

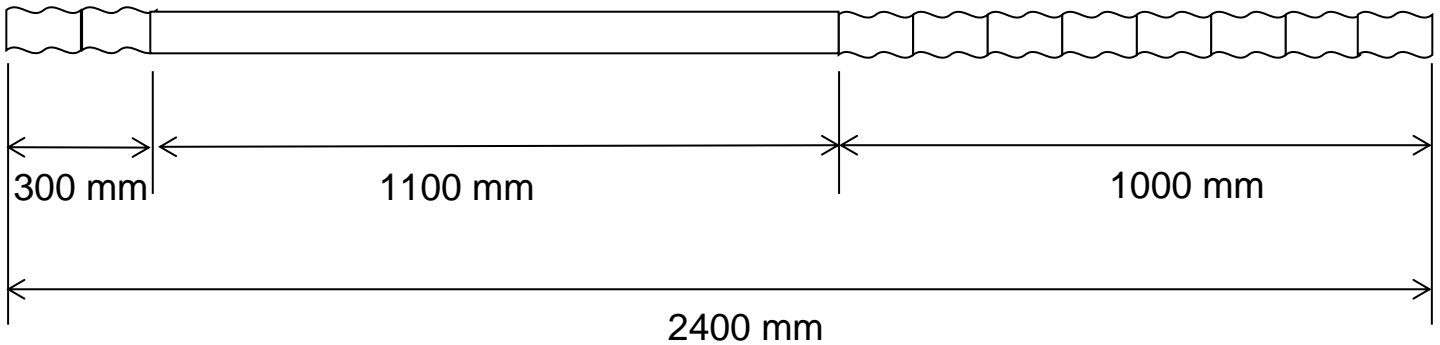
Self-Drilling Dynamic Bolt (SDDB®)



ROCK REINFORCEMENT

TECHNICAL DATA SHEET

Nevada Type - Rock Reinforcement Bolt



DESCRIPTION

The Self Drilling Dynamic – Nevada Bolt is intended to be used as a single member unit, although it may be extended where required.

The bolt is 2400 mm long with an 1100 mm smooth section to provide deformation and dynamic energy absorption capability.

The Nevada bolt is designed with a smooth seamless tube made of ductile steel and R32 ISO threads on each side. The longer threaded section employs a 1000 mm length R32 thread which works as anchor points and also accommodates the installation of the drill bit. The 300mm R32 thread on the opposite end is used as a coupling for drilling/installation and subsequently as bolt head anchorage and nut assembly to tighten the plate for surface support.

If an extension is required, a second bolt can be applied using the regular R32 SDA coupler. Where required for better bonding of the fracture zone closest to the face, the threaded ends may be rotated during installation.

The Nevada bolt is intended to be used in squeezing ground and in broken rock mass conditions.

KEY BENEFITS

- › Simple installation
- › Extendable
- › Capable of high pressure injection
- › In addition to use as a ground support system, the bolts act to bear load as a deformable injection lance for strata consolidation and reinforcement)

TYPICAL APPLICATIONS

- › Squeezing ground, broken, fractured and fissured rock where typical bolts are difficult to install.
- › May be considered as an alternative to cable bolting in certain applications.

FUNCTIONALITY

The Nevada Bolt reinforces the rock mass by constraining dilation between the anchor points. When the rock mass dilates, the anchor points assume the load and the smooth section between the anchor points stretch. The load on the smooth section increases quickly with a small increase in dilation until the yield load is reached. With further increases in load beyond yield, the smooth section undergoes plastic elongation until failure. The Nevada Bolt absorbs the dilation energy by utilizing strength and deformation capacities of the bolt material. The smooth section of the bolt provides localized and independent reinforcement to the surrounding rock mass.

TYPICAL APPLICATIONS

Squeezing ground, broken, fractured and fissured rock where typical bolts are difficult to install. May be considered as an alternative to cable bolting in certain applications.

TECHNICAL DATA

SDDB – Nevada Type	
Ultimate Load (kN) theoretical / typical	> 230 kN / ≥ 245 kN
Yield Load (kN) theoretical / typical	> 140 kN / ≥ 160 kN
Weight (kg/m)	÷ 2.75kg
Elongation (A 200 mm)	≥ 15%

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.

Self-Drilling Dynamic Bolt (SDDB®)

normet

ROCK REINFORCEMENT

TECHNICAL DATA SHEET

Nevada Type - Rock Reinforcement Bolt

DIMENSIONS / PACKING / THREADS

2400 mm length bolt includes 1100 mm smooth section between R32 ISO threads – 1000 mm length at one side and 300mm on the other.

Bolts are supplied in bundles. Bundles can be either 50 or 100 bolts per bundle.

Bolt length and configuration may be adjusted depending on specific requirements.

ACCESSORIES

Standard R32 accessories from SDA (Self Drilling Anchors) Bits, Couplers, Plates and Nuts. – see TDS for SDA.

INSTALLATION

The Nevada Bolt is installed with Roto-Percussive drills using typical drilling jumbos or bolters.

Whilst any information and/or specification contained herein is to the best of our knowledge, true and accurate, we always recommend that a trial be carried out to confirm suitability of the product. Please note regional climatic conditions may cause a variation in the performance of the product. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives, agents or distributors. The information in this data sheet is effective from the date shown and supersedes all previous data. Please check with your local Normet office to confirm that this is current issue.