

PLC/DCS Cable Cross Reference Guide

PLC/DCS Manufacturer	System Name	Belden Part Number		
ABB/Bailey Controls	FOUNDATION Fieldbus	See Protocol listings on page 12		
	Industrial IT 800 X A	9880	Network Trunk Cable	
	Infinet	9880	Network Trunk Cable	
		9463	Blue Hose® (Standard)	
	Masterpiece 200	9880	Network Trunk Cable	
		9907	Thin Network Trunk Cable	
	MICRO-DCI	3105A	1-Pair, RS-485	
	MICROLINK	9860	Twinax, 16 AWG, 124 Ohm	
	Modcell	3105A	1-Pair, RS-485	
	PROFIBUS DP & PA	See Protocol listings on page 12		
Allen-Bradley/ Rockwell Automation	ControlNet™	See Protocol listings on page 12		
	DeviceNet™	See Protocol listings on page 12		
	DH, DH+, Remote I/O	9463	Blue Hose (Standard)	
		9463F	Flexible Version (9463)	
		129463	Aluminum Armor (9463)	
		139463	Steel Armor (9463)	
		189463	Continuous Armor (9463)	
		9463DB	Direct Burial (9463)	
		3072F	600V TC Rated (9463)	
		89463	FEP 200°C, Plenum	
	DH-485	3074F	600V Tray Cable	
		3106A	1.5-Pair, RS-485 (PLTC)	
		9842	2-Pair, RS-485	
	Industrial Ethernet	See Protocol listings on page 12		
	Longline Communications	8723	Interface Cable	
		88723	Plenum Version	
	Cutler-Hammer/ Westinghouse	I/O System	9463	Blue Hose (Standard)
	Emerson Process Management (Fisher/ Rosemont Systems) — Delta V	DeviceNet	See Protocol listings on page 12	
FOUNDATION Fieldbus (Type SP50 ISA/IEC)		See Protocol listings on page 12		
HART		See Protocol listings on page 12		
Industrial Ethernet		See Protocol listings on page 12		
Modbus		See Protocol listings on page 12		
PROFIBUS DP		See Protocol listings on page 12		
Provox Plus		3091A	RG-11 Quad Shield PVC	
		3131A	RG-6 Quad Shield PVC	
RS-485		See Protocol listings on page 12		
GE Fanuc — I/O Bus	DeviceNet	See Protocol listings on page 12		
	9030, 9070	9182	Communications Bus	
	PAC System	89182	Plenum Version	
	INTERBUS®-S	See Protocol listings on page 12		
	Modbus®	See Protocol listings on page 12		
	PROFIBUS	See Protocol listings on page 12		

PLC/DCS Manufacturer	System Name	Belden Part Number		
GE Fanuc — Sensor Device Networks	DeviceNet	See Protocol listings on page 12		
	SDS	See Protocol listings on page 12		
Honeywell	Access 4000 System	9248	RG-6 PVC	
	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	See Protocol listings on page 12		
	IPC 620 System I/O	9271	Twinax, 25 AWG, 124 Ohm	
	IPC 620 System	9729	Up to 4,000 ft.	
	Serial Interface	9182	Up to 10,000 ft.	
		89182	Plenum	
	Series C	RS-485	FOUNDATION Fieldbus Industrial Ethernet	
	3000 UCN & LCN	3131A	RG-6 Quad Shield PVC	
		3094A	RG-11 Quad Shield PVC	
	Honeywell Microswitch Division	Smart Distributed System	3086A	Mini
3087A			Micro	
1346F			1 Pair 22 AWG, 1 Pair 24 AWG	
1348F			3 20 AWG	
1349F			3 20 AWG, 2 18 AWG	
Invensys/ Foxboro	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	See Protocol listings on page 12		
	I/A Series Carrier Band	8233	Small Trunk	
		3095A	Plenum	
		9290	Drop Cable	
	I/A Series Fieldbus	9207	Twinax	
		89207	200°C, Plenum	
		3073F	600V Tray Cable	
	I/A Series Node Bus	9880	Trunk Cable	
		89880	Plenum Version	
	Industrial Ethernet	See Protocol listings on page 12		
Limitorque	DCC100	3105A	Actuator Bus Cable, 1-Pair, RS-485	
Matsushita	FP Series C-NET	9207	Twinax, 20 AWG, Stranded, 100 Ohm	
		9860	Twinax, 16 AWG, Solid, 124 Ohm	
	FP Series MEWNET-F	9207	Twinax, 20 AWG, Stranded, 100 Ohm	
		9860	Twinax, 16 AWG, Solid, 124 Ohm	
	FP Series MEWNET-H	9248	RG-6, 75 Ohm, 18 AWG	
	FP Series MEWNET-TR	9207	Twinax, 20 AWG, Stranded, 100 Ohm	
		9860	Twinax, 16 AWG, Solid, 124 Ohm	
	FP Series MEWNET-W	9207	Twinax, 20 AWG, Stranded, 100 Ohm	
		9806	4-Pair, RS-232, RS-422	
	FP Series MEWNET-W2	9207	Twinax, 20 AWG, Stranded, 100 Ohm	
9860		Twinax, 16 AWG, Solid, 124 Ohm		
FP Series TRNET	9207	Twinax, 20 AWG, Stranded, 100 Ohm		
	9860	Twinax, 16 AWG, Solid, 124 Ohm		

