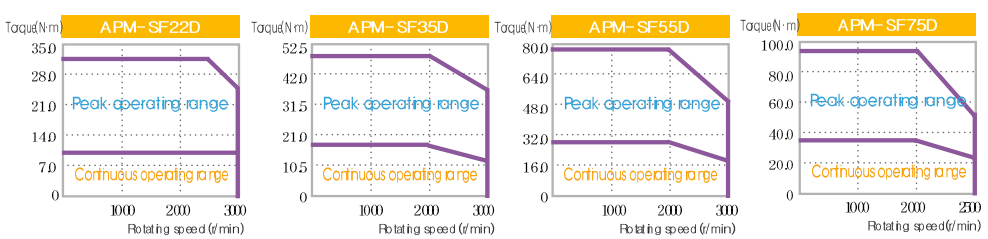
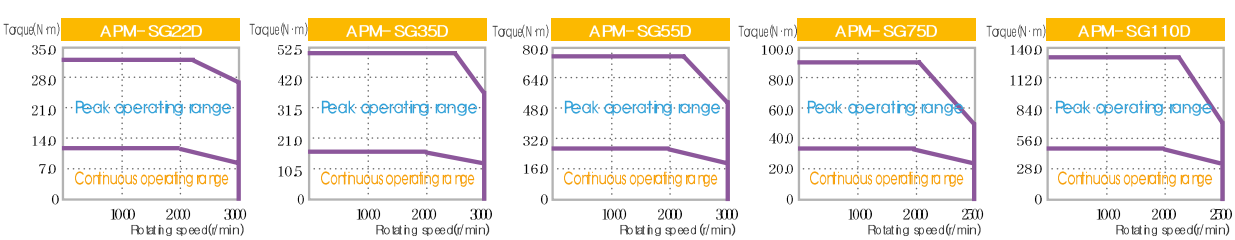
Servo Motor's Characteristics 〈Rated Speed 2000r/min〉

Servo Motor Model (APM-□□□□□)		SF22D	SF35D	SF55D	SF75D	SG22D	SG35D	SG55D	SG75D	SG110D
Servo Dive Model (APD-□□□□□)		VS20	VS35	VS50	VS75	VS20	VS35	VS50	VS75	VS110
Flange Size (□)		□180				□220				
Rated Power	[kW]	2.2	3.5	5.5	7.5	2.2	3.5	5.5	7.5	11.0
Rated Torque	[N · m]	10.5	16.7	26.25	35.81	10.5	16.7	26.3	35.8	52.5
	[kgf · cm]	107.1	170.4	267.8	365.41	107.2	170.5	267.9	365.4	535.9
Max. Instantaneous torque	[N · m]	31.5	50.12	78.76	89.53	31.5	50.1	78.8	89.5	131.3
	[kgf · cm]	321.3	511.3	803.4	913.53	321.3	511.5	803.8	913.4	1339.7
Rated rpm	[r/min]	2,000								
Max. rpm	[r/min]	3,000			2,500	3,000			2,500	
Monent of inertia	[kg · m² × 10⁻⁴]	30.74	52.13	80.60	121.35	51.42	80.35	132.41	172.91	291.36
	[gf · cm · s²]	31.35	53.16	85.24	123.74	52.47	81.99	135.11	176.44	297.31
Allowable Load Inertia Ratio		5 times of motor inertia								
Rated Power Rate	[kW/S]	35.88	53.56	82.56	105.75	21.45	34.75	52.07	74.15	94.65
Speed, Potion Transducer	Standard(Note1)	Incremental 3000[P/R]								
	Option	Absolute, Manchester communication								
Specification & Features	Protective Method	Totally enclosed, Non ventilated IP65(Excluding the shaft-through section and connectors.)								
	Rated Time	Continuous								
	Ambient Temp.	Operating Temp. : 0~40[°C] · Storage Temp. : -20~80[°C]								
	Ambient Temp.	Lower than 90[%] (Avoid condensation)								
	Atmosphere	Avoid direct sunlight, no corrosive gas, inflammable gas, oil mist, or dust								
	E/V	Elevation/Vibration 49[m/s²](5G)								
Weight	[kg]	12.4	17.7	26.3	35.6	16.95	21.95	30.8	37.52	66.2

⚠ Note) Standard Encoder specification is 5[V] Line Driver.

Rotation Speed-Torque's Characteristics



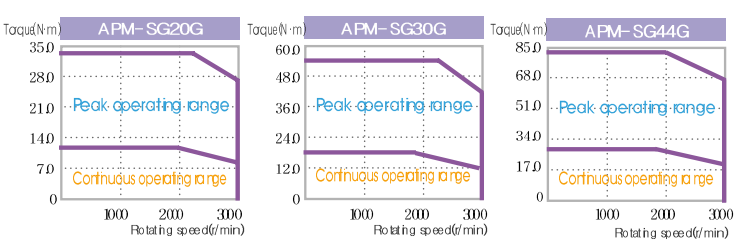


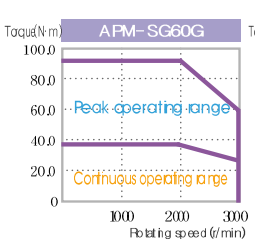
Servo Motor's Characteristics 〈Rated Speed 1500r/min〉

