

Product Discontinuation Notices

July 4, 2011

RFID Systems

No. 2011209E

Discontinuation Notice of RFID System model V670 series

Product Discontinuation

RFID Systems

Recommended Replacement

RFID Systems



V670 series

V680 series

Discontinuation date : The end of March, 2012

Caution on recommended replacement

- 1) There is no compatibility between V670 series and V680 series.
- When you use V680 series, it is necessary to replace all V670 series system by all V680 series system.
- 2) The tag communication time is later than V670 series.

* In detail, please confirm the operation manuals.

Difference from discontinued product

Model	Body Color	Dimensions	Wire connection	Mounting Dimensions	Characteristics	Operation ratings	Operation methods
V680 series	--	--	--	--	--	--	--

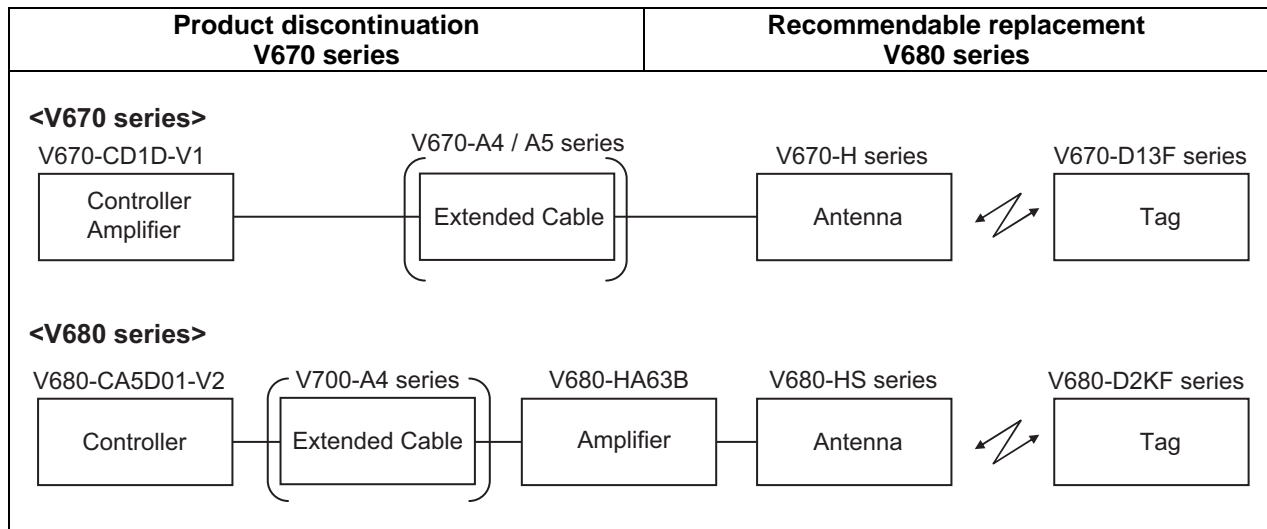
** : Fully compatible

* : The change is a little/Almost compatible

-- : Not compatible

- : No corresponding specification

System Configuration



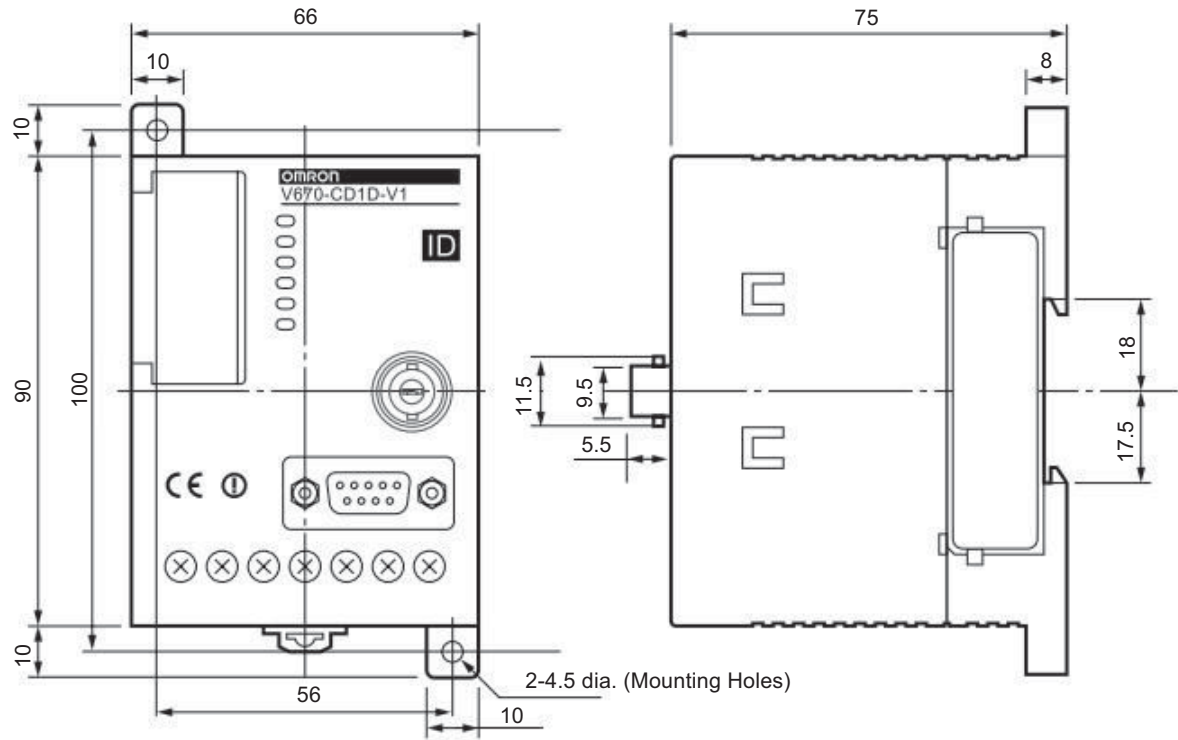
Product Discontinuation and recommended replacement

