



Stepping System Cables

SureStep® Cables

SureStep Series – Stepping System Cables							
Cable	Price	Purpose	Length	Use With	Cable End Connectors	Drawing	
STP-EXT-006	\$-2e9i:	motor to drive extension	6 ft	STP-MTR-xxxxx(x)	pigtail / Molex 43020-0401 connector	PDF	
STP-EXT-010	\$-2e9j:		10 ft			PDF	
STP-EXT-020	\$04vd:		20 ft			PDF	
STP-EXTH-006	\$2e9k:		6 ft	STP-MTRH-xxxxx(x)	pigtail / Molex 39-01-2041 connector	PDF	
STP-EXTH-010	\$-2e9l:		10 ft			PDF	
STP-EXTH-020	\$04ve:		20 ft			PDF	
STP-EXTHW-006	\$;3?j8:		6 ft	STP-MTRHW-xxxxx(x)	Bulgin # PXP4011/06P/6065	PDF	
STP-EXTHW-010	\$;3?j3:		10 ft			PDF	
STP-EXTHW-020	\$;03?j5:		20 ft			PDF	
STP-EXTL-006	\$2e9n:		6 ft	STP-MTRL-xxxxx(x)	pigtail / Molex 105308-22004 connector	PDF	
STP-EXTL-010	\$2e9d:		10 ft			PDF	
STP-EXTL-020	\$2e9e:		20 ft			PDF	
STP-EXTW-006	\$;3?j6:		6 ft	STP-MTRW-xxxxx(x)	Bulgin # PXP4011/06P/6065	PDF	
STP-EXTW-010	\$;3?j7:		10 ft			PDF	
STP-EXTW-020	\$;03?j4:		20 ft			PDF	
STP-EXT42-006	\$;4!qb:		motor to drive extension	6 ft	STP-MTRAC-42xxxx	10-pin / pigtail	PDF
STP-EXT42-010	\$;4!qc:			10 ft			PDF
STP-EXT42-020	\$;4!qd:			20 ft			PDF
STP-EXT42H-006	\$;4!qe:	6 ft		STP-MTRACH-42xxxxx	PDF		
STP-EXT42H-010	\$;4!qf:	10 ft			PDF		
STP-EXT42H-020	\$;4!qa:	20 ft			PDF		
STP-232RJ11-CBL *	\$04yx:	programming/ communication	10 ft	STP-DRV-4850, STP-DRV-80100	DB9 female / RJ11(6P4C)	PDF	
STP-232HD15-CBL-2**	\$;04yf:	communication	6.6 ft	STP-DRV-4850, STP-DRV-80100 DL06, D2-250-1, D2-260	HD 15-pin male / RJ12 6-pin plug	n/a	
STP-232RJ12-CBL-2**	\$04yg:	communication	6.6 ft	STP-DRV-4850, STP-DRV-80100 DL05, CLICK	RJ11 (6P4C) plug / RJ12 6-pin plug	n/a	
STP-CBL-CA6	\$;2b[y:	control cable	6 ft	STP-MTRD-17038 STP-MTRD-17038E	11-pin / pigtail	PDF	
STP-CBL-CA10	\$;2b[z:	control cable	10 ft		11-pin / pigtail	PDF	
STP-CBL-CA20	\$;02b[]:	control cable	20 ft		11-pin / pigtail	PDF	
STP-CBL-EA6	\$;2b[u:	encoder cable	6 ft	STP-MTRD-xxxxxE STP-MTRA-ENC1, STP-MTRA-ENC3 STP-MTRA-ENC5, STP-MTRA-ENC7 STP-MTRA-ENC11, STP-MTRA-ENC13 (for line driver encoders)	10-pin / pigtail	PDF	
STP-CBL-EA10	\$;2b[v:	encoder cable	10 ft		10-pin / pigtail	PDF	
STP-CBL-EA20	\$;2b[x:	encoder cable	20 ft		10-pin / pigtail	PDF	
STP-CBL-EB3	\$3?8z:	encoder cable	3 ft	AMT112Q-V AMT112S-V (for both line driver and push-pull (totem) encoders)	17-pin / pigtail	PDF	
STP-CBL-EB6	\$;2e9f:	encoder cable	6 ft		17-pin / pigtail	PDF	
STP-CBL-EB10	\$02e9g:	encoder cable	10 ft		17-pin / pigtail	PDF	
STP-CBL-EB20	\$02e9h:	encoder cable	20 ft		17-pin / pigtail	PDF	
STP-CBL-ED6	\$2e9s:	encoder cable	6 ft	STP-MTRA-ENC2, STP-MTRA-ENC4 STP-MTRA-ENC6, STP-MTRA-ENC8 STP-MTRA-ENC12, STP-MTRA-ENC14 (for push-pull (totem) encoders)	5-pin / pigtail	PDF	
STP-CBL-ED10	\$;2e9t:	encoder cable	10 ft		5-pin / pigtail	PDF	
STP-CBL-ED20	\$2e9u:	encoder cable	20 ft		5-pin / pigtail	PDF	
STP-CON-1	\$;2b[#:	replacement connector kit	n/a	STP-DRV-4845 & -6575	-	n/a	
STP-CON-2	\$;2b[!:	replacement connector kit	n/a	STP-DRV-4850 & 80100	-	n/a	

