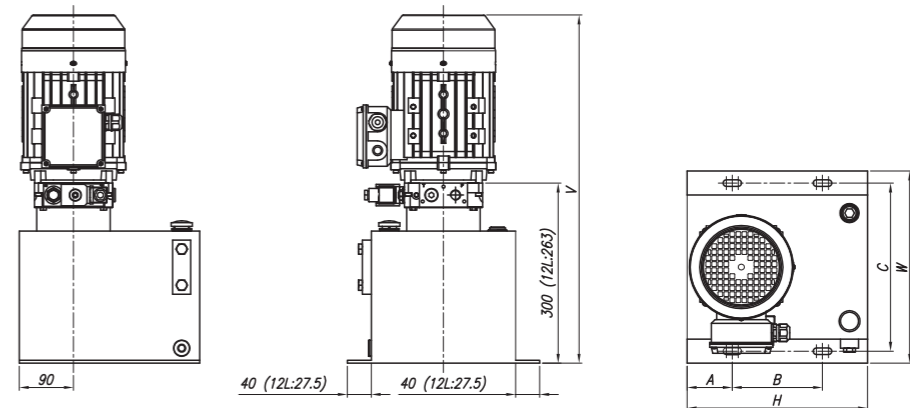
DIMENSION TABLE

■ **Normal**



Motor	W		WM	VM	L						ØDT		*V			
	1~2L	4~12L			1L	2L	4L	6L	8L	10L	12L	1~2L	4~12L	1~2L	4~12L	
AC 1 PHASE	0.5KW*	196	231	131	165	330	400	360	425	490	535	610	124	200	175	215
	0.75KW	224	246	146	193	430	500	460	525	590	635	710				
	1.5KW	240	252	152	193	480	550	510	275	640	685	760				
	1.8KW*	240	252	152	193	460	530	490	555	620	665	740				
	2.2KW	240	252	152	193	550	620	580	645	710	755	830				
AC 3 PHASE	0.5KW*	196	231	131	165	330	400	360	425	490	535	610	124	200	175	215
	0.75KW	216	237	137	184	425	495	455	520	585	630	705				
	1.5KW	230	247	144	193	460	530	490	555	620	665	740				
	1.8KW*	230	244	144	193	410	480	440	505	570	615	690				
	2.2KW	230	247	144	193	490	560	520	585	650	695	770				
DC	0.2KW	196	231	131	155	265	335	296	360	425	470	545	124	200	175	215
	0.5KW / 0.8KW	196	231	131	159	340	410	370	435	500	545	620				
	1.6KW / 2.2KW	196	231	131	163	352	422	382	447	512	557	632				
	2.0KW	196	231	131	163	356	426	386	451	516	561	636				
	3.0KW	196	231	131	171	400	470	430	495	560	605	680				

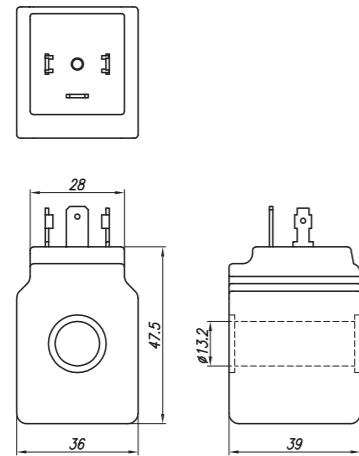
■ **Rectangular**



Motor	H			V		W			A		B		C			
	12L	15L	25L	12L	15L/25L	12L	15L	25L	12L	15L/25L	12L/15L	25L	12L	15L	25L	
AC 1 PHASE	0.5KW*			415	450											
	0.75KW			513	550											
	1.5KW			563	660											
	1.8KW*			543	580											
	2.2KW			633	670											
AC 3 PHASE	0.5KW*			415	450											
	0.75KW			508	545											
	1.5KW	345	300	400	543	580	256	320	380	53	75	150	250	320	280	340
	1.8KW*				493	530										
	2.2KW				573	610										
DC	0.2KW			348	385											
	0.5KW / 0.8KW			424	460											
	1.6KW / 2.2KW			435	472											
	2.0KW			440	476											
	3.0KW			485	520											

The motor marked with "*" is short working time type, for rated working time type please contact with us.

