Long Life Fan

92×92×25 mm

San Ace 92L 9LG type △ c℻us

ECO PRODUCTS

■ General Specifications

- · Material ································· Frame: Aluminum, Impeller: Plastic (Flammability: UL 94V-1)
- · Expected life ······················· See the table below. (L10 life: 90% survival rate for continuous operation in free air at 60°C, rated voltage)
- · Motor protection function ··············· Locked rotor burnout protection, Reverse polarity protection
  For details, please refer to p. 547.
- · Dielectric strength ···················· 50/60 Hz, 500 VAC, for 1 minute (between lead wire conductors and frame)
- · Insulation resistance················· 10 MΩ or more with a 500 VDC megger (between lead wire conductors and frame)
- · Sound pressure level (SPL) ·············· At 1 m away from the air inlet
- · Storage temperature ················· -30 to +70°C (Non-condensing)
- · Lead wire ···························· ⊕Red ⊖Black (Sensor) Yellow (Control) Brown
  (For models without PWM control function, there is no speed control wiring.)
- · Mass ································ 150 g

■ Specifications

The models listed below **have pulse sensors with PWM control function.**

Model no.	Rated voltage [V]	Operating voltage range [V]	PWM duty cycle* [%]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	[CFM]	Max. static pressure [Pa]	[inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG0912P4J001	12	10.8 to 13.2	100	0.42	5.04	5000	2.2	77.7	105	0.42	44	-20 to +70	180000/60°C
9LG0912P4G001			100	0.3	3.6	4400	1.93	68.2	81	0.33	40		
9LG0912P4S001			100	0.22	2.64	3850	1.69	59.7	62.1	0.25	37		
9LG0912P4H001			100	0.15	1.8	3150	1.38	48.7	41.6	0.17	32		
9LG0924P4J001	24	21.6 to 26.4	100	0.21	5.04	5000	2.2	77.7	105	0.42	44		
9LG0924P4G001			100	0.15	3.6	4400	1.93	68.2	81	0.33	40		
9LG0924P4S001			100	0.11	2.64	3850	1.69	59.7	62.1	0.25	37		
9LG0924P4H001			100	0.07	1.68	3150	1.38	48.7	41.6	0.17	32		

* PWM frequency: 25 kHz. Fan does not rotate when PWM duty cycle is 0%.

The following sensor and control options are available for selection.
Differs according to the model. Refer to the table on p. 576. **Without sensor** **Pulse sensor** **Lock sensor**

The models listed below **have pulse sensors.**

Model no.	Rated voltage [V]	Operating voltage range [V]	Rated current [A]	Rated input [W]	Rated speed [min⁻¹]	Max. airflow [m³/min]	[CFM]	Max. static pressure [Pa]	[inchH₂O]	SPL [dB (A)]	Operating temperature [°C]	Expected life [h]
9LG0912F4001	12	10.2 to 13.8	0.1	1.2	2800	1.22	43.1	32.8	0.13	29	-20 to +70	180000/60°C
9LG0912M4001			0.08	0.96	2400	1.05	37.1	24.1	0.097	24		
9LG0912L4001			0.07	0.84	2000	0.87	30.7	16.7	0.067	19		
9LG0924F4001	24	20.4 to 27.6	0.05	1.2	2800	1.22	43.1	32.8	0.13	29		
9LG0924M4001			0.04	0.96	2400	1.05	37.1	24.1	0.097	24		
9LG0924L4001			0.03	0.72	2000	0.87	30.7	16.7	0.067	19		

The following sensor and control options are available for selection.
Available for all models. **Without sensor** **Lock sensor**

■ Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG0912P4J001 With pulse sensor with PWM control function
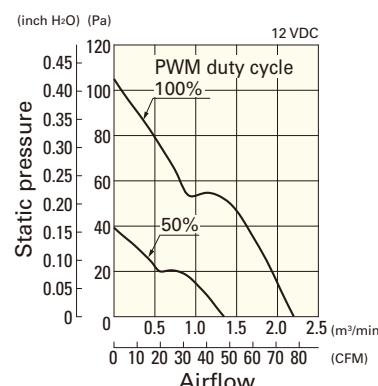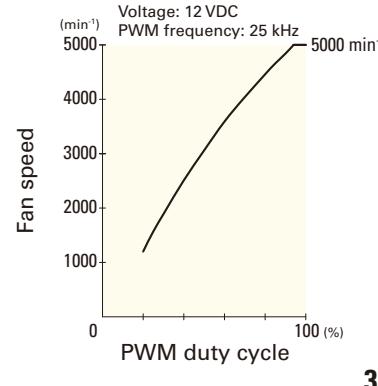
PWM duty cycle

