



HYDRAcap[®] MAX

Maximum Performance, Optimal Solution

HYDRAcap[®] MAX is used to treat a wide range of highly variable waters as either primary treatment or as pretreatment to reverse osmosis (RO) and nanofiltration (NF). Compared to conventional pretreatment, the HYDRAcap[®] MAX offers the combined benefits of high recovery and low footprint requirement due to its optimized membrane area and novel cleaning regimes. High strength PVDF membrane minimizes fiber breakage rate and ensures consistently superior filtrate quality, which enables RO and NF systems to be operated at higher fluxes, while maintaining longer intervals between cleanings.

HYDRAcap[®] MAX Product Offerings: ✓ HYDRAcap[®] MAX 40 – 52 m² ✓ HYDRAcap[®] MAX 60 – 78 m²

✓ HYDRAcap[®] MAX 80 – 105 m²









Capillary Technology vs. Conventional Pretreatment

- Smaller footprint
- Reduced chemical consumption, especially of coagulants
- Wastewater disposal is less problematic due to lower volume and decreased chemical consumption
- Better filtrate quality, which is stable regardless of feed water quality variation
- Increased efficiency of RO membrane system design and operation, contributing to reduced capital and operational costs
- Maximizes RO performance by allowing elements to operate longer with less cleaning

Applications:

- Drinking water
- Desalination pretreatment
- Industrial process water treatment
- Municipal waste water

Performance:

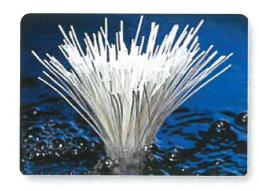
- Consistent filtrate quality with turbidity below 0.1 NTU
- High filtration flux operation up to 110 Lmh
- ✓ Maximized recovery up to 98%

Key Benefits:

- **✓ Lower CAPEX**
- Lower OPEX
- Simplicity and reliability

Key features:

- High membrane area
- TIPS fiber technology
- Process design simplicity

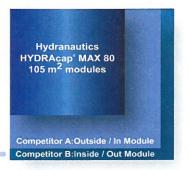




Key advantages of the high membrane area:

- Reduced footprint
- Skid cost reduced
- ✓ Fewer seals / connections

Basis: 20,000 m³/day production with one rack Hydranautics: 120 HYDRAcap MAX 80 modules Competitor A: Outside / In flow configuration Competitor B: Inside / Out flow configuration





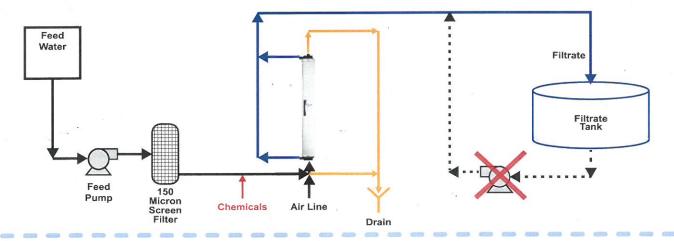
Key advantages of the TIPS fiber technology:

- ✓ Increased tensile and fatigue strength which minimizes integrity issues
- ✓ Increased chemical resistance which allows for more effective cleans at pH extremes
- Increased tolerance to chlorine, peroxide, ozone and other oxidants

Fiber Cross Section

Key advantages of not having backwash requirement

- Higher recovery
- No backwash pump nor ancillary equipment required



Ordering

Hydranautics Model	Culligan Part Number	Standard Lead Time
HYDRAcap40	D1032624	10 business days
HYDRAcap40-LD	D1032625	10 business days
HYDRAcap60	D1032626	10 business days
HYDRAcap60-LD	D1032627	10 business days
HYDRAcap60+	D1032628	10 business days
HYDRAcapMAX 4040	D1032629	10 business days
HYDRAcapMAX 40	D1032630	10 business days
HYDRAcapMAX 60	D1032631	10 business days
HYDRAcapMAX 80	D1032632	10 business days