Cable with Spring Clamp Terminal Block

(Discrete Cable Type / Connector Type)

Analog Shielded Cable with Ferrules

New Product Release | No. 21-02E

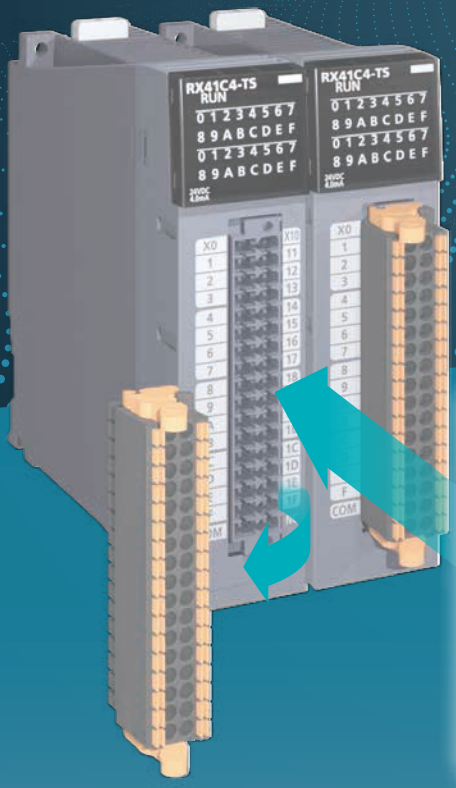
Spring clamp terminal block wiring in 99% less time

* Refer to page 2.

MELSEC iQ-R series

MELSEC iQ-F series

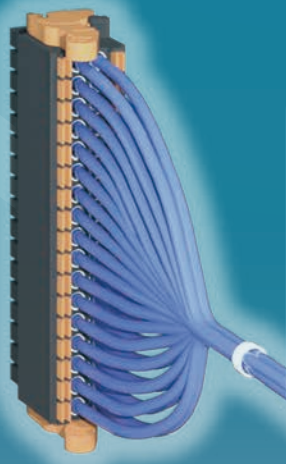
Remote I/O module



Simplified wiring

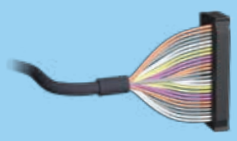
Terminating wire ends one by one

Connecting wires one by one



Junction terminal block side

Discrete cable



Connector

Cables for analog modules are also available.

- Current/voltage setting selectable for each channel
- Noise-resistant shielded cable connected to each channel

FA Goods Products

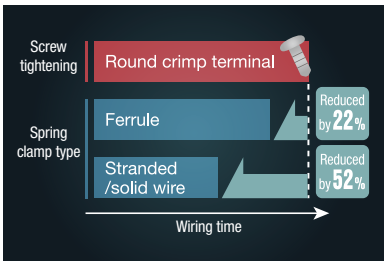
e-F@ctory

Source: Mitsubishi Electric Corporation

Wiring efficiency enhanced for spring clamp terminals

Features of spring clamp terminal specification

Easy wiring



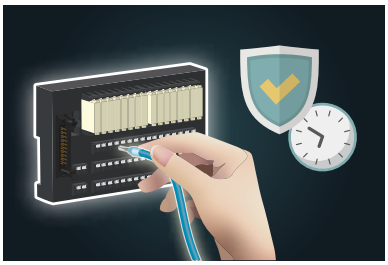
Wiring time can be significantly reduced by push-in connection.

* Calculated by comparing the time taken by non-experts with two years of experience (Data sourced from Japan Switchboard & control system Industries Association)

Stable connection

Screws are vibration resistant. Uniform quality is guaranteed for wiring since no special skills are required.

