





EDITION 0219

Layflat Hose Product Selection Chart



CATEGORY				PVC				PVC/N	itrile		
CATALOG PAGE	7	5	6	8	9	10	11	12	14		
PRODUCT	Vinylflow®	Vinylflow® EZ-Lite™	Vinylgreen®	Tuffsides™	Ironsides [®]	PVC Layflat Assemblies Blue	PVC Layflat Assemblies Red	OROFLEX [®] 10	OROFLEX® 20		
MATERIAL	PVC	PVC	PVC	PVC	PVC	PVC	PVC	PVC/NITRILE	PVC/ NITRILE		
COLOR	BLUE	BLUE	GREEN	RED	RED	BLUE	RED	BLACK	YELLOW		
APPLICATION	Irrigation Agriculture	Industrial Rental	Irrigation Agriculture	Industrial	Mining Industrial	Industrial Rental	Industrial Rental	Industrial	Compressed Air Industrial		
3/4"		100 psi							483 psi		
1"		85 psi							556 psi		
1 1/4"		85 psi									
1 1/2"	80 psi	65 psi	80 psi	145 psi	150 psi	70 psi	140 psi	203 psi	305 psi		
2"	80 psi	65 psi	80 psi	145 psi	150 psi	65 psi	128 psi	203 psi	302 psi		
2 1/2"	80 psi				150 psi		125 psi	203 psi			
3"	70 psi	60 psi	70 psi	145 psi	150 psi	60 psi		174 psi	261 psi		
3 1/2"											
4"	70 psi	60 psi	70 psi	120 psi	120 psi	120 psi	125 psi	50 psi	125 psi	174 psi	302 psi
4 1/2"											
5"	40 psi							174 psi			
5 1/2"								174 psi			
6"	50 psi	40 psi	50 psi	115 psi	115 psi			174 psi	290 psi		
7"	45 psi										
8"	35 psi	40 psi	45 psi	70 psi	70 psi			174 psi			
10"	30 psi				65 psi			174 psi			
12"	30 psi							116 psi			
16"	30 psi										
STOCK Lengths	100, 300	50,300	300	300	100, 300	50	50	50, 100, 200	50, 100, 200		

NOTE: OR = On Request



CATEGORY	PVC/I	Nitrile		Polyureth	ane (TPU)		P	olyester/Rubb	er
CATALOG PAGE	15	13	18	16	17	19	20	20	21
PRODUCT	OROFLEX® 20	OROFLEX® Bandama	OROFLEX® Terrain	OROFLEX® Aqua	OROFLEX® Drag	OROFLEX® Oil	Single Jacket Hose	Double Jacket Hose	Double Jacket Assemblies
MATERIAL	PVC/ NITRILE	PVC/ NITRILE	POLYURETHANE	POLYURETHANE	POLYURETHANE	POLYURETHANE	POLYESTER /RUBBER	POLYESTER /RUBBER	POLYESTER /RUBBER
COLOR	BLACK	BLACK	BLACK	BLUE	GREEN	ARMY GREEN or TAN	WHITE	WHITE	WHITE
APPLICATION	Water Transfer Manure Transfer	Irrigation	Water Transfer Fracking	Potable Water Bypass	Manure Drag	Hydrocarbs to MIL C-370J	Industrial Construction	Industrial Construction	Industrial Construction
3/4"									
1"				240 psi					
1 1/4"									
1 1/2"				300 psi			150 psi	200 psi	200 psi
2"				200 psi		142 psi	150 psi		
2 1/2"		290 psi		200 psi		142 psi	150 psi	200 psi	200 psi
3"		261 psi		200 psi		142 psi	150 psi		
3 1/2"		232 psi				142 psi			
4"		202 psi		200 psi	246 psi	142 psi	150 psi		
4 1/2"		174 psi			203 psi				
5"		174 psi			203 psi				
5 1/2"					174 psi				
6"	290 psi	174 psi		200 psi	174 psi	142 psi			
7"	232 psi								
8" 10"	212 psi		203 psi						
10"	212 psi		203 psi						
12"	157 psi		174 psi						
16"									
STOCK Lengths	660	660	660	200, 660	660	OR	50, 100	100	50



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Layflat Hoses, Couplings and Accessories by Series/Part Number

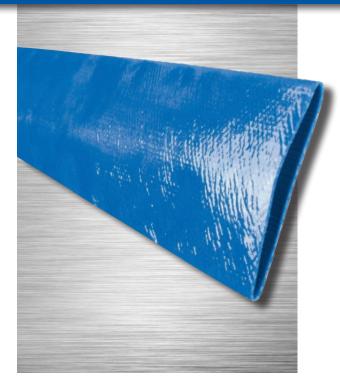
Series/Part	Page	Series/Part	Page	Series/Part	Page
ABF-LF	11	LF	10	OFTR	18
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AL-CLF	11	0F10	12	TS	8
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Vinylflow[®] EZ-Lite[®]



Features and Advantages:

- **Durable PVC Material** Provides good abrasion, chemical and UV resistance.
- "EZ" Design An easy to handle, lightweight hose for general purpose applications.
- Smooth PVC Tube Provides low friction loss.

VFL Series General Purpose PVC Water Discharge Hose

General Applications:

- Agriculture
- Construction
- Equipment rental

Construction:

Spiral homogeneous PVC construction is ideal for construction and agriculture applications, and provides for minimal elongation.

Service Temperature Range:

-5°F (-20°C) to +170°F (+76°C)

- **PVC Cores** Hoses coiled around durable PVC cores providing for easy unwinding.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Note: Longer lengths available by special order.

Nominal Specifications											
Series	Size		Hose ID		Wall Thickness	Working Pressure	Burst	Coil	Weight		
Number	(in)	(mm)	(in)	(mm)	(in)	(psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	(lbs/ft)		
VFL075	3/4	19.1	0.760	19.3	0.054	100	300	300	0.08		
VFL100	1	25.4	1.024	26.0	0.051	85	255	300	0.10		
VFL125	1 1/4	31.8	1.299	33.0	0.051	85	255	300	0.12		
VFL150	1 1/2	38.1	1.614	41.0	0.045	65	195	300	0.14		
VFL200	2	50.8	2.087	53.0	0.048	65	195	300/50	0.16		
VFL300	3	76.2	3.071	78.0	0.055	60	180	300/50	0.30		
VFL400	4	101.6	4.094	104.0	0.056	60	180	300	0.44		
VFL600	6	152.4	6.102	155.0	0.061	40	120	300	0.70		
VFL800	8	203.2	8.189	208.0	0.073	40	120	300	1.04		



Vinylgreen



Kuriyama Layflat Hose and Accessories

VG Series **PVC Drip Irrigation & Water Discharge Hose**



- Agriculture
- Construction
- Drip irrigation
- Industrial

Construction:

Spiral homogeneous PVC construction is ideal for irrigation and agriculture applications, and provides for minimal elongation.

Service Temperature Range:

-5°F (-20°C) to +170°F (+76°C)

Features and Advantages:

- Durable PVC Material Provides good abrasion, chemical and UV resistance.
- Drip Irrigation Hose designed to be punched easily without tearing. Ideal for drip irrigation applications.
- Smooth PVC Tube Provides low friction loss.



