Nitto
Innovation for Customers

HYDRANAUTICS

Product Data Sheet

HYDRACoRe70pHT Series

High flux and chlorine-resistant Nanofiltration membranes are designed specifically for color removal as well as acid, caustic, and other chemical reclamation applications. Membrane MWCO is about 600-700 Dalton. Membrane is able to reject color, proteins, fats, oils, and other macromolecular species. Components conform to FDA regulation CFR Title 21 Part 177. Products are Kosher and Halal certified.

Specified Performance

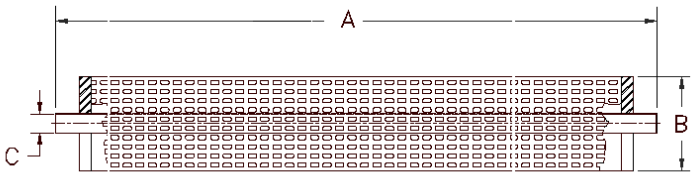
Model	Feed Spacer, inch (cm)	Area, ft² (m²)	Element Performance*		Max. Feed Flow, GPM (m³/hr)	Max. Pressure Drop per Element, psi (MPa)
			Nominal	Minimum		
			GPD (m³/day)	% Rej		
HYDRACoRe70pHT 4040-46	0.046 (0.117)	70 (6.5)	1220 (4.6) 760 (2.8)	87 83	30 (6.8)	15 (0.10)
HYDRACoRe70pHT 8040-46	0.046 (0.117)	275 (25.5)	4800 (18.2) 3000 (11.4)	87 83	80 (18.2)	13 (0.09)

* Element performance reflects the product performance tested using 500 mg/L NaCl solution at 165 psig (1.13 MPa), 15% recovery, 77°F (25 °C), 6.5-7.0 feed pH.

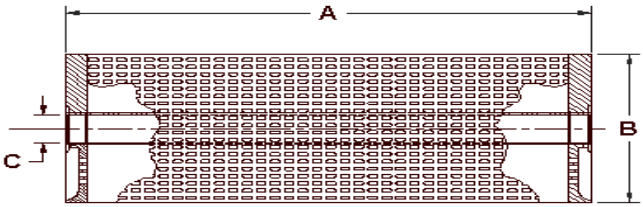
General Product Description

Configuration: Sanitary Spiral Wound
Membrane Polymer: Sulfonated Polyethersulfone

Packaging: All membrane elements are supplied with a brine seal, interconnector, and O-rings. For Halal installations do not use the brine seal. Elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulfite solution, and then packaged in a cardboard box.



Core tube extension = 1.05" (26.7 mm)
4040 Style



8040 Style with ATDs

	A, inches (mm)	B, inches (mm)	C, inches (mm)
4040	40.0 (1016)	3.98 (10110)	0.750 (19.1)
8040	40.0 (1016)	7.90 (201.0)	1.125 (28.6)

Product Use and Restrictions^

Maximum Applied Pressure: 600 psig (4.14 MPa)
Maximum Continuous Chlorine Concentration[1]: 10 ppm
Maximum Chlorine Concentration for Cleaning[1]: 100 ppm
Maximum Operating Temperature: 158 °F (70°C)
Operating and Cleaning pH Range: 1-14
Maximum Pressure Drop for a vessel: 60 psi (0.41 mPa)

[1] Transition metals (Fe, Mn) should not be present in the water or on the membrane as these can accelerate detrimental reactions between the membrane and the oxidant.

^ The limitations shown here are for general use. For specific projects, operating at more conservative values may ensure the best performance and longest life of the membrane. See Hydranautics Technical Bulletins for more details.

Disclaimer: The information and data are presented in good faith and in lieu of all warranties. All express or implied warranties, including the warranties of merchantability and fitness for a particular purpose, are hereby disclaimed and excluded. Conditions and methods of use of our products are beyond our control. Hydranautics assumes no liability for results obtained or damages incurred through the application of the presented information and data. It is the user's responsibility to determine the appropriateness of Hydranautics' products for the user's specific end uses.
3/14/25