## HD1 contacts

### 1. SCOPE

This Application specification covers the crimping requirements for HD1 contacts

### 2. APPLICABLE PRODUCT PART NUMBER

See Fig.1.

| Contact Type | Size | Contact Part number<br>*L/P: Loose Piece | Wire Size (AWG# REF)<br>[ $mm^2$] | Insulation Diameter [ mm ] |
|---|---|---|---|---|
| Receptacle Contact | S | *-2316670-1 : Reel<br>*-2316671-1 : L/P | 0.05～0.10<br>（#30～#28） | φ0.60～φ1.20 |
| | M | *-2316670-2 : Reel<br>*-2316671-2 : L/P | 0.08～0.37<br>(#28～#22) | φ1.08～φ1.60 |
| | L | *-2316670-3 : Reel<br>*-2316671-3 : L/P | 0.08～0.37<br>(#28～#22) | φ1.08～φ1.90 |
| | 2L | *-2316670-4 : Reel<br>*-2316671-4 : L/P | 0.34～0.87<br>(#22～#18) | φ1.40～φ2.20 |
| Tab Contact | S | *-2316663-1 : Reel<br>*-2316669-1 : L/P | 0.05～0.10<br>（#30～#28） | φ0.60～φ1.20 |
| | M | *-2316663-2 : Reel<br>*-2316669-2 : L/P | 0.08～0.37<br>(#28～#22) | φ1.08～φ1.60 |
| | L | *-2316663-3 : Reel<br>*-2316669-3 : L/P | 0.08～0.37<br>(#28～#22) | φ1.08～φ1.90 |
| | 2L | *-2316663-4 : Reel<br>*-2316669-4 : L/P | 0.34～0.87<br>(#22～#18) | φ1.40～φ2.20 |

Fig.1


| Indicates Change

## 3. Crimping REQUIREMENTS

See Fig.2 and Fig.3

| NO. | Check Item | Specified Requirements | NO. | Check Item | Specified Requirements |
|---|---|---|---|---|---|
| ① | Wire Stripping Length | 2mm±0.3 | ⑥ | Twisting | 3˚Max |
| ② | Cut-Off Tab Length | 0.25mm Max | ⑦ | Rolling | 5˚Max |
| ③ | Rear Bell mouth Length | 0.1～0.3mm | ⑧ | Wire-End Protrusion Length | 0.1～0.65mm |
| ④ | Bend-Up | 3˚Max | ⑨ [a] | Insulation Barrel Width | See Fig.4, 5 |
| ⑤ | Bend-Down | 3˚Max | ⑩ [a] | Insulation Barrel Height | See Fig.4, 5 |

[a]. Insulation barrel crimping dimension ⑨ and ⑩ should be controlled under Fig.4 and Fig.5 not to interfere housings.