Less maintenance



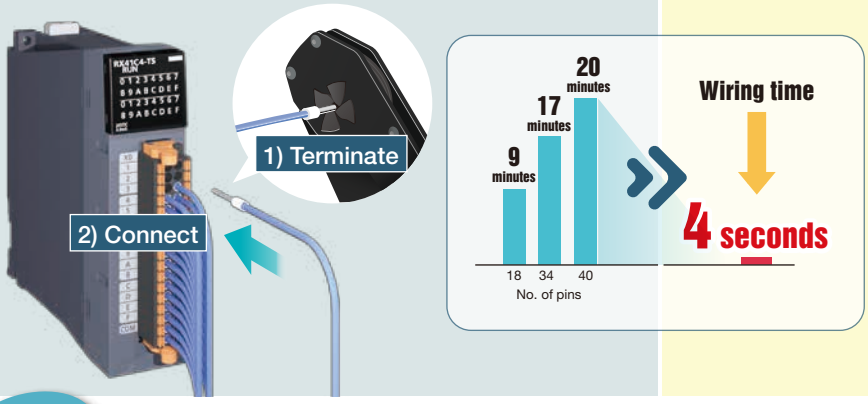
Screw tightening during maintenance is not required, reducing work load of workers. Rewiring work is also facilitated by push-in connection.

Two processes improved for innovative wiring solutions

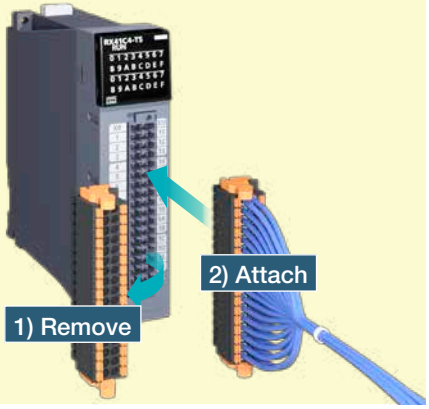
Significant reduction in time required to connect a programmable controller and a general-purpose product

Discrete cable type | Connector type

Before Wire ends terminated / wires connected one by one



After Just remove and attach the cable with spring clamp terminal block



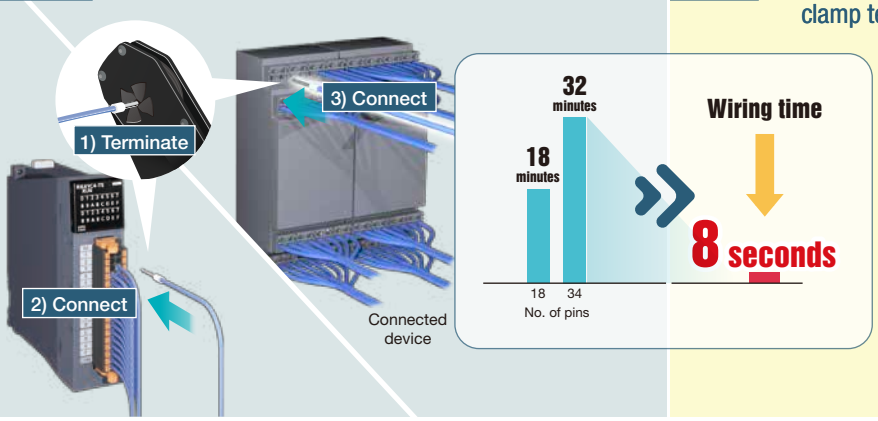
* Internal investigation data are used for the wiring time.

