

GT25 Series

GT2715-X T B A S

Code	Screen Size	Code	Resolution	Code	Display Type	Code	Frame Color	Code	Power Supply	Code	Communication Interface
15	15"	WX	WXGA	T	TFT Color	B	Black	A	100-240VAC	None (*1)	Ethernet, RS-422/485, or RS-232, depending on model
12	12.1"	X	XGA	M	TFT monochrome	W	White	D	24VDC	S1 (*1)	RS-232 and RS-422/485 interfaces, or RS-422 interface only
12F	12.1" Open Frame	S	SVGA			S	Silver	L	5VDC	S2 (*1)	Two RS-232 interfaces
10	10.4" or 10.1"	V	VGA			N	No Frame			-GF (*2)	CC-Link IE Field Network communication unit set
10F	10.4" Open Frame	P	320 x 128 dots								
08	8.4"	R	480 x 272 dots								
08F	8.4" Open Frame	Q	320 x 240 dots								
07	7.0"	W	Wide screen WVGA 800 x 480 dots								
07T	7.0" Rugged										
05	5.7"										
04	4.3"										
03	3.8"										

*1: GT21 only.
*2: For GT27/GT25 only

GT27	Advanced model with multi-touch gesture functions
GT25	High performance, cost efficient, mid-range model (open frame available)
GT21	Compact models with basic functions

GOT2000 Series General Specifications

Model Number	GT27, GT25	GT25 (Rugged) (*8)	GT21			
Operating Ambient Temp. (*1)	0 to 55°C (*2)	-20 °C to 65 °C	0 to 55°C (horizontal installation), 0 to 50°C (vertical installation)			
Storage Ambient Temperature	-20°C to 60°C	-30 °C to 75 °C	-20°C to 60°C			
Operating Ambient Humidity	10 to 90%RH, no condensation		10 to 90%RH, no condensation (*2)			
Storage Ambient Humidity	10 to 90%RH, no condensation		10 to 90%RH, no condensation (*2)			
Vibration Resistance	Conforming to JIS B 3502 and IEC 61131-2	Frequency	Half Amplitude			
		Acceleration	Sweep Count			
		Under intermittent vibration	5 to 8.4Hz	-	3.5mm GT25: 7.0mm	10 times each in X, Y and Z directions
		8.4 to 150Hz	9.8m/s ² GT25 19.6 m/s ²	-		
Under continuous vibration	5 to 8.4Hz	-	1.75mm GT25: 7.0mm	-		
8.4 to 150Hz	4.9m/s ² GT25 19.6 m/s ²	-				
Shock Resistance	-	IEC 60068-2-27 (392m/s ² (40G), 3 times in each X, Y, or Z direction)				
	Compliant with JIS B 3502, IEC 61131-2 (147 m/s ² (15G), 3 times each in X, Y and Z directions)					
Operating Atmosphere (*6)	No greasy fumes, corrosive gas, flammable gas, excessive conductive dust, and direct sunlight (as well as at storage)					
Operating Altitude (*3)	2000m (6562 ft) or less					
Installation Location	Inside control panel					
Overvoltage Category (*4)	II or less					
Pollution Degree (*5)	2 or less					
Cooling Method	Self-cooling					
Grounding	Grounding with a ground resistance of 100Ω or less. If impossible, connect the ground cable to the control panel.	Grounding with a ground resistance of 100 Ω or less by using a ground cable that has a cross-sectional area of 2 mm ² or more. If impossible, connect the ground cable to the control panel.	Grounding with a ground resistance of 100Ω or less by using a ground cable that has a cross-sectional area of 0.14 to 1.5 mm ² (single wire), 0.14 to 1.0 mm ² (stranded wire), or 0.25 to 0.5 mm ² (rod terminal with an insulation sleeve). If impossible, connect the ground cable to the control panel. (*7)			