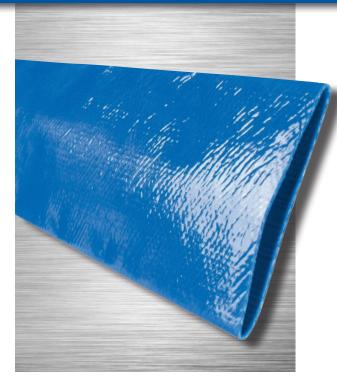
- PVC Cores Hoses coiled around durable PVC cores providing for easy unwinding.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nominal	Nominal Specifications												
Series	Si	Size		e ID	Wall	Working	Burst	Coil	Weight				
Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	(lbs/ft)				
VG150	1 1/2	38.1	1.610	40.9	0.067	80	240	300	0.16				
VG200	2	50.8	2.090	53.1	0.067	80	240	300	0.23				
VG300	3	76.2	3.130	79.5	0.079	70	210	300	0.39				
VG400	4	101.6	4.130	104.9	0.083	70	210	300	0.52				
VG600	6	152.4	6.181	157.0	0.087	50	150	300	0.86				
VG800	8	203.2	8.169	207.5	0.106	45	135	300	1.30				





Vinylflow®



Features and Advantages:

- **Durable PVC Material** Provides good abrasion, chemical and UV resistance.
- **Drip Irrigation** Hose designed to be punched easily without tearing. Ideal for drip irrigation applications.
- Smooth PVC Tube Provides low friction loss.

VF Series Premium PVC Drip Irrigation & Water Discharge Hose

General Applications:

- Agriculture
- Construction
- Drip irrigation
- Industrial

Construction:

Spiral homogeneous PVC construction is ideal for irrigation and agriculture applications, and provides for minimal elongation.

Service Temperature Range:

-5°F (-20°C) to +170°F (+76°C)

- **PVC Cores** Hoses coiled around durable PVC cores providing for easy unwinding.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Note: Longer lengths available by special order.

Nominal Specifications											
Series	Si	ze	Hose ID		Wall Thickness	Working Pressure	Burst	Coil	Weight		
Number	(in)	(mm)	(in)	(mm)	(in)	(psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	(lbs/ft)		
VF150	1 1/2	38.1	1.614	41.0	0.067	80	240	300	0.16		
VF200	2	50.8	2.090	53.1	0.067	80	240	300	0.23		
VF250	2 1/2	63.5	2.598	66.0	0.079	80	240	300	0.29		
VF300	3	76.2	3.130	79.5	0.079	70	210	300	0.39		
VF400	4	101.6	4.134	105.0	0.083	70	210	300	0.52		
VF500	5	127.0	5.039	128.0	0.087	40	120	300	0.68		
VF600	6	152.4	6.181	157.0	0.087	50	150	300	0.86		
VF800	8	203.2	8.169	207.5	0.106	45	135	300/100	1.30		
VF1000	10	254.0	10.118	257.0	0.118	35	105	100	1.81		
VF1200	12	304.8	12.126	308.0	0.118	30	90	100	1.95		
VF1400	14	355.6	14.134	359.0	0.118	30	90	100	2.62		
VF1600	16	406.4	16.142	410.0	0.118	30	90	100	3.10		

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



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Tuffsides[™]



Kuriyama Layflat Hose and Accessories

TS Series Heavy Duty PVC Water Discharge Hose

General Applications:

- Agriculture
- Construction
- Industrial
- Quarry

Construction:

Spiral homogeneous PVC construction is ideal for agriculture and construction applications, and provides for minimal elongation.

Service Temperature Range:

-5°F (-20°C) to +170°F (+76°C)

Features and Advantages:

- **Durable PVC Material** Provides good abrasion, chemical and UV resistance.
- Heavy Duty Construction Designed for applications requiring higher working pressures.
- Smooth PVC Tube Provides low friction loss.



- **PVC Cores** Hoses coiled around durable PVC cores providing for easy unwinding.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nominal	Nominal Specifications												
Series	Size		Hose ID		Wall	Working	Burst	Coil	Weight				
Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	(lbs/́ft)				
TS150	1 1/2	38.1	1.610	40.9	0.068	145	435	300	0.20				
TS200	2	50.8	2.090	53.1	0.072	145	435	300	0.27				
TS300	3	76.2	3.090	78.5	0.095	145	435	300	0.50				
TS400	4	101.6	4.100	104.1	0.100	120	360	300	0.67				
TS600	6	152.4	6.160	156.5	0.115	115	345	300	1.15				
TS800	8	203.2	8.150	207.0	0.120	70	210	300	1.55				





Ironsides®



Features and Advantages:

- **Durable PVC Material** Provides good abrasion, chemical and UV resistance.
- Premium Heavy Duty Construction Our most durable PVC layflat hose. Designed for applications requiring higher working pressures.
- **MSHA Accepted** Hose accepted by United States Dept. of Labor's Mine Safety and Health Administration as having met the Interim Fire Criteria Acceptance of Products Taken Into Underground Mines, acceptance no. IC-218/3.

IS Series Premium Heavy Duty PVC Water Discharge Hose

General Applications:

- Agriculture
- Construction
- Industrial
- Mining
- Quarry

Construction:

Spiral homogeneous PVC construction is ideal for agriculture and mining applications, and provides for minimal elongation.

Service Temperature Range:

-5°F (-20°C) to +170°F (+76°C)

- UV Resistant Hose resists damage that can result from exposure to UV light, allowing for prolonged outdoor use.
- Smooth PVC Tube Provides low friction loss.
- **PVC Cores** Hoses coiled around durable PVC cores providing for easy unwinding.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Note: Longer lengths available by special order.

Nomina	Nominal Specifications												
Series	Si	ze	Hose ID		Wall Thickness	Working	Burst	Coil Length	Weight				
Number	(in)	(mm)	(in)	(mm)	(in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	(ft)	(lbs/́ft)				
IS150	1 1/2	38.1	1.610	40.9	0.087	150	450	300	0.23				
IS200	2	50.8	2.090	53.1	0.091	150	450	300	0.32				
IS250	2 1/2	63.5	2.579	65.5	0.095	150	450	300	0.41				
IS300	3	76.2	3.090	78.5	0.098	150	450	300	0.52				
IS400	4	101.6	4.098	104.1	0.110	125	375	300	0.76				
IS600	6	152.4	6.161	156.5	0.118	115	345	300	1.21				
IS800	8	203.2	8.150	207.0	0.122	70	210	300/100	1.62				
IS1000	10	254.0	10.120	257.0	0.130	65	195	100	1.95				

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PVC Layflat Hose Assemblies



Kuriyama Layflat Hose and Accessories

NEW

General Applications:

- Agriculture
 Construction
 Contractor
- Industrial
 Rental

Construction:

Spiral homogeneous PVC construction is ideal for agriculture and construction applications, and provides for minimal elongation.

