Solvent Transfer and Paint Hose | Paint Hose with Grounding Wire; Possible to eliminate static electricity charged to the spray gun

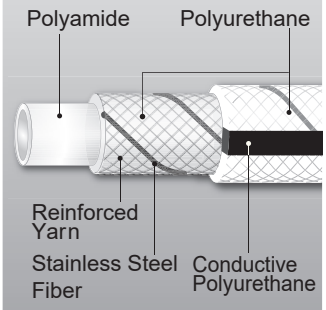
Solvent Transfer Hose

[Model Number : E-SV-(I.D.)]

Applications • Fluids

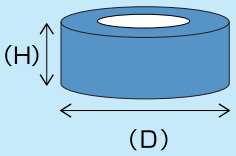
Chemical | Ink | Paint | Solvent | Air

〔Materials / Structure〕



- For Manual Painting such as Automobiles, Motorcycles, and Auto Parts
- For Pipes at Manufacturing Plants of Solvents and Paints
- For Transferring Air and Chemicals which require measurements against Anti-Static (Splash Charge)

〔Packing Dimension〕



Characteristics and Functions

Non-PVC | Solvent Resistance | Transparency | Pressure-Proof | Prevention of Static Charge | Ground Wire

- **Ground Wire**…Without taking the ground wire out of the hose and by attaching our original fittings to the hose, you can prevent the splash charge.
- **Remove Static Electricity**…With the ground wire and the conductive line, regardless of hose length, it shows higher ability to remove the static electricity. (Patent Registered)
- **Solvent Resistance**…Since the inner layer is made of Polyamide (Nylon resin), it shows greater levels of solvent resistance against paints, organic solvents, thinner, and so on.
- **Easy to Cut**…Since we print the cut mark on the hose every meter, it is easy to cut the length you would like to.
- **Flexibility**…Due to the laminated structure, compared with Nylon tubing, it shows higher levels of flexibility and kink-proof.
- **Transparency**…E-SV (clear color) enables you to check the fluid very easily.
- **Green Procurement**…E-SV is compliant with RoHS2 requirements.
- **Original Fittings**…By using our original fittings, you can avoid accidents which are caused by incorrect choices of hose and fittings.

Standard • Packing Information

Model Number	Inch (Inside Diamater) (*1)	I.D. × O.D.	Working Pressure MPa		Minimum Bend Radius at 20℃	Temperature Range	Standard Length	Product Weight	Color	Packing Dimension(*2)			
										Packing	Diameter (D)	Height (H)	Weight/roll
		mm	at 20℃	at 60℃	mm	℃	m	kg/roll			cm	cm	kg/roll
E-SV-6.5	1/4	6.5 × 9.5	0 ~ 1.5	0 ~ 0.7	50	−20 ~ 60	20	0.96	Clear+ Conductive Line	Film Wrapping	34	5	0.96
							100	4.80		Paper Bobbin	38.5	16	5.72
E-SV-7	19/64	7.5 × 10.5			60		20	1.03		Film Wrapping	34	5	1.03
							100	5.17		Paper Bobbin	46	16	6.35
E-SV-9	3/8	9.5×14			80		20	2.02		Film Wrapping	40	7.5	2.02
							100	10.12		Paper Bobbin	46	26	11.74

*1: Please note that inch size is approximate, which is not equal to milliunit.
*2: "Diameter (D)" × "Height (H)" means "External Dimensions of Cardboard Box (D)" × "Height (H)."

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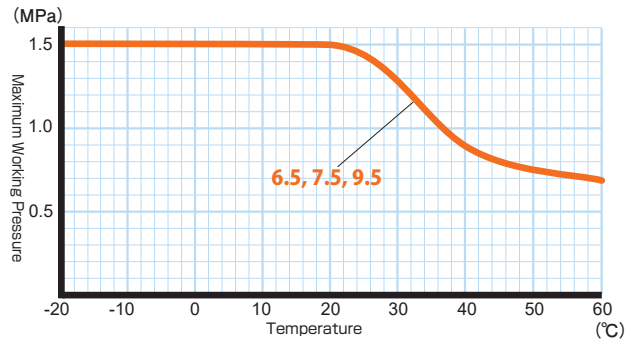
ISO 9001: 2015
ISO 14001: 2015

Technical Information

E-SV: Relationship between Working Temperature and Maximum Working Pressure

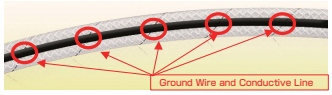


※ The above graph is the value when our fittings are used.
:Please do not use one-touch fitting for E-SV, since E-SV is a multi-layer hose.
Using an one-touch fitting results in the bursting and coming off from the hose.