Operating voltage range
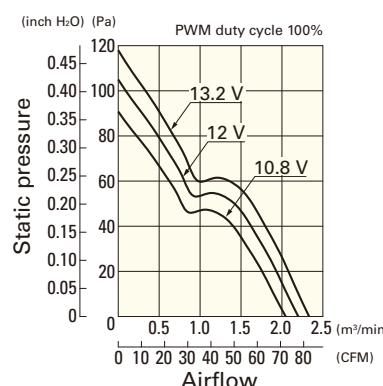

PWM duty - Speed characteristics example

Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

9LG0912P4G001 With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

(inch H₂O) (Pa) — 12 VDC — Static pressure — PWM duty cycle 100% — 50% — Airflow (m³/min) (CFM)

PWM duty cycle 100% — 13.2 V — 12 V — 10.8 V
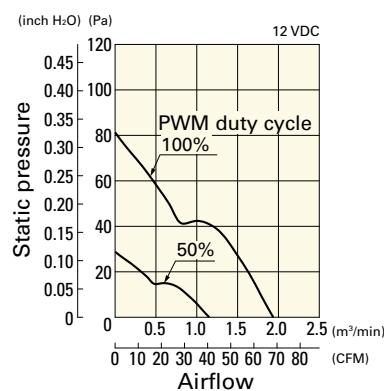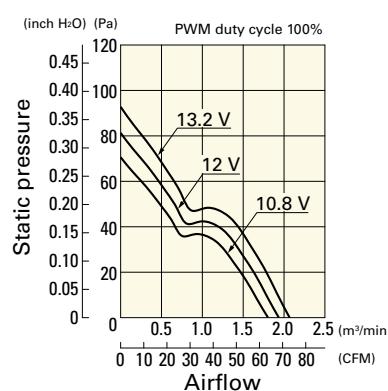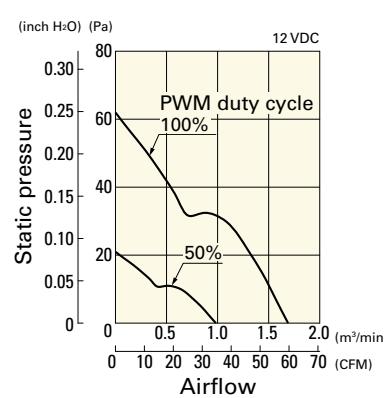
Voltage: 12 VDC / PWM frequency: 25 kHz — 4400 min⁻¹ — Fan speed — PWM duty cycle
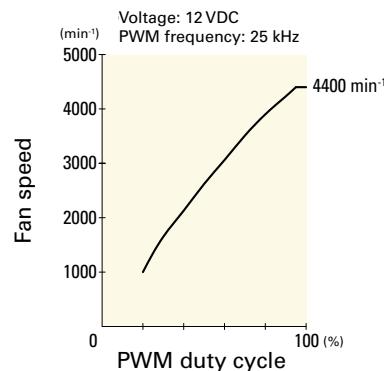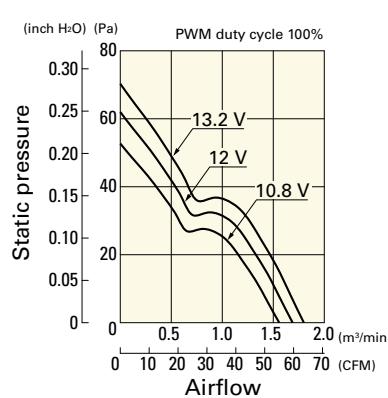
9LG0912P4S001 With pulse sensor with PWM control function
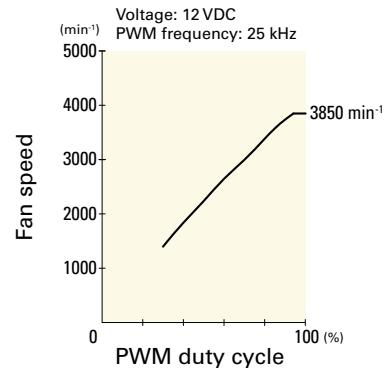
PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

