

Kuriyama Layflat ProductsHoses, Couplings & Assemblies





Kuriyama of America, Inc.





Table of Contents



Gatorflow [™] PVC / Nitrile Rubber Discharge Hose6
Gatorflow™ - Yellow PVC / Nitrile Rubber Air & Discharge Hose8
Gatorflow™ - Terrain™ PVC / Nitrile Rubber Discharge Hose7
Ironsides® Heavy Duty PVC Water Discharge Hose3
Mill Discharge Hoses Single Jacket & Double Jacket "Contractor Grade"9
Mill Discharge Assemblies Double Jacket "Contractor Grade"10
Vinylflow® Premium PVC Drip Irrigation and Water Discharge Hose4
Vinylflow® EZ-Lite™ General Purpose PVC Water Discharge Hose5

T155AA - High Pressure	
Water Discharge Hose	
T253AA - 150 PSI EPDM Layflat Water Discharge Hose	1
T254AA - 150 PSI SBR Water Discharge Hose	1:



EZ-Seal™ Leak Resistant Aluminum Couplings	
Part C Coupler x Hose Shank	14
Part E Male Adapter x Hose Shank	14
Pin Lug Hose Shank Couplings - Female Ends	14
Pin Lug Hose Shank Couplings - Male Ends	14

OTHER

Cautionary Statement & Limited Warranty	16
Technical Data	15

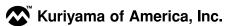
Layflat Hoses, Couplings and Accessories by Series Number

Series	Page	Series	Page	Series	Page
ABF-LF	14	DJMD	9	T155AA	13
ABM-LF	14	GF	6	T253AA	11
AL-CLF	14	GFTR	7	T254AA	12
AL-ELF	14	GFY	8	VF	4
DJ	10	IS	3	VFL	5
		SJMD	9		

The trademarks contained in this publication are trademarks of Kuriyama of America, Inc.

The "Alfagomma" trademark contained in this publication is a registered trademark of Alfagomma S.p.A.

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



Ironsides®

Heavy Duty PVC Water Discharge Hose

APPLICATIONS:

- Agricultural Quarry Mining Irrigation Construction
- Portable Hydrant Relay Supply Line Industrial

CONSTRUCTION:

 Premium quality PVC tube and cover, reinforced with two spiral plies and longitudinal synthetic cords.

FEATURES & BENEFITS:

- MSHA-accepted Use as a water hose in underground mining applications
- Premium quality tube and cover Designed for heavy duty applications. This hose has a high working pressure and is ozone resistant.
- Two spiral plies and longitudinal synthetic cords Provides higher working pressure and resists kinking and twisting.
- Storage All coils have PVC cores for easier dispensing. Hoses coil flat for easy storage.



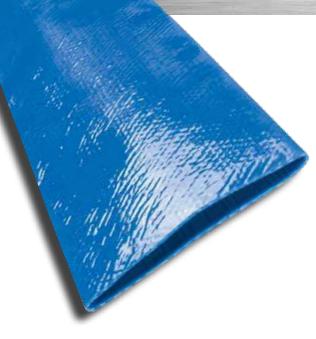
Please see page 15 for friction loss/elongation information.

Service Temperature: -5° F (-20° C) to 170° F (+76° C)

Series No.	(in.)	Size (mm)	Ho (in.)	se ID (mm)	Approximate Wall Thickness (in.)	Working Pressure (PSI)	Coil Length (ft.)	Approx. Weight (lbs./coil)
IS150	1 1/2	38.1	1.61	40.9	0.0866	150	300	69.0
IS200	2	50.8	2.09	53.1	0.0906	150	300	96.0
IS250	2 1/2	63.5	2.58	65.5	0.0945	150	300	123.0
IS300	3	76.2	3.09	78.5	0.0984	150	300	156.0
IS400	4	101.6	4.10	104.1	0.1102	125	300	228.0
IS600	6	153.4	6.16	156.5	0.1181	115	300	363.0
IS800	8	204.7	8.15	207.0	0.1220	70	300/100	486/162
IS1000	10	254.0	10.12	257.0	0.1300	65	100	195.0

Note: Not intended for use as a fire hose.





Premium PVC Drip Irrigation & Water Discharge Hose

APPLICATIONS:

• Drip irrigation • Construction • Industrial • Agricultural

CONSTRUCTION:

 Features a balanced polyester yarn spiral wrap, longitudinal strength member and homogeneous PVC tube and cover to prevent separation.

