

# GENERAL TECHNOLOGIES, SPC

## - High-Quality Services & Products

Tel: (913) 708-8131, Fax: 253-663-9333  
Web: <http://gtspc.com>, Email: [info@gtspc.com](mailto:info@gtspc.com)

### C-108HPLT, (True Uniform Particle Size) Na TRUE UNIFORM BEADS, ULTRA-PURE GRADE STRONG ACID (Designed for use in ultra-high purity water treatment applications)

#### Product Description

C-108HPLT Strong Acid Cation Exchange Resin is a Gel Type true Uniform Particle Size resin.

C-108HPLT is a standard cross-linkage product and it has outstanding mechanical and chemical stability, leading to low crush rate even after long-term use. C-108HPLT is supplied in Na<sup>+</sup> form. H<sup>+</sup> form is available depending on application and user's request..

When used in Mixed Bed with anion resin, the resins are specially selected to ensure - ultra-pure water grade low conductivity (resistivity > 18 megohms) and very low effluent TOC values (<13 ppb).

It is designed to provide ultra-pure water required for many applications such as for softening, demineralization, and other special processes like lysine, sugar and catalyst reaction. Because of its excellent ion removal capacity, high purity water can be produced economically

The true uniform particle size provides lower pressure drop during operation and more efficient chemical usage during re-generation.

#### Physical and Chemical Properties

Physical Form	Khaki translucent spherical beads
Matrix	Styrene-DVB, Gel
Functional Group	Sulfonic acid
Ionic Form	Na <sup>+</sup>
Total Capacity (eq/ℓ)	≥ 2.0
Moisture Retention (%)	43 ~ 49
Shipping Density(g/ℓ)	840
Particle Density	1.28
Uniformity Coefficient	<1.1
Particle Size(mm)	0.60±0.05
Whole Beads(%)	>95
Crush Strength(kgf/bead)	>3.5
Trace Metals(ppm/dry resin)	Al<25, Ca<40, Cu<5, Fe<25, Mg<25, Pb<5
Swelling(Na <sup>+</sup> ↔H <sup>+</sup> , %)	9

#### Recommended Operating Conditions

Physical Form	
Operating Temp(°F)	248
pH Range	0~14
Bed Depth(mm)	800
Service Flow Rate(m/h)	5~60
Regeneration	
Regenerant	HCl, H <sub>2</sub> SO <sub>4</sub>
Concentration(%)	HCl(1~8), H <sub>2</sub> SO <sub>4</sub> (1~4)
Level(g/ℓ)	30~150
Flow Rate(m/h)	2~10
Rinse Requirement(BV)	2~6

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### Hydraulic Characteristics

Figure 1 and 2 show the backwash expansion of C-108HPLT as a function of flow rate and temperature.

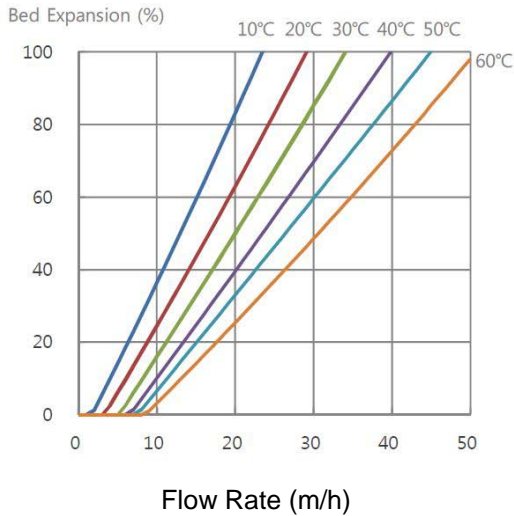


Figure 1. C-108HPLT Na+ Type

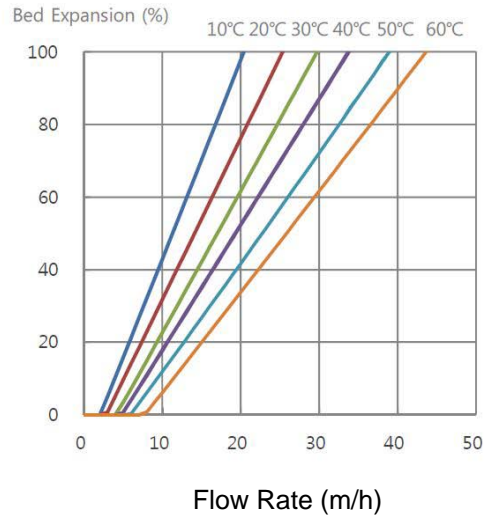


Figure 2. C-108HPLT H+ Type

Figure 3 and 4 show the pressure drop of C-108HPLT as a function of flow rate and water temperature.

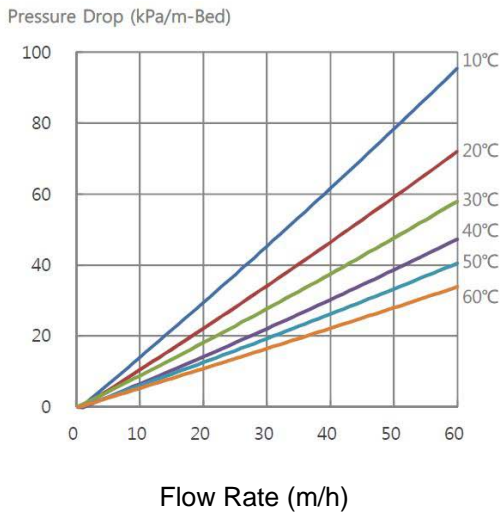


Figure 3. C-108HPLT Na+ Type

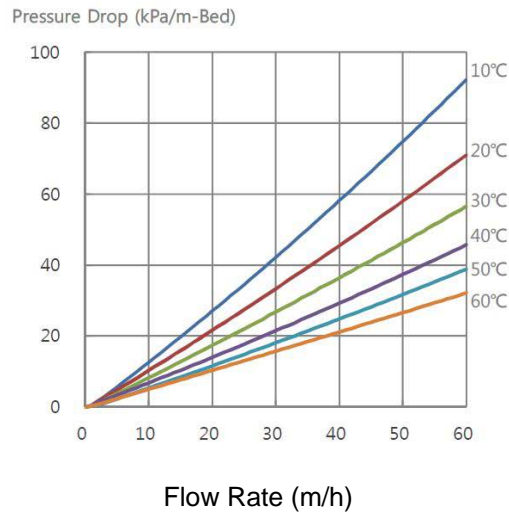


Figure 4. C-108HPLT H+ Type