ELECTRIC COIL



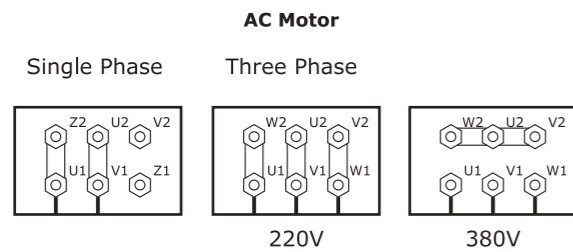
SPECIFICATION

Voltage (V)	Power (W)
DC 12V	30W
DV 24V	
AC 110V	
AC 220V	
RAC 110V	
RAC 220V	

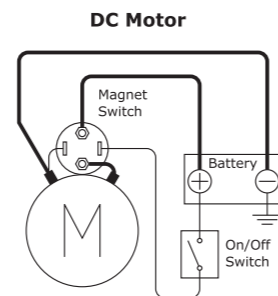
Type of Connector	
DIN Type	Wire Type

ELECTRIC WIRING

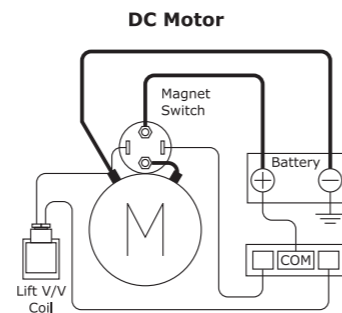
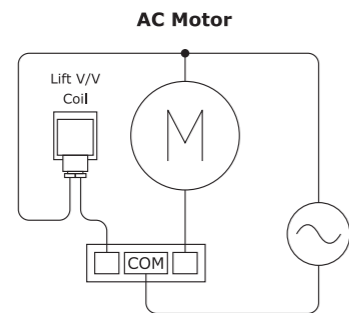
■ Basic PT Circuit



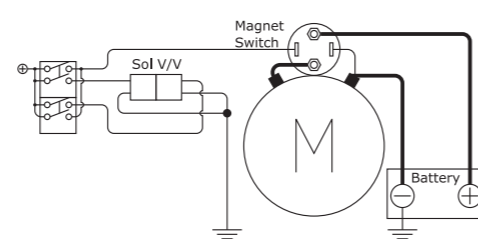
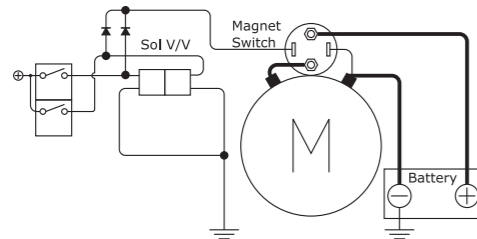
Rotation CCW Motor direction of rotation is counterclockwise.



■ Single Acting Cylinder Circuit



■ DC Motor with Directional Control Valve Circuit



KEY APPLICATIONS

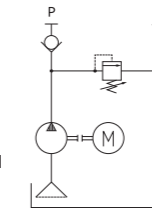
● DC PACKS

Electric Forklift



STABLE PERFORMANCE
Stable electric system
Supply to the major material handling manufacturers in Korea

SPECIFICATION
Model No: KP022-P5-18-8V
Electric Motor: DC 12/24V, 1.6~3.0KW
Hydraulic Pump: 1.6~4.2cc/rev
Oil Tank: 4-12 Liter
Hydraulic Circuit: PT for manual control valve

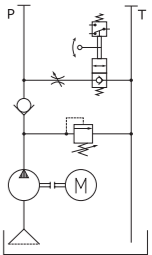


Electric Stacke



CONVENIENT CONTROL
Elevating by electric motor and lowering by hand with one lever
Soft working lever with double contactor switch

SPECIFICATION
Model No: KP021-L6-14-8H-MT
Electric Motor: DC 12/24V, 1.6~3.0KW
Hydraulic Pump: 1.6~4.2cc/rev
Oil Tank: 4~12 Liter
Hydraulic Circuit: manual lift valve

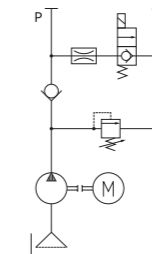


Electric Lift Table



COMPACT SIZE
Minimized system for narrow space
Suitable for varying load system
Supply to the major material handling manufacturers in Korea