FEATURES & BENEFITS:

- Smooth tube Provides low friction loss.
- Drip irrigation Hose lays straight with minimal elongation under pressure. Hose may be punched easily without tearing.
- Ultraviolet inhibitors Reduces aging and weather checking.
- Storage All coils have PVC cores for easier dispensing. Hoses coil flat for easy storage.

Please see page 15 for friction loss/elongation information.

Service Temperature: -5° F (-20° C) to 170° F (+76° C)

Nominal Specifications												
Series No.	(in.)	ize (mm)	Hos (in.)	e ID (mm)	Approximate Wall Thickness (in.)	Working Pressure (PSI)	Coil Length (ft.)	Approx. Weight (lbs./coil)				
VF150	1 1/2	38.1	1.614	41.0	0.0669	80	300	48.0				
VF200	2	50.8	2.090	53.1	0.0669	80	300	69.0				
VF250	2 1/2	63.5	2.598	66.0	0.0787	80	300	87.0				
VF300	3	76.2	3.130	79.5	0.0787	70	300	117.0				
VF400	4	101.6	4.134	105.0	0.0827	70	300	156.0				
VF500	5	127.0	5.039	128.0	0.0866	40	300	204.0				
VF600	6	153.4	6.181	157.0	0.0866	50	300	258.0				
VF800	8	204.7	8.169	207.5	0.1063	45	300/100	390/130				
VF1000	10	253.0	10.118	257.0	0.1181	35	100	181.0				
VF1200	12	304.8	12.126	308.0	0.1181	30	100	195.0				
VF1400	14	355.6	14.134	359.0	0.1181	30	100	262.0				
VF1600	16	406.4	16.142	410.0	0.1181	30	100	310.0				

VinyIflow® EZ-Lite®

General Purpose PVC Water Discharge Hose

APPLICATIONS:

- Equipment rental Construction Agricultural
- General open end water discharge

CONSTRUCTION:

 Features a balanced polyester yarn spiral wrap, longitudinal strength member and homogeneous PVC tube and cover to prevent separation.

FEATURES & BENEFITS:

- Smooth tube Provides low friction loss.
- EZ An easy to handle lightweight hose for general purpose applications.
- Ultraviolet inhibitors Reduces aging and weather checking.
- Storage All coils have PVC cores for easier dispensing. Hoses coil flat for easy storage.



Please see page 15 for friction loss/elongation information.

Service Temperature: -5° F (-20° C) to 170° F (+76° C)

Nominal	Speci	ficatio	ons					
Series No.	(in.)	ize (mm)	Hose (in.)	e ID (mm)	Approximate Wall Thickness (in.)	Working Pressure (PSI)	Coil Length (ft.)	Approx. Weight (lbs./coil)
VFL075	3/4	19.1	.760	19.3	.054	100	300	23.0
VFL100	1	25.4	1.024	26.0	.051	85	300	30.0
VFL125	1 1/4	31.8	1.299	33.0	.051	85	300	35.0
VFL150	1 1/2	38.1	1.614	41.0	.045	65	300	42.0
VFL200	2	50.8	2.087	53.0	.048	65	300/50	49.0/8.0
VFL300	3	76.2	3.071	78.0	.055	60	300/50	90.0/15.0
VFL400	4	101.6	4.094	104.0	.056	60	300	131.0
VFL600	6	152.4	6.102	155.0	.061	40	300	209.0
VFL800	8	203.2	8.169	208.0	.073	40	300	312.0





APPLICATIONS:

- Irrigation Agriculture Watering Dewatering Drainage
- Pump discharge Flotation booms Cable covering
- Industrial washdown Limited oil and chemical applications

CONSTRUCTION:

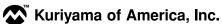
 Black PVC/Nitrile rubber tube and cover; polyester reinforcement provides working pressures equal to or higher than most PVC or rubber discharge hoses.

FEATURES & BENEFITS:

- Unique woven construction Resists kinking, stretching and twisting.
- Ribbed cover Provides high resistance to oil, weathering and abrasion.
- Handling Lighter, less bulky, stores in less space than most rubber discharge hoses.