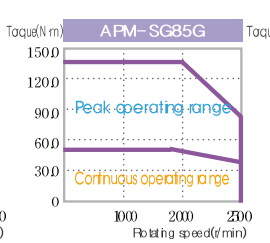
Servo Motor Model (APM-□□□□□)		SG20G	SG30G	SG44G	SG60G	SG85G	SG110G	SG150G
Servo Dive Model (APD-□□□□□)		VS20	VS35	VS50	VS75	VS110	VS150	VS150
Flange Size (□)		□220						
Rated Power	[kW]	1.8	2.9	4.4	6.0	8.5	11.0	15.0
Rated Torque	[N · m]	11.5	18.5	28.0	38.2	54.1	70.0	95.5
	[kgf · cm]	116.9	188.4	285.8	389.7	552.1	714.5	974.3
Max. Instantaneous torque	[N · m]	34.4	55.4	84.0	95.5	135.3	149.1	224.4
	[kgf · cm]	350.8	565.1	857.4	974.3	1380.3	1521.8	2289.6
Rated rpm	[r/min]	1,500						
Max. rpm	[r/min]	3,000			2,500		2,000	
Monent of inertia	[kg · m² × 10⁻⁴]	51.42	80.35	132.41	172.91	291.36	291.36	385.54
	[gf · cm · s²]	52.47	81.99	135.11	176.44	297.31	297.31	393.41
Allowable Load Inertia Ratio		5 times of motor inertia						
Rated Power Rate	[kW/S]	25.53	42.41	59.25	84.36	78.23	168.27	236.47
Speed, Potion Transducer	Standard(Note1)	Incremental 3000[P/R]						
	Option	Absolute, Manchester communication						
Specification & Features	Protective Method	Totally enclosed, Non ventilated IP65(Excluding the shaft-through section and connectors.)						
	Rated Time	Continuous						
	Ambient Temp.	Operating Temp. : 0~40[°C] ·Storage Temp. : -20~80[°C]						
	Ambient Temp.	Lower than 90[%] (Avoid condensation)						
	Atmosphere	Avoid direct sunlight, no corrosive gas, inflammable gas, oil mist, or dust						
	E/V	Elevation/Vibration 49[m/s²](5G)						
Weight	[kg]	16.95	21.95	30.8	37.52	66.2	66.3	92.2

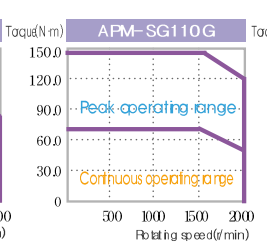
⚠ Note) Standard Encoder specification is 5[V] Line Driver.

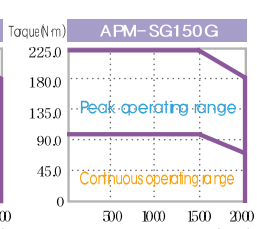
Rotation Speed-Torque's Characteristics









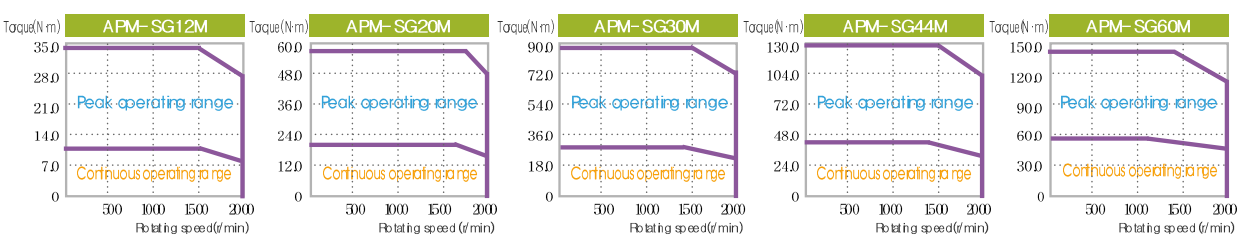


Servo Motor's Characteristics 〈Rated Speed 1000r/min〉

Servo Motor Model (APM-□□□□□)		SG12M	SG20M	SG30M	SG44M	SG60M
Servo Drive Model (APD-□□□□□)		VS15	VS20	VS35	VS50	VS75
Flange Size (□)		□220				
Rated Power	[kW]	1.2	2.0	3.0	4.4	6.0
Rated Torque	[N · m]	11.5	19.1	28.6	42.0	57.3
	[kgf · cm]	116.9	194.9	292.3	428.7	584.6
Max. Instantaneous torque	[N · m]	34.4	57.3	85.9	126.0	149.8
	[kgf · cm]	350.8	584.6	876.9	1286.1	1528.6
Rated rpm	[r/min]	1,000				
Max. rpm	[r/min]	2,000				
Moment of inertia	[kg·m²×10⁻⁴]	51.42	80.35	132.41	172.91	291.36
	[gf·cm·s²]	52.47	81.99	135.11	176.44	297.31
Allowable Load Inertia Ratio		5 times of motor inertia				
Rated Power Rate	[kW/S]	25.53	45.39	61.97	102.08	112.64
Speed, Potion Transducer	Standard(Note1)	Incremental 3000[P/R]				
	Option	Absolute, Manchester communication				
Specification & Features	Protective Method	Totally enclosed, Non ventilated IP65(Excluding the shaft-through section and connectors.)				
	Rated Time	Continuous				
	Ambient Temp.	Operating Temp. : 0~40[°C] ·Storage Temp. : -20~80[°C]				
	Ambient Temp.	Lower than 90[%] (Avoid condensation)				
	Atmosphere	Avoid direct sunlight, no corrosive gas, inflammable gas, oil mist, or dust				
	E/V	Elevation/Vibration 49[m/s²](5G)				
무게	[kg]	16.95	21.95	30.8	37.52	66.2

Note) Standard Encoder specification is 5[V] Line Driver.