More effective

Wiring time further reduced by using our other products for wiring

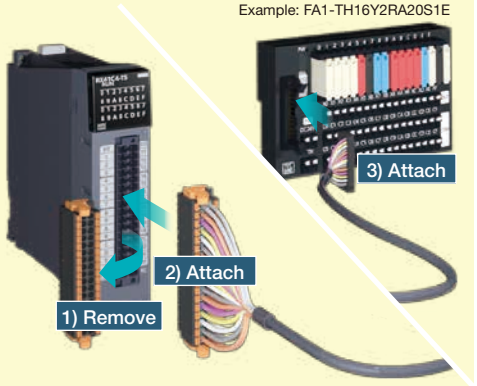
Connector type

Before Wire ends terminated / wires connected one by one



After Just remove and attach the cable with spring clamp terminal block

Example: FA1-TH16Y2RA20S1E



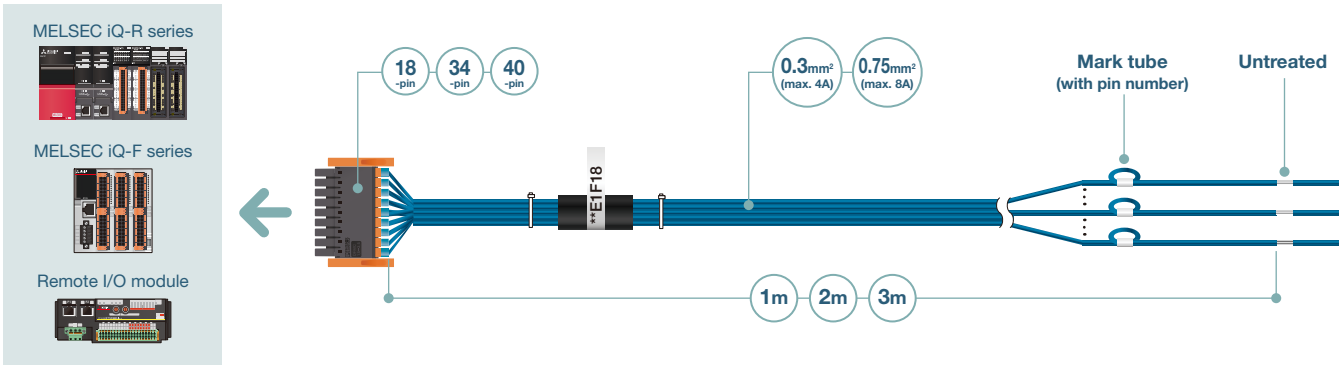
* Internal investigation data are used for the wiring time.

Products

Cable with spring clamp terminal block

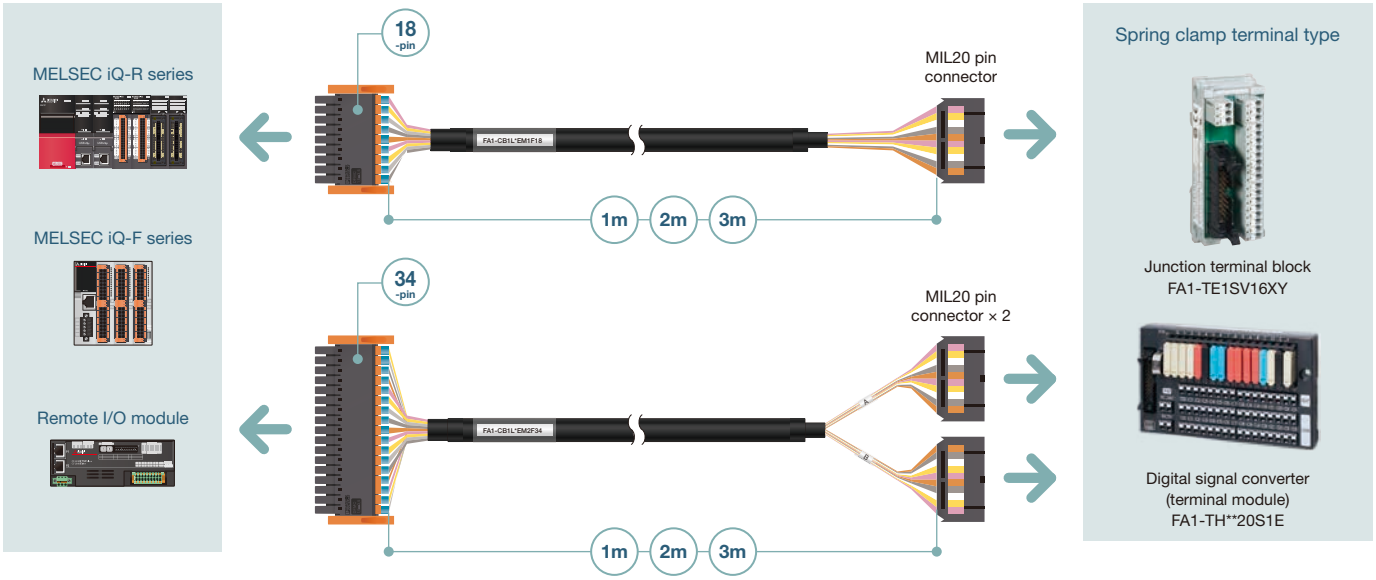
Discrete cable type

This cable is used for connection between a programmable controller and another device.
Models for different permissible currents and untreated wire ends broaden the range of application of this cable.