Nominal Specifications

Part	Size		Wall	Working	Coil	Weight					
Number	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Length (ft)	(ea/lbs)					
LF150APLX50	1 1/2	38.1	0.059	70	50	9.00					
LF200APLX50	2	50.8	0.063	65	50	13.50					
LF300APLX50	3	76.2	0.067	60	50	21.50					
LF400APLX50	4	101.6	0.067	50	50	30.00					

Hose Ends: Aluminum pin lug couplings male and female

Nominal Specifications

Part	Si	ze	Wall	Working	Coil	Weight	
Number	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Length (ft)	(ea/lbs)	
LF150ACEX50	1 1/2	38.1	0.059	70	50	9.50	
LF200ACEX50	2	50.8	0.063	65	50	13.60	
LF300ACEX50	3	76.2	0.067	60	50	22.00	
LF400ACEX50	4	101.6	0.067	50	50	31.50	

Hose Ends: Aluminum quick couplings male x female

Nominal Specifications

Part	Size		Wall	Working	Coil	Weight				
Number	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Length (ft)	(ea/lbs)				
LFR150APLX50	1 1/2	38.1	0.079	140	50	13.50				
LFR200APLX50	2	50.8	0.079	128	50	18.00				
LFR300APLX50	3	76.2	0.098	125	50	28.00				
LFR400APLX50	4	101.6	0.110	125	50	40.50				

Hose Ends: Aluminum pin lug couplings male and female

Nominal Specifications										
Part	Si	ze	Wall	Working	Coil	Weight				
Number	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Length (ft)	(ea/lbs)				
LFR150ACEX50	1 1/2	38.1	0.079	140	50	14.00				
LFR200ACEX50	2	50.8	0.079	128	50	18.50				
LFR300ACEX50	3	76.2	0.098	125	50	28.50				
LFR400ACEX50	4	101.6	0.110	125	50	41.00				

Hose Ends: Aluminum quick couplings male x female

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-4°F (-20°C) to +150°F (+65°C)

Features and Advantages:

- Smooth Tube Provides low friction loss.
- Packaging Individual carton.
- Storage Hose coils flat for easy storage.









EZ-Seal[™] Leak **Resistant Couplings**

Ideally suited for Layflat hoses

General Applications:

- Agriculture
 Chemicals
 Petroleum
- Construction
 Material handling

Construction:

• Aluminum; ASTM B85 Grade 383.

Features and Advantages:

- 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 (in)	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
AL-CLF600	6	5.65	6



Aluminum Part E Male Adapter x Hose Shank

Part Number	Size (in)	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
AL-ELF600	6	4.83	6



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

Part Number	Size (in)	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 (in)	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



OROFLEX® 10



Kuriyama Layflat Hose and Accessories

OF10 Series PVC/Nitrile Rubber Discharge Hose

General Applications:

- Agriculture
- Irrigation
- Cable covering

Watering

- Limited oil and chemical
- Dewatering

• Drainage

- applications
- Pump discharge
- Floatation booms
- Industrial washdown

Construction:

Black PVC/Nitrile hose using an extruded throughthe-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-20°F (-29°C) to +176°F (+80°C)

Features and Advantages:

- Proprietary PVC/Nitrile Material Specially developed PVC/Nitrile material provides superior abrasion, UV, chemical and oil resistance compared to PVC hoses.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nominal Specifications





	Size		Hos	e ID	Wall	Working	Burst		Tensile	
Series Number	(in)			Thickness	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Coil Length (ft)	Strength (lbs)	Weight (Ibs/ft)	
0F10-150	1 1/2	38.1	1.520	38.6	0.070	203	609	200	5000	0.20
0F10-200	2	50.8	2.110	53.6	0.070	203	609	200	6500	0.27
0F10-250	2 1/2	63.5	2.590	65.8	0.090	203	609	200	11300	0.38
0F10-300	3	76.2	3.181	80.8	0.090	174	464	200/100	11750	0.48
0F10-400	4	101.6	4.200	106.7	0.090	174	435	200/100/50	17400	0.71
0F10-500	5	127.0	5.020	127.5	0.100	174	435	200	20650	0.94
0F10-600	6	152.4	6.098	154.9	0.120	174	435	200/100/50	36000	1.08
0F10-800	8	203.2	8.051	204.5	0.130	174	362	100/50	51950	1.85
0F10-1000	10	254.0	10.000	254.0	0.150	174	348	100/50	103950	2.62
0F10-1200	12	304.8	12.000	304.8	0.150	116	348	100/50	103950	2.86

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OROFLEX[®] BANDAMA





Ideal for traveling irrigators.

BD Series **PVC/Nitrile Rubber Irrigation Hose**

General Applications:

- Flexible pipeline
- Heavy duty dredge discharge
- High abrasion resistant applications
- Irrigation supply lines
- Slurry, sludge, liquid manure pumping
- Traveling irrigators

Construction:

Black PVC/Nitrile hose using an extruded throughthe-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-20°F (-29°C) to +176°F (+80°C)

Features and Advantages:

- Proprietary PVC/Nitrile Material Specially developed PVC/Nitrile material provides superior abrasion, UV, chemical and oil resistance compared to PVC hoses.
- Superior Snaking Resistance! Specially designed to virtually eliminate instances of hose snaking, making the hose ideal for use on traveling irrigators.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Manufactured in special 660 foot lengths to reduce possible leaking points.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nom	Nominal Specifications													
Carlas	Size		Hose ID		Wall	Working	Burst	Coil	Tensile	14/				
Series Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	Strength (lbs)	Weight (Ibs/ft)				
BD250	2 1/2	63.5	2.598	66.0	0.120	290	725	660	11728	0.57				
BD300	3	76.2	3.051	77.5	0.120	261	653	660	18475	0.67				
BD350	3 1/2	88.9	3.543	90.0	0.130	232	580	660	20503	0.77				
BD400	4	101.6	4.067	103.3	0.130	202	507	660	22046	0.94				
BD450	4 1/2	114.3	4.626	117.5	0.130	174	435	660	25353	1.08				
BD500	5	127.0	5.020	127.5	0.140	174	435	660	27161	1.21				
BD600	6	152.4	6.043	153.5	0.140	174	435	660	33069	1.41				



OROFLEX[®] **20 YELLOW**



Kuriyama Layflat Hose and Accessories

OF20Y Series Heavy Duty PVC/Nitrile Air & Discharge Hose

General Applications:

- Agriculture
- High pressure liquid pumping
- Air compressors • Bulk powder discharge
- Industrial washdown
- (excluding cement)
 - Irrigation · Limited oil and
- Cable covering • Dewatering
- chemical applications

Watering

- Drainage
- Flotation booms

Construction:

Yellow PVC/Nitrile hose using an extruded throughthe-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-20°F (-29°C) to +176°F (+80°C)

Features and Advantages:

- Proprietary PVC/Nitrile Material Specially developed PVC/Nitrile material provides superior abrasion, UV, chemical and oil resistance compared to PVC hoses.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.





Nominal Specifications

	S	Size		e ID	Wall	Working	Burst	Coil	Tensile	
Series Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	Strength (lbs)	Weight (Ibs/ft)
0F20Y-075	3/4	19.1	0.866	22.0	0.080	483	1450	200/50	3300	0.13
0F20Y-100	1	25.4	1.075	27.3	0.080	556	1668	200/50	4150	0.17
0F20Y-150	1 1/2	38.1	1.555	39.5	0.110	305	914	200	6600	0.30
0F20Y-200	2	50.8	2.106	53.5	0.120	302	754	200	8250	0.43
0F20Y-300	3	76.2	3.031	77.0	0.120	261	653	200	18750	0.61
0F20Y-400	4	101.6	4.035	102.5	0.120	302	754	200	28650	0.84
0F20Y-600	6	152.4	6.063	154.0	0.160	290	725	100	51600	1.68





OROFLEX[®] **20 BLACK**



OF20B Series **Heavy Duty PVC/Nitrile Rubber Discharge Hose**

General Applications:

- Agriculture
- Contaminated liquids, fertilizers, oils, hydrocarbons
- Dewatering
- Frack solution and fresh water transfer
- Irrigation
- Limited chemical applications
- Liquid manure, sludge and slurry transfer
- Mining
- Watering

Construction:

Black PVC/Nitrile hose using an extruded through-the-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-20°F (-29°C) to +176°F (+80°C)

Features and Advantages:

- Proprietary PVC/Nitrile Material Specially developed PVC/Nitrile material provides superior abrasion, UV, chemical and oil resistance compared to PVC hoses.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Manufactured in special 660 foot lengths to reduce possible leaking points.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nomina	Nominal Specifications													
	Size		Hose ID		Wall	Working Pressure (psi) at 68°F	Burst Pressure (psi) at 68°F	Coil Length (ft)	Tensile Strength (Ibs)	Weight (Ibs/ft)				
Series Number	Series Number (in) (mm) (in)	(mm)	Thickness (in)											
0F20B-600	6	152.4	6.063	154.0	0.160	290	725	660	51600	1.68				
+0F20B-700	7	177.8	7.126	181.0	0.160	232	580	660	66150	1.88				
0F20B-800	8	203.2	8.091	205.5	0.150	212	508	660	77150	2.22				
0F20B-1000	10	254.0	10.059	255.5	0.150	212	508	660	110250	2.65				
OF20B-1200	12	304.8	12.087	307.0	0.160	157	377	660	101400	3.43				

+ NOTE: This is a non-stock product. Minimum order requirements may apply. Contact Kuriyama customer service for details.

