

■ Position Control Unit with EtherCAT interface

Unit classification	Product name	Specifications		No. of unit numbers allocated	Current consumption (A)		Model	Standards
		Control output interface	No. of axes		5 V	24 V		
CJ1 CPU Bus Units	Position Control Unit with EtherCAT interface 	Control commands executed by EtherCAT communications. Positioning functions: Memory operation, Direct operation by ladder programming	2 axes	1	0.46	---	CJ1W-NC281	UC1, CE
			4 axes				CJ1W-NC481	
			8 axes				CJ1W-NC881	
			16 axes				CJ1W-NCF81	
		Control commands executed by EtherCAT communications. Positioning functions: Memory operation, Direct operation by ladder programming I/O communications: 64 nodes	4 axes	1	0.46	---	CS1W-NC482	
			8 axes				CS1W-NC882	

● Recommended EtherCAT Communications Cables

Category 5 or higher (100BASE-TX) straight cable with double shielding (aluminum tape and braided shielding) is recommended.

Cabel with Connectors

Wire Gauge and Number of Pairs: AWG 22, 2-pair Cable

As of October 2010

Item	Appearance	Recommended manufacturer	Cable length (m)	Model
Cable with Connectors on Both Ends (RJ45/RJ45)		OMRON	0.3	XS5W-T421-AMD-K
			0.5	XS5W-T421-BMD-K
			1	XS5W-T421-CMD-K
			2	XS5W-T421-DMD-K
			5	XS5W-T421-GMD-K
			10	XS5W-T421-JMD-K
Cable with Connectors on Both Ends (M12/RJ45)			0.3	XS5W-T421-AMC-K
			0.5	XS5W-T421-BMC-K
			1	XS5W-T421-CMC-K
			2	XS5W-T421-DMC-K
			5	XS5W-T421-GMC-K
			10	XS5W-T421-JMC-K

Note: The cable length 0.3, 0.5, 1, 2, 3, 5, 10 and 15m are available. For details, refer to Cat.No.G019.

Cabel with Connectors

Wire Gauge and Number of Pairs: AWG 24, 4-pair Cable

As of June 2010

Item	Appearance	Recommended manufacturer	Model
Cable	---	Tonichi Kyosan Cable, Ltd.	NETSTAR-C5E SAB 0.5 × 4P
	---	Kuramo Electric Co.	KETH-SB
	---	SWCC Showa Cable Systems Co.	FAE-5004
Connector	---	Panduit Corporation	MPS588

Wire Gauge and Number of Pairs: AWG 22, 2-pair Cable

As of June 2010

Item	Appearance	Recommended manufacturer	Model
Cable	---	Kuramo Electric Co.	KETH-PSB-OMR *
RJ45 Assembly Connector		OMRON	XS6G-T421-1 *

* We recommend you to use above cable and connector together.

■ Position Control Units with MECHATROLINK-II interface

Unit classification	Product name	Repeater		No. of unit numbers allocated	Current consumption (A)		Model	Standards
		Control output interface	No. of axes		5 V	24 V		
CJ1 CPU Bus Units	Position Control Units with MECHATROLINK-II interface 	Control commands executed by MECHATROLINK-II synchronous communications. Direct operation by ladder programming. Control mode: Position control, speed control, or torque control	2 axes	1	0.36	---	CJ1W-NC271	UC1, CE
			4 axes				CJ1W-NC471	
			16 axes				CJ1W-NCF71	
			16 axes				CJ1W-NCF71-MA	
	MECHATROLINK-II Cables	MECHATROLINK-II Cables (without ring core and USB connector on both ends) (Yaskawa Electric Corporation) Note: Can be connected to R88D-GN and R88D-KN only.	Cable length: 0.5 m		FNY-W6002-A5		---	
			Cable length: 1 m		FNY-W6002-01			
			Cable length: 3 m		FNY-W6002-03			
			Cable length: 5 m		FNY-W6002-05			
		MECHATROLINK-II Cables (with ring core and USB connector on both ends) (Yaskawa Electric Corporation) Use the model numbers provided in this catalog when ordering from OMRON.	Cable length: 0.5 m		FNY-W6003-A5		---	
			Cable length: 1 m		FNY-W6003-01			
			Cable length: 3 m		FNY-W6003-03			
			Cable length: 5 m		FNY-W6003-05			
			Cable length: 10 m		FNY-W6003-10			
			Cable length: 20 m		FNY-W6003-20			
			Cable length: 30 m		FNY-W6003-30			
MECHATROLINK-II Terminating Resistors	Terminating Resistor for MECHATROLINK-II (Yaskawa Electric Corporation) Use the model numbers provided in this catalog when ordering from OMRON.					FNY-W6022	---	
MECHATROLINK-II Repeater	Repeater					FNY-REP2000	---	