

# DSI Ductile Hollow Bar Bolt R28

Product code: DSIHBR28DUC24dm

Product specification: Ductile self-drilling hollow core bolt

Category: Hollow core bolts to be grouted with pumpable resin

## Introduction

The DSI Ductile Hollow Bar Bolt R28 is a highly compliant hollow core bolt, offering a very high deformation capacity and fast and safe self-drilling installation with trouble-free application in unstable boreholes. It enables fast development, especially in a jointed/broken rock mass and speeding up the rehabilitation works.



## Key features

- Very high deformability
- For squeezing and jointed or broken ground conditions
- Fast and safe self-drilling installation with trouble-free application in unstable boreholes
- Best results with pumpable resin systems (Mineral Bolt)
- Special heat treatment of the entire bolt allows for elongation and high deformation capacity

## Main advantages

- Fast drilling and placing due to drilling, bolt installation and grouting in a single operation
- Neither separate installation nor removal of casing and drill rods
- Similar installation methods for all ground conditions
- Choice of drill bits for different ground conditions
- The hollow core not only provides flushing with air or water during drilling, but also grouting the anchor tendon

## Technical specifications

| Description                                | Unit | DSI Ductile Hollow Bar Bolt R28               |
|--------------------------------------------|------|-----------------------------------------------|
| Nominal outer diameter                     | mm   | 28                                            |
| Nominal inner diameter                     | mm   | 12                                            |
| Length                                     | m    | 2.4                                           |
| Tensile load bearing capacity <sup>1</sup> | kN   | 335                                           |
| Shear load bearing capacity <sup>2</sup>   | kN   | 280                                           |
| Critical embedment length <sup>3</sup>     | mm   | 50                                            |
| Thread (left hand)                         |      | Internal standard based on ISO 10208 and 1720 |

<sup>1</sup> Determined during pull-out tests of bolts installed with Mineral Bolt resin in high strength concrete blocks conducted by an independent institution.

<sup>2</sup> Determined during shear tests of bolts installed with Mineral Bolt resin in high strength concrete blocks conducted by an independent institution.

<sup>3</sup> Minimum value of the critical bonding (embedment) length of R28 Ductile bolts bonded with Mineral Bolt resin, determined across multiple types of tests on bolts installed directly in steel tubes, as well as in concrete and various types of rock.

|                                      |                                                                                                                                                                                                                                               |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Installation/applications</b>     | The DSI Ductile Hollow Bar Bolt R28 is perfectly suited for self-drilling installation using a pumpable resin system (Mineral Bolt).                                                                                                          |
| <b>Product range and accessories</b> | The DSI Hollow Bar System offers several products and accessories, including drill bits, couplings, plates, and much more.                                                                                                                    |
| <b>Legal disclaimer</b>              | All dimensions, weights, quantities, and specifications are those applicable at the time of this publication and may be amended from time to time. Please contact your local representative for final confirmation of any key specifications. |