

UNIFAST BEAM CLAMPS

Product Description

Unifast beam clamps are manufactured from cast steel with a high corrosion resistance zinc flake coating and come in two sizes to suit M12 and M16 bolt sizes. The profile of the clamps is designed for the legs to locate on strut channel profiles or flat plates and the geometry of the bolt area ensures the bolt head remains flat to the clamp through the whole clamping range.

Applications

Unifast are universal beam clamps for clamping steel plates, strut profiles and secondary steelwork to steelwork flanges. They are extremely versatile and can accommodate a wide range of flange thicknesses up to 40mm making them highly usable for multiple clamping applications across a project. Additionally the clamping thickness can be increased by up to 10mm using a suitable steel spacer. Unifast are simple to install, give high safe load values and can be used in C4 corrosion classifications.

Installation

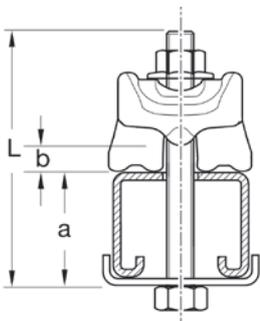
Unifast clamps are positioned with the legs resting on the component and the clamping lug located on the steelwork flange. An appropriate size of bolt is inserted through the clamp and component and tightened to the recommended torque setting. Unifast clamps should be used in pairs and the component clamped to both flanges of the steelwork.

Selection of Bolts

USC2 – M12 diameter set screw grade 8.8

USC4 – M16 diameter set screw grade 8.8

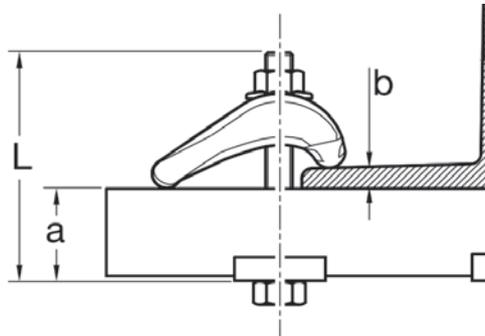
Calculating the bolt length



A. Bolted through example

M12: $L_{min} = a + b + 45mm$

M16: $L_{min} = a + b + 55mm$



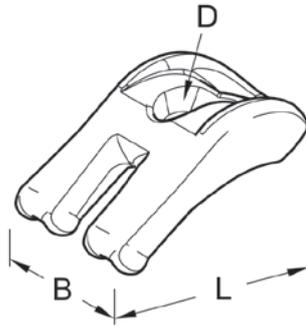
B. Bolt to channel nut example

M12: $L_{min} = b + 45mm$

M16: $L_{min} = b + 55mm$



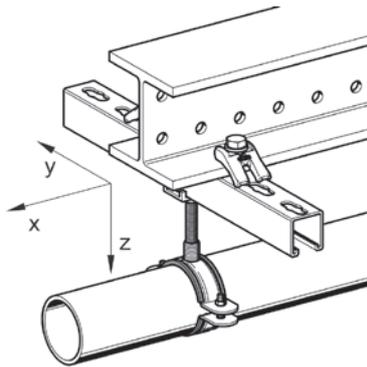
Technical Data



Dimensions

CODE	CLAMPING RANGE (MM)	DIMENSIONS (MM)		
		B	L	D
USC2	1 - 30	44	60	13
USC4	4 - 40	48	72	17

Loads



CODE	TIGHTENING TORQUE (Nm)	FZ (KN) *1	FX (KN) *2
USC2	85	13.8	3.2
USC4	150	16.7	3.6

*1 = Permitted load per beam clamp in Z direction

*2 = Shear force load capacity in X direction per 2 beam clamps with a coefficient of static friction $\mu = 0.20$