

Guia de Referência para seleção de cabos para PLC (Controlador Lógico Programável) e SCD (Sistema de Controle Distribuído)

PLC/DCS Fabricante	Protocolo	Código Belden	
ABB/Bailey Controls	FOUNDATION Fieldbus	Veja lista de protocolos na página 4	
	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	Veja lista de protocolos na página 4	
	Allen-Bradley/ Rockwell Automation	ControlNet™	Veja lista de protocolos na página 4
		DeviceNet™	Veja lista de protocolos na página 4
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)	
		YR28826 Dual Version (9463)	
		YC39151 Dual Armored (9463)	
		9463DB Direct Burial (9463)	
		YR29565 Various Color Jackets (9463)	
		3072F 600V TC Rated (9463)	
		YR41104 Low Smoke, Halogen Free	
		YR28764 Super Thick (PLTC)	
		89463 FEP 200°C, Plenum	
DH-485		3074F 600V Tray Cable	
		3106A 1.5-Pair, RS-485 (PLTC)	
		9842 2-Pair, RS-485	
		YM39500 Flexible Version (3106A)	
Industrial Ethernet		Veja lista de protocolos na página 4	
Longline Communications	8723 Interface Cable 88723 Plenum Version		
Cutler-Hammer/ Westinghouse	IMPACC System	YR29090 Proprietary Trunk Cable	
	I/Q System	9463 Blue Hose (Standard)	
Emerson Process Management (Fisher/ Rosemont Systems) — Delta V	DeviceNet	Veja lista de protocolos na página 4	
	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	Veja lista de protocolos na página 4	
	HART	Veja lista de protocolos na página 4	
	Industrial Ethernet	Veja lista de protocolos na página 4	
	Modbus	Veja lista de protocolos na página 4	
	Profibus DP	Veja lista de protocolos na página 4	
	Provox Plus	3091A RG-11 Quad Shield PVC 3131A RG-6 Quad Shield PVC	
	RS-485	Veja lista de protocolos na página 4	
	GE Fanuc — I/O Bus	DeviceNet	Veja lista de protocolos na página 4
		Genius	YR29841 PLTC Version 9182 Communications Bus 89182 Plenum Version
9030, 9070 PAC System			
Interbus®-S		Veja lista de protocolos na página 4	
Modbus®		Veja lista de protocolos na página 4	
Profibus		Veja lista de protocolos na página 4	

PLC/DCS Fabricante	Protocolo	Código Belden	
GE Fanuc — Sensor Device Networks	DeviceNet	Veja lista de protocolos na página 4	
	SDS	Veja lista de protocolos na página 4	
Honeywell	Access 4000 System	9248 RG-6 PVC	
	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	Veja lista de protocolos na página 4	
	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	
		Smart Distributed System	3086A Mini 3087A Micro
	Honeywell Microswitch Division	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	Veja lista de protocolos na página 4
		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
		Industrial Ethernet	
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
		FP Series MEWNET-H	
		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 = Etileno-propileno Fluoretado

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PLC/DCS Fabricante	Protocolo	Código Belden	
Mitsubishi Electric Automation	CC-Link	Veja lista de protocolos na página 4	
	DeviceNet	Veja lista de protocolos na página 4	
	Melsecnet II (10/10H)	1505A	Precision RG-59/U Coax
		1505F	High-Flex 1505A
		1506A	Plenum Precision RG-59/U, Outdoor, Direct Burial
		8241	Standard RG-59/U Coax
	8241F	High-Flex 8241F	
Modbus	Veja lista de protocolos na página 4		
Profibus DP	Veja lista de protocolos na página 4		
Serial Communications	8777	Control and Instrumentation Interconnect Cable	
Modicon/Schneider AEG	Industrial Ethernet	Veja lista de protocolos na página 4	
	Modbus	8777	Modem Drop Cable, 22 AWG, 3-Pair
		128777	Aluminum Armor (8777)
		138777	Steel Armor (8777)
		88777	FEP 200°C, Plenum
	Modbus II	3092A	RG-6 Quad Shield PVC
		3132A	RG-6 Quad Shield, 150°C, Plenum
		3092F	RG-6 Quad Shield PVC, Flexible Version
		123092A	Aluminum Armor (3092A)
		133092A	Steel Armor (3092A)
	Modbus Plus	YM29560	24 AWG, 1-Pair, RS-485
		YC39000	Aluminum Armor (YM29560)
		YC39222	Steel Armor (YM29560)
		YQ29258	24 AWG, 1-Pair, 150°C, Plenum
	Remote I/O	3092A	RG-6 Quad Shield PVC
		3092F	RG-6 Quad Shield PVC, Flexible Version
		123092A	Aluminum Armor (3092A)
		133092A	Steel Armor (3092A)
		123092F	Aluminum Armor, RG-6 Quad Shield PVC
		3132A	RG-6 Quad Shield, 150°C, Plenum
		3094A	RG-11 Quad Shield PVC
		123094A	Aluminum Armor (3094A)
		133094A	Steel Armor (3094A)
3095A		RG-11 Quad Shield, 150°C, Plenum	
Omron		ComboBus/D (DeviceNet™)	See DeviceNet Protocol listings Veja protocolos DeviceNet na página 4
	ComboBus/S	9409	18 AWG, 1-Pair, 300V PLTC Control
		9318	18 AWG, 1-Pair, 300V PLTC Control, Shielded
		3073	600V Tray Cable, Twinax
		89740	18 AWG, 1-Pair, 300V, Control