- Notes:**
- The operating ambient temperature includes the temperature inside the enclosure of the control panel to which the GOT is installed.
 - (GT27, GT25) When any of the following units is mounted, the maximum operating ambient temperature must be 5 °C lower than the one described in the general specifications: multimedia unit (GT27-MMR-Z), MELSECNET/H communication unit (GT15-J71LP23-25, GT15-J71BR13), CC-Link communication unit (GT15-J61BT13)
 - (GT21) If the ambient temperature exceeds 40°C, the absolute humidity must not exceed 90% RH at 40 °C.
 - Do not use or store the GOT under a pressure higher than the atmospheric pressure at altitude 0 m. Doing so may cause a malfunction. Air purging by applying pressure to the control panel may create clearance between the surface sheet and the touch panel. This may cause the touch panel to be not sensitive enough or the sheet to come off.
 - This indicates the section of the power supply to which the equipment is assumed to be connected between the public electrical power distribution network and the machinery within the premises. Category II applies to equipment that is supplied with power from fixed facilities. The withstand surge voltage for the equipment with the rated voltage up to 300 V is 2500 V.
 - This indicates the occurrence rate of conductive material in an environment where a device is used. Pollution degree 2 indicates an environment where only non-conductive pollution occurs normally and a temporary conductivity caused by condensation shall be expected depending on the conditions.
 - (GT25, GT27 only) Some models have ANSI/ISA 12.12.01 approval for use in Class I, Division 2 (ANSI/ISA 12.12.01, C22.2 No.213-M1987) hazardous locations. For the details, please contact your local sales office.
 - 5 VDC type does not require grounding.
 - Communication units and options usable with the rugged model can be used in the environment described in the general specifications of the rugged model. For using peripheral devices to be connected to the GOT, refer to the manual of each device.

GT25 Base Units

Category	Model Number	Screen Size	Resolution	Display Type	Frame Color	Power Supply	Stocked Item
GT2512	GT2512-STBA	12.1"	SVGA (800 x 600)	TFT Color	Black	100-240VAC	S
	GT2512-STBD					24VDC	S
GT2510	GT2510-VTBA	10.4"	VGA (640 x 480)		Black	100-240VAC	S
	GT2510-VTBD					24VDC	S
	GT2510-VTWA				100-240VAC	S	
	GT2510-VTWD	24VDC	S				
	GT2510-WXTBD	10.1"	WXGA (1280 x 800)		Black	24VDC	S
GT2510-WXTSD	Silver				24VDC	S	
GT2508	GT2508-VTBA	8.4"	VGA (640 x 480)		Black	100-240VAC	S
	GT2508-VTBD					24VDC	S
	GT2508-VTWA				100-240VAC	S	
	GT2508-VTWD				24VDC	S	
GT2507	GT2507-WTBD	7.0"	WVGA (800 x 480)	Black	24VDC	S	
	GT2507-WTSD			Silver	24VDC	S	
	GT2507T-WTSD (Rugged)			Silver	24VDC	S	
GT2505	GT2505-VTBD	5.7"	VGA (640 x 480)		Black	24VDC	S

GT25 Open Frame Base Units

Category	Model Number	Screen Size	Resolution	Display Type	Frame Color	Power Supply	Stocked Item
GT25 Open Frame Model GOT (*1)	GT2512F-STNA	12.1"	SVGA (800 x 600)	TFT color (65536 colors)	No frame	100-240VAC	S
	GT2512F-STND					24VDC	S
	GT2510F-VTNA	10.4"	VGA (640 x 480)			100-240VAC	S
	GT2510F-VTND					24VDC	S
	GT2508F-VTNA	8.4"	VGA (640 x 480)			100-240VAC	S
	GT2508F-VTND					24VDC	S

Note 1: Always attach an environmental protection sheet dedicated to the open frame model (sold separately) to the display section. Or, attach a user-prepared environmental protection sheet. Not doing so may damage or soil the GOT or cause foreign matter to enter the GOT, resulting in a failure or malfunction

