

Applications for oil and compressed air hoses

ContiTech

Mobile Fluid Systems

ContiTech Fluid Assembly and hose manufacturing expertise

ContiTech Fluid Technology a leading developer and manufacturer of high-quality hoses and hose assemblies for the most varied industrial and commercial applications.



CONTI Excelsus



Compressor line



Assembly expertise

- Tube machining at our plants using ultra-modern machines up to 6 m long
- Tubing for high volume flows with customer-specific geometries up to 120 mm in diameter
- Hose assemblies available with directly crimped elbow tubes to avoid joins
- Broad range of connection concepts standard connections and plug-in systems as well as cold-formed block connections for quick and safe assembly
- Fittings and tubes made of aluminum and (stainless) steel are processed

Hose Manufacturing Expertise

- Innovative solutions for every application
- Years of expertise in materials and processing: over 100 years of manufacturing elastomer products
- Materials and design checked in accordance with (inter)national standards
- Continuous stringent quality control: multiple testing and review processes guarantee product safety that extends far beyond the standards
- Development responsibility from the idea to production readiness
- Hoses supplied as cut hose material or molded hoses

Application: Oil and compressed air

Applications in the field of compressed air and oil are very versatile and require hoses that must be able to withstand very high temperatures and securely transport media at high volumetric flow rates.

With our hoses and hose assemblies, we offer a broad and innovative spectrum of solutions for these applications and therefore ensure optimal transport of oil, dry air, and air that contains oil.

Applications including oil cooling and lubrication, hydraulic systems, and compressors can be operated optimally using our solutions.



Performance Overview

	Pressure in bar			up to 100°C		up to 135°C		up to 150°C			> 200°C
	80			<80		<80					<80
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Operating pressure	40			_		_		_			
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	min.	4	20	5	20	6	20	6	6	10	5
	max.	40	60	32	25	32	85	16	8	25	16

Oil Hose CONTI® M1L-OLN

Description

- Black, smooth rubber inner lining
- Reinforcement: textile braid
- Black, finish fabric patterned outer lining made from wear-resistant rubber
- Temperature resistance: -40°C to +100°C (up to +120°C for brief periods)
- Highly flexible
- Very easy to install

Technical Data

• Vacuum stability up to -0.9 bar

Application

The oil hose is ideally suited for the secure transport of hydraulic oils, lubricating oils, and air that contains oil. Resistant to ozone and UV radiation.

DN	_	ID	OD	Оре	rating pressure	Ві	irsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
4	1/6	4	10	40	580	160	2320	30	80
5	1/5	5	11	60	870	240	3480	35	90
6	1/4	6	12	60	870	240	3480	40	115
8	5/16	8	14	50	725	150	2175	50	140
9	3/8	9	15	40	580	120	1740	50	155
11	7/16	11	18	30	435	120	1740	65	220
13	1/2	13	22	30	435	120	1740	90	340
16	5/8	16	25	20	290	100	1450	110	400
20	3/4	20	30	30	435	120	1740	130	540
32	1 1/4	32	42,5	8	116	60	870	180	835
40	1 1/2	40	51,5	6	87	40	580	240	1110

Pressure information in relation to room temperature. High pressure and/or temperature lead to a reduction in service life. Further dimensions available on request.

Oil Hose CONTI® M1L-OLNW

Description

- Black, smooth rubber inner lining
- Reinforcement: two textile braids and a steel wire helix
- Black, finish fabric patterned outer lining made from
- wear-resistant rubber • Temperature resistance: -40°C to +100°C
- (up to +120°C for brief periods) • Suitable for very narrow bending radii
- Vacuum stability up to -0.9 bar

Application

The oil hose is ideally suited for the secure transport of hydraulic oils, lubricating oils, and air that contains oil. Extremely narrow bending radii are achieved by the integrated steel wire helix. Resistant to ozone and UV radiation.

