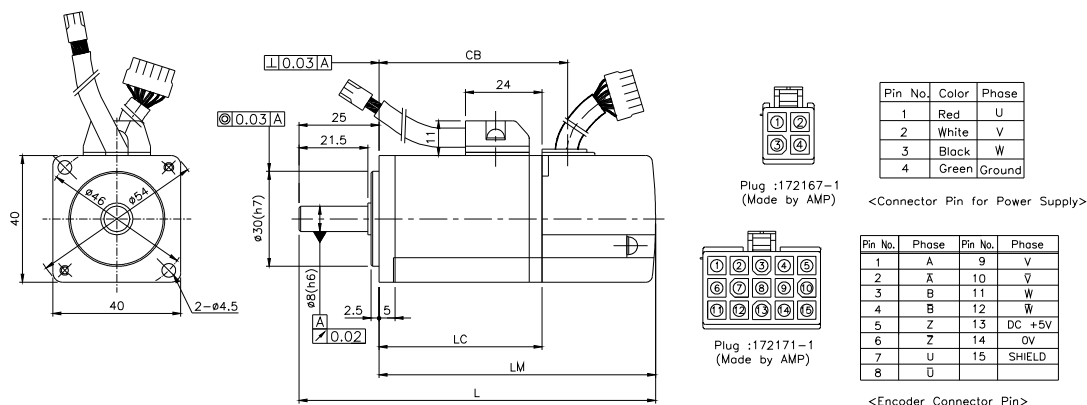


# APD-VS[Standard Type] Manual

## 7.1.2 External Dimensions

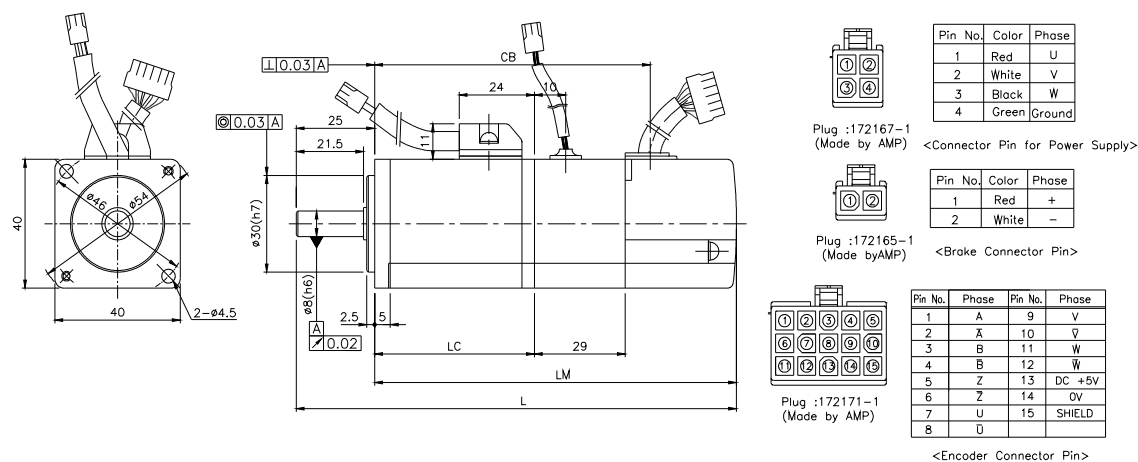
◆ Standard type : APM-SAR3A, APM-SAR5A, APM-SA01A



Model	External dimensions				Weight(kg)
	L	LM	LC	CB	
SAR3A	104.5	79.5	44	52	0.3
SAR5A	111.5	86.5	51	59	0.4
SA01A	128.5	103.5	68	76	0.52

Note1) 40Flange's standard axis is straight.

◆ Brake-attached type : APM-SAR3A, APM-SAR5A, APM-SA01A



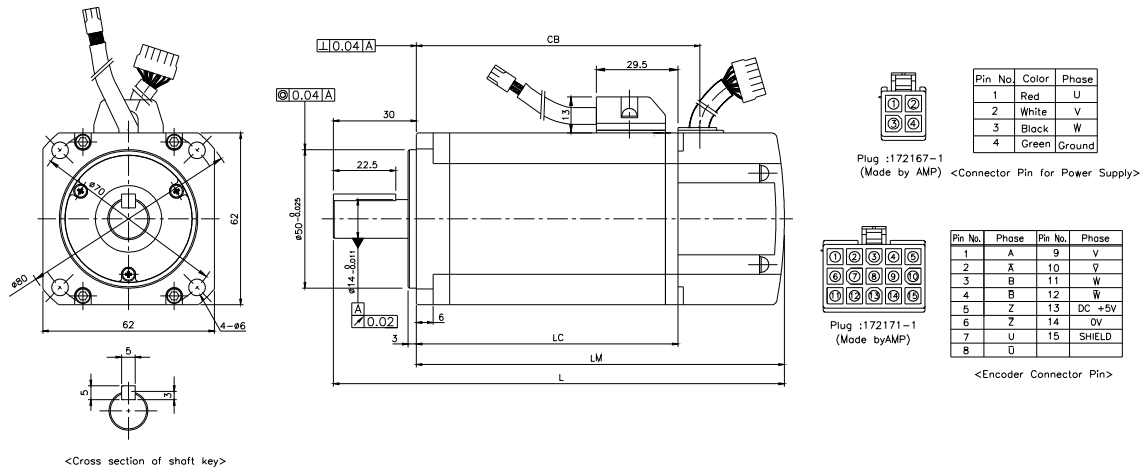
Model	External dimensions				Weight(kg)
	L	LM	LC	CB	
SAR3A	133.5	108.5	44	81	0.65
SAR5A	140.5	115.5	51	88	0.75
SA01A	157.5	132.5	68	105	0.87

Note1) 40Flange's standard axis is straight.

Note2) Use DC 24[V] for brake input power supply

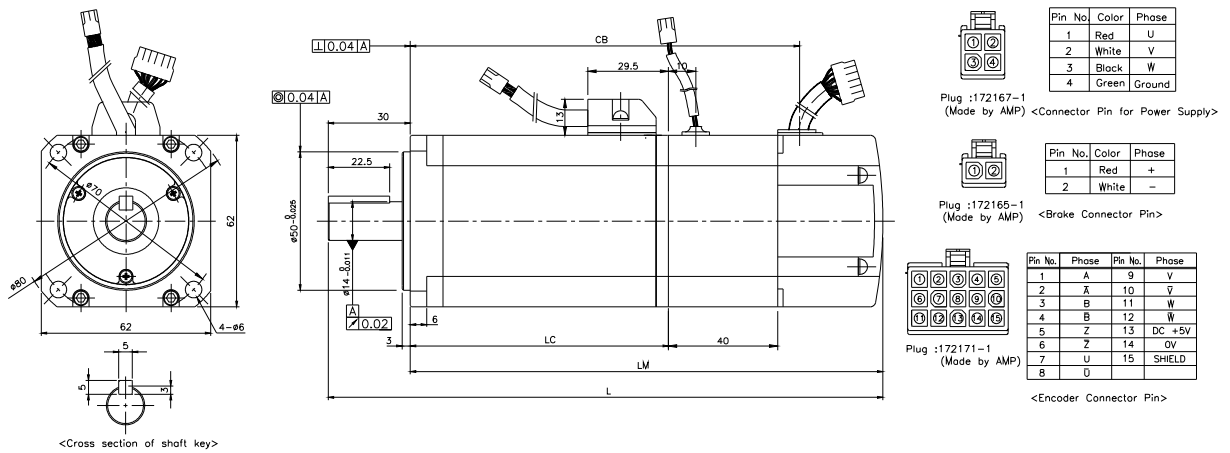
# APD-VS[Standard Type] Manual

## ◆ Standard type : APM-SB01A, APM-SB02A, APM-SB04A



Model	External dimensions				Weight(kg)
	L	LM	LC	CB	
SB01A	120.5	90.5	52.5	60.5	0.84
SB02A	134.5	104.5	66.5	74.5	1.11
SB04A	162.5	132.5	94.5	102.5	1.64