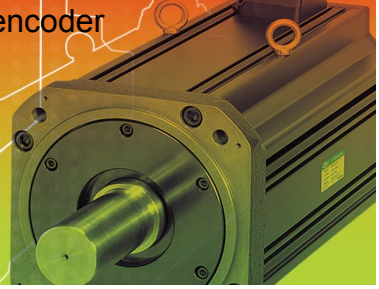
Rotation Speed-Torque's Characteristics



Brake Specification

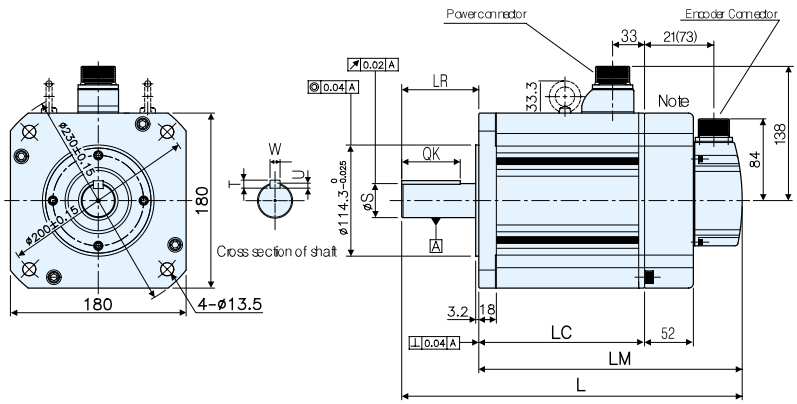
Applicable Motor Series	APM-SA	APM-SB	APM-SC	APM-SE	APM-SF	APM-SG
USe	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance
Power supply [V]	DC 24V	DC 24V	DC 24V	DC 24V	DC 24V	DC 90V
Rated Friction Torque [N • m]	0.32	1.47	3.23	10.4	40	74
Capacity [W]	6	6.5	9	17.4	33	32
Coil Resistance [Ω]	96	89	64	29.6	245	327
Rated Current [A]	0.25	0.27	0.38	0.81	0.37	0.28
Braking Type	Spring brake	Spring brake	Spring brake	Spring brake	Spring brake	Spring brake
Insulation Class	F- class	F- class	F- class	F- class	F- class	F- class

Note 1) For the electronic Brake that is attached to our Servo Motor, the same specifications are to be applied as per the series
2) Never use it for braking purpose because the electronic brake is only for maintenance of stopped condition
3) The characteristic of electronic brake is measured at 20 C
4) For SE, SF, SG Series of motor, DC24V is standard Power supply for Brake, but we can supply the Brake with DC 90V of power supply as optional.



Servo Motor Dimension

SF Serise | APM-SF30A, SF22D, SF20G, SF12M, APM-SF50A, SF35D, SF30G, SF20M, APM-SF55D, SF44G, SF30M, APM-SF75D, SF60G, SF44M, APM-SF75G



Model	External Dimension				Shaft, Key					Weight (kg)
	L	LM	LC	LR	S	QK	T	W	U	
SF30A, SF22D, SF20G, SF12M	261.8(313.8)	182.8(234.8)	132.8	79	35 $^{+0.01}_{+0}$	60	8	10	5	12.4(19.2)
SF50A, SF35D, SF30G, SF20M	294.8(346.8)	215.8(267.8)	165.8	79	35 $^{+0.01}_{+0}$	60	8	10	5	17.7(24.9)
SF55D, SF44G, SF30M	344.8(396.8)	265.8(317.8)	215.8	79	35 $^{+0.01}_{+0}$	60	8	10	5	26.3(33.4)
SF75D, SF60G, SF44M	404.8(456.8)	325.8(377.8)	275.8	79	35 $^{+0.01}_{+0}$	60	8	10	5	35.6(42.8)
SF75G	458.9(510.8)	345.8(397.8)	295.8	113	42 $^{-0}_{-0.016}$	96	8	12	5	39.4(45.1)

Plug Specification

Specification : MS3102A22-22P (Standard)

Pin No.	Phase
A	U
B	V
C	W
D	Ground

Specification : MS3102A24-10P (Brake attached type)

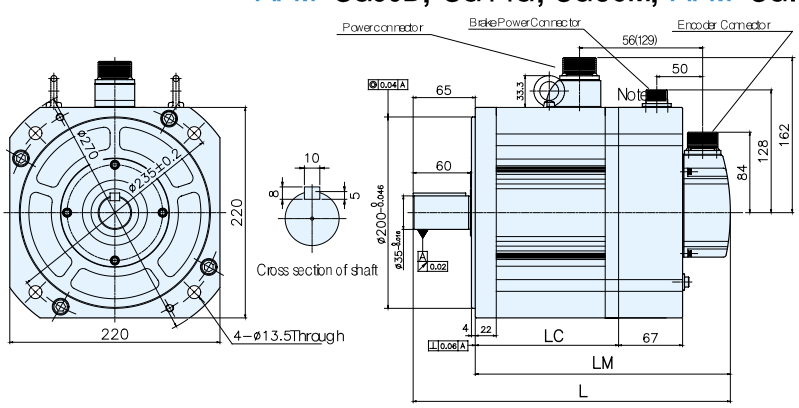
Pin No.	Phase	Pin No.	Phase
A	U	D	Ground
B	V	E	BK+
C	W	F	BK-

