

Thermoplastic Industrial Hoses



VOLTBUSTER

Superior Static Protection™

Static Dissipative Food Grade Material **Handling Hoses**

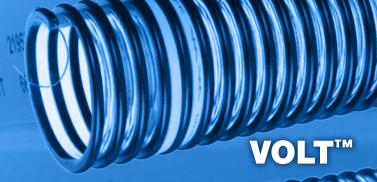
Superior Static Protection!

Durable Abrasion Resistant!

Food Grade! **Light Weight!** WINNER!

2013 AWARI

CHEMICAL PROCESSING













EDITION 0114





























VOLT™ Series

Heavy Duty Food Grade Static Dissipative Polyurethane Material Handling Hose

General Applications:

- Bulk truck and railcar unloading
- Fly ash collection
- Food grade material handling heavy duty abrasive
- Material handling heavy duty abrasive
- Milling machine scrap recovery
- Pharmaceutical product transfer
- Plastic processing equipment
- Pneumatic conveying equipment

Construction: Static dissipative polyurethane tube. rigid helix and grounding wire (patent pending).

Service Temperature: -40°F (-40°C) to 150°F $(+65^{\circ}C)^{*}$

Features and Advantages:

- Superior Static Protection! A properly grounded Voltbuster™ hose will not retain an electrostatic charge sufficient to create a propagating brush discharge. Hose material, using the embedded grounding wire, shows a charge decay time constant of < 1 second, based on independent lab testing.
- Food Grade Materials Hose tube complies with FDA (05) requirements. Grounding wire embedded in external helix to prevent material contamination.
- Extra Thick Abrasion Resistant Single-Ply Polyurethane Tube - Provides for longer hose life and lower operating costs versus rubber or PVC hoses.
- Transparent Construction "See-the-flow". Allows for visual confirmation of material flow.
- "Cold-Flex" Materials Hose remains flexible in sub-zero temperatures.
- Easy Slide Helix Rigid helix design protects hose tube from wear; allows hose to slide easily over rough surfaces. Easy to handle.
- Oil Resistant Polyurethane Tube Resists most animal and petroleum based oils.

Nominal Specifications

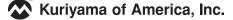
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Series	ID (in.)	ID (mm)	OD (in.)	OD (mm)		rking ure (psi) 104°F		uum (in. Hg) 104°F	Min. Bending Radius (in. @ 68°F)	Standard Length (ft.)	Weight (lbs./ft.)
VOLT150	1-1/2	38.35	1.87	47.5	40	20	Full	28	2	100/60	0.31
VOLT200	2	51.1	2.52	63.9	40	20	Full	28	6	100/60	0.61
VOLT250	2-1/2	63.75	2.96	75.2	40	20	Full	28	7	100	0.76
VOLT300	3	76.2	3.60	91.4	40	20	Full	28	9	100/60	0.91
VOLT400	4	101.6	4.69	121.0	35	17	28	25	12	100/60/20	1.70
VOLT500	5	127.0	5.75	146.8	35	17	28	25	14	60/20	2.13
VOLT600	6	153.4	6.81	173.2	30	15	25	20	16	60/20	2.53
VOLT800	8	203.5	8.76	223.3	30	15	25	20	18	60/20	3.30
VOLT1000	10	255.5	11.04	280.5	25	10	22	16	25	20	4.99

NOTE: Service life may vary depending on operating conditions and type of material being conveyed.

NOTE: For details of the following compliances, refer to footnotes listed on page 62.

BSE/TSE⁽⁰²⁾, FDA⁽⁰⁵⁾, RoHS⁽¹⁰⁾

Because we continually examine ways to improve our products, we reserve the right to alter specifications without notice.



^{*}Actual service temperature range is application dependent.

