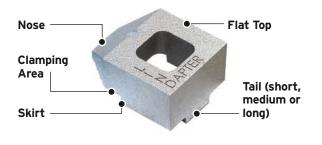
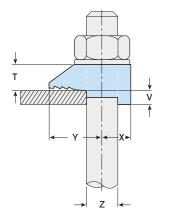
## Type B

The flat-top version of Lindapter's standard clamp, for moderate tensile loading. Can also be used with Type A in a Girder Clamp configuration.









- Flat top allows the bolt head or nut to rotate on a hardened washer.
- Suitable for use with bolts, studs, tie rods, J-bolts.
- Supports up to 78.8kN in a tensile four-bolt configuration.
- For higher loads the Type AF should be used, see page 14.
- Packings are available to increase the clamping range, see page 10.
- Location plate / end plate details can be found on page 11.

Material: Malleable iron, zinc plated or hot dip galvanised.



		Safe Working L	oads (FOS 5:1)		Dimensions											
Product	Bolt 8.8	Tensile	Slip	Tightening	Υ	Х		Tail Length V	т	Width						
Code	Z	/ 1 Bolt	/ 2 Bolts	Torque*			short	medium	long							
		kN	kN	Nm	mm	mm	mm	mm	mm	mm	mm					
B08	М8	1.0	-	6	16	8	-	4	-	8	20					
B10	M10	1.5	-	20	20	11	4	5	7	10	26					
B12	M12	5.8	0.7	69	26	13	4.5	6	9.5	12	29					
B16	M16	7.3	1.5	147	30	16	5.5	8	11	16	36					
B20	M20	14.7	3.0	285	36	19	7	10	12.5	19	46					
B24	M24	19.7	4.5	491	48	25	9	12	16	25	55					

<sup>\*</sup> Torque figures based on bolts / setscrews in an unlubricated condition. For further information on lubricated fasteners see page 70.



For Characteristic Resistances when designing a connection to Eurocode 3, please refer to DoP No.003 on the website www.Lindapter.com/About/CE









## Packing Pieces for Types A and B

These packing pieces are compatible with the Type A and Type B clamps and are used to increase the clamping range to suit flange thicknesses. Types A and B are available with three different tail lengths (short, medium or long) and the correct combination of packing pieces should be used.

### **Packing Pieces**

Mild steel, zinc plated or hot dip galvanised

**Bolt Size** 

М8

M10

M12

M16

M20

M24

\* CW08 is only available zinc plated.

Type CW



Product

Code CW08\*

CW10

CW12

CW16

CW20

**CW24** 



Dimension

2

2

2.5

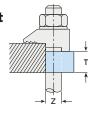
3

4

4

Type P1/P2 short



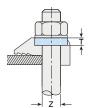


Mild steel, malleable iron, zinc plated or hot dip galv.

Product Code	Bolt Size Z	Dimension T (mm)				
P1S08	М8	4				
P1S10	M10	5				
P1S12	M12	6				
P1S16	M16	8				
P1S20	M20	10				
P1S24	M24	12				
P2S10	M10	10				
P2S12	M12	12				
P2S16	M16	16				
P2S20	M20	20				
P2S24	M24	25				

### 





Mild steel, malleable iron, zinc plated or hot dip galv.

Product Code	Bolt Size Z	Dimension T (mm)
W08	М8	4
W10	M10	5.5
W12	M12	6
W16	M16	8
W20	M20	10

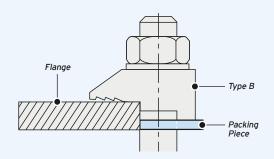
Note: The Type W is used to fill the recess in the Type A to convert it into a flat top clamp to enable the bolt head or nut to be rotated on a hardened

### Tail Length / Packing Piece Combinations for Types A and B

Choose the correct Type A/B configuration for your application using the table below.

For example, a M24 Type A/B on a 26mm flange requires 1 x Type A/B short tail (S), 1 x Type CW (CW) and 1 x Type P1 short (P1S).

For thicker flanges contact Lindapter.



