



# Stepping System Cables

## SureStep® Cables

| SureStep Series – Stepping System Cables |          |                               |                          |                                                                                                                                                 |                                        |                     |                     |
|------------------------------------------|----------|-------------------------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------|---------------------|
| Cable                                    | Price    | Purpose                       | Length                   | Use With                                                                                                                                        | Cable End Connectors                   | Drawing             |                     |
| <a href="#">STP-EXT-006</a>              | \$13.00  | motor to drive extension      | 6 ft                     | STP-MTR-xxxxx(x)                                                                                                                                | pigtail / Molex 43020-0401 connector   | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXT-010</a>              | \$14.50  |                               | 10 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXT-020</a>              | \$18.50  |                               | 20 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTH-006</a>             | \$26.50  |                               | 6 ft                     | STP-MTRH-xxxxx(x)                                                                                                                               | pigtail / Molex 39-01-2041 connector   | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTH-010</a>             | \$31.50  |                               | 10 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTH-020</a>             | \$38.00  |                               | 20 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTHW-006</a>            | \$57.00  |                               | 6 ft                     | STP-MTRHW-xxxxx(x)                                                                                                                              | Bulgin # PXP4011/06P/6065              | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTHW-010</a>            | \$69.00  |                               | 10 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTHW-020</a>            | \$105.00 |                               | 20 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTL-006</a>             | \$11.50  |                               | 6 ft                     | STP-MTRL-xxxxx(x)                                                                                                                               | pigtail / Molex 105308-22004 connector | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTL-010</a>             | \$14.50  |                               | 10 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTL-020</a>             | \$18.00  |                               | 20 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTW-006</a>             | \$56.00  |                               | 6 ft                     | STP-MTRW-xxxxx(x)                                                                                                                               | Bulgin # PXP4011/06P/6065              | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTW-010</a>             | \$68.00  |                               | 10 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXTW-020</a>             | \$99.00  |                               | 20 ft                    |                                                                                                                                                 |                                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-EXT42-006</a>            | \$29.00  |                               | motor to drive extension | 6 ft                                                                                                                                            | STP-MTRAC-42xxxx                       | 10-pin / pigtail    | <a href="#">PDF</a> |
| <a href="#">STP-EXT42-010</a>            | \$34.00  |                               |                          | 10 ft                                                                                                                                           |                                        |                     | <a href="#">PDF</a> |
| <a href="#">STP-EXT42-020</a>            | \$49.00  |                               |                          | 20 ft                                                                                                                                           |                                        |                     | <a href="#">PDF</a> |
| <a href="#">STP-EXT42H-006</a>           | \$29.00  | 6 ft                          |                          | STP-MTRACH-42xxxxx                                                                                                                              | <a href="#">PDF</a>                    |                     |                     |
| <a href="#">STP-EXT42H-010</a>           | \$34.00  | 10 ft                         |                          |                                                                                                                                                 | <a href="#">PDF</a>                    |                     |                     |
| <a href="#">STP-EXT42H-020</a>           | \$49.00  | 20 ft                         |                          |                                                                                                                                                 | <a href="#">PDF</a>                    |                     |                     |
| <a href="#">STP-232RJ11-CBL*</a>         | \$15.00  | programming/<br>communication | 10 ft                    | STP-DRV-4850, STP-DRV-80100                                                                                                                     | DB9 female / RJ11(6P4C)                | <a href="#">PDF</a> |                     |
| <a href="#">STP-232HD15-CBL-2**</a>      | \$19.00  | communication                 | 6.6 ft                   | STP-DRV-4850, STP-DRV-80100<br>DL06, D2-250-1, D2-260                                                                                           | HD 15-pin male / RJ12 6-pin<br>plug    | n/a                 |                     |
| <a href="#">STP-232RJ12-CBL-2**</a>      | \$12.00  | communication                 | 6.6 ft                   | STP-DRV-4850, STP-DRV-80100<br>DL05, CLICK                                                                                                      | RJ11 (6P4C) plug / RJ12<br>6-pin plug  | n/a                 |                     |
| <a href="#">STP-CBL-CA6</a>              | \$32.00  | control cable                 | 6 ft                     | STP-MTRD-17038<br>STP-MTRD-17038E                                                                                                               | 11-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-CA10</a>             | \$47.00  | control cable                 | 10 ft                    |                                                                                                                                                 | 11-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-CA20</a>             | \$85.00  | control cable                 | 20 ft                    |                                                                                                                                                 | 11-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EA6</a>              | \$31.00  | encoder cable                 | 6 ft                     | STP-MTRD-xxxxxE<br>STP-MTRA-ENC1, STP-MTRA-ENC3<br>STP-MTRA-ENC5, STP-MTRA-ENC7<br>STP-MTRA-ENC11, STP-MTRA-ENC13<br>(for line driver encoders) | 10-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EA10</a>             | \$37.00  | encoder cable                 | 10 ft                    |                                                                                                                                                 | 10-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EA20</a>             | \$52.61  | encoder cable                 | 20 ft                    |                                                                                                                                                 | 10-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EB3</a>              | \$60.00  | encoder cable                 | 3 ft                     | AMT112Q-V<br>AMT112S-V<br>(for both line driver and push-pull (totem)<br>encoders)                                                              | 17-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EB6</a>              | \$83.00  | encoder cable                 | 6 ft                     |                                                                                                                                                 | 17-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EB10</a>             | \$113.00 | encoder cable                 | 10 ft                    |                                                                                                                                                 | 17-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-EB20</a>             | \$187.00 | encoder cable                 | 20 ft                    |                                                                                                                                                 | 17-pin / pigtail                       | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-ED6</a>              | \$34.00  | encoder cable                 | 6 ft                     | STP-MTRA-ENC2, STP-MTRA-ENC4<br>STP-MTRA-ENC6, STP-MTRA-ENC8<br>STP-MTRA-ENC12, STP-MTRA-ENC14<br>(for push-pull (totem) encoders)              | 5-pin / pigtail                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-ED10</a>             | \$46.00  | encoder cable                 | 10 ft                    |                                                                                                                                                 | 5-pin / pigtail                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-CBL-ED20</a>             | \$55.00  | encoder cable                 | 20 ft                    |                                                                                                                                                 | 5-pin / pigtail                        | <a href="#">PDF</a> |                     |
| <a href="#">STP-CON-1</a>                | \$31.00  | replacement connector kit     | n/a                      | STP-DRV-4845 & -6575                                                                                                                            | -                                      | n/a                 |                     |
| <a href="#">STP-CON-2</a>                | \$31.00  | 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.



