

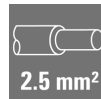
**HDC HQ 7 MC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



The HQ series - big features in a compact design The electrical values speak for themselves. The standard HE crimp contacts can also be used here.

The wire connection level is designed as a crimp contact

The established crimp connection has been used as a standard for decades.

Crimp contacts are not delivered with the inserts.

Pole count: **7 (+PE)**

Rated current: **10 A**

Rated voltage: **400 V**

Nominal voltage acc. to UL/CSA: **600 V AC/DC**

Crimp connection

**General ordering data**

|            |                                                                              |
|------------|------------------------------------------------------------------------------|
| Version    | HDC insert, Male, 400 V, 10 A, Number of poles: 7, Crimp connection, Size: 1 |
| Order No.  | <a href="#">1003190000</a>                                                   |
| Type       | HDC HQ 7 MC                                                                  |
| GTIN (EAN) | 4032248698189                                                                |
| Qty.       | 1 pc(s).                                                                     |

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## Technical data

## Dimensions and weights

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 21 mm   | Depth (inches)  | 0.827 inch |
| Height     | 39.5 mm | Height (inches) | 1.555 inch |
| Width      | 21 mm   | Width (inches)  | 0.827 inch |
| Net weight | 12.6 g  |                 |            |

## Temperatures

|                   |                   |
|-------------------|-------------------|
| Limit temperature | -40 °C ... 125 °C |
|-------------------|-------------------|

## Dimensions

|                |         |                   |       |
|----------------|---------|-------------------|-------|
| Height of plug | 39.5 mm | Total length base | 21 mm |
| Width          | 21 mm   |                   |       |

## General data

|                               |       |                                      |                                                             |
|-------------------------------|-------|--------------------------------------|-------------------------------------------------------------|
| BG                            | 1     | Colour                               | beige                                                       |
| Free from halogens            | false | Insulating material                  | PC glass-fibre reinforced (UL-listed and railway-certified) |
| Insulating material group     | IIIa  | Insulation strength                  | 10 <sup>10</sup> Ω                                          |
| Low smoke acc. DIN EN 45545-2 | Yes   | Material                             | Copper alloy                                                |
| Number of poles               | 7     | Plugging cycles, gold                | ≥ 500                                                       |
| Plugging cycles, silver       | ≥ 500 | Pollution severity                   | 3                                                           |
| Rated current (DIN EN 61984)  | 10 A  | Rated impulse voltage (DIN EN 61984) | 6 kV                                                        |
| Rated voltage (DIN EN 61984)  | 400 V | Rated voltage according to UL/CSA    | 600 V AC/DC                                                 |
| Series                        | HQ    | Size                                 | 1                                                           |
| Type                          | Male  | Type of connection                   | Crimp connection                                            |
| UL 94 flammability rating     | V-0   | Volume resistance                    | ≤4 mΩ                                                       |

## Connection data PE

|                                       |              |                                       |                     |
|---------------------------------------|--------------|---------------------------------------|---------------------|
| Blade size, slotted (PE connection)   | SD 0.6 x 3.5 | Connection type PE                    | Screw connection    |
| Fixing screw                          | M 3          | Rated cross-section                   | 2.5 mm <sup>2</sup> |
| Stripping length PE connection        | 5 mm         | Tightening torque, max. PE connection | 0.55 Nm             |
| Tightening torque, min. PE connection | 0.5 Nm       | Wire cross section, AWG (PE), max.    | AWG 14              |
| Wire cross section, AWG (PE), min.    | AWG 26       |                                       |                     |

## Version

|                                                                                         |                      |                                                                                         |                      |
|-----------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------------------------------------------|----------------------|
| BG                                                                                      | 1                    | Conductor cross-section, max.                                                           | 2.5 mm <sup>2</sup>  |
| Conductor cross-section, min.                                                           | 0.14 mm <sup>2</sup> | Material                                                                                | Copper alloy         |
| Size                                                                                    | 1                    | Stripping length, rated connection                                                      | 8 mm                 |
| Type of connection                                                                      | Crimp connection     | Volume resistance                                                                       | ≤4 mΩ                |
| Wire connection cross section AWG, max.                                                 | AWG 14               | Wire connection cross section AWG, min.                                                 | AWG 26               |
| Wire connection cross section, finely stranded, max.                                    | 2.5 mm <sup>2</sup>  | Wire connection cross section, finely stranded, min.                                    | 0.14 mm <sup>2</sup> |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm <sup>2</sup>  | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.14 mm <sup>2</sup> |

