

Mechanical Stress and Load Limit

We use a Safety Factor of 3-4 for Critical Applications used for safety relevant infrastructure like automotive or aerospace. Products are NOT designed for use in situations where the rack will be transported while populated.

Breaking Load

Force until the bolt breaks or shears



engineered to withstand a load of 4600N (470kg), maximum operational load of 1500N (150kg)*

The bolt must not be tightened beyond 1 Nm, because the holding force adds to the fixing force through torque. **The user agrees to follow this advice. The manufacturer is not responsible for damage if the limit is exceeded.**

Torque Setting

Maximum torque (and torque limiter ring adjustment) to use with an (electric) tool to fasten the bolt



engineered to withstand a torque of 13,8 Nm, maximum operational torque of 1 Nm*

Electric Drill



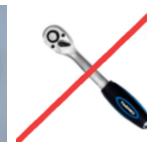
Increments on adjusting ring for fastening torque	Fastening torque
1	Approx. 0.3 Nm (Approx. 3 Kg/cm)
5	Approx. 0.82 Nm (Approx. 8.4 Kg/cm)
9	Approx. 1.35 Nm (Approx. 13.8 Kg/cm)
13	Approx. 1.88 Nm (Approx. 19.2 Kg/cm)
17	Approx. 2.41 Nm (Approx. 24.6 Kg/cm)
21	Approx. 2.94 Nm (Approx. 30 Kg/cm)
∞	At low speed: approx. 8 Nm (Approx. 81.6 Kg/cm) At high speed: approx. 1.5 Nm (Approx. 15.7 Kg/cm)

Torque Limiter Ring at max. 6 (1Nm)

Torque wrench / Torque screwdriver



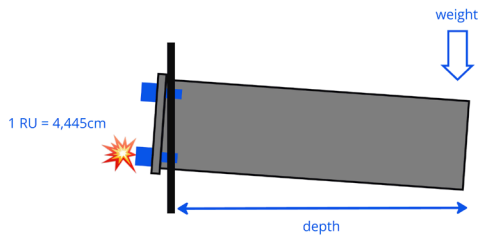
Torque Limiter at max. 1Nm



Do NOT use normal wrench!

Load Capacity

Holding weight at the end of a 1 RU component of a certain length in a rack with this bolt.



short depth | 8" - 20 cm

engineered to withstand a load of 2000N (200kg), maximum operational load of 500N (50kg / 110lbs)*

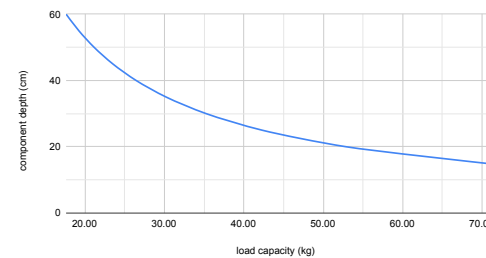
mid depth | 15" - 38 cm

engineered to withstand a load of 1000N (100kg), maximum operational load of 250N (25kg / 55lbs)*

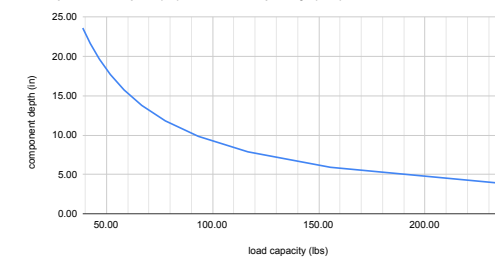
long depth | 24" - 60 cm

engineered to withstand a load of 700N (70kg), maximum operational load of 170N (17kg / 38 lbs)*

component depth (cm) vs. load capacity (kg)



component depth (in) vs. load capacity (lbs)



*) Safety factor of 3-4 for critical applications; applicable only to the mounting system; for stiff component with load distribution on both racks; ensure the rack, the component and its brackets can withstand these forces. By purchasing, you acknowledge and agree that, to the fullest extent permitted by law, neither Patchbox nor any related parties shall be liable for any damages or losses arising from the use or failure.