TOTAKU
NAGASE Group

TOTAKU Oil-Resistant Hoses

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

Notice:

- The data in this catalog uses values in a straight hose configuration. (The allowable vacuum pressure for duct hoses is measured when the hose is in a straight configuration with both ends fixed.)
- 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.

Important Safety Precautions for Oil-Resistant Hoses

Warning: Improper handling may result in serious injury or accidents.

- Before use, always check the operating conditions (fluid type, flow rate, pressure, and temperature) and ensure the hose is used within the appropriate limits.
- Hoses are consumable and deteriorate over time. If any abnormalities are found during daily or regular inspections, stop using the hose immediately and replace it with a new one.
- Do not install or operate the system in a way that subjects the hose to excessive flow rates (6.6 ft/s [2 m/s]) or sudden flow changes, as this may generate shock pressure exceeding the allowable limit, potentially causing hose failure.
- Do not install the hose in a way that applies excessive tension or load, as this can lead to damage.
- When using the hose for marine refueling, ensure vessel movement does not put tension on the hose.
- Avoid bending the hose too sharply near fittings, as this may lead to early failure.
- For more details, refer to “Hose Handling Precautions” in this catalog.

We do not provide any warranty for damages resulting from the improper use of hoses, fittings, or hose assemblies.

Oil-Resistant TOTAKU Hoses: Compatible Transport Materials

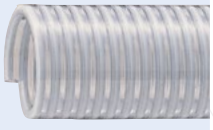
Transport Material	TOTAKU SD-COR	TOTAKU LINE POWER-CVOR	TOTAKU LINE POWER-ATO	TOTAKU LINE POWER-OT
Crude Oil	–	–	–	✓
Gasoline	–	–	–	✓
Kerosene	✓	✓	✓	✓
Diesel fuel	✓	✓	✓	✓
Heavy fuel Oil (HFO)	✓	✓	✓	✓

The following TOTAKU hoses are also compatible with oil-resistant applications:

TOTAKU SD-F	TOTAKU SD-HF	TOTAKU DUCT-OR	TOTAKU DUCT-ARO R	TOTAKU ECO LINE-HO 100°C	TOTAKU ECO LINE-HO
–	–	–	–	–	–
–	–	–	✓ (VOLATILE FORM ONLY)	–	–
✓	✓	✓ (VOLATILE FORM ONLY)	✓ (VOLATILE FORM ONLY)	✓	✓
✓	✓	✓ (VOLATILE FORM ONLY)	✓ (VOLATILE FORM ONLY)	–	–
✓	✓	✓ (VOLATILE FORM ONLY)	✓ (VOLATILE FORM ONLY)	–	–

SD-F

SD-HF



DUCT-OR

DUCT-ARO R

ECO LINE-HO 100°C

ECO LINE-HO

Legend:

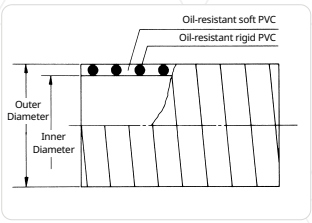
✓ = Compatible for full use

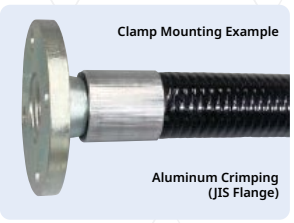
✓ (VOLATILE FORM ONLY) = Compatible with the volatile form (vapor or gas) only

– = Not compatible with the material

TOTAKU SD-COR

Part Number - 22117





Features

- An all-resin oil-resistant hose.
- Designed with a special oil-resistant resin, making it suitable for transporting oils.

Applications

- Used for transporting diesel, kerosene, and Heavy fuel Oil (HFO). (Refer to the Caution.)
- Suitable for both suction and discharge.