Product discontinuation	Recommended replacement
V670-CD1D-V1	V680-CA5D01-V2
	V680-HA63B 0.5M
V670-H11 2M	V680-HS63-W 2M
V670-H11 0.5M	V680-HS63-W 2M
V670-H51 2M	V680-HS52-W 2M
V670-H51 0.5M	V680-HS52-W 2M
V670-H51Q 2M	None
V670-D13F01	V680-D2KF52M
V670-D13F01H	V680-D2KF52M
V670-D13F03	V680-D2KF67
V670-A81	None
V670-A40 3M	V700-A41 3M
V670-A41 10M	V700-A43 10M
V670-A42 18M	V700-A44 20M
V670-A43 28M	V700-A45 30M
V670-A54 8M	None
V670-A55 1M	None

Dimensions

Product discontinuation V670 series

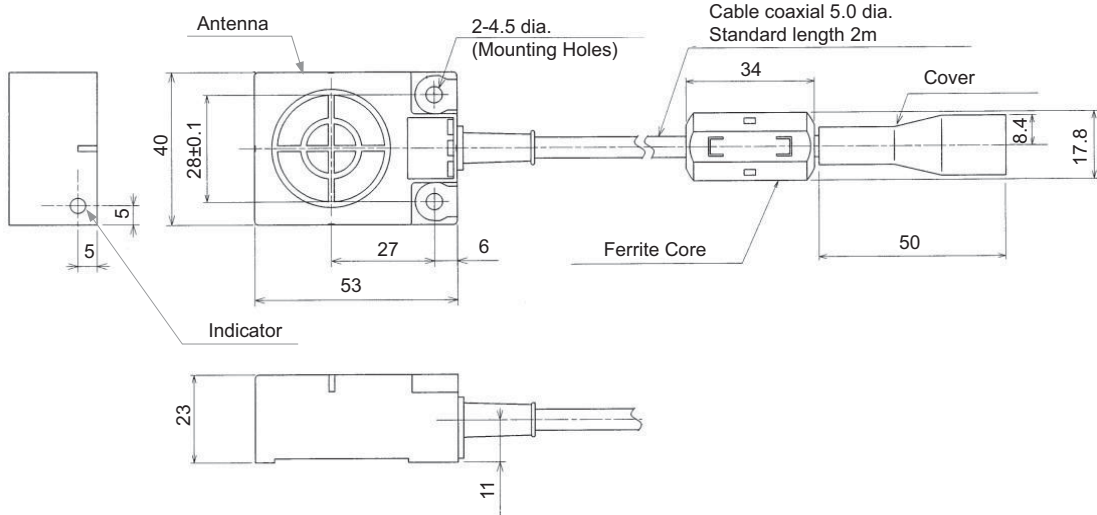
Model V670-CD1D-V1



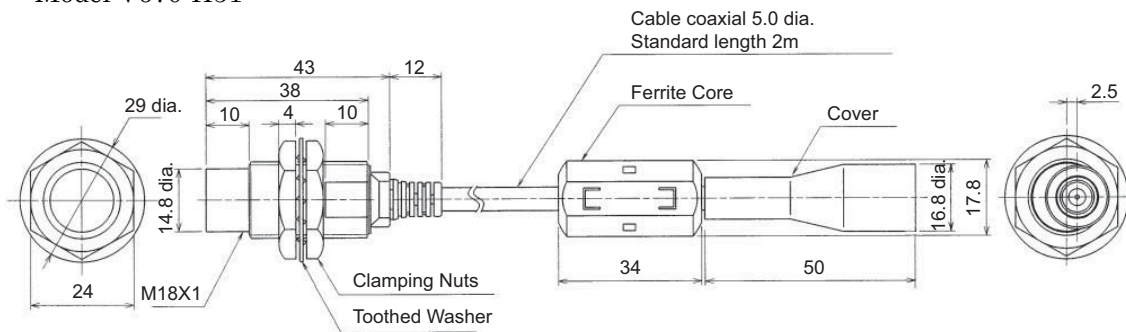
Dimensions

Product discontinuation V670 series

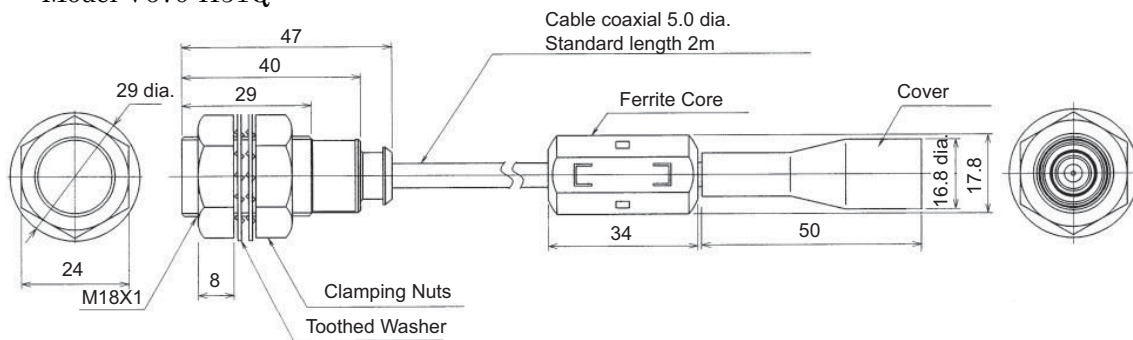
Model V670-H11



Model V670-H51



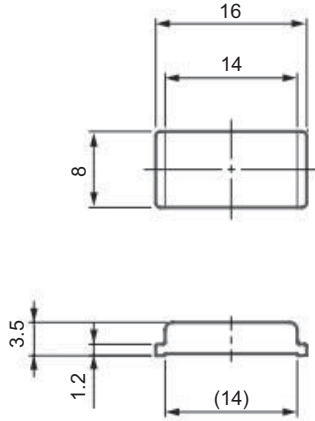
Model V670-H51Q



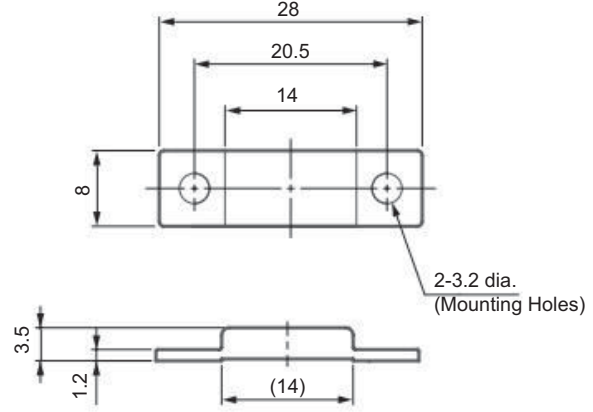