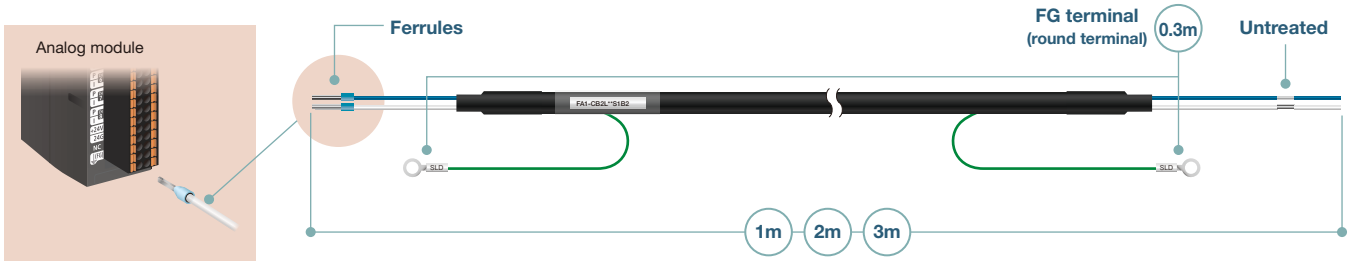
Connector type

This cable is used for connection between a programmable controller and a junction terminal block / digital signal converter.
Wiring time will be further reduced by using our other products for wiring.



Analog shielded cable with ferrules

Analog signal cable with ferrules (for 1 channel)
Current/voltage setting selectable for each channel with the noise-rejecting shielded cable



■Selection chart

Programmable controller module name			Time and wire saving device							
Series	Model	Common	Module type						Module	Connection cable
MELSEC iQ-R series	RX10-TS		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	RX40C7-TS	Positive common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA1-CB1L**EM1F18
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA1-CB1L**EM1F18
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Negative common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM1F18
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	RX41C4-TS	Positive common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM2F34
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA1-CB1L**EM2F34
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA1-CB1L**EM2F34
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Negative common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM2F34
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	RY10R2-TS		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	RY40NT5P-TS		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA1-CB1L**EM1F18
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	RY41NT2P-TS		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM2F34
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA1-CB1L**EM2F34
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	RY40PT5P-TS		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA1-CB1L**EM1F18
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	RY41PT1P-TS		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM2F34
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA1-CB1L**EM2F34
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
MELSEC iQ-F series	FX5UC-32MT/DS-TS	Sink input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA2-CB1L**EM1F18E
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA2-CB1L**EM1F18E
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Source input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
		Sink output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA2-CB1L**EM1F18
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5UC-32MT/DSS-TS	Sink input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA2-CB1L**EM1F18E
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA2-CB1L**EM1F18E
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Source input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
		Source output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA2-CB1L**EM1F18E
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5UC-32MR/DS-TS		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C32ET/DS-TS	Sink input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA2-CB1L**EM1F18E
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA2-CB1L**EM1F18E
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Source input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18