## ◆ Brake-attached type : APM-SB01A, APM-SB02A, APM-SB04A

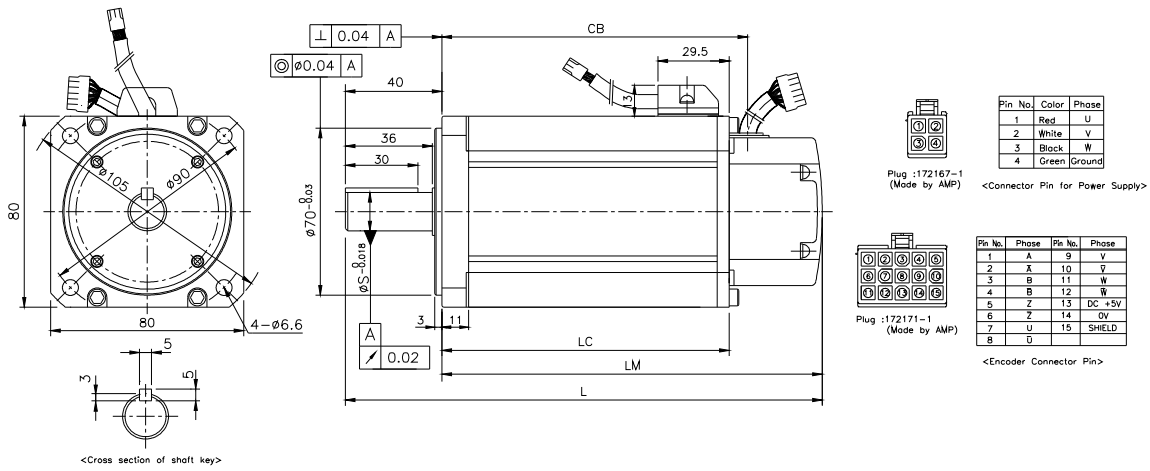


Model	External dimensions				Weight(kg)
	L	LM	LC	CB	
SB01A	160.5	130.5	52.5	100.5	1.21
SB02A	174.5	144.5	66.5	114.5	1.49
SB04A	202.5	172.5	94.5	142.5	2.05

Note) Use DC 24[V] for brake input power supply.

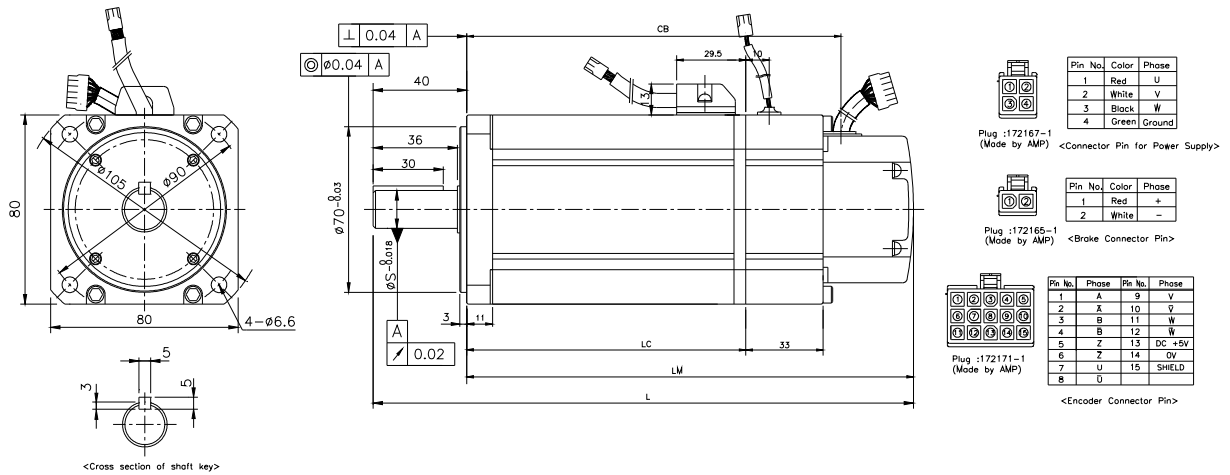
## Chapter7 Product Specification

◆ Standard type : APM-SC04A,SC03D, APM-SC06A,SC05D  
 APM-SC08A,SC06D, APM-SC10A,SC07D



Model	External dimensions					Weight(kg)
	L	LM	LC	CB	S	
SC04A,SC03D	158	118	79	86.5	14	1.85
SC06A,SC05D	178	138	99	106.5	16	2.49
SC08A,SC06D	198	158	119	126.5	16	3.15
SC10A,SC07D	218	178	139	146.5	16	3.80

◆ Brake-attached type : APM-SC04A,SC03D, APM-SC06A,SC05D  
 APM-SC08A,SC06D, APM-SC10A,SC07D

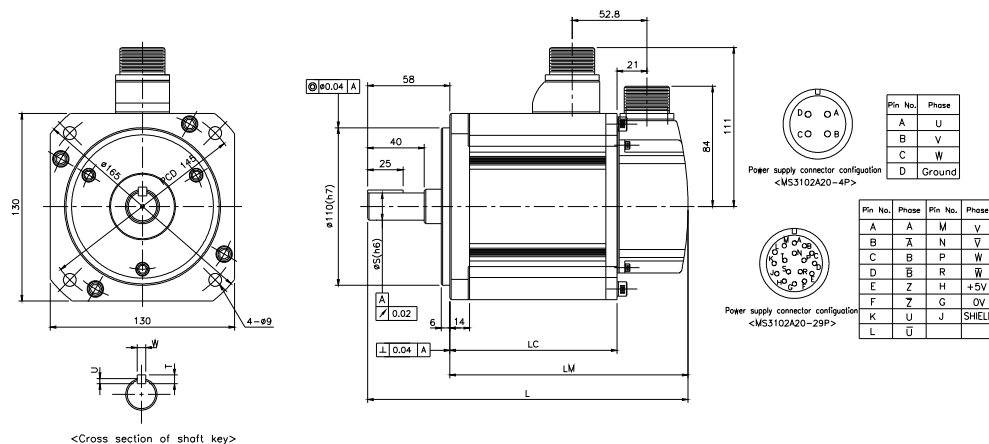


Model	External dimensions					Weight(kg)
	L	LM	LC	CB	S	
SC04A,SC03D	191	151	79	119.5	14	2.45
SC06A,SC05D	211	171	99	139.5	16	3.09
SC08A,SC06D	231	191	119	159.5	16	3.75
SC10A,SC07D	251	211	139	179.5	16	4.40

# APD-VS[Standard Type] Manual

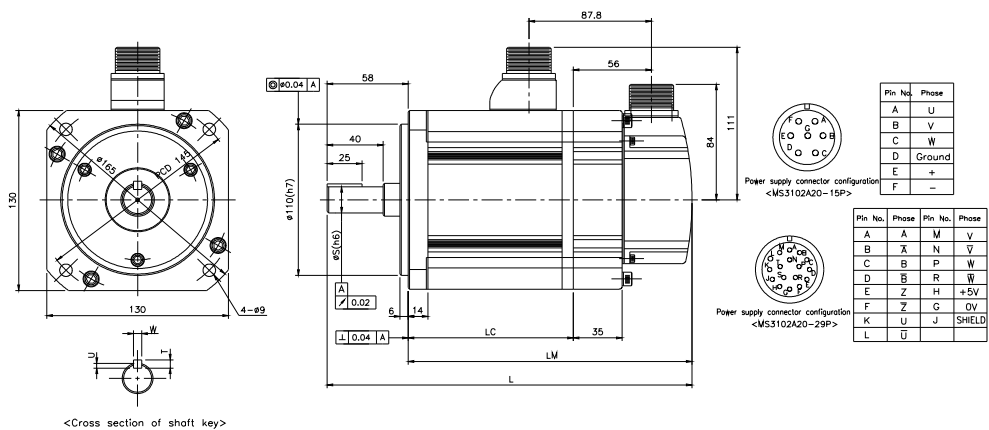
Note) Use DC 24[V] for brake input power supply.

