



LOW TEMPERATURE DURAMAX™ HOSES

Engineered for extreme cold, designed for durability.



BUILT TO BRAVE THE FREEZE

DuraMax™ low temperature hoses are designed and tested to withstand cold climates.

Hydraulic hoses used in low temperature applications face thicker, more viscous fluid that causes hard starts, reduced flow, and higher system stresses. Elastomers within hose materials can stiffen or become brittle, increasing kinks, cracks and leaks. Cold environments can also increase susceptibility to abrasion. These issues lead to sluggish or uneven operation, frequent leaks, and unplanned downtime.

The materials that the hose is constructed from can help mitigate the risk of hose failure. Traditional rubber hoses contain compounds that stiffen in cold temperatures, and they are unable to flex smoothly, especially in pulley or over-the-sheave applications. They are prone to cracking or failure when bent in cold applications. Thermoplastic hoses remain flexible at much lower temperatures than rubber compounds, so they don't stiffen or embrittle when bent in low temperature applications. From material handling equipment operating in industrial freezers to equipment stored outdoors in cold weather, DuraMax™ thermoplastic hoses have proven that they can withstand extreme cold.

The DuraMax™ hose family has been tested in an over-the-sheave freezer test stand to mimic mobile equipment applications that operate with continual flexing in extreme elements. Even in temperatures as low as -70°F (-57°C), these thermoplastic hoses were able to withstand the rigorous testing, without any compromise to hose life.



Traditional rubber hydraulic hoses used in cold temperature pulley applications can lead to cracking, while DuraMax™ low temperature hoses provide superior flexibility and long service life.

55LT

DuraMax™ SAE 100R7 Low Temperature Hydraulic Hose



Features

- Twin and multi-line available
- Superior flexibility in cold temperature applications
- Excellent for over-the-sheave applications

Compliance

- Meets/Exceeds SAE J517 100R7

Construction

- Tube: Nylon
- Reinforcement: Fiber
- Cover: Black Copolyester

Operating Parameters

- Temperature Range: -70°F (-57°C) to 212°F (100°C)
- Vac. Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

Notes

- Perforated cover



Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/mtr	
55LT-3	3/16	5	0.43	10.9	3,250	22.4	3/4	19	0.05	0.08	56
55LT-4	1/4	6.3	0.51	13.0	3,000	20.7	1-1/4	32	0.07	0.10	56
55LT-5	5/16	8	0.57	14.5	2,500	17.2	1-3/4	44	0.09	0.13	56
55LT-6	3/8	10	0.65	16.5	2,250	15.5	2	51	0.10	0.14	56
55LT-8	1/2	12.5	0.81	20.6	2,000	13.8	3	76	0.14	0.21	56

WARNING

This product can expose you to chemicals including Nickel compounds, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

563LT

DuraMax™ SAE 100R17 Low Temperature Hydraulic Hose



Features

- Lowest length change under pressure
- 3,000 psi constant pressure
- Ideal for over-the-sheave applications in cold temperature applications
- Twin or multi-line hose/hose assembly production capabilities

Construction

- Tube: Copolyester
- Reinforcement: High Tensile Steel Wire Braid
- Cover: Black Copolyester

Notes

- Non-perforated cover
- *Two wire braid
- 43 series fittings available from Hose Products Division

Compliance

- Meets/Exceeds SAE J517 100R17 performance

Operating Parameters

- Temperature Range:
 - Petroleum based hydraulic fluids and lubricating oils within a temperature range:
 - 563LT-4 to 563LT-8 -70°F (-57°C) to 250°F (121°C)
 - 563LT-10 to 563LT-12 -50°F (-45°C) to 250°F (121°C)
 - Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to 185°F (85°C)
 - Water/glycol hydraulic fluids limited to 135°F (57°C)
- Vac. Rating: 28 inch Hg
- Change in length at Max. Working Pressure:
 - 4 to 8: +/-1%
 - 10 to 12: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)



Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/mtr	
563LT-4	1/4	6.3	0.47	11.9	3,045	21.0	1-1/2	38	0.09	0.13	56
563LT-6	3/8	10	0.64	16.3	3,045	21.0	2	51	0.19	0.29	56
563LT-8	1/2	12.5	0.77	19.5	3,045	21.0	2-3/4	70	0.24	0.36	56
563LT-10*	5/8	16	0.97	24.6	3,045	21.0	3-1/2	89	0.40	0.60	43
563LT-12*	3/4	19	1.12	28.3	3,045	21.0	4-1/4	108	0.55	0.82	43

WARNING

This product can expose you to chemicals including Antimony Oxide (Antimony Trioxide), which is known to the State of California to cause cancer, and 2-Imidazolidinethione, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

