Flexible Fluorine (ETFE) Resin Tubing Black [Model Number: E-SJ-BK]

Precautions for Use



Please make sure to read following instructions in order to use HAKKO EIGHTON products safely.

- The inner layer of E-SJ-BK is made of ETFE. Thus, E-SJ-BK shows higher levels of chemical resistance. However, depending on the kinds of chemicals, concentration, and temperature, E-SJ-BK might swell or deteriorate. Please check the chemical resistance data listed on our product catalog and corporate website.
- Depending on the kinds of fluids, temperature, and detention time, the odor of the tubing might transfer to the fluid.
- This is a multi-layer tubing. In terms of chemical resistance, the outer layer (urethane elastomer) is inferior to the inner layer (ETFE), so please do not soak E-SJ-BK into chemicals and contact with chemicals for a long time.
 Also, depending on working environments, the fluids would be permeated through inner layer, resulting in the danger of swelling and degradation of the middle or outer layer.
- Please comply with the use conditions mentioned in our catalog such as working pressure, temperature, and minimum bend
- Please do not bring the hoses close to fire or heat sources.
- In cutting the hose, the cross-section must be perpendicular.
- For hose fittings, please use HAKKO original fittings [E-FTS: Multi-Layer Fittings]. For more information on HAKKO original fittings, please take a look at general catalog and corporate website.
 - In case you use other manufacturers' fittings, it may lead to the fluid leakage, coming off from the fittings, and the bursting of the hose. Unavoidably, if you use the joints other than HAKKO original fittings, please use the joints to seal an inner surface of the hose. Please do not use the joints to seal an outer surface of the hose.
 - Any problems occurred by using other manufacturers' fittings are not guaranteed.
- Please use the fittings which have the barbed R on the nipples. Please do not use the fittings which have scratches or rust on the surface of the nipple. Inner surfaces of the tubing may be damaged and it may cause the tubing to rupture or leak. Please use the flat hose clamps required for the hose specifications. Please do not use wires or do not tighten excessively with wires.
- Please do not apply unreasonable force such as kinking and pulling to the hoses.
- Tubings are greatly affected by use conditions and environments. In case hoses are used outdoor, the surface of the hoses will be damaged and the quality will deteriorate quickly, compared with ones used indoor.
 - The conditions of the hoses and fittings should be inspected regularly. If something unusual things listed below occur, stop using the hoses immediately and replace them with new ones:
 - ☐ Appearance Irregularity · · · Tear, Scratches, Swelling, Crack, Curve, Deformation, and Exposure of Reinforced Yarns due to Abrasion ☐ The Bursting of Inner or/and Outer Layers of the Hoses, Hardening, Dramatic Change in Color, and Leaking Fluids
- E-SJ-BK is designed for positive pressure. Please do not use E-SJ-BK for negative pressure (in vacuum conditions).
- In case the hoses are stored, get rid of remaining fluids inside the hoses, clean up any dusts on the surface of the hose and avoid twisting/holding the hoses.
- Please store a hose on the flat, smooth surfaces; otherwise, its shape may change.
- Please do not expose the hose to direct sunshine, wind, or rain. Store the hose in the low humid, well-ventilated, cold, and dark places. If you leave the hose outside, this might lead to change its color and deteriorate.
- Please do not pile up the hoses in large quantity or place the heavy objects onto the hose. These will lead to change the shape.
- In case of disposing, follow the local governmental regulations.