- We can manufacture sizes, standard lengths, and color which are not listed on the catalog as made-to-order products. If you are interested in your original hoses which are tailored to your needs, do not hesitate to contact us.
- Due to the multi-layer structure, even though the material of the inner layer stands proof against chemical substances, depending on the using conditions, fluids may leak to the middle and outer layers, leading to swelling, leakage, changing colors, and bursting.

(Electrical Resistivity Data)

The metal fiber and the conductive line resin layer are coiled as spiral. These are contacted with regular intervals, regardless of the hose length are E-SV shows greater levels of grounding.
In case, the part of the ground wire is broken, the ground wire with the spiral configuration and the conductive static line are contacted for regular intervals. Thus, you can safely pull out the ground wire.
※ For the hose which only contains carbon, the electrical resistivity goes up in proportion to the hose length.



Solvent Transfer Hose	
The Length of Sample : 1m	The Length of Sample : 10m
70kΩ	200kΩ

※The figures above are measured without taking the ground wire away and insert the solvent transfer fittings on the both ends.
※The results shown above are not guaranteed.

(Bending Test for Ground Wire)

A ground wire used in Solvent Transfer Hose shows higher levels of bendness, compared with copper wire. The ground wire shows resistance against flexibility and repeated bending.

Bending Test for Ground Wire (Bending Angle 120 Degree : Load 500 Gram)	
Solvent Transfer Hose φ7.5mm	Bending 30,000 times without breaking Ground Wire
Copper Wire Sold in the Market	Bending only 110 times before breaking Ground Wire

※ The results shown above are not guaranteed.

(Paint Hose Series/Data of Soaking into Paint)

Test Procedure

Pieces of dumbbell (inner layer of the Solvent Transfer Series) are soaked into respective types of paint in order to determine the post-soaking tensile strength and calculate its tensile strength in the formula below.

$$\text{Tensile Strength}(\%) = \frac{\text{Tensile Strength After Soaking}}{\text{Tensile Strength Before Soaking}} \times 100$$

Soaking Time: 50 days (1,200 hours)

Material for Inner Layer

Polyamide : Paint Flex-Nylon (E-PFN) · Solvent Transfer Hose (E-SV)

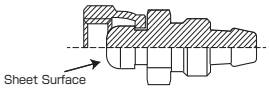
Fluorine Resin (ETFE) : Paint Flex-Fluorine (E-PFF)

*Low Retention of Tensile Strength means that the material swells and deteriorates against the chemical.
*This data is measured under the certain circumstances. Thus, depending on the using conditions, environments, and duration, this data might not be reliable.
*The results shown above are not guaranteed. Please make sure to check under your working conditions.

HAKKO Original Fittings

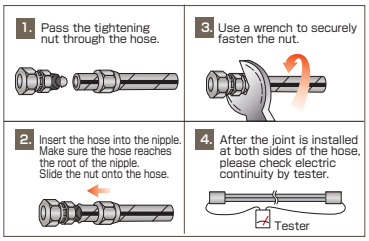
Image	Model Number	TYpe	Applicable Hose	Thread	Sheet	Material	Weight g/pc
	E-EM-75-G1/4-B	Female Screw (Fixed)	E-SV-7	G1/4	Male Sheet	Brass Nickel Plating	48
	E-EM-75-G3/8-B			G3/8			61
	E-EM-95-G3/8-B		E-SV-9	G3/8			85
	E-EM-75-G1/4-S		E-SV-7	G1/4		Wetted Part : SUS 304 Nut : Brass Nickel Plating	47
	E-EM-75-G3/8-S			G3/8			59
	E-FS-6.5-G1/4		E-SV-6.5	G1/4		Wetted Part : SUS 304 Nut : Brass Nickel Plating	52
	E-FS-6.5-G3/8			G3/8			64
	E-FB-6.5-G1/4			G1/4		Brass Nickel Plating	54
	E-FB-6.5-G3/8			G3/8			66
	E-FSG-6.5-G1/4			G1/4		Wetted Part : SUS 304 Nut : Brass Nickel Plating	76
	E-FSG-6.5-G3/8			G3/8			88
	E-FBG-6.5-G1/4			G1/4		Brass Nickel Plating	78
	E-FBG-6.5-G3/8			G3/8			90

The Shape of Sheet Surface on Threaded Portion of Hose Joint



At the other side,please select parallel thread of Female Sheet.

(How to Install the Fittings)



⚠ *Due to the yarn-reinforced hose, 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.This may result in the bursting or coming off from the hose.
*When you use our products, please refer to "Precautions for Use" available on our webpage and product catalog.
*In terms of chemical resistance, please refer to "Chemical Resistance Data" available on our webpage and product catalog.

Contact us if you have any inquiries about HAKKO products.

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