53LT

DuraMax™ SAE 100R18 Low Temperature Hydraulic Hose



Features

- Superior flexibility in cold temperature applications
- Excellent for over-the-sheave applications
- Better bend radius than SAE J517 and 100R7
- 3,045 psi constant pressure
- Nylon core provides improved chemical compatibility

Construction

- Tube: Nylon
- Reinforcement: Fiber
- Cover: Black Copolyester

Notes

- Perforated cover

Compliance

- Meets/Exceeds SAE J517 100R18

Operating Parameters

- Temperature Range:
 - Petroleum based hydraulic fluids and lubricating oils within a temperature range -70°F (-57°C) to 212°F (100°C)
- Vac. Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)



Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/mtr	
53LT-4	1/4	6.3	0.51	13	3,045	21.0	1-1/4	32	0.07	0.10	56
53LT-6	3/8	10	0.66	16.7	3,045	21.0	2	51	0.10	0.15	56
53LT-8	1/2	12.5	0.85	21.6	3,045	21.0	3-1/2	89	0.16	0.24	56

WARNING

This product can expose you to chemicals including Nickel compounds, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

53DM

DuraMax™ SAE 100R18 Low Temperature Hydraulic Hose



Features

- Low coefficient of friction cover
- Superior flexibility in cold temperature applications
- Excellent for over-the-sheave applications
- Better bend radius than SAE J517 and 100R7
- 3,045 psi constant pressure

Construction

- Tube:
 - Nylon: -2
 - Copolyester: -4 to -12
- Reinforcement: Fiber
- Cover: Black Copolyester

Notes

- Perforated cover

Compliance

- Meets/Exceeds SAE J517 100R18

Operating Parameters

- Temperature Range:
 - Petroleum based hydraulic fluids and lubricating oils within a temperature range -70°F (-57°C) to 212°F (100°C)
 - Synthetic, synthetic blend, water, and water/oil emulsion hydraulic fluids limited to 135°F (57°C) {Sizes -4 thru -12}
- Vac. Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)



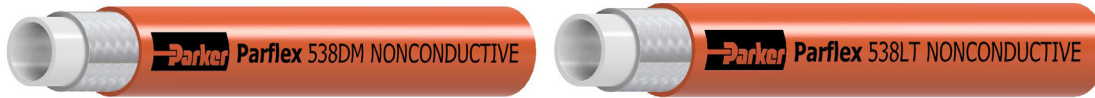
Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/mtr	
53DM-2	1/8	3.2	0.33	8.2	3,045	21.0	1/2	13	0.03	0.05	CY
53DM-4	1/4	6.3	0.49	11.9	3,045	21.0	1-1/4	32	0.07	0.10	56
53DM-6	3/8	10	0.66	16.7	3,045	21.0	2	51	0.11	0.16	56
53DM-8	1/2	12.5	0.85	21.6	3,045	21.0	3-1/2	89	0.17	0.26	56
53DM-10	5/8	16	1.03	26.2	3,045	21.0	4	102	0.22	0.33	56
53DM-12	3/4	19	1.13	28.7	3,045	21.0	6-1/2	165	0.26	0.39	CG

WARNING

This product can expose you to chemicals including Antimony Oxide (Antimony Trioxide), which is known to the State of California to cause cancer, and 2-Imidazolidinethione, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

538DM/538LT

DuraMax™ SAE 100R18 Non-Conductive Low Temperature Hydraulic Hose



Features

- Superior flexibility in cold temperature applications
- Excellent for over-the-sheave applications
- Better bend radius than SAE J517 and 100R7
- 3,045 psi constant pressure

Compliance

- Meets/Exceeds SAE J517 100R18
- Meets SAE J517 electrical standards (non-conductivity)

Construction

- Tube:
 - Copolyester - 538DM
 - Nylon - 538LT
- Reinforcement: Fiber
- Cover: Orange Copolyester

Operating Parameters

- Temperature Range:
 - Petroleum based hydraulic fluids and lubricating oils within a temperature range -70°F (-57°C) to 212°F (100°C)
- Vac. Rating: 28 inch Hg
- Change in length at Max. Working Pressure: +/-2%
- Min. Burst Pressure is 4x Max. Working Pressure at 73°F (23°C)

Notes

- Non-perforated cover



Part Number	Nominal I.D.		Maximum O.D.		Maximum Working Pressure		Minimum Bend Radius		Weight		Permanent Fitting Series
	inch	mm	inch	mm	psi	MPa	inch	mm	lbs/ft	kg/mtr	
538DM-6	3/8	10	0.66	16.7	3,045	21.0	2	51	0.11	0.16	56
538LT-6	3/8	10	0.66	16.7	3,045	21.0	2	51	0.10	0.15	56

WARNING

This product can expose you to chemicals including Nickel compounds, which is known to the State of California to cause cancer, and Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



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