PWM duty cycle 100% — 50%

13.2 V — 12 V — 10.8 V

Voltage: 12 VDC / PWM frequency: 25 kHz — 3850 min⁻¹

9LG0912P4H001 With pulse sensor with PWM control function
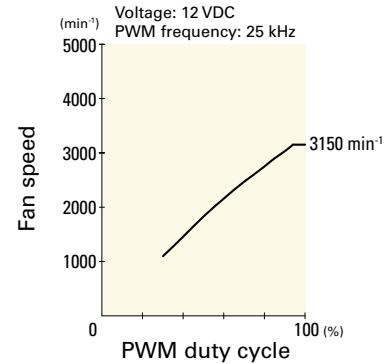
PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

PWM duty cycle 100% — 50%

13.2 V — 12 V — 10.8 V

Voltage: 12 VDC / PWM frequency: 25 kHz — 3150 min⁻¹
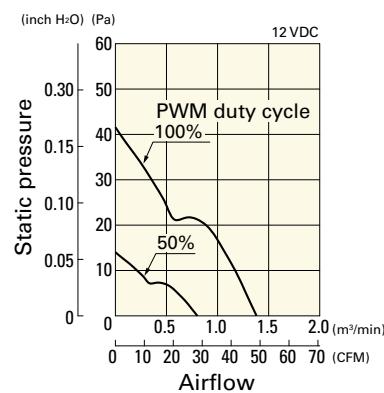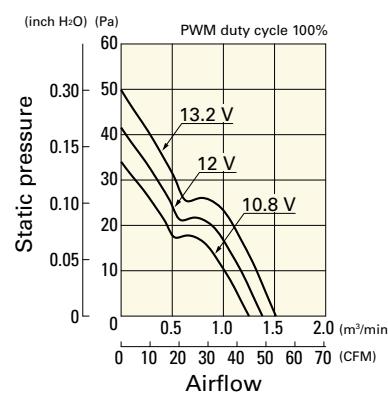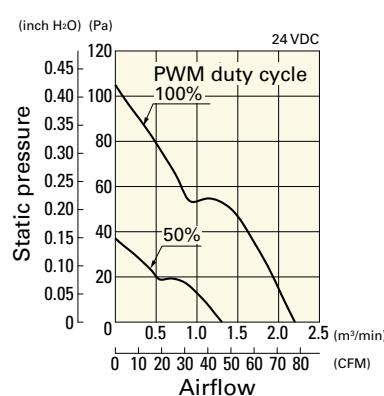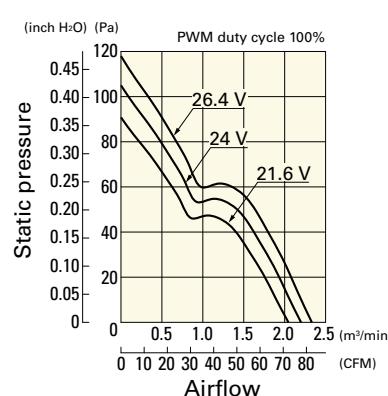
9LG0924P4J001 With pulse sensor with PWM control function

PWM duty cycle

Operating voltage range

PWM duty - Speed characteristics example

24 VDC — PWM duty cycle 100% — 50%

PWM duty cycle 100% — 26.4 V — 24 V — 21.6 V

Voltage: 24 VDC / PWM frequency: 25 kHz — 5000 min⁻¹

Airflow - Static Pressure Characteristics / PWM Duty - Speed Characteristics Example