- ◆ Standard type : APM-SE09A,SE06D,SE05G,SE03M, APM-SE15A,SE11D,SE09G,SE06M  
APM-SE22A,SE16D,SE13G,SE09M, APM-SE30A,SE22D,SE17G,SE12M



Model	External dimensions				Key dimensions			Weight(kg)
	L	LM	LC	S	T	W	U	
SE09A,SE06D,SE05G,SE03M	202	144	94	19	5	5	3	5.6
SE15A,SE11D,SE09G,SE06M	226	168	118	19	5	5	3	7.2
SE22A,SE16D,SE13G,SE09M	250	192	142	22	6	6	3.5	8.7
SE30A,SE22D,SE17G,SE12M	274	216	166	22	6	6	3.5	10.2

- ◆ Brake-attached type : APM-SE09A,SE06D,SE05G,SE03M, APM-SE15A,SE11D,SE09G,SE06M  
APM-SE22A,SE16D,SE13G,SE09M, APM-SE30A,SE22D,SE17G,SE12M

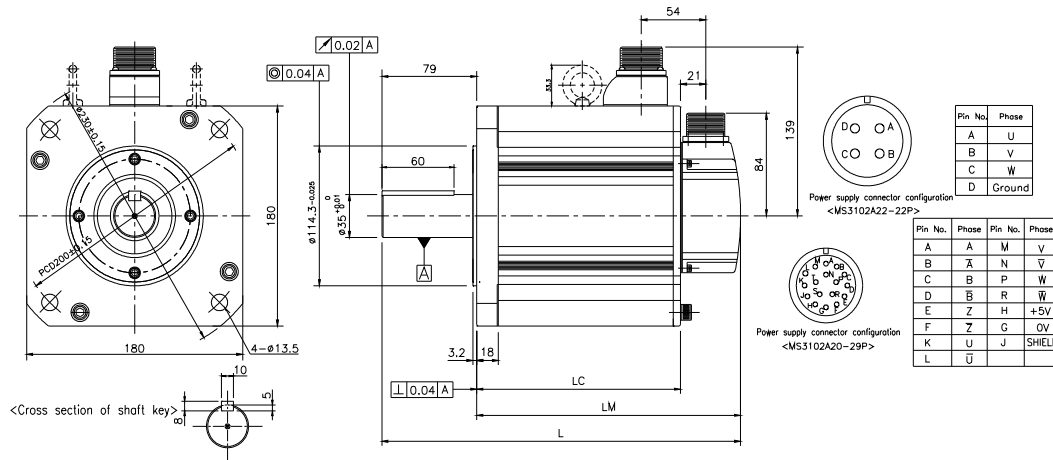


Model	External dimensions				Key dimensions			Weight(kg)
	L	LM	LC	S	T	W	U	
SE09A,SE06D,SE05G,SE03M	237	179	94	19	5	5	3	7.4
SE15A,SE11D,SE09G,SE06M	261	203	118	19	5	5	3	9.0
SE22A,SE16D,SE13G,SE09M	285	227	142	22	6	6	3.5	10.5
SE30A,SE22D,SE17G,SE12M	309	251	166	22	6	6	3.5	12.0

Note) Use DC 24 [V] for brake input power supply.

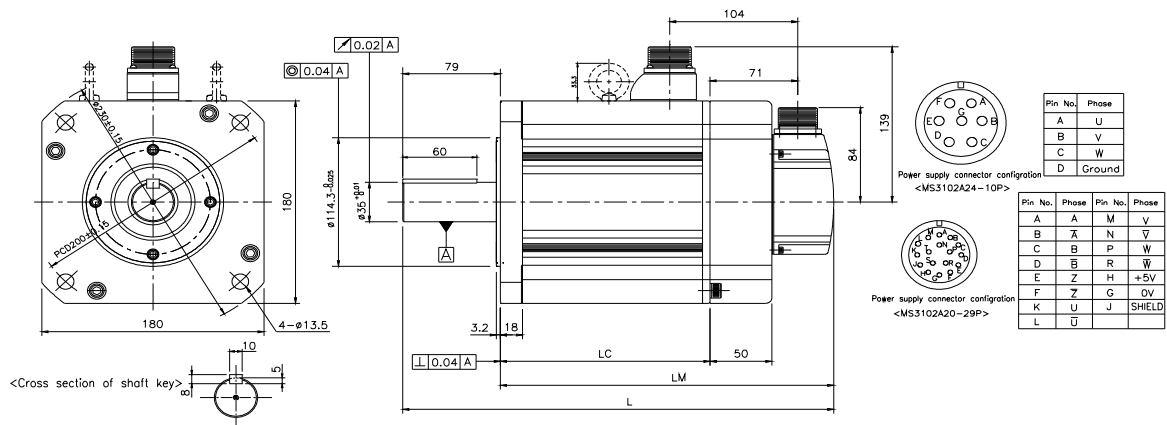
## Chapter7 Product Specification

- ◆ Standard type : APM-SF30A,SF22D,SF20G,SF12M, APM-SF50A,SF35D,SF30G,SF20M  
 APM-SF55D,SF44G,SF30M, APM-SF75D,SF60G,SF44M



Model	External dimensions			Weight(kg)
	L	LM	LC	
SF30A,SF22D,SF20G,SF12M	261.8	182.8	132.8	12.4
SF50A,SF35D,SF30G,SF20M	294.8	215.8	165.8	17.7
SF55D,SF44G,SF30M	344.8	265.8	215.8	26.3
SF75D,SF60G,SF44M	404.8	325.8	275.8	35.6

- ◆ Brake-attached type : APM-SF30A,SF22D,SF20G,SF12M, APM-SF50A,SF35D,SF30G,SF20M  
 APM-SF55D,SF44G,SF30M, APM-SF75D,SF60G,SF44M



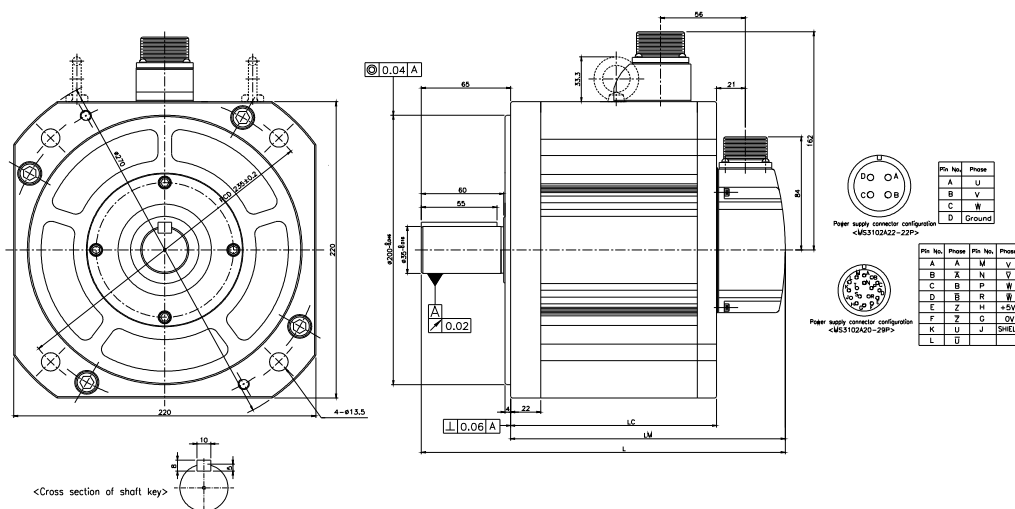
Model	External dimensions			Weight(kg)
	L	LM	LC	
SF30A,SF22D,SF20G,SF12M	311.8	232.8	132.8	17.6
SF50A,SF35D,SF30G,SF20M	344.8	265.8	165.8	24.9
SF55D,SF44G,SF30M	394.8	315.8	215.8	33.5
SF75D,SF60G,SF44M	454.8	375.8	275.8	42.8

Note) Use DC 24[V] for brake input power supply, Eyebolt is used at over SF55D, SF44G, SF30M type