Service Temperature: -20° F (-29° C) to 176° F (+80° C)

No	Nominal Specifications													
	Series No.	(in.)	ize (mm)	Hose (in.)	e ID (mm)	Approximate Wall Thickness (in.)	Working Pressure (PSI)	Coil Length (ft.)	Approx. Weight (Ibs./coil)					
	GF150	1 1/2	38.1	1.56	39.6	0.08	200	200	42.0					
	GF200	2	50.8	2.08	52.8	0.08	200	200	60.0					
	GF250	2 1/2	63.5	2.59	65.8	0.08	175	200	82.0					
	GF300	3	76.2	3.08	78.2	0.10	175	200	91.0					
	GF400	4	101.6	4.08	103.6	0.10	150	200/50	132/33					
	GF500	5	127.0	5.05	128.3	0.12	150	200	196.5					
	GF600	6	153.4	6.10	155.0	0.12	150	200/100/50	232/116/58					
	GF800	8	204.7	8.10	205.7	0.12	150	100/50	198/99					
ew 10" &	GF1000	10	254.0	10.00	254.0	0.14	115	100/50	252/126					
2" sizes	GF1200	12	304.8	12.09	307.0	0.14	115	100/50	336/168					



Gatorflow[™] - Terrain[™]

PVC / Nitrile Rubber Discharge Hose

APPLICATIONS:

- Liquid Manure, Sludge & Slurry Transfer
- Frack Solution & Fresh Water Transfer
- Irrigation Agriculture Watering Dewatering
- Contaminated Liquids, Fertilizers, Oils, Hydrocarbons
- Mining Limited Chemical Applications

CONSTRUCTION:

 Black PVC/Nitrile rubber tube and cover; polyester reinforcement provides working pressures equal to or higher than most PVC or rubber hoses.

FEATURES & BENEFITS:

- Unique woven construction Resists kinking, stretching and twisting.
- Ribbed cover Provides high resistance to oil, weathering and abrasion.
- Lengths Manufactured in special longer lengths (660 Ft) to reduce leak points



Service Temperature: 20° F (-29° C) to 176° F (+80° C)

Nominal Specifications												
Series No.	Si (in.)	ize (mm)	Hos (in.)	e ID (mm)	Approximate Wall Thickness (in.)	Working Pressure (PSI)	Coil Length (ft.)	Approx. Weight (lbs./coil)				
GFTR600	6	152.4	6.10	155	0.18	200	660	1082				
GFTR800	8	203.2	8.15	207	0.18	175	660	1551				
GFTR1000	10	254.0	10.00	254	0.16	175	660	1775				



Gatorflow™ - Yellow

PVC / Nitrile Rubber Air & Discharge Hose

APPLICATIONS:

- Air compressors High pressure liquid pumping
- Bulk powder discharge (excluding cement)
- Irrigation Agriculture Watering Dewatering
- Drainage Flotation booms Cable covering
- Industrial wash down Limited oil and chemical applications

CONSTRUCTION:

 Yellow PVC/Nitrile rubber tube and cover; polyester reinforcement provides working pressures equal to or higher than most PVC or rubber hoses.

FEATURES & BENEFITS:

- Unique woven construction Resists kinking, stretching and twisting.
- Ribbed cover Provides high resistance to oil, weathering and abrasion.
- Handling Lighter, less bulky, stores better in less space than most rubber discharge hoses.

Service Temperature: -20° F (-29° C) to 176° F (+80° C)

Nominal Specifications Approximate Working Approx. **Hose ID Coil Length** Series Size Pressure Wall Thickness Weight No. (in.) (mm) (in.) (mm) (ft.) (in.) (PSI) (lbs./coil) **GFY075** 3/4 19.1 .82 21.0 200/50 20.0/5.0 0.13 400 **GFY100** 1 25.4 1.02 26.0 0.14 400 200/50 28.0/7.0 GFY150 1 1/2 38.1 1.56 39.6 0.14 300 200 60.0 **GFY200** 2 50.8 2.08 52.8 200 200 85.0 0.14 **GFY300** 3 76.2 3.08 78.2 200 123.0 0.14 200 **GFY400** 4 101.6 4.08 103.6 0.14 200 200 173.0 **GFY600** 6 152.4 6.10 154.9 0.18 200 100 164.0

Mill Discharge Hoses

Single Jacket & Double Jacket "Contractor Grade" Hoses

APPLICATIONS:

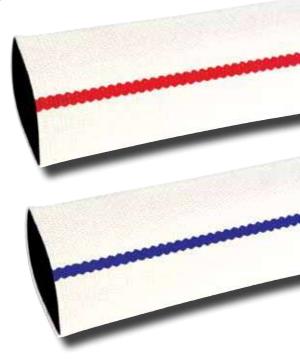
- Pump water discharge Construction pumps.
- Wash down service on ships and in factories Plant clean-up

CONSTRUCTION:

 Single or double jacket with 100% polyester yarn. Water and mildew-resistant cover, will not rot, even if the hose is stored wet.