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|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000438    | ETIM 7.0    | EC000438    |
| ETIM 8.0    | EC000438    | ETIM 9.0    | EC000438    |
| ETIM 10.0   | EC000438    | ECLASS 9.0  | 27-44-02-05 |
| ECLASS 9.1  | 27-44-02-05 | ECLASS 10.0 | 27-44-02-05 |
| ECLASS 11.0 | 27-44-02-05 | ECLASS 12.0 | 27-44-02-05 |
| ECLASS 13.0 | 27-44-02-05 | ECLASS 14.0 | 27-44-02-05 |
| ECLASS 15.0 | 27-44-02-05 |             |             |

|                     |                           |
|---------------------|---------------------------|
| Substance           | Acetone                   |
| Chemical resistance | Resistant                 |
| Substance           | Ammonia, watery           |
| Chemical resistance | Conditionally resistant   |
| Substance           | Petrol                    |
| Chemical resistance | Resistant                 |
| Substance           | Benzene                   |
| Chemical resistance | Resistant                 |
| Substance           | Diesel oil                |
| Chemical resistance | Conditionally resistant   |
| Substance           | Acetic acid, concentrated |
| Chemical resistance | Resistant                 |
| Substance           | Potassium hydroxide       |
| Chemical resistance | Conditionally resistant   |
| Substance           | Methanol                  |
| Chemical resistance | Conditionally resistant   |
| Substance           | Motor oil                 |
| Chemical resistance | Conditionally resistant   |
| Substance           | Lye, diluted              |
| Chemical resistance | Resistant                 |
| Substance           | Hydrochlorofluorocarbons  |
| Chemical resistance | Conditionally resistant   |
| Substance           | Outdoor use               |
| Chemical resistance | Conditionally resistant   |

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## Technical data

## Environmental Product Compliance

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RoHS Compliance Status               | Compliant with exemption                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RoHS Exemption (if applicable/known) | 6c                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| REACH SVHC                           | Lead 7439-92-1 Potassium perfluorobutane sulfonate 29420-49-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| SCIP                                 | b67daa31-7dca-434d-8290-da7fb52f83a2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Chemical resistance                  | de.myview.objectmodel.impl.BlockImpl@74928fbf de.myview.objectmodel.impl.BlockImpl@62bae236<br>de.myview.objectmodel.impl.BlockImpl@209196dc de.myview.objectmodel.impl.BlockImpl@712ff5b1<br>de.myview.objectmodel.impl.BlockImpl@11a0735c de.myview.objectmodel.impl.BlockImpl@243e980c<br>de.myview.objectmodel.impl.BlockImpl@8b5dd21 de.myview.objectmodel.impl.BlockImpl@6b923fb<br>de.myview.objectmodel.impl.BlockImpl@14119ae3 de.myview.objectmodel.impl.BlockImpl@44bf9e95<br>de.myview.objectmodel.impl.BlockImpl@62451ff6 de.myview.objectmodel.impl.BlockImpl@2dac5ebe |

## Approvals

Approvals



|                         |                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals MAMID         | <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/</a> <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/</a> |
| ROHS                    | Conform                                                                                                                                                                                                                                                                                                                                                 |
| UL File Number Search   | UL Website                                                                                                                                                                                                                                                                                                                                              |
| Certificate No. (cURus) | E92202                                                                                                                                                                                                                                                                                                                                                  |

## Downloads

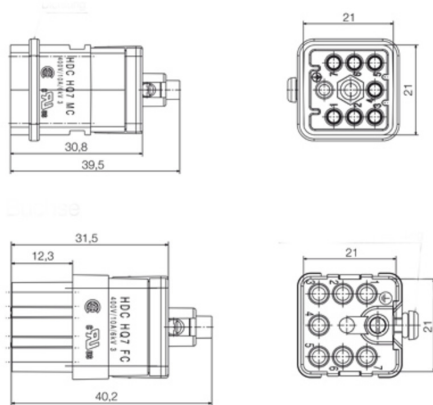
|                                             |                                                                        |
|---------------------------------------------|------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Manufacturer's declaration</a>                             |
| Engineering Data                            | <a href="#">CAD data – STEP</a>                                        |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                               |
| Brochures                                   | <a href="#">FL FIELDWIRING EN</a><br><a href="#">FL FIELDWIRING EN</a> |