# APD-VS[Standard Type] Manual

◆ Standard type : APM-SG22D, SG20G, SG12M, APM-SG35D, SG30G, SG20M

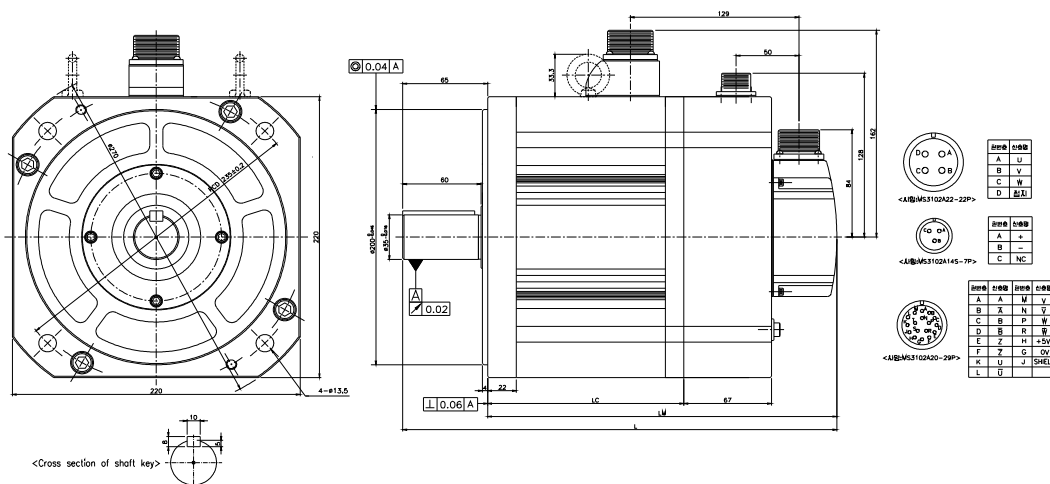
APM-SG55D, SG44G, SG30M, APM-SG75D, SG60G, SG44M



Model	External dimensions			Weight(kg)
	L	LM	LC	
SG22D, SG20G, SG12M	237	172	122	14.2
SG35D, SG30G, SG20M	257	192	142	19.88
SG55D, SG44G, SG30M	293	228	178	28.56
SG75D, SG60G, SG44M	321	256	206	37.28

◆ Brake-attached type : APM-SG22D, SG20G, SG12M, APM-SG35D, SG30G, SG20M

APM-SG55D, SG44G, SG30M, APM-SG75D, SG60G, SG44M

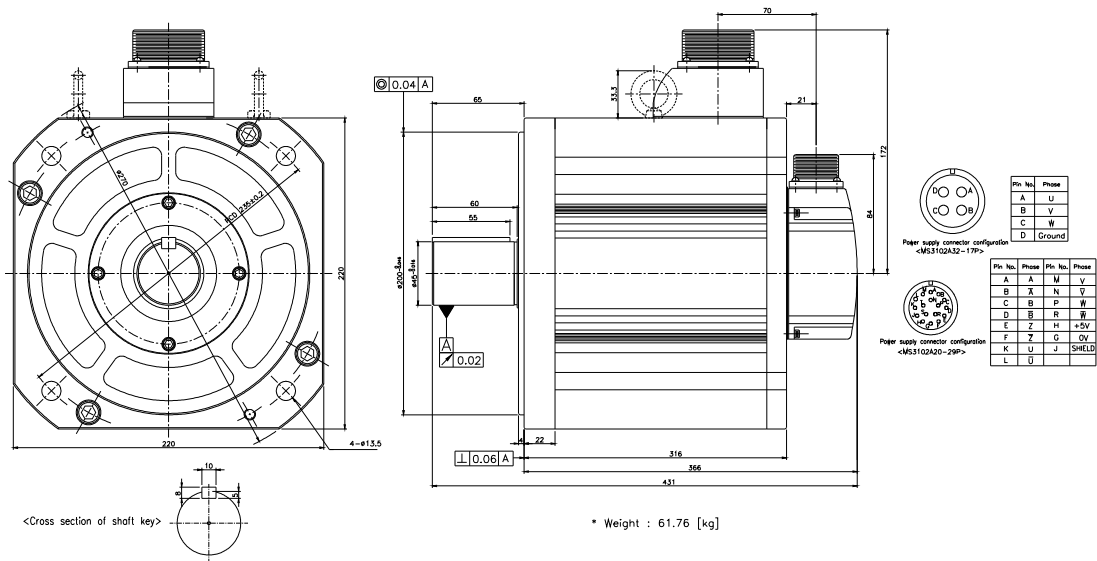


Model	External dimensions			Weight(kg)
	L	LM	LC	
SG22D, SG20G, SG12M	304	239	122	22.2
SG35D, SG30G, SG20M	324	259	142	27.88
SG55D, SG44G, SG30M	360	295	178	36.56
SG75D, SG60G, SG44M	388	323	206	45.28

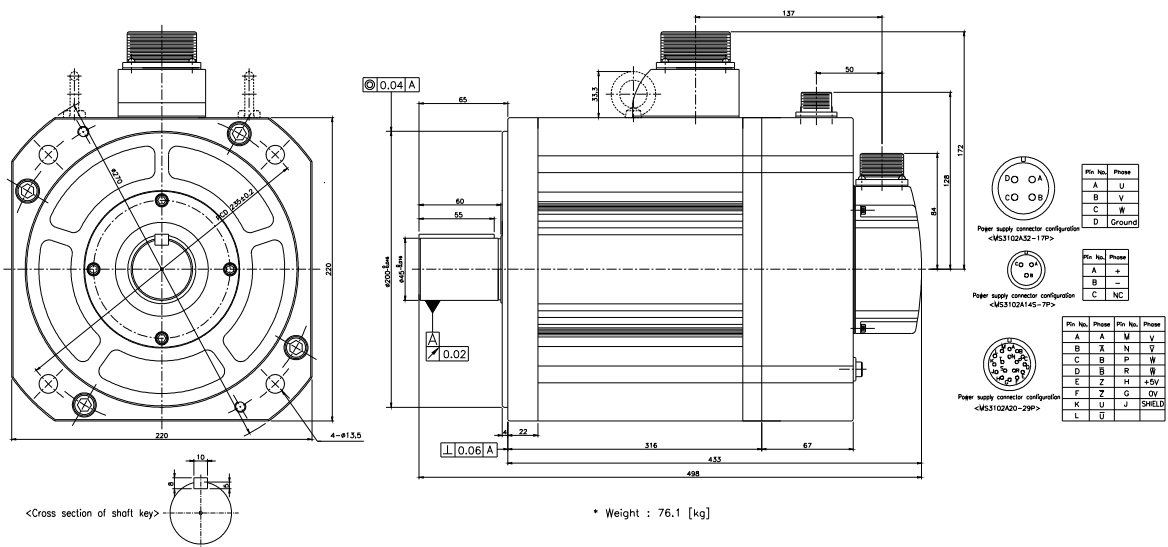
Note) Use DC 24[V] for brake input power supply.