Cautions

- For crude oil and gasoline transport, use LINE POWER-OT.
- TOTAKU SD-COR does not have a grounding wire

Standard Dimensions and Properties

Nominal Diameter		Inner Diameter		Outer Diameter		Reference Weight		Length		Allowable Pressure *(at room temperature)*		Allowable Bend Radius *(to the center axis of the hose)*	
inch	mm	inch	mm	inch	mm	lbs/ft	g/m	ft	m	psi	MPa	inch	mm
1	25	1.00	25.4	1.23	31.2	0.23	340	164	50	72.52	0.50	9.45	240
1.25	32	1.26	32.0	1.54	39.2	0.35	515	164	50	65.27	0.45	13.39	340
1.5	38	1.50	38.0	1.81	46.0	0.44	655	164	50	58.02	0.40	13.78	350
2	50	2.00	50.8	2.40	61.0	0.76	1130	164	50	58.02	0.40	19.69	500
2.5	65	2.50	63.5	2.94	74.8	1.03	1535	65/164	20/50	58.02	0.40	23.62	600
3	75	3.00	76.2	3.46	88.0	1.27	1895	65/164	20/50	58.02	0.40	30.51	775
4	100	4.00	101.6	4.56	115.8	2.07	3080	65	20	43.51	0.30	45.28	1150

Operating Temperature Range:

Suction

°F: 14 to 140 °C: -10 to 60

Discharge

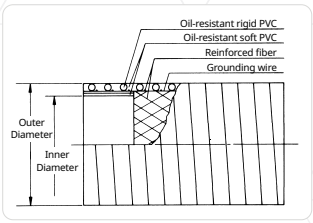
°F: 14 to 122 °C: -10 to 50

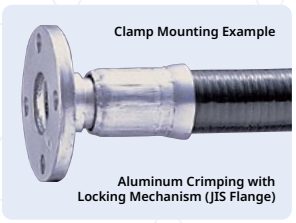
Notes:

- 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.

TOTAKU LINE POWER-CVOR

Part Number - 26122





Features

- Contains reinforcement fibers, offering superior pressure resistance compared to TOTAKU SD-COR.
- Built-in ground wire helps prevent static electricity buildup.

Applications

- Ideal for oil transfer in refineries and general industrial facilities.
- Suitable for transporting diesel, kerosene, and Heavy fuel Oil (HFO).

Cautions

- Do not store outdoors for extended periods.
- This hose is designed exclusively for discharge.
- For transporting crude oil and gasoline, use LINE POWER-OT.

Installation of Fitting

- Fitting installation is performed at our factory.

Standard Dimensions and Properties

Nominal Diameter		Inner Diameter		Outer Diameter		Reference Weight		Length		Allowable Pressure *(at room temperature)*		Allowable Bend Radius *(to the center axis of the hose)*	
inch	mm	inch	mm	inch	mm	lbs/ft	g/m	ft	m	psi	MPa	inch	mm
1.25*	32	1.26	32.0	1.78	45.2	0.65	960	65/164	20/50	101.53	0.70	19.69	500
1.5	38	1.52	38.5	1.99	50.5	0.76	1125	65/164	20/50	101.53	0.70	23.62	600
2	50	2.00	50.8	2.52	64.0	1.01	1505	65/164	20/50	101.53	0.70	29.53	750

** These are made-to-order products. Please contact our company regarding order quantities and other inquiries.*

Operating Temperature Range:

Suction

°F: — °C: —

Discharge

°F: 14 to 122 °C: -10 to 50

Notes:

- The permissible pressure varies with operating temperature.

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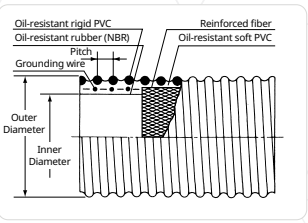
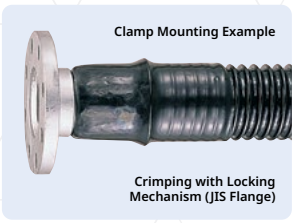
Static Electricity Prevention

TOTAKU LINE POWER-ATO

Part Number - 26106





Features

- About half the weight of a rubber hose with excellent flexibility.
- Oil-resistant rubber is used for the inner surface.
- Provides anti-static protection with conductive oil-resistant rubber and a built-in ground wire.

Applications

- Suitable for transporting Heavy fuel Oil (HFO), kerosene, and diesel.
- Used for loading and unloading from tank trucks, refineries, ships, and tank railcars, as well as oil transfer within general industrial facilities.

  Note: At a fluid temperature of 140°F (60°C) [maximum operating temperature range], the allowable pressure is 72.5 psi (0.50 MPa) (ambient temperature: 86°F [30°C]).

Cautions

- To prevent cracking from ozone degradation, cap both ends of the hose and store it indoors in a dry area, away from direct sunlight.
- Do not store the hose outdoors, as it may deteriorate.

Installation of Fitting

- Fitting installation is performed at our factory.
  For shipments from our factory, a test report will be included.