Flange Thickness		М	12			М	116			М	20		M24		Flange Thickness		М	12			М	116			M	20			М2	4			
mm	A/B	CW	P1S	P2S	A/B	CW	P1S	P2S	A/B	CW	P1S	P2S	A/B	CW	P1S	P2S	mm	A/B	CW	P1S	P2S												
5	S	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	17	М	2	1	-	L	2	-	-	S	-	1	-	S	2	-	-
6	М	-	-	-	S	-	-	-	-	-	-	-	-	-	-	-	18	М	-	-	1	L	2	-	-	М	2	-	-	S	2	-	-
7	S	1	-	-	М	-	-	-	S	-	-	-	-	-	-	-	19	S	1	-	1	L	-	1	-	S	3	-	-	L	1	-	-
8	S	1	-	-	М	-	-	-	S	-	-	-	-	-	-	-	20	S	1	-	1	L	3	-	-	М	-	1	-	L	1	-	-
9	М	1	-	-	S	1	-	-	М	-	-	-	S	-	-	-	21	М	1	-	1	L	3	-	-	S	1	1	-	S	-	1	-
10	L	-	-	-	L	-	-	-	М	-	-	-	S	-	-	-	22	L	-	-	1	L	1	1	-	М	3	-	-	S	-	1	-
11	М	2	-	-	L	-	-	-	S	1	-	-	М	-	-	-	23	S	-	1	1	L	1	1	-	L	-	1	-	М	-	1	-
12	L	1	-	-	S	2	-	-	S	1	-	-	М	-	-	-	24	М	-	1	1	М	-	-	1	М	1	1	-	М	-	1	-
13	S	1	1	-	S	-	1	-	L	-	-	-	S	1	-	-	25	S	1	1	1	L	2	1	-	S	2	1	-	S	1	1	-
14	S	1	1	-	L	1	-	-	М	1	-	-	S	1	-	-	26	S	1	1	1	L	2	1	-	S	2	1	-	S	1	1	-
15	L	2	-	-	S	3	-	-	S	2	-	-	L	-	-	-	28	L	-	1	1	S	2	-	1	М	2	1	-	L	-	1	-
16	L	-	1	-	М	-	1	-	S	2	-	-	L	-	-	-	30	М	-	-	2	L	1	-	1	М	-	-	1	S	2	1	-





A/B = Type A/B S = A/B short M = A/B medium L = A/B long CW = Type CW P1S = Type P1 short P2S = Type P2 short





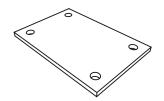
# Location and End Plates for Types A and B

These plates ensure the clamps and bolts are located in the correct position relative to the supporting steelwork. If you would like help choosing a suitable plate, please contact Lindapter.

### **Location Plate**

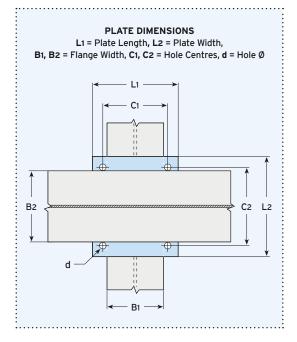
#### What is it?

Location plates are simple fabricated items designed to sit between the two sections to be clamped together to ensure the bolts are fixed at the correct centres.



Material: Structural steel grade S275 JR or JO. For other grades contact Lindapter.

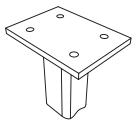
Bolt Size	Hole Ø	Plate Thick.	Hole Centres	Length	Hole Centres	Width
	d mm	mm	C1 mm	min L1 mm	C2 mm	min L2 mm
М8	9	6	B <sub>1</sub> + 9	B1 + 36	B2 + 9	B2 + 36
M10	11	8	B1 + 11	B1 + 44	B2 + 11	B2 + 44
M12	14	8	B1 + 14	B1 + 54	B2 + 14	B2 + 54
M16	18	10	B1 + 18	B1 + 70	B2 + 18	B2 + 70
M20	22	12	B1 + 22	B1 + 88	B2 + 22	B2 + 88
M24	26	15	B1 + 26	B1 + 104	B2 + 26	B2 + 104



#### End Plate ······

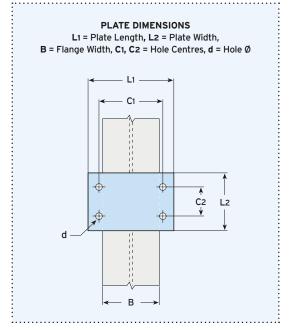
#### What is it?

End plates are simple fabricated items that are pre-welded to support frames, bracket or sections, allowing connection to the supporting structure with standard Lindapter clamps.



Material: Structural steel grade S275 JR or JO. For other grades contact Lindapter.

Bolt Size	Hole Ø	Plate Thick. <sup>1)</sup>	Hole Centre	Length	Hole Centre	Width
	d mm	mm	C1 mm	min L1 mm	min C2 mm	min L2 mm
М8	9	10	B + 9	B + 36	40	C <sub>2</sub> + 40
M10	11	12	B + 11	B + 44	50	C <sub>2</sub> + 40
M12	14	12	B + 14	B + 54	60	C <sub>2</sub> + 50
M16	18	15	B + 18	B + 70	70	C <sub>2</sub> + 60
M20	22	20	B + 22	B + 88	90	C2 + 70
M24	26	25	B + 26	B + 104	110	C2 + 90



- 1) Depending on the type of connection and associated end plate use, the thickness may need to be modified to comply with accepted local design codes.
- To calculate the bolt length, add up the total distance that the bolt will pass through, plus half of the bolt diameter. Then round up the total to the nearest available bolt length. An example can be found on page 6.