GT25 GOT + CC-Link IE Field Network Communication Unit Sets

Category	Model Number	Screen Size	Resolution	Display Type	Frame Color	Power Supply	Stocked Item
GT2512	GT2512-STBA-GF	12.1"	SVGA (800 x 600)	TFT Color	Black	100-240VAC	S
	GT2512-STBD-GF					24VDC	S
GT2510	GT2510-VTBA-GF	10.4"	VGA (640 x 480)		Black	100-240VAC	S
	GT2510-VTBD-GF					24VDC	S
	GT2510-VTWA-GF				100-240VAC	S	
	GT2510-VTWD-GF				24VDC	S	
GT2508	GT2508-VTBA-GF	8.4"	VGA (640 x 480)		Black	100-240VAC	S
	GT2508-VTBD-GF					24VDC	S
	GT2508-VTWA-GF				100-240VAC	S	
	GT2508-VTWD-GF				24VDC	S	

GT25 Power Supply Specifications

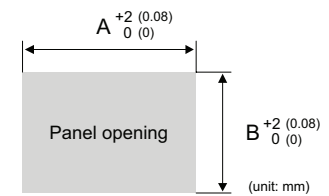
Model Number	GT2512-STBA GT2512F-STNA	GT2510-VTBA GT2510F-VTNA	GT2508-VTBA GT2508F-VTNA	GT2512-STBD GT2512F-STND	GT2510-VTBD GT2510F-VTND	GT2508-VTBD GT2508F-VTND	GT2505-VTBD	
Input Power Supply Voltage	100 to 240VAC (+10%, -15%)			24VDC (+25%, -20%)		24 VDC (+10%, -15%)		
Input Power Supply Frequency	50/60Hz ±5%			-				
Power Consumption	Maximum Load	35W or less	34W or less	31W or less	37W or less	33W or less	31W or less	8.4 W or less
	Stand Alone	14W	12W	11W	13W	10W	8W	4.3 W
	Stand Alone with Backlight Off	7W	7W	7W	6W	6W	6W	2.6 W
Inrush Current	60A or less (2ms, ambient temperature 25°C, maximum load)			5A or less (20ms, ambient temperature 25°C, maximum load)		42 A or less (2 ms, ambient temperature: 25°C, under the maximum load)		
Permissible Instantaneous Failure Time	Within 20ms (100VAC or more)			Within 10ms		10 ms or less		
Noise Resistance	Noise voltage 1500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz			Noise voltage 500Vp-p, noise width 1µs by noise simulator with noise frequency 25 to 60Hz		Noise voltage: 1000 Vp-p, noise width: 1 µs, measured by a noise simulator with noise frequency ranging from 30 Hz to 100 Hz		
Withstand Voltage	1500 VAC for 1 minute between power supply terminal and ground			350 VAC for 1 minute between power supply terminal and ground		500 VAC for 1 minute across power terminals and earth		
Insulation Resistance	10MΩ or higher with an insulation resistance tester (500 VDC between power supply terminal and ground)							
Applicable Wire Size	0.75 to 2 [mm ²]							
Clamp Terminal	Clamp terminals for M3 screw RAV1.25-3, V2-S3.3, V2-N3A, FV2-N3A							
Tightening Torque (Terminal Block's Terminal Screws)	0.5 to 0.8 [N·m]							

GT25 Power Supply Specifications (continued)

Model Number	GT2510-WXTBD • GT2510-WXTSD	GT2507-WTBD • GT2507-WTSD	GT2507T-WTSD	
Input Power Supply Voltage	24VDC (+25%, -20%)			
Input Power Supply Frequency	-			
Power Consumption	Maximum Load	16 W or less	16 W or less	17 W or less
	Stand Alone	9 W or less	9 W or less	11 W
	Stand Alone with Backlight Off	5 W or less	5 W or less	7 W
Inrush Current	59 A or less (2 ms, ambient temperature: 25°C, under the maximum load)			
Permissible Instantaneous Failure Time	5 ms or less			
Noise Resistance	Noise voltage 500Vp-p, noise width 1μs by noise simulator with noise frequency 25 to 60Hz			
Withstand Voltage	350 VAC for 1 minute between power supply terminal and ground			
Insulation Resistance	10MΩ or higher with an insulation resistance tester (500 VDC between power supply terminal and ground)			
Applicable Wire Size	0.75 to 2 [mm ²]			
Clamp Terminal	Solderless terminal for M3 screw RAV1.25-3, V2-S3.3, V2-N3A, FV2-N3A			
Tightening Torque (Terminal Block's Terminal Screws)	0.5 to 0.8 [N·m]			

