

# **TOTAKU Non-PVC Hoses ECO Series**

Founded in 1952, TOTAKU INDUSTRIES, INC. has been a pioneer in the pipes and hose industry, creating the world's first flexible hose. Driven by our core principle of prioritizing customer satisfaction through exceptional quality, we continuously innovate to meet the evolving needs of our customers. At TOTAKU, we are dedicated to making a positive impact on the world by developing unique, thoughtful products that address modern challenges.

### **Featured Products**

ECO LINE-HO 100°C 02
SHIMETAC for TOTAKU
ECO LINE-HO 100°C 03
ECO LINE 04
ECO LINE-HO 05
SHIMETAC for TOTAKU
ECO LINE 06
ECO PP-SPRING 07
ECO SD-AS 08

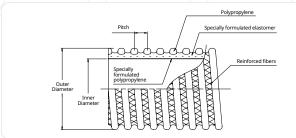
ECO SD-C 09
ECO DUCT 10
ECO DUCT-AS 11

### Notice:

- The data in this catalog uses values in a straight hose configuration.
- The permissible pressure is not the maximum operating pressure. Please refer to the "Operating Pressure Design Table" in the hose handling precautions and configure according to the operating pressure (normal working pressure). Also, please note that the combination of fittings and clamps, operating temperature, and bending conditions may affect performance.

# **TOTAKU ECO LINE-HO 100°C**





### **Features**

- Suitable for transporting oils, fatty foods, and general food products.
- Complies with standards for food and additives established by the Japanese Ministry of Health and Labour and Welfare (Notification No. 370). But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Can be cleaned with hot water at temperatures up to 212°F (100°C) or with 95% ethanol, ensuring hygienic use.
- Safe for incineration after use without emitting harmful gases.
   (Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.)
- Semi-transparent construction allows for easy inspection of transported materials.
- Reinforced with a reinforcing fiber, offering pressure resistance up to 101.5 psi (0.7 MPa).

### **Applications**

- Suitable for transporting edible oils, fatty foods, sake, shochu, and other alcoholic beverages, as well as soft drinks and various liquids or powders.
- Ideal for hygienic piping applications, such as transporting purified water
- Designed for transporting hot water or similar liquids at temperatures below 212°F (100°C). (Refer to the table below for pressure resistance performance at temperatures above 104°F [40°C].)

### **Standard Dimensions and Properties**

Nom Diam			ner neter	Outer Diameter		Pitch		Reference Weight		Leng	gth	Allowable	Pressure mperature)	Allowable B (to the ce of the	enter axis
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inch	mm
1	25	1.00	25.4	1.52	38.6	0.30	7.5	0.31	460	65/164	20/50	101.53	0.70	4.72	120
1.5	38	1.50	38.0	2.17	55.0	0.39	10.0	0.57	850	65/164	20/50	101.53	0.70	9.45	240
2	50	2.00	50.8	2.72	69.0	0.43	11.0	0.81	1210	65/164	20/50	101.53	0.70	11.81	300

Nom	inal			Allowable	Pressure		
		104°F to (40°C to		140°F to (60°C to		176°F to (80°C to	o 212°F o 100°C)
inch	mm 25 38 50	inch	mm	inch	mm	inch	mm
1	25	87.02	0.60	72.52	0.50	58.02	0.40
1.5	38	87.02	0.60	72.52	0.50	58.02	0.40
2	50	79.77	0.55	58.02	0.40	43.51	0.30

The recommended operating temperature range is 32°F to 212°F (0°C to 100°C). However, allowable pressure may vary depending on the operating temperature and installation method.

### **Recommended Fitting Installation Examples**







EPDM Corrugated Sealing with Stainless Steel Crimping (for IDF Ferrule)

### **Operating Temperature Range:**

°F: 32 to 212 °C: 0 to 100

### Notes:

- The permissible pressure varies with operating temperature.
- Operating down to a vacuum level of approximately -29.5 inHg (-0.1 MPa) is feasible at room temperature.