* Programming/communication cable STP-232RJ11-CBL is available for spare or replacement purposes.
(One cable is included with each software programmable drive.)

** Refer to the ZIPLinks Wiring Solutions section for complete information regarding cables STP-232HD15-CBL-2 and STP-232RJ12-CBL-2.

SureStep® Cables, *continued*

SureStep Series – Stepping System Cables						
Cable	Price	Purpose	Length	Use With	Cable End Connectors	Drawing
STP-CON-3	\$;2b[?:	replacement connector kit	n/a	STP-MTRD-xxxxxR	-	n/a
STP-CON-4	\$432s:	replacement connector kit	n/a	STP-DRVA-RC-050A	-	n/a
STP-CON-5	\$;432t:	replacement connector kit	n/a	STP-DRV-4830	-	PDF
STP-CON-6	\$432u:	replacement connector kit	n/a	STP-DRVAC-24025	-	n/a
STP-485DB9-CBL-2	\$;:2b[[:	4-wire programming cable	6.5 ft	STP-MTRD-xxxxxR	DB9 / Phoenix 5-conductor plug	PDF

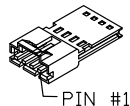
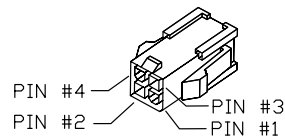
STP-EXT(x)-0xx Extension Cable Wiring Diagram

