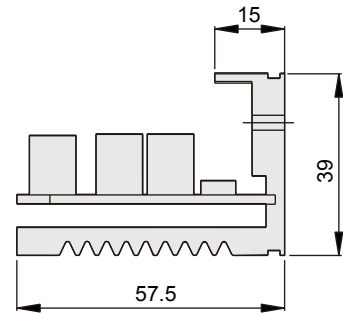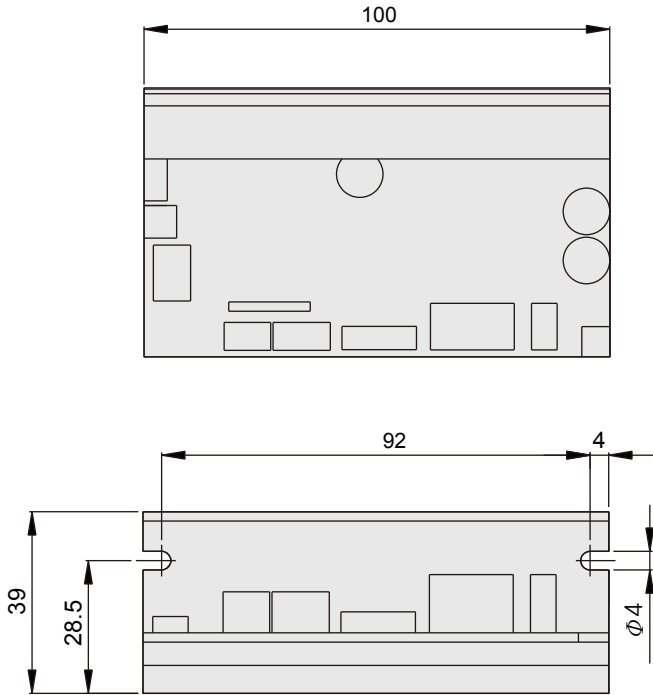Before use this product, read well manual certainly and
understand all about knowledge, safety information and cautions
of product, and use right way.
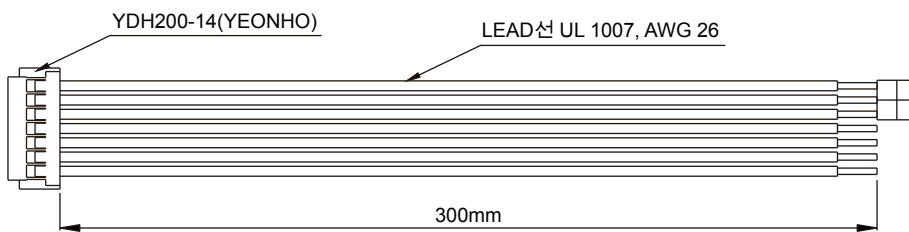After read, please be sure to keep fixed place to refer at anytime.

1. Product appearance

■ Driver main part outside view

100

92   4

39

28.5

Ø4

39

15

39

57.5

[Accessory]

■ Driver input signal cable, External volume

YDH200-14(YEONHO)   LEAD선 UL 1007, AWG 26

300mm

■ Driver power cable

MOLEX 5557-2R   LEAD선 UL 3266, AWG 22 (30,50W)
LEAD선 UL 3266, AWG 18 (100W)

300mm
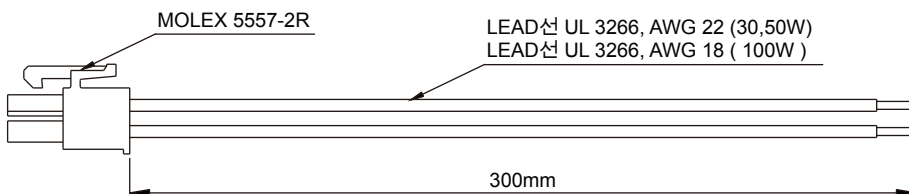
■ Extension cable (Option)

MOLEX 5557-8R   MOLEX 5559-8P

L mm
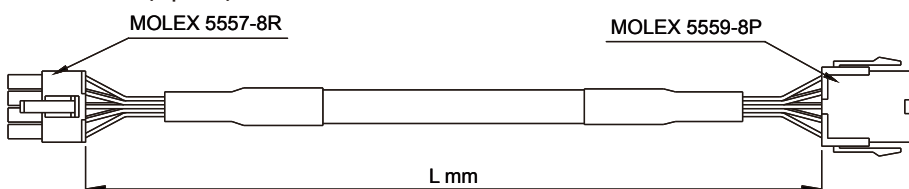
MODEL	L(extension cable length)
KXEW-1	1m
KXEW-1.5	1.5m
KXEW-2	2m

