



The following excerpt are pages from the [North American Product Technical Guide Volume 3: Modular Support Systems Technical Guide, Edition 1](#) .

Please refer to the publication in its entirety for complete details on this product including load values, approvals/listings, general suitability, finishes, quality, etc.

To consult directly with a team member regarding our modular support system products, contact Hilti's team of technical support specialists between the hours of 7:00am – 6:00pm CST.

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3.0 MODULAR SUPPORT SYSTEM

3.2.8 MT CLAMPS AND CHANNEL TIES

MT-CC-40/50

Description

Clamp for channel-to-channel or channel-to-girder connections.

Material Specifications

| Standard ¹ | Grade ¹ | F _y , ksi (MPa) | F _u , ksi (MPa) |
|-----------------------|--------------------|----------------------------|----------------------------|
| GB/T 700 | Q235 B | 34.08 (235) | 53.66 (370) |

1. Mechanical properties of GB/T 700 Grade Q235 B meet or exceed the mechanical properties of ASTM A1011 SS Grade 33.

Corrosion Protection

Electro-Galvanized (EG)

MT-CC-40/50

Hot-Dipped Galvanized (HDG)

MT-CC-40/50 OC

Ordering Information

| Description | Weight Per Piece lbs (kg) | Quantity Piece(s) | Item No. |
|----------------|------------------------------|----------------------|----------|
| MT-CC-40/50 | 0.70 (0.32) | 20 | 2322429 |
| MT-CC-40/50 OC | 0.70 (0.32) | 20 | 2322391 |

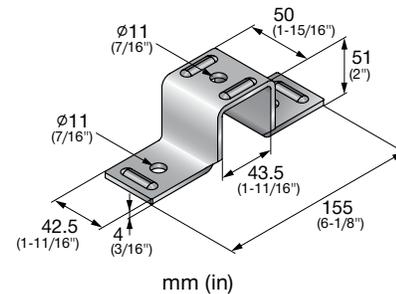


Figure 86 - Channel-to-Channel Connection

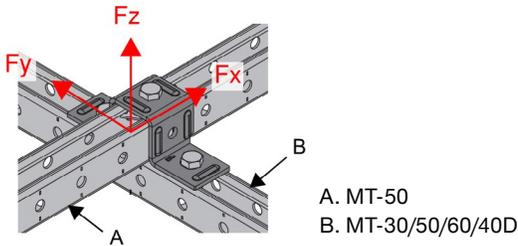


Table 221 - Allowable Strength Design (ASD) Load Data^{1,2,3,4}

| F _x lb (kN) | F _y lb (kN) | F _z lb (kN) |
|---------------------------|---------------------------|---------------------------|
| 1,010 (4.50) | 1,685 (7.50) | 1,120 (5.00) |

1. Minimum safety factor, Ω , for tabulated values is 2.6.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 86.
4. Loading in the negative Z-direction is not recommended for this connector.

Table 222 - Limit State Design (LSD) Load Data^{1,2,3}

| F _x lb (kN) | F _y lb (kN) | F _z lb (kN) |
|---------------------------|---------------------------|---------------------------|
| 1,405 (6.26) | 2,345 (10.44) | 1,560 (6.96) |

1. Maximum resistance factor, ϕ , for tabulated values is 0.55.
2. See Figure 86.
3. Loading in the negative Z-direction is not recommended for this connector.

Figure 87 - Channel-to-Girder Connection

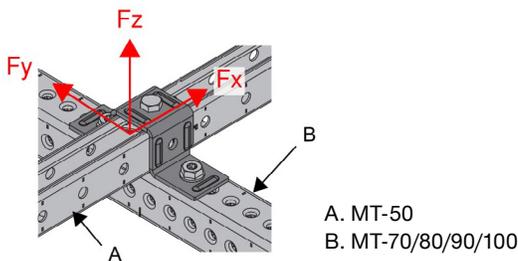


Table 223 - Allowable Strength Design (ASD) Load Data^{1,2,3,4}

| F _x lb (kN) | F _y lb (kN) | F _z lb (kN) |
|---------------------------|---------------------------|---------------------------|
| 1,010 (4.50) | 2,035 (9.06) | 1,645 (7.33) |

1. Minimum safety factor, Ω , for tabulated values is 2.35.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 87.
4. Loading in the negative Z-direction is not recommended for this connector.

Table 224 - Limit State Design (LSD) Load Data^{1,2,3}

| F _x lb (kN) | F _y lb (kN) | F _z lb (kN) |
|---------------------------|---------------------------|---------------------------|
| 1,405 (6.26) | 2,645 (11.78) | 2,140 (9.53) |

1. Maximum resistance factor, ϕ , for tabulated values is 0.55.
2. See Figure 87.
3. Loading in the negative Z-direction is not recommended for this connector.