

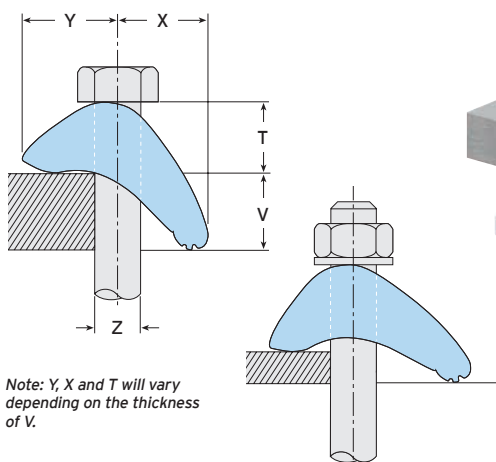
Type LS

Providing excellent corrosion resistance, Lindapter's stainless steel clamp self-adjusts to suit a range of flange thicknesses.

Nose



Tail



Note: Y, X and T will vary depending on the thickness of V.

- Made from high strength stainless steel grade 316.
- Self-adjusts to suit 3mm - 30mm flange thicknesses (size M20).
- For parallel and tapered flanges up to 10°.
- The tail spans slotted clearance holes.

➤ Packings are available to increase the clamping range, see page 23.

➤ Location plate / end plate details can also be found on page 23.

Material: Cast stainless steel grade 316.



| Product Code | Bolt A4-70 Z | Safe Working Loads | | Tightening Torque* | Clamping Range V mm | Dimensions | | | |
|--------------|--------------|-------------------------------------|---|--------------------|------------------------|------------|---------|---------|-------------|
| | | Tensile / 1 Bolt (FOS 5:1) kN | Slip ¹⁾ / 2 Bolts (FOS 2:1) kN | | | Y mm | X mm | T mm | Width mm |
| LS10 | M10 | 3.0 | 1.5 | 40 | 3 - 15 | 17 - 19 | 18 - 24 | 16 - 21 | 38 |
| LS12 | M12 | 7.0 | 2.0 | 80 | 3 - 20 | 16 - 22 | 18 - 29 | 17 - 23 | 40 |
| LS16 | M16 | 10.0 | 3.0 | 200 | 3 - 25 | 22 - 25 | 27 - 37 | 20 - 28 | 55 |
| LS20 | M20 | 18.0 | 5.0 | 400 | 3 - 30 | 24 - 31 | 25 - 42 | 23 - 32 | 60 |

¹⁾ Slip resistant values calculated against movement exceeding 0.1mm.

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



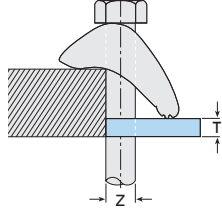
For Characteristic Resistances when designing a connection to Eurocode 3, please refer to DoP No.008 on the website www.Lindapter.com

Packing Pieces and Plate Details for Type LS

Stainless steel packing pieces are available to increase the clamping range of the Type LS, please select the correct packing combination from the table below. This page also contains information for designing location / end plates.

Packing Pieces

Type
LSP2



Material: Stainless steel grade 316.

| Product Code | Bolt Size Z | Dimension T (mm) |
|--------------|-------------|------------------|
| LS10P2 | M10 | 10 |
| LS12P2 | M12 | 10 |
| LS16P2 | M16 | 10 |
| LS20P2 | M20 | 10 |

Packing Combinations for Type LS

Choose the correct combination for your configuration using the table below. Please note these calculations are for **parallel flanges and beams up to 10° slopes only**. For example, a size M20 Type LS on a 42mm flange requires 2 x Type LSP2.

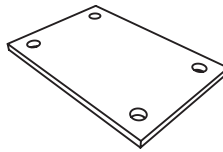
| Combinations | | Clamping Range | | | |
|--------------|------|----------------|---------|---------|---------|
| LS | LSP2 | M10 mm | M12 mm | M16 mm | M20 mm |
| 1 | - | 3 - 15 | 3 - 20 | 3 - 25 | 3 - 30 |
| 1 | 1 | 13 - 25 | 13 - 30 | 13 - 35 | 13 - 40 |
| 1 | 2 | 23 - 35 | 23 - 40 | 23 - 45 | 23 - 50 |

➔ For thicker flanges please contact Lindapter.

Location Plate

What is it?

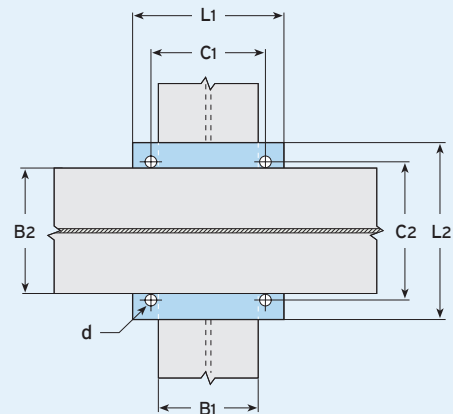
Location plates are simple fabricated items designed to sit between the two sections to be clamped together to ensure the bolts are fixed at the correct centres.



Material: Stainless steel grade 304 / 316.

| 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 |
| M10 | 11 | 10 | B1 + 11 | B1 + 70 | B2 + 11 | B2 + 70 |
| M12 | 14 | 12 | B1 + 14 | B1 + 80 | B2 + 14 | B2 + 80 |
| M16 | 18 | 15 | B1 + 18 | B1 + 100 | B2 + 18 | B2 + 100 |
| M20 | 22 | 20 | B1 + 22 | B1 + 130 | B2 + 22 | B2 + 130 |

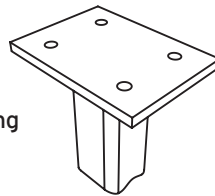
PLATE DIMENSIONS: L1 = Plate Length, L2 = Plate Width, B1, B2 = Flange Width, C1, C2 = Hole Centres, d = Hole Ø



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: Stainless steel grade 304 / 316.

| Bolt Size | Hole Ø | Plate Thick. ¹⁾ | Hole Centres | Length | Hole Centres | Width |
|-----------|--------|----------------------------|--------------|-----------|--------------|-----------|
| | d mm | mm | C1 mm | min L1 mm | min C2 mm | min L2 mm |
| M10 | 11 | 10 | B + 11 | B + 70 | 80 | C2 + 60 |
| M12 | 14 | 15 | B + 14 | B + 80 | 80 | C2 + 60 |
| M16 | 18 | 20 | B + 18 | B + 100 | 110 | C2 + 80 |
| M20 | 22 | 25 | B + 22 | B + 130 | 120 | 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.

PLATE DIMENSIONS: L1 = Plate Length, L2 = Plate Width, B = Flange Width, C1, C2 = Hole Centres, d = Hole Ø