Specification : MS3102A20-29P

Pin No.	Phase	Pin No.	Phase
A	A	M	V
B	$\overline{A}$	N	$\overline{V}$
C	B	P	W
D	$\overline{B}$	R	$\overline{W}$
E	Z	H	+5V
F	$\overline{Z}$	G	0V
K	U	J	SHIELD
L	$\overline{U}$		

Note 1) Use DC24V or DC90V for brake input supply depending on Brake specification
2) The dimension in ( ) is for Brake attached motor

SG Serise | APM-SG22D, SG20G, SG12M, APM-SG35D, SG30G, SG20M, APM-SG55D, SG44G, SG30M, APM-SG75D, SG60G, SG44M



Model	External Dimension			Weight (kg)
	L	LM	LC	
SG22D, SG20G, SG12M	237(303)	172(238)	122	16.95(30.76)
SG35D, SG30G, SG20M	257(323)	192(258)	142	21.95(35.7)
SG55D, SG44G, SG30M	293(359)	228(294)	178	30.8(44.94)
SG75D, SG60G, SG44M	321(387)	256(322)	206	37.52(50.94)

Plug Specification

Specification : MS3102A22-22P (Standard)

Pin No.	Phase
A	U
B	V
C	W
D	Ground

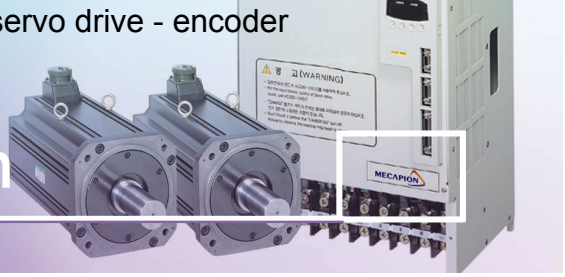
Specification : MS3102A14S-7P (Brake attached type)

Pin No.	Phase
A	BK+
B	BK-
C	NC

Specification : MS3102A20-29P

Pin No.	Phase	Pin No.	Phase
A	A	M	V
B	$\overline{A}$	N	$\overline{V}$
C	B	P	W
D	$\overline{B}$	R	$\overline{W}$
E	Z	H	+5V
F	$\overline{Z}$	G	0V
K	U	J	SHIELD
L	$\overline{U}$		

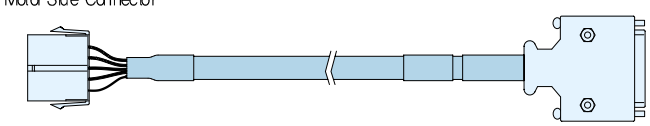
Note 1) Use DC24V or DC90V for brake input supply depending on Brake specification
2) The dimension in ( ) is for Brake attached motor



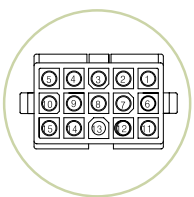
Options(Cable)

Incremental Encoder Cable

Model (★Note1) : APC - E□□□AS
Applicable Motor : All models of APM-SA Series, APM-SB Series, APM-SC Series, APM-HB Series

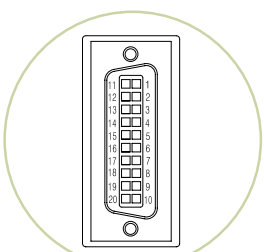


1. Motor Side Connector
   CAP (15 Position) : 172163-1(Made by AMP)
   SOCKET : 170361-1(Made by AMP)
2. Drive Side Connector(CN2)
   CASE : 10320-52A0-008(Made by 3M)
   CONNECTOR : 10120-3000VE(Made by 3M)
3. Cable
   7P×0.2SQ(AWG24)



AMP 172163-1 CAP
(15 Circuits)

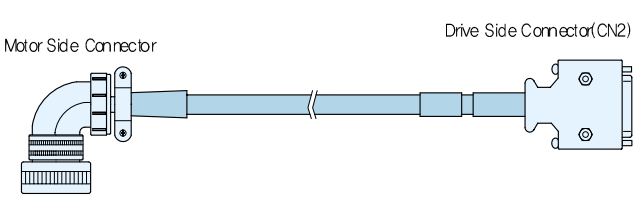
PIN NO.	Encoder signal	PIN NO.	Encoder signal
1	A	9	V
2	$\overline{A}$	10	$\overline{V}$
3	B	11	W
4	$\overline{B}$	12	$\overline{W}$
5	Z	13	+5V
6	$\overline{Z}$	14	0V
7	U	15	SHIELD
8	$\overline{U}$		



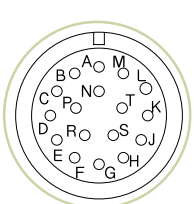
3M 10320-52A0-008
(15 Circuits)

PIN NO.	Encoder signal	PIN NO.	Encoder signal
1	W	11	$\overline{Z}$
2	$\overline{W}$	12	SHIELD
3	V	13	$\overline{B}$
4	$\overline{V}$	14	Z
5	U	15	$\overline{A}$
6	$\overline{U}$	16	B
7	–	17	–
8	–	18	A
9	0V	19	+5V
10	–	20	–

