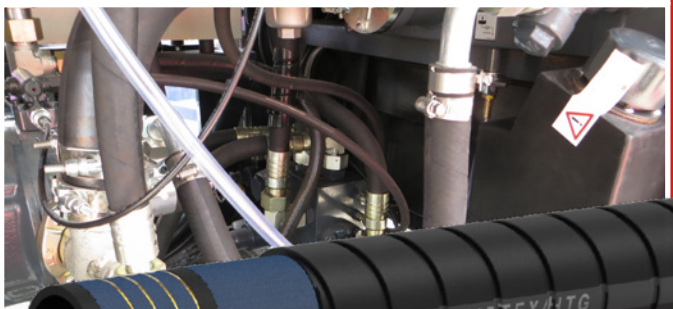


SPIRTEX

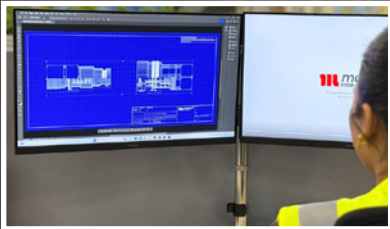


Enhanced Flexibility
for Demanding
Installations

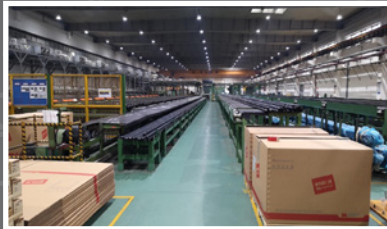
 **manuli**

 **manuli**[®]
HYDRAULICS

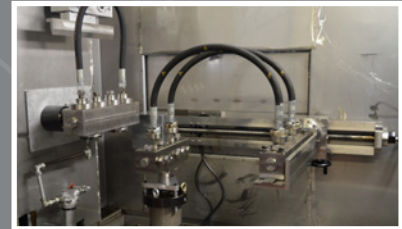
“Manuli Hydraulics is focused on achieving excellence in the design, manufacture, and supply of fluid conveyance solutions, components and associated equipment for high pressure hydraulics, industrial material conveyance, refrigeration and cooling applications.”



Our experienced Research & Development team take 2D drawings to 3D models to real life products.



Our world-class hoses, fittings and assembly equipment are manufactured in-house to the highest standards.



We test and validate our products to meet and exceed technical industry standards.

DESIGN

MANUFACTURE

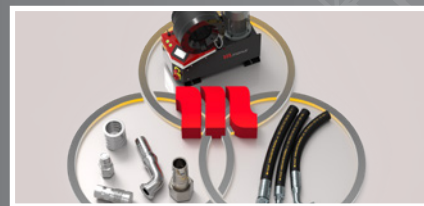
TEST

SUPPLY

INTEGRATED SYSTEMS



We provide the complete solution: hoses, fittings, crimping parameters and assembly equipment for a fully integrated system.



We supply fluid conveyance solutions directly to our customers whenever and wherever they are.

From design to manufacture, and assembly, Manuli Hydraulics' continual commitment to this unified philosophy makes us a global leader in providing integrated solutions for fluid and material transfer connector applications including hydraulics, refrigeration & air conditioning, oil & gas, water and industrial low-pressure.

Manuli Hydraulics offer a complete range of hoses, fittings and assembly equipment which are purposely designed to work seamlessly together. This harmonized approach allows us to guarantee the quality and performance of our hose assemblies.

Every metre of hose and every single fitting is backed by industry knowledge and experience, made available to you through our dedicated team of application engineers.

From advice on component selection and configuration, our technical expertise allows us to support and work directly with our customers whenever and wherever they are based.

Disclaimer: We reserve the right to modify our products and/or related services and/or discontinue the manufacture and/or supply of any of the products and/or related services, without notice. This document supersedes all previous versions and previously issued documentation. The only official source of technical crimping parameters regarding our products is our Digital Crimp Tools. Printed copies are uncontrolled therefore, please be sure to use the latest versions of our Manuli [Crimp App](#) or [Crimp Web Tool](#). Don't mix and match: always use Manuli original hoses and fittings. For more information, see our '[Safety Guide](#)' by scanning the QR code.