EXT & EXTH CABLES

PIN#	COLOR
1	RED
2	WHITE
3	GREEN
4	BLACK

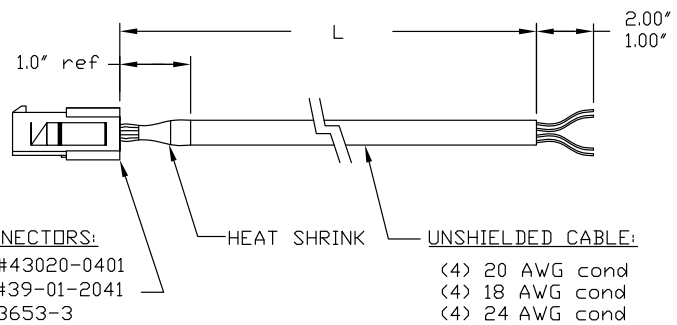
EXTL CABLES

PIN#	COLOR
1	RED
2	WHITE
3	GREEN
4	BLACK

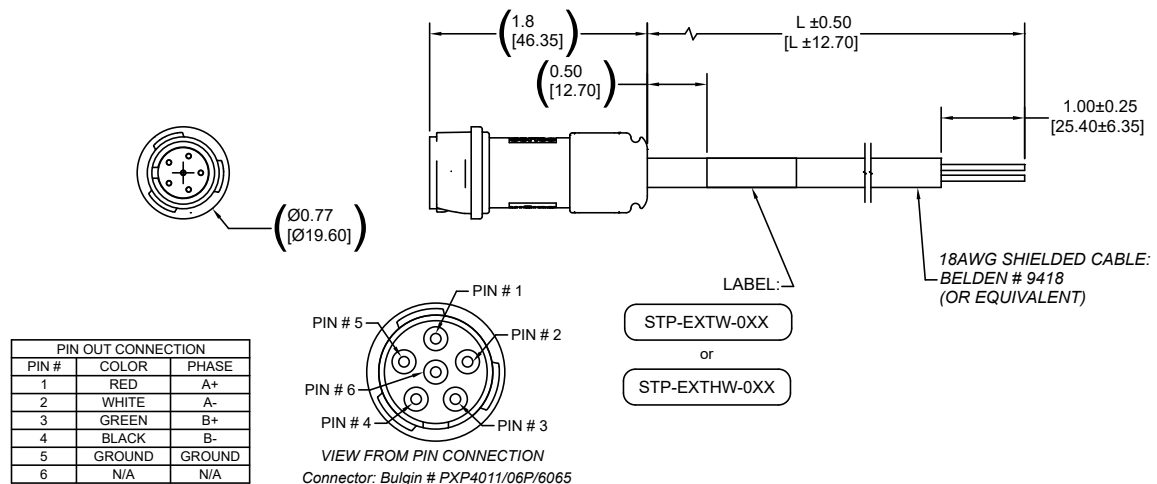


CONNECTORS:

EXT: Molex #43020-0401
 EXTH: Molex #39-01-2041
 EXTL: TE #103653-3



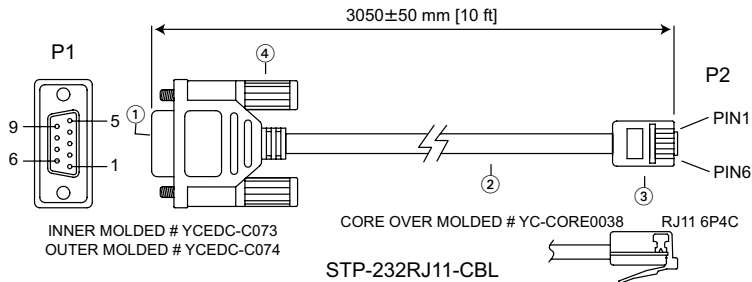
STP-EXTW-0xx and STP-EXTHW-0xx Extension Cable Wiring Diagram



Stepping System Cables

SureStep® Cables, continued

STP-232RJ11-CBL Programming Cable Wiring Diagram

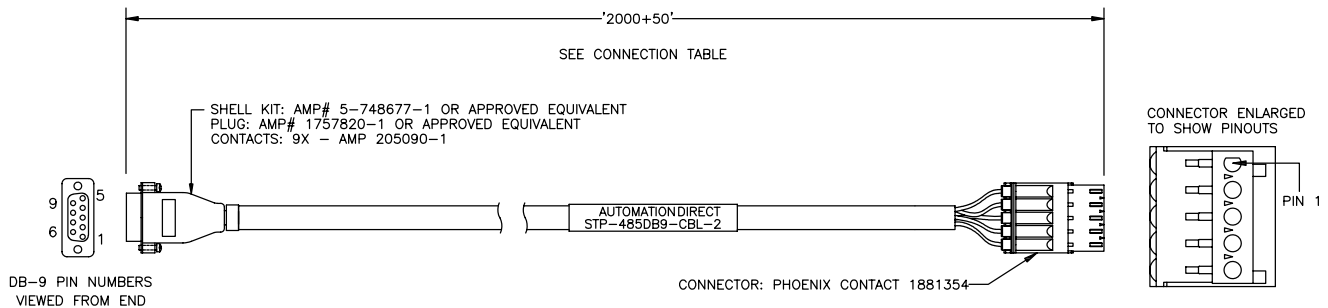


WIRE CONNECTION			
(DB9) P1			P2 (RJ11 6P4C)
2	RX	TX	3
3	TX	RX	5
4	nc	nc	4
5	GND	GND	2

①	DB 9P FEMALE CONNECTOR SHELL: FRONT NICKEL BACK TIN INSULATOR COLOR: BLACK
②	CABLE: CAT-5 UTP 24AWG (7/0.203BA*2PR) 100MHz COLOR: BLACK OD: 4.5mm
③	RJ11 6P4C PLATED GOLD 3U"
④	SCREW: #4-40UNC PD40*175TNP COLOR: BLACK