Dimensions

Product discontinuation V670 series

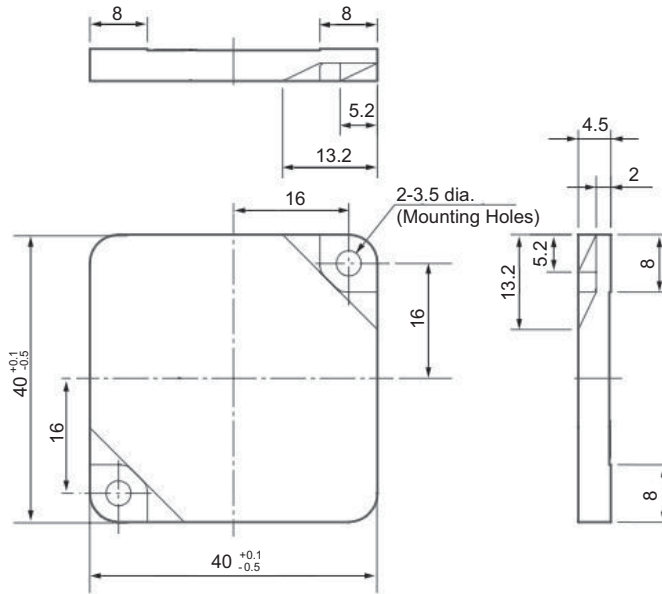
Model V670-D13F01



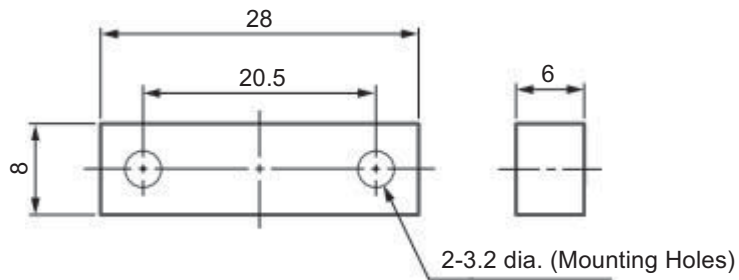
Model V670-D13F01H



Model V670-D13F03



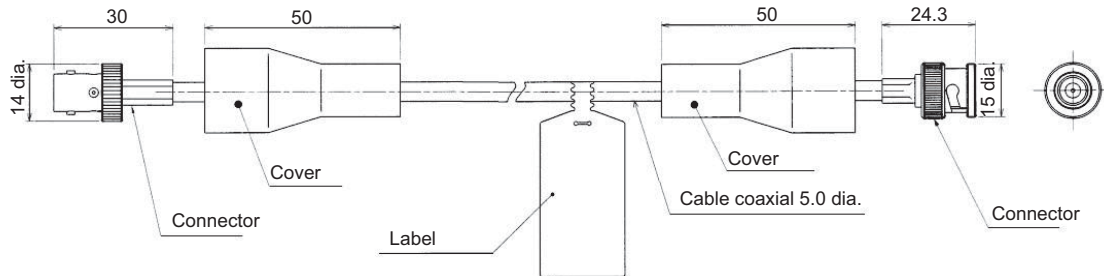
Model V670-A81



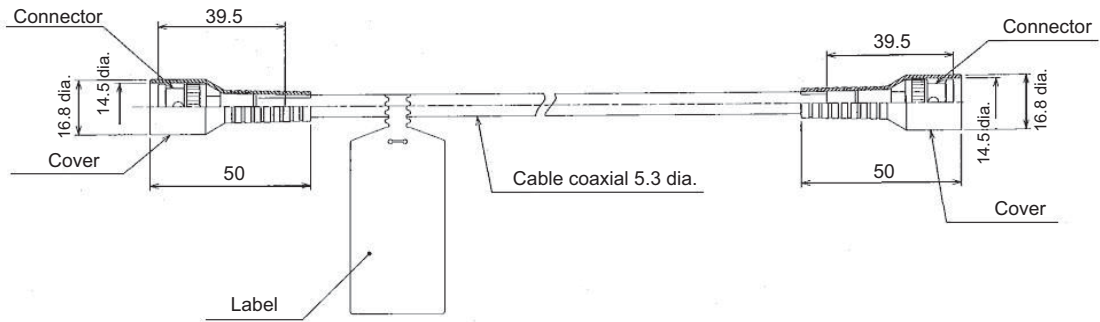
Dimensions

Product discontinuation V670 series

Model V670-A4 series



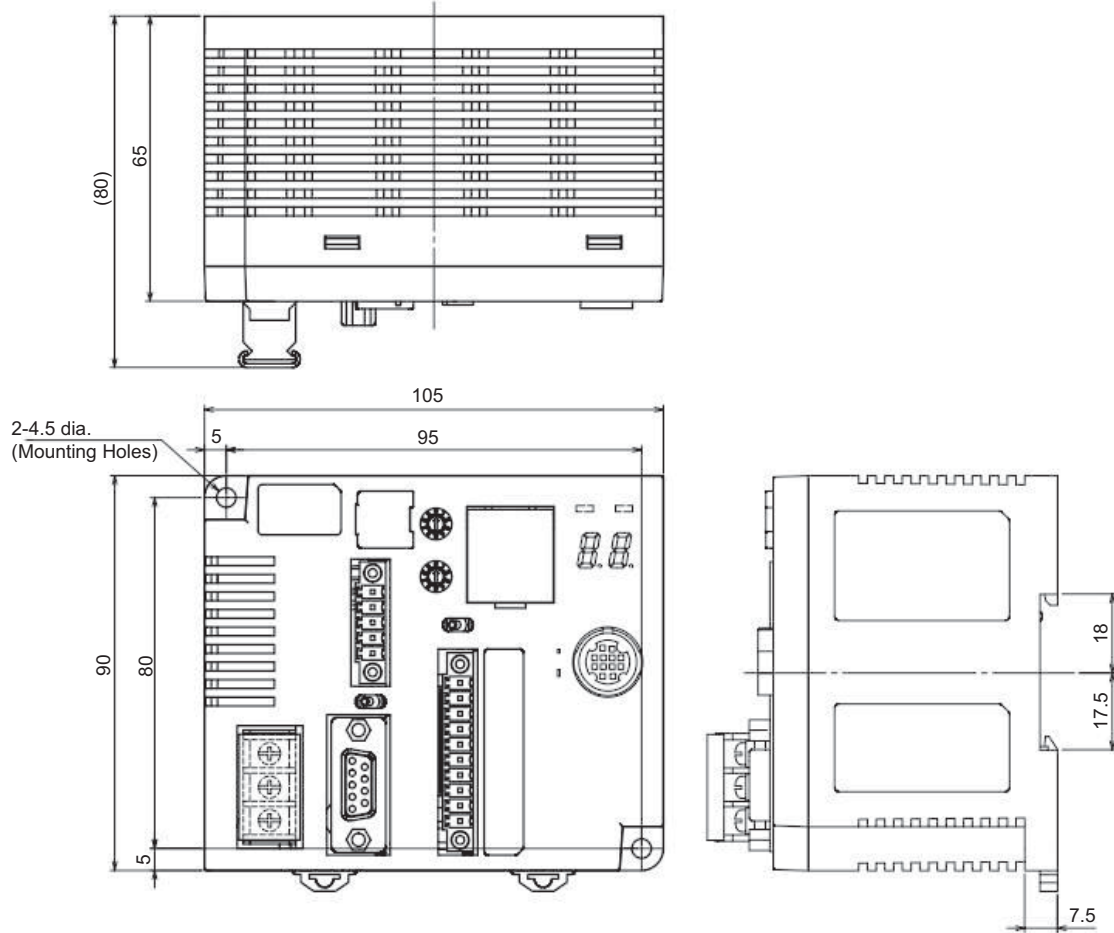
Model V670-A5 series



Dimensions

Recommendable replacement V680 series

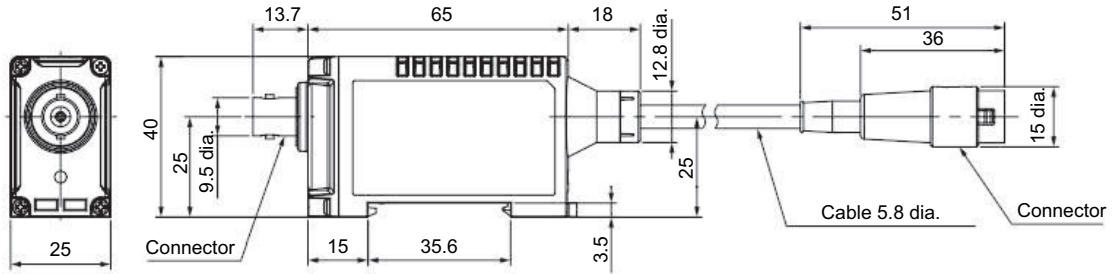
Model V680-CA5D01-V2



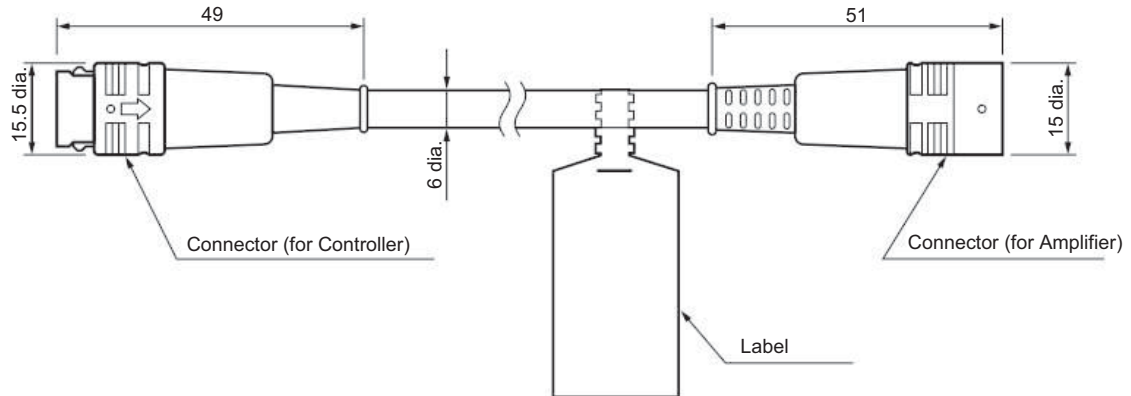
Dimensions

Recommendable replacement V680 series

Model V680-HA63B



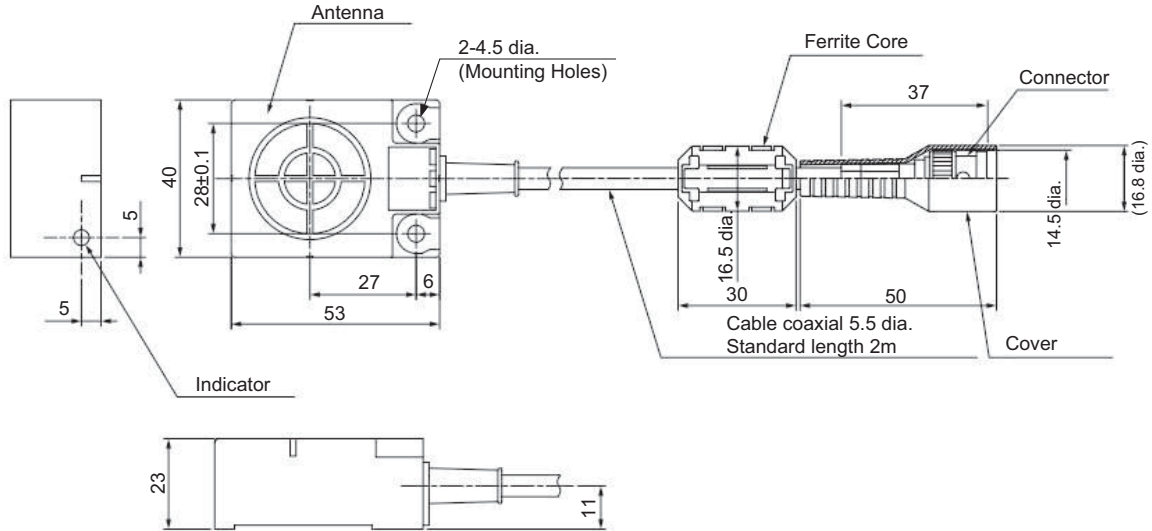
Model V700-A4 series



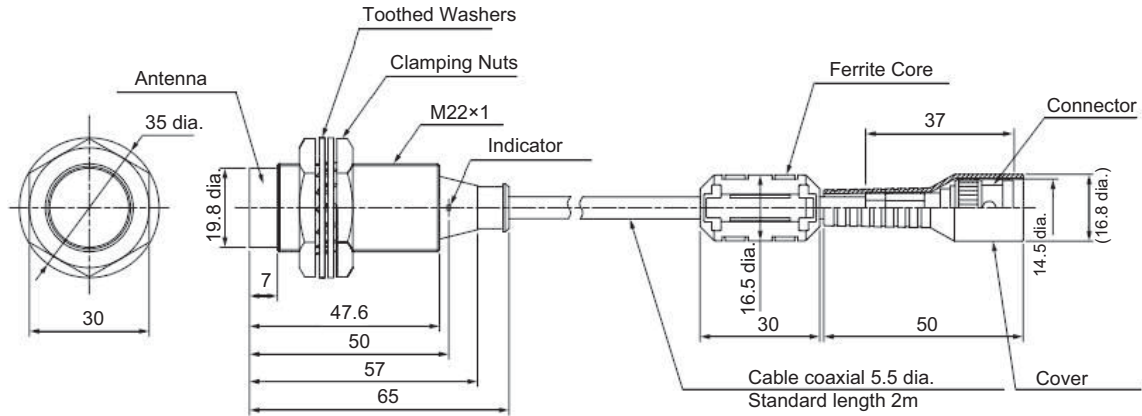
Dimensions

Recommendable replacement V680 series

