

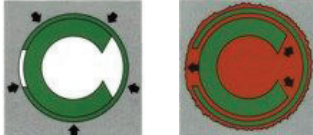
PREDIMAX® Injection Hose

Injection Hose for Economic Sealing of Construction Joints in Concrete Structures

PREDIMAX 11 and PREDIMAX 19

Product

PREDIMAX is a double-jacketed PVC based hose with offset openings and/or slots for outlet of compressed injection material to seal joints in subterranean constructions. The openings in the interior hose are offset from the openings in the outer hose, that is to say, cement paste is prevented from entering.



For installation, you have to fix the injection hose to the first concrete section by means of some suitable fastening and imbed it with the next concrete-work phase.

Use (in general)

The injection hose is used for sealing of construction joints which are permanently or occasionally exposed to loads due to subterranean, down-the-slope or surface water.

Construction joints which are required for structural engineering reasons can be designed non-positive and watertight.

Features for Installation

- Sufficient cross section of the duct (reducing inner friction of injection material thus allowing economical compression lengths) and permeability of the compression duct and outlet openings after concreting.
- Cement paste is prevented from entering during concrete work because of the hose-in-hose system
- Robust during installation under building-site conditions, fastening system included
- Easy handling and time-saving fitting
- No unwanted twisting when installing from the reel, because hose is circular
- Outlet of injection material from the concreted hose system even under slight pressure, that is to say, outlet of material is assured to all sides
- Smooth surface to avoid unwanted bonding between injection hose and concrete. **PREDIMAX** may therefore be applied quite easily with any injection material.
- Favourable relation between price and performance, maximum reliability, for **multiple injections**.
- Suitable for injection of regular cement (**PREDIMAX 19** only), fine cement, ultra fine cement, PU resin or PU foam resin, EP resin or acrylates

- Can be used for multiple injections
- Product certification to DIN EN ISO 9001
- Injection hose with continuous markings of meter length and control number
- PREDIMAX injection hose is a unique, patented technology **made in Switzerland**

Application

- Horizontal sealing of constructional joints: base/base, base/wall, wall/cover, cover/cover
- Vertical sealing of constructional joints: wall/wall
- Overground and underground workings, civil engineering, tunnel constructions, special-purpose
- **PREDIMAX** may be used for compressing and/or injecting resins, foamed resins, acrylates and ultra-fine-cement suspensions, fine cements or cement lime. **PREDIMAX 19** can be injected beside the above mentioned injection media also with regular Portland Cement.

Form of Delivery / Storage

	PREDIMAX 11	PREDIMAX 19
Reels of	100 m	100 m
	Sealed in tight shrink film	
Pallet with	2,500 m	1,000 m
Shelf life	5 years when stored protected against frost and permanent sunshine	

Technical Data

	PREDIMAX 11	PREDIMAX 19
Working material:	PVC	PVC
Colour shade	green	green
Inside diameter of hose:	6 mm	11 mm
Outside diameter of hose:	11 mm	19 mm
Weight:	0,11 kg/m	0,25 kg/m
Materials to be injected:	Resins, acrylates, fine cement, CEMproof cement lime	Resins, acrylates, fine cements, Portland Cement
Max. length of injection hose:	12 m	15 m -on request-
Outlet opening of outer hose:	5 mm	10 mm
Arrangement of holes in inner hose	every 20 mm staggered 90° outlets per 10 cm length	every 20 mm staggered 90° outlets per 10 cm length
Temperature for use	Store the injection hose in a heated room when temperature is below +5 °C	

CEM 11 Injection Tube

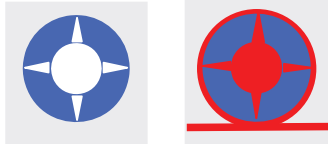
Injection Tube for Economic Sealing of Cold Joints in Concrete Structures

An efficient, well-priced injection tube system for structural waterproofing

Product

PVC based injection hose for economical sealing of any construction joints in subterranean construction.

Single-wall hose of PVC based material, with slightly cone-shaped openings and slots from inside to outside for the compressed injection material to be squeezed out in order to seal the joints in underground constructions. The openings get closed by their geometry thus avoiding efficiently any penetration of cement paste into the injection hose.

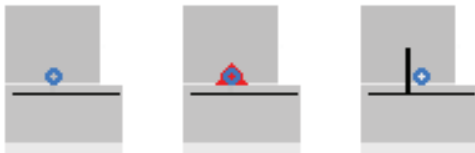


The smooth surface of CEM 11 eliminates any unwanted bond between injection hose and concrete. The CEM 11 injection tube system can be used for any injection resin. Injections are possible even after years, because the smooth surface CEM 11 does not allow any sinter deposits or obstructions in the system.

Use

The CEM 11 injection hose is used for sealing of construction joints which are permanently or occasionally exposed to groundwater or surface water. CEM 11 is an efficient, effective injection tube system used to prepare waterproof, gastight and frictional construction joints.

Application



Suitable for all kind of vertical and horizontal construction joint / cold joint sealing!

Product Characteristics

- Sufficiently dimensioned inside diameter and permeability of the injection hose and the outlet openings after concrete work.
- Prevents cement paste from penetrating during concrete work.
- Sturdy when being incorporated under building-site conditions with fastening system included.
- Easy handling, simple time-saving fitting
- No unwanted twisting when you incorporate from the coil as there is a circular hose.

- Material to be injected leaves the hose system embedded in concrete, even under reasonable pressure, that is to say material is reliably coming out to all sides (opening injection-pressure min. 0.5 bar).
- Can be used for multiple injections by using acrylate-gel or PU-gel.
- Outlet opening shaping conically from inside towards outside. Some trifle opening resistance only has to be overcome therefore.
- Smooth surface, hence no unwanted bond between injection hose and concrete.
- Very favourable balance of price and performance.

Technical Data

Material:	PVC
Inside diameter:	5 mm
Outside diameter:	11 mm
Injection material:	PU / EP resin, acrylates, gels -no cement-
max. injection length:	10 m
Outlet openings:	5 mm every 25 mm
Arrangement of holes in hose:	Every 12 mm to 14 mm
DIN EN ISO 9001 certificated manufacturing process. Injection hose with ongoing control-numbers.	

The hose has been approved by several public testing laboratories for overground and underground constructions for sealing concrete construction joints.

Remark: CEM 11 is a multiple injectable system when using acrylates or special PU-gels. Use only acrylates without corrosive behaviour to the reinforcement of the concrete structure!

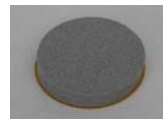
Accessories for CEM 11



Shutter connector



Pressing nipple for shutter connector



Rubber plate for shutter connector



Plastic clip

Installation of the BPA Injection Hose System

The PREDIMAX/CEM 11 injection hose is easy to install when you consider the following items of this installation manual:

Put the hose in the middle of the cold joint. The connection, ventilating hose / PREDIMAX/CEM 11 has to be placed completely inside the concrete structure.



The hose has to be well set on the cold joint and has to be fastened with hose clamps at **approx. 15 cm** distance (depending on surface of the concrete of the construction joint).



Overlapping: The overlapping should at least be 10 cm.



The injection ends shall be placed towards outside the formwork in order to be easily found again. **Two different possibilities are shown:**

Installation of the injection hose system by using **shutter connector** including rubber plate and a spider (for easy installation on the reinforcement)



Installing the ventilation hoses inside an **end box**: Important: Ventilation hoses have to be fixed in order to avoid a replacement during the concrete work.