2. Specifications

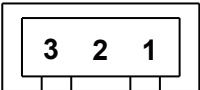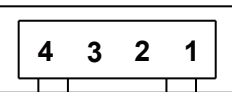| Item	Spec			Note
Rated output[W]	30W	50W	100W	
Input power[V]	DC24V (±10%)			
Rated current[A]	2.1	3.1	6	
Max current[A]	3.7	5.4	9.8	
External size (mm)	100 X 58 X 39			
Communication	RS485 (optional)			
Velocity control range	100~3,000r/min (Velocity variation±1% or under)			

3. Name and functions of each part

Volume

DIPswitch

RS485 3 2 1

OP-500 4 3 2 1

In / output IO 14 13 12 11 10 9 8 / 7 6 5 4 3 2 1

Motor & hall sensor 1 2 3 4 / 5 6 7 8

Power 1: +24VDC 2: GND 5566-2P(MOLEX)
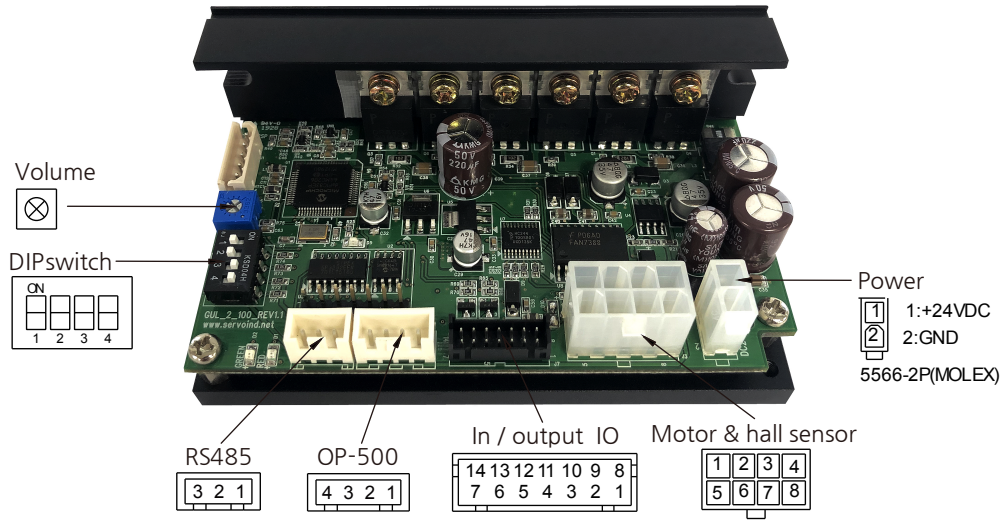
4. DIP switch & internal volume specifications

Item	Pin no.	Spec		Note
DIP switch	1	30W/50W	OFF : 50W, ON : 30W	
		100W	100W fixed	
	2	OFF : square wave, ON : sine wave		
	3	OFF : Close, ON : OPEN		
	4	OFF : I/O control, ON : Communication control		Communication optional
Internal volume		Ac/deceleration adjustment / Velocity Adjustment of SPEED INT		

5. LED specifications

Item	LED sign	Note
Hall sensor alarm	Flickering once at intervals of 6 seconds (Red)	
Low voltage alarm	Flickering twice at intervals of 6 seconds (Red)	
Over load alarm	Flickering 3 times at intervals of 6 seconds (Red)	
Parameter alarm	Flickering 4 times at intervals of 6 seconds (Red)	
Over heat alarm	Flickering 5 times at intervals of 6 seconds (Red)	Motor stop
Over voltage alarm	Flickering 6 times at intervals of 6 seconds (Red)	
Over speed alarm	Flickering 7 times at intervals of 6 seconds (Red)	
Over current alarm	Flickering 8 times at intervals of 6 seconds (Red)	
Normality	Control ON:green light on Control OFF:green light off	