Scan, tap, or touch for product videos



Product Overview

# SHIMETAC for TOTAKU ECO LINE-HO 100°C

Applicable Sizes: 1.5 inches (φ38 mm) and 2 inches (φ50 mm)



### **Features**

- Made from resin, ensuring a lightweight design.
- Rust-free due to its resin construction.
- Equipped with Stainless Steel 304 bolts, flat washers, and nuts.
- Reliable pressure resistance performance.
- Fittings are removable for easy cleaning.
- Designed with a secure structure to prevent detachment.

### Notes

- Be sure to use the *dedicated fittings* for SHIMETAC.
- The fittings shown below are examples.

### Pressure Resistance Performance at 212°F (100°C)

			Proc	essing Met	hods		
Nom Diam		Sealing wi	orrugated th Stainless rimping	Bar Tighte		SHIM Tight	
inch	mm	inch	mm	inch	mm	inch	mm
1	25	58.02	0.40	14.50	0.10	_	_
1.5	38	58.02	0.40	14.50	0.10	58.02	0.40
2	50	43.51	0.30	14.50	0.10	43.51	0.30

### **Dedicated Fittings for SHIMETAC**



IDF Ferrule with SHIMETAC shank (Stainless Steel)



M1 SHIMETAC shank (Stainless Steel)



Flange with SHIMETAC shank (Stainless Steel)



Camlock 633-CTS (Stainless Steel)



Camlock 633-ETS (Stainless Steel)



TS Flange with SHIMETAC shank (PVC)



Loose Flange with SHIMETAC shank (Polypropylene) (Flange Part: Structural Steel)



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Product Overview

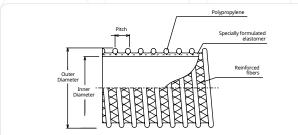


Compatible Hoses



# TOTAKU ECO LINE







### **Features**

- Safe for use in food applications.
   Note: Not suitable for transporting foods or liquids containing oils or fats.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- The U.S. standard is currently under development.
- Can be cleaned with hot water<sup>1</sup> and 95% ethanol, ensuring hygienic use.
- Safe for incineration after use without emitting harmful gases<sup>2</sup> (Incineration ash residue is less than 0.1%).
- Semi-transparent construction allows for easy inspection of transported materials.
- Flexible design enables easy handling during use.
- It is equipped with a reinforcement fiber, providing an allowable pressure of 72.5 psi (0.50 MPa).

### **Applications**

- Suitable for transporting alcoholic beverages such as sake and shochu, as well as soft drinks.
- Ideal for transporting other food products, including liquids and powders.
- Designed for general water suction and discharge applications.

### **Cautions**

Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

Non Dian		Inner Diameter		Outer Diameter		Pitch			rence ight	Len	gth	Allowable		Allowable Bend Radius (to the center axis of the hos	
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inch	mm
1	25	1.00	25.4	1.44	36.7	0.31	7.8	0.24	350	164	50	72.52	0.50	4.72	120
1.25	32	1.26	32.0	1.73	44.0	0.35	8.8	0.30	445	164	50	72.52	0.50	5.91	150
1.5	38	1.50	38.0	2.01	51.0	0.37	9.3	0.39	580	164	50	72.52	0.50	8.27	210
2	50	2.00	50.8	2.57	65.2	0.40	10.2	0.54	800	164	50	72.52	0.50	9.45	240
2.5	65	2.50	63.5	3.17	80.5	0.55	14.0	0.74	1105	65/164	20/50	72.52	0.50	12.99	330
3	75	3.00	76.2	3.76	95.5	0.59	15.0	1.03	1530	65/164	20/50	72.52	0.50	15.35	390

The recommended operating temperature range is  $32^{\circ}F$  to  $122^{\circ}F$  (0°C to  $50^{\circ}C$ ). However, allowable pressure may vary depending on the operating temperature and installation method. For continuous use, keep the temperature below  $104^{\circ}F$  ( $40^{\circ}C$ ).

### **Operating Temperature Range:**

°F: 32 to 122 °C: 0 to 50

### Notes:

- The permissible pressure varies with operating temperature.
- Operating down to a vacuum level of approximately -29.5 inHg
   (-0.1 MPa) is feasible at room temperature.