FEP = Fluorinated Ethylene-propylene

VFD Cross Reference Guide *(continued)*

Voltage	HP	kW	Sizes	Classic VFD Part No.	Classic with Signal Pair Part No.	2 kV VFD Part No.	CSA VFD Part No.	LSZH VFD Part No.	Thermoset LSZH VFD, Marine Approvals Part No.
575V 3Ø	125	93.2	1/0	29529	—	29544	29558C	29529T	29529X
			2/0	29530	—	29545	29559C	29530T	29530X
			3/0	29531	—	29546	29560C	29531T	29531X
	200	149.1	4/0	29532	—	29547	29561C	29532T	29532X
			250 MCM	—	—	29533	29533	—	—
			350 MCM	—	—	29534	29534	—	—
			500 MCM	—	—	29535	29535	—	—
	250	186.4	350 MCM	—	—	29534	29534	—	—
	350	261.0	500 MCM	—	—	29535	29535	—	—

Values based on typical Full-Load Current (FLC) ratings of three-phase AC motors as published in NEC Table 430.250 (2011) multiplied by 125% per NEC article 430-22 (A) (2011). The ampacity ratings of the cables are based on NEC Table 310.15(B)(16) (2011). The VFD w/Signal ampacity values were de-rated to 80% per NEC Table 310.15 (B)(2)(a) (2011) due to the increased number of current-carrying conductors included in these cable(s).

Values based on typical Full-Load Current (FLC) ratings of three-phase AC motors as published in CEC Table 44 (2012) multiplied by 125% per CEC Section 28-112 (2012). The ampacity ratings of the cables are based on CEC Table 2 (2012). The VFD w/Signal ampacity values were de-rated to 80% per CEC Table 5C (2012) due to the increased number of current-carrying conductors included in these cable(s).

Consult drive/motor manufacturer for exact FLC ratings. Ampacity interpretations subject to user's local authority having jurisdiction.

VFD Supplier	VFD Name
ABB/Baldor	AC S
	ACH 501 (480V AC, 208/230V AC)
	ACH550
	ACS 6000c
	ACQ
	Cascade
	Cyclo (Analog)
	Cyclo (PSR)
	MEGADRIVE-LCI
	MEGASTAR A
	SAMI MEGASTAR (W)
	TYRAK-LCI
	VS1SP
	VS1GV
	VS1PM
Danfoss	AHF
	VLT® 12-Pulse
	VLT 2800
	VLT 2800
	VLT AQUA FC 200
	VLT FC 100
	VLT FC 300
	VLT High Power
	VLT Low Harmonic
	VLT Micro