CAUTION: This product is designed to dissipate static electricity when the embedded grounding wire is physically extracted and securely connected to ground, through the fitting or by other means



















VLT-SD™ Series

Heavy Duty Food Grade Static Dissipative Polyurethane Fabric Reinforced Material Handling Hose

General Applications:

- Bulk truck and railcar unloading
- Food grade material handling heavy duty abrasive
- Material handling heavy duty abrasive
- Milling machine scrap recovery
- Plastic processing equipment
- Pneumatic conveying equipment
- Suction and discharge

Construction: Static dissipative polyurethane tube, polyester fabric reinforcement, rigid helix and grounding wire (patent pending).

Service Temperature: -40°F (-40°C) to 150°F (+65°C)*

Features and Advantages:

- Superior Static Protection! A properly grounded Voltbuster™ hose will not retain an electrostatic charge sufficient to create a propagating brush discharge. Hose material, using the embedded grounding wire, shows a charge decay time constant of < 1 second, based on independent lab testing.
- Food Grade Materials Hose tube complies with FDA(05) requirements. Grounding wire embedded in external helix to prevent material contamination.
- Extra Thick Abrasion Resistant Double-Ply Polyurethane Tube - Provides for longer hose life and lower operating costs versus rubber or PVC hoses.
- Fabric Reinforcement Designed with high tensile strength, food grade FDA⁽⁰⁶⁾, polyester yarn jacket to handle both suction, and higher pressure discharge applications.
- Transparent Construction "See-the-flow". Allows for visual conformation of material flow.
- "Cold-Flex" Materials Hose remains flexible in sub-zero temperatures.
- Easy Slide Helix Rigid helix design protects hose from wear; allows hose to slide easily over rough surfaces. Easy to handle.
- Oil Resistant Polyurethane Tube Resists most animal and petroleum based oils.

Nominal Specifications

Series	ID (in.)	ID (mm)	OD (in.)	OD (mm)		rking ıre (psi) 104°F		uum (in. Hg) 104°F	Min. Bending Radius (in. @ 68°F)	Standard Length (ft.)	Weight (lbs./ft.)
VLT-SD200	2	51.1	2.67	67.0	75	40	Full	28	9	100/50	0.77
VLT-SD300	3	77.0	3.78	96.0	70	35	Full	28	12	100/20	1.22
VLT-SD400	4	102.2	4.84	123.0	65	30	Full	28	13	100/60/20	1.85
VLT-SD500	5	128.0	5.79	152.0	45	22	28	25	14	60/20	2.43
VLT-SD600	6	153.4	6.93	177.4	40	22	28	25	17	60/20	3.05
VLT-SD800	8	206.0	9.25	235.0	35	25	26	20	23	20	4.70

NOTE: Service life may vary depending on operating conditions and type of material being conveyed.

NOTE: For details of the following compliances, refer to footnotes listed on page 62.

X CAUTION: This product is designed to dissipate static electricity when the embedded grounding wire is physically extracted and securely connected to ground, through the fitting or by other means.

BSE/TSE⁽⁰²⁾. FDA⁽⁰⁵⁾. FDA⁽⁰⁶⁾. RoHS⁽¹⁰⁾

Because we continually examine ways to improve our products, we reserve the right to alter specifications without notice.



^{*}Actual service temperature range is application dependent.











Static Dissipative, Food **Gradet Flexible PVC Sleeve**

- Helps prevent overbending near the coupling.
- Cut into approximately 12-inch lengths and screw onto hose at each end.

For VOLT & VLT-SD Hoses

Nominal Specifications					
Part No.	Fits Hose (ID)	Color	Standard Length (ft.)	Weight (lbs/ea.)	
SLV-VLT4X3	4"	Clear	3	4.2	

†CFR Title 21 Parts 170-199.



High Static Applications

In most applications, Tigerflex™ hoses with grounding wires (such as our WE, 2001 or 2020 series) or static dissipative additives (such as our WBS, UF1 or UF2 series) are sufficient to dissipate static. However, applications involving fine particles transferred at very high rates of speed have increased potential to generate static. Tigerflex™ Voltbuster™ hoses are designed for these very high static generating applications.