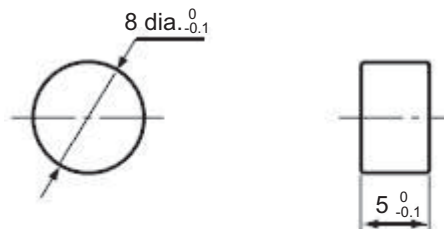
Model V680-HS63-W



Model V680-HS52-W



Model V680-D2KF52M



Model V680-D2KF67 : The outline is as same as Model V670-D13F03.

Wire Connection

Product discontinuation V670 series	Recommendable replacement V680 series																																																																																												
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Characteristics

Controller and Amplifier unit

Item	Product discontinuation	Recommended replacement	
	V670-CD1D-V1	V680-CA5D01-V2	V680-HA63B
Supply voltage (power consumption)	24VDC \pm 10% (7W max.)	24VDC +10%/-15% (15W max., 0.8A max.)	-
Ambient operating temperature	0°C to +55°C (with no icing)	-10°C to +55°C (with no icing)	-10°C to +55°C (with no icing)
Ambient operating humidity	35 to 85%RH (with no condensation)	25 to 85%RH (with no condensation)	35 to 85%RH (with no condensation)
Ambient storage temperature	-20°C to +75°C (with no icing)	-25°C to +65°C (with no icing)	-25°C to +65°C (with no icing)
Ambient storage humidity	35 to 85%RH (with no condensation)	25 to 85%RH (with no condensation)	35 to 85%RH (with no condensation)
Insulation resistance	20M Ω min. at 100VDC - between power supply terminals and ground terminal - between power supply terminals and output terminals - between power supply terminals and casing - between output terminals and ground terminal - between output terminals and casing - between ground terminal and casing	20M Ω min. at 500VDC - between power supply terminals and casing - between power supply terminals and ground terminal	20M Ω min. at 500VDC - between connector terminals and casing
Dielectric strength	For all combinations given above; 1,000VAC (50/60Hz) for 1 minute, leakage current : 5mA max.	For all combinations given above; 1,000VAC (50/60Hz) for 1 minute	For all combinations given above; 1,000VAC (50/60Hz) for 1 minute
Vibration resistance	10 to 150Hz, 0.2mm double amplitude at 15m/s ² in X, Y and Z directions 10 sweeps each for 8 minutes	10 to 150Hz, 0.2mm double amplitude at 15m/s ² in X, Y and Z directions 10 sweeps each for 8 minutes	10 to 500Hz, 1.5mm double amplitude at 100m/s ² in X, Y and Z directions 10 sweeps each for 11 minutes
Shock resistance	150m/s ² , 3 times in 6 directions (X, Y, Z)	150m/s ² , 3 times in 6 directions (X, Y, Z)	500m/s ² , 3 times in 6 directions (X, Y, Z)
Material	PC / ASA resin	PC+ABS resin	PC resin
Weight	Approx. 270g	Approx. 300g	Approx. 650g (with 10m cable)