GT25 Panel Cut Dimensions

Screen Size	Model	A	B	Remarks
12.1"	GT2512	302 (11.89)	228 (8.98)	Same dimensions as GT1685, GT1585, A985GOT
	GT2512F	214 (8.43)	269 (10.59)	-
10.4"	GT2510	289 (11.38)	200 (7.87)	Same dimensions as GT167_M, GT157_M, A97MGOT
	GT2510F	187 (7.36)	234 (9.21)	-
10.1"	GT2510-WX	243.5 (9.59)	185.5 (7.30)	Panel thickness 1.6 (0.06) to 4 (0.16)
	GT2507-W	180.5 (7.11)	133.5 (5.26)	
7"	GT2507T-W	197 (7.76)	141 (5.55)	Panel thickness 1.6 (0.06) to 4 (0.16)
8.4"	GT2508	227 (8.94)	176 (6.93)	Same dimensions as GT1665, GT1565
	GT2508F	158 (6.22)	194 (7.64)	-
5.7"	GT2505	156 (6.02)	121 (4.76)	Same dimensions as GT1455, GT1450



GT25 Performance Specifications

Model Number		GT2512-STBA GT2512-STBD	GT2512F-STNA GT2512F-STND	GT2510-VTBA GT2510-VTBD	GT2510-VTWA GT2510-VTWD	GT2510F-VTNA GT2510F-VTND	GT2510-WXTBD GT2510-WXTSD	
Display Section (*1, *2)	Type	TFT color LCD						
	Screen Size	12.1"			10.4"		10.1" Wide	
	Resolution (Dots)	800 x 600 dots SVGA			640 x 480 VGA		WXGA: 1280 x 800 dots	
	Display Size (W x H) mm	246 x 184.5			211.2 x 158.4		216.96 x 135.6	
	Number of Characters	16-dot standard font: 50 chars x 37 lines (2-byte) 12-dot standard font: 66 chars. x 50 lines (2-byte)			16-dot standard font: 40 chars. x 30 lines (2-byte) 12-dot standard font: 53 chars. x 40 lines (2-byte)		16-dot standard font: 80 characters x 50 lines (two-byte) 12-dot standard font: 106 characters x 66 lines (two-byte)	
	Display Colors	65536 colors						
Intensity Adjustment	32-level adjustment							
Backlight	Type	LED (not replaceable)						
	Life (*4)	Approx. 60000 hours or more (Time for display intensity reaches 50% at ambient temperature of 25°C)					Approx. 50000 h (operating ambient temperature: 25 °C, display intensity: 50%)	
Touch Panel (*3)	Type	Analog resistive film						
	Key Size (Dots)	Minimum 2 x 2 dots (per key) (*8)						
	Simultaneous Press	Not available (*5) (only 1 point can be pressed)						
	Life	1 million times or more (operating force 0.98N or less)						
Panel Color		Black	-	Black	White	-	GT2510-WXTBD: Black GT2510-WXTSD: Silver	
Memory	User Memory Capacity	Memory for storage (ROM): 32MB, Memory for operation (RAM): 80MB					Memory for storage (ROM): 32MB, Memory for operation (RAM): 128MB	
	Life (No. of Writings)	100,000 times						
Internal Clock Accuracy		±90 sec/month (ambient temperature 25°C)						
Battery	Type	GT11-50BAT lithium battery						
	Life	Approx. 5 years (ambient temperature 25°C)						
Built-in Interface	RS-232	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male)						
	RS-422/485	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female)						
	Ethernet	1ch Data transfer method: 10BASE-T/100BASE-TX Connector shape: RJ-45 (modular jack)					2ch	
	USB (Host)	2ch (front/rear face)		1ch (rear face)		2ch (front/rear face)		1ch (rear face)
		Maximum transfer speed: High-Speed 480Mbps Connector shape: USB-A						
	USB (Device)	1ch (front face)		1ch (rear face)		1ch (front face)		1 channel (rear face)
		Maximum transfer rate: High-Speed 480 Mbps Connector shape: USB Mini-B						
	SD Memory Card	1ch SDHC compliant (maximum 32GB)						
Extension Interface	For communication unit/option unit mounting						-	
Side Interface	For installing a wireless LAN communication unit							
Sound Output Interface	-						1 channel, WAV format (16 bits, 8 kHz/16 kHz, monoral) applicable plug: φ3.5 stereo mini-plug (3-prong)	
Buzzer Output	Single tone (tone, tone length adjustable)							
Power LED	Emission color: 2 colors (blue, orange)							
Protective Construction	Front: IP67F (*6, *9) Inside control panel: IP2X	Front: IP67F (*7, *9) Inside control panel: IP2X	Front: IP67F (*6, *9) Inside control panel: IP2X		Front: IP67F (*7, *9) Inside control panel: IP2X	Front: IP67F (*6*9) In control panel: IP2X		
External Dimensions (W x H x D) mm	316 x 246 x 52	311 x 237 x 54	303 x 218 x 52		298 x 209 x 54		252 x 194 x 48	
Panel Cutout (W x H) mm	302 x 228	269 x 214	289 x 200		234 x 187		243.5 x 185.5	
Weight (Excluding Mounting Brackets) kg	2.4		2.1				1.2	
Applicable Software Package	GT Works3 Version1.122C or later	GT Works3 Version1.150G or later	GT Works3 Version1.112S or later		GT Works3 Version1.150G or later		GT Works3 Version 1.175H or later	