Technical Data

DN		ID	OD	Ope	rating pressure	Вг	irsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
20	3/4	20	30	20	290	180	2610	100	410
25	1	25	35,5	33	478	150	2175	150	690
32	1 1/4	32	42,5	25	363	150	2175	180	830
40	1 1/2	40	51,5	10	145	120	1740	240	1230
50	2	50	61,5	10	145	100	1450	230	1500
60	2 3/8	60	72	10	145	70	1015	350	1860

Hydraulic hose 1 TE/2 TE/3 TE

Description

- Black, smooth rubber inner lining
- Reinforcement: one or two textile braids
- Black, finish fabric patterned outer lining made from wear-resistant rubber
- Temperature resistance: -40°C to +100°C (up to +125°C for brief periods)
- Optimal compression set for securing
- Vacuum stability up to -0.6 bar (2 TE) or up to -0.8 bar (3 TE)



The hydraulic hoses are ideally suited for the secure transport of hydraulic oil based on mineral oil. They are resistant to oil and grease as well as ozone and UV radiation. Design in accordance with DIN EN 854.

Technical Data - 1 TE

DN		ID	OD	Operatin	g pressure	Burstin	g pressure	Smallest bending radius	Weight (aprx.
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
5	3/16	4.8	10.8	25	363	100	1450	35	105
6	1/4	6.4	12.4	25	363	100	1450	45	12C
8	5/16	7.9	13.9	20	290	80	1160	65	14C
10	3/8	9.5	15.5	20	290	80	1160	75	16C
12	1/2	12.7	18.7	16	232	64	928	90	19C
16	5/8	15.9	22.9	16	232	64	928	115	290
20	3/4	19	26	12	174	40	580	135	320
25	1	25.4	33.4	12	174	40	580	165	49C

Technical Data - 2 TE

DN		ID	OD	Оре	rating pressure	Ви	rsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
5	3/16	4.8	11.8	80	1160	320	4640	35	105
6	1/4	6.4	13.4	75	1088	300	4350	40	160
8	5/16	7.9	14.9	68	986	270	3915	50	170
10	3/8	9.5	16.5	63	914	250	3625	60	200
13	1/2	12.7	19.7	58	841	232	3364	70	250
16	5/8	15.9	23.9	50	725	200	2900	90	340
20	3/4	19	27	45	653	180	2610	110	390
25	1	25.4	34.5	40	580	160	2320	150	570
32	1 1/4	31.8	40.8	35	508	140	2030	190	636

Technical Data - 3 TE

DN		ID	OD	Opera	ating pressure	Bu	irsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
6	1/4	6.4	14.4	145	2104	580	8415	45	160
8	5/16	7.9	16.9	130	1886	520	7544	55	220
10	3/8	9.5	18.5	110	1596	440	6384	70	250
12	1/2	12.7	21.7	93	1349	372	5397	85	320
16	5/8	15.9	25.9	80	1161	320	4643	105	410
20	3/4	19	29	70	1016	280	4062	130	490
25	1	25.4	35.9	55	798	220	3192	150	640
32	1 1/4	31.8	42.3	45	653	180	2611	190	790
40	1 1/2	38.1	49.6	40	580	160	2320	240	1060
50	2	50.8	62.3	33	478	132	1914	300	1390
60	2 3/8	60	72	25	362	100	1450	400	1710

Oil Hose CONTI® M4M-2



Description

- Black, smooth rubber inner lining
- Reinforcement: polyamide braid, including steel wire helix above DN25
- Black, finished fabric patterned outer lining made from wear-resistant rubber
- Temperature resistance: -40°C to +135°C (up to +150°C for brief periods)
- Resistant to all conventional lubricating oils
- Optimal compression set for securing, highly flexible
- Very long service life (tested for 3 million load cycles)

Application

The high-performance oil hose (former OLNS1) is ideally suited for the secure transport of lubricating oils and air that contains oil, particularly at high temperatures. Resistant to ozone and UV radiation.

