



# har-flexicon male connector, vertical, SMC



### General information

| Design                       | male connector  |                                 |   |
|------------------------------|---|---------------------------------|---|
| Type                         | har-flexicon 3.50/3.81 MTV                                      | har-flexicon 5.00 MTV           | har-flexicon 5.08 MTV                             |
| Part numbers                 | 1412xx14001000 & 1412xx15001xxx                                 | 1412xx16001xxx & 1412xx16003xxx | 1412xx17001000                                    |
| Contact pitch                | 3.50/3.81 mm  | 5 mm                            | 5.08 mm   |
| No. of contacts              | 2-25 poles  | 2-12 poles                      | 2-12 poles  |
| Rated surge voltage (II/2):  | 2,5 kV  | 4 kV                            | 4 kV (overvoltage cat. II / pollution degree 2)   |
| Rated surge voltage (III/2): | 2,5 kV  | 4 kV                            | 4 kV (overvoltage cat. III / pollution degree 2)  |
| Rated surge voltage (III/3): | 2,5 kV  | 4 kV                            | 4 kV (overvoltage cat. III / pollution degree 3)  |
| Rated Voltage:               | 300 V   | 300 V                           | 300 V   |
| Rated voltage (II/2):        | 300 V   | 600 V                           | 600 V (overvoltage cat. II / pollution degree 2)  |
| Rated voltage (III/2):       | 150 V   | 300 V                           | 300 V (overvoltage cat. III / pollution degree 2) |
| Rated voltage (III/3):       | 150 V   | 250 V                           | 250 V (overvoltage cat. III / pollution degree 3) |
| Working current              | 11 A  | 15 A                            | 15 A  |
| Contact resistance           | max. 15 mOhm  |                                 |   |
| Insulation resistance        | min. 10 <sup>9</sup> Ohm (500 V DC)                             |                                 |   |
| Temperature range            | -40°C ... +110°C  |                                 |   |
| Termination technology       | THR/SMC Reflow  |                                 |   |
| Insertion force              | max. 3  |                                 |   |
| Withdrawal force             | min. 1,5  |                                 |   |
| Hot plugging                 | No  |                                 |   |
| Vibration                    | 10-150Hz,0,35mm,5g 2h each axes -> No contact disturbance > 1µs |                                 |   |
| RoHS - compliant             | Yes   |                                 |   |
| UL file                      | E314677   |                                 |   |

### Isulator material

|                                    |               |
|------------------------------------|---------------|
| Material                           | PA/PPA        |
| Color                              | black         |
| UL classification                  | UL 94-V0      |
| Material group acc. to IEC 60664-1 | I (CTI > 600) |

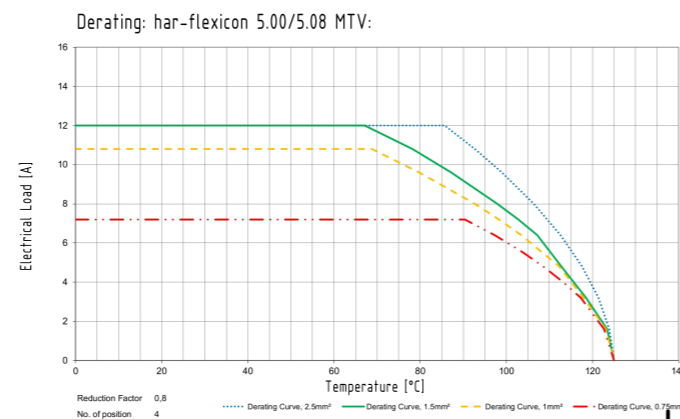
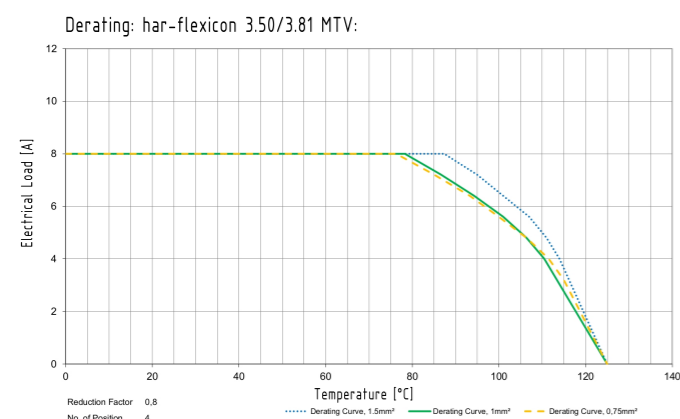
### Contact material

|                          |              |
|--------------------------|--------------|
| Contact material         | Copper alloy |
| Plating termination zone | Sn           |
| Plating contact zone     | Sn           |

### Derating

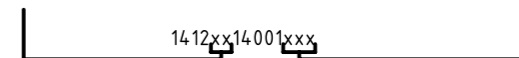
The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals.  
The current capacity curve is valid for continuous, non interrupted current loaded contacts of connectors when simultaneous power on all contacts is given, without exceeding the maximum temperature.

Control and test procedures according to DIN IEC 60512-5



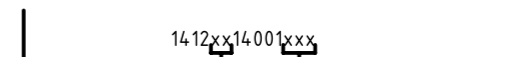
### Packging unit for 3.50/3.81

| Type of packaging | No. of poles (xx) | Quantity | Index (xxx) | Remark  |
|-------------------|-------------------|----------|-------------|---------|
| tropical bag      | 2 - 3             | 100      | 000         |         |
| tropical bag      | 4 - 5             | 75       | 000         |         |
| tropical bag      | 6 - 20            | 50       | 000         |         |
| tropical bag      | 21 - 25           | 25       | 000         |         |
| tropical bag      | 2 - 6             | 10       | 333         | samples |
| tropical bag      | 7 - 12            | 5        | 333         | samples |



### Packging unit for 5.00/5.08

| Type of packaging | No. of poles (xx) | Quantity | Index (xxx) | Remark  |
|-------------------|-------------------|----------|-------------|---------|
| tropical bag      | 2 - 3             | 100      | 000         |         |
| tropical bag      | 4 - 5             | 75       | 000         |         |
| tropical bag      | 6 - 12            | 50       | 000         |         |
| tropical bag      | 2 - 6             | 10       | 333         | samples |
| tropical bag      | 7 - 12            | 5        | 333         | samples |



|   |                       |   |                       |                             |                    |   |
|---|-----------------------|---|-----------------------|-----------------------------|--------------------|---|
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|   | Department EC PD - DE | Title<br>har-flexicon male connector, vertical, SMC |                       |                             |                    | Doc-Key / ECM-Nr.<br>100579746/UGD/000/B<br>50000077827 |
| HARTING Electronics GmbH<br>D-32339 Espelkamp |                       | Type<br>DS  | Number<br>14121400201 |                             | Rev.<br>B          | Page<br>1/1   |