Model (★Note1) : APC-E□□□BS
Applicable Motor : All models of APM-SE Series, APM-SF Series, APM-SG Series, APM-HE Series

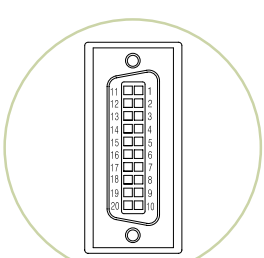


1. Motor Side Connector (MS:Military Standard)
   PLUG : MS3108B(MS3106B) 20-29S
2. Drive Side Connector(CN2)
   CASE : 10320-52A0-008(Made by 3M)
   CONNECTOR : 10120-3000VE(Made by 3M)
3. Cable
   7P×0.2SQ(AWG24)



MS3108B20-29S
(15Circuits)

PIN NO.	Encoder signal	PIN NO.	Encoder signal
A	A	M	V
B	$\overline{A}$	N	$\overline{V}$
C	B	P	W
D	$\overline{B}$	R	$\overline{W}$
E	Z	H	+5V
F	$\overline{Z}$	G	0V
K	U	J	SHIELD
L	$\overline{U}$		



3M 10320-52A0-008
(15 Circuits)

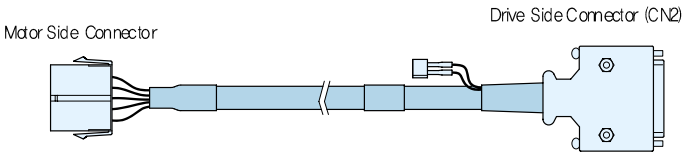
PIN NO.	Encoder signal	PIN NO.	Encoder signal
1	W	11	$\overline{Z}$
2	$\overline{W}$	12	SHIELD
3	V	13	$\overline{B}$
4	$\overline{V}$	14	Z
5	U	15	$\overline{A}$
6	$\overline{U}$	16	B
7	–	17	–
8	–	18	A
9	0V	19	+5V
10	–	20	–

Note1) □□□ of model indicates the kind and length of cable, and notation is as below

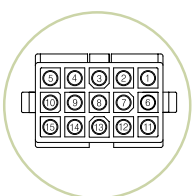
Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20

Absolute Encoder Cable

Model (★Note1) : APC-E□□□AA
Applicable Motor : All models of APM-SB Series, APM-SC Series

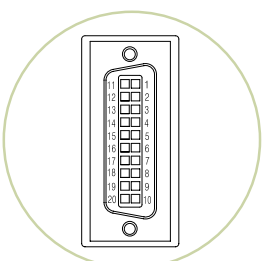


1. Motor Side Connector
   CAP (15 Position) : 172163-1(Made by AMP)
   SOCKET : 170361-1(Made by AMP)
2. Drive Side Connector(CN2)
   CASE : 10320-52A0-008(Made by 3M)
   CONNECTOR : 10120-3000VE(Made by 3M)
3. Cable
   7Px0.2SQ(AWG24)
4. BATTERY CONNECTOR
   5267-02A(Made by MOLEX)



AMP 172163-1 CAP
(15Circuits)

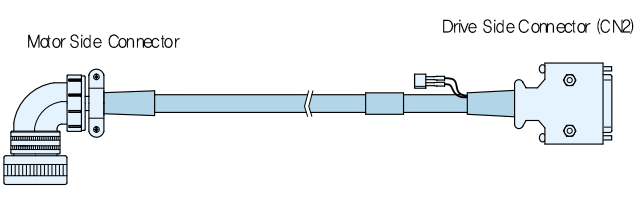
Pin No.	Encoder Phase	Pin No.	Encoder Phase
1	A	9	BATTERY
2	$\overline{A}$	10	BATTERY 0V
3	B	11	RX
4	$\overline{B}$	12	$\overline{RX}$
5	Z	13	+5V
6	$\overline{Z}$	14	0V
7	CLR	15	SHIELD
8	FG		



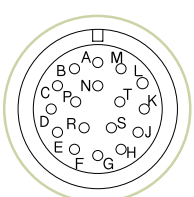
3M 10320-52A0-008
(15 Circuits)

Pin No.	Encoder Phase	Pin No.	Encoder Phase
1	RX	11	$\overline{Z}$
2	$\overline{RX}$	12	SHIELD,FG
3	—	13	$\overline{B}$
4	—	14	Z
5	—	15	$\overline{A}$
6	—	16	B
7	—	17	—
8	—	18	A
9	0V	19	+5V
10	—	20	CLR

Model (★Note1) : APC-E□□□BA
Applicable Motor : All models of APM-SE Series, APM-SF Series, APM-SG Series

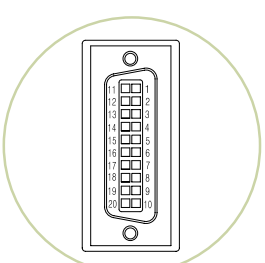


1. Motor Side Connector (MS : Military Standard)
   PLUG : MS3108B(3106B)20-29S
2. Drive Side Connector(CN2)
   CASE : 10320-52A0-008(Made by 3M)
   CONNECTOR : 10120-3000VE(Made by 3M)
3. Cable
   7Px0.2SQ(AWG24)
4. BATTERY CONNECTOR
   5267-02A(Made by MOLEX)



MS3108B20-29S
(15Circuits)