Technical Data

DN		ID	OD	Оре	Operating pressure Bursting pressure		Smallest bending radius	Weight (aprx.)	
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
20	3/4	20	30	20	290	150	2176	130	470
25	1	25	35,5	20	290	150	2176	200	595

Pressure information in relation to room temperature. High pressure and/or temperature lead to a reduction in service life. Further dimensions available on request.

Oil Hose 1 SN HT



Description

- Black, smooth rubber inner lining
- Reinforcement: steel wire braid
- Blue, finished fabric patterned outer lining made from wear-resistant rubber
- Temperature resistance: -50°C to +135°C (up to +150°C for brief periods)



Application

The economical oil hose is ideally suited for the secure transport of hydraulic oils, lubricating oils, and dry air or air that contains oil, particularly at high application temperatures.

Technical Data

DN		ID	OD	Оре	rating pressure	Bu	irsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
6	1/4	6.4	13.2	225	3263	1030	14939	100	235
8	5/16	8	14.8	215	3118	970	14069	115	275
10	3/8	9.5	17.2	180	2611	820	11893	130	350
12	1/2	12.7	20.4	160	2321	700	10153	180	435
16	5/8	16	23.5	130	1885	600	8702	200	500
20	3/4	19	27.5	105	1523	500	7252	240	635
25	1	25.4	35.4	88	1276	375	5439	300	935
32	1 1/4	31.8	43.5	63	914	280	4061	420	1310

Oil Hose SOH

Description

- Black, smooth rubber inner lining
- Reinforcement: steel wire braid
- Outer lining made from black textile fabric
- Temperature resistance: -40°C to +150°C



Application

The high-performance oil hose is ideally suited for the secure transport of lubricating oils and dry air or air that contains oil, particularly at high temperatures. Resistant to ozone and UV radiation.

Technical Data

DN		ID	OD	Oper	ating pressure	BL	rsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
20	7/8	22	31.5	35	508	200	2901	180	608
25	1	25.4	65.9	35	508	200	2901	200	700
32	1 3/8	35	46.5	35	508	140	2031	260	1160
41	15/8	40	52	35	508	100	1450	340	1290
46	1 3/4	46	57	20	290	100	1450	340	1400
50	2	50	61	20	290	80	1160	400	1490
60	2 3/8	60	72	20	290	80	1160	400	1920
85	3 3/8	85	99	15	218	80	1160	500	2800

Pressure information in relation to room temperature. High pressure and / or temperature lead to a reduction in service life. Further dimensions available on request.

Oil Hose CONTI® L5L-1



Description

- Black, smooth rubber inner lining
- Reinforcement: two aramid braids
- Black, finished fabric patterned outer lining made from wear-resistant rubber
- Temperature resistance: -40°C to +150°C (up to +175°C for brief periods)
- Optimal compression set for securing, highly flexible
- Very long service life (tested for 3 million load cycles)



Application

The high-performance oil hose (former OLNHT) is ideally suited for use in oil cooler, lubricating oil, hydraulic oil, and compressed air systems – especially at high temperatures. Resistant to ozone and UV radiation.

Technical Data

DN		ID	OD	Operat	ting pressure	Bu	rsting pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
6	1/4	6	12	60	725	300	4351	40	105
8	5/16	8	14	40	507	250	3626	50	130
10	3/8	10	16	25	435	175	2538	60	145
13	1/2	12	19	25	435	150	2176	70	210
16	5/8	16	24	20	363	150	2176	110	320

Oil Hose

Description

- Black, smooth rubber inner lining
- Reinforcement: black textile braid
- No outer lining
- Temperature resistance: -40°C to +230°C (up to +250°C for brief periods)
- Suitable for very narrow bending radii
- Optimal working weight

Application

The flexible oil hose is particularly well-suited to the high temperature range. This excellent performance is achieved using an innovative, patented yarn.