## 9LG0924P4G001 With pulse sensor with PWM control function

PWM duty cycle

Static pressure — Airflow (24 VDC), PWM duty cycle 100% and 50%

Operating voltage range

Static pressure — Airflow, PWM duty cycle 100%, 26.4 V / 24 V / 21.6 V

PWM duty - Speed characteristics example

Voltage: 24 VDC
PWM frequency: 25 kHz
Fan speed — PWM duty cycle, 4400 min⁻¹
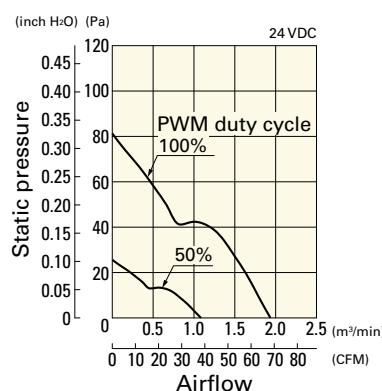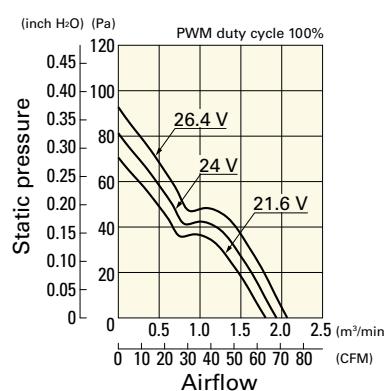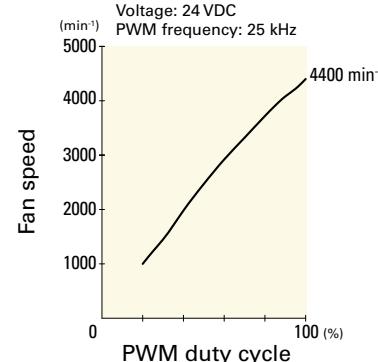
9LG0924P4S001 With pulse sensor with PWM control function

PWM duty cycle

Static pressure — Airflow (24 VDC), PWM duty cycle 100% and 50%

Operating voltage range

Static pressure — Airflow, PWM duty cycle 100%, 26.4 V / 24 V / 21.6 V

PWM duty - Speed characteristics example

Voltage: 24 VDC
PWM frequency: 25 kHz
Fan speed — PWM duty cycle, 3850 min⁻¹
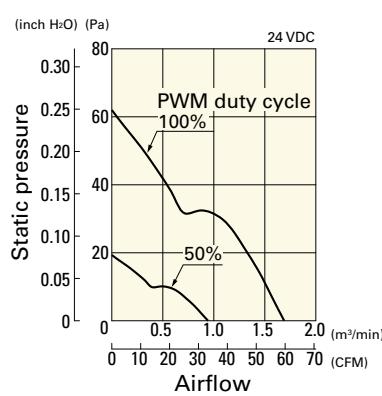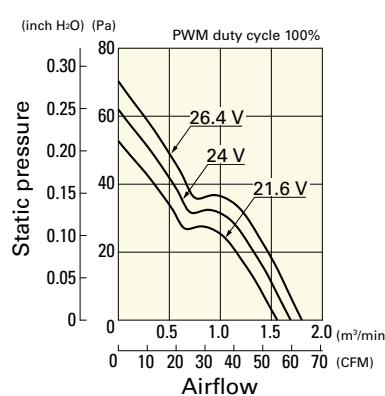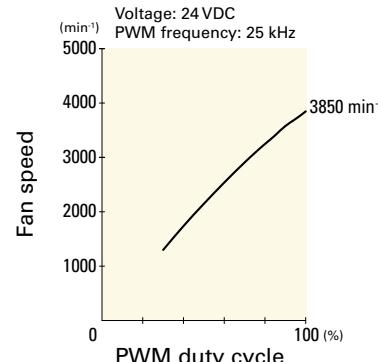
9LG0924P4H001 With pulse sensor with PWM control function

