

Industrial Data Solutions® - Industrial Data
DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cables



De- scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m	MHz	dB/ 100 ft.	dB/ 100 m

FOUNDATION Fieldbus/PROFIBUS PA • 18 AWG • Stranded (7x26) 1.2 mm Tinned Copper • Beldfoil® • 20 AWG Tinned Copper Drain Wire

Polyolefin Insulation • PVC Jacket (Orange and Blue)

Type A	3076F	NEC:	250	76	10.6	4.8	1.22 mm	0.088	2.24	Overall	0.253	6.43	100 @	66%	24.0	78.7	0.039	0.1	0.26
300V 75°C		PLTC CM	500	152	18.5	8.4	18 AWG			Beldfoil®					31.25 KHz				
(31.25 kbits/sec)		ITC	1000	305	34.2	15.5	(7x26) TC			+ Drain Wire									
		CEC:	2500	762	85.1	38.6				(20 AWG TC)									
		CM	† 5000	1524	170.4	77.3													



Shorting Fold

Color Code: Orange, Blue
 Fieldbus: Orange jacket
 Profibus PA: Intrinsically safe Blue jacket.
 Blue available as standard in 305 m put-up only.
 CPE jacket optional.

123076F – Version with Aluminum Interlocked Armor
 133076F – Version with Steel Interlocked Armor
 YM47023 – CPE jacketed version
 YM46698 – Black & White color-coded pairs
 YM47090 – Various colored jackets
 YM41725 – LSZH (FRNC) jacketed version

Polyolefin Insulation • FRNC/LSNH Jacket (Blue and Orange)

300V 80°C	3076NH	IEC	1640	500	98.3	44.6	1.22 mm	0.088	2.24	Overall	0.295	7.50	100	66%	24.4	80.0	0.01	0.1	0.4	
		332-3C	3280	1000	191.1	86.7	18 AWG			Beldfoil®							0.039	0.2	0.5	
		BS 7655					(7x26) TC			+ Drain Wire								0.1	0.2	0.8
										(20 AWG TC)								0.5	0.6	2.1
																		1.0	1.0	3.2



Shorting Fold

Color Code: White, Black

Polyolefin Insulation • FRNC/LSNH Inner Jacket (Black and Blue) • Steel Wire Armor • Black FRNC/LSNH Outer Jacket

300V 80°C	3076LS	IEC	1640	500	394.8	179.1	1.22 mm	0.088	2.24	Overall	*0.295	*7.50	100	66%	24.4	80.0				see above
		332-3C	3280	1000	737.0	334.3	18 AWG			Beldfoil®	**0.512	**13.00								
		BS 7655					(7x26) TC			+ Drain Wire										
										(20 AWG TC)										



Shorting Fold

* Under Armor
 ** Over Armor

Color Code: White, Black

FOUNDATION Fieldbus • 22 AWG • Stranded (7x30) 0.8 mm Tinned Copper • Beldfoil® • 20 AWG Tinned Copper Drain Wire

Polyolefin Insulation • Orange PVC Jacket

Type B	3077F	NEC:	† 500	152	11.0	5.0	0.76 mm	0.059	1.50	Overall	0.196	4.97	100 @	66%	23.5	77.1	0.039	0.1	0.5
300V 150°C		PLTC CM	† 1000	305	22.9	10.4	22 AWG			Beldfoil®					31.25 KHz				
(31.25 kbits/sec)		ITC					(7x30) TC			+ Drain Wire									
		CEC:								(20 AWG TC)									
		CM																	



Shorting Fold

Color Code: Orange, Blue
 CPE and LSZH jacketed versions also available.

123077F – Version with Aluminum Interlocked Armor
 133077F – Version with Steel Interlocked Armor

Polyolefin Insulation • FRNC/LSNH Jacket (Blue and Orange)

300V 80°C	3077NH	IEC	1640	500	86.9	39.4	0.76 mm	0.059	1.50	Overall	0.295	7.50	100	66%	25.9	85.0	0.01	0.2	0.6	
		332-3C	3280	1000	168.2	76.3	22 AWG			Beldfoil®							0.039	0.2	0.7	
		BS 7655					(7x30) TC			+ Drain Wire								0.1	0.3	0.9
										(20 AWG TC)								0.5	1.1	3.5
																		1.0	1.6	5.1



Shorting Fold

Color Code: White, Black

Polyolefin Insulation • FRNC/LSNH Inner Jacket (Black and Blue) • Steel Wire Armor • Black FRNC/LSNH Outer Jacket

300V 80°C	3077LS	IEC	1640	500	381.8	173.2	0.76 mm	0.059	1.50	Overall	*0.295	*7.50	100	66%	25.9	85.0				see above
		332-3C	3280	1000	741.8	336.5	22 AWG			Beldfoil®	**0.512	**13.00								
		BS 7655					(7x30) TC			+ Drain Wire										
										(20 AWG TC)										



Shorting Fold

* Under Armor
 ** Over Armor

Color Code: White, Black

TC = Tinned Copper • DCR = DC resistance
 † Final put-up length may vary 0% to +10% from length shown.