Notes:

- As a characteristic of liquid crystal display panels, bright dots (always lit) and dark dots (never lit) may appear on the panel. Since liquid crystal display panels comprise a great number of display elements, the appearance of bright and dark dots cannot be reduced to zero. Individual differences in liquid crystal display panels may cause differences in color, uneven brightness and flickering. Note that these phenomena are characteristics of liquid crystal display panels and it does not mean the products are defective or damaged.
- Flickering may occur due to vibration, shock, or the display colors.
- When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications: • Material: polyacetal resin • Tip radius: 0.8 mm or more
- To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
- If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.
- To conform to IP67F, close the USB environmental protection cover by pushing the [PUSH] mark firmly. (To conform to IP2X, open the USB environmental protection cover.) Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
- To conform to IP67F attach the environmental protection sheet. Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
- The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended: • Key size: 16 x 16 dots or larger • Distance between keys: 16 dots or more
- The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.

GT25 Performance Specifications (continued)

Model Number	GT2508-VTBA GT2508-VTBD	GT2508-VTWA GT2508-VTWD	GT2508F-VTNA GT2508F-VTND	GT2507-WTBD GT2507-WTSD	GT2507T-WTSD	GT2505-VTBD	
Display Section (*1, *2)	Type	TFT color LCD					
	Screen Size	8.4"			7" Wide		5.7"
	Resolution (Dots)	640 x 480 VGA			WVGA:800 x 480 dots		640 x 480 VGA
	Display Size (W x H) mm	170.9 x 128.2			152.40 x 91.44		115.2 x 86.4
	Number of Characters	16-dot standard font: 40 chars. x 30 lines (2-byte); 12-dot standard font: 53 chars. x 40 lines (2-byte)			16-dot standard font: 50 characters x 30 rows (Two-byte characters) 12-dot standard font: 66 characters x 40 rows (Two-byte characters)		16-dot standard font: 40 chars. x 30 lines (2-byte); 12-dot standard font: 53 chars. x 40 lines (2-byte)
	Display Colors	65536 colors					
Intensity Adjustment	32-level adjustment						
Backlight	Type	LED (not replaceable)					
	Life (*4)	Approx. 60000 hours or more (Time for display intensity reaches 50% at ambient temperature of 25°C)			Approx. 50000 h (operating ambient temperature: 25°C, display intensity: 50%)		Approx. 60000 hours or more (Time for display intensity reaches 50% at ambient temperature of 25°C)
Touch Panel (*3)	Type	Analog resistive film					
	Key Size (Dots)	Minimum 2 x 2 dots (per key) (*8)					
	Simultaneous Press	Not available (*5) (only 1 point can be pressed)					
	Life	1 million times or more (operating force 0.98N or less)					
Panel Color	Black	White	-	GT2507-WTBD: Black GT2507-WTSD: Silver	Silver	Black	
Memory	User Memory Capacity ROM (Storage) RAM (Operation)	ROM: 32MB; RAM: 80MB			ROM: 32MB; RAM: 128MB		ROM: 32MB; RAM: 80MB
	Life (No. of Writings)	100,000 times					
	Internal Clock Accuracy	±90 sec/month (ambient temperature 25°C)					
Battery	Type	GT11-50BAT lithium battery					