PWM duty cycle

Static pressure — Airflow (24 VDC), PWM duty cycle 100% and 50%

Operating voltage range

Static pressure — Airflow, PWM duty cycle 100%, 26.4 V / 24 V / 21.6 V

PWM duty - Speed characteristics example

Voltage: 24 VDC
PWM frequency: 25 kHz
Fan speed — PWM duty cycle, 3150 min⁻¹
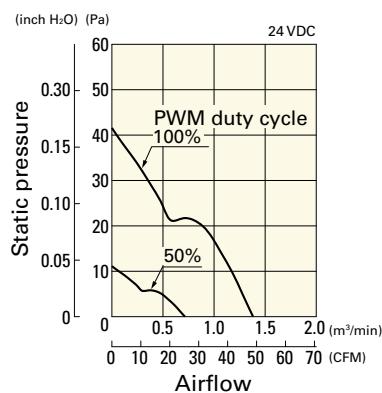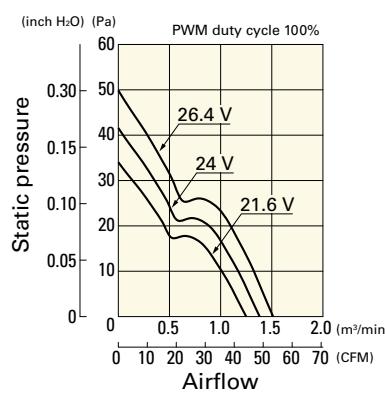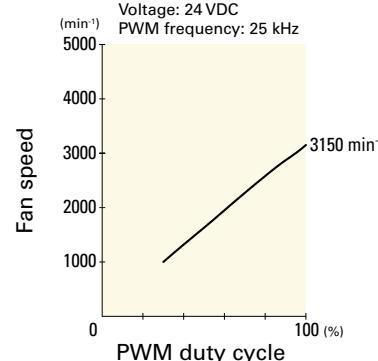
9LG0912F4001 With pulse sensor

Operating voltage range

Static pressure — Airflow, 13.8 V / 12 V / 10.2 V
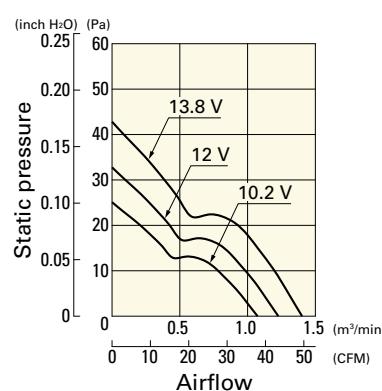
9LG0912M4001 With pulse sensor

Operating voltage range

Static pressure — Airflow, 13.8 V / 12 V / 10.2 V
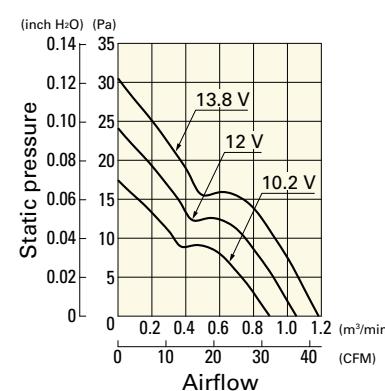
9LG0912L4001 With pulse sensor

Operating voltage range

Static pressure — Airflow, 13.8 V / 12 V / 10.2 V
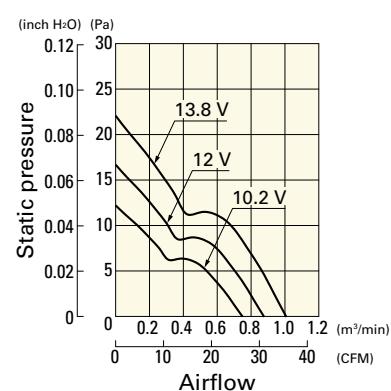
■ Airflow - Static Pressure Characteristics
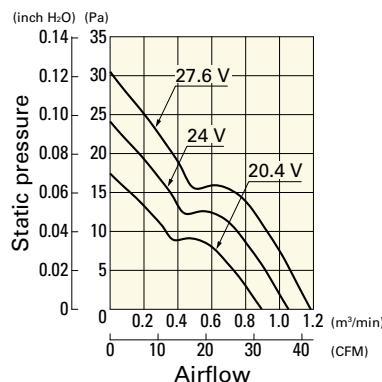
9LG0924F4001 With pulse sensor