Static Generating Applications*	Food Grade and Non Food Grade Applications	Non Food Grade Applications Only		
Very High	VOLT, VLT-SD	TR1, TR2		
High	WE, 2001, 2020 & GTFE	PF, UV3, UVPE		
Medium	WBS	AMPH, UBK, UF1, UF2, UFC, WU, UV2		

*This chart is intended only as a guideline for selecting the proper Tigerflex™ hose series. Actual results are applicationdependent. Additional factors influencing static generation include, but are not limited to, the composition of the transferred materials, rate of material transfer, relative humidity, length and size of hose, and number and degree of hose bends. It is the purchaser's responsibility to ensure hose suitability prior to installation.

For product information on other listed Tigerflex™ hose series, please visit www.kuriyama.com.

Grounding of Equipment

Tigerflex™ hoses with grounding wires are designed to dissipate static electricity when the embedded grounding wire is physically extracted and securely connected to ground, through the fitting or by other means. Trucks, railcars and other equipment connected to the hose must first be grounded in order for the hose to function properly.

Hose assemblies should be tested regularly to ensure proper bond continuity of grounding wire to metal coupling.





Engineered Innovation for Peace of Mind



Static Safety

Superior Static Protection! A properly grounded Voltbuster™ hose will not retain an electrostatic charge sufficient to create a propagating brush discharge. Hose material, using the embedded grounding wire, shows a charge decay time constant of < 1 second, based on independent lab testing.



Back Safety

Tigerflex™ Voltbuster™ hoses are lightweight and flexible for worker safety. According to the US Department of Labor, sprains, strains and tear injuries account for approximately 40 percent of total injury and illness cases requiring days away from work. [1] These types of injuries are commonly the result of overexertion of the back or shoulders. Cumbersome rubber and metal hoses can pose an increased risk of these types of injuries due to their heavier weight.



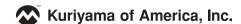
Food Safety

Tigerflex™ Voltbuster™ hoses are specially designed to ensure the purity of the transferred materials. The hoses' durable stainless steel grounding wire is encapsulated in the rigid plastic helix on the exterior of the hose, safely eliminating the risk of metal contaminating the transferred materials. However, traditional plastic and food grade rubber hoses typically place their grounding wires in the body of the hose. Over time, the transfer of powders, grains or other abrasive materials can wear away the interior of the hose tube, and may ultimately reach the metal wire, causing portions to separate from the hose and contaminate the transferred materials!

Compliance Footnotes

- (02) BSE/TSE The majority of the raw materials used in our formulations are not manufactured or derived from materials of animal origin. Nor do our products come into contact with materials of animal origin during processing. Our suppliers of raw materials have assured us their compounds exceed the relevant European Guidance on minimizing the Risk of Transmitting Animal Spongiform Encephalophy Agents Via Human and Veterinary Medical Products.
- (05) FDA Material conforms to CFR title 21, parts 177.2600 and 175.105
- (06) FDA Material conforms to CFR title 21, parts 177.2800 (5)(i), 21 CFR 170.39.
- (10) RoHS The product complies with the requirements of the EU directive 2002/95/EC which is on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

[1] U.S. Department of Labor, Bureau of Labor Statistics, Nonfatal Occupational Injuries and Illnesses Requiring Days Away From Work, 2009 (November 9, 2010)



Cautionary Statement

All Products sold and distributed by Kuriyama of America, Inc. are in the nature of commodities and they are sold by published specifications and not for particular purposes, uses or applications. Purchaser shall first determine their suitability for the intended purposes, uses or applications and shall either conduct its own engineering studies or tests, or retain qualified engineers, consultants or testing laboratories and consult with them before determining the proper use, suitability or propriety of the merchandise or Products for the intended purposes, uses or applications.