FEATURES & BENEFITS:

- Easy identification White cover with single stripe. Red stripe indicates single jacket; blue stripe indicates double jacket.
- Smooth natural rubber tube Provides strength and flexibility.
- Double Jacket version Provides greater abrasion resistance.
- Wide range of operating temperatures Hose may be used in temperatures from -25° F (-31° C) to 185° F (+85° C) without stiffening.
- Packaging/ storage Individually packed in cartons for ease of handling and shipping. Hose coils easily for storage.



Service Temperature: -25° F (-31° C) to 185° F (+85° C)

Nominal S	Nominal Specifications													
Series No.	(in.)	ize (mm)	Ho (in.)	se ID (mm)	Max. Working Pressure (PSI)	COUPLING BOWL Size (in.)	Approx. Weight per 100 ft. (lbs.)	Standard Length in Carton (ft.)						
SJMD 150X100	1 1/2	38.1	1.61	41.0	150	111/16"	14	100*						
SJMD 200X100	2	50.8	2.13	54.0	150	21/4"	20	100*						
SJMD 250X100	2 1/2	63.5	2.64	67.0	150	23/4"	26	100*						
SJMD 300X100	3	76.2	3.15	80.0	150	31/4"	32	100*						
SJMD 400X100	4	101.6	4.06	103.0	150	49/32"	50	100*						
DJMD 150X100	1 1/2	38.1	1.57	40.0	200	1 ¹³ / ₁₆ "	22	100*						
DJMD 250X100	2 1/2	63.5	2.60	66.0	200	213/16"	44	100*						

Note: Not intended for use as a fire hose.

Mill Discharge Assemblies

Double Jacket "Contractor Grade"

Coupled with Male and Female Aluminum

Rocker Lug Couplings

APPLICATIONS:

- Municipal washdown
- Hydrant-to-truck water supply line
- Heavy duty equipment or pump rental
- Ship deck washdown

CONSTRUCTION:

 Double jacket with 100% polyester yarn. Water and mildew-resistant cover, will not rot, even if the hose is stored wet.

FEATURES & BENEFITS:

- · Smooth natural rubber tube Provides strength and flexibility.
- Double Jacket Provides greater abrasion resistance.
- Wide range of operating temperatures Hose may be used in temperatures from -25° F (-31° C) to 185° F (+85° C) without stiffening.
- Easy identification White cover with single blue stripe.
- Packaging/ storage Individually packed in cartons for ease of handling and shipping. Hose coils easily for storage.





Service Temperature: -25° F (-31° C) to 185° F (+85° C)

Nominal Specifications Max. Working Approx. Weight Series Size Length Thread **Pressure** No. (in.) (mm) (ft.) **Type** (lbs.) (PSI) DJ150NSTX50 1 1/2 38.1 NST 200 12 50' DJ150NPSHX50 1 1/2 38.1 50' **NPSH** 200 12 DJ250NSTX50 2 1/2 63.5 50' **NST** 200 23 DJ250NPSHX50 2 1/2 50' **NPSH** 200 23

Note: Not intended for use as a fire hose.

Water Discharge

T253AA - 150 PSI EPDM Layflat Water Discharge Hose

APPLICATIONS:

 High pressure, 150 PSI lay flat type hose for general industrial construction and irrigation.

COVER:

Black abrasion and ozone-resistant EPDM rubber.

REINFORCEMENT:

• High tensile textile cords.

TUBE:

• Black EPDM rubber.