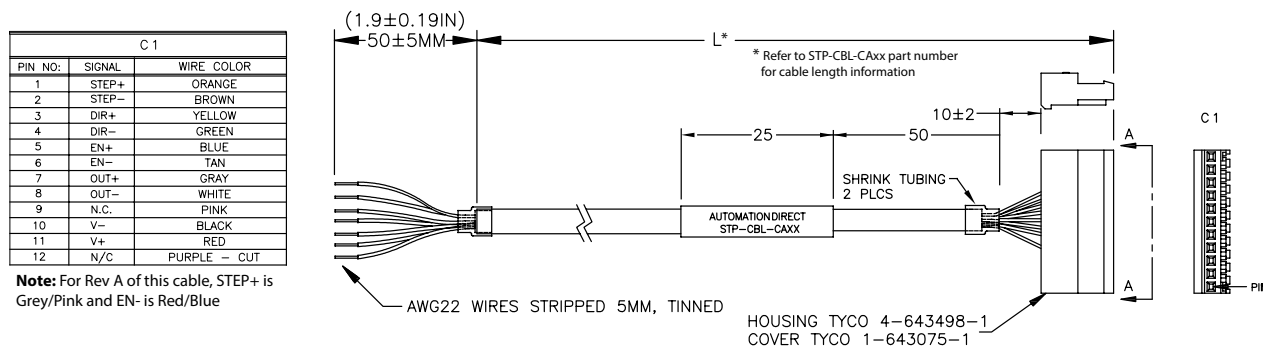
STP-485DB9-CBL-2 4-wire Programming Cable Wiring Diagram

CONNECTION CHART				
DB-9 CONN PIN	DB9 SIGNAL	WIRE COLOR	PHOENIX PIN	PHOENIX SIGNAL
2	TX+	RED	5	RX+
1	TX-	ORANGE	4	RX-
3	RX+	BLACK	3	TX+
4	RX-	BROWN	2	TX-
5	GND	YELLOW	1	GND
METAL HOUSING	SHIELD	SHIELD	N/C	N/C