6. Serialcommunication

Item	Pin no.	Description	Note
RS485 **3 2 1** (YEONHO, SMW 250-03)	1	A+ (RS-485)	Communication optional
	2	B- (RS-485)	
	3	GND	
OP-500 **4 3 2 1** (YEONHO, SMW 250-04)	1	+5VDC	Available separately
	2	RX (RS-232)	
	3	TX (RS-232)	
	4	GND	

7. Input/output specifications (YEONHO, YDH200-14)

| Pin No	Signal	COLOR	Description
1	SPEED_+5V	Red	DC power (+5V) to set speed. The power is supplied to outside for power input of adjustable resistance for speed input. Any usage other than this is prohibited. In the event of using external adjustable resistance, the value of 10KΩ (1/4W or over) is applied.
2	SPEED_IN	Orange	DCpowerinput to set speed. Motor speed is changed up to the max speed in proportion to (0~5VDC).
3	SPEED_GND	Black	GND
4	CW / CCW	Yellow	Determine motor direction. If input is "Low" (GND connected), CW direction if "High" (GND not connected), CCW direction.
5	START	White	If input is "Low" (GND connected), motor control function is activated. (ready for motor rotation) If input is "High" (GND not connected) while motor rotation, the motor stops naturally.
6	STOP	Blue	If input is "Low" (GND connected) while motor rotation, motor deceleration brake stops it.
7	SPEED_IN	Brown	Brown If input is "Low" (GND connected), useinternal volume to set speed. If input is "High" (GND not connected), use external volume to set speed.
8	GND	Black	power grounding
9	N.C	Green	-
10	GND	Black	power grounding
11	Alarm Reset	Grey	Function to remove the cause of alarm and reset alarm forcibly. If input is "Low" (GND connected), alarm is reset.
12	SPEED_OUT	Pink	Motor speed pulseoutput (Open Collector) _ 15 pulseoutput a rotation
13	Alarm Out	Purple	In the event of an alarm by alarm signal output (Open Collector), output changes to "Low" (0V).
14	N.C		

8. Features

■ **Speed control**

If I/O #7inputis"High" (5V), motor speed changes up to the max speed in proportion to the external volume (I/O#2) input voltage (0~5VDC).

In the event of utilizing external adjustable resistance, use the value of 10KΩ (1/4W or over).

If I/O #7input is "Low" (GND), motor speed changes up to the max speed in proportion to the internal volume input voltage (0~3.3VDC)
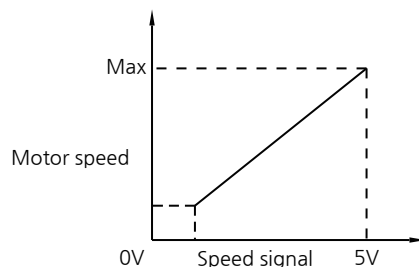
■ Motor direction control

If I/O #4input is "Low" (GND connected), the motor rotates toward CW (to motor axis).
If I/O #4input is "High" (GND not connected), the motor rotates toward CCW (to motor axis).

■ Controller ON/OFF control

If I/O#5input is"Low" (GND connected), motor control function is activated. (green LED light on)
(ready for motor rotation)
Motor operation starts according to an external volume input value. If input is "High" (GND not connected) while motor rotation,
the motor stops naturally.

■ Motor stop control

If I/O#6inputis "Low" (GND connected) while motor rotation, the motor stops. [deceleration - brake (no maintaining)]

Motor speed

Dec

Motor brake

Time

Motor stop control
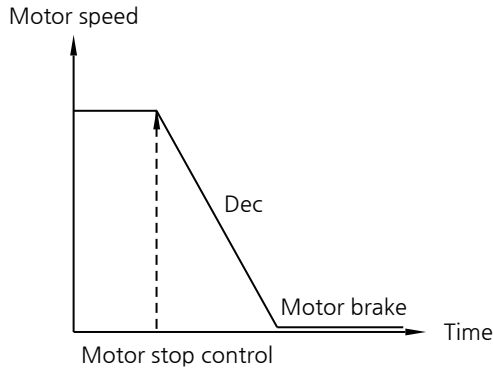
■ Output signal

Motor speed pulse output	Alarmsignoutput
Driver internal user circuit Max +24VDC Pull-up Resistor R (10mA) Pin#12	Driver internal user circuit Max +24VDC Pull-up Resistor R (10mA) Pin#13
I/O #12 outputs signal pulse while motor rotation. (outputs 15 pulses of signal per 1 motor rotation)	In the event of an alarm, I/O #13output changes to "Low" (0V).