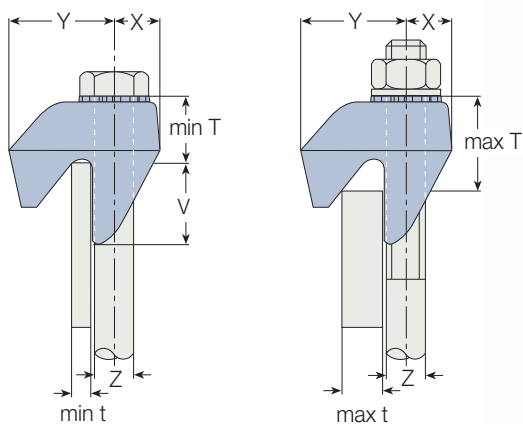
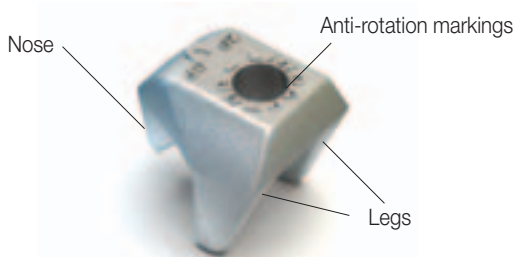


Type CF

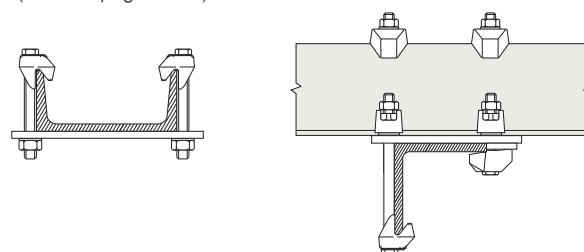
SG iron, hot dip galvanised



Typical Applications

(see also page 36-39)

High friction clamp which hooks over flanges of I-beams, angles and channels. Lindapter markings act as a unique anti-rotation device. Can be combined with all Lindapter Girder Clamp products including type AF.



Product Code	Bolt 8.8 Z	Safe Working Loads			Torque Nm	Dimensions					
		Tensile / 1 Bolt (5:1)	factor of safety (2:1)			Y mm	X mm	t mm	T mm	V mm	Width mm
		kN	Frictional ¹⁾ / 2 Bolts	Galv. Steelwork ²⁾							
CF12	M12	8.5	3.4	3.9	90	32	14	6 - 13	21 - 29	25	46
CF16	M16	16.0	8.0	10.0	240	44	18	8 - 16	25 - 33	32	56
CF20	M20	26.3	13.0	16.0	470	53	22	10 - 19	30 - 41	45	65

CF Combinations with other Lindapter Clamps					
		kN	kN	kN	Nm
CF / A ³⁾	M12	5.8	0.7	0.7	69
CF / A ³⁾	M16	7.3	1.5	1.7	147
CF / A ³⁾	M20	14.7	3	3.0	285
CF / AF	M12	8.5	3.4	3.9	90
CF / AF	M16	16.0	8.0	10.0	240
CF / AF	M20	26.3	13.0	16.0	470

■ Order example: CF12

1) Frictional load figures are based on type CF and location plate in HDG finish
 2) Shot blast and painted steelwork
 3) Also applies to type B, BR, LR, D2 or D3

Location and End Plates

- L_1 = Plate length
- L_2 = Plate width
- l_{1M}, l_{2M} = Hole centres
- b_1, b_2 = Flange width
- d = Hole \varnothing
- s = Plate thickness

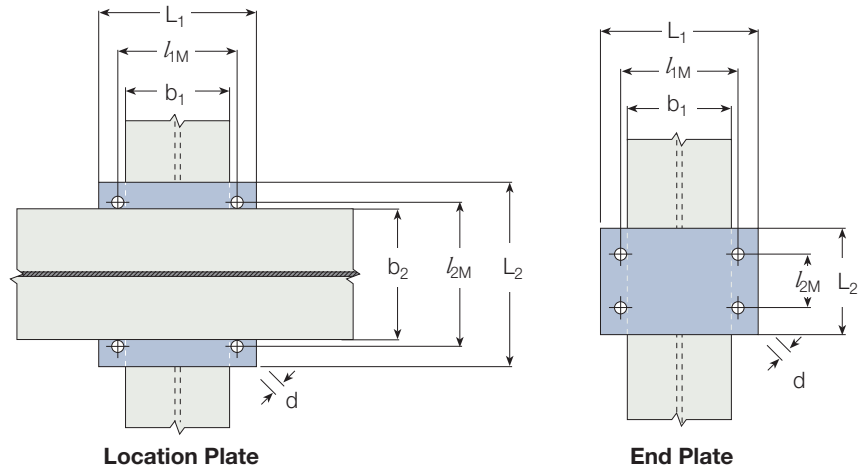


Plate Dimensions

Material: Mild Steel Grade S355 JR (for other grades please contact Lindapter)