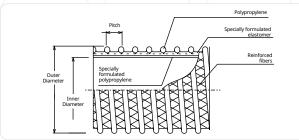
### Additional Notes:

<sup>&</sup>lt;sup>1</sup> Hot water cleaning should be performed under the following conditions: temperature below 176°F (80°C), pressure below 14.5 psi (0.1 MPa), and a pressurization time of 3 minutes or less.

<sup>&</sup>lt;sup>2</sup> Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.

### **TOTAKU ECO LINE-HO**





### **Features**

- Suitable for transporting oils, fatty foods, and general food products.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Can be cleaned with hot water<sup>1</sup> and 95% ethanol, ensuring hygienic use.
- Safe for incineration after use without emitting harmful gases<sup>2</sup> (Incineration ash residue is less than 0.1%).
- Semi-transparent construction allows for easy inspection of transported materials.
- It is equipped with a reinforcement fiber, providing an allowable pressure of 72.5 psi (0.50 MPa).

### **Applications**

 Suitable for transporting edible oils, fatty foods, sake, shochu, and other alcoholic beverages, as well as soft drinks and various liquids or powders.

### **Cautions**

Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

	Nominal Inner Diameter Diameter			Outer Diameter		Pit	ch	Refer Wei		Leng	gth		e Pressure emperature)	Allowable Bend Radius (to the center axis of the hose)	
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	МРа	inch	mm
1	25	1.00	25.4	1.47	37.4	0.31	7.8	0.24	360	164	50	72.52	0.50	4.72	120
1.25	32	1.26	32.0	1.73	44.0	0.35	9.0	0.31	455	164	50	72.52	0.50	5.91	150
1.5	38	1.50	38.0	2.01	51.0	0.39	10.0	0.39	580	164	50	72.52	0.50	9.45	240
2	50	2.00	50.8	2.55	64.8	0.41	10.5	0.55	820	164	50	72.52	0.50	11.81	300

The recommended operating temperature range is  $32^{\circ}F$  to  $140^{\circ}F$  (0°C to  $60^{\circ}C$ ). However, allowable pressure may vary depending on the operating temperature and installation method. For continuous use, keep the temperature below  $122^{\circ}F$  ( $50^{\circ}C$ ).

### **Operating Temperature Range:**

°F: 32 to 140 °C: 0 to 60

### Notes:

- The permissible pressure varies with operating temperature.
- Operating down to a vacuum level of approximately -29.5 inHg (-0.1 MPa) is feasible at room temperature.

### Additional Notes:

<sup>&</sup>lt;sup>1</sup> Hot water cleaning should be performed under the following conditions: temperature below 176°F (80°C), pressure below 14.5 psi (0.1 MPa), and a pressurization time of 3 minutes or less.

<sup>&</sup>lt;sup>2</sup> Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.

# SHIMETAC for TOTAKU ECO LINE

Applicable Sizes: 1 inch (φ25 mm)\*, 1.5 inches (φ38 mm), 2 inches (φ50 mm), 2.5 inches (φ65 mm), 3 inches (φ75 mm)



\*1 inch (φ25 mm) is compatible with Line Ace





Part Number 92311 Material: Fiber-Reinforced Polypropylene

### **TOTAKU ECO LINE**

**Allowable Pressure:** 72.5 psi (0.5 MPa) or less (at room temperature)

Hot Water Wash: 14.5 psi (0.1 MPa) or less (up to 176°F [80°C], within 3 minutes)

#### TOTAKU ECO LINE-HO

**Allowable Pressure:** 72.5 psi (0.5 MPa) or less (at room temperature)

Hot Water Wash: 14.5 psi (0.1 MPa) or less (up to 176°F [80°C], within 30 minutes)

#### **Features**

- Made from resin, ensuring a lightweight design.
- Rust-free due to its resin construction.
- Equipped with Stainless Steel 304 bolts, flat washers, and nuts.
- Reliable pressure resistance performance.
- Fittings are removable for easy cleaning.
- Designed with a secure structure to prevent detachment.

### Notes

- Be sure to use the dedicated fittings for SHIMETAC.
- The fittings shown below are examples.