DON'T MIX & MATCH

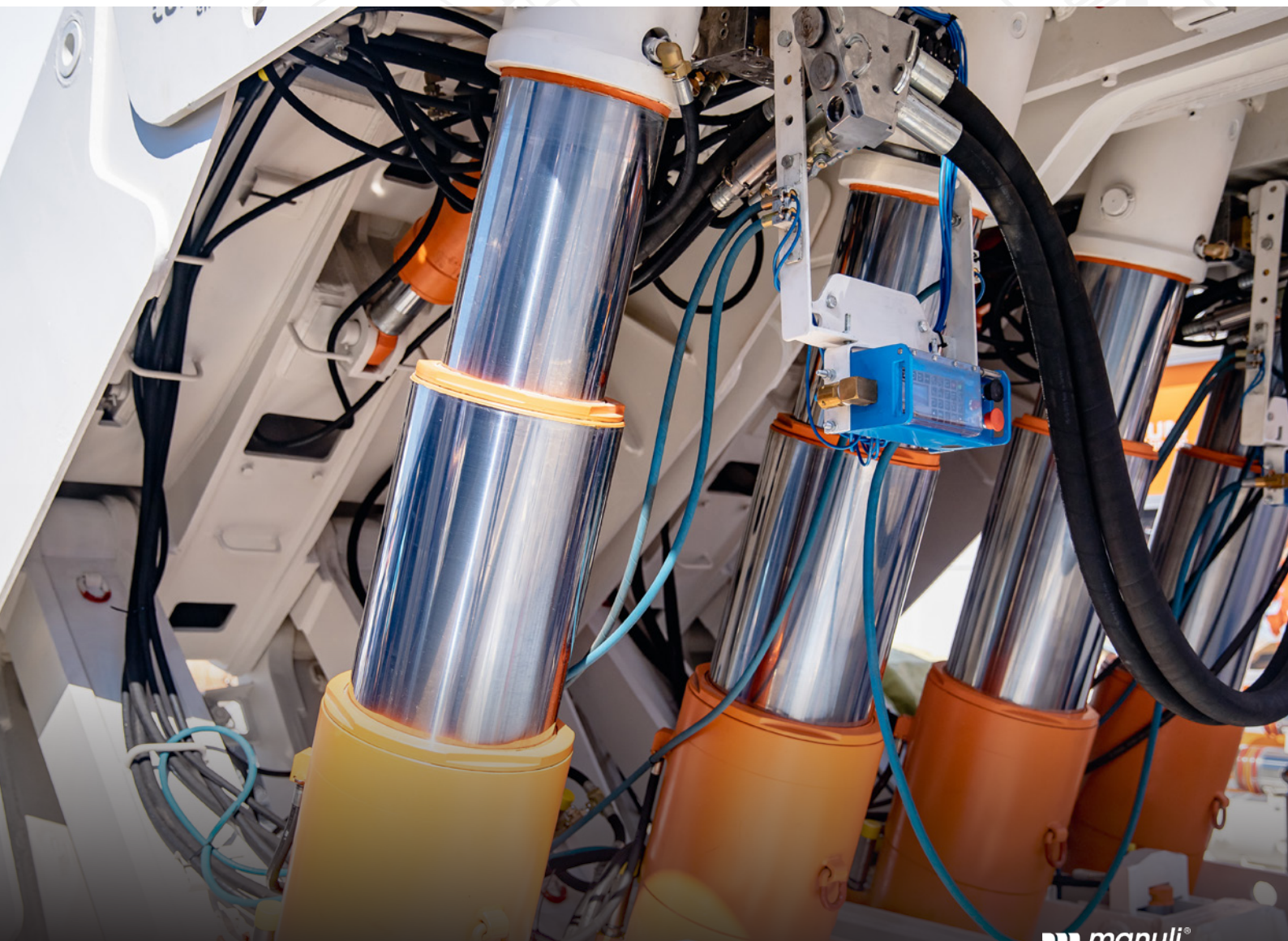
IMPROVED PERFORMANCE AND FLEXIBILITY

Spirtex by Manuli Hydraulics is a name that has long been associated with setting the standards of what to expect from a SAE 100 R4 suction and return hose. With a large range of sizes, helical wire reinforcement and a nitrile based tube for wide compatibility with both standard and environmentally friendly oils, Spirtex offers everything you could want from an R4 hose and more.