Pin No.	Encoder Phase	Pin No.	Encoder Phase
A	A	M	CLR
B	$\overline{A}$	N	FG
C	B	P	RX
D	$\overline{B}$	R	$\overline{RX}$
E	Z	H	+5V
F	$\overline{Z}$	G	0V
K	BATTERY	J	SHIELD
L	BATTERY 0V		

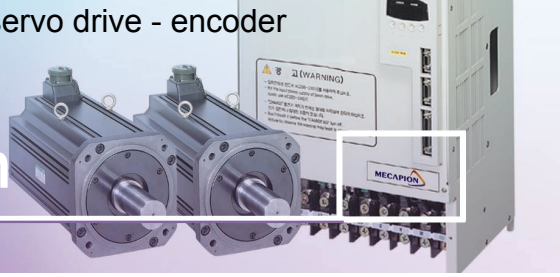


3M 10320-52A0-008
(15 Circuits)

Pin No.	Encoder Phase	Pin No.	Encoder Phase
1	RX	11	$\overline{Z}$
2	$\overline{RX}$	12	SHIELD,FG
3	—	13	$\overline{B}$
4	—	14	Z
5	—	15	$\overline{A}$
6	—	16	B
7	—	17	—
8	—	18	A
9	0V	19	+5V
10	—	20	CLR

Note1) □□□ of model indicates the kind and length of cable, and notation is as below

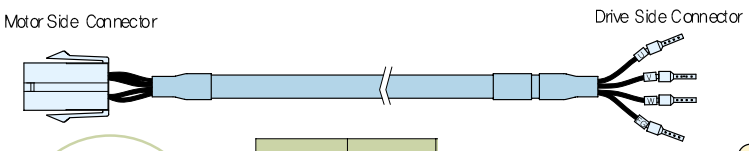
Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20

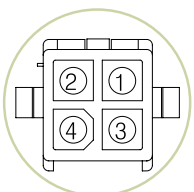


Options(Cable)

Power cable

Model (★Note1) : APC - P□□□CS
Applicable Motor : All models of APM-SA Series, APM-SB Series, APM-HB Series / APM-SC04A, SC06A, SC03D, SC05D



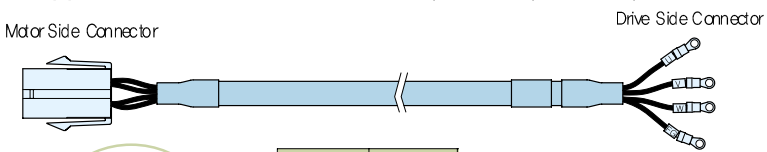


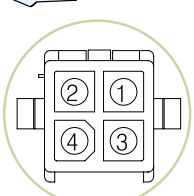
AMP 172159-1 CAP
(4Circuits)

Pin No.	Phase
1	U
2	V
3	W
4	Ground

1. Motor Side Connector
   CAP (4 Position) : 172159-1(Made by AMP)
   SOCKET : 170362-1(Made by AMP)
2. Drive Side Connector (U,V,W,FG)
   PIN : UA-F1512(Made by Suh-il Electronic)
   Compressor : UA-510A
   (Made by Suh-il Electronic)
3. Cable
   4Cx0.75SQ(AWG20)

Model (★Note1) : APC - P□□□DS
Applicable Motor : APM-SC08A, SC10A, SC06D, SC07D



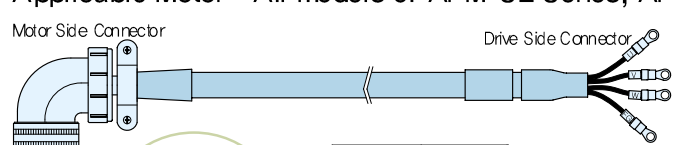


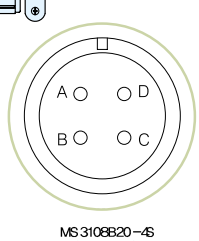
AMP 172159-1 CAP
(4Circuits)

Pin No.	Phase
1	U
2	V
3	W
4	Ground

1. Motor Side Connector
   CAP (4 Position) : 172159-1(Made by AMP)
   SOCKET : 170362-1(Made by AMP)
2. Drive Side Connector(U,V,W,FG)
   Connection terminals : 1.25×3(KET GP110012)
3. Cable
   4C×0.75SQ(AWG18)

Model (★Note1) : APC - P□□□ES
Applicable Motor : All models of APM-SE Series, APM-HE Series





MS3108B20-4S
(4Circuits)

Pin No.	Phase
A	U
B	V
C	W
D	Ground

1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)20-4S
2. Drive Side Connector (U,V,W,FG)
   Connection terminals : 2.5x4(KET GP110721)
3. Cable
   4Cx2.0SQ(AWG14)

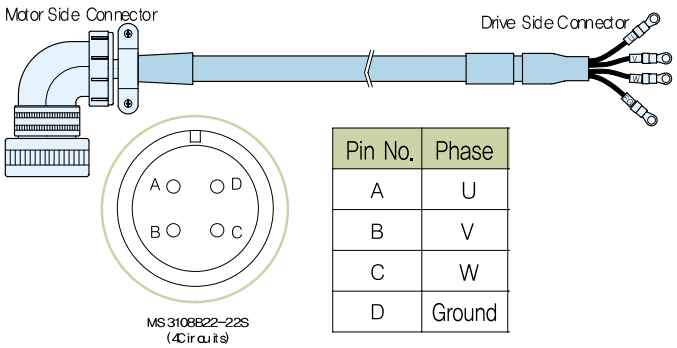
⚠ Note) For drive side connector of APM-SE03M Series cable, UA-F1512 pin is to be applied