◆ Standard type : APM-SG110D, SG85G, SG60M

## Chapter7 Product Specification



### ◆ Brake-attached type : APM-SG110D, SG85G, SG60M

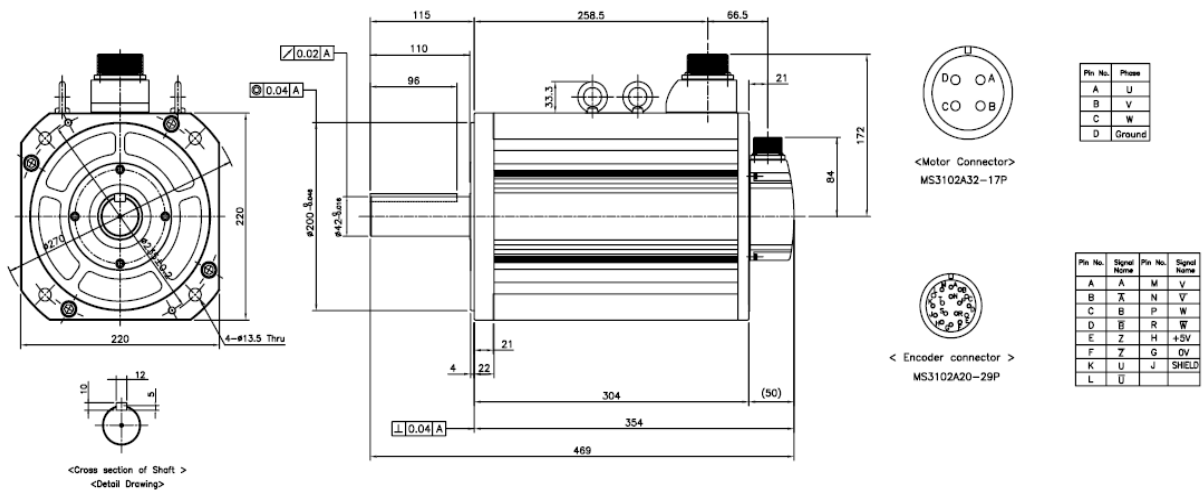


Note) Use DC 24 [V] for brake input power supply.

# APD-VS[Standard Type] Manual

◆ Standard type : APM-SG110G

※Weight : 58.92[kg]

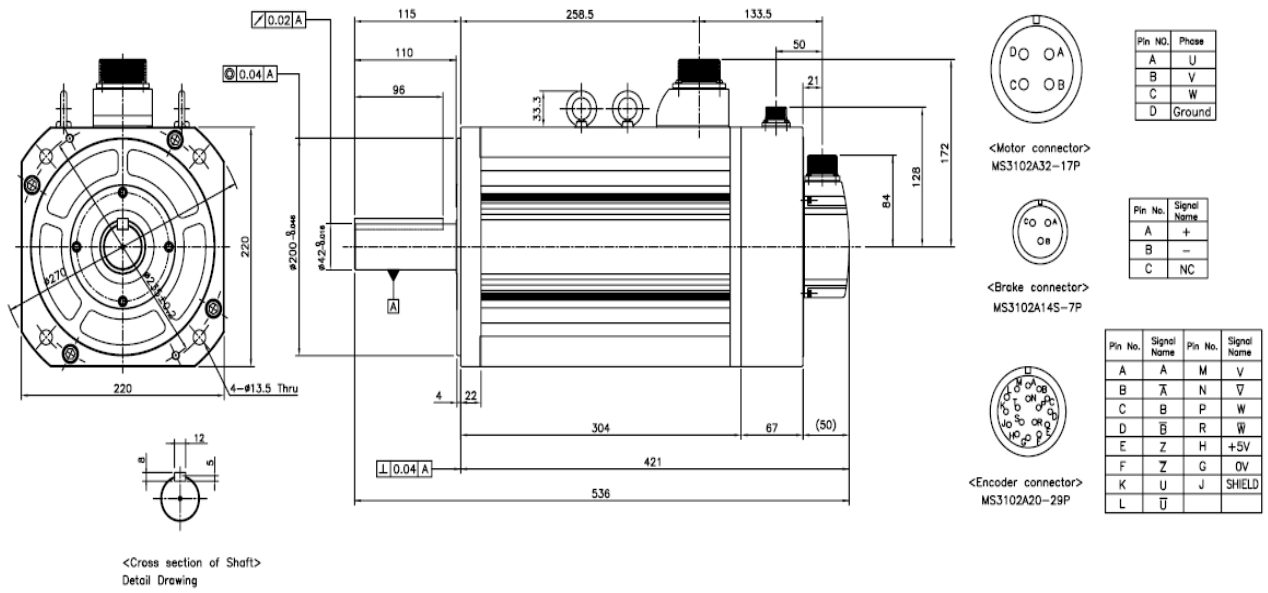


## Chapter7 Product Specification

◆ Brake Attached type : APM-SG110G

※Weight : 66.92[kg]

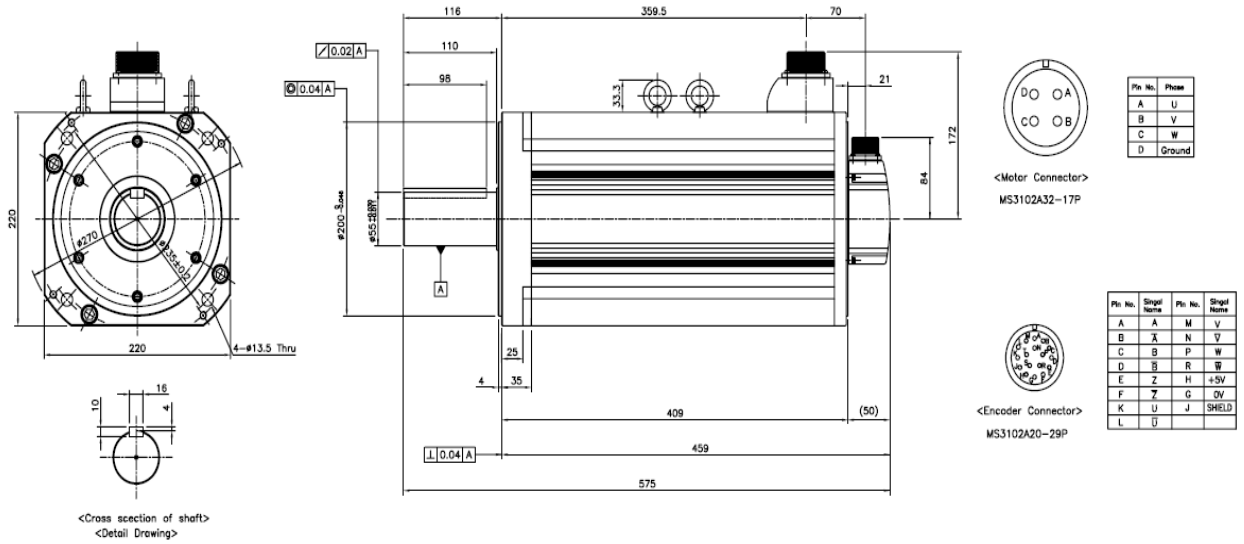
# APD-VS[Standard Type] Manual



◆ Standard type : APM-SG150G

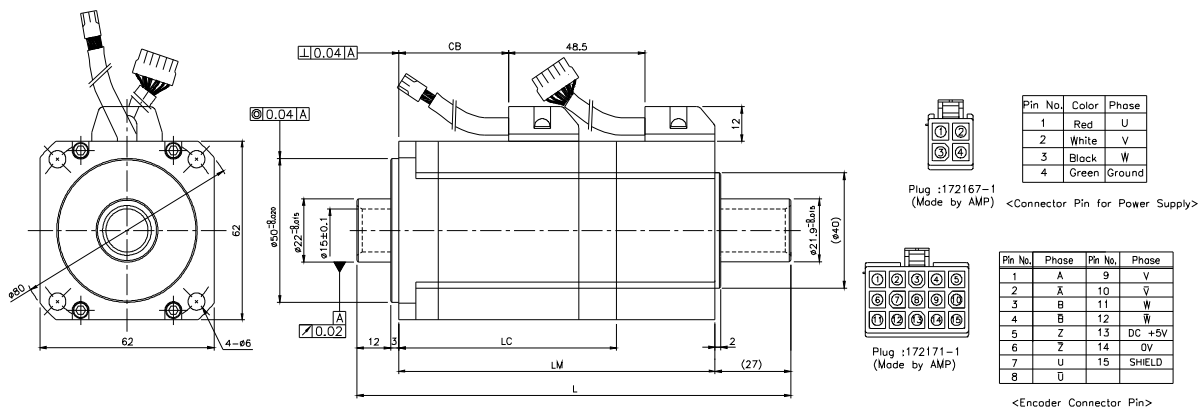
# Chapter7 Product Specification

※Weight : 92.26[kg]