TEMPERATURE RANGE:

• -22°F (-30°C) to 176°F (+80°C)

STANDARD LENGTH:

• 100 feet: 11/2" through 10"50 feet: 6", 8" 10" & 12"

WORKING PRESSURE:

• 150 PSI constant (10 Bar)

BRANDING:

- ALFAGOMMA ITALY T253 10 BAR (150 PSI) EPDM WATER DISCHARGE (in green letters)
- * 65/8" referred to as Elephant Trunk Hose Ideal for "Irrigation Boots"



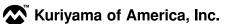
FOR APPLICATIONS INVOLVING
INDUSTRIAL ACID CHEMICALS AND
ALCOHOLS, PLEASE REFER TO T5050G
AND T5090E CHEMICAL HOSES

Nominal S	pecifica	tions	NOT FOR CHEM	IICAL APPLICATIONS			
Series No.	Nomi	inal ID	Nomir	nal OD	Approx. Wt.	Max. Rec.	
Selies Nu.	(in.)	(mm)	(in.)	(mm)	lbs./100 ft.	WP (PSI)	
T253AA150	1 1/2	38	1.81	46	36	150	
T253AA200	2	51	2.32	59	49	150	
T253AA250	2 1/2	63	2.80	71	60	150	
T253AA300	3	76	3.31	84	86	150	
T253AA400	4	102	4.33	110	119	150	
T253AA600	6	152	6.38	162	200	150	
★ T253AA662	6 5/8	168	7.01	178	217	150	
T253AA800	8	203	8.46	215	288	150	
T253AA1000	10	254	10.63	270	512	150	
T253AA1200	12	305	12.56	319	534	150	
·		.,,			·	<u> </u>	

COUPLING SUGGESTIONS

Quick-Acting, pin lug, short shank couplings or combination nipples attached with single bolt, double bolt, wire or band type clamps.

★ Kuriyama offers a full line of Quick-Acting couplings, pin lug shank couplings and combination nipples. Refer to current Kuriyama-Couplings™ and Accessories Catalog for type and pricing.



Water Discharge







APPLICATIONS:

• Water discharge hose for construction and irrigation.

COVER:

• Black abrasion and ozone-resistant SBR rubber.

REINFORCEMENT:

• High tensile textile cords.

TUBE:

Black SBR

TEMPERATURE RANGE:

• -22°F (-30°C) to 176°F (+80°C)

WORKING PRESSURE:

• Constant Pressure — 10 Bar (150 PSI)

STANDARD LENGTH:

• 100 feet: 11/2" through 8"

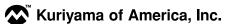
• 50 feet: 8"

Nominal Sp	Nominal Specifications												
Series No.	Nomi	nal ID	Nomi	nal OD	Approx. Wt.	Max. Rec.							
Series No.	(in.)	(mm)	(in.)	(mm)	lbs./100 ft.	WP (PSI)							
T254AA150	1 1/2	38	1.89	48	65	150							
T254AA200	2	51	2.40	61	85	150							
T254AA300	3	76	3.46	88	153	150							
T254AA400	4	102	4.49	114	206	150							
T254AA600	6	152	6.54	166	309	150							
T254AA800	8	203	8.62	219	458	150							

COUPLING SUGGESTIONS

Quick-Acting, pin lug, short shank couplings or combination nipples attached with single bolt, double bolt, wire or band type clamps.

★ Kuriyama offers a full line of Quick-Acting couplings, pin lug shank couplings and combination nipples. Refer to current Kuriyama-Couplings[™] and Accessories Catalog for type and pricing.



Water Discharge

T155AA - High Pressure Water Discharge Hose

APPLICATIONS:

 Heavy duty water discharge hose where tougher operating conditions exist and high pressures are needed.

COVER:

Black abrasion and ozone-resistant SBR rubber.

REINFORCEMENT:

• High tensile textile cords.

TUBE:

Black SBR/NBR blend

TEMPERATURE RANGE:

• -22°F (-30°C) to 176°F (+80°C)

STANDARD LENGTH:

• 100 feet: 11/2" through 6"

• 50 feet: 6"



Nominal S	Nominal Specifications												
Series No.	Nomi	inal ID	Nomi	nal OD	Approx. Wt.	Max. Rec.							
Series No.	(in.)	(mm)	(in.)	(mm)	lbs./100 ft.	WP (PSI)							
T155AA150	1 1/2	38	1.97	50	83	300							
T155AA200	2	51	2.56	65	110	300							
T155AA250	2 1/2	63	3.11	79	151	300							
T155AA300	3	76	3.62	92	185	300							
T155AA400	4	102	4.65	118	242	300							
T155AA600	6	152	6.69	170	410	300							

COUPLING SUGGESTIONS

Quick-Acting, pin lug, short shank couplings or combination nipples attached with single bolt, double bolt, wire or band type clamps.

