## DIAION<sup>™</sup> PK228

DIAION™ PK228 is a porous type strongly acidic cation exchange resin. It has 14% cross-linkages and excellent properties. A wide range of applications, especially in a field of manufacturing and processing pure water, is recommended.

Product		
Grade Name		DIAION <sup>TM</sup> PK228
Туре		Strong Acid Cation
Matrix		Styrene-DVB, Porous
Functional Group		Sulfonic Acid
Ionic Form		Na <sup>†</sup>
Specification		
Whole Bead Count	-	95 min.
Salt Splitting Capacity	meq/mL	2.05 min.
Water Content	%	37 - 43
Particle Size Distribution on 1180 μm	%	5 max.
Particle Size Distribution thr. 300 $\mu m$	%	1 max.
Effective Size	mm	0.40 min.
Uniformity Coefficient	-	1.6 max.
Typical Properties		
Shipping Density	g/L	810
Mean Particle Size	μm	740
Particle Density	g/mL	1.32
Total Swelling (Na <sup>+</sup> to H <sup>+</sup> )	%	5
Recommended Operating Conditions		
Maximum Operating Temperature	°C	120
Operating pH Range		0 - 14
Minimum Bed Depth	mm	800
Service Flow Rate	BV/h	10 - 60
Regenerant		HCI
		$H_2SO_4$
Regenerant Concentration	%	HCl 4 - 10
		H <sub>2</sub> SO <sub>4</sub> 1 - 4
Regenerant Level	g/L	50 - 200
Regenerant Flow Rate	BV/h	2 - 10
Total Rinse Requirement	BV	2 - 10

1 BV(Bed Volume)=1 m<sup>3</sup>/m<sup>3</sup>-resin

## **Hydraulic Characteristics**

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of  $DIAION^{TM}$  PK228 resin in normal down flow operation is shown in the graphs below.

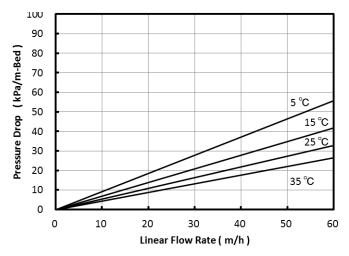


Fig. 1 Pressure Drop of PK228

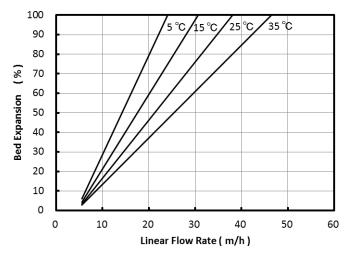


Fig. 2 Bed Expansion of PK228

## **Notice**

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