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





Kuriyama of America, Inc. www.kuriyama.com

OROFLEX[®] AQUA



Kuriyama Layflat Hose and Accessories

OFAQ Series



Polyurethane Potable Water Discharge Hose

General Applications:

- Drinking water transport
- Emergency water supply
- Liquid and powder food transfer
- Potable water to transfer ships/boats
- Sewer and water treatment

Construction:

Blue NSF-61 polyurethane (TPU) hose using an extruded through-the-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-58°F (-50°C) to +122°F (+50°C)

Features and Advantages:

- Premium Polyurethane (TPU) Material Exhibits exceptional resistance to abrasion, allowing for use in applications where severe abrasion is a factor and providing longer service life versus rubber or PVC hoses. Also, exhibits exceptional resistance to oils and petroleum based products.
- NSF-61 Certified Hose is certified under NSF/ANSI 61: Drinking Water System Components.





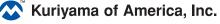
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Available in 200 foot lengths and also longer 660 foot lengths to reduce possible leaking points.
- Smooth TPU Tube Provides low friction loss.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nomina	Nominal Specifications												
Series	Size		Hose ID		Wall	Working	Burst	Coil	Weight				
Number	(in)	(mm)	(in)	(mm)	Thickness (in)					Length (ft)	(lbs/ft)		
0FAQ-100	1	25.4	1.004	25.5	0.071	240	725	660, 200	0.11				
0FAQ-150	1 1/2	38.1	1.559	39.6	0.079	300	900	660, 200	0.24				
0FAQ-200	2	50.8	2.059	52.3	0.087	200	600	660, 200	0.26				
0FAQ-250	2 1/2	63.5	2.618	66.5	0.087	200	600	660, 200	0.34				
0FAQ-300	3	76.2	3.059	77.7	0.093	200	600	660, 200	0.57				
0FAQ-400	4	101.6	4.059	103.1	0.106	200	600	660, 200	0.66				
0FAQ-600	6	152.4	6.020	152.9	0.138	200	600	660, 200	1.24				

NOTE: Other sizes available. Contact Kuriyama customer service for details.

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OROFLEX[®] DRAG





Ideal for drag manure spreading.

OFDG Series



Polyurethane Manure Drag Hose

General Applications:

- Drag and transport lines for slurry/manure injection and spreading
- Irrigation feeding line
- Traveler irrigators

Construction:

Green polyurethane (TPU) hose using an extruded through-the-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-58°F (-50°C) to +122°F (+50°C)

Features and Advantages:

- Premium Polyurethane (TPU) Material -Exhibits exceptional resistance to abrasion, allowing for use in applications where severe abrasion is a factor and providing longer service life versus rubber or PVC hoses. Also, exhibits exceptional resistance to oils and petroleum based products.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Manufactured in special 660 foot lengths to reduce possible leaking points.
- Smooth TPU Tube Provides low friction loss.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nomin	al Sp	pecifi	catic	ons						
	Si	ize	Hos	e ID	Wall	Working	Burst	Coil	Tensile	
Series Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	Strength (lbs)	Weight (lbs/ft)
+0FDG-400	4	101.6	4.110	104.4	0.140	246	609	660	28900	0.87
+0FDG-450	4 1/2	114.3	4.598	116.8	0.140	203	507	660	35300	0.94
OFDG-500	5	127.0	5.020	127.5	0.150	203	507	660	39700	1.14
0FDG-550	5 1/2	139.7	5.571	141.5	0.150	174	435	660	44100	1.28
OFDG-600	6	152.4	6.003	152.5	0.150	174	435	660	55100	1.28

+ NOTE: This is a non-stock product. Minimum order requirements may apply. Contact Kuriyama customer service for details.



OROFLEX[®] TERRAIN[™]



Kuriyama Layflat Hose and Accessories

OFTR Series NEW Polyurethane Discharge Hose

General Applications:

- Dewatering
- Fluid transfer (see chemical chart)
- Large volume water transfer including fracking
- Manure transfer
- Mining

Construction:

Black polyurethane (TPU) hose using an extruded through-the-weave process with circular woven high tenacity polyester reinforcement.

Service Temperature Range:

-58°F (-50°C) to +122°F (+50°C)

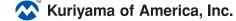
Features and Advantages:

- **Premium Polyurethane (TPU) Material** Exhibits exceptional resistance to abrasion, allowing for use in applications where severe abrasion is a factor and providing longer service life versus rubber or PVC hoses. Also, exhibits exceptional resistance to oils and petroleum based products.
- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Manufactured in special 660 foot lengths to reduce possible leaking points.
- Smooth TPU Tube Provides low friction loss.
- **Compact Design** Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.





Nomina	l Sp	ecif	icati	ons							
	S	ize	Hos	e ID	Wall	Working	Burst	Coil	Tensile		
Series Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	Pressure (psi) at 68°F		Strength (lbs)	Weight (lbs/ft)	
0FTR-800	8	203.2	8.098	205.7	0.165	203	600	660	81571	2.08	
0FTR-1000	10	254.0	10.098	256.5	0.169	203	500	660	100310	2.76	
0FTR-1200	12	304.8	12.098	307.3	0.185	174	435	660	121254	3.43	





OROFLEX[®] OIL



Features and Advantages:

- Premium Polyurethane (TPU) Material -Exhibits exceptional resistance to abrasion, allowing for use in applications where severe abrasion is a factor and providing longer service life versus rubber or PVC hoses. Also, exhibits exceptional resistance to oils and petroleum based products.
- Grounding Wires Hose contains four wires to help prevent the buildup of static electricity for added safety.

Available Colors:

NATO Green, Tan, Black

OFOIL Series



Polyurethane Oil Transfer Hose

General Applications:

- Brackish and seawater
- Fluid transfer (see chemical chart)
- Fuels and oils transport

Construction:

Polyurethane (TPU) hose using an extruded through-the-weave process with circular woven high tenacity polyester reinforcement. Four electrical wires protected with a braided sheet of polyester to help prevent static build up.

Service Temperature Range:

-58°F (-50°C) to +122°F (+50°C)

- Unique Woven Construction Specially designed weave pattern provides resistance to kinking, stretching and twisting.
- Longer Lengths Manufactured in special 660 foot lengths to reduce possible leaking points.
- Smooth TPU Tube Provides low friction loss.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.