PLC/DCS Fabricante	Protocolo	Código Belden	
Omron <i>(continued)</i>	Controller Link	9207	Twinax
		89207	Twinax, 200°C, Plenum
		9815	Twinax, 100 Ohm, Direct Burial
		3073F	600V Tray Cable, Twinax
		3073F	600V Tray Cable, Twinax
	SYSBUS-2	9841	22 AWG, 1-Pair, RS-485
	SYSMAC BUS	3105A	22 AWG, 1-Pair, RS-485
	SYSMAC LINK	9231	RG-59U Coax
	Phoenix Contact	DeviceNet	Veja lista de protocolos na página 4
		Industrial Ethernet	Veja lista de protocolos na página 4
Interbus®-S		Veja lista de protocolos na página 4	
Profibus DP FMS & PA		Veja lista de protocolos na página 4	
Reliance/A-B	Auto Max Distributed Power	M98021	2-Fiber Breakout
		I100255	2-Fiber Loose Tube PVC
		I100266	2-Fiber Loose Tube CPE
	R-Net	9259	RG-59 PVC
89259	RG-59, 200°C, Plenum		
Rotork Siemens/Moore	Pakscan II E RS-485	3105A	22 AWG, 1-Pair, RS-485
		3105A	1-Pair, RS-485
		3106A	1.5-Pair, RS-485
		3107A	2-Pair, RS-485
		3108A	3-Pair, RS-485
	3109A	4-Pair, RS-485	
	FMC (Field Mountable Controller)	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	Veja lista de protocolos na página 4
	Hiway	9860	Network Trunk Cable
	Industrial Ethernet	See Protocol listings on page 8.6	
	MODULNET	3094A	RG-11 Quad Shield PVC
		3131A	RG-6 Quad Shield PVC
	Profibus DP & FMS (Purple)	Veja lista de protocolos na página 4	
	Profibus PA (Blue)	Veja lista de protocolos na página 4	
	SINEC Series H1	9907	Thin Network Trunk Cable
9880		Network Trunk Cable	
SINEC Series H2B	3131A	RG-6 Quad Shield	
	3094A	RG-11 Quad Shield	
SINEC Series L1	3107A	2-Pair, RS-485	
SINEC Series L2	3079A	300V Twinax	
Thicknet Ethernet Trunk	9880	Network Trunk Cable	
	129880	Aluminum Interlocked Armor Trunk	
	139880	Steel Interlocked Armor Trunk	
Thinnet Ethernet Trunk	9907	Thin Network Trunk Cable	