### **Dedicated Fittings for SHIMETAC**





M1 SHIMETAC shank (Stainless Steel)
Also available in Steel Structure



Camlock 633-ETS (Stainless Steel)

# Part Number 92313



IDF Ferrule with SHIMETAC shank (Stainless Steel)



Loose Flange with SHIMETAC shank (Polypropylene) (Flange Part: Steel Structure)



Camlock 633-CTS (Stainless Steel)



Flange with SHIMETAC shank (Stainless Steel)

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Product Overview



Compatible Hoses



Installation Method

# **TOTAKU ECO PP-SPRING**

Applicable Sizes: 1 inch ( $\phi$ 25 mm), 1.25 inches ( $\phi$ 32 mm), 1.5 inches ( $\phi$ 38 mm), 2 inches ( $\phi$ 50 mm), 2.5 inches ( $\phi$ 65 mm), 3 inches ( $\phi$ 75 mm)



### **Applications**

- Designed for use as a corrugated sealing material when securing TOTAKU ECO LINE with flat bands or similar fasteners.
- Ideal for preventing localized bending near fittings.

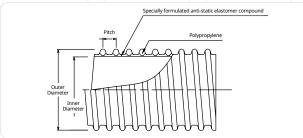


### **Example of TOTAKU ECO LINE in Use**



### **TOTAKU ECO SD-AS**





### SHIMETAC for TOTAKU ECO LINE is now available!

(Applicable Sizes: 1.5 inches (φ38 mm) to 3 inches (φ75 mm))



### **Features**

- Safe for use in food applications.
   Note: Not suitable for transporting foods or liquids containing oils or fats.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Safe for incineration after use without emitting harmful gases.<sup>1</sup>
- The smooth inner surface boosts transport efficiency.
- Ensures strong anti-static properties.
- Lightweight, flexible, and offers excellent abrasion resistance.
- Semi-transparent construction allows for easy inspection of transported materials.

### **Applications**

- Ideal for transporting resin pellets used in food packaging, toys, and other applications.
- Suitable for transporting granular and powdered food products.
- Appropriate for transporting pharmaceuticals.
- Also used for transporting non-food granular and powdered materials.

### **Cautions**

Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

Non Dian	ninal neter		ner neter	Outer Diameter		Pitch		Refer Wei		Leng	gth		e Pressure emperature)	Allowable Bend Radiu (to the center axis of the hose)	
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inch	mm
1.5	38	1.50	38.0	1.89	48.0	0.35	9.0	0.23	340	164	50	14.50	0.10	5.91	150
2	50	2.00	50.8	2.44	62.0	0.39	10.0	0.37	550	164	50	14.50	0.10	7.68	195
2.5	65	2.50	63.5	2.99	76.0	0.56	14.3	0.47	695	65/164	20/50	14.50	0.10	10.04	255
3	75	3.00	76.2	3.62	92.0	0.62	15.8	0.64	950	65	20	14.50	0.10	10.04	255
4	100	4.00	101.6	4.67	118.5	0.71	18.0	1.08	1600	65	20	14.50	0.10	17.72	450

The recommended operating temperature range is 32°F to 122°F (0°C to 50°C). However, allowable pressure may vary depending on the operating temperature and installation method. For continuous use, keep the temperature below 104°F (40°C).

### **Operating Temperature Range:**

°F: 32 to 122 °C: 0 to 50

### Notes:

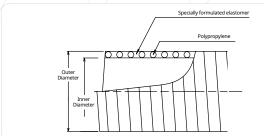
- The permissible pressure varies with operating temperature.
- Operating down to a vacuum level of approximately -29.5 inHg
   (-0.1 MPa) is feasible at room temperature.

Scan, tap, or touch for product videos



### TOTAKU ECO SD-C





### **Features**

- Safe for use in food applications.
   Note: Not suitable for transporting foods or liquids containing oils or fats.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Provides outstanding heat resistance and flexibility.
- Can be cleaned with hot water<sup>1</sup> and 95% ethanol, ensuring hygienic use.
- Safe for incineration after use without emitting harmful gases.<sup>2</sup>
- Lightweight, and offers excellent abrasion resistance.
- Features smooth surfaces on both the interior and exterior.
- Semi-transparent construction allows for easy inspection of transported materials.

