

PURE RESIN PC200FD

- REF. RA330;
- Macroporous Weak Acid Cation Exchange Resin;
- macroporous poly-acrylic weak acid cation resin;
- it can be supplied in the hydrogen (H⁺) form or sodium (Na⁺) as spherical beads;
- in H cycle is used for dealcalisation, deionization and chemical processing applications;
- supplied in sodium cycle for use in applications such as softening and heavy metal cations removal. This requires a two stage regeneration process using a strong acid first and then a neutralization rinse to put the resin into the sodium form and is especially effective in high solids softening applications.

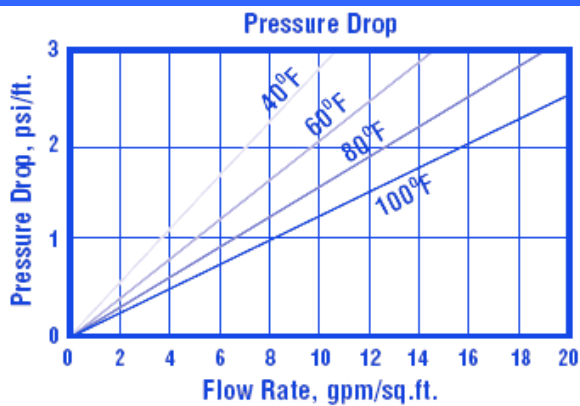


Typical Physical & Chemical Characteristics	
Polymer Matrix Structure	Acrylic-Divinylbenzene
Functional Group	R-(COOH) ⁻
Ionic Form, as shipped	H ⁺
Physical Form and Appearance	Clear Spherical Beads
Sphericity	95% min.
Screen Size Range US Standard Screen	16 ÷ 50 mesh, wet
Particle Size Range	+1,2 mm < 5%, - 0,3 mm < 1%
Uniformity Coefficient	1,6 max.
Water Retention, H ⁺ form	50 ÷ 60%
Swelling Na ⁺ → H ⁺	65% max.
Shipping Weight, H ⁺ form	700 ÷ 780 g/l (45 lbs/cu.ft, approx.)
Total Exchange Capacity, H ⁺ form	3,5 eq/l min.
pH Range	4 ÷ 14

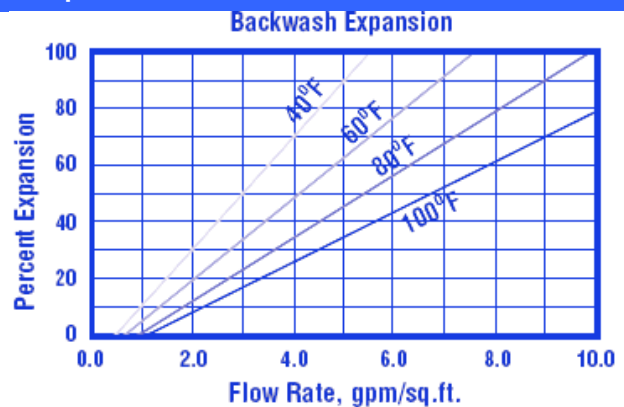
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Suggested Operating Conditions	
Maximum Temperature, H ⁺ form	120°C (248°F) max.
Minimum Bed Depth	0,8 m (30 inches)
Backwash Rate	25 ÷ 50% Bed Expansion
Regeneration, Hydrogen Cycle Flow Rate Contact Time	5 ÷ 10% HCl, 0,5 ÷ 1% H ₂ SO ₄ 2 ÷ 7 BV/h 8 ÷ 20 BV/h At least 30 Minutes
Displacement Rinse Rate	Same as Regenerant Flow Rate
Displacement Rinse Volume	1,4 ÷ 2 BV (10 ÷ 15 gallons/cu.ft)
Fast Rinse Rate	Same as Service Flow Rate
Fast Rinse Volume	4 ÷ 8 BV (30 ÷ 60 gallons/cu.ft)
Service Flow Rate	10 ÷ 50 BV/h (1,25 ÷ 6,25 gpm/cu.ft)

Hydraulic Properties



Pressure Drop: The graph above shows the expected pressure loss per foot of bed depth as a function of flow rate at various temperatures.



Backwash: After each cycle the resin bed should be backwashed at a rate that expands the bed 25 to 50 percent. That will remove any foreign matter and reclassify the bed. The graph above shows the expansion characteristics of Pure PC200FD.