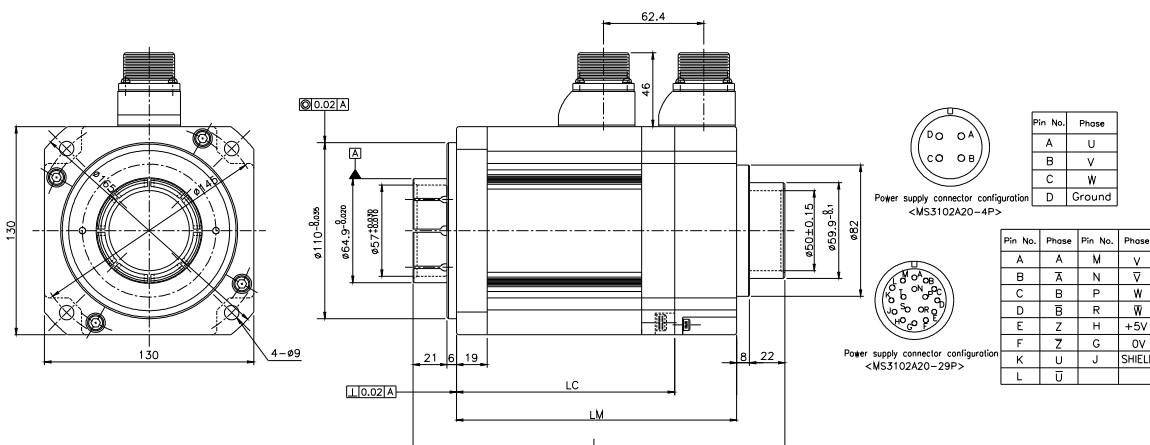
# APD-VS[Standard Type] Manual

## ◆ APM-HB01A(Hollow shaft type), APM-HB02A(Hollow shaft type), APM-HB04A(Hollow shaft type)



Model	External dimensions					Weight(Kg)
	L	LM	LC	CB	Hollow shaft type	
HB01A	140.5	98.5	63.5	25	15	0.89
HB02A	154.5	112.5	77.5	39	15	1.16
HB04A	182.5	140.5	105.5	67	15	1.69

## ◆ APM-HE09A(Hollow shaft type), APM-HE15A(Hollow shaft type)



Model	External dimensions				Weight(Kg)
	L	LM	LC	Hollow shaft type	
HE09A	207	150	111.5	50	5.82

## Chapter7 Product Specification

HE15A	231	174	135.5	50	7.43
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## Chapter7 Product Specification

Model	External dimensions									
	L	LM	LN	D	R	A	B	F	S	Y
37kw	811	671	135	405	300	285	350	250	70	4- $\phi$ 17.5 PCD 300
30kw	823	683	135	356	256	254	304	230	64	4- $\phi$ 13.5 PCD 265
22kw	755	615	135	356	256	254	304	230	64	4- $\phi$ 13.5 PCD 265

## Servo Drive

### Features

Model	VSR5	VS01	VS02	VS04	VS05	VS10	VS15	VS20	VS35	VS50	VS75	VS110	
Item													
Input voltage		3 Phase AC 200~230[V]+10[%]-15[%], 50/60[Hz]											
Appli cable Motor	Voltage type	3 Phase sine wave PWM-driven AC Servo motor											
	Rated current	1.2	1.65	1.65	3.2	4.3	6.4	11	16	21	32	38	50
	Max.current	3.6	4.95	4.95	9.6	12.9	19.2	33	48	63	96	102	125
Detector system		Standard : Incremental line driver 2000~10000 [P/R]											
Speed	Speed control range	Max. 1 : 10000											

## APD-VS[Standard Type] Manual

Control mode	Frequency response	Max. 400[Hz]			
	Speed command	DC -10[V] ~ +10[V](Reverse rotation in case of minus voltage), digital command 7 speeds			
	Acceleration/Deceleration time	Linear or S shape acceleration/deceleration (0~100,000[ms], Setting 1[ms] unit is possible)			
	Speed variation ratio	±0.01[%]or less [at Load variation 0~100%] , ±0.1[%]or less[Temp.25±10°C]			
Position Control Mode	Input frequency	500[kpps]			
	Input pulse type	A+B phase, forward and reverse pulse, direction + pulse[Line driver, Open collector]			
	Electrical gear ratio	Setting and selecting 4 digital electronic gear ratio. Precise adjustment is possible.			
Torque Control Mode	Torque command input	DC -10[V] ~ +10[V][-Reverse rotation in case of minus voltage]			
	Torque Linearity	2[%] or less			
	Limit speed command	DC 0[V] ~ +10[V], digital command 3 speeds.			
Built In Function	Generated braking	Standard built in [Operating at servo alarm of servo OFF]			
	Regenerated braking	Option	Built in	Provide standard resistor	Option
	Display	Built in 7-Segments[6Digits], CHARGE & ALARM Lamp			
	Monitor output	DC -5[V] ~ +5[V], 2 channels [speed, torque, position, etc]			
	Protective functions	Overcurrent, overload, overvoltage, voltage shortage, overspeed, wrong wiring, encoder problem, position following problem			
Ambient Environment	Temp.	0 ~ 50[°C]			
	Humidity	90[%] or less (avoid condensation)			
	Atmosphere	Indoors, no corrosive gas, inflammable gas and fluid, oil mist, or dust			

### - Features

Model		VS220	VS300	VS370										
Item														
Input voltage		3 Phase AC 200~230[V]+10[%]-15[%], 50/60[Hz]												
Applicable Motor	Voltage type	3 Phase sine wave PWM-driven AC Servo motor												
	Rated current	125	185	210										
	Max.current	250	370	420										
Detector system		Standard : Incremental line driver 2000~10000 [P/R]												
Speed Control mode	Speed control range	Max. 1 : 10000												
	Frequency response	Max. 400[Hz]												

## Chapter7 Product Specification

	Speed command	DC -10[V] ~ +10[V](Reverse rotation in case of minus voltage), digital command 7 speeds	
	Acceleration/Deceleration time	Linear or S shape acceleration/deceleration (0~100,000[ms], Setting 1[ms] unit is possible)	
	Speed variation ratio	±0.01[%]or less [at Load variation 0~100%] , ±0.1[%]or less[Temp.25±10°C]	
Position Control Mode	Input frequency	400[kpps]	
	Input pulse type	A+B phase, forward and reverse pulse, direction + pulse[Line driver, Open collector]	
	Electrical gear ratio	Setting and selecting 4 digital electronic gear ratio. Precise adjustment is possible.	
Torque Control Mode	Torque command input	DC -10[V] ~ +10[V][-Reverse rotation in case of minus voltage]	
	Torque Linearity	2[%] or less	
	Limit speed command	DC 0[V] ~ +10[V], digital command 3 speeds.	
Built In Function	Generated braking	Standard built in [Operating at servo alarm of servo OFF]	
	Regenerated braking	Option	
	Display	CHARGE & ALARM Lamp, , HANDY LOADER (OPTION)	
	Monitor output	DC -5[V] ~ +5[V], 2 channels [speed, torque, position, etc]	
	Protective functions	Overcurrent, overload, overvoltage, voltage shortage, overspeed, wrong wiring, encoder problem, position following problem	
Ambient Environment	Temp.	0 ~ 50[°C]	
	Humidity	90[%] or less (avoid condensation)	
	Atmosphere	Indoors, no corrosive gas, inflammable gas and fluid, oil mist, or dust	

### External Dimensions

◆ APD-VSR5N, APD-VS01N,  
APD-VS02N

◆ APD-VS04N

APD-VS[St

Manual

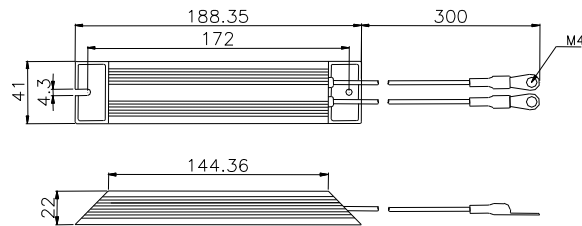
★ Weight : 1.2[kg]

← PD-VS10N

★ Weight : 1.5[kg]

★ Weight:2.5[kg]