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Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing including connections, couplings, clamps, conductivity and bonding should be inspected frequently, regularly and consistently, and should be replaced, adjusted or re-tightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty. Seller shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any Products sold or distributed by it.

Purchasers or users of the Products should frequently and consistently undertake inspections and protective measures with respect to the use and application of Products, which should include the examination of tube and cover, conditions of the hose or tubing, and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.

Limited Warranty

The Products sold or distributed by Seller are warranted to its customers to be free from defects in material and workmanship at the time of shipment by us, subject to the following provisions. ALL WARRANTY CLAIMS SHALL BE MADE WITHIN SIX (6) MONTHS AFTER SELLER SHIPPED THE PRODUCTS. SELLER'S LIABILITY HEREUNDER IS LIMITED AT SELLER'S EXCLUSIVE DISCRETION, TO 1) THE PURCHASE PRICE OF ANY PRODUCTS PROVING DEFECTIVE; 2) REPAIR OF ANY DEFECTIVE PRODUCT OR PART THEREOF; OR 3) REPLACEMENT OF ANY DEFECTIVE PRODUCT OR PART UPON ITS AUTHORIZED RETURN TO SELLER.

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09/2005

Distributed by:

Kuriyama of America, Inc.

Headquarters, Sales Office and Warehouse Location 360 E. State Parkway, Schaumburg, IL 60173-5335 Phone: (847) 755-0360 • Toll-free FAX: (800) 800-0320 International FAX: (847) 885-0996

> Web Site: http://www.kuriyama.com E-Mail: sales@kuriyama.com

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CONTACT OUR SALES/WAREHOUSE LOCATIONS BELOW WHICH SERVE YOUR AREA

SOUTHWEST WAREHOUSE KURIYAMA OF AMERICA, INC. HOUSTON 531 PORTWALL STREET, SUITE 100 HOUSTON, TX 77029 Phone: (713) 674-8212 Toll Free Phone: (800) 501-6808 FAX: (713) 674-5214 Toll Free FAX: (800) 800-5214

WESTERN WAREHOUSE KURIYAMA OF AMERICA, INC. SANTA FE SPRINGS 10749 SHOEMAKER AVENUE SANTA FE SPRINGS, CA 90670-4039 Phone: (562) 941-4507 FAX: (562) 941-8940 Toll Free FAX: (800) 326-8940

SOUTHEAST WAREHOUSE FORTNEY SALES CO., INC. 1580 BIG SHANTY DRIVE NW KENNESAW, GA 30156-8210 Phone: (770) 427-6528 FAX: (770) 423-9249 Toll Free FAX: (800) 423-9249 Web Site: www.fortneysales.com E-Mail: sales@fortneysales.com

EASTERN WAREHOUSE EASTERN RUBBER & PLASTICS CO., INC. RT. 537 PLUMSTED INDUSTRIAL PARK NEW EGYPT, NJ 08533-0248 Phone: (609) 758-0100 FAX: (609) 758-0102 Toll Free FAX: (800) 445-7138 Web Site: www.easternrubber.com E-Mail: sales@easternrubber.com

IN CANADA:

KURI TEC CORPORATION BOX 21052, L P M P O 140 ROY BOULEVARD BRANTFORD, ONT, CANADA N3R 7W9 Phone: (519) 753-6717 FAX: (519) 753-7737 Web Site: http://www.kuritec.com E-Mail: sales@kuritec.com

IN MEXICO:

KURIYAMA DE MEXICO, S. DE R.L. DE C.V. CARRETERA MIGUEL ALEMÁN KM. 14.8 PARQUE INDUSTRIAL HASNA APODACA (MONTERREY), N.L., 66600, MEXICO Phone: (81) 1086-1870 O 71 Toll-Free: (within Mexico) 01-800-822-52-00 FAX: (81) 1086-1869 Internet: www.kuriyama.com Correo Electronico: ventas@kuriyama.com





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