

METAL INJECTION PACKERS TECHNICAL DATASHEET

Injection Packers Specification

Code	BC01080	BC01385	BC13100	BC13150
Material	Aluminum	Aluminum	Aluminum	Aluminum
Length (mm)	80	85	100	150
Diameter (mm)	10	13	13	13
Drill Diameter (mm)	10	13	13	13
Net Weight (g)	12.7	22.5	24.5	30.0
Gross Weight (g)	13.4	23.0	25.0	31.7
Working Pressure (bar)	100	100	100	100
Injection Performance	easy to inject, can use at low temperatures; single component grouting, simple construction, easy to clean up			
Application Range	subways, tunnels, reservoirs, underground structures, hair-like cracks, construction joints, expansion joints, cracks ,site improvements, harbor construction, floor and other upgrading works.			
Sealing agent applied	water base polyurethane, oil base polyurethane, epoxy resin			
Packing (Pcs/Carton)	1500	1000	1000	1000

Note:

The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times

Construction of high-pressure Injection Waterproofing System

Construction Prepares

- a. Find crack: For wet surface, first clean water; for dry surface, clean dust. Carefully looking for cracks, using colored pens or chalk mark along the cracks.
- b. Drilling: According to the thickness of concrete structures, from the crack of about 150 ~ 350mm, cross-drilled on both sides along the crack direction. 14mm diameter drill bit used. Holes and cracks in cross-section should be 45 degrees to 70 degrees cross, and the central cross in the bottom 1 / 2 range.
- c. Bury injection packers: buried with tools and fastening to ensure that the rubber part of the needle and the hole wall are dry before use, otherwise easily lead to slip when tightening.



Construction Notes

- a. First, analysis cracks' width and length, take cores to determine the development of crack depth.
- b. If the surface is not easy dry, you can use torch drying, cracks due to moisture, can be found immediately to improve efficiency.

Crack Repair

- a. Injection should be started in elevation from bottom to top, when the foam material emerge from the cracks should immediately stop, and start again after a while. In the infusion process, if the material adjacent to the needle position has been filled, you can jump without injection. If found cracks extension in both ends or cracks with cross, should drill holes again, re-grouting
- b. To fill cracks with polyurethane, should grout again before the material become solid.



Notes when Grouting

a. Stop infusing if polyurethane does not emitting from the cracks after 5 minutes. And try again later. If not yet filled, should check whether the buried pipeline cross-drilled or floor have holes and so on.

b. Infusion should be closely watched gauge of work perfusion machine, if more than the rated pressure (45Mpa above), should be shut down, if pressure remained high, cracks should check whether the drilling cross with cracks.

Detection of Crack Repair

After complete of the cracks repair, testing with the core drilling. Test results should be the concrete surface smooth and dense, materials filled all the cracks in structure, and the compressive strength of concrete core samples meet the original design value.

