

# 23.1

## Injection System W-VIZ/S

with WIT-VM 100 injection mortar

for application with the Application Gun Art. No. 0891 003 or with HandyMax® Art. No. 0891 007

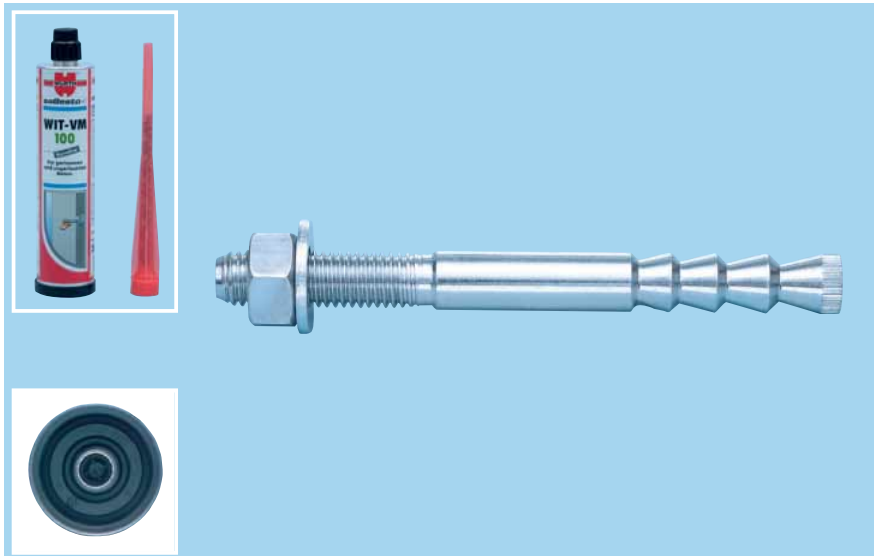
**Individual attachment:**

cracked and uncracked concrete

**Galvanized steel**

For W-VIZ/A4 injection system see **23.2**

For W-VIZ/HCR injection system see **23.2**



### Proof of Performance

Approvals	Test Reports	Through-bolt mounting (M10 to M24)	Drill hole cleaning
<p><b>European Technical Approval</b></p> <p>Option 1 for cracked and uncracked concrete</p>	<p><b>Fire resistance</b></p> <p>Direct effect of flames</p>	<p><b>Ring gap between anchor bar and attached part must be filled with WIT-VM 100 mortar.</b></p>	<p><b>Clean drill hole: Blow out 2x, brush out mechanically 2x, blow out 2x</b></p> <p>From <b>M20</b> or more, blow out drill hole <b>with compressed air</b> using the correct compressed-air nozzles</p>

### 1. Applications

- Can be used for medium to heavy loads
- With European Technical Approval, the anchor can be used in reinforced or non-reinforced standard concrete of a strength class of at least C20/25 and at most C50/60 in accordance with EN 206-1:2000-12
- Anchorage with European technical approval in cracked concrete (concrete tensile zone) and in uncracked concrete (concrete pressure zone)
- The anchor may be used for anchorage with primarily static loads (e.g. own weight, installations, support materials) or quasi-static loads (e.g. railings)
- Anchor size M8 to M10: Installation in dry or wet concrete
- Anchor size M12 to M24: Installation in dry or wet concrete and in drilling holes filled with water
- The temperature in the mortar area may not exceed +50°C or +72°C, and briefly +80°C or +120°C
- For use in concrete < C20/25 and pressure-resistant natural stone (without approval)
- W-VIZ/S (galvanized steel) can be used in dry interior rooms
- Suitable for fastening metal structures, metal profiles, brackets, foot plates, supports, railings, wood structures, beams etc.

### 2. Advantages

- Through-bolt (M10 to M24) and cotter-pin mounting (M8 to M24)
- High loads, small axle bases and edge clearances
- Shallow drilling hole depth with deep anchoring depth
- The injection dowel is suitable for use in cracked concrete (concrete tensile zone) and uncracked concrete (concrete pressure zone)
- Hardened injection mortar largely seals off the drill hole
- Attachment with low expansion pressure allows small edge and axial clearances
- Geometry of anchor bar allows safe post-expansion performance
- Mechanical drilled hole cleaning: Simple handling, very good drill hole cleaning, high loads
- Reliable installation due to application of prescribed torque on anchorage
- High thermal stability (long-term up to +72°C, short-term up to +120°C)
- Cartridge can be reused by replacing static mixer or by reclosing with sealing cap

### 3. Properties

- Force-controlled/torque-controlled spreading anchor of electrogalvanized steel in the sizes M8, M10, M12, M16, M20 and M24
- The force transfer is via the mechanical teeth of individual cones in the composite mortar and also via a combination of retaining and friction forces in the anchoring base (concrete)
- Galvanized steel: European Technical Approval ETA-04/0095
- Dimensioned in accordance with the "European Technical Approval Guideline (ETAG) of Metal Anchors for use in concrete", Annex C, dimensioning method A
- Fire resistance: F30, F60, F90 and F120  
fire stress in acc. with DIN 4102-02: 1977-09 (standard temperature time curve)

### Setting instructions (cotter-pin mounting):