Nomina	l Sp	ecif	icati	ons					
Series	Si	ize	Hos	e ID	Wall	Working	Burst Pressure	Coil	Weight
Number	(in)	(mm)	(in)	(mm)	Thickness (in)	Pressure (psi) at 68°F	(psi) at 68°F	Length (ft)	(lbs/ft)
0F0IL-200	2	50.8	2.059	52.3	0.087	142	597	50 to 660	0.26
0F0IL-250	2 1/2	63.5	2.650	67.3	0.087	142	597	50 to 660	0.34
OFOIL-300	3	76.2	3.059	77.7	0.093	142	597	50 to 660	0.43
0F0IL-350	3 1/2	88.9	3.551	90.2	0.095	142	597	50 to 660	0.57
OFOIL-400	4	101.6	4.059	103.1	0.106	142	597	50 to 660	0.66
OFOIL-600	6	152.4	6.059	153.9	1.380	142	597	50 to 660	1.24

NOTE: This is a non-stock product. Minimum order requirements may apply. Contact Kuriyama customer service for details. Because we continually examine ways to improve our products, we reserve the right to alter specifications or discontinue products without prior notice.



Mill Discharge Hoses



Kuriyama Layflat Hose and Accessories

SJMD Series DJMD Series

Single Jacket

Double Jacket

"Contractor Grade" Hoses

General Applications:

- Construction pumps
- Plant clean-up
- Pump water discharge
- Wash down ships/factories

Construction:

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

Service Temperature Range:

-25°F (-31°C) to +185°F (+85°C)

Features & Advantages:

- Versatile Natural Rubber Tube Exhibits a good combination of strength and extreme flexibility for ease-of-use.
- Wide Service Temperature Range Hose may be used in a wide range of service temperature ranges from -25°F to +185°F.
- Double and Single Jacket Options Available with a double jacket for additional external abrasion resistance.

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- Identification Stripe Red stripe indicates single jacket version, blue stripe indicates double jacket version.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.
- Storage/Shipping Carton Hoses are individually packaged in cartons for ease of handling and shipping.

Nomina	l Sp	ecif	icati	ons					
Series	S	ize	Hos	e ID	Working	Burst	Coil	Coupling	Weight
Number	(in)	(mm)	(in)	(mm)	Pressure (psi) at 68°F	Pressure (psi) at 68°F	Length (ft)	Bowl Size (in)	(lbs/ft)
SJMD150	1 1/2	38.1	1.614	41.0	150	450	100/50	1 11/16	0.21
SJMD200	2	50.8	2.126	54.0	150	450	100/50	2 1/4	0.28
SJMD250	2 1/2	63.5	2.638	67.0	150	450	100/50	2 3/4	0.37
SJMD300	3	76.2	3.150	80.0	150	450	100/50	3 1/4	0.45
SJMD400	4	101.6	4.055	103.0	150	450	100/50	4 9/32	0.56
DJMD150	1 1/2	38.1	1.575	40.0	200	600	100/50	1 13/16	0.25
DJMD250	2 1/2	63.5	2.598	66.0	200	600	100/50	2 13/16	0.44

Note: Not intended for use as a fire hose.



Mill Discharge Assemblies





DJ Series

Double Jacket "Contractor Grade" Coupled with Male and Female Aluminum Rocker Lug Couplings

General Applications:

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

Service Temperature Range:

-25°F (-31°C) to +185°F (+85°C)

Features & Advantages:

- Versatile Natural Rubber Tube Exhibits a good combination of strength and extreme flexibility for ease-of-use.
- Wide Service Temperature Range Hose may be used in a wide range of service temperature ranges from -25°F to +185°F.
- **Double Jacket** Double jacket provides additional external abrasion resistance.
- Compact Design Flat hose design rolls up into tight coils for easy storage and transport, takes up less space than other hoses.
- Storage/Shipping Carton Hoses are individually packaged in cartons for ease of handling and shipping.

Nominal	Nominal Specifications										
Part	Si	ze	Length	Thursd Trues	Max. Working	Weight Each					
Number	(in)	(mm)	(fť)	Thread Type	Pressure (psi) at 68°F	(lbs)					
DJ150NSTX50	1 1/2	38.1	50	NST	200	14					
DJ150NPSHX50	1 1/2	38.1	50	NPSH	200	14					
DJ250NSTX50	2 1/2	63.5	50	NST	200	23					
DJ250NPSHX50	2 1/2	63.5	50	NPSH	200	23					





Friction Loss of PVC Layflat Hose (psi/100 ft.)

GPM	1.5"	2"	2.5"	3"	4"	6"	8"	10"	12"	14"	16"
20	1.2					ĺ			ĺ		
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						ļ
240					1.1		0.2				
250				5							ļ
260					1.3	0.2					
280					1.4	0.2					ļ
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					<u> </u>
660						1.1					
1,200					00	3.0					
1,250					22		1.5				
1,800							1.5				
2,500								1.0			
3,500									0.8		
3,630						22					
5,000							11			0.6	
6,000											0.4
8,000								8			
12,000								0	8		
15,000						1				5	
16,000											30

Friction Loss of PVC/Nitrile Layflat Hose in (psi/100 ft.)

					_										
GPM	1	1 1/4	1 1/2	1 3/4	2	2 1/2	3	3 1/2	4	4 1/2	5	6	8	10	12
1	0.04	0.05	0.00												
2	0.15	0.05	0.02	0.05	0.00										
5 7	0.82	0.28	0.11	0.05	0.03	0.02									
10	2.96	1.00	0.21	0.10	0.05	0.02	0.02								
15	6.27	2.11	0.41	0.19	0.10	0.03	0.02	0.03							
20	10.67	3.60	1.48	0.41	0.21	0.07	0.03	0.05							
25	16.13	5.44	2.24	1.06	0.55	0.12	0.00	0.03	0.04						
30	22.59	7.62	3.14	1.48	0.33	0.15	0.12	0.00	0.04	0.03					
35	30.05	10.14	4.17	1.97	1.03	0.20	0.22	0.14	0.07	0.03					
40	38.47	12.98	5.34	2.52	1.32	0.44	0.22	0.14	0.09	0.04					
45	47.84	16.14	6.64	3.13	1.64	0.55	0.35	0.23	0.00	0.04	0.03				
50	58.13	19.61	8.07	3.81	1.99	0.67	0.42	0.28	0.13	0.00	0.00				
60	00.10	27.48	11.31	5.34	2.79	0.94	0.59	0.39	0.18	0.10	0.05				
70		36.54	15.04	7.10	3.70	1.25	0.79	0.51	0.24	0.13	0.07	0.04			
80			19.25	9.09	4.74	1.60	1.01	0.66	0.31	0.16	0.09	0.05			
90			23.94	11.30	5.90	1.99	1.25	0.82	0.39	0.20	0.11	0.07			
100				13.73	7.17	2.42	1.52	0.99	0.47	0.25	0.14	0.08			
125	1			20.75	10.83	3.65	2.30	1.50	0.71	0.37	0.21	0.12	0.05		
150					15.17	5.12	3.22	2.11	0.99	0.52	0.29	0.18	0.07		
175	1				20.18	6.81	4.28	2.80	1.32	0.69	0.39	0.23	0.10		
200	Ì				25.84	8.71	5.48	3.59	1.69	0.88	0.50	0.30	0.12		
225					32.13	10.84	6.81	4.46	2.10	1.10	0.62	0.37	0.15		
250						13.17	8.28	5.42	2.56	1.33	0.75	0.45	0.19		
275						15.71	9.88	6.46	3.05	1.59	0.90	0.54	0.22	0.05	
300							11.60	7.59	3.58	1.87	1.05	0.63	0.26	0.06	
350							15.43	10.10	4.77	2.49	1.40	0.84	0.35	0.09	
400								12.93	6.10	3.18	1.79	1.07	0.44	0.11	
450								16.08	7.59	3.96	2.23	1.34	0.55	0.14	
500								19.54	9.22	4.81	2.71	1.62	0.67	0.16	0.06
600									12.92	6.74	3.80	2.27	0.94	0.23	0.08
700									17.18	8.97	5.05	3.03	1.24	0.31	0.10
800										11.48	6.47	3.87	1.59	0.39	0.13
1000										17.35	9.78	5.85	2.41	0.59	0.20
1200											13.70	8.20	3.37	0.83	0.28
1400												10.91	4.49	1.11	0.37
1600												13.96	5.75	1.42	0.48
1800													7.14	1.76	0.59
2000													8.68	2.14	0.72
2500													13.12	3.23	1.09
3000														4.53	1.53
3500														6.02	2.03
4000														7.71	2.60
4500															3.23 3.93
5000															
5500 6000															4.69 5.51
6000 6500															
7000															6.39 7.32
7500															8.32
8000															9.38
0000															0.00

Note: This calculations are theoretical and based on staight lines . Liquid is water at 20°C.