Programmable controller module name			Time and wire saving device							
Series	Model	Common	Module type						Module	Connection cable
MELSEC iQ-F series	FX5-C32ET/DS-TS	Sink output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH16Y2RA20S1E	FA2-CB1L**EM1F18
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C32ET/DSS-TS	Sink input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible		Independent	FA1-TH16X24RA1L20S1E	FA2-CB1L**EM1F18E
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable		Independent	FA1-TH4X2SC20S1E	FA2-CB1L**EM1F18E
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Source input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
		Source output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH1E16Y2RA20S1E	FA2-CB1L**EM1F18E
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C32EX/DS-TS	Sink input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible		Independent	FA1-TH16X24RA1L20S1E	FA2-CB1L**EM1F18E
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable		Independent	FA1-TH4X2SC20S1E	FA2-CB1L**EM1F18E
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Source input	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C16EYR/D-TS		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C32EYT/D-TS	Sink output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA2-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH16Y2RA20S1E	FA2-CB1L**EM1F18
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	FX5-C32EYT/DSS-TS	Source output	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA1-CB1L**EM1F18
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH1E16Y2RA20S1E	FA2-CB1L**EM1F18E
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
CC-Link IE TSN series with safety function	NZ2GNSS2-8D NZ2GNSS2-8TE NZ2GNSS2-16DTE		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F40
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F40
CC-Link IE TSN series	NZ2GN2S1-16D	Positive common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM1F18X
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible		Independent	FA1-TH16X24RA1L20S1E	FA3-CB1L**EM1F18X
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable		Independent	FA1-TH4X2SC20S1E	FA3-CB1L**EM1F18X
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	NZ2GN2S1-16T		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM1F18Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH16Y2RA20S1E	FA3-CB1L**EM1F18Y
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	NZ2GN2S1-16TE		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM1F18Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH1E16Y2RA20S1E	FA3-CB1L**EM1F18Y
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F18
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F18
	NZ2GN2S1-32D	Positive common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34X
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible		Independent	FA1-TH16X24RA1L20S1E	FA3-CB1L**EM2F34X
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable		Independent	FA1-TH4X2SC20S1E	FA3-CB1L**EM2F34X
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2GN2S1-32T		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible		Independent	FA1-TH16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible		Independent	FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible		Independent	FA1-TH16Y1TR20S1E	
					Base unit	Module selectable		Independent	FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34

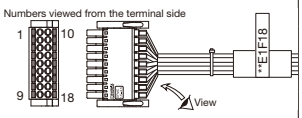
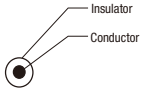
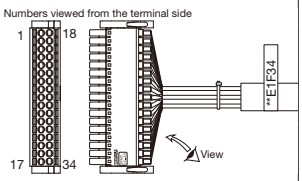
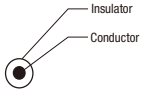
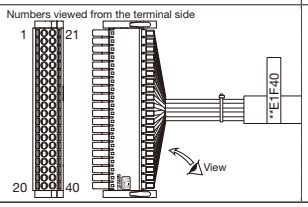
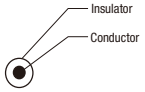
Programmable controller module name			Time and wire saving device							
Series	Model	Common	Module type						Module	Connection cable
CC-Link IE TSN series	NZ2GN2S1-32TE		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2GN2S1-32DT	Input side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA3-CB1L**EM2F34Y
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA3-CB1L**EM2F34Y
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Output side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2GN2S1-32DTE	Input side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
		Output side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
CC-Link IE Filed Basic series	NZ2MF2S1-32D	Positive common	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34X
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA3-CB1L**EM2F34X
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA3-CB1L**EM2F34X
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2MF2S1-32T		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2MF2S1-32TE1		Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2MF2S1-32DT	Input side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	24VDC N/O contact relay (positive common)	Module mixing possible	Independent		FA1-TH16X24RA1L20S1E	FA3-CB1L**EM2F34Y
					24VDC N/O contact relay (negative common)				FA1-TH16X24RA1H20S1E	
					Base unit	Module selectable	Independent		FA1-TH4X2SC20S1E	FA3-CB1L**EM2F34Y
									FA1-TH8X2SC20S1E	FA-CBL**MMH20 (for distributing)
		Output side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2MF2S1-32DTE1	Input side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
		Output side	Junction terminal block	Spring clamp				1-wire type	FA1-TE1SV16XY	FA3-CB1L**EM2F34Y
			Digital signal converter (terminal module)	Spring clamp	N/O contact relay	Module mixing possible	Independent		FA1-TH1E16Y2RA20S1E	FA3-CB1L**EM2F34Y
					Triac, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1SR20S1E	
					Transistor, 1.0A	Module mixing possible	Independent		FA1-TH1E16Y1TR20S1E	
					Base unit	Module selectable	Independent		FA1-TH1E16Y2SC20S1E	
			Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
	NZ2MF2S2-16A NZ2MF2S2-16R		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F34
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F34
CC-Link IE Field series with safety function	NZ2GFSS2-8D NZ2GFSS2-32D NZ2GFSS2-8TE NZ2GFSS2-16DTE NZ2EXSS2-8TE		Discrete cable	0.75mm² type (max. 8A)						FA1-CB3L07SQ**E1F40
				0.3mm² type (max. 4A)						FA1-CB3L03SQ**E1F40

