

CC-Link

CC-Link (Control & Communication Link) is a field network system that processes control and information data at high speed while ensuring a deterministic response.

Features include:

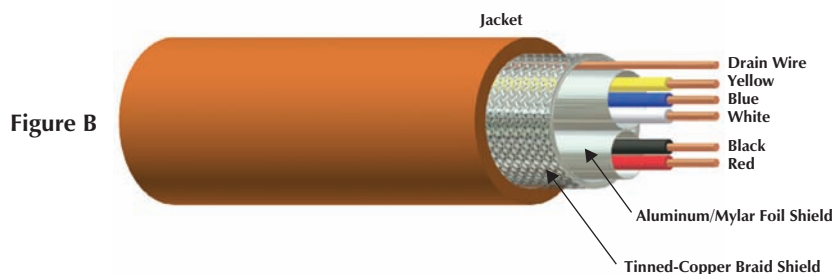
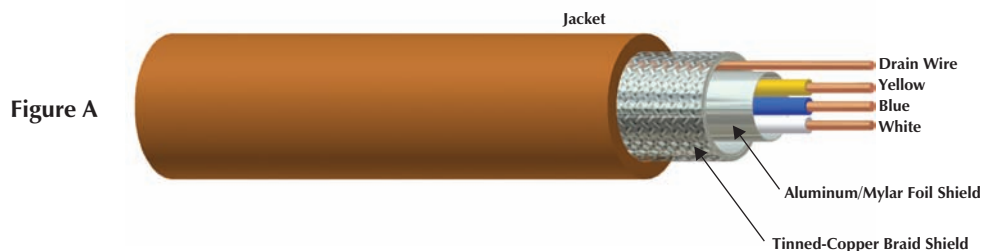
- Simple communication programming - configuration software available but not required
- Allows automation controllers to be programmed and monitored over the network
- Provides network diagnostic information
- A standby network master to assume network control if primary master goes off-line
- Bypasses network devices needing service without disrupting network traffic
- Automatically restores off-line, bypassed devices to the network
- Network devices can be added while network is operating

	CC-Link	CC-Link / LT
Maximum Number of Slaves	64	64
Max. No. of Addressable I/O Points (bit)	8192 in / 8192 out	1024 in / 1024 out
Maximum Number of Addressable Numerical Data Values (word)	2048 in / 2048 out	---
Typical Scan Rate for 64 Stations	4 ms @ 10 Mbps	2 ms @ 2.5 Mbps
Network Topology	Multi-drop, T branch, Star	T branch, Star
Error Detection System	CRC	CRC
Physical Layer	RS-485	RS-485
Media	Shielded Twisted 3-wire Cable	4-wire Flat Cable (includes power)
Communication Method	Broadcast, Polling	BITR Method
Transmission Format	HDLC	HDLC

CC-Link

CC-Link, Cable Specifications

- Cable Certified by the CC-Link Partner Association (CLPA) to Ver. 1.10 Cable Standard
- Cables are Available in 3 Conductor and 5 Conductor (with power conductors) Versions

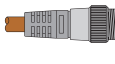

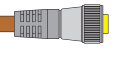

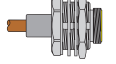
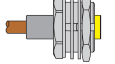


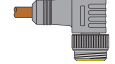
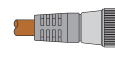



Communication Speed	Maximum Transmission Distance	
	CC-Link Cable Ver. 1.10 CC-Link High Performance Cable	CC-Link Cable
10 Mbps	100 meters (328 feet)	100 meters (328 feet)
5 Mbps	160 meters (525 feet)	150 meters (492 feet)
2.5 Mbps	400 meters (1312 feet)	200 meters (656 feet)
625 Kbps	900 meters (2953 feet)	600 meters (1968 feet)
156 Kbps	1200 meters (3937 feet)	1200 meters (3937 feet)

Type	Approvals	Data Triad		Power Pair	Outer Jacket	Shields	Bulk Cable Part Number / Weight/300 M	Figure
		AWG Color Code	DCR (/1000 feet) Insulation	Power	Material Color Nominal O.D.	Type Drain Wire		
430 AWM 2464 75°C 300 Volts	NEC PLTC CEC [CMG]	3/20 AWG WH, YE, BU	11.4 Ohms PE	---	PVC Brown 7.7 mm (.305 in)	Foil/Braid 22 AWG	RB51126-*M 55 lbs.	A
630 AWM 2464 75°C 300 Volts	NEC PLTC CEC [CMG]	3/20 AWG WH, YE, BU	11.4 Ohms PE	2/18 AWG RD, BK	PVC Brown 10.5 mm (.413 in)	Foil/Braid 22 AWG	RB51127-*M 101 lbs.	B

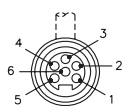
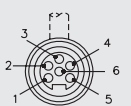
* Indicates length in meters.
 Standard cable lengths are 30, 75, 150, 225 and 300 meters.