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PLC/DCS Fabricante	Protocolo	Código Belden		
Smarr	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	See Protocol listings on page 8.6		
	Industrial Ethernet	See Protocol listings on page 8.6		
	Profibus DP FMS & PA RS-485	See Protocol listings on page 8.6		
Square D/ Schneider AEG	FIP/Fieldbus	3079A 22 AWG, 1-Pair, Shielded 123079A Aluminum Armor (3079A)		
	Industrial Ethernet	See Protocol listings on page 8.6		
	Model 50, RS-422 Cable	8760 18 AWG, 1-Pair, Shielded 128760 Aluminum Armor (8760)		
	Passport I/O – I/O Net	3105A 22 AWG, 1-Pair, RS-485 123105A Aluminum Armor (3105A) 3106A 22 AWG, 1.5-Pair, RS-485 123106A Aluminum Armor (3106A)		
		Power Logic	9841 24 AWG, 1-Pair, RS-485 9842 24 AWG, 2-Pair, RS-485	
		Square D/ Schneider AEG	Seriplex®	3124A CBL-1822-P20 3125A CBL-1622-P16 3126A CBL-162212-P16 123124A Aluminum Armor (3124A) 123125A Aluminum Armor (3125A) 123126A Aluminum Armor (3126A) 9463 Blue Hose® (Standard) 9463F Flexible Version (9463) 129463 Aluminum Armor (9463) 139463 Steel Armor (9463) 189463 Continuous Armor (9463) YR28826 Dual Version (9463) 9463DB Direct Burial (9463) YR29565 Various Color Jackets 9463)
SY/Net Network Trunk Cable	3072F 600V TC Rated (9463) YR41194 Low-Smoke, Halogen-Free YR28764 Super Thick (PLTC) 89463 FEP 200°C, Plenum			
	SY/Net TNIM Cable			9272 20 AWG, 1-Pair, Shielded 89272 FEP 200°C, Plenum

PLC/DCS Fabricante	Protocolo	Código Belden
Yokogawa — CENTUM	DeviceNet™	See Protocol listings on page 8.6
	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	See Protocol listings on page 8.6
	HART	See Protocol listings on page 8.6
	Industrial Ethernet	See Protocol listings on page 8.6
	Profibus	See Protocol listings on page 8.6
Yokogawa — FA-M3	RS-485	See Protocol listings on page 8.6
	DeviceNet	See Protocol listings on page 8.6
	Industrial Ethernet	See Protocol listings on page 8.6
	Modbus	See Protocol listings on page 8.6
	Profibus	See Protocol listings on page 8.6
Yokogawa — STARDOM	RS-485	See Protocol listings on page 8.6
	DeviceNet	See Protocol listings on page 8.6
	FOUNDATION Fieldbus (Type SP50 ISA/IEC)	See Protocol listings on page 8.6
	HART	See Protocol listings on page 8.6
	Industrial Ethernet	See Protocol listings on page 8.6
Westinghouse	Profibus	See Protocol listings on page 8.6
	RS-485	See Protocol listings on page 8.6
	WDPF	9292 RG-11 PVC

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ControlNet é uma marca registrada ControlNet International, Ltd.

DeviceNet é uma marca registrada Open DeviceNet Vendor Association, Inc.

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InterBus é uma marca registrada Phoenix Contact.

Modbus é uma marca registrada Modicon, Inc.

PROFIBUS é uma marca registrada PROFIBUS International.

PROFINET é uma marca registrada PROFIBUS International.

SDS é uma marca registrada Honeywell International, Inc.

Seriplex é uma marca registrada Square D/Schneider AEG.

Guia de Referência de Protocolos de Comunicação Industrial

Protocolo	Código Belden	
Can Open/HART/ RS-485	3105A 1-Pair, RS-485 (PLTC)	
	3106A 1.5-Pair, RS-485 (PLTC)	
	3107A 2-Pair, RS-485 (PLTC)	
CC-Link	YR47198 20 AWG/3c, Foil + Braid Shield	
	YR47205 20 AWG/3c Shielded + 18 AWG/2c Power	
ControlNet™	3092A RG-6 PVC Quad Shield	
	3092F RG-6 PVC Quad Shield, Flex Version, Aluminum Braid	
	YR28890 RG-6 PVC Quad Shield, Flex Version, Copper Braid	
	3093A RG-6 FEP Quad Shield, Plenum	
	123092A Aluminum Armor (3092A)	
	133092A Steel Armor (3092A)	
	183092A Continuous Armor (3092A)	
DataHighway (DH) & DataHighway Plus (DH+) Remote I/O	9463 20 AWG Twinax, Blue Hose	
	3072F 600V, TC Blue Hose	
	9463DB Direct Burial Blue Hose	
	9463F High-Flex, Blue Hose	
	89463 High-Temp, Plenum Blue Hose	
	129463 Aluminum Armor (9463)	
	139463 Steel Armor (9463)	
	189463 Continuous Armor (9463)	
	YR28826 Dual Blue Hose	
	YC39151 Dual Armored Blue Hose	
	YR28764 Thick Wall PLTC Blue Hose	
	YR29565 Colored Blue Hose	
	YR41104 Low-Smoke, Zero-Halogen Blue Hose	
	DeviceNet™	3082A PVC (Thick)
3082F High-Flex (Thick)		
3082K CL2 (Flat)		
3082KP Auxiliary Power (Flat)		
3083A CPE (Thick)		
3084A PVC (Thin)		
3084F High-Flex (Thin)		
3085A CPE (Thin)		
7895A CL2 PVC (Cable III Mid)		
7896A CL1 PVC (Type V Trunk Cable)		
7897A CL1 PVC (Thick)		
7900A CL1 Unshielded (Drop Cable IV)		
FOUNDATION Fieldbus (Type SP50 ISA/IEC)		3076F Type A, H1 1900m (31.25K)
		3077F Type B, H1 1200m (31.25K)
	HSE Copper & Fiber (see <i>Cables for Industrial Ethernet</i> , pg. 18.6)	
Hart/RS-485/ Can Open	3105A 1-Pair, RS-485 (PLTC)	
	3106A 1.5-Pair, RS-485 (PLTC)	
	3107A 2-Pair, RS-485 (PLTC)	
Industrial Ethernet	7932A Cat 5e, 2-Pair, Bonded	
	7933A Cat 5e, 2-Pair, Bonded, Shielded	
	7918A Cat 5e, 4-Pair	
	7924A Cat 5e, 4-Pair, Bonded, Flexible	
	7930A Cat 5e, 4-Pair, Flexible	
	7922A Cat 5e, 4-Pair, Bonded, PLTC	
	7934A Cat 5e, 4-Pair, Bonded, Burial	