Programmable controller module name			Time and wire saving device	
Series	Model		Cable type	Connection cable
MELSEC iQ-R series	R60ADI8-HA		Discrete shielded cable	FA1-CB2L**S1B2-4
MELSEC iQ-F series	FX5-4AD FX5-8AD FX5-4DA			
CC-Link IE TSN series	NZ2GN2S-60AD4 NZ2GN2S-60DA4			
CC-Link IE Filed series	NZ2GF2S-60MD4	For voltage/current input		

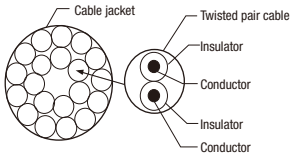
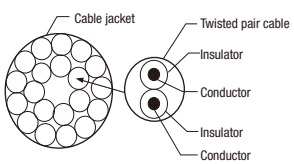
■ Product list

Cable with spring clamp terminal block

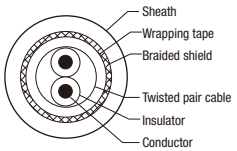
Discrete cable type

Specifications							Model
No. of pins	Shape	Pin layout	Cross section	Cross sectional area (permissible current)	Length	Weight	
18-pin				0.3mm² (4A)	1m	Approx. 115g	FA1-CB3L03SQ10E1F18
					2m	Approx. 220g	FA1-CB3L03SQ20E1F18
					3m	Approx. 325g	FA1-CB3L03SQ30E1F18
				0.75mm² (8A)	1m	Approx. 230g	FA1-CB3L07SQ10E1F18
					2m	Approx. 450g	FA1-CB3L07SQ20E1F18
					3m	Approx. 670g	FA1-CB3L07SQ30E1F18
34-pin				0.3mm² (4A)	1m	Approx. 220g	FA1-CB3L03SQ10E1F34
					2m	Approx. 415g	FA1-CB3L03SQ20E1F34
					3m	Approx. 610g	FA1-CB3L03SQ30E1F34
				0.75mm² (8A)	1m	Approx. 430g	FA1-CB3L07SQ10E1F34
					2m	Approx. 840g	FA1-CB3L07SQ20E1F34
					3m	Approx. 1250g	FA1-CB3L07SQ30E1F34
40-pin				0.3mm² (4A)	1m	Approx. 260g	FA1-CB3L03SQ10E1F40
					2m	Approx. 495g	FA1-CB3L03SQ20E1F40
					3m	Approx. 730g	FA1-CB3L03SQ30E1F40
				0.75mm² (8A)	1m	Approx. 510g	FA1-CB3L07SQ10E1F40
					2m	Approx. 995g	FA1-CB3L07SQ20E1F40
					3m	Approx. 1480g	FA1-CB3L07SQ30E1F40

Connector type

Specifications						Model
No. of pins	Shape	Cross section	Programmable controller to be connected	Length	Weight	
18-pin			MELSEC iQ-R I/O module	1m	Approx. 110g	FA1-CB1L10EM1F18
				2m	Approx. 210g	FA1-CB1L20EM1F18
				3m	Approx. 310g	FA1-CB1L30EM1F18
			MELSEC iQ-F sink I/O module	1m	Approx. 110g	FA2-CB1L10EM1F18
				2m	Approx. 210g	FA2-CB1L20EM1F18
				3m	Approx. 310g	FA2-CB1L30EM1F18
			MELSEC iQ-F source I/O module	1m	Approx. 110g	FA2-CB1L10EM1F18E
				2m	Approx. 210g	FA2-CB1L20EM1F18E
				3m	Approx. 310g	FA2-CB1L30EM1F18E
			CC-Link IE TSN input module	1m	Approx. 110g	FA3-CB1L10EM1F18X
				2m	Approx. 210g	FA3-CB1L20EM1F18X
				3m	Approx. 310g	FA3-CB1L30EM1F18X
			CC-Link IE TSN output module	1m	Approx. 110g	FA3-CB1L10EM1F18Y
				2m	Approx. 210g	FA3-CB1L20EM1F18Y
				3m	Approx. 310g	FA3-CB1L30EM1F18Y
34-pin			MELSEC iQ-R I/O module	1m	Approx. 180g	FA1-CB1L10EM2F34
				2m	Approx. 290g	FA1-CB1L20EM2F34
				3m	Approx. 400g	FA1-CB1L30EM2F34
			CC-Link IE TSN / CC-Link IE Field Basic input module	1m	Approx. 180g	FA3-CB1L10EM2F34X
				2m	Approx. 290g	FA3-CB1L20EM2F34X
				3m	Approx. 400g	FA3-CB1L30EM2F34X
			CC-Link IE TSN / CC-Link IE Field Basic output module	1m	Approx. 180g	FA3-CB1L10EM2F34Y
				2m	Approx. 290g	FA3-CB1L20EM2F34Y
				3m	Approx. 400g	FA3-CB1L30EM2F34Y