### **Applications**

- Suitable for transporting alcoholic beverages such as sake and shochu, as well as soft drinks.
- Ideal for transporting food products and others.
- Designed for general water suction and discharge applications.

### **Cautions**

Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

Nom Diam		Inner Diameter		Outer Diameter		Reference Weight		Leng	jth		e Pressure emperature)	Allowable Bend Radius (to the center axis of the hose)		
inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inch	mm	
1.5	38	1.50	38.0	1.83	46.6	0.33	485	164	50	43.51	0.30	9.45	240	
2	50	2.00	50.8	2.39	60.6	0.54	805	164	50	29.01	0.20	14.17	360	

The recommended operating temperature range is 32°F to 122°F (0°C to 50°C). However, allowable pressure may vary depending on the operating temperature and installation method. For continuous use, keep the temperature below 104°F (40°C).

### **Operating Temperature Range:**

°F: 32 to 122 °C: 0 to 50

### **Notes:**

- The permissible pressure varies with operating temperature.
- Operating down to a vacuum level of approximately -29.5inHg (-0.1 MPa) is feasible at room temperature.

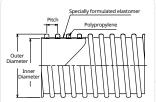
### Additional Notes:

Hot water cleaning should be performed under the following conditions: temperature below 176°F (80°C), pressure below 14.5 psi (0.1 MPa), and a pressurization time of 3 minutes or less.

<sup>&</sup>lt;sup>2</sup> Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.

### **TOTAKU ECO DUCT**







### **Features**

- Lightweight and flexible, allowing for easy handling.
- Safe for use in food applications.
   Note: Not suitable for transporting foods or liquids containing oils or fats.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Exceptional bending durability.
   (No defects observed after 1,000,000 bending cycles)
- Transparent construction allows for easy inspection of transported materials
- Safe for incineration after use without emitting harmful gases.<sup>1</sup>
   (Incineration ash residue is 0.05% or less)

### **Applications**

- Suitable for air supply and exhaust in equipment and machinery.
- Appropriate for use in intake and exhaust systems of food-grade machinery.
- Ideal for air supply and exhaust in cleanrooms and other environments requiring low particle emission.
- Suitable for drainage purposes (for surface-level drainage).

### **Cautions**

Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

	ninal neter		ner neter		iter neter	Pi	tch		rence ight	Len	gth		e Pressure emperature)	Allow Depressi (at room te	urization	(to the ce	Bend Radius enter axis of hose)
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inHg	kPa	inch	mm
1.25	32	1.26	32.0	1.50	38.0	0.30	7.5	0.11	170	98	30	5.80	0.04	-14.97	-50.7	1.57	40
1.5	38	1.50	38.0	1.77	45.0	0.31	7.8	0.16	235	98	30	5.80	0.04	-14.97	-50.7	1.97	50
2	50	2.00	50.8	2.32	59.0	0.39	10.0	0.22	325	98	30	5.80	0.04	-14.97	-50.7	2.36	60
2.5	65	2.50	63.5	2.83	72.0	0.49	12.5	0.27	405	98	30	4.35	0.03	-14.97	-50.7	2.95	75
3	75	3.00	76.2	3.35	85.0	0.51	13.0	0.32	470	98	30	4.35	0.03	-9.74	-33.0	3.54	90
3.5	90	3.50	88.9	3.90	99.0	0.53	13.5	0.39	575	98	30	4.35	0.03	-5.91	-20.0	3.54	90
4	100	4.00	101.6	4.39	111.5	0.59	15.0	0.43	635	98	30	4.35	0.03	-5.17	-17.5	4.33	110
5	125	5.00	127.0	5.45	138.5	0.83	21.0	0.66	975	65	20	2.90	0.02	-3.69	-12.5	5.31	135
6	150	6.00	152.4	6.46	164.0	0.79	20.0	0.76	1125	65	20	2.90	0.02	-3.69	-12.5	6.30	160
8	200	8.00	203.2	8.50	216.0	0.89	22.5	1.04	1545	65	20	1.45	0.01	-1.77	-6.0	8.27	210
10	250	9.92	252.0	10.67	271.0	1.02	26.0	2.00	2975	32	10	1.45	0.01	-1.18	-4.0	11.81	300
12	300	11.93	303.0	12.68	322.0	1.02	26.0	2.51	3735	32	10	1.45	0.01	-0.74	-2.5	13.78	350

This product uses materials designed to minimize dust generation; however, under certain conditions (such as temperature, fluid type, or pressure), particle emission may still occur. Please verify emission characteristics based on your operating conditions before use.

