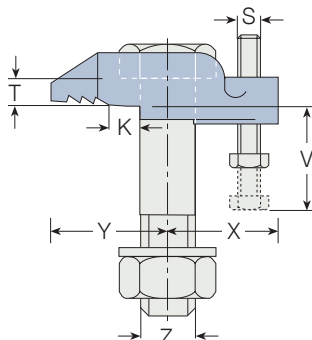
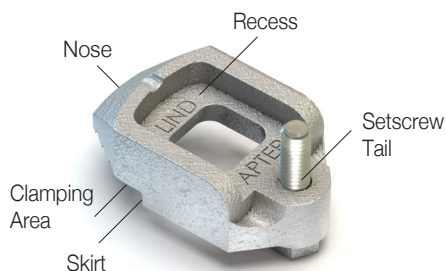
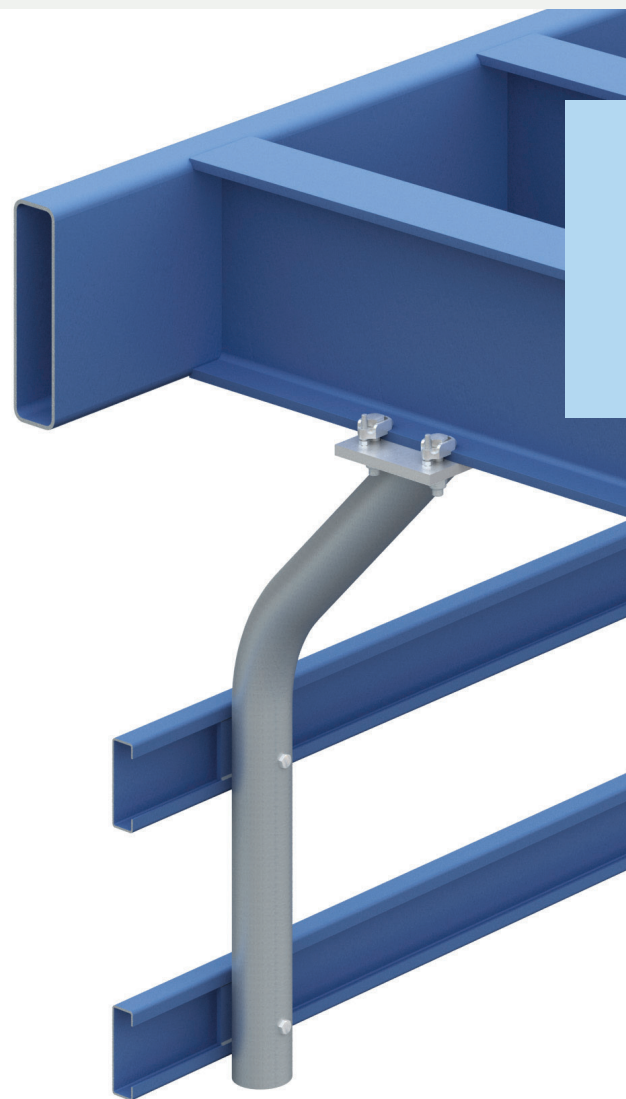
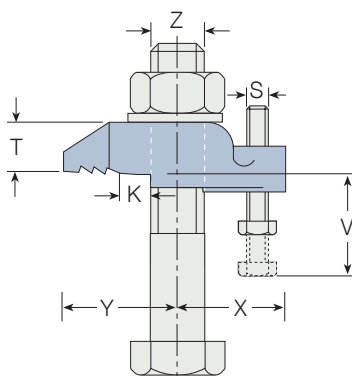
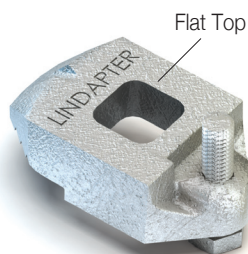


Type D2

Malleable iron, bright zinc plated /
hot dip galvanised

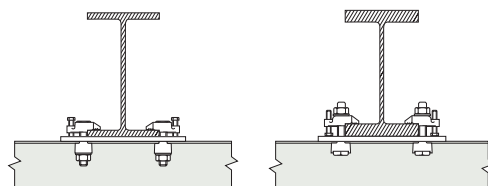
**Type D3**

Malleable iron, bright zinc plated /
hot dip galvanised



Adjustable clamps that incorporate a setscrew to accommodate a wide range of flange thicknesses. Type D2 has a recessed head to hold the bolt head captive. The skirt prevents the clamp rotating during installation. For flanges up to 5°. For thicker flanges packings P1 long and P2 long are available. For correct packing combinations please see page 23.

Correct Installation: Setscrew *S* needs to be adjusted so that *V* is 1mm shorter than the flange thickness prior to installation. Adjust the setscrew after installation so that the bolt *Z* is 90° to the clamp and the clamp contacts the flange with the clamping area only.