CC-Link, 630 Communication/Power Cable and Cordset Selection Matrix



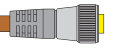
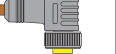
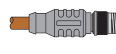




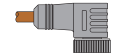



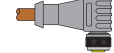
		minifast®				minifast Bulkhead	
		Pin (Male)		Socket (Female)		Pin (Male)	Socket (Female)
		1 	2 	3 	4 	9 	10 
		RSM	WSM	RKM	WKM	RSFP	RKFP
		RSM 630-*M	WSM 630-*M	RKM 630-*M	WKM 630-*M	RSFP 630-*M	RKFP 630-*M
minifast	Pin (Male)						
	1 	RSM RSM 630-*M	RSM WSM 630-*M	RSM RKM 630-*M	RSM WKM 630-*M	RSM RSFP 630-*M	RSM RKFP 630-*M
	2 		WSM WSM 630-*M	WSM RKM 630-*M	WSM WKM 630-*M	WSM RSFP 630-*M	WSM RKFP 630-*M
	3 			RKM RKM 630-*M	RKM WKM 630-*M	RKM RSFP 630-*M	RKM RKFP 630-*M
Socket (Female)							
4 				WKM WKM 630-*M	WKM RSFP 630-*M	WKM RKFP 630-*M	

See page S11 for dimensional drawings.

- * Indicates length in meters. Standard cable lengths are 1.0, 2.0, 4.0, 6.0, 10...15 Meters. Consult factory for other lengths. For stainless steel coupling nuts change part number RSM ... to RSV, WSM ... to WSV.

minifast	Pinouts	minifast
Male 	1. Blue (DA) 2. White (DB) 3. Yellow (DG) 4. Red (V+) 5. Black (V-) 6. Drain (Shield)	Female 

CC-Link, 430 Communication Cable and Cordset Selection Matrix

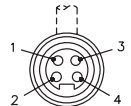
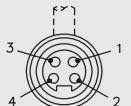
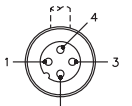
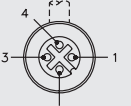
		<i>minifast</i> [®]				<i>eurofast</i> [®]	
		Pin (Male)		Socket (Female)		Pin (Male)	
		1  RSM	2  WSM	3  RKM	4  WKM	5  RSC	
 Bare		RSM 430-*M	WSM 430-*M	RKM 430-*M	WKM 430-*M	RSC 430-*M	
<i>minifast</i>	Pin (Male)	1  RSM	RSM RSM 430-*M	RSM WSM 430-*M	RSM RKM 430-*M	RSM WKM 430-*M	RSM RSC 430-*M
	Pin (Male)	2  WSM		WSM WSM 430-*M	WSM RKM 430-*M	WSM WKM 430-*M	WSM RSC 430-*M
	Socket (Female)	3  RKM			RKM RKM 430-*M	RKM WKM 430-*M	RKM RSC 430-*M
	Socket (Female)	4  WKM				WKM WKM 430-*M	WKM RSC 430-*M
<i>eurofast</i>	Pin (Male)	5  RSC					RSC RSC 430-*M
	Pin (Male)	6  WSC					
	Socket (Female)	7  RKC					
	Socket (Female)	8  WKC					

See pages S11 - S12 for dimensional drawings.

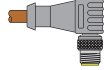
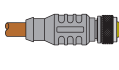
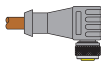
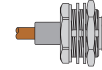
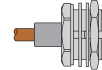
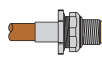
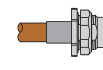
* Indicates length in meters.

Standard cable lengths are 1.0, 2.0, 4.0, 6.0, 10...15 Meters. Consult factory for other lengths.

For stainless steel coupling nuts change part number RSM... to RSV, WSM... to WSV.