### **Operating Temperature Range:**

°F: 32 to 122 °C: 0 to 50

### Notes:

 The permissible pressure varies with operating temperature.

Additional Notes:

<sup>1</sup> Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.

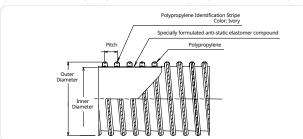
Scan, tap, or touch for product videos



Product Overview

## **TOTAKU ECO DUCT-AS**





### **Features**

- Lightweight and flexible, allowing for easy handling.
- Safe for use in food applications.
   Note: Not suitable for transporting foods or liquids containing oils or fats.
- Meets the standards for food and additives set by the Japanese Ministry of Health, Labour and Welfare (Notification No. 370), excluding elution testing for fatty and oily foods. But they do not meet U.S. standards. They are currently under development, so please contact us for more details.
- Exceptional bending durability.
   (No defects observed after 1,000,000 bending cycles)
- Transparent construction allows for easy inspection of transported materials
- Safe for incineration after use without emitting harmful gases.<sup>1</sup>
   (Incineration ash residue is 0.05% or less)

### **Applications**

- Suitable for air supply and exhaust in equipment and machinery.
- Appropriate for use in intake and exhaust systems of food-grade machinery.
- Ideal for air supply and exhaust in cleanrooms and other environments requiring low particle emission.
- Suitable for drainage purposes (for surface-level drainage).

### **Cautions**

• Do not use or store outdoors for extended periods.

### **Standard Dimensions and Properties**

	ninal neter		ner neter		ıter neter	Pi	tch		rence ight	Len	gth	Allowable (at room ter		Allow Depressu (at room te	urization	(to the ce	Bend Radius enter axis of hose)
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	feet	m	psi	MPa	inHg	kPa	inch	mm
1.5	38	1.50	38.0	1.77	45.0	0.31	7.8	0.15	220	98	30	5.80	0.04	-14.97	-50.7	1.97	50
2	50	2.00	50.8	2.32	59.0	0.39	10.0	0.22	325	98	30	5.80	0.04	-14.97	-50.7	2.36	60
2.5	65	2.50	63.5	2.83	72.0	0.49	12.5	0.27	405	98	30	4.35	0.03	-14.97	-50.7	2.95	75
3	75	3.00	76.2	3.35	85.0	0.51	13.0	0.32	470	98	30	4.35	0.03	-9.74	-33.0	3.54	90
4	100	4.00	101.6	4.39	111.5	0.59	15.0	0.43	635	98	30	4.35	0.03	-5.17	-17.5	4.33	110
5	125	5.00	127.0	5.45	138.5	0.83	21.0	0.54	805	65	20	2.90	0.02	-3.69	-12.5	5.31	135
6	150	6.00	152.4	6.46	164.0	0.79	20.0	0.71	1055	65	20	2.90	0.02	-3.69	-12.5	6.30	160
8	200	8.00	203.2	8.50	216.0	0.89	22.5	0.97	1440	65	20	1.45	0.01	-1.77	-6.0	8.27	210

This product uses materials designed to minimize dust generation; however, under certain conditions (such as temperature, fluid type, or pressure), particle emission may still occur. Please verify emission characteristics based on your operating conditions before use.

### **Operating Temperature Range:**

### Notes

°F: -4 to 122 °C: -20 to 50

• The permissible pressure varies with operating temperature.

Additional Notes:

<sup>1</sup> Includes hydrogen chloride, sulfur oxides, nitrogen oxides, hydrogen cyanide, and ammonia.

Scan, tap, or touch for product videos



