



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

3.2.4 MT SPLICE CONNECTORS

MT-ES-70 OC

Description

Splice connector for coupling MT-70 or MT-80 girders end-to-end.

Material Specifications

Standard ¹	Grade ¹	F _y , ksi (MPa)	F _u , ksi (MPa)
GB/T 1591	Q355 B	51.49 (355)	68.17 (470)

1. Mechanical properties of GB/T 1591 Grade Q355 B meet or exceed the mechanical properties of ASTM A1011 SS Grade 50.

Corrosion Protection

Hot-Dipped Galvanized (HDG)

MT-ES-70 OC

Ordering Information

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-ES-70 OC	4.03 (1.83)	4	2272078

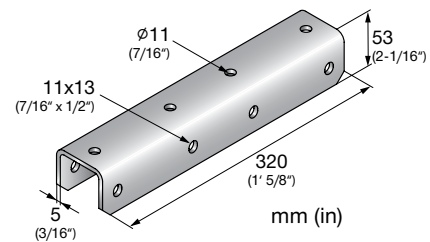
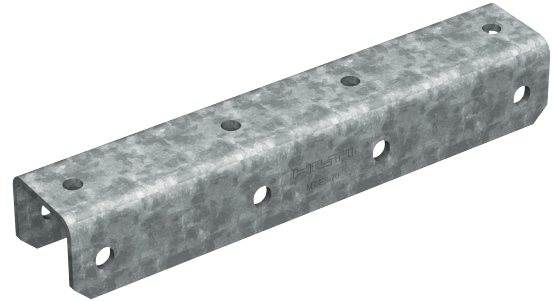


Figure 65 - MT Splice Connection

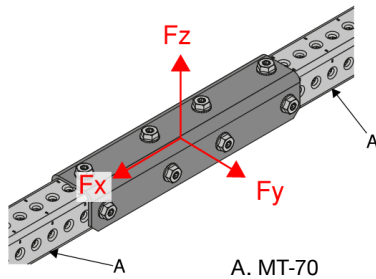


Table 187 - Allowable Strength Design (ASD) Load Data^{1,2,3}

F _x lb (kN)	F _y lb (kN)	F _z lb (kN)
10,180 (45.30)	1,100 (4.90)	1,795 (8.00)

1. Minimum safety factor, Ω , for tabulated values is 2.05.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 65.

Table 188 - Limit State Design (LSD) Load Data^{1,2}



F _x lb (kN)	F _y lb (kN)	F _z lb (kN)
13,240 (58.90)	1,435 (6.40)	2,335 (10.40)

1. Maximum resistance factor, ϕ , for tabulated values is 0.75.
2. See Figure 65.

Figure 66 - MT Splice Connection

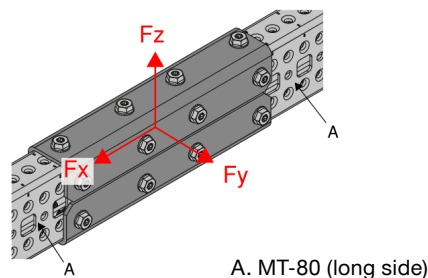


Table 189 - Allowable Strength Design (ASD) Load Data^{1,2,3}

F _x lb (kN)	F _y lb (kN)	F _z lb (kN)	M _y ft lb (kN m)
20,360 (90.60)	2,200 (9.80)	3,595 (16.00)	3,340 (4.53)

1. Minimum safety factor, Ω , for tabulated values is 2.3.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. See Figure 66.

Table 190 - Limit State Design (LSD) Load Data^{1,2}



F _x lb (kN)	F _y lb (kN)	F _z lb (kN)	M _y ft lb (kN m)
26,480 (117.80)	2,875 (12.80)	4,675 (20.80)	4,340 (5.89)

1. Maximum resistance factor, ϕ , for tabulated values is 0.6.
2. See Figure 66.