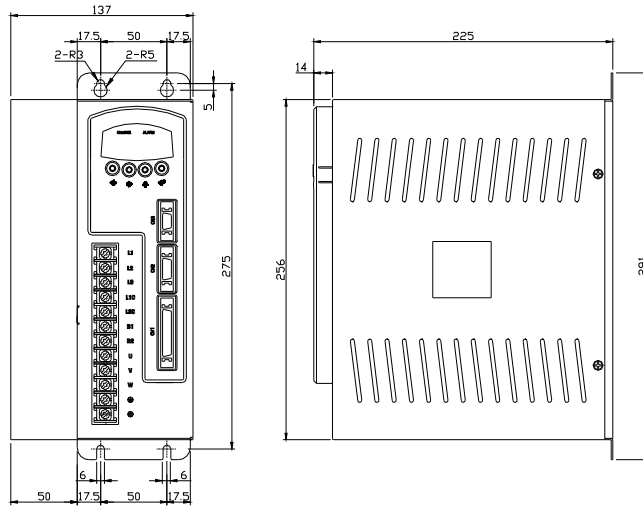
[Standard regenerative braking resistance : MRC 140W 40Ω]



IRH 140W 40ohm

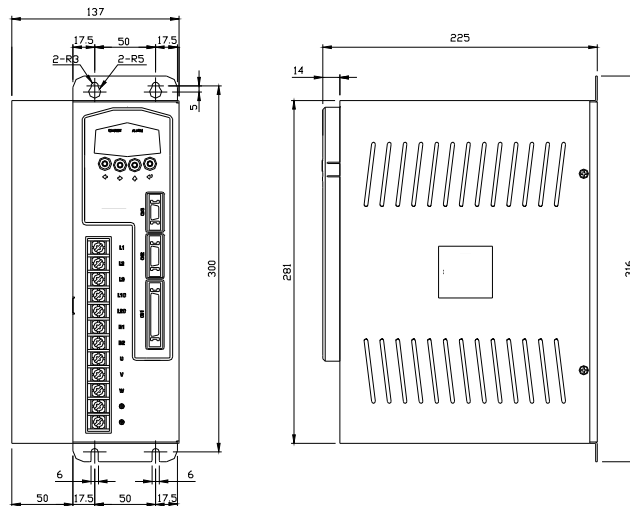
## Chapter7 Product Specification

### ◆ APD-VS15N, APD-VS20N, APD-VS35N, APD-VS50N



★ Weight : 7.2[kg]  
(VS35N~50N:Fan Cooling)

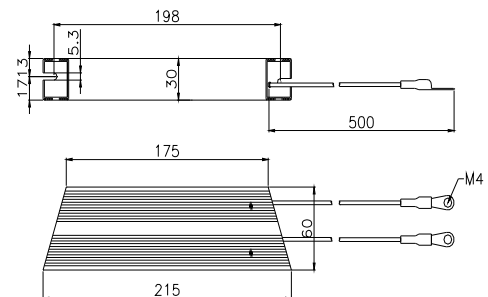
### ◆ APD-VS75N



★ Weight: 8[kg]  
(Fan Cooling)

[Standard regenerative braking resistance : IRV 300W 23Ω]

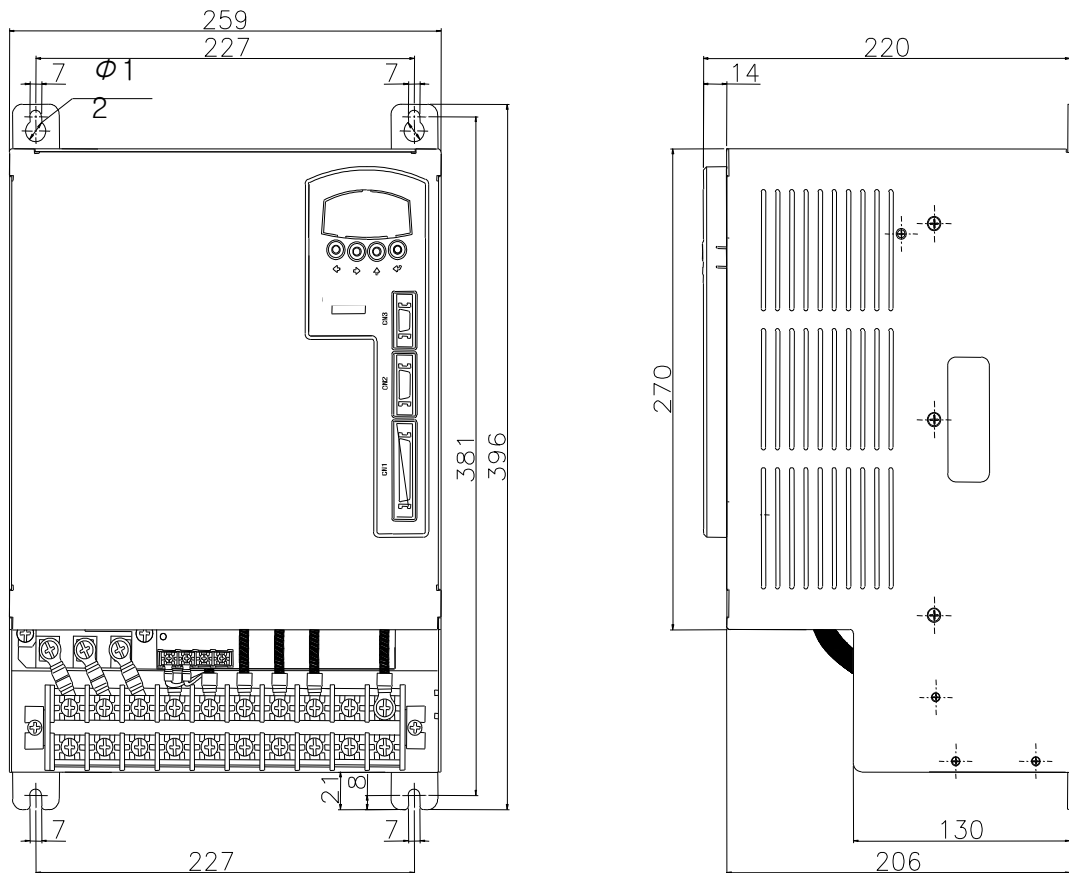
Model No. (APD-VS N)	15	20	35	50	75
Braking resistance(Provided)	23[Ω] (300[W])		11.5[Ω] (300[W]×2P)		
Option Braking resistance (Refer to Chapter7.3)	15[Ω] (600[W]×2P)		10[Ω] (600[W]×3P)		



IRV 300W 23ohm

## APD-VS[Standard Type] Manual

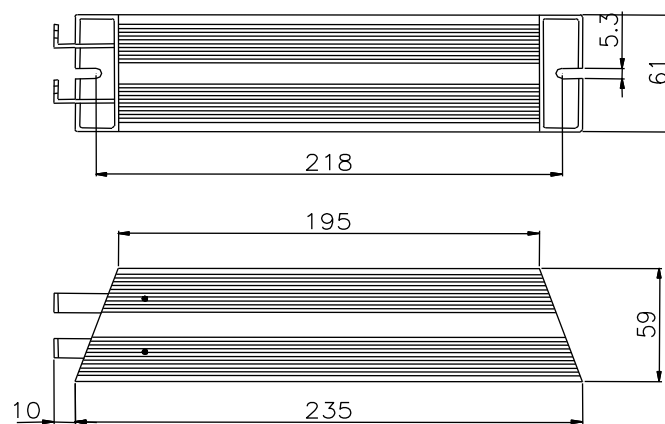
### ◆ APD-VS110N



★ Weight: 12[kg]  
(Fan Cooling)