	Life	Approx. 5 years (ambient temperature 25°C)					
Built-in Interface	RS-232	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (male)					
	RS-422/485	1ch Transmission speed: 115200/57600/38400/19200/9600/4800bps Connector shape: D-sub 9-pin (female)					
	Ethernet	1ch			2ch		1ch
	USB (Host)	2ch (front/rear face)		1ch (rear face)		Maximum transfer speed: High-Speed 480Mbps Connector shape: USB-A	
	USB (Device)	1ch (front face)		1ch (rear face)		1ch (front face)	1ch (rear face)
		Maximum transfer rate: High-Speed 480 Mbps Connector shape: USB Mini-B					
	SD Memory Card	1ch SDHC compliant (maximum 32GB)					
	Extension Interface	For communication unit/option unit mounting			-	-	-
	Side Interface	For installing a wireless LAN communication unit					
Sound Output Interface	-			1 channel, WAV format (16 bits, 8 kHz/16 kHz, monoral) applicable plug: ø3.5 stereo miniplug (3-prong)		-	
Buzzer Output	Single tone (tone, tone length adjustable)						
Power LED	Emission color: 2 colors (blue, orange)						
Protective Construction	Front: IP67F (*6, *9) Inside control panel: IP2X		Front: IP67F (*7, *9) Inside control panel: IP2X	Front: IP67F (*6*9) In control panel: IP2X	Front: IP66F / IP67F (*9) In control panel: IP2X	Front: IP67F (*7, *9) Inside control panel: IP2X	
External Dimensions (W x H x D) mm	241 x 194 x 52		236 x 185 x 54	189 x 142 x 48	214 x 158 x 55	164 x 139 x 53.5	
Panel Cutout (W x H) mm	227 x 176		194 x 158	180.5 x 133.5	197 x 141	153 x 121	
Weight (Excluding Mounting Brackets) kg	1.5			0.75	1.2	0.6	
Applicable Software Package	GT Works3 Version1.112S or later		GT Works3 Version1.150G or later	GT Works3 Version 1.175H or later		GT Works3 Version1.180N or later	

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 - When a stylus is used, the touch panel has a life of 100 thousand touches. The stylus must satisfy the following specifications: • Material: polyacetal resin • Tip radius: 0.8 mm or more
 - To prevent the display section from burning in and lengthen the backlight life, enable the screen save function and turn off the backlight.
 - If you touch two points or more simultaneously on the touch panel, a touch switch near the touched points may operate unexpectedly. Do not touch two points or more simultaneously on the touch panel.
 - To conform to IP67F, close the USB environmental protection cover by pushing the [PUSH] mark firmly. (To conform to IP2X, open the USB environmental protection cover.) Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
 - To conform to IP67F attach the environmental protection sheet. Note that the structure does not guarantee protection in all users' environments. The GOT may not be used in certain environments where it is subjected to splashing oil or chemicals for a long period of time or soaked in oil mist.
 - The minimum size of a key that can be arranged. To ensure safe use of the product, the following settings are recommended: • Key size: 16 x 16 dots or larger • Distance between keys: 16 dots or more
 - The suffix "F" of IP67F is a symbol that indicates protection rate against oil. It is described in the Appendix of Japanese Industrial Standard JIS C 0920.