However, sometimes even more is expected, and so to further enhance our product offering we have now also developed three additional members of the Spirtex family:

- **Spirtex/G** : Equal to the standard Spirtex hose in performance and reliability, but with a new corrugated cover for even greater flexibility and a minimum bend radius of just half the SAE 100 R4 standard requirements.
- **Spirtex/HT** : Higher working pressure than SAE 100 R4 standard as well as increased working temperature range of -40°C to 135°C (-40°F to 275°F) making it perfect for more demanding applications.
- **Spirtex/HTG** : The ultimate Spirtex hose! All the advantages of the Spirtex/HT hose family but with a corrugated cover to further improve flexibility and ease of installation in restrictive areas.

The minimum bend radius is an amazing one-quarter of the SAE 100 R4 standard requirements, and in some cases approaches a 1:1 ratio with the overall hose diameter. The Spirtex/HTG hose is also ideal for cooling applications for oils and water glycol.





FEATURES & BENEFITS:

- Hardwall hose used for the suction and delivery of hydraulic oils
- High robustness of hose structure
- Long lasting in severe applications
- Resistance to vacuum
- Improved Minimum Bend Radius (two thirds the SAE 100R4)
- Max. length: 60m

APPLICATIONS & FLUIDS:

Hydraulics: Suction lines, Return lines.

Mineral oils, vegetable and rape seed oils, glycol and polyglycol based oils, synthetic ester based oils, oils in aqueous emulsion, water.

																	
PART REF.	HOSE SIZE			R.O.D		O.D		MAX. W.P		BURST		MIN. BEND		WEIGHT		FITTINGS	
	DN	dash	inch	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	g/m	lb/ft	Std 1	Std 2
H80002019*	19	-12	3/4"	-	-	29.6	1.16	21	300	84	1,218	80.0	3.14	516	0.35	MF+M00321-12	-
H80002025*	25	-16	1"	-	-	36.0	1.41	17	250	70	1,015	100.0	3.93	648	0.44	MF+M00930-16	-
H80002031*	31	-20	1.1/4"	-	-	42.6	1.67	14	200	56	812	130.0	5.11	790	0.53	MF+M00920-20	-
H80002038*	38	-24	1.1/2"	-	-	49.4	1.94	11	160	44	638	170.0	6.69	1028	0.69	MF+M00910-24	-
H80002051*	51	-32	2"	-	-	62.4	2.45	7	100	28	406	200.0	7.87	1337	0.9	MF+M00910-32	-
H80002063*	63	-40	2.1/2"	-	-	76.7	3.01	4	60	17	246	235.0	9.25	2250	1.51	MF+M03450-40	-
H80002076*	76	-48	3"	-	-	88.6	3.48	4	60	17	246	300.0	11.81	2592	1.74	MF+M03400-48	-
H80002089*	89	-56	3.1/2"	-	-	103.9	4.09	3	40	12	174	350.0	13.77	3546	2.38	MF+M03400-56	-
H80002102*	102	-64	4"	-	-	116.4	4.58	3	40	12	174	400.0	15.74	3999	2.69	MF+M03400-64	-

Refer to the latest Manuli Digital Crimp Tools for crimping parameters.

TECHNICAL SPECIFICATIONS:

Continuous Service Temperature Range

-40.0 °F, 212 °F
-40.0 °C, 100 °C

Tube

NBR synthetic rubber

Reinforcement

High tensile synthetic cord, helix body wire.

Cover

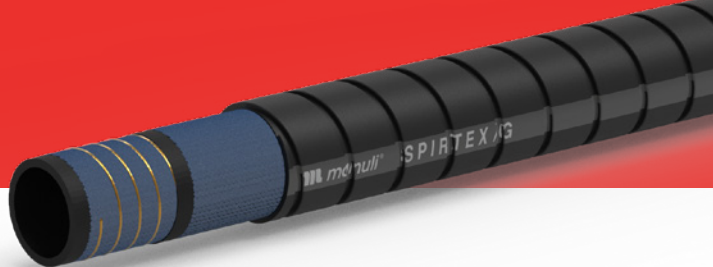
Weather resistant synthetic rubber

Applicable Standards

SAE J517 type 100R4, MANULI® Design; two thirds the SAE 100R4 Minimum Bend Radius