<i>minifast</i>		Pinouts	<i>eurofast</i>	
Male 	Female 	1. Grey (Drain) 2. White (DB) 3. Yellow (DG) 4. Blue (DA)	Male 	Female 

CC-Link, 430 Communication Cable and Cordset Selection Matrix

<i>euromast</i> [®]			<i>minifast</i> [®] Bulkhead		<i>euromast</i> Bulkhead (Thin Only)	
Pin (Male)	Socket (Female)		Pin (Male)	Socket (Female)	Pin (Male)	Socket (Female)
6  WSC	7 	8 	9 	10 	11 	12 
WSC 430-*M	RKC 430-*M	WKC 430-*M	RSFP 430-*M	RKFP 430-*M	FSFD 430-*M	FKFD 430-*M
RSM WSC 430-*M	RSM RKC 430-*M	RSM WKC 430-*M	RSM RSFP 430-*M	RSM RKFP 430-*M	RSM FSFD 430-*M	RSM FKFD 430-*M
WSM WSC 430-*M	WSM RKC 430-*M	WSM WKC 430-*M	WSM RSFP 430-*M	WSM RKFP 430-*M	WSM FSFD 430-*M	WSM FKFD 430-*M
RKM WSC 430-*M	RKM RKC 430-*M	RKM WKC 430-*M	RKM RSFP 430-*M	RKM RKFP 430-*M	RKM FSFD 430-*M	RKM FKFD 430-*M
WKM WSC 430-*M	WKM RKC 430-*M	WKM WKC 430-*M	WKM RSFP 430-*M	WKM RKFP 430-*M	WKM FSFD 430-*M	WKM FKFD 430-*M
RSC WSC 430-*M	RSC RKC 430-*M	RSC WKC 430-*M	RSC RSFP 430-*M	RSC RKFP 430-*M	RSC FSFD 430-*M	RSC FKFD 430-*M
WSC WSC 430-*M	WSC RKC 430-*M	WSC WKC 430-*M	WSC RSFP 430-*M	WSC RKFP 430-*M	WSC FSFD 430-*M	WSC FKFD 430-*M
	RKC RKC 430-*M	RKC WKC 430-*M	RKC RSFP 430-*M	RKC RKFP 430-*M	RKC FSFD 430-*M	RKC FKFD 430-*M
		WKC WKC 430-*M	WKC RSFP 430-*M	WKC RKFP 430-*M	WKC FSFD 430-*M	WKC FKFD 430-*M

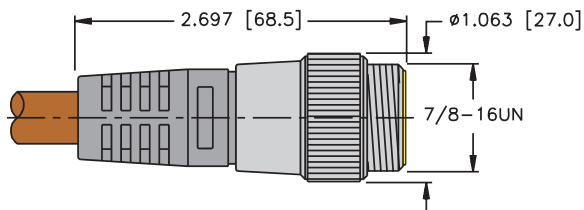
CC-Link

CC-Link, minifast® Cordset and Receptacle Connector Dimensions

Specifications

Housing:	TPU (Polyurethane)
Coupling Nut:	Nickel Plated CuZn or Stainless Steel
Contact Carrier:	TPU (Polyurethane)
Contacts:	Gold Plated CuZn
Protection:	NEMA 1, 3, 4, 6P and IEC IP 68
Rated Voltage:	300 V
Rated Current:	9 A
Ambient Temperature:	-40°C to +75°C

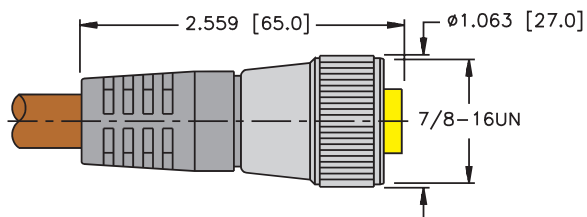
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RSM ..

Pages S8 - S10

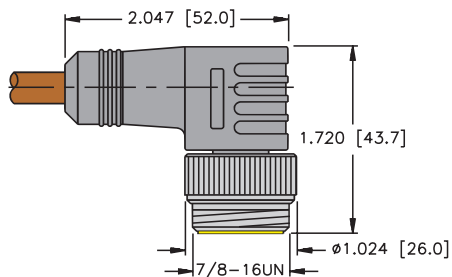
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RKM ..

Pages S8 - S10

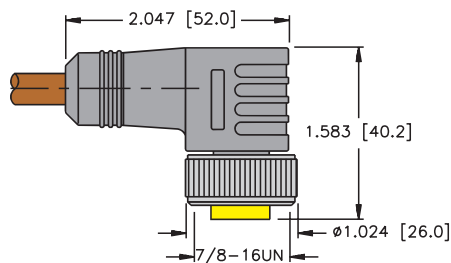
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WSM ..