Bolt	Hole \varnothing	Location Plate			End Plate ¹⁾				
		Plate Thickness	Hole Centres	Length/Width	Plate Thickness	Hole Centre	Length	Hole Centre	Width
Z	d	s	l_{1M}, l_{2M}	min $L_1, \text{min } L_2$	s	l_{1M}	min L_1	min l_{2M}	min L_2
	mm	mm	mm	mm	mm	mm	mm	mm	mm
M12	13	10	$b + 13$	$b + 90$	15	$b_1 + 13$	$b_1 + 90$	80	$l_{2M} + 80$
M16	18	15	$b + 18$	$b + 110$	25	$b_1 + 18$	$b_1 + 110$	100	$l_{2M} + 100$
M20	22	20	$b + 22$	$b + 130$	30	$b_1 + 22$	$b_1 + 130$	180	$l_{2M} + 180$
M24	26	25	$b + 26$	$b + 180$	40	$b_1 + 26$	$b_1 + 180$	200	$l_{2M} + 200$

1) Dependant on the use of the end plate the thickness might need to be increased.
 2) For combinations of Type CF with A, B and BR see page 15 and for types D2, D3 and LR see page 23.

Calculation of bolt length see page 11

Tail Length / Packing Combinations for Types AF

Parallel flanges and beams of up to 10° slope

Flange Thickness	Type AF															
	M12				M16				M20				M24			
mm	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFP1	AFP2	
5	s	-	-	-	■	-	-	-	■	-	-	-	■	-	-	
6	s	-	-	-	■	-	-	-	■	-	-	-	■	-	-	
7	s	1	-	-	s	-	-	-	■	-	-	-	■	-	-	
8	s	1	-	-	s	-	-	-	■	-	-	-	■	-	-	
9	s	2	-	-	s	-	-	-	s	-	-	-	■	-	-	
10	s	-	1	-	s	1	-	-	s	-	-	-	■	-	-	
11	s	3	-	-	s	1	-	-	s	-	-	-	■	-	-	
12	s	1	1	-	s	2	-	-	s	1	-	-	s	-	-	
13	m	-	-	-	s	-	1	-	s	1	-	-	s	-	-	
14	m	1	-	-	s	3	-	-	s	2	-	-	s	-	-	
15	s	-	-	1	m	-	-	-	s	-	1	-	s	-	-	
16	m	2	-	-	m	-	-	-	s	3	-	-	s	-	-	
17	m	-	1	-	s	1	-	-	m	-	-	-	s	-	-	
18	m	-	1	-	s	-	-	1	m	-	-	-	s	1	-	
19	m	1	1	-	m	-	1	-	m	-	-	-	s	1	-	
20	s	-	1	1	m	-	1	-	m	1	-	-	s	1	-	
21	m	2	1	-	m	-	1	-	m	1	-	-	s	1	-	
22	m	2	1	-	m	1	1	-	m	2	-	-	s	1	-	
23	m	-	-	1	m	1	1	-	m	-	1	-	s	-	1	
24	m	1	-	1	m	-	-	1	m	1	1	-	s	-	1	
25	s	-	-	2	m	-	-	1	m	1	1	-	s	-	1	
26	m	2	-	1	m	-	-	1	s	1	1	1	s	-	1	
27	m	2	-	1	m	1	-	1	s	1	1	1	m	-	-	

Flange Thickness	Type AF															
	M12				M16				M20				M24			
mm	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFCW	AFP1	AFP2	AF	AFP1	AFP2	
28	m	-	1	1	s	-	-	2	m	-	-	1	m	-	-	
29	m	1	1	1	m	-	1	1	m	-	-	1	m	-	-	
30	s	-	1	2	m	-	1	1	m	1	-	1	m	-	-	
31	s	-	1	2	m	-	1	1	m	1	-	1	m	-	-	
32	m	-	-	2	m	1	1	1	m	-	1	1	m	1	-	
33	m	-	-	2	m	1	1	1	m	-	1	1	m	1	-	
34	m	1	-	2	m	-	-	2	m	-	1	1	m	1	-	
35	s	-	-	3	m	-	-	2	s	-	1	2	m	1	-	
36	s	-	-	3	m	-	-	2	m	1	1	1	m	1	-	
37	m	-	1	2	m	1	-	2	m	-	-	2	m	1	-	
38	m	-	1	2	s	-	-	3	m	-	-	2	m	-	1	
39	m	1	1	2	m	-	1	2	m	-	-	2	m	-	1	
40	s	-	1	3	m	-	1	2	m	1	-	2	m	-	1	
41	s	-	1	3	m	-	1	2	m	1	-	2	m	-	1	
42	m	-	-	3	m	1	1	2	m	-	1	2	m	-	1	
43	m	-	-	3	s	-	1	3	m	-	1	2	m	1	1	
44	m	1	-	3	m	-	-	3	m	-	1	2	m	1	1	
45	s	-	-	4	m	-	-	3	m	1	1	2	m	1	1	
46	s	-	-	4	m	-	-	3	m	1	1	2	m	1	1	
47	m	-	1	3	m	1	-	3	m	-	-	3	m	1	1	
48	m	-	1	3	s	-	-	4	m	-	-	3	m	-	2	
49	s	-	1	4	m	-	1	3	m	-	-	3	m	-	2	
50	s	-	1	4	m	-	1	3	m	1	-	3	m	-	2	

s = short m = medium ■ = Type not applicable