Industrial Data Solutions® – Industrial Data

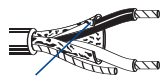
DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cables



De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m	MHz	dB/100 ft.	dB/100 m

FOUNDATION Fieldbus • 22 AWG • Stranded (7x30) 0.8 mm Tinned Copper • Beldfoil® • 20 AWG Tinned Copper Drain Wire

FHDPE Insulation • Orange PVC Jacket																		
High Speed 3078F	NEC:	250	76	9.9	4.5	0.76 mm	0.121	3.07	Overall	0.351	8.92	150 @	78%	8.5	27.9	0.25	0.2	0.6
300V 75°C	PLTC CM	500	152	22.9	10.4	22 AWG			Beldfoil®			1 MHz				0.625	0.3	0.9
(1.0 & 2.5 Mbits/sec)	CEC:	1000	305	44.1	20.0	(7x30) TC			+ Drain Wire							1.25	0.3	1.1
	CM	2500	762	115.1	52.2				(20 AWG TC)							3.125	0.6	1.8



Shorting Fold

Color Code: Orange, Blue
CPE and LSZH jacketed versions also available.

123078F – Version with Aluminum Interlocked Armor
133078F – Version with Steel Interlocked Armor

DataBus® PROFIBUS • DP EN50170-2-2

De-scription	Part No.	UL NEC/ C(UL)CEC Type IEC	Standard Lengths		Standard Unit Weight		Conductor (Stranding) Diameter Nom. DCR	Nominal Insulation OD		Shielding Material Nom. DCR	Nominal OD		Nom. Imp. (Ω)	Nom. Vel. of Prop.	Nominal Capacitance		Nominal Attenuation		
			ft.	m	lbs.	kg		inch	mm		inch	mm			pF/ft.	pF/m	MHz	dB/100 ft.	dB/100 m

Profibus DP • 22 AWG • Solid 0.6 mm Bare Copper • Beldfoil® • 65% Tinned Copper Braid

FHDPE Insulation • Chrome and Violet PVC Jacket																			
300V 75°C	3079A	NEC:	1000	305	56.0	25.4	0.64 mm	0.099	2.52	Overall	0.315	8.00	150	78%	8.5	27.9	0.2	0.3	0.9
		PLTC CMG	2000	610	112.0	50.8	22 AWG			Beldfoil®							4	0.7	2.2
		CEC:	3600	1098	201.5	91.4	Solid BC			+ Overall							16	1.4	4.5
		CMG FT4							65% TC Braid								100	3.8	12.3
																	300	6.5	21.4



Color Code: Red, Green
Siemens Sinec L2 cable
UL AWM 20201 (600V)

123079A – Aluminum Interlocked Armor
133079A – Steel Interlocked Armor
YR45047 – CPE jacketed version
YR44731 – LSZH (FRNC) jacketed version

Profibus DP • 22 AWG • Stranded (7x30) 0.8 mm Bare Copper • Beldfoil® • 65% Tinned Copper Braid

FR-FPE Insulation • Violet PVC Jacket																			
300V 75°C	3079E	NEC:	1000	305	44.1	20.0	0.76 mm	0.099	2.52	Overall	0.315	8.00	150	78%	8.5	27.9	0.2	0.3	1.1
		PLTC CMG	1640	500	73.9	33.5	22 AWG			Beldfoil®							4	0.8	2.7
		CEC:	3280	1000	144.4	65.5	(7x30) BC			+ Overall							16	1.6	5.4
		CMG FT4							65% TC Braid								100	3.8	12.3



Color Code: Red, Green
For CPE jacketed version order Part No. YR45047

Cellular Polyolefin Insulation • Violet FRNC/LSNH Jacket

300V 80°C	3079ANH	IEC	1000	305	214.1	97.1	0.64 mm	0.099	2.52	Overall	0.315	8.00	150	78%	8.8	29.0	0.2	0.3	0.9
		332-3C	1640	500	358.2	162.5	22 AWG			Beldfoil®							4	0.7	2.2
		BS 7655	3280	1000	711.2	322.6	Solid BC			+ Overall							16	1.4	4.5
									65% TC Braid								100	3.8	12.3



Color Code: Red, Green

Cellular Polyolefin Insulation • Black PVC Jacket • Steel Wire Armor

300V 80°C	3079ALS	IEC	1640	500	102.5	46.5	0.64 mm	0.099	2.52	Overall	*0.315	*8.00	150	78%	8.5	27.9	0.2	0.3	0.9
		332-3C	3280	1000	183.0	83.0	22 AWG			Beldfoil®	**0.488	**12.40					4	0.7	2.2
		BS 7655					Solid BC			+ Overall							16	1.4	4.5
									65% TC Braid										



Color Code: Red, Green

* Under Armor
** Over Armor

TC = Tinned Copper • BC = Bare Copper • DCR = DC resistance