SPIRTEX/G

HIGH FLEXIBILITY SUCTION AND RETURN HOSE
EXCEEDS SAE 100 R4



FEATURES & BENEFITS:

- Hardwall hose used for the suction and delivery of hydraulic oils
- Grooved (corrugated) cover for improved flexibility and reduced bend radius (1/2 of SAE J517 R4)
- Long lasting in severe applications
- Resistance to vacuum
- Max. length: 40m (DN 89 20m)

APPLICATIONS & FLUIDS:

Hydraulics: Suction lines, Return lines.

Difficult installation with space constraints.

Mineral oils, vegetable and rape seed oils, glycol and polyglycol based oils, synthetic ester based oils, oils in aqueous emulsion, water.

																	
PART REF.	HOSE SIZE			R.O.D		O.D		MAX. W.P		BURST		MIN. BEND		WEIGHT		FITTINGS	
	DN	dash	inch	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	g/m	lb/ft	Std 1	Std 2
M00H80023019*	19	-12	3/4"	-	-	30.4	1.19	21	300	84	1218	62.0	2.44	560	0.38	SR + D08100-12	MF+M00321-12
H80023025*	25	-16	1"	-	-	36.9	1.45	17	250	70	1015	75.0	2.95	745	0.50	SR + D08100-16	MF+M03400-16
H80023031*	31	-20	1.1/4"	-	-	43.9	1.72	14	200	56	812	100.0	3.93	850	0.57	SR + D08100-20	MF+M00920-20
H80023038*	38	-24	1.1/2"	-	-	50.7	1.99	11	160	44	638	127.0	5.0	1000	0.67	SR + D08100-24	MF+M00910-24
H80023051*	51	-32	2"	-	-	63.4	2.49	7	100	28	406	150.0	5.9	1414	0.95	SR + D08100-32	MF+M00910-32
H80023063*	63	-40	2.1/2"	-	-	77.4	3.04	4	60	16	232	177.0	6.96	2357	1.58	SR + D08100-40	MF+M03450-40
H80023076*	76	-48	3"	-	-	89.4	3.51	4	60	16	232	230.0	9.05	2712	1.82	SR + D08100-48	MF+M03400-48
H80023089*	89	-56	3.1/2"	-	-	104.9	4.12	3	40	12	174	265.0	10.43	3465	2.33	SR + D08100-56	MF+M03400-56
H80023102*	102	-64	4"	-	-	116.4	4.58	3	40	12	174	305.0	12.0	3832	2.57	SR + D08100-64	MF+M03400-64

Refer to the latest Manuli Digital Crimp Tools for crimping parameters.

TECHNICAL SPECIFICATIONS:

Continuous Service Temperature Range

-40.0 °F, 212 °F
-40.0 °C, 100 °C

Tube

Oil resistant synthetic rubber

Reinforcement

High tensile synthetic cord, helix body wire.

Cover

Weather resistant synthetic rubber, Grooved cover style

Applicable Standards

Manuli design; exceed SAE J517-100R4, 1/2 the SAE 100R4 Minimum Bend Radius

SPIRTEX/HT

HIGH PERFORMANCE SUCTION AND RETURN
HOSE EXCEEDS SAE 100 R4



FEATURES & BENEFITS:

- Hardwall hose used for the suction and delivery of hydraulic oils
- Improved minimum bend radius (two thirds of the SAE 100R4)
- higher working pressure than SAE 100R4 spec.
- Long lasting in severe applications
- Resistance to vacuum
- Max. length: 60m

APPLICATIONS & FLUIDS:

Hydraulics: Suction lines, Return lines.

Mineral oils, vegetable and rape seed oils, glycol and polyglycol based oils, synthetic ester based oils, oils in aqueous emulsion, water.

