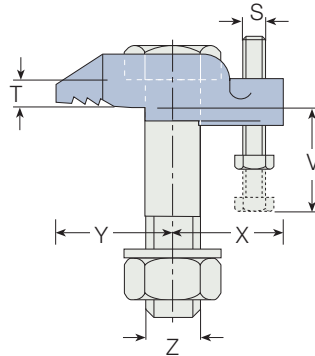
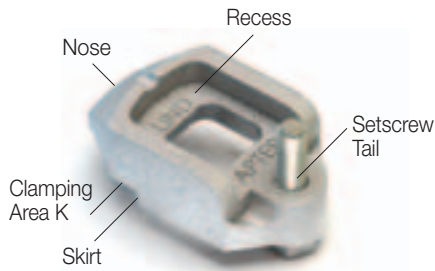


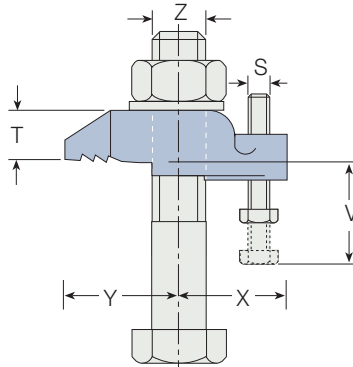
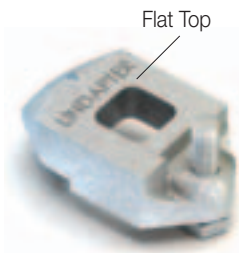
Type D2

Malleable iron, bright zinc plated, hot dip galvanised



Type D3

Malleable iron, bright zinc plated, hot dip galvanised

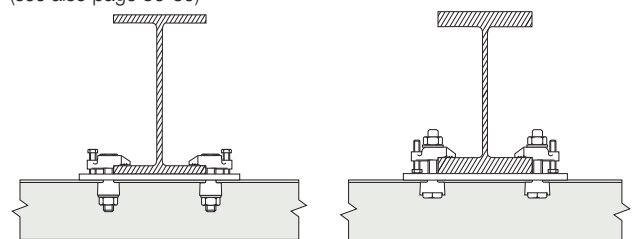


Adjustable clamps incorporate a setscrew to accommodate a wide range of flange thicknesses. Type D2 has a recessed head to hold the bolt head captive. The skirt prevents the clamp rotating during installation. For flanges up to 5°. For thicker flanges packings P1 long and P2 long are available. For correct tail length/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 area 'K' only.

Typical Applications

(see also page 36-39)



Product Code	Bolt 8.8 Z	Safe Working Loads (5:1 Factor of Safety)			Clamping Range		Dimensions				
		Tensile / 1 Bolt kN	Frictional / 2 Bolts kN	Torque Nm	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

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

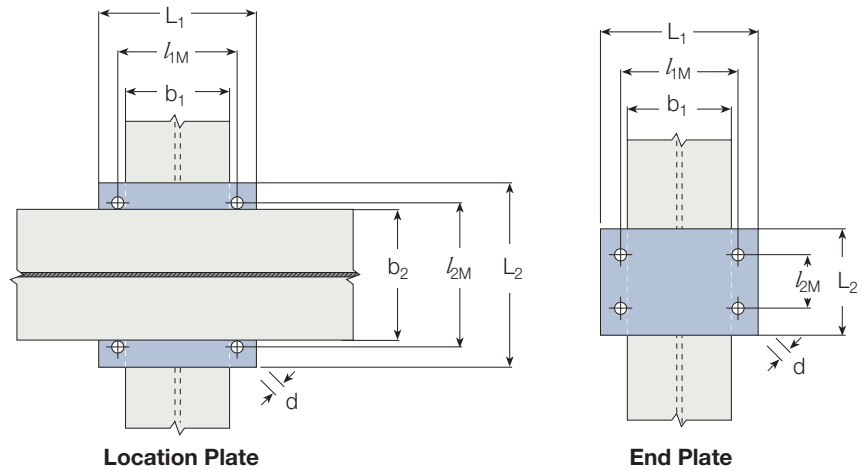


Plate Dimensions
Material: Mild Steel Grade S275 JR

Bolt Z	Hole \varnothing d	Location Plate			End Plate ¹⁾				
		Plate Thickness s	Hole Centres l_{1M}, l_{2M}	Length/Width min $L_1, \min L_2$	Plate Thickness s	Hole Centre l_{1M}	Length min L_1	Hole Centre min l_{2M}	Width min L_2
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⁾ Dependant on the use of the end plate the thickness might need to be increased.

Calculation of bolt length see page 11

Tail Length / Packing Combinations for Type LR

Parallel flanges

Type	M 10	M 12	M 16	M 20	M 24
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

Tail Length / Packing Combinations for Type D2 & D3

Parallel flanges and beams of up to 5° slope

Type	M 10	M 12	M 16	M 20	M 24
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.

Tail Length / 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	
80	1	-	-	■	-	-	■	-	-	■	-
100	1	-	-	1	-	-	■	-	-	■	-
120	1	-	-	1	-	-	1	-	-	■	-
140	1	-	-	1	-	-	1	-	-	■	-
160	1	-	-	1	-	-	1	-	-	■	-
180	1	-	-	1	-	-	1	-	-	■	-
200	1	-	-	1	-	-	1	-	-	■	-
220	1	-	-	1	-	-	1	-	-	1	-
240	1	1	-	1	-	-	1	-	-	1	-
260	1	1	-	1	-	-	1	-	-	1	-
280	1	1	-	1	1	-	1	-	-	1	-
300	1	1	-	1	1	-	1	-	-	1	-
320	1	1	-	1	1	-	1	-	-	1	-
340	1	1	-	1	1	-	1	-	-	1	-
360	1	-	1	1	1	-	1	-	-	1	-
380	1	-	1	1	1	-	1	-	-	1	-
400	1	-	1	1	1	-	1	-	-	1	-
425	1	-	1	1	1	-	1	1	-	1	-
450	1	-	1	1	1	-	1	1	-	1	-
475	1	1	1	1	1	-	1	1	-	1	-
500	1	1	1	1	1	-	1	1	-	1	-
550	1	1	1	1	1	1	1	1	-	1	-
600	■	-	-	1	1	1	1	1	-	1	1

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

For thicker flanges please contact Lindapter.

