



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-70 OC

#### Description

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

#### Material Specifications

Standard <sup>1</sup>	Grade <sup>1</sup>	F <sub>y</sub> , ksi (MPa)	F <sub>u</sub> , 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

##### Hot-Dipped Galvanized (HDG)

MT-CC-70 OC

#### Ordering Information

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-CC-70 OC	0.79 (0.36)	16	2322404

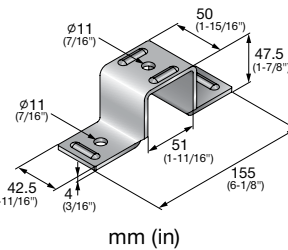
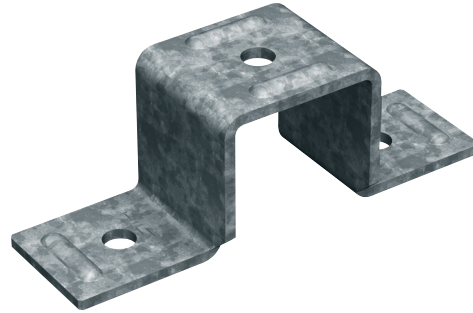
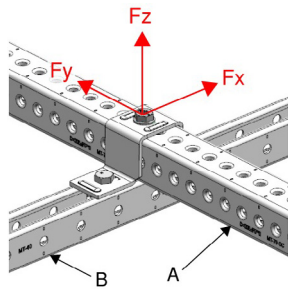


Figure 90 - Girder-to-Channel Connection



A. MT-70  
B. MT-30/50/60/40D

Table 229 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)
700 (3.12)	2,105 (9.38)	1,120 (5.00)

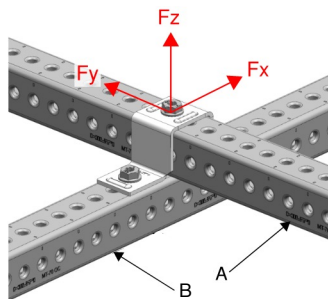
1. Minimum safety factor,  $\Omega$ , for tabulated values is 2.6.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 90.
4. Loading in the negative Z-direction is not recommended for this connector.

Table 230 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)
975 (4.35)	2,930 (13.05)	1,560 (6.96)

1. Maximum resistance factor,  $\phi$ , for tabulated values is 0.55.
2. See Figure 90.
3. Loading in the negative Z-direction is not recommended for this connector.

Figure 91 - Girder-to-Girder Connection



A. MT-70  
B. MT-70/80/90/100

Table 231 - Allowable Strength Design (ASD) Load Data<sup>1,2,3,4</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)
2,545 (11.33)	2,035 (9.06)	2,055 (9.16)

1. Minimum safety factor,  $\Omega$ , 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 91.
4. Loading in the negative Z-direction is not recommended for this connector.

Table 232 - Limit State Design (LSD) Load Data<sup>1,2,3</sup>

F <sub>x</sub> lb (kN)	F <sub>y</sub> lb (kN)	F <sub>z</sub> lb (kN)
3,310 (14.73)	2,645 (11.78)	2,675 (11.91)

1. Maximum resistance factor,  $\phi$ , for tabulated values is 0.55.
2. See Figure 91.
3. Loading in the negative Z-direction is not recommended for this connector.