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## Drawings



# Tightening torques and screwing tools

| Screw size         | Connector type                          | Dia. tightening torque in Nm                                                      | Recommended blade inserts and AF size for hexagon socket |
|--------------------|-----------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------|
| <b>M 2.5</b>       | <b>Signal contacts</b>                  |                                                                                   |                                                          |
|                    | S 6/6                                   | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | S 6/12                                  | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
| <b>M 2.9 x 0.5</b> | <b>Fastening screws</b>                 |                                                                                   |                                                          |
|                    | HQ 4/2                                  | 0.8 (plastic) / 1.1 (metal)                                                       | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HQ 8                                    | 0.8 (plastic) / 1.1 (metal)                                                       | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HQ 17                                   | 0.8 (plastic) / 1.1 (metal)                                                       | SD 0.6 x 3.5 mm or PH0                                   |
| <b>M 3</b>         | <b>Contact screws</b>                   |                                                                                   |                                                          |
|                    | HA 3                                    | 0.5 - 0.55                                                                        | SD 0.5 x 3.0 mm                                          |
|                    | HA 4                                    | 0.5 - 0.55                                                                        | SD 0.5 x 3.0 mm                                          |
|                    | HA 10 bis HA 48                         | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HE                                      | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | HVE                                     | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Signal contacts:</b>                 |                                                                                   |                                                          |
|                    | S 4/2                                   | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | S 4/8                                   | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>PE connection via female contact</b> |                                                                                   |                                                          |
|                    | S 4                                     | 0.5 - 0.8                                                                         | SD 0.6 x 3.5 mm                                          |
|                    | ConCept modular frame, metal            | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm                                          |
|                    | <b>PE terminal</b>                      |                                                                                   |                                                          |
|                    | HQ 5                                    | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 or 0.8 x 4 mm                               |
|                    | HQ 7                                    | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 or 0.8 x 4 mm                               |
|                    | <b>Fastening screws</b>                 | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Guide pin</b>                        | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Guide bush</b>                       | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Coding pins</b>                      | 0.5 - 0.55                                                                        | SD 0.6 x 3.5 mm or PZ0                                   |
| <b>M 4</b>         | <b>Contact screws</b>                   |                                                                                   |                                                          |
|                    | HSB                                     | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | <b>PE connection via male contact</b>   |                                                                                   |                                                          |
|                    | S 4                                     | 0.5 - 0.8                                                                         | SD 0.6 x 3.5 mm                                          |
|                    | ConCept modular frame, metal            | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 mm                                          |
|                    | <b>PE terminal</b>                      |                                                                                   |                                                          |
|                    | HA                                      | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HE                                      | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HEE                                     | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HVE                                     | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HD                                      | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | HDD                                     | 1.2 - 1.5                                                                         | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | S 6/6 (for signal contacts)             | 1.2 - 1.5                                                                         | 0.8 x 4 mm or PZ1                                        |
|                    | ConCept modular frame, plastic          | 1.2 - 1.5                                                                         | 0.8 x 4 mm or PZ1                                        |
| <b>M 5</b>         | <b>PE terminal</b>                      |                                                                                   |                                                          |
|                    | HSB                                     | 2 - 2.5                                                                           | SD 1 x 5.5 mm or PZ2                                     |
|                    | S 4/0 (Screw connection)                | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 4/0 (Axial screw connection)          | 2 - 2.5                                                                           | SD 0.8 x 4 mm or PZ 2                                    |
|                    | S 4/2                                   | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 4/8                                   | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 6/12                                  | 2 - 2.5                                                                           | SD 0.8 x 4 mm or PZ 2                                    |
|                    | S 6/36                                  | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 8/24                                  | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 12/2                                  | 2 - 2.5                                                                           | SD 1.2 x 6.5 mm or PH2                                   |
| <b>M 6</b>         | <b>Power contacts</b>                   |                                                                                   |                                                          |
|                    | S 4/0 (Screw connection)                | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm                                            |
|                    | S 4/2                                   | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm                                            |
|                    | S 4/8                                   | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm                                            |
| <b>M 7 x 0.75</b>  | <b>Power contacts</b>                   |                                                                                   |                                                          |
|                    | S 4                                     | 1.1 - 1.7                                                                         | SW 2                                                     |
|                    | S 6/6 (+ PE)                            | 6 - 8                                                                             | SW 4                                                     |
| <b>M 8 x 0.75</b>  | <b>Power contacts</b>                   |                                                                                   |                                                          |
|                    | S 6/12                                  | 1.1 - 1.7                                                                         | SW 2                                                     |
|                    | S 8/0 (+ PE)                            | 6 (10-16 mm <sup>2</sup> ) - 7 (25 mm <sup>2</sup> )                              | SW 4                                                     |
| <b>M10 x 1</b>     | <b>Power contacts</b>                   |                                                                                   |                                                          |
|                    | S 4/0 (Axial connection)                | 2 - 3                                                                             | SW 3                                                     |

Increasing the tightening torque does not improve the contact resistance. The stated torque settings offer optimal mechanical, thermal and electrical conditions. Exceeding the recommended values may even damage the conductor and terminal.