																	
PART REF.	HOSE SIZE			R.O.D		O.D		MAX. W.P		BURST		MIN. BEND		WEIGHT		FITTINGS	
	DN	dash	inch	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	g/m	lb/ft	Std 1	Std 2
H80003019*	19	-12	3/4"	-	-	29.6	1.16	25	360	100	1450	80.0	3.14	564	0.38	-	MF+M00321-12
H80003025*	25	-16	1"	-	-	36.0	1.41	25	360	100	1450	100.0	3.93	713	0.48	-	MF+M00930-16
H80003031*	31	-20	1.1/4"	-	-	43.0	1.69	17	250	70	1015	130.0	5.11	892	0.60	-	MF+M00920-20
H80003038*	38	-24	1.1/2"	-	-	49.6	1.95	17	250	70	1015	170.0	6.69	1119	0.75	-	MF+M00910-24
H80003051*	51	-32	2"	-	-	62.4	2.45	10	150	42	609	200.0	7.87	1432	0.96	-	MF+M00910-32
H80003063*	63	-40	2.1/2"	-	-	75.7	2.98	10	150	42	609	235.0	9.25	2201	1.48	-	MF+M03450-40
H80003076*	76	-48	3"	-	-	88.2	3.47	7	100	28	406	300.0	11.81	2648	1.78	-	MF+M03400-48
H80003089*	89	-56	3.1/2"	-	-	103.5	4.07	5	70	21	304	350.0	13.77	3627	2.44	-	MF+M03400-56
H80003102*	102	-64	4"	-	-	116.5	4.59	5	70	21	304	400.0	15.74	4222	2.84	-	MF+M03400-64

Refer to the latest Manuli Digital Crimp Tools for crimping parameters.

TECHNICAL SPECIFICATIONS:

Continuous Service Temperature Range

-40.0 °F, 275 °F
-40.0 °C, 135 °C

Tube

Special synthetic rubber.

Reinforcement

High tensile synthetic cord, helix body wire.

Cover

Weather and ozone resistant synthetic rubber, flame retardant with high heat resistance

Applicable Standards

Exceeds SAE J517 type 100R4, MANULI®
Design: two thirds of the SAE 100R4 Minimum
Bend Radius

Type Approvals

MSHA

SPIRTEX/HTG

HIGH PERFORMANCE AND FLEXIBILITY SUCTION AND RETURN HOSE; EXCEEDS SAE 100 R4



FEATURES & BENEFITS:

- Hardwall hose used for the suction and delivery of hydraulic oils, cooling lines (oils, water-glycols)
- Grooved (corrugated) cover for improved flexibility and reduced bend radius (1/4 of SAE J517-R4)
- Long lasting in severe applications
- Resistance to vacuum
- Max. length: 40m

APPLICATIONS & FLUIDS:

Hydraulics: Suction lines, Return lines.

Difficult installations with space constraints.

Mineral oils, vegetable and rape seed oils, glycol and polyglycol based oils, synthetic ester based oils, oils in aqueous emulsion, water.

																	
PART REF.	HOSE SIZE			R.O.D		O.D		MAX. W.P		BURST		MIN. BEND		WEIGHT		FITTINGS	
	DN	dash	inch	mm	inch	mm	inch	bar	psi	bar	psi	mm	inch	g/m	lb/ft	Std 1	Std 2
H80058016*	16	-10	5/8"	-	-	26.3	1.03	21	300	84	1218	33.0	1.29	500	0.34	-	MF+M00310-10
H80058019*	19	-12	3/4"	-	-	30.4	1.19	21	300	84	1218	36.0	1.41	560	0.38	-	MF+M00321-12
H80058025*	25	-16	1"	-	-	36.9	1.45	17	250	70	1015	40.0	1.57	745	0.50	-	MF+M03400-16
H80058031*	31	-20	1.1/4"	-	-	43.9	1.72	14	200	56	812	50.0	1.96	850	0.57	-	MF+M00920-20

Refer to the latest Manuli Digital Crimp Tools for crimping parameters.

TECHNICAL SPECIFICATIONS:

Continuous Service Temperature Range

-40.0 °F, 275 °F
-40.0 °C, 135 °C

Tube

Oil resistant synthetic rubber

Reinforcement

High tensile synthetic cord, helix body wire.

Cover

Weather and ozone resistant synthetic rubber, corrugated cover type

Applicable Standards

MANULI® Design, exceeds SAE J517 type 100R4



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