⚠ Note1) □□□ of model indicates the kind and length of cable, and notation is as below

Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20

Power cable

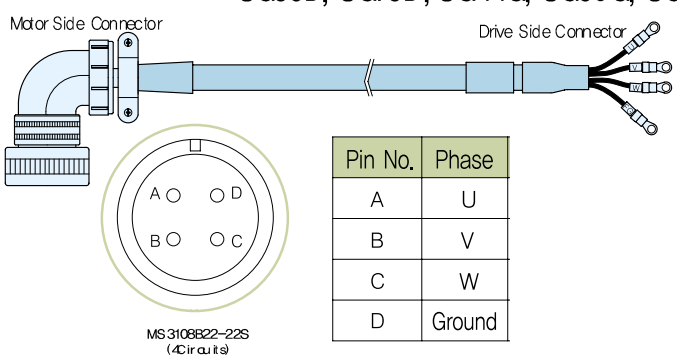
Model (★Note1) : APC-P□□□FS
Applicable Motor : APM-SF30A, SF22D, SF35D, SF20G, SF30G, SF12M, SF20M, SF30M
SG22D, SG35D, SG20G, SG30G, SG12M, SG20M, SG30M



Pin No.	Phase
A	U
B	V
C	W
D	Ground

1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)22-22S
2. Drive Side Connector(U,V,W,FG)
   Connection terminals : 3.5x5(KET GP110028)
3. Cable
   4Cx3.5SQ(AWG12)

Model (★Note1) : APC-P□□□GS
Applicable Motor : APM-SF50A, SF55D, SF75D, SF44G, SF60G, SF75G, SF44M
SG55D, SG75D, SG44G, SG60G, SG44M

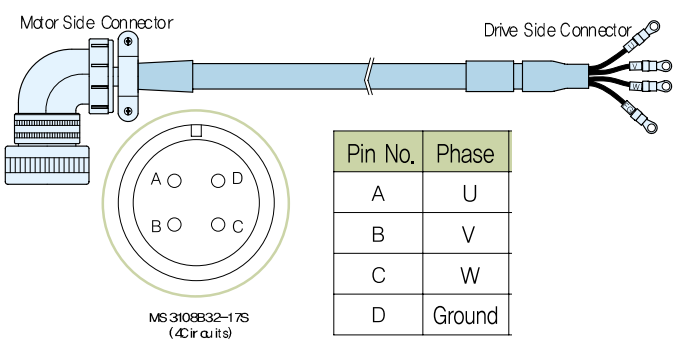


Pin No.	Phase
A	U
B	V
C	W
D	Ground

1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)22-22S
2. Drive Side Connector(U,V,W,FG)
   Connection terminals : 5.5x5(KET GP110028)
3. Cable
   4Cx5.0SQ(AWG10)

Model (★Note1,2) : APC-P□□□RS
Applicable Motor : APM-SG110D, SG150G, SG60M

Model (★Note1,3) : APC-P□□□SS
Applicable Motor : SG85G, SG110G



Pin No.	Phase
A	U
B	V
C	W
D	Ground

★Note2

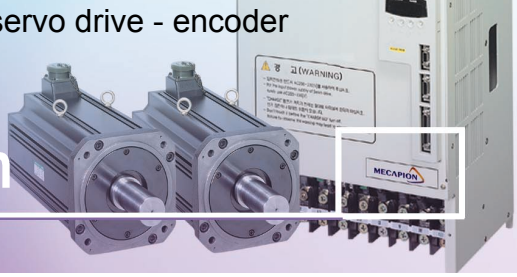
1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)32-17S
2. Drive Side Connector(U,V,W,FG)
   Connection terminals : 8.0x8(KET GP140841)
3. Cable
   4Cx8.0SQ(AWG8)

★Note3

1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)32-17S
2. Drive Side Connector(U,V,W,FG)
   Connection terminals : 11Cx8(KET GP140841)
3. Cable
   4Cx14.0SQ(AWG6)

Note1) □□□ of model indicates the kind and length of cable, and notation is as below

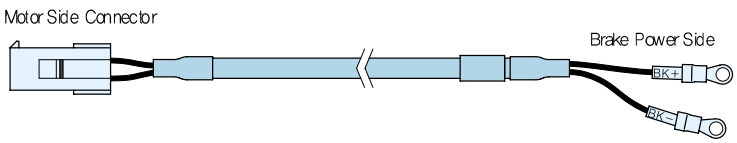
Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20

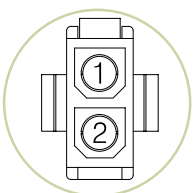


Options(Cable)

Brake cable

Model (★Note1) : APC-P□□□KB
Applicable Motor : All models of APM-SA Series, APM-SB Series, APM-SC Series



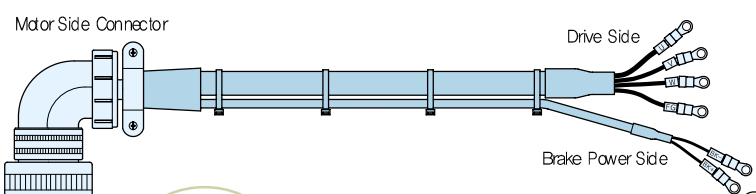


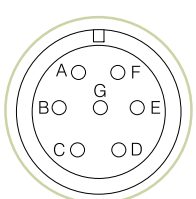
AMP 172157-1 CAP
(2Circuits)