Standard Dimensions and Properties

Nominal Diameter		Inner Diameter		Outer Diameter		Pitch		Reference Weight		Length		Allowable Pressure *(at room temperature)*		Allowable Bend Radius *(to the center axis of the hose)*	
inch	mm	inch	mm	inch	mm	inch	mm	lbs/ft	g/m	ft	m	psi	MPa	inch	mm
2	50	2.00	50.8	2.62	66.6	0.39	10.0	1.07	1590	65	20	101.53	0.70	17.72	450
2.5	65	2.50	63.5	3.21	81.5	0.56	14.3	1.32	1970	65	20	101.53	0.70	21.65	550
3	75	3.00	76.2	3.89	98.8	0.59	15.1	1.96	2920	65	20	101.53	0.70	30.51	775
4	100	4.00	101.6	5.12	130.0	0.70	17.7	3.09	4600	65	20	101.53	0.70	49.21	1250
5	125	5.00	127.0	6.18	157.0	0.87	22.0	4.08	6070	65	20	101.53	0.70	59.06	1500
6*	150	6.00	152.4	7.38	187.5	0.87	22.0	5.20	7740	65	20	101.53	0.70	78.74	2000

** These are made-to-order products. Please contact our company regarding order quantities and other inquiries.*

Operating Temperature Range:

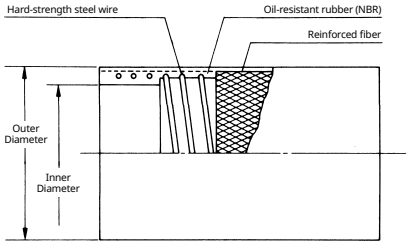
°F: -4 to 140 °C: -20 to 60

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.

TOTAKU LINE POWER-OT

Part Number - 26108



Clamp Mounting Example
Aluminum Crimping
(Lorry Coupling)

Allowable Pressure:
101.5 psi (0.70 MPa) or less

Clamp Mounting Example

Aluminum Crimping with
Locking Mechanism (JIS Flange)

Features

- Offers the highest pressure resistance among oil-resistant hoses, with an allowable pressure of 217.5 psi (1.50 MPa).
- Provides anti-static protection with conductive oil-resistant rubber and a steel wire.

Applications

- Suitable for transporting crude oil, gasoline, Heavy fuel Oil (HFO), kerosene, and diesel.
- Used for loading and unloading from tank trucks, refineries, ships, and tank railcars, as well as oil transfer within general industrial facilities.

  Note: Use only with gasoline that contains 40% or less aromatic content. "Aromatics" refer to aromatic hydrocarbons, including benzene, toluene, and xylene. Most gasoline typically contains 20–30% aromatics.

Durability Performance (Repeated Water Pressure Test)

- Hoses in a straight configuration were repeatedly pressurized from 0 to 218 psi (0 to 1.50 MPa) at 20-second intervals.
- **Result: No abnormalities were found after 50,000 cycles for all sizes.**

Cautions

- To prevent cracking from ozone degradation, cap both ends of the hose and store it indoors in a dry area, away from direct sunlight.
- Do not store the hose outdoors, as it may deteriorate.

Installation of Fitting

- Fitting installation is performed at our factory.

Standard Dimensions and Properties

Nominal Diameter		Inner Diameter		Outer Diameter		Reference Weight		Length		Allowable Pressure *(at room temperature)*		Allowable Bend Radius *(to the center axis of the hose)*	
inch	mm	inch	mm	inch	mm	lbs/ft	g/m	ft	m	psi	MPa	inch	mm
1.5	38	1.52	38.5	2.02	51.3	0.93	1390	65/164	20/50	217.56	1.50	19.69	500
2	50	2.00	50.8	2.52	64.0	1.23	1835	65/164	20/50	217.56	1.50	19.69	500
2.5	65	2.50	63.5	3.04	77.1	1.70	2530	65/164	20/50	217.56	1.50	24.61	625
3	75	3.01	76.5	3.62	92.0	2.30	3420	65/164	20/50	217.56	1.50	31.50	800
4	100	4.00	101.6	4.69	119.0	3.47	5170	65	20	217.56	1.50	56.10	1425

Operating Temperature Range:

Suction

°F: -4 to 194 °C: -20 to 90

Discharge

°F: -4 to 176 °C: -20 to 80

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

Static Electricity Prevention