

Konudur HL 11 PVC

Polyester needle felt hose for rehabilitation of CIPP liners

Product Properties

- Polyester needle felt hose with elastic polyvinyl chloride foil
- Easy impregnation of polyester needle felt
- Good handling

Areas of Application

- Polyester needle felt hose for CIPP liner system, suitable for inversion technique
- No-dig rehabilitation of defective sewer pipes and ducts
- Rehabilitation methods for underground sewer pipes and ducts

Application Advice

Customization

Customization (cutting to required length) must be carried out while protected from weathering.

When required length of polyester needle felt is calculated, observe additional length for e.g. beginning and end of liner, vacuum, filling port of resin and samples.

Vacuum

See the data sheet “General Application Advice for CIPP liner Systems” and the “Technical Data” table.

Impregnation

See the data sheet “General Application Advice for CIPP liner Systems”. The specific coverage of resin for the polyester needle felt is listed in the

“Technical Data” table and must be seen as a guideline only for the approx. calculation. Demand for resin of the polyester needle felt can differ (e.g. special project conditions) and must be adapted till the felt is completely impregnated.

Application

See the data sheet “General Application Advice for CIPP liner Systems”. Polyester needle felt hose is installed by inversion technique. Point out explanation and data given in the application manual “Konudur Homeliner”.

Safety Advice

Observe the hazard notices and safety advice on the labels and safety datasheets.

Technical Data of Konudur HL 11 PVC

Characteristic	Unit	Value*	Comments
Coating weight per unit area (polyester needle felt 3 mm)	g/m ²	approx. 670 approx. 500	polyester needle felt lamination
Thickness PVC-lamination	mm	approx. 0.4	tolerance ± 10 %
Tensile strength (50 mm strips)	N	approx. 1,000	polyester needle felt along (3 mm) polyester needle felt across (3 mm)
Elongation at break	%	approx. 80	polyester needle felt along (3 mm) polyester needle felt across (3 mm)
Liner flexibility	%	approx. 30	calculated at the circle
Temperature of use	°C	+ 90 + 90	max. heating temperature max. temperature during use***
Vacuum pressure	bar	0.2 0.5	min. max.
Nominal diameter (available)	DN [mm]	100 600	min. max.
Wall thickness (available)	mm	3 18	min. max.
Undersize of the nominal diameter	%	8 to 10	incl. lamination
Resin coverage**	l/m ² /mm	approx. 0.90	

Product Characteristics for Konudur HL 11 PVC

Colour	white
Form of Delivery	Delivery table available on request
Storage	Polyester needle felt hoses can be stored for at least one year at temperatures between + 5 °C and + 25 °C in dry conditions, free of dust and UV-light. The same requirements apply to transport.
Disposal	Residuals of the material, which did not get in contact with epoxy resin or a cleaning agent, can be disposed with the domestic waste. Residuals of the material, which are contaminated or soaked with resin, can be disposed with domestic waste after a proper and complete hardening.

* Unless otherwise stated, all technical data were determined at + 23 °C and 50 % relative air humidity.

** Quantities used depend on the object and on the storage and working temperatures and the temperature of the substrate. We recommend carrying out experiments beforehand to determine object-specific quantities.

*** Thermal resistance was determined using potable water. Aggressive sewage ingredients may have an impact to the thermal resistance.

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.

Edition 03/20. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.