VFD Supplier	VFD Name
Easton/Cutler-Hammer	CFX
	CPX
	H-Max
	HVX
	LCX
	M-Max
	MVX
	NFX
	SC 9000
	SLX
SPX	
SVX	
Mitsubishi	A500 Series
	A700 Series
	A701 Series
	D700 Series
	E500 Series
	E700 Series
	E700SC Series
	F700Series
S500 Series	
V500 Drives	
OMRON	3G3JX
	3G3MX2
	3G3RX

VFD Supplier	VFD Name
Rockwell/A-B	PowerFlex®
	1336
	1305
Schneider	Altivar®
	E-flex™
	M-Flex™
	PowerGard™
Siemens	S-Flex™
	MICROMASTER
	SINAMICS
	SED2
WEG	VBA
	CFW
	EDP
	MVW
Yaskawa	A1000
	AC7
	E7
	F7
	G5HHP
	G7
	J1000
	P1000
	P7
	V1000
VS mini	
Z1000	

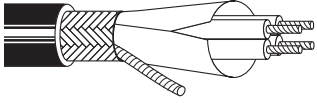
Encoder Cables

Belden also offers the following standard cables for encoder applications. Encoder cables help feed information to the microprocessor regarding both the speed and the position of the rotor.

Part No.	Pairs	AWG
8790	1 (Power Supply)	18
9729	2	24
9730, 89730	3	24
9728	4	24
9892	4	20
9860	1 (Signal)	16

VFD (Variable Frequency Drive) Cable

Classic Foil/Braid Design • Low Smoke Zero Halogen

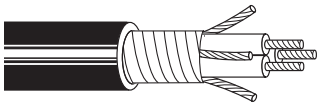


- Four-Conductor Cable (3 Circuit + Ground)
- Full-Size Insulated Ground
- Foil + Braid Shield
- 1000V UL Flexible Motor Supply Cable
- 600V UL TC-ER
- 1000V CSA AWM I/II A/B FT4

Part No.	Conductor		OD (Nom)		Pulling Tension (Max)		Bend Radius (Min)		Additional Features/Ratings
	AWG	Stranding	Inch	mm	Lbs	N	Inch	mm	
Stranded TC (Circuit), BC (Ground) Conductors • XLP Insulation • Overall Beldfoil® + 85% TC Braid Shielding • Black Haloarrest® Jacket									
29500T	16	26 x 30	.53	13.46	128	570	4.3	109.2	IEEE 1202/383 Sunlight Res UL Direct Burial XHHW-2, RHHW-2 Conductors (16 AWG: XHHW-2 only) 90°C Wet/Dry MSHA P-07-KA070003
29501T	14	41 x 30	.60	15.24	212	943	4.8	121.9	
29502T	12	65 x 30	.65	16.51	336	1495	5.2	132.0	
29503T	10	105 x 30	.69	17.53	592	2634	5.5	139.7	
29504T	8	7 x 19 x 29	.93	23.62	768	3418	7.5	190.5	
29505T	6	7 x 19 x 27	1.02	25.91	1220	5429	8.2	203.2	
29506T	4	7 x 19 x 25	1.16	29.46	1940	8633	9.3	236.2	
29507T	2	7 x 19 x 23	1.31	33.27	3088	13,742	10.8	273.1	

Conductor Color Coding: ICEA Method 4: Black and Numbered, Green/Yellow Ground.

Classic Symmetrical Design • Low Smoke Zero Halogen



- Three-Conductor Cable (3 Circuit + 3 Ground)
- Dual Spiral Copper Tape Shield
- 1000V UL Flexible Motor Supply Cable
- 600V UL TC-ER
- 1000V CSA AWM I/II A/B FT4