★ Kuriyama offers a full line of Quick-Acting couplings, pin lug shank couplings and combination nipples. Refer to current Kuriyama-Couplings[™] and Accessories Catalog for type and pricing.



Kuriyama-Couplings[™]



EZ-Seal[™] Leak Resistant Couplings Ideally suited for Layflat hoses

APPLICATIONS:

- Agriculture Chemicals Petroleum Construction
- Material handling

CONSTRUCTION:

• Aluminum; ASTM B85 Grade 383

FEATURES & BENEFITS:

- Rubber seals Help prevent leakage.
- Interchangeability Part C & E conform to Mil Spec A-A-59326.
- Versatile Suitable for use with other PVC and Rubber Hoses.

Note: To insure proper sealing attach band clamps directly over rubber seals.



Aluminum Part C Female Coupler x Hose Shank

Part Number	Size	Weight Each (lbs.)	Standard Carton
AL-CLF150	1 1/2"	0.77	30
AL-CLF200	2"	0.98	40
AL-CLF300	3"	1.98	15
AL-CLF400	4"	2.87	15



Aluminum Part E Male Adapter x Hose Shank

Part Number	Size	Weight Each (lbs.)	Standard Carton
AL-ELF150	1 1/2"	0.44	40
AL-ELF200	2"	0.64	50
AL-ELF300	3"	1.38	18
AL-ELF400	4"	2.51	20



Aluminum Pin Lug Hose Shank with Brass Swivel Nut Female End (NPSM Threads)

		•	,
Part Number	Size	Weight Each (lbs.)	Standard Carton
ABF-LF150	1 1/2"	0.37	150
ABF-LF200	2"	0.58	80
ABF-LF300	3"	1.16	24
ABF-LF400	4"	2.01	20



Aluminum Pin Lug Hose Shank Male End (NPSM Threads)

Part Number	Size	Weight Each (lbs.)	Standard Carton
ABM-LF150	1 1/2"	0.22	150
ABM-LF200	2"	0.40	80
ABM-LF300	3"	1.04	24
ABM-LF400	4"	1.48	20

Technical Data

VINYLFLOW® / IRONSIDES® / VINYLFLOW® EZ-Lite™ Friction Loss per 100 Ft. (PSI)

GPM	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"	14"	16"
20	1.2										
30	2.4										
40	5.1	1.1									
50	6.0										
60		2.4	1.4								
80		4.1	1.9	1.0							
90	17.0										
100		6.0	2.8	1.2							
120				1.8							
140				2.2							
160				2.6	0.6						
180				3.3	0.7						
200		22	7		0.8						
220					1.0						
240					1.1		0.2				
250				5							
260					1.3	0.2					
280					1.4	0.2					
300					1.6	0.2					
340						0.3					
350			22								
380						0.4					
420						0.5					
460						0.6					
500					4	0.7					
540						0.8					
580				22		0.9					
620						1.0					
660						1.1					
1,200						3.0					
1,200 1,250					22						
1,800							1.5				
2.500								1.0			
3,500									0.8		
3,500 3,630						22					
5,000							11			0.6	
6,000											0.4
8.000								8			
12,000									8		
15,000										5	
16,000											30

VINYLFLOW® Longitudinal Elongation (%) (on flat ground only)

	PRESSURE (PSI)												
Size	10 20 30 40 50 60 70												
11/2"	0.00	0.01	0.02	0.06	0.14	0.17	0.35	0.50					
2"	0.01	0.03	0.04	0.15	0.32	0.38	0.61	0.84					
21/2"	0.06	0.15	0.23	0.50	0.79	0.95	1.33	1.57					
3"	0.03	0.14	0.21	0.34	0.63	0.76	1.10	-					
4"	0.14	0.35	0.53	0.90	1.40	1.68	1.98	-					
6"	0.14	0.42	0.63	1.08	1.35	-	-	-					
8"	0.21	0.57	0.86	1.47	1	1	-	-					
10"	0.15	0.39	0.59	-	-	-	-	-					
12"	0.14	0.55	0.82	-	-	-	-	-					
16"	0.00	0.28	0.42	-	-	ı	-	-					

REV. 11.08

VINYLFLOW® EZ-Lite™ Longitudinal Elongation (%) - (on flat ground only)