# Stepping System Cables

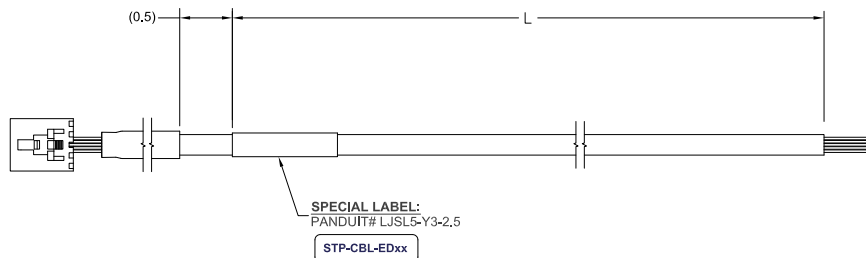
## SureStep® Cables, continued

### STP-CBL-EDxx Encoder Cable Wiring Diagram

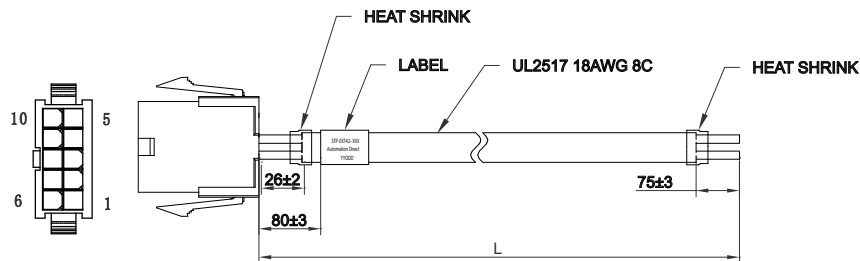
STP-EDxx CABLES

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

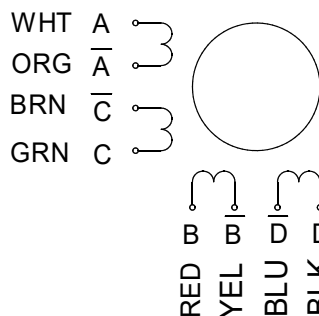
| TABLE INFORMATION |                |
|-------------------|----------------|
| CABLE NUMBER      | CABLE LENGTH L |
| STP-CBL-ED6       | 6 Feet         |
| STP-CBL-ED10      | 10 Feet        |
| STP-CBL-ED20      | 20 Feet        |



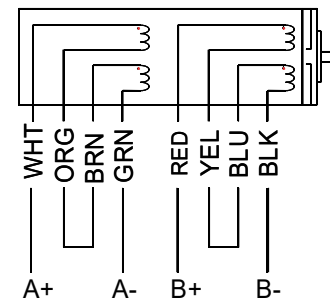
### STP-EXT42(H)-xxx Cable Wiring Diagram



| 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