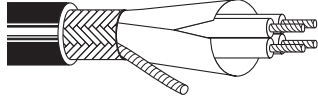
Part No.	Conductor		OD (Nom)		Pulling Tension (Max)		Bend Radius (Min)		Additional Features/Ratings
	AWG	Stranding	Inch	mm	Lbs	N	Inch	mm	
Conductors: Stranded TC (Circuit), BC (Ground) Conductors • XLP Insulation • Dual Spiral Copper Tape Shield • Black PVC Jacket									
29528T	1	7 x 19 x 22	1.20	30.48	2650	11,788	12.0	304.8	IEEE 1202/383 Sunlight Res UL Direct Burial XHHW-2 Conductors 90°C Wet/Dry MSHA P-07-KA070003
29529T	1/0	7 x 19 x 21	1.29	32.77	3537	15,733	12.9	327.7	
29530T	2/0	7 x 19 x 20	1.40	35.56	4200	18,682	14.0	355.6	
29531T	3/0	7 x 19 x 19	1.52	38.61	5025	22,352	15.2	386.1	
29532T	4/0	7 x 19 x 18	1.68	42.67	6670	29,670	16.8	426.7	

Conductor Color Coding: ICEA Method 4: Black and Numbered, Green/Yellow Ground.

BC = Bare Copper • TC = Tinned Copper • PVC = Polyvinyl Chloride • XLP = Cross-Linked Poly

VFD (Variable Frequency Drive) Cable

**Classic Foil/Braid Design •
Thermoset Low Smoke Zero
Halogen • Marine Certified**

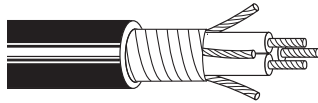


- Four-Conductor Cable (3 Circuit + Ground)
- Full-Size Insulated Ground
- Foil + Braid Shield
- 1000V UL Flexible Motor Supply Cable
- 600V UL TC-ER
- CSA FT4
- Marine Approvals: ABS, UL 1309, IEEE 45, IEEE 1580 Type P

Part No.	Conductor		OD (Nom)		Pulling Tension (Max)		Bend Radius (Min)		Additional Features/Ratings
	AWG	Stranding	Inch	mm	Lbs	N	Inch	mm	
Stranded TC Conductors • XLP Insulation • Overall Beldfoil® + 85% TC Braid Shielding • Black HaloarrestXLINK™-2 Jacket									
29500X	16	26 x 30	.53	13.46	128	570	4.3	109.2	IEEE 1202/383 Sunlight Res Oil Res II IEC 60811-2-1 Hydrocarbon Resistant XHHW-2, RHW-2 Conductors (16 AWG: XHHW-2 only) 90°C Wet/Dry MSHA Approved Suitable for Class I, II & III, Division 2 Hazardous Locations
29501X	14	41 x 30	.60	15.24	212	943	4.8	121.9	
29502X	12	65 x 30	.65	16.51	336	1495	5.2	132.0	
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Conductor Color Coding: ICEA Method 4: Black and Numbered, Green/Yellow Ground.

**Classic Symmetrical Design •
Thermoset Low Smoke Zero
Halogen • Marine Certified**



- Three-Conductor Cable (3 Circuit + 3 Ground)
- Dual Spiral Copper Tape Shield
- 1000V UL Flexible Motor Supply Cable
- 600V UL TC-ER
- CSA FT4
- Marine approvals: ABS, UL 1309 Type, IEEE 45, IEEE 1580 Type P

Part No.	Conductor		OD (Nom)		Pulling Tension (Max)		Bend Radius (Min)		Additional Features/Ratings
	AWG	Stranding	Inch	mm	Lbs	N	Inch	mm	
Conductors: Stranded TC (Circuit), BC (Ground) Conductors • XLP Insulation • Dual Spiral Copper Tape Shield • Black HaloarrestXLINK-2 Jacket									
29528X	1	7 x 19 x 22	1.20	30.48	2650	11,788	12.0	304.8	IEEE 1202/383 Sunlight Res Oil Res II IEC 60811-2-1 Hydrocarbon Resistant XHHW-2 Conductors 90°C Wet/Dry MSHA Approved Suitable for Class I, II & III, Division 2 hazardous locations
29529X	1/0	7 x 19 x 21	1.29	32.77	3537	15,733	12.9	327.7	
29530X	2/0	7 x 19 x 20	1.40	35.56	4200	18,682	14.0	355.6	
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29532X	4/0	7 x 19 x 18	1.68	42.67	6670	29,670	16.8	426.7	

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