

Pressure bolts JDS

**JORDAHL®
pressure bolt**

JORDAHL® pressure bolts are spacer bolts. They are primarily used in the installation of precast elements and are used to transmit compressive forces resulting from dead weight or wind loads. Tensile forces cannot be absorbed.

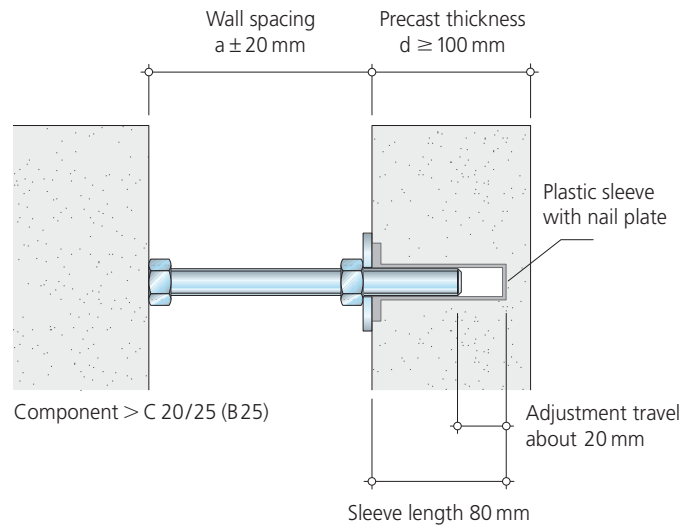
Constituents

The construction comprises

- a plastic sleeve with a nail plate, which is arranged in the precast element or in the insitu concrete,
- a suitable bolt with nuts and washer made of stainless steel 1.4401 (A4) nach EN 10088.

Application advice

In order to permit adjustment, the bolt should be arranged about 15 cm away from the edge of the fabricated part. In this case, the edge spacing from the upper edge of the plate should be $a_r \geq 1,5 \times d$ (d = plate thickness). The fact that the forces are passed on in the concrete must be verified and ensured by adequate reinforcement in the force introduction region. In combination with a tube socket (→ p. 55), the pressure bolt joint can also be braced against inadvertent detachment.



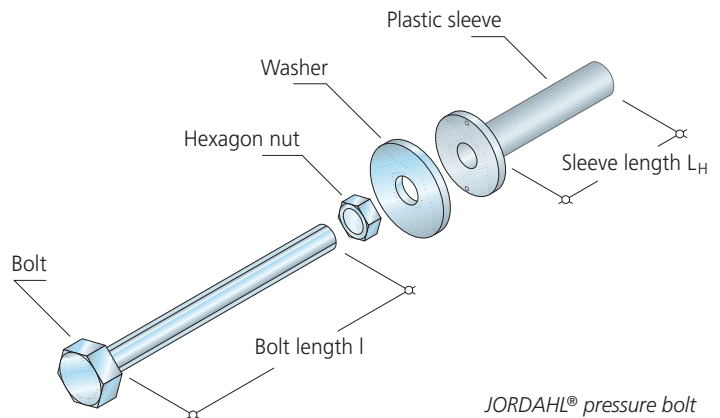
Design resistance to Eurocode

$F_{Rd} = perm. F \times 1.4$

The design values of the load bearing capacities are shown in *italics* in the tables.

Permissible pressure forces					
Bolt length [mm]	for wall spacing $a \pm 20$ [mm]	perm. pressure force F_k ¹⁾ [kN]			
		F_{Rd} [kN] M 10	M 12	M 16	M 20
80	40	7.3 <i>10.2</i>	11.0 <i>15.4</i>	21.4 <i>30.0</i>	33.4 <i>47.0</i>
100	60	6.5 <i>9.1</i>	10.0 <i>14.0</i>	20.0 <i>28.0</i>	32.6 <i>45.6</i>
120	80	5.8 <i>8.1</i>	9.1 <i>12.7</i>	18.7 <i>26.2</i>	30.8 <i>43.1</i>
140	100	5.2 <i>7.3</i>	8.3 <i>11.6</i>	17.5 <i>24.5</i>	29.2 <i>40.9</i>
160	120	4.6 <i>6.4</i>	7.6 <i>10.6</i>	16.4 <i>23.0</i>	27.7 <i>38.8</i>
180	140	4.1 <i>5.7</i>	6.9 <i>9.7</i>	15.3 <i>21.4</i>	26.2 <i>36.7</i>
200	160	3.7 <i>5.2</i>	6.3 <i>8.8</i>	14.3 <i>20.0</i>	24.8 <i>34.7</i>
220 ²⁾	180	3.3 <i>4.6</i>	5.7 <i>8.0</i>	13.3 <i>18.6</i>	23.5 <i>32.9</i>
240 ²⁾	200	3.0 <i>4.2</i>	5.2 <i>7.3</i>	12.4 <i>17.4</i>	22.3 <i>31.2</i>

1) Calculation of the loadbearing capacity (steel failure) to Eurocode EC3 and Z-30.3-6 "Components and joining means of stainless steels".
2) Special lengths on request



Order example
JORDAHL® pressure bolt JDS,
Length 80 mm, M 10

JDS - M10 × 80

Type Ø Bolt length

Round plastic sleeve fitting the pressure bolt JDS M10