Pin No.	Phase
1	BK+
2	BK-

1. Motor Side Connector
   CAP (2 Position) : 172157-1(Made by AMP)
   SOCKET : 170362-1(Made by AMP)
2. Brake Power Side
   Connection terminals : 1.25×3(KET GP110012)
   Cable : 2C×0.75SQ(AWG18)

Model (★Note1) : APC-P□□□MB
Applicable Motor : All models of APM-SE Series





MS3108B20-15S
(6Circuits)

Pin No.	Phase
A	U
B	V
C	W
D	Ground
E	BK+
F	BK-

1. Motor Side Connector (MS Military Standard)
   PLUG : MS3108B(MS3106B)20-15S
2. Drive Side (U,V,W,FG)
   Connection terminals : 2.5x4(KET GP110721)
   Cable : 4Cx2.0SQ(AWG14)
3. Brake Power Side (+,-)
   Connection terminals : 1.25x3(KET GP110012)
   Cable : 2Cx0.75SQ(AWG18)

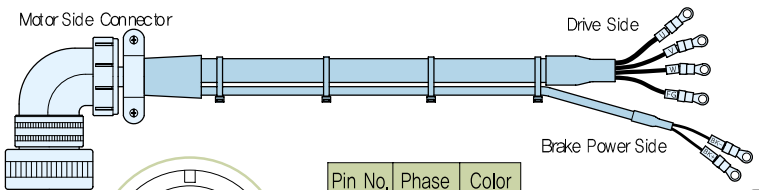
⚠ Note) For drive side connector of APM-SE03M Series cable, UA-F1512 pin is to be applied

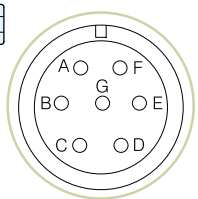
⚠ Note1) □□□ of model indicates the kind and length of cable, and notation is as below

Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20

Brake cable

Model (★Note1) : APC-P□□□NB
Applicable Motor : APM-SF30A, SF22D, SF35D, SF20G, SF30G, SF12M, SF20M, SF30M



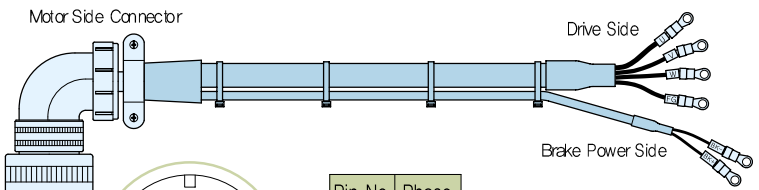


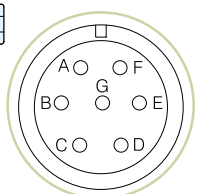
MS3108B20-10S
(6Circuits)

Pin No.	Phase	Color
A	U	Red
B	V	White
C	W	Black
D	Ground	Green
E	BK+	–
F	BK–	–

1. Motor Side Connector(MS:Military Standard)
   PLUG : MS3108B(MS3106B)24-10S
2. Drive Side (U,V,W,FG)
   Connection terminals : 3.5x5(KET GP110028)
   Cable : 4Cx3.5SQ(AWG12)
3. Brake Power Side (+,–)
   Connection terminals : 1.25x3(KET GP110012)
   Cable : 2Cx0.75SQ(AWG18)

Model (★Note1) : APC-P□□□PB
Applicable Motor : APM-SF50A, SF55D, SF75D, SF44G, SF60G, SF75G, SF44M



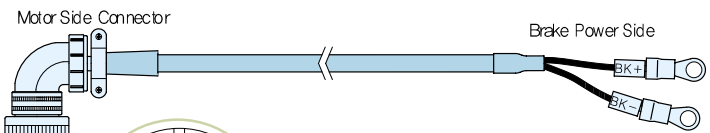


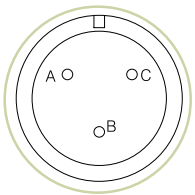
MS3108B20-10S
(6Circuits)

Pin No.	Phase
A	U
B	V
C	W
D	Ground
E	BK+
F	BK–

1. Motor Side Connector (MS:Military Standard)
   PLUG : MS3108B(MS3106B)24-10S
2. Drive Side (U,V,W,FG)
   Connection terminals : 3.5x5(KET GP110028)
   Cable : 4Cx5.5SQ(AWG10)
3. Brake power Side (+,–)
   Connection terminals : 1.25x3(KET GP110012)
   Cable : 2Cx0.75SQ(AWG18)

Model (★Note1) : APC-P□□□SB
Applicable Motor : All models of APM-SG Series





MS3108B14S-7S
(2Circuits)

Pin No.	Phase
A	BK+
B	BK–

1. Motor Side Connector
   PLUG : MS3108B(MS3106B)14S-7S
2. Brake Power Side (+, –)
   Connection terminals : 1.25×3(KET GP110012)
3. Cable
   2C×0.75SQ(AWG18)

Note1) □□□ of model indicates the kind and length of cable, and notation is as below

Standard Cable Length (m)	3	5	10	20
Robotic Cable	F03	F05	F10	F20
General Cable	N03	N05	N10	N20