

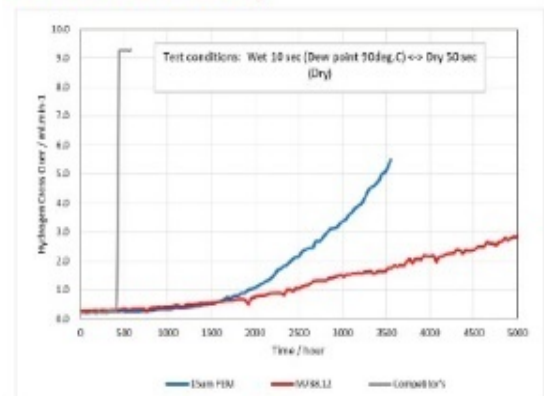
Properties	Types of membrane		MX765.08	Note
	Unit			
Thickness	Um		8	Digital thickness gauge 23C, relative humidity of 50%
IEC	meq/g		0.98	Measure the dry weight of the electrolyte after drying at 100C for 2~3 hours in vacuum oven Put the electrolyte, distilled water (25 ml) to the sealed cell unit, and stir them for 15 min after filled with N2 Pour 3M NaCl solution (55 ml), and stir them for 45 min Titrate 0.01M NaOH solution up to pH7.00
Tensile strength	MD	MPa	99	Equivalent ISO527-3 Shape : Specimen type 4 (Width of narrow parallel-sided portion : 10 mm) Initial distance between grips ; 80 mm Crosshead speed ; 200 mm/min 23C, 50%RH.
	TD	MPa	110	
Elastic modulus 2%	MD	MPa	1695	
	TD	MPa	1280	
Swelling ratio	MD	%	0.4	Measurement of membrane size under 23C, 50% (dry size) After boiling at 100C for 10min, measure the membrane size (wet size) Swelling ratio (%) = wet size / dry size
	TD	%	2	

Ready for a new Generation of products

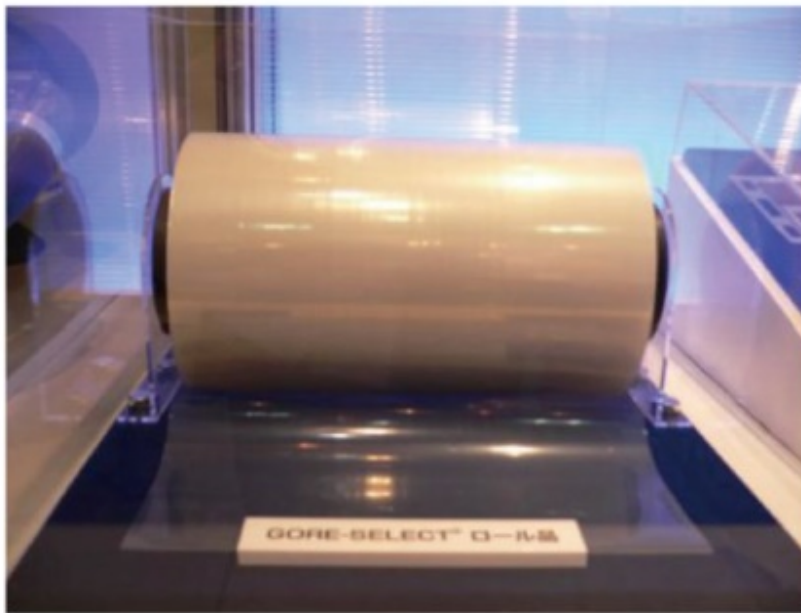
Thin and Strong

- M788.12 is our latest 12um membrane
- M788.12 performance and chemical durability is comparable to a 15um membrane
- M788.12 has outstanding mechanical durability
- M788.12 can be produced on our new line at low cost
- We can also produce in wider or longer rolls to meet customers' needs

Mechanical Durability



THIN AND STRONG-M788.12



Gore & the Fuel Cell Industry

Committed and continuing to invest

- More than 20 years of R&D to create the best Proton Exchange Membranes and MEAs to meet Fuel Cell industry's developing needs
- Continuously improving membrane performance and durability
- Constantly looking for ways to reduce total cost of ownership
- Invested early so Gore is ready to meet high volume needs of the Fuel Cell industry now!

Value	Lead Application / Market	Membrane Name
Longest life and high power density	Stationary power (Chemically demanding automotive)	M740.18
High power density and durable in automotive operation	Automotive, bus, motive, etc.	M735.18
Highest power density and durable in drier automotive operation	Current Generation Automotive	MX20.10
Highest power density & chemically durable in non humidified operation	Long Life Back-up power, range extender, fork lift and portable	M820.15
Highest power density in non humidified operation	Short life Back-up power and portable	M815.15

Resistance vs RH @ 80C