Pages S8 - S10

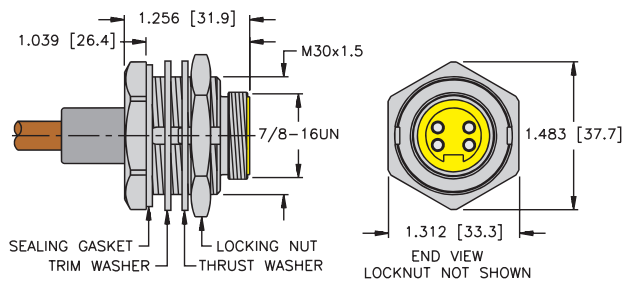
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WKM ..

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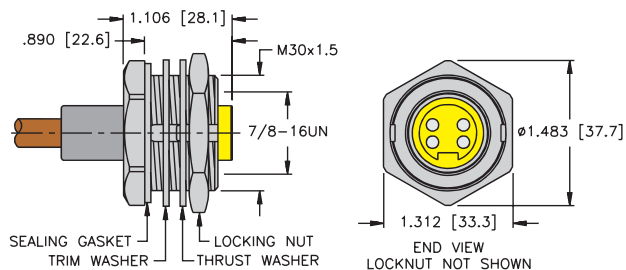
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RSFP ..

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10



RKFP ..

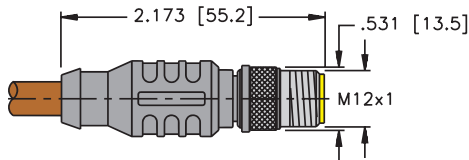
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CC-Link, eurofast® Cordset and Receptacle Connector Dimensions

Specifications

Housing:	PUR (Polyurethane)
Coupling Nut:	Nickel Plated CuZn or Stainless Steel
Contact Carrier:	TPU (Polyurethane) or POM (Nylon)
Contacts:	Gold Plated CuZn
Protection:	NEMA 1, 3, 4, 6P and IEC IP 68
Rated Voltage:	250 V
Rated Current:	4 A
Ambient Temperature:	-40°C to +75°C

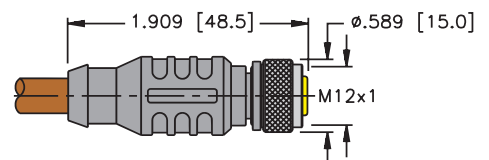
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RSC ..

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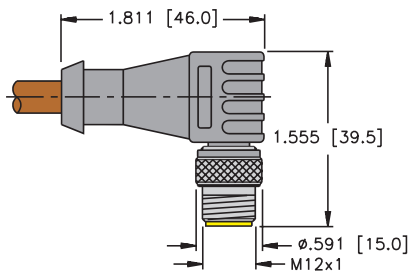
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RKC ..

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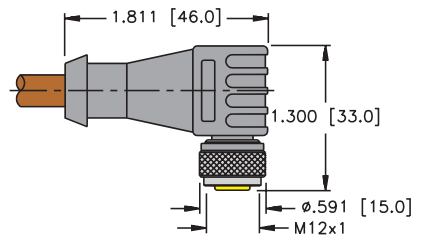
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WSC ..

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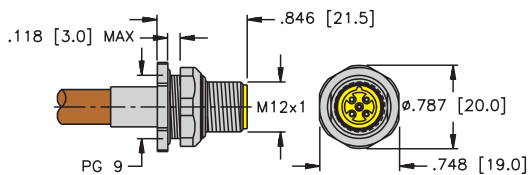
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WKC ..

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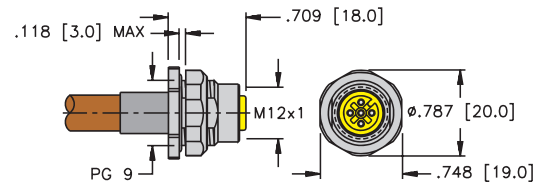
11



FSFD ..

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FKFD ..

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CC-link

CC-Link, (7/8-16UN) *minifast*® 4-wire Panel Mount Receptacles

- Mounted for Quick Connection to Enclosures



Housing	Part Number	Specs	Application	Pinouts	
<p>1</p>	RSFV 43	Nickel Plated CuZn or Stainless Steel 300 V, 9 A -40°C to +105°C	1/2-14NPT threads, standard duty	1. GY 2. WH 3. YE 4. BU	<p>Male</p>
<p>2</p>	RKFV 43				<p>Female</p>

See page S16 for dimensional drawings.

Standard cable length is 0.5 meters. Consult factory for other lengths.