Operating voltage range
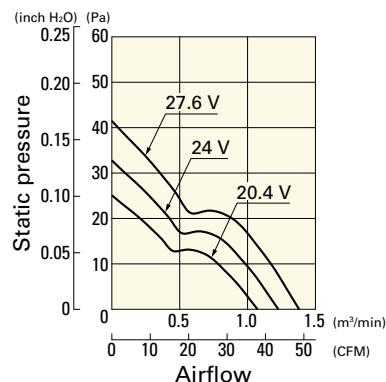

9LG0924M4001 With pulse sensor

Operating voltage range

9LG0924L4001 With pulse sensor

Operating voltage range

■ Dimensions (unit: mm)

8-ø4.3±0.3
Mounting hole

92±0.5
82.5±0.3
82.5±0.3
92±0.5

Rotating direction

300 +50 / 0
(10)

Lead wire
AWG26
UL 1430

4±0.3   4±0.3
25.2±0.5

Airflow direction
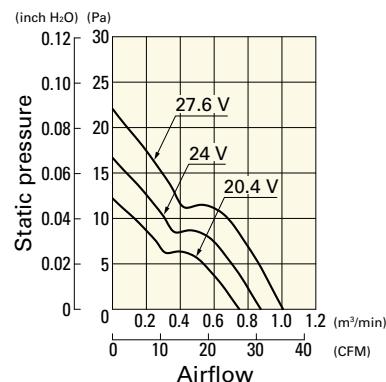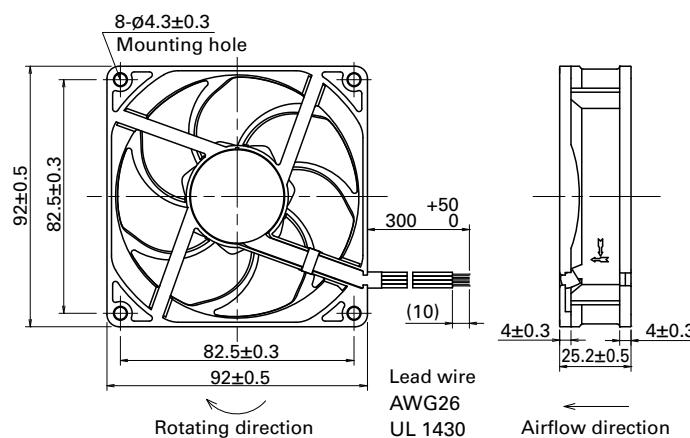
■ Reference Dimensions of Mounting Holes and Vent Opening (unit: mm)

Inlet side
90.5
4-ø4.5
ø97
90.5
82.5±0.3
82.5±0.3

Outlet side
90.5
4-ø4.5
ø108
90.5
82.5±0.3
82.5±0.3
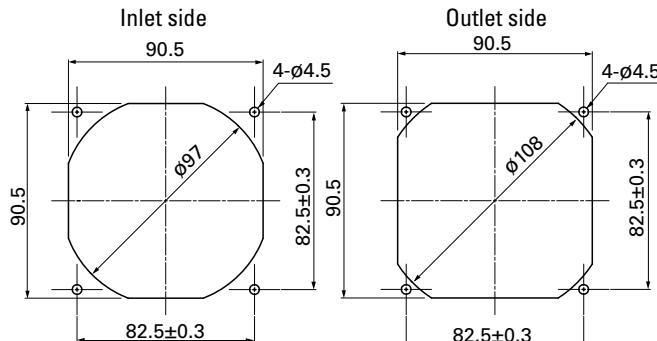
■ Options

Finger guards	page: p. 532

Model no.: 109-099E, 109-099H, 109-099C

Resin finger guards	page: p. 539

Model no.: 109-1001G

Resin filter kits	page: p. 540

Model no.: 109-1001F13 (13PPI), 109-1001F20 (20PPI),
109-1001F30 (30PPI), 109-1001F40 (40PPI)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Sanyo Denki](#):
  9LG0912P4H001 9LG0924P4J001 9LG0924P4G001 9LG0924P4H001 9LG0924P4S001 9LG0912P4J001
9LG0912P4S001 9LG0912P4G001 9LG0912S4001 9LG0912H4D001 9LG0912H4001 9LG0912H4002
9LG0912S4D001 9LG0924H4D001 9LG0924H4001 9LG0924H4002 9LG0912G4002 9LG0924J4D001
9LG0924S4D001 9LG0912S4002