Recomended maximum velocity for constant work: 11.5 ft/s (3.5m/s).

Maximum recommended velocity for non constant work: 16.4 ft/s (5 m/s).

Values in red match with flows given 16.4 ft/s (5 m/s).



Vinylflow[®] Longitudinal Elongation Percentage (On Flat Ground Only)

Series Number		Pressure (psi)											
	10	20	30	40	50	60	70	80					
VF150	0.00	0.01	0.02	0.06	0.14	0.17	0.35	0.50					
VF200	0.01	0.03	0.04	0.15	0.32	0.38	0.61	0.84					
VF250	0.06	0.15	0.23	0.50	0.79	0.95	1.33	1.57					
VF300	0.03	0.14	0.21	0.34	0.63	0.76	1.10	-					
VF400	0.14	0.35	0.53	0.90	1.40	1.68	1.98	-					
VF600	0.14	0.42	0.63	1.08	1.35	-	-	-					
VF800	0.21	0.57	0.86	1.47	-	-	-	-					
VF1000	0.15	0.39	0.59	-	-	-	-	-					
VF1200	0.14	0.55	0.82	-	-	-	-	-					
VF1600	0.00	0.28	0.42	-	-	-	-	-					

Ironsides[®] Longitudinal Elongation Percentage (On Flat Ground Only)

		• /													
Series		Pressure (psi)													
Number	10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
IS150	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
IS200	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
IS250	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
IS300	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	-	-
IS400	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	-	-
IS600	0.00	0.10	0.30	0.50	0.50	0.60	0.80	0.90	1.00	1.20	-	-	-	-	-
IS800	0.10	0.20	0.50	0.80	1.00	1.20	1.50	0.00	-	-	-	-	-	-	-

Vinylflow[®] EZ-Lite[™] Longitudinal Elongation Percentage (On Flat Ground Only)

Series Number			Pressu	re (psi)		
	10	20	30	40	50	60
VFL150	0.00	0.10	0.20	0.30	0.40	0.60
VFL200	0.00	0.20	0.30	0.60	0.80	-
VFL300	0.20	0.40	0.80	1.20	-	-
VFL400	0.20	0.50	1.40	1.90	-	-
VFL600	0.00	0.40	0.80	1.40	-	-
VFL800	0.20	0.80	1.60	2.20	-	-
VF800	0.21	0.57	0.86	1.47	-	-
VF1000	0.15	0.39	0.59	-	-	-
VF1200	0.14	0.55	0.82	-	-	-
VF1600	0.00	0.28	0.42	-	-	-

Layflat Hose ID Size Guide

Hose ID	3/4	1	1-1/2	2	3	4	5	6	8	10	12	14	16
Hose Width When Flat	5/8	1-5/8	2-1/2	3-1/2	5	6-1/2	8	9-1/2	13	16	19	22	25

Technical Information

VinyIflow[®], VinyIflow[®] **EZ-Lite Maximum Length Availability**

Series Number	Max. Available Length
VF150	1000
VF200	1000
VF250	800
VF300	800
VF400	750
VF600	700
VF800	650
VF1000	500
VF1200	500
VF1400	500
VF1600	500

Length Availability

Series Number	Max. Available Length
IS150	700
IS200	650
IS250	600
IS300	550
IS400	500
IS600	450
IS800	450
IS1000	450

Ironsides® Maximum For Sloped Ground, Add **Head Pressure Shown Below**

Hose	Slope Angle	Additional Head Pressure
	5°	11
Vinylflow®	10°	23
Vinylflow®	15°	34
EZ-Lite [™]	20°	44
Vinylgreen™	25°	55
Ironsides®	30°	65
Tuffsides™	35°	75
	40°	83





Layflat Hose Material Properties

Product Name	Series	Tube Material	General Applications	Overall Durability	Drag Application Suitability	Water	Liquid Manure
Vinylflow® EZ-Lite™	VFL	PVC	Water transfer	Standard	Limited	Excellent	Limited
VinyIflow®	VFL	PVC	Water transfer & drip irrigation	Standard	Limited	Excellent	Limited
Vinylgreen™	VG	PVC	Water transfer & drip irrigation	Standard	Limited	Excellent	Limited
Tuffsides™	TS	PVC	Water transfer	Good	Limited	Excellent	Limited
Ironsides™	IS	PVC	Water transfer and mining applicaions	Good	Limited	Excellent	Limited
PVC Layflat Assemblies	LF & LFR	PVC	Water transfer	Standard	Not Recommended	Excellent	Not Recommended
OROFLEX [®] 10	0F10	PVC/NBR	Water	Very Good	Limited	Excellent	Excellent
OROFLEX [®] 20	0F20B & 0F20Y	PVC/NBR	Water & liquid manure transfer	Excellent	Good	Excellent	Excellent
OROFLEX [®] Drag	OFDG	TPU	Manure spreaders	Excellent	Excellent	Excellent	Excellent
OROFLEX [®] Bandama	BD	PVC/NBR	Traveling irrigators	Excellent	Very Good	Excellent	Excellent
OROFLEX® Aqua	OFAQ	Polyurethane	Water Bypass	Excellent	Very Good	Excellent	Excellent
OROFLEX® Terrain	OFTR	Polyurethane	Frac Water Transfer	Excellent	Very Good	Excellent	Excellent
OROFLEX [®] Oil	OFOIL	Polyurethane	Military Oil Transfer	Excellent	Very Good	Excellent	Excellent
Mill Discharge Hose	SJMD & DJMD	Rubber/ Polyester	Water transfer	Standard	Not Recommended	Excellent	Not Recommended
Mill Discharge Assemblies	DJ	Rubber/ Polyester	Water transfer	Standard	Not Recommended	Excellent	Not Recommended