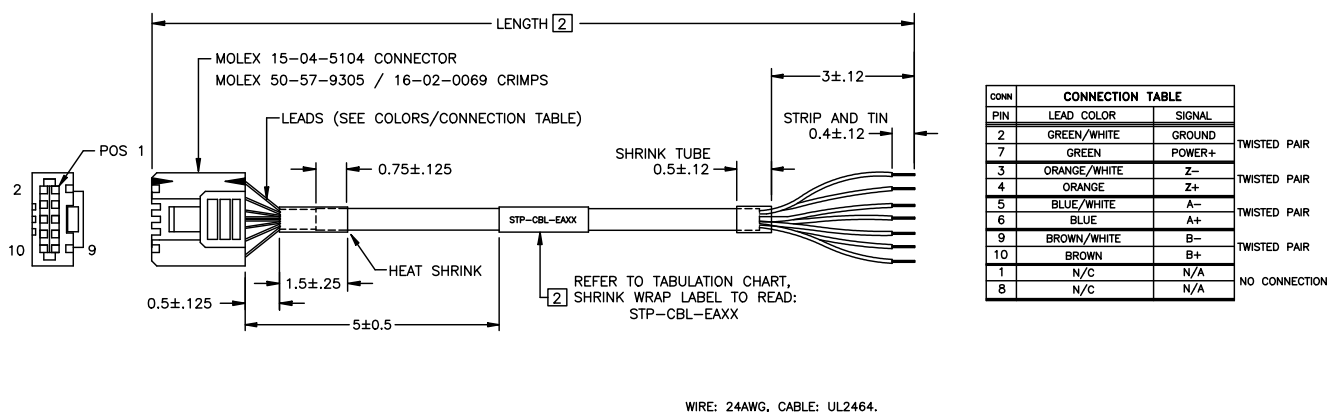


SureStep® Cables, continued

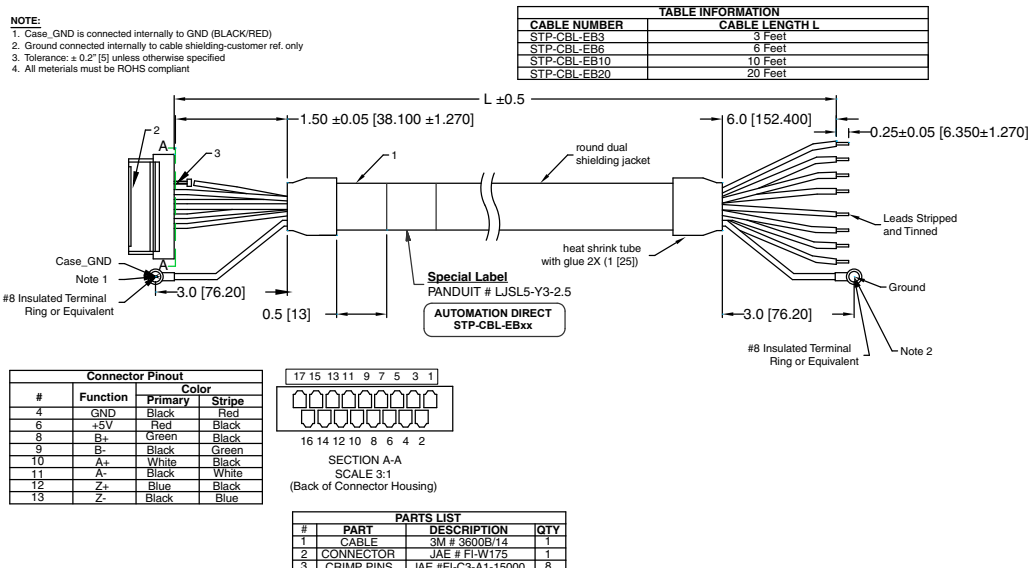
STP-CBL-CAxx Control Cable Wiring Diagram



STP-CBL-EAxx Encoder Cable Wiring Diagram



STP-CBL-EBxx Encoder Cable Wiring Diagram





Stepping System Cables

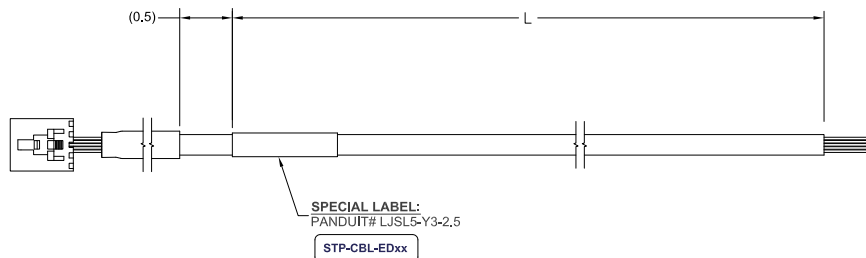
SureStep® Cables, continued

STP-CBL-EDxx Encoder Cable Wiring Diagram

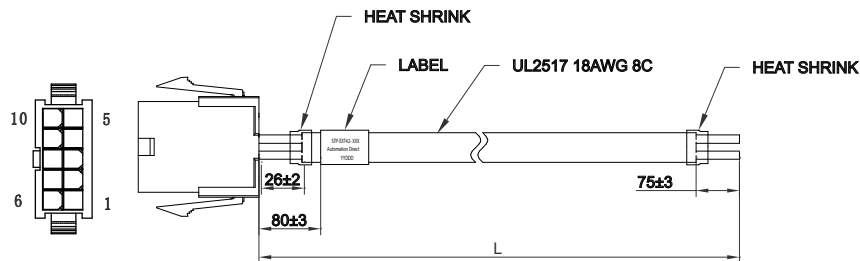
STP-EDxx CABLES

PIN#	Function	Color
1	Ground	Black
2	Index	Green
3	A Channel	White
4	+5VDC Power	Red
5	B Channel	Brown

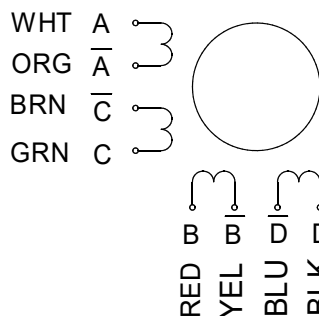
TABLE INFORMATION	
CABLE NUMBER	CABLE LENGTH L
STP-CBL-ED6	6 Feet
STP-CBL-ED10	10 Feet
STP-CBL-ED20	20 Feet



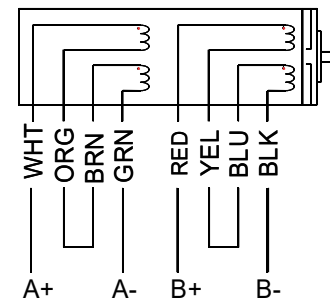
STP-EXT42(H)-xxx Cable Wiring Diagram



Pin	Wire Description
1	A - White
2	$\bar{A}$ - Orange
3	C - Green
4	$\bar{C}$ - Brown
5	B - Red
6	$\bar{B}$ - Yellow
7	D - Black
8	$\bar{D}$ - Blue
9	GND - Drain wire



Bi-polar series



Bi-polar parallel

