

# Konudur HL 11 PP

Polyester needle felt hose with PP-foil for rehabilitation by CIPP lining



## PRODUCT PROPERTIES

- Polyester needle felt hose with polypropylene foil
- Easy impregnation of polyester needle felt
- Good handling

## AREAS OF APPLICATION

- Polyester needle felt hose for CIPP liner Systems, 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 values / product characteristics" 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. Observe explanation and data given in the application manual "Konudur Homeliner".

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Vacuuming pressure		0.1 - 0.4	
Consumption <sup>1)</sup>	l/m <sup>2</sup> /mm	1	
Inversion pressure		0.2 - 0.6	depending on nominal diameter and wall thickness
Actuation pressure	bar	approx. 0.5	during the during process, depending on nominal diameter and wall thickness
Nominal diameter, undersize tolerance	%	approx. 10	
Nominal diameter (available)	DN (mm)	150 - 600	larger nominal diameters on request
Wall thickness (PP coating)	mm	approx. 0.3	DN 150-600, tolerance $\pm 10\%$
Wall thickness (available)	mm	3 - 18	at 0.5 bar during the curing process
Specific weight (per layer of felt)	g/m <sup>2</sup>	> 450 < 1,050	tolerance $\pm 10\%$
Specific weight (PP coating)	g/m <sup>2</sup>	approx. 300	DN 150-600, tolerance $\pm 10\%$
Temperature (maximum)	°C	approx. 90 approx. 90	during inversion / installation during usage

All technical values are laboratory results determined at 21°C  $\pm 2^\circ\text{C}$  and 50% relative humidity.

1) Consumption quantities are object-specific and depend on the storage, application and substrate temperature. Preliminary tests are recommended to determine object-specific consumption quantities.

Colour	natural white
Delivery form	Delivery data chart available on request
Storage	Can be stored in original sealed packages at temperatures between 15°C and 20°C in dry conditions for at least 12 months.

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.

**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2300018289]