Analog shielded cable with ferrules

Specifications					Model*2
No. of pins	Shape	Cross section	Length	Weight*1	
2-pin			1m	Approx. 100g	FA1-CB2L10S1B2-4
			2m	Approx. 200g	FA1-CB2L20S1B2-4
			3m	Approx. 300g	FA1-CB2L30S1B2-4

*1: Weight per cable

*2: Model for four FA1-CBL**S1B2 cables

■ Cable specifications

Cable with spring clamp terminal block

Discrete cable type

Item	Specifications	
	0.3mm² (4A)	0.75mm² (8A)
Mark tube	Provided (printing: 1 to 18, 1 to 34, or 1 to 40)	
Cable	Stranded wire (heat resistant vinyl chloride, blue): 18, 34, or 40 wires	
Conductor nominal cross sectional area	0.3mm² (22 AWG)	0.75mm² (18 AWG)
Conductor	17 wires/0.16mm	34 wires/0.18mm
Insulator outer diameter	1.6mm	2.1mm
Cable outer diameter	—	—
Maximum current	4A	8A
Conductor resistance (20˚C)	0.0586Ω/m or less	0.0235Ω/m or less
Dielectric strength voltage	1500VAC for 1 minute	
Insulation resistance	5MΩ·km or more	
UL standard (cable area)	UL STYLE No.1007 80˚C 300V	

Connector type

Item	Specifications	
	18-pin connector	34-pin connector
Connector on the programmable controller side	Spring clamp terminal type 18-pin connector	Spring clamp terminal type 34-pin connector
Connector on the junction terminal block side	MIL20P connector	MIL20P connector × 2
Cable type	20 core cable (black)	40 core cable (black)
Conductor nominal cross sectional area	0.08mm² (28 AWG)	
Conductor	7 wires/0.127mm	
Insulator outer diameter	0.88mm	
Cable outer diameter	8.1mm	9.5mm
Rated current	1A	
Conductor resistance (20˚C)	0.232Ω/m or less	
Dielectric strength voltage	500VAC for 1 minute	
Insulation resistance	100MΩ·km or more	
UL standard (cable area)	UL STYLE No.2464 80˚C 300V	

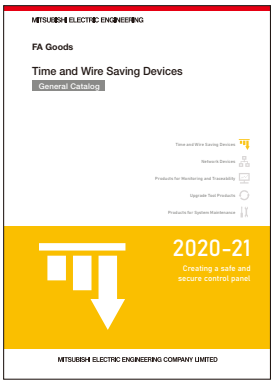
Analog shielded cable with ferrules

Item		Specifications
Solderless terminal	Analog signal cable	Ferrule terminal (AI 0,34-10 TQ)
	SLD cable	M4 round solderless terminal
Cable type		One pair (2 core) shielded twisted pair cable (black)
Conductor nominal cross sectional area		0.3mm² (22 AWG)
Conductor		60 wires/0.08mm
Insulator outer diameter		0.75mm
Cable outer diameter		4.9mm
Conductor resistance (20˚C)		0.072Ω/m or less
Dielectric strength voltage		2000VAC for 1 minute
Insulation resistance		100MΩ·km or more
UL standard (cable area)		UL STYLE No.2464 80˚C 300V

■ Related catalogs

Digest edition

Time and wire saving devices



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