Chemical Resistance Chart

E Fluid has minor to moderate effect T No data-likely to have minor effect – No data NAME CONDITIONS TPU POLYETHER NBR PVC	BRASS	
NAME PVC	BRASS	
NAME PVC	BRASS	
	DIIAOO	ALUMINUM
% °C HOURS POLYURETHANE		ALOIMINOIM
Acetaldehyde 40 21 1000 C X X	А	A
Acetamide 50 21 1000 B -	-	-
Acethylene 21 1000		
Acetic acid 20 21 1000 C X A	Х	В
Acetic acid 5 21 1000 C X A		
Acetic acid 5 100 10		
Acetic acid 98 C		
Acetic acid, glacial 38 1000	-	-
Acetic anhydride 1000	-	-
Acetone 21 10000 X X	А	A
Acetone 1000 C X		
Acetone 21 1000 X C		
Alcohol 1000		
Allyl alcohol - X	-	-
Aluminium chloride 5 60 168 B		
Aluminium chloride solutions A -	Х	Х
Aluminium salts B A A	-	В
Aluminium sulfate solutions B A -	Х	Х
Alums		
Ammonia B X A	-	-
Ammonia 28 21 1000 A	Х	-
Ammonium chloride solutions 10 B A	Х	-
Ammonium hydroxide22110000ABX	Х	-
Ammonium hydroxide solutions	Х	-
Ammonium salts B		
Ammonium sulfate solutions B		
Amyl acetate C X X	A	Х
Amyl alcohol C B B	A	A
Aniline 21 10000 C X -	Х	В
Aniseed oil		
Asphalt B X	А	-
ASTM oil No.1 149 B A B	А	A
ASTM 0il No.3 149 B A X	А	A
ASTM reference Fuel A 70 B A B	А	A
ASTM reference Fuel B 70 B A X	А	A
ASTM reference Fuel C 70 C B X	А	-
ASTM reference Fuel C		
Barium hydroxide solutions B A X	-	-
Beer	-	-
Benzaldehyde C X X	-	A
Benzene 21 1000 C B X	А	A
Benzoic acid 3 100 10	-	-





Chemical Resistance Chart (continued)

		CONDITI	ONS	TPU				
NAME	%	°C	HOURS	POLYETHER POLYURETHANE	NBR	PVC	BRASS	ALUMINUM
Benzoic acid	3	100	10	С	Х	Х		
Benzole							İ	
Benzyl alcohol	1		1		Х	A	-	-
Bitumen	1		İ	-		Ì		
Bleaching lye		21	288				i	
Borax solutions			İ	-	A	A	В	-
Boric acid solutions	10		İ	В	A	A	Х	A
Brandy			İ	-				
Bromine,anhydrous liquid			1	В	Х	Х	A	А
Butane		21	1000		Х	Х		
Butanol	1	21	10000		A	A	A	A
Butter					-	-	-	-
Butter milk	1						i	
Butyl acetate		21	10000				A	A
Butyl acetate			10000	С	Х	A		
Butyl alcohol				В	A	A	A	A
Butylene glycol			1				-	-
Butyraldehyde					Х	_	A	-
Butyric acid			1		-	A	В	A
Calcium chloride		21	10000	В	A	A	B	-
Calcium chloride solutions	10	21	10000		A	A	-	-
Calcium hydroxide solutions	10			В	B	-	X	X
Calcium hypochlorite	5			U	-	B	-	-
Calcium hypochlorite	<u> </u>	60	1000		-	B		-
Camphor		00	1000					
Carbon bisulfide								
Carbon Dioxide				Δ	Δ	Δ	A	Δ.
Carbon disulphide		21	1000	A B	A B	A X	B	A B
Carbon monoxide		21	1000	D	B	A	A	A
Carbon tetrachloride		21	1000	C	Х	X	B	X
Carbon tetrachloride		21	1000	U			D	^
				D			Δ	
Castor oil				В	A	A	A	A
Catechol	6 40				Х	v		
Caustic soda	40					X	-	-
Chloric Acid 35%				D		A		
Chlorine gas,dry				В	X		-	-
Chlorine gas,wet					X	X		
Chlorine water				0	-	Х	-	-
Chloroacetic acid				С	B	- V	-	-
Chlorobenzene		0.1	1000	0	X	X	A	A
Chloroform		21	1000	C	Х	Х	A	A
Chloromic acid	40	80	1000	С				
Chlorosulfonic acid					X	X	-	-
CELLOSOLVE Acetate					X	A	-	-
Citric acid	10	80	1000	В	X	A	X	A
Copper chloride solutions					В	A	Х	-
Copper salts	10							
Copper Sulfate solutions					A	A	Х	Х



Technical Information

Chemical Resistance Chart (continued)

		CONDITI	ONS	TPU				
NAME	%	°C	HOURS	POLYETHER POLYURETHANE	NBR	PVC	BRASS	ALUMINUM
Cotton seed oil		21	1000	В	В	-	A	A
Creosote oil					В	Х	Х	A
Cresol	1	21	10000	С	X	-	-	A
Cupric sulphate		21	10000	В	A	A	Х	X
Cyclohexane	1			Disolve	B	X	A	
Cyclohexanol					B	Х	-	-
Cyclohexanone	1		1		X	X	-	В
Decalin					В	-	A	-
Dibutyl Phthalate	1	30	1000	С	X	A	A	A
Diesel oil						C		
Diesel fuel	1		1		A	C	A	A
Diethyl ether		21	10000		X	B	A	A
Diethyl sebacate	1		10000		X	X	A	-
Dimethyl formamide				Disolve			-	-
Dimethyl Phthalate	1		1	Distino	X	-		
Dioctyl Phthalate							A	А
Dioxane	1	21	1000		Х	Х	A	A
Epichlorohydrin		1	1000		-	-	-	-
Ethanol	1	21	10000		A	В	В	A
Ether		21	10000	В	B	B	A	A
Ethyl acetate	1	21	1000	C	X	X	A	A
Ethyl acetate		21	1000	0		X		
Ethyl Alcohol				В	A	В	В	A
Ethyl chloride				C	X	X	B	A
Ethylene dichloride		21	1000	0	X	X	-	-
Ethylene glicol		21	10000	В	A	A	A	A
Ethylene oxide	-	21	10000			A		~
Ferric chloride	3	100	10	В	B	A	Х	Х
Ferric chloride		21	10000	B		<u>A</u>		^
Ferric chloride solutions		21	10000		В	A	Х	Х
Fluosilicic acid	-				X	X	-	A
Formaldehyde	30	21	10000	В	-	-	A	B
Formic acid	40	21	10000	C	-	X		В
Formic Acid	40			0	-		В	-
Formic Acid	5	01	1000					-
Formic Acid	5	21 100	1000 10					
Freon 11	5	100	10					
		55			X	Х		
Freon 113		55			X	X		
Freen 114					V	v		
Freen 12		01	1000		Х	Х	-	-
Freon II		21	1000	D		V		
Fuel oil				B	A	X	A	A
Gasoline				В	B	C	A	A
Glue				P	B	A	X	A
Glycerin			1000	В	A	A	A	A
Glycerol		60	1000		A	A	A	A
Glycol			10.5.5	В	A	-		
Heptane		21	1000		A	В	A	A





Chemical Resistance Chart (continued)

