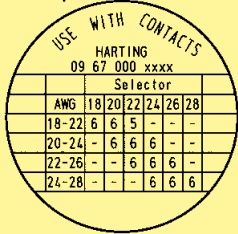


## Tools for crimp termination – D-Sub-M

| Identification                                                                        | Part No.       | Drawing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
|---------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--------|----------------------------------|----------------|----------------------------------|---------------------------------------|----------------------------------|----------------|---------------------------------------|----------------|------------|-------------------------------|----------------|------------|-------------------------------|----------------|------------|-------------------------------|----------------|------------|-------------------------------|----------------|-----------|------------------------------|----------------|-----------|------------------------------|
| Hand crimp tool<br>for <b>signal</b> contacts                                         | 09 99 000 0501 | <br>printing<br><br>USE WITH CONTACTS<br>HARTING<br>09 67 000 xxxx<br>Selector<br>AWG 18 20 22 24 26 28<br>18-22 6 6 5 - - -<br>20-24 - 6 6 6 - - -<br>22-26 - - 6 6 6 - -<br>24-28 - - - 6 6 6 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Die<br>(To be ordered separately)                                                     | 09 99 000 0531 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Wire gauge AWG 18 – 28                                                                |                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Hand crimp tool<br>for <b>power</b> contacts                                          | 09 99 000 0509 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Positioner for male and female contacts<br>(To be ordered separately)                 | 09 99 000 0504 | <table><tr><th>Contact Part No.</th><th>Gauge</th><th>Tool setting</th></tr><tr><td>09 69 182 x420</td><td>AWG 16, 18, 20</td><td>3 for AWG 16, 2 for AWG 18 and AWG 20</td></tr><tr><td>09 69 282 x420</td><td>AWG 16, 18, 20</td><td>3 for AWG 16, 2 for AWG 18 and AWG 20</td></tr><tr><td>09 69 182 x421</td><td>AWG 12, 14</td><td>5 for AWG 12 and 4 for AWG 14</td></tr><tr><td>09 69 282 x421</td><td>AWG 12, 14</td><td>5 for AWG 12 and 4 for AWG 14</td></tr><tr><td>09 69 182 x422</td><td>AWG 10, 12</td><td>7 for AWG 10 and 6 for AWG 12</td></tr><tr><td>09 69 282 x422</td><td>AWG 10, 12</td><td>7 for AWG 10 and 6 for AWG 12</td></tr><tr><td>09 69 182 x423</td><td>AWG 8, 10</td><td>7 for AWG 8 and 6 for AWG 10</td></tr><tr><td>09 69 282 x423</td><td>AWG 8, 10</td><td>7 for AWG 8 and 6 for AWG 10</td></tr></table> | Contact Part No. | Gauge  | Tool setting                     | 09 69 182 x420 | AWG 16, 18, 20                   | 3 for AWG 16, 2 for AWG 18 and AWG 20 | 09 69 282 x420                   | AWG 16, 18, 20 | 3 for AWG 16, 2 for AWG 18 and AWG 20 | 09 69 182 x421 | AWG 12, 14 | 5 for AWG 12 and 4 for AWG 14 | 09 69 282 x421 | AWG 12, 14 | 5 for AWG 12 and 4 for AWG 14 | 09 69 182 x422 | AWG 10, 12 | 7 for AWG 10 and 6 for AWG 12 | 09 69 282 x422 | AWG 10, 12 | 7 for AWG 10 and 6 for AWG 12 | 09 69 182 x423 | AWG 8, 10 | 7 for AWG 8 and 6 for AWG 10 | 09 69 282 x423 | AWG 8, 10 | 7 for AWG 8 and 6 for AWG 10 |
| Contact Part No.                                                                      | Gauge          | Tool setting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x420                                                                        | AWG 16, 18, 20 | 3 for AWG 16, 2 for AWG 18 and AWG 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x420                                                                        | AWG 16, 18, 20 | 3 for AWG 16, 2 for AWG 18 and AWG 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x421                                                                        | AWG 12, 14     | 5 for AWG 12 and 4 for AWG 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x421                                                                        | AWG 12, 14     | 5 for AWG 12 and 4 for AWG 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x422                                                                        | AWG 10, 12     | 7 for AWG 10 and 6 for AWG 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x422                                                                        | AWG 10, 12     | 7 for AWG 10 and 6 for AWG 12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x423                                                                        | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x423                                                                        | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Positioner for male contacts<br>(To be ordered separately.)                           | 09 99 000 0522 | <table><tr><th>Contact Part No.</th><th>Gauge</th><th>Tool setting</th></tr><tr><td>09 69 282 x821</td><td>AWG 12, 14</td><td>5 for AWG 12 and 4 for AWG 14</td></tr><tr><td>09 69 282 x823</td><td>AWG 8, 10</td><td>7 for AWG 8 and 6 for AWG 10</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Contact Part No. | Gauge  | Tool setting                     | 09 69 282 x821 | AWG 12, 14                       | 5 for AWG 12 and 4 for AWG 14         | 09 69 282 x823                   | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10          |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Contact Part No.                                                                      | Gauge          | Tool setting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x821                                                                        | AWG 12, 14     | 5 for AWG 12 and 4 for AWG 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 282 x823                                                                        | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Positioner for female contacts<br>(To be ordered separately.)                         | 09 99 000 0521 | <table><tr><th>Contact Part No.</th><th>Gauge</th><th>Tool setting</th></tr><tr><td>09 69 182 x821</td><td>AWG 12, 14</td><td>5 for AWG 12 and 4 for AWG 14</td></tr><tr><td>09 69 182 x823</td><td>AWG 8, 10</td><td>7 for AWG 8 and 6 for AWG 10</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Contact Part No. | Gauge  | Tool setting                     | 09 69 182 x821 | AWG 12, 14                       | 5 for AWG 12 and 4 for AWG 14         | 09 69 182 x823                   | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10          |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Contact Part No.                                                                      | Gauge          | Tool setting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x821                                                                        | AWG 12, 14     | 5 for AWG 12 and 4 for AWG 14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 182 x823                                                                        | AWG 8, 10      | 7 for AWG 8 and 6 for AWG 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Hand crimp tool<br>for <b>coaxial</b> contacts,<br>solder/crimp version <sup>1)</sup> | 09 99 000 0503 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Die<br>(To be ordered separately)                                                     | 09 99 000 0508 |  <table><tr><th>Contact Part No.</th><th>Cavity</th></tr><tr><td>09 69 181 x230<br/>09 69 281 x230</td><td>B</td></tr><tr><td>09 69 181 x141<br/>09 69 281 x141</td><td>C</td></tr><tr><td>09 69 181 x140<br/>09 69 281 x140</td><td>B</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Contact Part No. | Cavity | 09 69 181 x230<br>09 69 281 x230 | B              | 09 69 181 x141<br>09 69 281 x141 | C                                     | 09 69 181 x140<br>09 69 281 x140 | B              |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Contact Part No.                                                                      | Cavity         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 181 x230<br>09 69 281 x230                                                      | B              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 181 x141<br>09 69 281 x141                                                      | C              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 181 x140<br>09 69 281 x140                                                      | B              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Die<br>(To be ordered separately)                                                     | 09 99 000 0515 | <table><tr><th>Contact Part No.</th><th>Cavity</th></tr><tr><td>09 69 181 x143<br/>09 69 281 x143</td><td>A</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Contact Part No. | Cavity | 09 69 181 x143<br>09 69 281 x143 | A              |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Contact Part No.                                                                      | Cavity         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 181 x143<br>09 69 281 x143                                                      | A              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Die<br>(To be ordered separately)                                                     | 09 99 000 0519 | <table><tr><th>Contact Part No.</th><th>Cavity</th></tr><tr><td>09 69 181 x233<br/>09 69 281 x233</td><td>B</td></tr></table>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Contact Part No. | Cavity | 09 69 181 x233<br>09 69 281 x233 | B              |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| Contact Part No.                                                                      | Cavity         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |
| 09 69 181 x233<br>09 69 281 x233                                                      | B              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                  |        |                                  |                |                                  |                                       |                                  |                |                                       |                |            |                               |                |            |                               |                |            |                               |                |            |                               |                |           |                              |                |           |                              |

<sup>1)</sup> Only the outer ferrule is crimped (inner conductor is soldered)