Protocolo	Código Belden	
Industrial Ethernet (continued)	11700A Cat 5e, 4-Pair, Bonded, Upjacketed	
	11700A2 Cat 5e, 4-Pair, Bonded, Upjacketed, Oil Res II	
	121700A Cat 5e, 4-Pair, Bonded, Armored	
	7919A Cat 5e, 4-Pair, Shielded	
	7921A Cat 5e, 4-Pair, Bonded, Shielded (Foil + Braid)	
	7927A Cat 6, 4-Pair, Bonded	
	7931A Cat 6, 4-Pair, Bonded, Gas Res, High + Low Temperature	
	11872A Cat 6, 4-Pair, Bonded, Upjacketed	
	121872A Cat 6, 4-Pair, Bonded, Armored	
	Interbus®-S	3119A 18 AWG/3c, 24 AWG/3-Pair, Composite
		3120A 24 AWG/3-Pair
IronWorks®	8471 16 AWG, 1-Pair, UL AWM 2598	
	8917 16 AWG, 1-Cond, UL AWM 1015	
	85102 16 AWG, 2-Cond, VW1, Plenum	
Modbus	8777 22 AWG, 3-Pair, Modem Drop Cable	
	128777 Aluminum Armor (8777)	
	138777 Steel Armor (8777)	
	88777 FEP 200°C, Plenum (8777)	
Profibus DP & FMS (Purple)	3079A 22 AWG 300V Twinax	
	3079E 22 AWG 300V Twinax, Flex Version	
Profibus PA (Blue)	3076F 18 AWG, 2-Conductors, Type A	
RS-485/HART/ Can Open	9841 1-Pair	
	82841 1-Pair, Plenum	
	89841 1-Pair, Plenum, High-Temperature	
	9842 2-Pair	
	82842 2-Pair, Plenum	
	9843 3-Pair	
	9844 4-Pair	
	7200A 1-Pair, RS-485, Hi-Flex	
	7201A 2-Pair, RS-485, Hi-Flex	
	7202A 3-Pair, RS-485, Hi-Flex	
	7203A 4-Pair, RS-485, Hi-Flex	
	7206A 1-Pair, RS-485, Hi-Flex	
	3105A 1-Pair, RS-485 (PLTC)	
	3106A 1.5-Pair, RS-485 (PLTC)	
3107A 2-Pair, RS-485 (PLTC)		
3108A 3 Pair, RS-485 (PLTC)		
3109A 4 Pair, RS-485 (PLTC)		
Seriplex®	3124A 1-Pair 18 AWG, 1-Pair 22 AWG	
	3125A 1-Pair 16 AWG, 1-Pair 22 AWG	
	3126A 1-Pair 16 AWG, 1-Pair 22 AWG, 1-Pair 12 AWG	
	123124A Aluminum Armor (3124A)	
	123125A Aluminum Armor (3125A)	
123126A Aluminum Armor (3126A)		
Smart Distributed System (SDS)	3086A 1-Pair 16 AWG, 1-Pair 20 AWG	
	3087A 2-Pairs 22 AWG	

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