Standard housing material is nickel plated cast zinc. "RKF .."; "RKFV .." indicates 316 stainless steel housing (leads only)

CC-Link, (M12x1) *euromast*® 4-wire Panel Mount Receptacles

- Mounted for Quick Connection to Enclosures



Housing	Part Number	Specs	Application	Pinouts
<p>3</p>	FSV 43	Nickel Plated CuZn or Stainless Steel 250 V, 4 A -40°C to +105°C	PG 9 threads	<p>Male</p>
<p>4</p>	FKV 43			<p>Female</p>

See page S16 for dimensional drawings.

Standard cable length is 0.5 meters. Consult factory for other lengths.

Standard housing material is nickel plated cast zinc. "RKF .."; "RKFV .." indicates 316 stainless steel housing (leads only)

CC-Link, (7/8-16UN) *minifast*® 6-wire Panel Mount Receptacles

- Mounted for Quick Connection to Enclosures



Housing	Part Number	Specs	Application	Pinout
<p>1</p>	RSF 63	Nickel Plated CuZn or Stainless Steel 250 V, 4 A -40°C to +105°C	1/2-14NPT threads, standard duty	<p>Male</p>
<p>2</p>	RKF 63			<p>Female</p>

See page S16 for dimensional drawings.

Standard cable length is 0.5 Meters. Consult factory for other lengths.

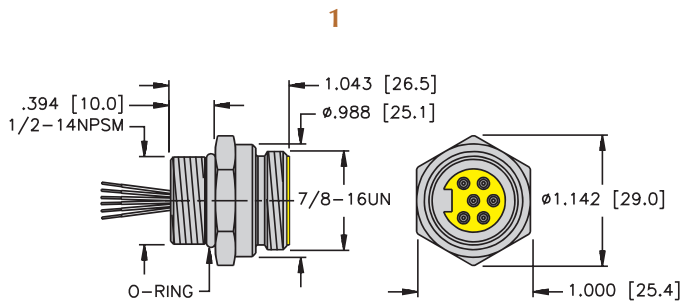
Receptacles require a 13/16" (21 mm) clearance hole for panel mounting.

Standard housing material is nickel plated cast zinc. "RKF .."; "RKFV .." indicates 316 stainless steel housing (leads only) and "RKFK .." indicates nylon housing.

For locknuts to be included, add "W/LN" to the end of the part number.

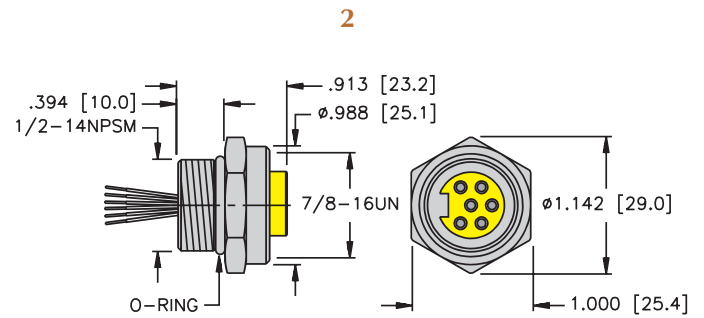
To specify PVC jacketed cable, add "/S717" to the end of the part number.

minifast® Male and Female Receptacles



RSF .. 1/2-14NPSM

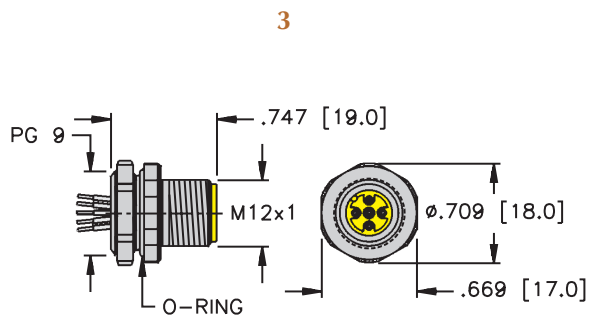
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RKF .. 1/2-14NPT

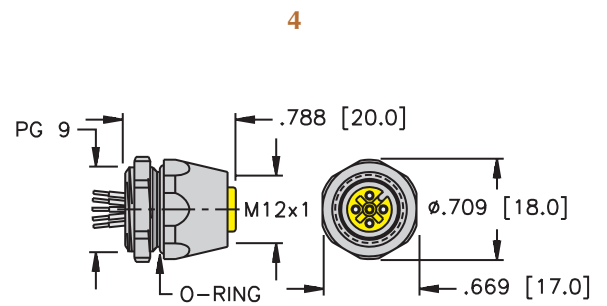
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eurofast® Male and Female Receptacles



FS .. PG 9

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FK .. PG 9

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