		CONDITI	ONS	TPU				
NAME	%	°C	HOURS	POLYETHER POLYURETHANE	NBR	PVC	BRASS	ALUMINUM
Hexane		60	1000	В	A	Х	А	-
Hydrazine				С	Х	Х	-	-
Hydrochloric acid	10	21	10	С	i	Ì		
Hydrochloric acid	20		İ	-	В	Х		
Hydrochloric acid	10	21	20000		İ	Ì	ĺ	
Hydrochloric acid	1		İ	С		Ì		
Hydrochloric acid	37		İ		-	Х	Х	Х
Hydrocyanic acid			i	-	-	-		
Hydrofluoric acid	48		1		Х	Х	Х	Х
Hydrofluoric acid	75		1	С				
Hydrogen			1	A	X	Х	-	-
Hydrogen peroxide	30			В	В	A	Х	A
Hydrogen peroxide	3	70	10					
Hydrogen peroxide	3	21	10					
Hydrogen sulfide	<u> </u>		10	С	Х	Х	-	A
Iron salts	20				A	A	-	-
Isooctane	20		1	В	A	X	A	-
Isopropanol		60	1000	В	A	B	B	A
Isopropyl alcohol		00	1000	U	A	B	B	A
JP-4 Jet Fuel				С	A	X	A	B
Kerosene				B	B	C	A	A
Kerosene		21	1000			0	A	A
Lacquer solvents		21	1000					
Lactic acid	50			В	A		В	Х
Lactic acid		21	10000		î	-		
Linseed oil	90	21	10000	В	- B	-	B	X A
		100		D	D	A	D	A
Lithium grease		100		D				
Lubricating oil				В	В	-	В	A
Magnesium chloride solutions					-	-		
Magnesium hydroxide					-	-	-	Х
solutions								
Maleic acid	25	21	10000	С	X	X	-	-
Mercuric chloride solutions					В	В	Х	Х
Mercury				A	В	A	Х	Х
Methanol		21	1000		A	В	В	A
Methyl alcohol			ļ		A	В	В	A
Methyl ethyl ketone		21	10000	С	Х	Х	A	A
Methyl ethyl ketone			ļ					
Methyl isobutyl ketone					Х	Х	-	-
Methylene chloride		21	1000	C	Х	Х	A	Х
Mineral oils		80	1000	В	A	A	A	A
Naphtha				В	В	Х	A	В
Naphthalene					-	-	A	A
Nickel salts				С	A	В	-	-
Nitric acid	70			С	Х	Х	Х	-
Nitric acid	30				Х	Х	Х	-
Nitric acid	60				Х	Х	Х	-
Nitric acid	10	21	20000	С	Х	Х	Х	-



Technical Information

Chemical Resistance Chart (continued)

		CONDITI	ONS	TPU				
NAME	%	°C	HOURS	POLYETHER Polyurethane	NBR	PVC	BRASS	ALUMINUM
Nitric acid, red fuming			1		Х	Х	-	-
Nitrobenzene			1	С	Х	Х	A	A
Nitromethane			Ì		Х	Х	A	-
Octane			1		-	-	-	-
Oleic acid			Ì	В	В	В	В	A
Oleic acid	100	80	1000					
Oleum	20/25				Х	Х	-	-
Olive oils	1 1	80	1000		В	В	B	A
Oxalic acid	5	100	10	A	-	Х	Х	В
Palmitic acid					В	-	X	A
Paraffin oil					A	-	A	-
Perchloroethane								
Perchloroethylene		120	10	С	Х	Х	Х	-
Perchloroethylene		100	10					
Perchloroethylene		100	10					
Petrol		21	1000					
Petroleum		21	1000	В				
Phenol	+ +	21	10000	C	X	Х	X	В
Phenol		93	10	0				0
Phenol	+ +	30	10					
Phenyl etyl alcohol								
Phosphoric acid	85	21	10000	В	X	A	X	Х
Phosphoric acid	10	21	10	D		A		^
Pickling solution	20	21	10		-	- A		
Plasticizers	20				-	-		
Potassium bromide	10							
	10	01	10000		-	A	-	-
Potassium chloride		21	10000	В	-	A	-	-
Potassium Dichromate					-	A	-	-
solutions			100					
Potassium hydroxide	10	21	100				-	-
Potassium hydroxide	0,1	21	500		B	A		-
Potassium iodide	10				A	A	-	-
Potassium nitrate	10			В	-	A	-	-
Potassium permanganate	1				-	Х		
Potassium permanganate	50	21	1000		ļ		-	-
Potassium sulphate					-	A	-	-
Propane				В	X	Х		
Propanol					-	В	-	-
Pydraul 312					X	Х	-	-
Pyridine		21	10000		-	Х	A	A
Pyridine		21	1000					
Pyridine								
Resorcinol	10	21	1000					
SAE 10 oil				В				
Salicylic acid					Х	A	-	В
Salt								
Sea Water				В	В	A	В	-
Silicone fluids		80	1000					





Chemical Resistance Chart (continued)

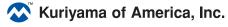
		CONDITI	ONS	TPU				
NAME	%	°C	HOURS	POLYETHER POLYURETHANE	NBR	PVC	BRASS	ALUMINUM
Silicone Grease					В	В	A	-
Silver salts			İ	В				
SKYDROL 500B			i		i		i	1
Soap	1	120	10	В	A	В	-	-
Sodium bicarbonate	10	80	1000	В	A	A	В	-
Sodium bisulphite	1	100	10	В	A	A	-	-
Sodium bromide			1				İ	
Sodium carbonate	1	120	10	В	A	A	В	Х
Sodium chloride	0,7	100	10	В			Х	Х
Sodium chloride	20	80	1000	В	A	A	1	
Sodium dichromate	20			В	A	A	-	-
Sodium hydroxide	1	100	100			A	-	-
Sodium hydroxide	0,1	21	10000	В	1	A	i	
Sodium hydroxide	20			_		A		
Sodium hypochlorite	0,4	70	10				i	
Sodium hypochlorite	5				Х	A	Х	Х
Sodium nitrate	10		1	В	X		B	B
Sodium perborate	1	100	10		X	A	X	A
Sodium phosohate	10	100	10		-	A	X	X
Sodium sulphate		21	10000	В	A	A	-	-
Sodium sulphate	10	21	20000					
Sodium sulphide	10		20000	В	A	A	-	-
Sodium sulphite			1		B	A	1	
Sodium thiosulphide								
Soybean oil			1		В	В	-	-
Stannouschloride	15				A	A	-	-
Steam		100		С	X	X	-	-
Stearic acid		100		0	B	A	Х	Х
Styrene			1	В	X	-	В	X
Sulfur dioxide gas				A	X		-	-
Sulfur dioxide liquid					X	Х	-	_
Sulfuric acid fuming oleum	20			С	X	X		
Sulfuric acid, above	50		-	0			-	-
Sulfuric acid up to	50							
Sulfuric acid above	50					Х		
Sulfurous acid	1 30				Х			
Sulfur, molten	-							
Sulphuric acid	10	21	10		Х	A		
Sulphuric acid	30	80	1000		X	-		
Tannic acid	10	00	1000		X	A	Х	В
Tartaric acid	10			В	X	B	Λ	
Tetrahydrofuran		21	500	0	X	X	-	-
Tetrahydrofuran		21	300		^			-
Tetraline					Х	_	-	-
Toluene		21	1000	С	X	X		
		21	1000	6	^	^	A	A
Toluene Tributul phoophoto					v			v
Tributyl phosphate					X	- V	-	Х
Trichlorethane					Х	Х	-	-



Technical Information

Chemical Resistance Chart (continued)

		CONDITIO	DNS	TPU				
NAME	%	°C	HOURS	POLYETHER Polyurethane	NBR	PVC	BRASS	ALUMINUM
Trichloroethylene		21	10000				A	Х
Trichloroethylene				С	Х	-		
Triethanolamine					В	В	A	-
Trisodium phosphate solution				В	В	-	-	-
Tung oil					В	В	A	A
Turpentine		21	10000	В	В	А	В	-
Urea	20			В	В	-	-	-
Vaseline		80	1000					
Vegetable oils		80	1000	В	-	В	-	A
Water		100		В				
Water		70		В				
Water		23		А	А	Α	A	A
White spirit		21	1000			С	A	A
Xylene				С	Х	С	-	-
Xylene		60	1000					
Zinc chloride	3	100	10	В				
Zinc chloride solutions				В	В	В	Х	Х



Notes



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

Kuriyama of America, Inc.

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Cautionary Statement

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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.

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