Typical Applications (see also page 34-37)

Product Code	Bolt 8.8 Z	Safe Working Loads (5:1 Factor of Safety)		Tightening Torque Nm	Clamping Range		Dimensions				
		Tensile / 1 Bolt kN	Frictional / 2 Bolts kN		V ¹⁾ mm	V ²⁾ mm	Y mm	X mm	S mm	T mm	Width mm
D210	M10	1.5	-	20	5 - 10	10 - 20	20	20	M6	5	26
D212	M12	5.8	0.7	69	5 - 10	10 - 22	26	25	M6	6	29
D216	M16	7.3	1.5	147	6.5 - 13	13 - 20	30	30	M8	8	35
D220	M20	14.7	3	285	8.5 - 17	17 - 24	36	35	M10	10	42
D224	M24	19.7	4.5	491	10 - 19	19 - 30	48	49	M12	12	54
D312	M12	5.8	0.7	69	5 - 10	10 - 22	26	25	M6	12	29
D316	M16	7.3	1.5	147	6.5 - 13	13 - 20	30	30	M8	16	35

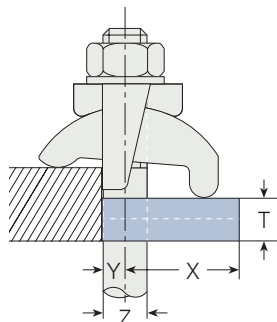
1) Setscrew *S* inserted from above.

2) Setscrew *S* inserted from below.

Order example: D210 BZP

Type P1 long / P2 long

Mild Steel, malleable iron, bright zinc plated / hot dip galvanised



A packing used to adjust the tail length of the clamp to meet differing beam flange thicknesses.

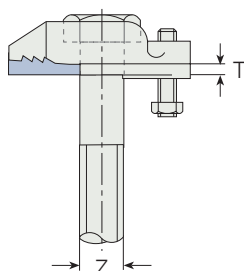
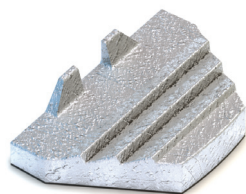


Product Code (P1) (P2)	Bolt Z	Dimensions				
		Y mm	X mm	(P1) T mm	(P2) T mm	Width mm
P1L10 P2L10	M10	5	24	5	10	24
P1L12 P2L12	M12	6	32	6	12	30
P1L16 P2L16	M16	8	40	8	16	35
P1L20 P2L20	M20	10	47	10	20	43
P1L24 P2L24	M24	12	64	12	24	54

Order example: P1L10 BZP

Type T

Malleable iron, bright zinc plated / hot dip galvanised



A packing to fill the nose of Type D2 and D3 making it horizontal. For parallel flanges only. The thickness 'T' should be added for tail length and bolt length calculations. The product is for aesthetic purposes only and is not mandatory from a technical perspective.

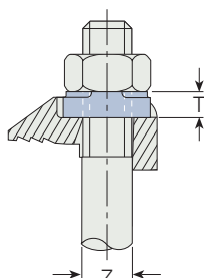
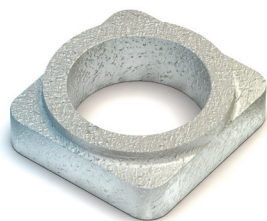


Product Code	Bolt Z	Dimensions
		T mm
T12	M12	3
T16	M16	4
T20	M20	5
T24	M24	6.5

Order example: T12 BZP

Type W

Mild Steel, malleable iron, bright zinc plated / hot dip galvanised



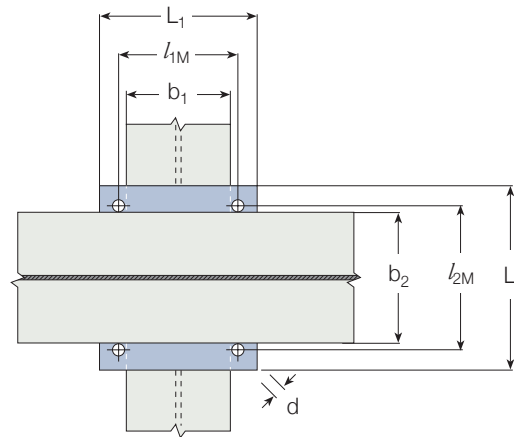
A washer used to fill the recess of Type D2 to enable the nut to be tightened. When calculating the bolt length, please add 'T'.

Product Code	Bolt Z	Dimensions
		T mm
W08	M8	4
W10	M10	5.5
W12	M12	6.5
W16	M16	8
W20	M20	9.5

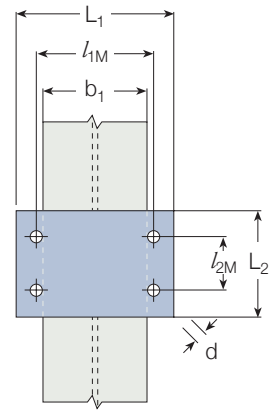
Order example: W08 BZP

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



Location Plate



End Plate

Plate Dimensions

Material: Mild Steel Grade S275 JR (for other grades please contact Lindapter).