**[Regenerative Braking Resistance : Purchase separately (Option)]**

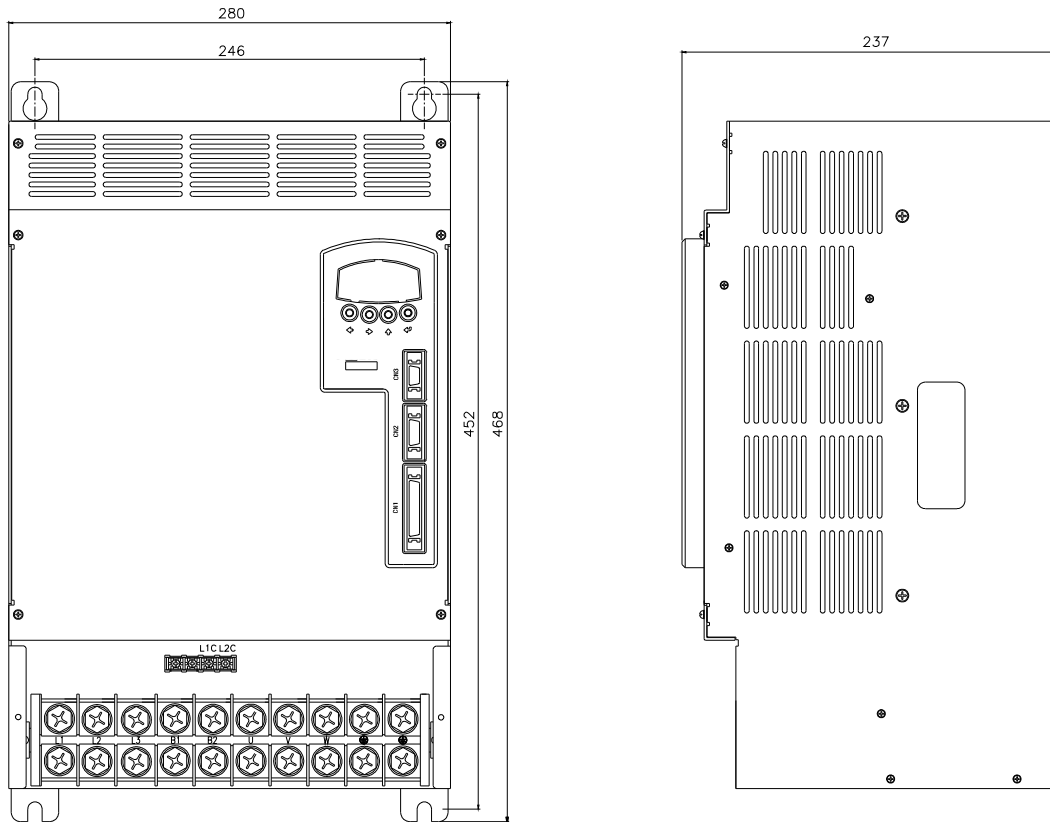
- 1) Model No. : APC-600R30 (600W30Ω)
- 2) Q'TY : 4 pcs parallel connected (2400W7.5Ω)



IRV 600S 30ohm

## Chapter7 Product Specification

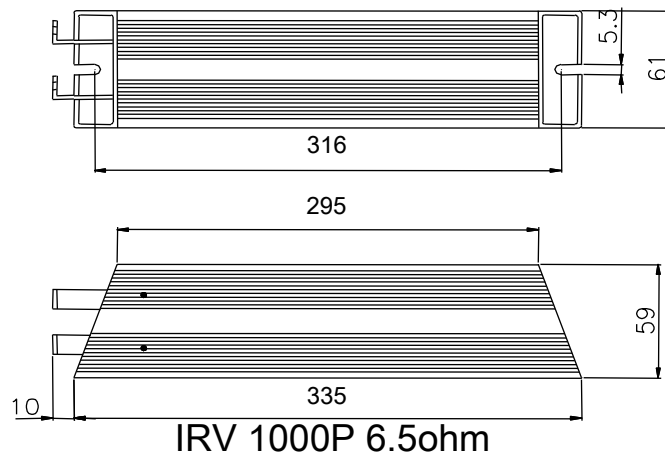
### ◆ APD-VS150N



★ Weight : 17[kg]  
(Fan Cooling)

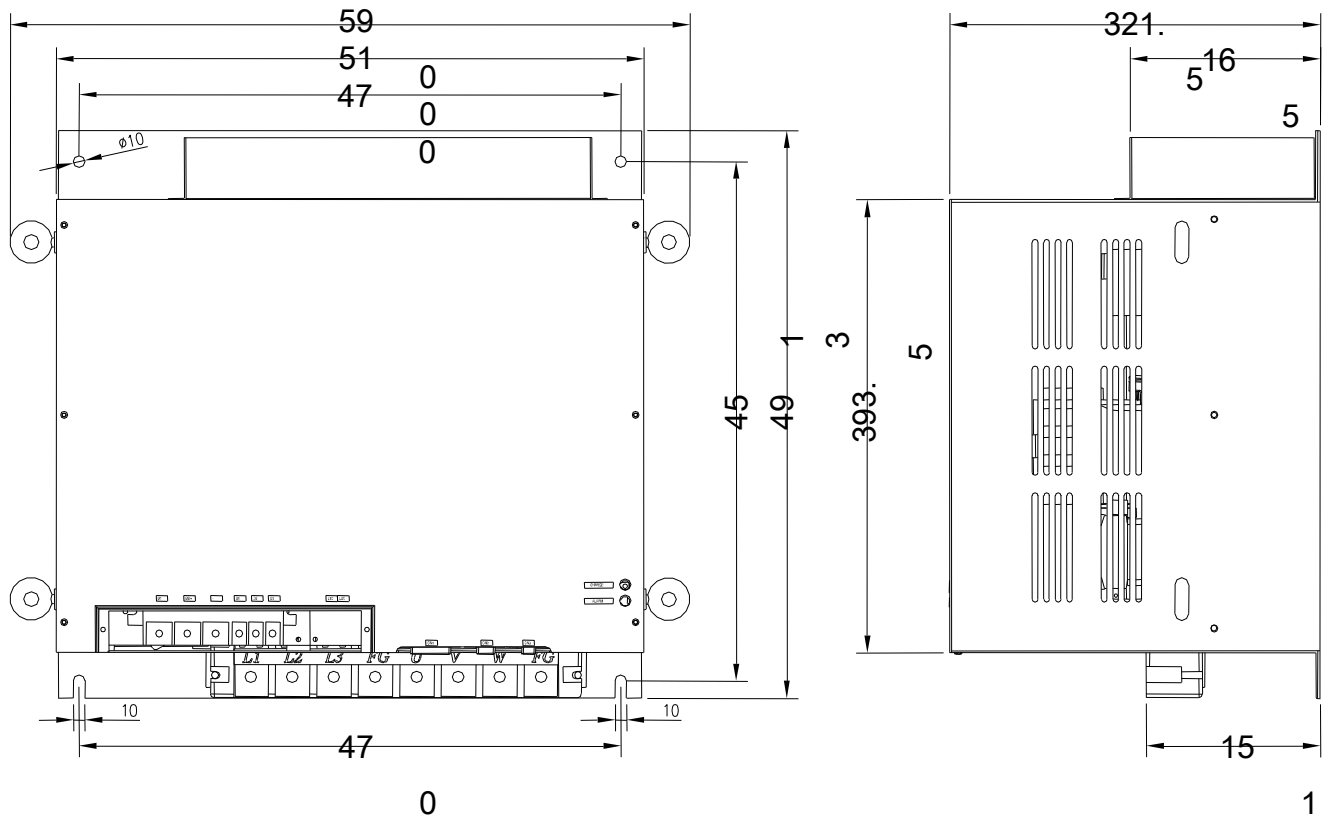
**[Regenerative Braking Resistance : Purchase separately (Option)]**

- 3) Model No. : APC-1000R6R5 (1000W6.5Ω)
- 4) Q'TY : 2 pcs parallel connected (2000W3.25Ω)



## APD-VS[Standard Type] Manual

### ◆ APD-VS220N, APD-VS300N, APD-VS370N



[Regenerative Braking Resistance : Purchase separately (Option)]

- 1) APD-VS220 : 2400W 2.4 [ $\Omega$ ]
- 2) APD-VS370, APD-VS300 : 4800W 1.6 [ $\Omega$ ] (2400W 3.2 [ $\Omega$ ] 2 pcs parallel connected)

