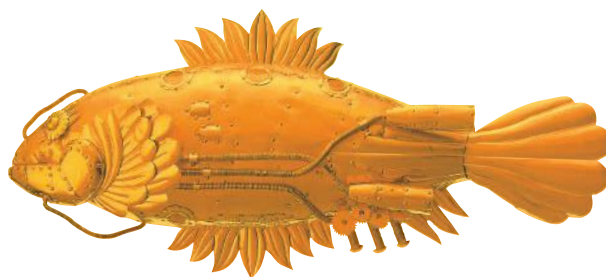


Shodex™



HPLC Columns

MANUAL

IC YS-50

SHOWA
DENKO
EUROPE

Columns manufactured by Showa Denko K.K Japan
Made in Japan

Shodex HPLC Columns
Europe, Middle East, Africa, Russia

For technical support please use
contact details shown below:

SHOWA DENKO EUROPE GmbH
Shodex Business
Konrad-Zuse-Platz 3
81829 Munich, Germany

E-mail: support@shodex.de
Phone: +49 (0)89 93 99 62 37
www.shodex.de

Operation Manual

Shodex™ IC YS-50

(Please read this manual carefully before using the column to ensure performance and life.)

1. Introduction

Shodex IC YS-50 is an ion chromatography column suitable for simultaneous analysis of univalent and divalent cations. It has the merit of being able to detect a trace ammonium ion under a high concentration of sodium ion. It is used for both suppressor method and non-suppressor method.

2. Instructions in handling

Caution! * Take notice of keeping instructions about the solvents and the reagents used with the column not to occur problems related to losing your health or leaking.

Attention! * Use the column within the regular range of flow rate, pressure and temperature. There is a danger of deteriorating the performance when it is handled beyond the permissible range even for a short time. See the clause "Usable conditions" about the permissible range.

3. Specifications

Column size:	4.6 mm ID x 125 mm L.
Column material (inside):	SUS 316.
Packing material:	Porous particle of polyvinyl alcohol type bonded with carboxyl group.
In-column solvent (initial):	4.0 mM methane sulfonic acid.
Number of theoretical plates:	>5,500 per column (Ca ²⁺).

4. Usable conditions

Flow rate: 2.0 mL/min (It should be 1.0mL/min or less for replacing the in-column solvent.).

Pressure:	<10 MPa per column.
Temperature:	20~60°C.
pH:	2~12.
Eluent:	4.0 mM methane sulfonic acid is usually used (Acetonitrile can be added within 30 vol%).

Attention!

- 1) Replace the solvent in the chromatograph with the eluent to be used before connecting the column.
- 2) Connect the column so that the flow direction corresponds to the arrow mark on the tag.
- 3) Connect the column with a male screw and a ferrule made of resin. Pay attention not to screw too tightly. PEEK connector (a ferrule unified with a male screw) which needs no tool is recommended.
- 4) Filtrate the sample with a disposable filter (0.45 μm) to prevent deterioration by adsorbing insoluble matters.
- 5) Install a guard column (YS-G) upstream to protect the main column from deterioration with adsorbates.
- 6) When the column is not used for a month or more, replace the in column solvent with the standard eluent, close each end with a stopper, and store it at room temperature.
- 7) Do not remove the end fittings of the column under any circumstances.
- 8) Do not make a strong impact on the column: such as hitting or dropping on the floor.