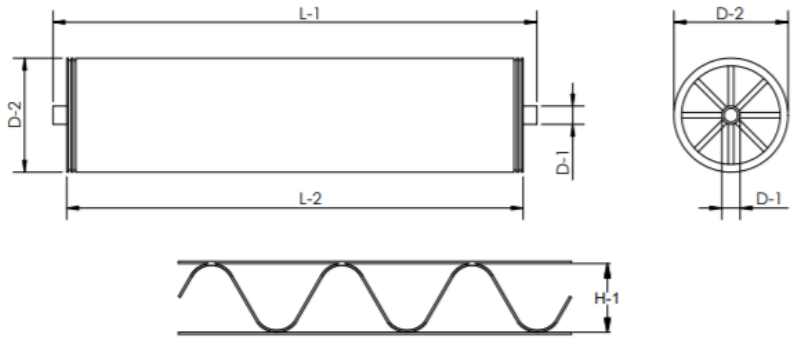
PolyCera® HYDRO Ultrafiltration

HYDRO-UF-10-HT-40

Performance & Operating Parameters		Cleaning & Chemical Exposure Guidelines	
Membrane Material	Hydro	Max Backwash Pressure	1.7 bar
Nominal Pore Size/MWCO	2 nm/10kDa	Backwash Flux	80 - 240LMH
Operating pH Range	1 – 13.5	Standard Backwash Duration	30 seconds
Operating Temperature Range	1＜pH＜13.5 @ 50℃ 1＜pH＜9.0 @ 80℃	Max Backwash Duration	120 seconds
Max Inlet Pressure	6.0 bar	Max Cleaning Temperature	≤ 80℃
Max Pressure Drop Per Element	0.35 bar	Max Cleaning pH	1 – 13.5
*Max Free Oil & Grease	≤150 mg/L	Hydrochloric Acid	≤0.4% (pH＞1.0)
*Max Total Suspended Solids	≤10000 mg/L	Citric Acid	≤20% (pH＞1.0)
Continuous Free Chlorine	≤5.0 mg/L	Sodium Hydroxide	≤1% (pH＜13.5)
Typical Operating Flux	40 - 200LMH	Free Chlorine Instantaneous/Total	100 ppm/300,000 ppm hour @ pH 11
Recommended Pre-Filter	100 μm	Peroxide/Ozone	Not compatible
Notes	Increased crossflow during backwash enhances cleaning efficacy; Backwash flux should be 1.5 to 2 times of operating flux ; *Max Free Oil & Grease/ Max Total Suspended Solids means the max concentration at concentration side. It's dependent on raw feed water quality and design recovery rate.		

Elements

Model
Filter Area m2 (ft2)
Weight kg (lbs)
Outer Wrap
Endcap
Recommend crossflow (m3/h)
Filtrate flowrate (m3/h)
Permeate connection D-1 cm(in)
Element diameter D-2 cm(in)
Element length (male) L-1 cm(in)
Element length(female) L-2 cm(in)
Feed Spacer Size H-1 mm(mil)
Notes



Handling & Storage Instructions

New Element Handling & Storage Guidelines

- Recommended storage temperature: ⩾5°C (41°F). Do not freeze element.
- Handle with care. Damage to elements/end-caps/ATDs can compromise performance.
- It is recommended to store elements wet and horizontally.
- Whenever possible, store elements in original packaging.
- Drying can damage membrane surface and compromise performance.
- Membrane elements should be stored in dry, dark, and ventilated environmental conditions.

Installation & Initial Use Guidelines

- Prior to use, soak element for 24 hours with portable water then flush for at least 30 minutes.
- Elements can be mounted vertically or horizontally.
- Use water or glycerin to lubricate seal.

After Use Storage & Preservation Guidelines

Use standard CIP procedure to clean feed and filtrate from the elements prior to shut down. Then perform element preservation as recommended below:

- 1–7 days: Sanitize element by flushing with 10 ppm bleach and adjust to pH 11 for 30 minutes. Fill up element and housing with fresh 1 ppm bleach solution, seal the housing and store.
- 1 week to 6 months: Fill up element and housing with 0.3% Saniclean* solution, seal the housing and store. Every four weeks drain the Saniclean solution from the system and flush with clean water. Refill the element and housing with 0.3 % Saniclean solution, seal the housing and store. If Saniclean solution is not avalible, use 0.2% sodium azide solution or 45% glycerin solution instead.
- More than 6 months: Please Contact PSP.US, Inc. for further information.

*Saniclean is a USDA accepted, low-foaming acid anionic rinse product made by Five Star Chemicals & Supplies, Inc. (Colorado, USA).

PSP.US, Inc.
721 S Glasgow Ave.
Unit D
Los Angeles, CA 90301

E: info@polycera.com