



TECHNICAL REFERENCE

Connector load table

All figures are static loads per axis, measured in-house on 28.0 mm OD, 1.2 mm wall steel pipe with bolts torqued to 4 N-m. For overhead or dynamic loads, apply a 2:1 safety factor. Draft values - to be confirmed by certified testing before publication.

Loads

Part	Name	Load per axis (static)	Fasteners
KG-12	Corner	340 kg	4 x M6 x 50
KG-13	Tee	310 kg	6 x M6 x 50
KG-24	Cross	310 kg	8 x M6 x 50
KG-45	Brace	280 kg	4 x M6 x 50
KG-31	Foot	340 kg	2 x M6 x 50 + 2 anchor holes
KG-22	Splice	340 kg	4 x M6 x 50
KG-51	Pivot	180 kg	4 x M6 x 50 + lock bolt
KG-61	Rail clamp	220 kg	2 x M6 x 50
KG-71	Wall mount	260 kg	2 x M6 x 50 + 2 wood screws

Notes

- Loads are per axis: a corner loaded on two axes at once carries less on each.
- A brace (KG-45) per bay roughly doubles the racking stiffness of a frame.
- Pivot (KG-51) figures apply with the lock bolt torqued; never load an unlocked pivot.
- Ratings assume pipe to spec. Thinner wall or larger clearance reduces every figure.