

# Expansion plug ISP

Affordable expansion plug for secure hold.

## Long Description

The Upat Expansion plug ISP is a pure nylon expansion plug and is excellent for securing light to medium loads in both solid and hollow building materials. When a screw is inserted and tightened, the plug expands within the drilled hole, providing secure anchoring in the building material. This expansion plug is commonly used for securing lamps, pictures, electrical installations and wall cabinets.

## Characteristics

- Building material: Concrete, solid construction
- Load range: Tension load, shear load, and oblique load 0,24-1,85kN
- Material: Nylon
- Feature: Drill diameter 5-14mm

## Applications

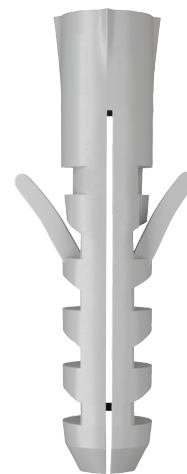
- Towel holder
- Mirror cabinet
- Wall shelves
- Screen brackets

## Advantages

- Upat nylon quality: Robust - durable - recyclable
- Edge mounting: Dual expansion allows for targeted force transmission parallel to the edge of the building material
- Secure application: The anti-rotation lock prevents the nylon expansion plug from rotating in the borehole
- Flexible installation: Suitable for pre- and through-hole mounting
- Secure screw guidance: Due to the internal serration of the nylon expansion plug

## Materials

- Sand-lime solid brick
- Dense natural stone
- Concrete
- Solid lightweight concrete block
- Solid brick

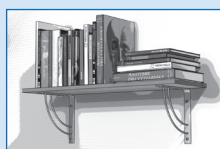


Straight to the product

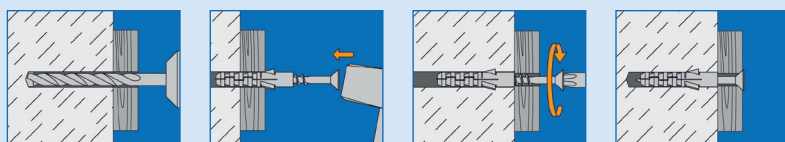


[upat.com/en-isp](https://upat.com/en-isp)

## Application examples



## Assembly



## Product variants

| Product | Art.No. | Drill diameter | Anchor length | Min. drill hole depth | Wood and chipboard screws | Sales unit |
|---------|---------|----------------|---------------|-----------------------|---------------------------|------------|
| ISP 5   | 577086  | 5              | 25            | 35                    | 3.0 - 4.0                 | 100        |
| ISP 6   | 577087  | 6              | 30            | 40                    | 4.0 - 5.0                 | 100        |
| ISP 8   | 577088  | 8              | 40            | 55                    | 5.0 - 6.0                 | 100        |
| ISP 10  | 577089  | 10             | 50            | 65                    | 6.0 - 8.0                 | 50         |
| ISP 12  | 577090  | 12             | 60            | 75                    | 8.0 - 10.0                | 25         |
| ISP 14  | 577091  | 14             | 70            | 90                    | 10.0 - 12.0               | 20         |

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## Load table

Highest recommended loads<sup>1)2)3)</sup> of a single anchor.

| Type   | Concrete $\geq$ C20/25<br>$F_{rec}^{4)}$ [kN] | Solid brick $\geq$ Mz 12<br>$F_{rec}^{4)}$ [kN] | Solid sand-lime brick $\geq$ KS 12<br>$F_{rec}^{4)}$ [kN] |
|--------|-----------------------------------------------|-------------------------------------------------|-----------------------------------------------------------|
| ISP 5  | 0,28                                          | 0,24                                            | 0,24                                                      |
| ISP 6  | 0,40                                          | 0,28                                            | 0,28                                                      |
| ISP 8  | 0,60                                          | 0,50                                            | 0,55                                                      |
| ISP 10 | 1,10                                          | 5)                                              | 5)                                                        |
| ISP 12 | 1,50                                          | 5)                                              | 5)                                                        |
| ISP 14 | 1,85                                          | 5)                                              | 5)                                                        |

<sup>1)</sup> Safety factor requirement considered.

<sup>2)</sup> Load values apply to the largest screw diameter.

<sup>3)</sup> For anchorages close to the edge, it is recommended to orient the anchor with the expansion direction parallel to the edge of the component.

<sup>4)</sup> Valid for tension, shear, and oblique loads at any angle.

<sup>5)</sup> Due to failure of the substrate varies too much no reproducible values can be given.