Fig 2

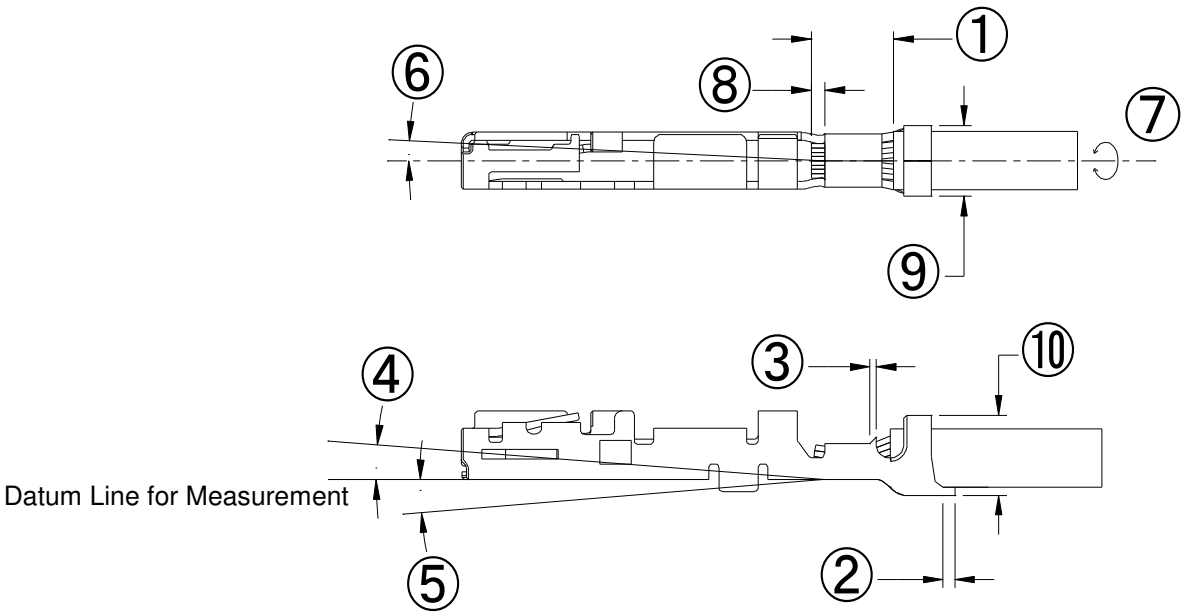


Fig 3

## 4. CRIMPING DATA

4.1 Applicator

See Fig.4

| Reel Contact Part No | | Applicator Number | Wire Size | | Insulation Stripping Length [mm] | Wire Crimp | | Insulation | | Finished Insulation Diameter [mm] | Crimp Tensile Strength [Kg MIN] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of Con-ductor **[b]** | Cross Section [$mm^2$] (AWG) **[c]** | | Width [mm] | Crimp Height [mm] | ⑨ Barrel Width [mm] | ⑩ Crimp Height [mm] | | |
| S | *-2316663-1<br>*-2316670-1 | 2151110-1 | 1 | 0.05～0.06(#30) | 2.0±0.3 | 0.90 (REF) | 0.54±0.03 | 1.5MAX " F " | 1.4~1.8MAX | φ0.60~φ1.20 | 0.5 |
| | | | 1 | 0.08～0.10(#28) | | | 0.57±0.03 | | | | 1.0 |
| M | *-2316663-2<br>*-2316670-2 | 2151082-1 | 1 | 0.08～0.10(#28) | 2.0±0.3 | 1.16 (REF) | 0.64±0.03 | 1.5MAX " F " | 1.6~2.2MAX | φ1.08~φ1.60 | 1.0 |
| | | | 1 | 0.12～0.15(#26) | | | 0.67±0.03 | | | | 2.0 |
| | | | 1 | 0.21～0.23(#24) | | | 0.73±0.03 | | | | 3.0 |
| | | | 1 | 0.34～0.37(#22) | | | 0.80±0.03 | | | | 4.5 |
| L | *-2316663-3<br>*-2316670-3 | 2151111-1 | 1 | 0.08～0.10(#28) | 2.0±0.3 | 1.16 (REF) | 0.64±0.03 | 2.1MAX " F " | 1.6~2.4MAX | φ1.08~φ1.90 | 1.0 |
| | | | 1 | 0.12～0.15(#26) | | | 0.67±0.03 | | | | 2.0 |
| | | | 1 | 0.21～0.23(#24) | | | 0.73±0.03 | | | | 3.0 |
| | | | 1 | 0.34～0.37(#22) | | | 0.80±0.03 | | | | 4.5 |
| 2L | *-2316663-4<br>*-2316670-4 | 2151083-1 | 1 | 0.34～0.37(#22) | 2.0±0.3 | 1.40 (REF) | 0.85±0.03 | 2.1MAX " F " | 2.0~2.4MAX | φ1.40~φ2.20 | 4.5 |
| | | | 1 | 0.51～0.53(#20) | | | 1.00±0.03 | | | | 6.5 |
| | | | 1 | 0.85～0.87(#18) | | | 1.15±0.03 | | | | 6.5 |

[b]. The contacts are not applicable for crimping multi wires.
The strand diameter should be over φ0.1mm.
[c]. Solid wire is not applied.

Fig.4

4.2 Hand Tool

See Fig.5

| Loose Piece Contact Part No | | Hand Tool Number **[d]** | Wire Size | | Insulation Stripping Length [mm] | Wire Crimp | | Insulation | | Finished Insulation Diameter [mm] | Crimp Tensile Strength [Kg MIN] |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | No. of Con-ductor **[e]** | Cross Section [$mm^2$] (AWG) **[f]** | | Width [mm] | Crimp Height [mm] | ⑨ Barrel Width [mm] | ⑩ Crimp Height [mm] | | |
| S | *-2316669-1<br>*-2316671-1 | 2305684-1 (2119144-1 with 2305680-1) | 1 | 0.05～0.06(#30) | 2.0±0.3 | 0.90 (REF) | 0.49~0.59 | 1.5MAX " F " | 1.3(REF) | φ0.60~φ1.00 | 0.5 |
| | | | 1 | 0.08～0.10(#28) | | | 0.52~0.62 | | 1.5(REF) | φ0.80~φ1.20 | 1.0 |
| M | *-2316669-2<br>*-2316671-2 | 2305681-1 (2119141-1 with 2305680-1) | 1 | 0.08～0.10(#28) | 2.0±0.3 | 1.16 (REF) | 0.59~0.69 | 1.5MAX " F " | 1.95(REF) | φ1.08~φ1.40 | 1.0 |
| | | | 1 | 0.12～0.15(#26) | | | 0.59~0.69 | | | | 2.0 |
| | | | 1 | 0.21～0.23(#24) | | | 0.69~0.79 | | 2.1(REF) | φ1.20~φ1.60 | 3.0 |
| | | | 1 | 0.34～0.37(#22) | | | 0.69~0.79 | | | | 4.5 |
| L | *-2316669-3<br>*-2316671-3 | 2305683-1 (2119143-1 with 2305680-1) | 1 | 0.08～0.10(#28) | 2.0±0.3 | 1.16 (REF) | 0.59~0.69 | 2.1MAX " F " | 2.05(REF) | φ1.08~φ1.40 | 1.0 |
| | | | 1 | 0.12～0.15(#26) | | | 0.59~0.69 | | | | 2.0 |
| | | | 1 | 0.21～0.23(#24) | | | 0.69~0.79 | | 2.2(REF) | φ1.20~φ1.90 | 3.0 |
| | | | 1 | 0.34～0.37(#22) | | | 0.69~0.79 | | | | 4.5 |
| 2L | *-2316669-4<br>*-2316671-4 | 2305682-1 (2119142-1 with 2305680-1) | 1 | 0.34～0.37(#22) | 2.0±0.3 | 1.40 (REF) | 0.80~0.90 | 2.1MAX " F " | 2.1(REF) | φ1.40~φ2.00 | 4.5 |
| | | | 1 | 0.51～0.53(#20) | | | 0.80~0.90 | | | | 6.5 |
| | | | 1 | 0.85～0.87(#18) | | | 1.10~1.20 | | 2.4(REF) | φ1.80~φ2.20 | 6.5 |

[d]. Apply to use D1000 Hand tool with 2305680-1 by exchange flip locator

[e]. The contacts are not applicable for crimping multi wires.
The strand diameter should be over φ0.1mm.

[f]. Solid wire is not applied.

Fig.5