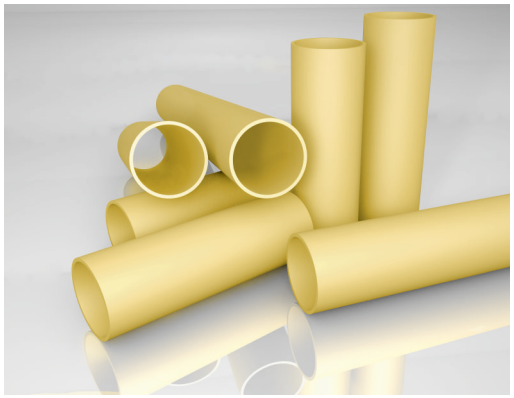
RALEX® MEMBRANE AM-XT TUBULAR

RALEX® Membrane AM-XT TUBULAR is a special seamless heterogeneous extruded and self supported anion or cation exchange membrane tube. It can be produced in different outer diameters in accordance with producer possibilities.

RALEX® Membrane AM-XT TUBULAR has smooth surface which prevents a deposition of paint. This increases its performance and lifetime.



Mechanical properties (typical)		Unit	Anion
Outer diameter of dry tube		D (mm)	65±1
Swelled differences Δ (in demi-water)	outer diameter	ΔD (%)	6±2
	length	Δl (%)	6±2
	weight	Δm (%)	30±5
Maximum working pressure		ε (bar)	0,6

Electrochemical properties (typical)			
Resistance in 0.5 M NaCl	surface	RA ($\Omega.cm^2$)	150±50
(measured under DC current)	specific	RS ($\Omega.cm$)	500±100
Transport number in 0.5/0.1M KCl		t^M (-)	min 0,95
Permselectivity in 0.5/0.1M KCl		P_{STAT} (%)	min 91
Ion exchange capacity		IEC (eq/kg)	min 1,4

Other properties

- Good thermal resistance up to 50 °C.
- Resistance against aggressive chemicals and fouling components, except strong oxidizing agents (HNO_3 max.1%, H_2O_2 max. 3%).
- Long-term stability at pH 0–14.
- Utilization of some fungicide is allowed (after consulting with MEGA).
- For regeneration its possible to use acid and alkali solution up to pH 14.
- Maximum manufacturing length is 8 meters.
- Long life cycle.

CERTIFICATES:

Membrane production is certified in compliance with **CSN EN ISO 9001:2009** and **CSN EN ISO 14001:2005**.

MEGA a.s., Division of Membrane Processes, Pod Vinicí 87, 471 27 Stráž pod Ralskem, Czech Republic
Phone: +420 487 888 300, Fax: +420 487 888 302, E-mail: sales@mega.cz, Web: www.ralex.eu, www.mega.cz

PRODUCT DATA SHEET

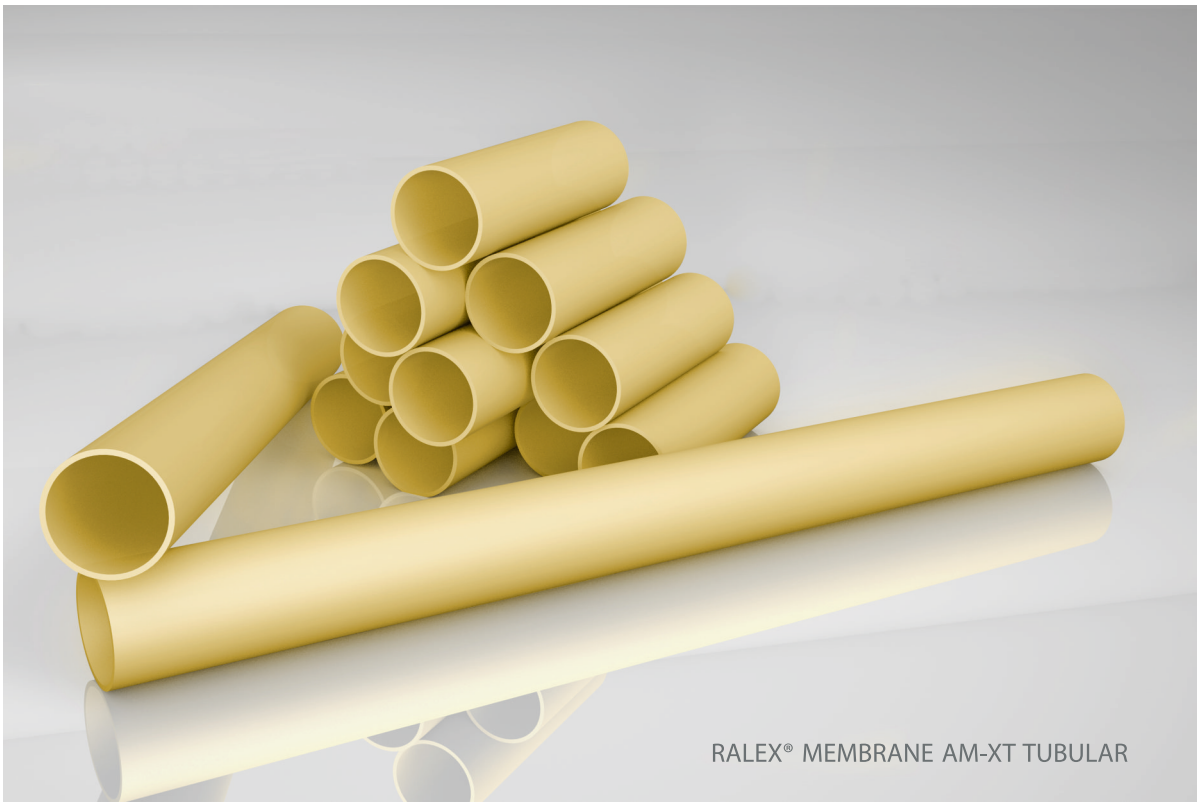
HANDLING AND STORAGE

RALEX® Membrane AM-XT TUBULAR has to be stored in dry state at dark place and temperature between 5-30°C. RALEX® Membrane AM-XT TUBULAR has to be installed to the EFC in the dry state due to some dimensional changes during swelling. The self supporting structure allows EFC assembly without any outer nor inner supporting grid. To avoid membrane touching the electrode, protection net is recommended.

Before use the new EFC needs to be preconditioned at least for 24 hours at 25 °C in demi water.

RALEX® Membrane AM-XT TUBULAR can be chemically or mechanically cleaned to retain its electrochemical properties or remove paint from the surface. Please note the RALEX® Membrane AM-XT TUBULAR has low mechanical properties due to absence of any support. Therefore it can be damaged by improper manipulation.

In case the E-coat tank is empty then it is strongly recommended to clean the membrane surface by water or other appropriate solvent. This cleaning protects from strong paint deposition on the membrane surface and keeps the maximum membrane functionality. It is possible to let the membrane dry out after cleaning.



RALEX® MEMBRANE AM-XT TUBULAR

MEGA a.s., Division of Membrane Processes, Pod Vinicí 87, 471 27 Stráž pod Ralskem, Czech Republic
Phone: +420 487 888 300, Fax: +420 487 888 302, E-mail: sales@mega.cz, Web: www.ralex.eu, www.mega.cz