Bolt Z	Hole $\varnothing$ d mm	Location Plate			End Plate ¹⁾				
		Plate Thickness s mm	Hole Centres l_{1M}, l_{2M} mm	Length/Width min L_1 , min L_2 mm	Plate Thickness s mm	Hole Centre l_{1M} mm	Length min L_1 mm	Hole Centre min l_{2M} mm	Width min L_2 mm
M10	11	12	$b + 11$	$b + 66$	15	$b_1 + 11$	$b_1 + 66$	70	$l_{2M} + 50$
M12	13	12	$b + 13$	$b + 81$	15	$b_1 + 13$	$b_1 + 81$	80	$l_{2M} + 60$
M16	18	15	$b + 18$	$b + 105$	20	$b_1 + 18$	$b_1 + 105$	100	$l_{2M} + 70$
M20	22	20	$b + 22$	$b + 132$	25	$b_1 + 22$	$b_1 + 132$	120	$l_{2M} + 90$
M24	26	25	$b + 26$	$b + 156$	30	$b_1 + 26$	$b_1 + 156$	150	$l_{2M} + 110$

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.

Calculation of bolt length see page 10

Packing Combinations for Type LR

Parallel flanges

Type	M10	M12	M16	M20	M24
Combinations	Clamping Range				
LR P1L P2L	mm	mm	mm	mm	mm
1 - -	3 - 10	3 - 12	3 - 16	3 - 20	3 - 24
1 1 -	8 - 15	9 - 18	11 - 24	13 - 30	15 - 36
1 - 1	13 - 20	15 - 24	19 - 32	23 - 40	27 - 48
1 1 1	18 - 25	21 - 30	27 - 40	33 - 50	39 - 60
1 - 2	23 - 30	27 - 36	35 - 48	43 - 60	51 - 72
1 1 2	28 - 35	33 - 42	43 - 56	53 - 70	63 - 84
1 - 3	33 - 40	39 - 48	51 - 64	63 - 80	75 - 96

Packing Combinations for Type D2 & D3

Parallel flanges and beams of up to 5° slope

Type	M10	M12	M16	M20	M24
Combinations	Clamping Range				
D P1L P2L	mm	mm	mm	mm	mm
1 ¹⁾ - -	5 - 10	5 - 10	6.5 - 13	8.5 - 17	10 - 19
1 - -	10 - 20	10 - 22	13 - 20	17 - 24	19 - 30
1 1 -	15 - 25	16 - 28	21 - 28	27 - 34	31 - 42
1 - 1	20 - 30	22 - 34	29 - 36	37 - 44	43 - 54
1 1 1	25 - 35	28 - 40	37 - 44	47 - 54	55 - 66
1 - 2	30 - 40	34 - 46	45 - 52	57 - 64	67 - 78
1 1 2	35 - 45	40 - 52	53 - 60	67 - 74	79 - 90
1 - 3	40 - 50	46 - 58	61 - 68	77 - 84	91 - 102

1) Setscrew S inverted.

Packing Combinations for Type LR

For IPN-Beams of an 8° slope

IPN Profile	M10	M12	M16	M20	M24
LR P1L P2L	LR P1L P2L	LR P1L P2L	LR P1L P2L	LR P1L P2L	LR P1L P2L
80	1 - -	■ - -	■ - -	■ - -	■ - -
100	1 - -	1 - -	■ - -	■ - -	■ - -
120	1 - -	1 - -	1 - -	■ - -	■ - -
140	1 - -	1 - -	1 - -	■ - -	■ - -
160	1 - -	1 - -	1 - -	1 - -	■ - -
180	1 - -	1 - -	1 - -	1 - -	■ - -
200	1 - -	1 - -	1 - -	1 - -	■ - -
220	1 - -	1 - -	1 - -	1 - -	1 - -
240	1 1 -	1 - -	1 - -	1 - -	1 - -
260	1 1 -	1 - -	1 - -	1 - -	1 - -
280	1 1 -	1 1 -	1 - -	1 - -	1 - -
300	1 1 -	1 1 -	1 - -	1 - -	1 - -
320	1 1 -	1 1 -	1 - -	1 - -	1 - -
340	1 1 -	1 1 -	1 - -	1 - -	1 - -
360	1 - 1	1 1 -	1 1 -	1 - -	1 - -
380	1 - 1	1 1 -	1 1 -	1 - -	1 - -
400	1 - 1	1 1 -	1 1 -	1 - -	1 - -
425	1 - 1	1 - 1	1 1 -	1 1 -	1 - -
450	1 - 1	1 - 1	1 1 -	1 1 -	1 - -
475	1 1 1	1 - 1	1 1 -	1 1 -	1 - -
500	1 1 1	1 - 1	1 1 -	1 1 -	1 - -
550	1 1 1	1 1 1	1 - 1	1 1 -	1 - -
600	■ - -	1 1 1	1 - 1	1 1 -	1 1 -

P1L = P1 long P2L = P2 long ■ = Type not applicable

➔ For thicker flanges please contact Lindapter.