Characteristics

Antenna

Item	Product discontinuation		
	V670-H11	V670-H51	V670-H51Q
Ambient operating temperature	0°C to +70°C (with no icing)		
Ambient operating humidity	35 to 85%RH (with no condensation)	35 to 95%RH (with no condensation)	
Ambient storage temperature	-25°C to +85°C (with no icing)	-25°C to +75°C (with no icing)	
Ambient storage humidity	35 to 85%RH (with no condensation)	35 to 95%RH (with no condensation)	
Insulation resistance	20MΩ min. at 100VDC between connector terminals and casing		
Dielectric strength	For all combinations given above; 1,000VAC (50/60Hz) for 1 minute, leakage current : 1mA max.		
Degree of protection	IP67 (IEC60529) (without connector)		IP67 (IEC60529) (without connector) IP67g (JEM1030) (with antenna part only)
Vibration resistance	10 to 150Hz, 0.7mm double amplitude at 50m/s ² in X, Y and Z directions 10 sweeps each for 8 minutes	10 to 500Hz, 1.5mm double amplitude at 100m/s ² in X, Y and Z directions 10 sweeps each for 11 minutes	
Shock resistance	150m/s ² , 3 times in 6 directions (X, Y, Z)	300m/s ² , 3 times in 6 directions (X, Y, Z)	
Material	ABS / Epoxy resin	PBT resin, brass, and Epoxy resin	Fluorine resin / Epoxy resin
Weight	Approx. 160g (with 2m cable)	Approx. 140g (with 2m cable)	Approx. 130g (with 2m cable)

Item	Recommended replacement	
	V680-HS52-W	V680-HS63-W
Ambient operating temperature	-10°C to +60°C (with no icing)	
Ambient operating humidity	35 to 95%RH (with no condensation)	
Ambient storage temperature	-25°C to +75°C (with no icing)	
Ambient storage humidity	35 to 95%RH (with no condensation)	
Insulation resistance	20MΩ min. at 500VDC between connector terminals and casing	
Dielectric strength	For all combinations given above; 1,000VAC (50/60Hz) for 1 minute	
Degree of protection	IP67 (IEC60529) In-house standard for antenna oil resistance (former JEM standard equivalent to IP67g) Note: The connector specifications are IP67 and IP65 (IEC 60529).	
Vibration resistance	10 to 500Hz, 1.5mm double amplitude at 100m/s ² in X, Y and Z directions 10 sweeps each for 8 minutes	
Shock resistance	500m/s ² , 3 times in 6 directions (X, Y, Z)	
Material	ABS resin, brass, and Epoxy resin	ABS / Epoxy resin
Weight	Approx. 850g (with 12.5m cable)	

Characteristics

Tag

Item	Product discontinuation		
	V670-D13F01	V670-D13F01H	V670-D13F03
Memory capacity	128 bytes		
Memory type	FRAM		
Memory longevity	Access frequency : 1 billion times (The total communication frequency of the Read or Write is called an access frequency.)		
Data backup time	10 years after reading or writing		
Ambient operating temperature	0°C to +70°C (with no icing)		
Ambient operating humidity	35 to 95%RH (with no condensation)	35 to 85%RH (with no condensation)	
Ambient storage temperature	-10°C to +70°C (with no icing)		
Ambient storage humidity	35 to 95%RH (with no condensation)	35 to 85%RH (with no condensation)	
Degree of protection	IP67 (IEC60529)		
Vibration resistance	10 to 2,000Hz, 1.5mm double amplitude at 150m/s ² in X, Y and Z directions 10 sweeps each for 15 minutes		
Shock resistance	500m/s ² , 3 times in 6 directions (X, Y, Z)		
Material	PPS / Epoxy resin		PBT / Epoxy resin
Weight	Approx. 1g		Approx. 6g

