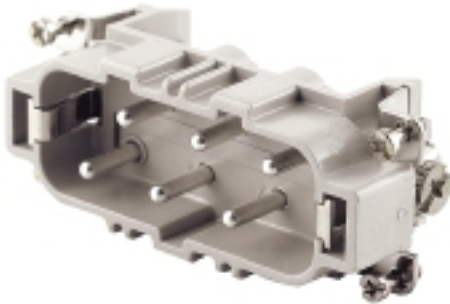


## HDC insert HDC HSB 6 MS 7 - 12

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com



The HSB series enables you to carry 35A per contact simultaneously. Assembly with screw connections, for secure and reliable connections.

The wire connection level is designed for screw connections. All screw connection elements are equipped with wire protection.

Screw connection

### General ordering data

|            |   |
|------------|---|
| Type       | HDC HSB 6 MS 7 - 12   |
| Order No.  | <a href="#">1498800000</a>  |
| Version    | HDC insert, Male, 400 V, 35 A, No. of poles: 6, Screw connection, Size: 6 |
| GTIN (EAN) | 4008190071875   |
| Qty.       | 1 pc(s).  |

**HDC insert**  
**HDC HSB 6 MS 7 - 12**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

**Technical data**
**Dimensions and weights**

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Length     | 84.5 mm | Length (inches) | 3.327 inch |
| Width      | 34 mm   | Width (inches)  | 1.339 inch |
| Height     | 34 mm   | Height (inches) | 1.339 inch |
| Net weight | 82 g    |                 |            |

**Temperatures**

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

**Environmental Product Compliance**

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

**Dimensions**

|                |       |                   |         |
|----------------|-------|-------------------|---------|
| Height of plug | 34 mm | Total length base | 84.5 mm |
|----------------|-------|-------------------|---------|

**General data**

|                              |                   |                                      |   |
|------------------------------|-------------------|--------------------------------------|---|
| Conductor cross-section      | 6 mm <sup>2</sup> | Insulating material                  | PC glass-fibre reinforced (UL-listed and railway-certified) |
| Insulating material group    | IIIa              | Insulation resistance                | 10 <sup>10</sup> Ω  |
| Material                     | Copper alloy      | Max. torque for main contact         | 1.5 Nm  |
| Min. torque for main contact | 1.2 Nm            | No. of poles                         | 6   |
| Plugging cycles, silver      | ≥ 500             | Pollution severity                   | 3   |
| Rated current (DIN EN 61984) | 35 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                       | HSB               | Size                                 | 6   |
| Surface finish               | Silver passivated | Type                                 | Male  |
| UL 94 flammability rating    | V-0               | Volume resistance                    | ≤ 2 mΩ  |

**Connection data PE**

|   |                     |   |                     |
|---|---------------------|---|---------------------|
| Blade size, crosshead   | Gr. PZ2             | Blade size, slotted (PE connection)   | 1 x 5.5             |
| Connection type PE  | Screw connection    | Fixing screw  | M 5                 |
| Rated cross-section   | 6 mm <sup>2</sup>   | Stripping length PE connection  | 10 mm               |
| Tightening torque, max. PE connection   | 2.5 Nm              | Tightening torque, min. PE connection   | 2 Nm                |
| Wire connection cross section, finely stranded, max.                                    | 6 mm <sup>2</sup>   | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 6 mm <sup>2</sup>   |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm <sup>2</sup> | Wire connection cross-section, finely stranded, min.                                    | 0.5 mm <sup>2</sup> |
| Wire cross section, AWG (PE), max.  | AWG 10              | Wire cross section, AWG (PE), min.  | AWG 20              |
| Wire cross-section, solid, max.   | 6 mm <sup>2</sup>   | Wire cross-section, solid, min.   | 0.5 mm <sup>2</sup> |

**Data sheet**

**HDC insert  
HDC HSB 6 MS 7 - 12**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Technical data**

**Version**

|   |                     |   |                     |
|---|---------------------|---|---------------------|
| Blade size  | size PZ 1           | Blade size, slotted (screw connection)  | SD 0.8 x 4.0        |
| Clamping screw  | M 4                 | Conductor cross-section, max.   | 6 mm <sup>2</sup>   |
| Conductor cross-section, min.   | 0.5 mm <sup>2</sup> | Material  | Copper alloy        |
| Max. torque for main contact  | 1.5 Nm              | Min. torque for main contact  | 1.2 Nm              |
| Size  | 6                   | Stripping length, rated connection  | 11 mm               |
| Surface finish  | Silver passivated   | Type of connection  | Screw connection    |
| Volume resistance   | ≤ 2mΩ               | Wire connection cross section AWG, max.   | AWG 10              |
| Wire connection cross section AWG, min.   | AWG 20              | Wire connection cross section, finely stranded, max.                                    | 6 mm <sup>2</sup>   |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 6 mm <sup>2</sup>   | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm <sup>2</sup> |
| Wire connection cross-section, finely stranded, min.                                    | 0.5 mm <sup>2</sup> | Wire cross-section, solid, max.   | 6 mm <sup>2</sup>   |
| Wire cross-section, solid, min.   | 0.5 mm <sup>2</sup> |   |                     |

**Classifications**

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC001121    | ETIM 4.0   | EC000438    |
| ETIM 5.0   | EC000438    | ETIM 6.0   | EC000438    |
| UNSPSC     | 30-21-18-01 | eClass 5.1 | 27-14-34-19 |
| eClass 6.2 | 27-26-12-04 | eClass 7.1 | 27-44-02-05 |
| eClass 8.1 | 27-44-02-05 | eClass 9.0 | 27-44-02-05 |
| eClass 9.1 | 27-44-02-05 |            |             |

**Product information**

|                                 |  |
|---------------------------------|--|
| Descriptive text ordering data  | Please use the following inserts for size 10 (12-pole): HSB 6 FS + HSB 6 FS 7-12 |
| Descriptive text technical data | Always use ferrules when connecting stranded conductors.                         |
| Instructions for accessories    | Accessories, see chapter J - Tools, see chapter K                                |

**Approvals**

Approvals



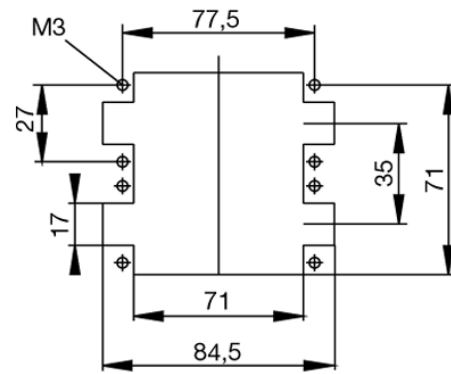
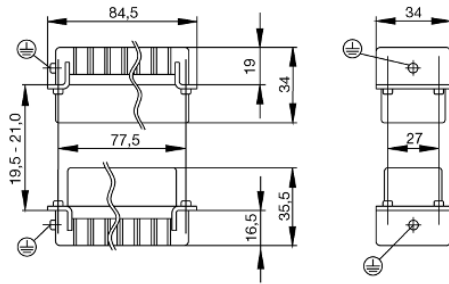
|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

**Downloads**

|                    |   |
|--------------------|---|
| Brochure/Catalogue | <a href="#">CAT 3 HDC 17/18 EN</a><br><a href="#">FL FIELDWIRING EN</a> |
| Engineering Data   | <a href="#">EPLAN, WSCAD</a>  |

**HDC insert  
HDC HSB 6 MS 7 - 12**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**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.