

Dimensioning of Sampag fasteners are profile dependent. For details on associating tee-bolts and channel nuts, please refer to Design Data of particular channel. Serrated nuts and studs are recommended only for use with toothed profile TSA 41/22 in case of slip loads in the longitudinal direction (See page 20).

Note fastener capacities may be limited by load capacity of anchor channels.

Table 7.1 Allowable Loads of Tee-Bolts
(Pull-out and Shear)

Thread ∅	Grade 4.6		Grade 8.8		A4-50		A4-70	
	F [kN]	Torque [Nm]	F [kN]	Torque [Nm]	F [kN]	Torque [Nm]	F [kN]	Torque [Nm]
M 8	4.0	8	8.4	24	4.0	8	5.5	8
M10	6.4	15	13.3	30	6.4	15	8.7	15
M12	9.3	25	19.4	70	9.3	25	12.6	25
M16	17.3	60	36.1	150	17.3	60	23.6	60
M20	27.0	120	56.4	300	27.0	120	36.8	120

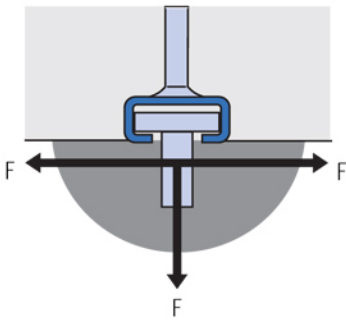
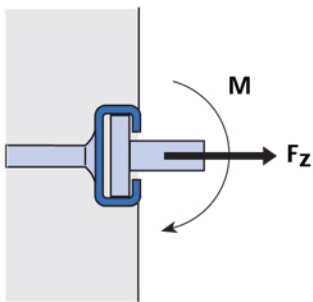


Table 7.2 Bending Moments of Tee-Bolts
(With respect to upper edge of channel or concrete)

Thread ∅	Grade 4.6 [Nm]	Grade 8.8 [Nm]	A4-50 [Nm]	A4-70 [Nm]
M8	5.0	—	—	9.4
M10	10.0	24.9	8.7	18.7
M12	17.5	43.7	15.3	32.8
M16	44.4	111.0	38.8	83.3
M20	86.5	216.4	75.7	162.3
M24	149.7	350.1	130.9	—
M27	221.9	—	—	—
M30	299.9	—	—	—



When bending occurs simultaneously with pull-out, bolt capacity F from table 7.1 should be reduced according to formula :

$$F_R = F \times \left(1 - \frac{M}{M_B}\right)$$

- Where
- F_R = Reduced working load of tee-bolt
 - F = Allowable load from Table 7.1
 - M = Working moment
 - M_B = Bending moment from Table 7.2