SPECIFICATION
Model No: KPM21-L1-14-2H-P4
Electric Motor: DC 12/24V, 0.5/0.8KW
Oil Tank: 1~4 Liter
Hydraulic Circuit: lift circuit with pressure compensated throttle

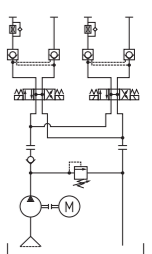


Wingbody



FIT FOR SPECIAL PURPOSE VEHICLE
Special manifold for SPV system
All in one system including electric control
Strong for severe circumstance like hot&cold temperature or vibration

SPECIFICATION
Model No: KP021-X5-18-6V-D2
Electric Motor: DC 12/24V, 1.6~3.0KW
Hydraulic Pump: 1.6~4.2cc/rev
Oil Tank: 4, 6 Liter
Hydraulic Circuit: various circuit

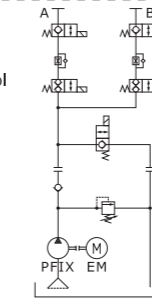


Tail Lift



SPECIAL DESIGN FOR EUROPEAN STYLE LIFTGATE
Easy to maintenance with 3 side open
All in one system including electric control
Strong for severe circumstance like hot&cold temperature or vibration

SPECIFICATION
Model No: KP021-LG1-4V-2S
Electric Motor: DC 12/24V, 1.6~3.0KW
Hydraulic Pump: 1.0~4.2cc/rev
Oil Tank: 4, 8 Liter
Hydraulic Circuit: 1 single, 2 single, 1 single 1 double

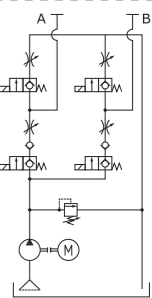


Wheelchair Lift



SPECIAL DESIGN FOR WHEELCHAIR CAR
Safety with thermal S/W, pressure S/W
Low profile system for narrow space

SPECIFICATION
Model No: KP011-WM2-7-2V-HP
Electric Motor: DC 12/24V, 0.5~2.2KW
Hydraulic Pump: 0.2~2.5cc/rev
Oil Tank: 0.5, 1 Liter
Hydraulic Circuit: lift circuit with emergency hand pump



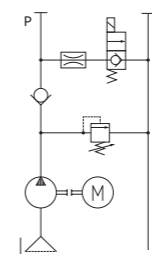
● AC PACKS

2 Post Lift



STABLE SYSTEM
Standard type motor with bell housing
High quality parts for durability

SPECIFICATION
Model No: KP323-L5-18-12V
Electric Motor: AC 3Phase 220/380V, 0.75~2.2KW
Hydraulic Pump: 1.0~4.2cc/rev
Oil Tank: 12, 15 Liter
Hydraulic Circuit: 2 post lift system

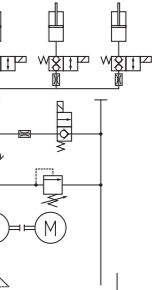


Electric Stacke



EXCELLENT REACTIVITY AND WORK EFFICIENCY
Standard type motor with bell housing
Special block for 4 post lift

SPECIFICATION
Model No: KP323-L5-18-15V-4PL
Electric Motor: AC 3phase 220/380V, 0.75~2.2KW
Hydraulic Pump: 1.0~4.2cc/rev
Oil Tank: 12, 15 Liter
Hydraulic Circuit: 4 post lift system

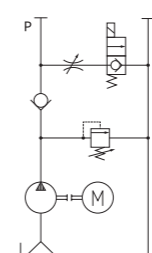


Scissors Lift



MOST COMMON SYSTEM
Wide range of specification
Very stable system with long term experience

SPECIFICATION
Model No: KP333-L7-14-12H
Electric Motor: AC 3Phase 220/380V, 0.5~3.7KW
Hydraulic Pump: 0.25~9.8cc/rev
Oil Tank: 1~25 Liter
Hydraulic Circuit: lift system



Tower Crane



SPECIAL SYSTEM FOR TOWER CRANE
By customer's request

SPECIFICATION
Model No: KP-TCRB-303-05