Technical Data

DN		ID	OD	Ope	Operating pressure Bursting pressure		Smallest bending radius	Weight (aprx.)	
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
6	1/4	6	8.5	15	218	120	1740	40	60
8	5/16	8	10.5	15	218	120	1740	50	75

Pressure information in relation to room temperature. High pressure and/or temperature lead to a reduction in service life. Further dimensions available on request.

Oil Hose TWS

Description

- Black, corrugated PTFE inner lining
- Reinforcement: textile braid
- Outer lining with steel wire casing
- Temperature resistance: -54°C to +180°C (up to +205°C for brief periods)
- High chemical resistance



The high-temperature hose is ideally suited for the secure transport of liquid and gaseous media in the high temperature range up to 205°C. Resistant to ozone and UV radiation.

Technical Data

DN		ID	OD	Operating	g pressure	Bursti	ng pressure	Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
10	3/8	9.8	15.3	15	218	200	2901	50	160
13	1/2	12.3	18.3	15	218	200	2901	60	190
16	5/8	15.6	21.6	15	218	150	2176	70	240
18	7/10	18.6	25	15	218	150	2176	80	330
20	3/4	19.9	26.9	15	218	150	2176	80	420
25	1	26.2	33.5	25	363	120	1740	120	550

Oil Hose TFS

Description

- Black, smooth PTFE inner lining
- Outer lining with steel wire casing
- Temperature resistance: -60°C to +230°C
- High chemical resistance



Application

The high-temperature hose is ideally suited for the secure transport of liquid and gaseous media in the high temperature range up to 230°C. Resistant to ozone and UV radiation.

Technical Data

DN	ID		OD	Operating pressure		Bursting pressure		Smallest bending radius	Weight (aprx.)
mm	in	mm	mm	bar	psi	bar	psi	mm	g/m
5	3/16	4.5	7.6	190	2756	760	11023	40	80
6	1/4	6.4	9	170	2466	680	9863	40	100
8	5/16	7.9	11	150	2176	600	8702	50	120
10	3/8	10	13	140	2031	550	7977	60	150
13	1/2	12.5	15.5	105	1523	420	6092	80	210
16	5/8	15.3	18.5	95	1378	380	5511	120	270

Pressure information in relation to room temperature. High pressure and/or temperature lead to a reduction in service life. Further dimensions available on request.

Other industrial hoses from our product range

for use in the field of oil and compressed air:

TRIX BLAUSTRAHL®

The oil-resistant, branded, compressed air hose in accordance with DIN EN ISO 2398

- Black, non-porous, smooth NBR inner and outer lining
- Reinforcement: synthetic yarns
- Operating pressure up to 25 bar
- Temperature-resistant from -40°C to +85°C
- Excellent resistance to oil, RMA Class A
- Electrically dissipative irrespective of length, R < 10⁶ Ω

UNITRIX® 60 and 80

For various applications

- Black, non-porous, smooth NBR inner lining
- Reinforcement: synthetic yarns
- Black, smooth NBR outer lining; ozone, weather, UV, oil, grease, and chemical resistant
- Operating pressure up to 33 bar
- Temperature-resistant from -40°C to +85°C
- Electrically dissipative irrespective of length, R < 10 $^6\Omega$



Simply request the detailed data sheets if you are interested. Please contact us if you have any further questions.

ContiTech

Mobile Fluid Systems

Market segment Engine and Drivetrain

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ContiTech is part of the international technology corporation Continental and enjoys a global reputation as a materials specialist and development partner with innovative products and intelligent systems that make use of rubber, plastic and combinations of materials such as metals, fabric, textiles, glass, and electronic components. ContiTech operates in almost all sectors of industry. Drawing on our extensive development and materials expertise, we combine our products and systems with customized services. We partner with our customers to create added value and help make the social trends of tomorrow into a reality today.



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