	PRESSURE (PSI)												
Size	10	10 20 30 40 50											
11/2"	0.00	0.10	0.20	0.30	0.40	0.60							
2"	0.00	0.20	0.30	0.60	0.80	-							
3"	0.20	0.40	0.80	1.20	-	-							
4"	0.20	0.50	1.40	1.90	-	-							
6"	0.00	0.40	0.80	1.40	-	-							
8"	0.20	0.80	1.60	2.20	-	-							

For sloped ground, add the head pressure shown below									
Slope Angle	Additional Head Pressure								
-	Pressure per 300 ft.								
5°	11								
10°	23								
15°	34								
20°	44								
25°	55								
30°	65								
35°	75								
40°	83								
45°	92								

IRONSIDES® Longitudinal Elongation (%) - (on flat ground only)

Size	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
1 1/2"	0.00	0.10	0.10	0.20	0.30	0.36	0.40	0.50	0.60	0.60	0.80	0.90	0.90	1.00	1.10
2"	0.00	0.00	0.00	0.10	0.10	0.10	0.20	0.40	0.60	0.60	0.70	0.80	0.80	0.90	1.10
2 1/2"	0.00	0.00	0.10	0.20	0.30	0.40	0.40	0.60	0.60	0.80	1.00	1.10	1.10	1.30	1.30
3"	0.00	0.10	0.10	0.20	0.30	0.40	0.50	0.50	0.60	0.70	0.80	1.00	1.10		
4"	0.00	0.10	0.20	0.30	0.40	0.50	0.70	0.80	0.90	1.20	1.30	1.40	1.40		
6"	0.00	0.10	0.30	0.50	0.50	0.60	0.80	0.90	1.00	1.20					
8"	0.10	0.20	0.50	0.80	1.00	1.20	1.50	0.00							

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.

Kuriyama of America, Inc. ("Seller") does not recommend the Products for any particular purpose, use or application, and the Purchaser or user thereof shall assume full responsibility for the suitability, propriety, use and application of the Products. Purchaser shall follow all instructions contained in Seller's catalogs, brochures, technical bulletins and other documents regarding the Products. The Products, including but not limited to, hose, tubing or couplings, may fail due to the use or conveyance of substances at elevated or lowered temperatures or at excessive pressure, the conveyance of abrasive, injurious, flammable, explosive or damaging substances.

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.

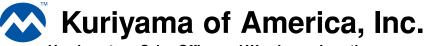
Purchasers or users of the Products should frequently and consistently undertake inspections and protective measures with respect to the use and application of Products, which should include the examination of tube and cover, conditions of the hose or tubing, and the identification, repair or replacement 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.

THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, STATUTORY, OR OTHERWISE CREATED UNDER APPLICABLE LAW INCLUDING, BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND THE WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL SELLER OR THE MANUFACTURER OF THE PRODUCT BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, INCLUDING LOSS OF PROFITS, WHETHER OR NOT CAUSED BY OR RESULTING FROM THE NEGLIGENCE OF SELLER AND/OR THE MANUFACTURER OF THE PRODUCT, UNLESS SPECIFICALLY PROVIDED HEREIN. IN ADDITION, THIS WARRANTY SHALL NOT APPLY TO ANY PRODUCTS OR PORTIONS THEREOF WHICH HAVE BEEN SUBJECTED TO ABUSE, MISUSE, IMPROPER INSTALLATION, MAINTENANCE, OR OPERATION, ELECTRICAL FAILURE OR ABNORMAL CONDITIONS, AND TO PRODUCTS WHICH HAVE BEEN TAMPERED WITH, ALTERED, MODIFIED, REPAIRED, REWORKED BY ANYONE NOT APPROVED BY SELLER, OR USED IN ANY MANNER INCONSISTENT WITH THE PROVISIONS OF THE "CAUTIONARY STATEMENT" ABOVE OR ANY INSTRUCTIONS OR SPECIFICATIONS PROVIDED WITH OR FOR THE PRODUCT.

Distributed by:



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: www.kuriyama.com E-Mail: sales@kuriyama.com

The trademarks contained in this publication are trademarks of Kuriyama of America, Inc.
The "Alfagomma" trademark contained in this publication is a registered trademark of Alfagomma S.p.A.

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 30144-7040 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 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





Visit us
www.kuriyama.com
on the Web!