Item	Recommended replacement	
	V680-D2KF52M	V680-D2KF67
Memory capacity	2,000 bytes	
Memory type	FRAM	
Memory longevity	Access frequency : 10 billion times (10 billion times per block) (The total communication frequency of the Read or Write is called an access frequency.)	
Data backup time	10 years after reading or writing (55°C or less) 2.9 years after reading or writing (85°C or less)	
Ambient operating temperature	-25°C to +85°C (with no icing)	
Ambient operating humidity	35 to 95%RH (with no condensation)	35 to 85%RH (with no condensation)
Ambient storage temperature	-40°C to +85°C (with no icing)	
Ambient storage humidity	35 to 95%RH (with no condensation)	35 to 85%RH (with no condensation)
Degree of protection	IP67 (IEC60529) In-house standard for oil resistance (former JEM standard equivalent to IP67g)	
Vibration resistance	10 to 2,000Hz, 1.5mm double amplitude at 150m/s ² in X, Y and Z directions 10 sweeps each for 15 minutes	
Shock resistance	500m/s ² , 3 times in 6 directions (X, Y, Z)	
Material	PPS / Epoxy resin	
Weight	Approx. 0.5g	Approx. 6.5g

Operation ratings

Communication distance

(1) V670 series

a) model V670-D13F01 and model V670-D13F01H

Controller	Antenna (on non-metal)	Tag (on non-metal)	Communication distance (mm) (Axis offset: ± 1 mm)		
			Without extended cable	with extended cable	
V670-CD1D-V1	V670-H51 2M	V670-D13F01 V670-D13F01H	0.5 to 5.0	V670-A40 (3M)	0.5 to 5.0
				V670-A41 (10M)	
				V670-A42 (18M)	0.5 to 4.0
				V670-A43 (28M)	
	V670-H51Q 2M		0.5 to 4.5	V670-A40 (3M)	0.5 to 4.5
				V670-A41 (10M)	
				V670-A42 (18M)	0.5 to 3.5
	V670-A43 (28M)				
	V670-H51 0.5M		Don't use	V670-A54 (8M) V670-A55 (1M)	0.5 to 4.5

b) model V670-D13F03

Controller	Antenna (on non-metal)	Tag (on non-metal)	Communication distance (mm) (Axis offset: ± 1 mm)		
			Without extended cable	with extended cable	
V670-CD1D-V1	V670-H11 2M	V670-D13F03	5.0 to 23.0	V670-A40 (3M)	5.0 to 21.5
				V670-A41 (10M)	5.0 to 21.0
				V670-A42 (18M)	5.0 to 20.5
				V670-A43 (28M)	5.0 to 20.0
	V670-H11 0.5M		Don't use	V670-A54 (8M) V670-A55 (1M)	5.0 to 21.0

(2) V680 series

a) model V680-D2KF52M

Amplifier	Antenna (on non-metal)	Tag	Communication distance (mm) (Axis offset: ± 2 mm)	
V680-HA63B	V680-HS52	V680-D2KF52M (on non-metal)	Read	0 to 8.0
			Write	0 to 8.0
		V680-D2KF52M (in metal (iron))	Read	0 to 3.0
			Write	0 to 3.0
	V680-HS63	V680-D2KF52M (on non-metal)	Read	0 to 9.5
			Write	0 to 9.5

b) model V680-D2KF67

Amplifier	Antenna (on non-metal)	Tag (on non-metal)	Communication distance (mm)	
V680-HA63B	V680-HS52	V680-D2KF67	Read	0 to 17.0 (Axis offset: ± 2 mm)
			Write	0 to 17.0 (Axis offset: ± 2 mm)
	V680-HS63		Read	7.0 to 30.0 (Axis offset: ± 10 mm)
			Write	7.0 to 30.0 (Axis offset: ± 10 mm)

Operation ratings

Tag Communications Time (Reference)

(1) V670 series

Command	Number of bytes processed	Communications Time (ms) (N : Number of bytes processed)
Read	1 to 64 bytes	$0.07N + 4.22$
	65 to 128 bytes	$0.07N + 5.64$
Write (without verification)	1 to 128 bytes	$0.07N + 4.72$
Write (with verification)	1 to 64 bytes	$0.14N + 6.45$
	65 to 128 bytes	$0.14N + 7.79$

(2) V680 series

Communications speed setting	Command	Communications Time (ms) (N : Number of bytes processed)
Normal mode	Read	$1.2N + 30$
	Write (without verification)	$1.2N + 49$
	Write (with verification)	$2.4N + 49$
High-speed mode (See note.)	Read	$0.9N + 27$
	Write (without verification)	$0.9N + 41$
	Write (with verification)	$1.7N + 49$

Note:

When using multi-access or FIFO communications options, normal-mode communications speed will be used regardless of the high-speed mode setting.