3.0 MODULAR SUPPORT SYSTEM

3.2.1 MT CONNECTION MECHANISMS

MT-TL M10 + MT TLB

Description

Twist lock and bolt for channel connection system.

Approvals / Listings

City of Los Angeles	City of Los Angeles 2020 LABC LARR 26181
European Technical Assessment	ETA-21/1017

Material Specifications

F_y, ksi (MPa)	F_u, ksi (MPa)
92.82 (640)	116.03 (800)

Corrosion Protection

Electro-Galvanized (EG)

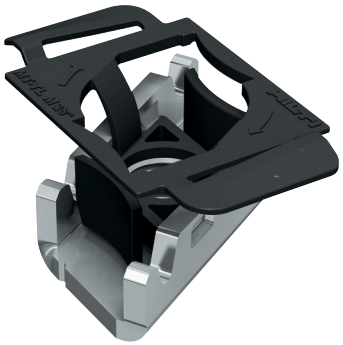
MT-TL M10
MT-TLB
MT-TLB 30

Hot-Dipped Galvanized (HDG)

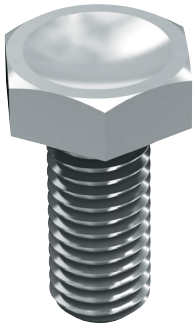
MT-TL M10 OC
MT-TLB OC
MT-TLB 30 OC

Ordering Information

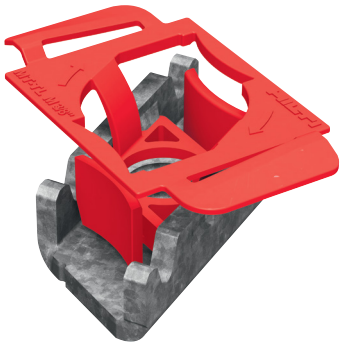
Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-TL M10	0.07 (0.03)	50	2272080
MT-TL M10 OC	0.07 (0.03)	50	2272082
MT-TLB	0.06 (0.03)	200	2273254
MT-TLB 30	0.06 (0.03)	200	2282190
MT-TLB OC	0.06 (0.03)	200	2273256
MT-TLB 30 OC	0.06 (0.03)	200	2282191



MT-TL M10



MT-TLB / MT-TLB 30



MT-TL M10 OC

MT-TLB OC / MT-TLB 30 OC

Figure 2 - MT-TL with MT-TLB Connection

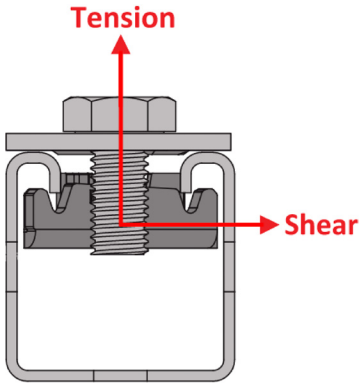


Table 61 - Allowable Strength Design (ASD) Load Data[1,2,3,4]

Description	Tension lb (kN)	Shear lb (kN)
MT-TL M10 OC	1,125 (5.00)	1,010 (4.50)

1. Minimum safety factor, Ω, for tabulated values is 2.65.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. Tabulated values in table are for MT-TL M10 with MT-TLB.
4. See Figure 2.

Table 62 - Limit State Design (LSD) Load Data[1,2,3]

Description	Tension lb (kN)	Shear lb (kN)
MT-TL M10 OC	1,570 (6.96)	1,410 (6.26)

1. Maximum resistance factor, Φ, for tabulated values is 0.5.
2. Tabulated values in table are for MT-TL M10 with MT-TLB.
3. See Figure 2.

3.0 MODULAR SUPPORT SYSTEM

3.2.1 MT CONNECTION MECHANISMS

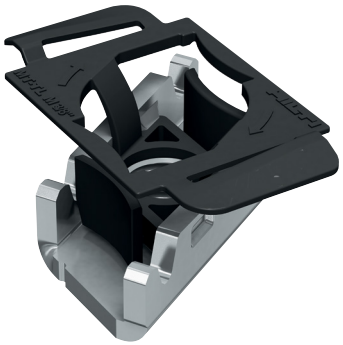
MT-TL 3/8" AND 1/2"

Description

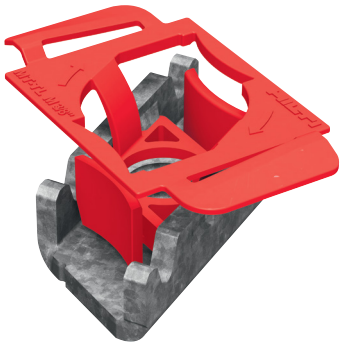
Twist lock – for threaded rod to channel connection. MT-TL 3/8 and MT-TL 1/2 are valid for media fixation only and are not compatible with MT connectors.

Approvals / Listings

City of Los Angeles	City of Los Angeles 2020 LABC LARR 26181
European Technical Assessment	ETA-21/1017



MT-TL 3/8
MT-TL 1/2



MT-TL 3/8 OC
MT-TL 1/2 OC

Corrosion Protection

Electro-Galvanized (EG)

MT-TL 3/8
MT-TL 1/2

Hot-Dipped Galvanized (HDG)

MT-TL 3/8 OC
MT-TL 1/2 OC

Ordering Information

Description	Weight Per Piece lbs (kg)	Quantity Piece(s)	Item No.
MT-TL 3/8	0.07 (0.03)	50	2273636
MT-TL 3/8 OC	0.07 (0.03)	50	2273637
MT-TL 1/2	0.07 (0.03)	30	2273638
MT-TL 1/2 OC	0.07 (0.03)	30	2273639

Figure 3 - MT-TL with Threaded Rod Connection

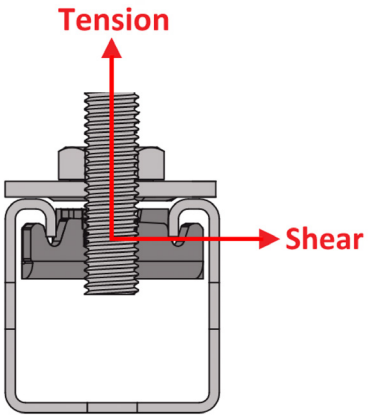


Table 63 - Allowable Strength Design (ASD) Load Data[1,2,3,4]

Description	Tension lb (kN)	Shear lb (kN)
MT-TL 3/8 OC	1,125 (5.00)	1,010 (4.50)
MT-TL 1/2 OC	1,125 (5.00)	1,010 (4.50)

1. Minimum safety factor, Ω, for tabulated values is 2.65.
2. Multiply tabulated values by 1.5 to obtain minimum Load and Resistance Factor Design (LRFD) values.
3. Loads are for twist-lock mechanism only. Design professional is responsible for checking threaded rod strength.
4 See Figure 3.

Table 64 - Limit State Design (LSD) Load Data[1,2,3]

Description	Tension lb (kN)	Shear lb (kN)
MT-TL 3/8 OC	1,570 (6.96)	1,410 (6.26)
MT-TL 1/2 OC	1,570 (6.96)	1,410 (6.26)

1. Maximum resistance factor, Φ, for tabulated values is 0.55.
2. Loads are for twist-lock mechanism only. Design professional is responsible for checking threaded rod strength.
3. See Figure 3.