

Improved performance and flexibility for
SAE 100 R4 suction & return applications

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.

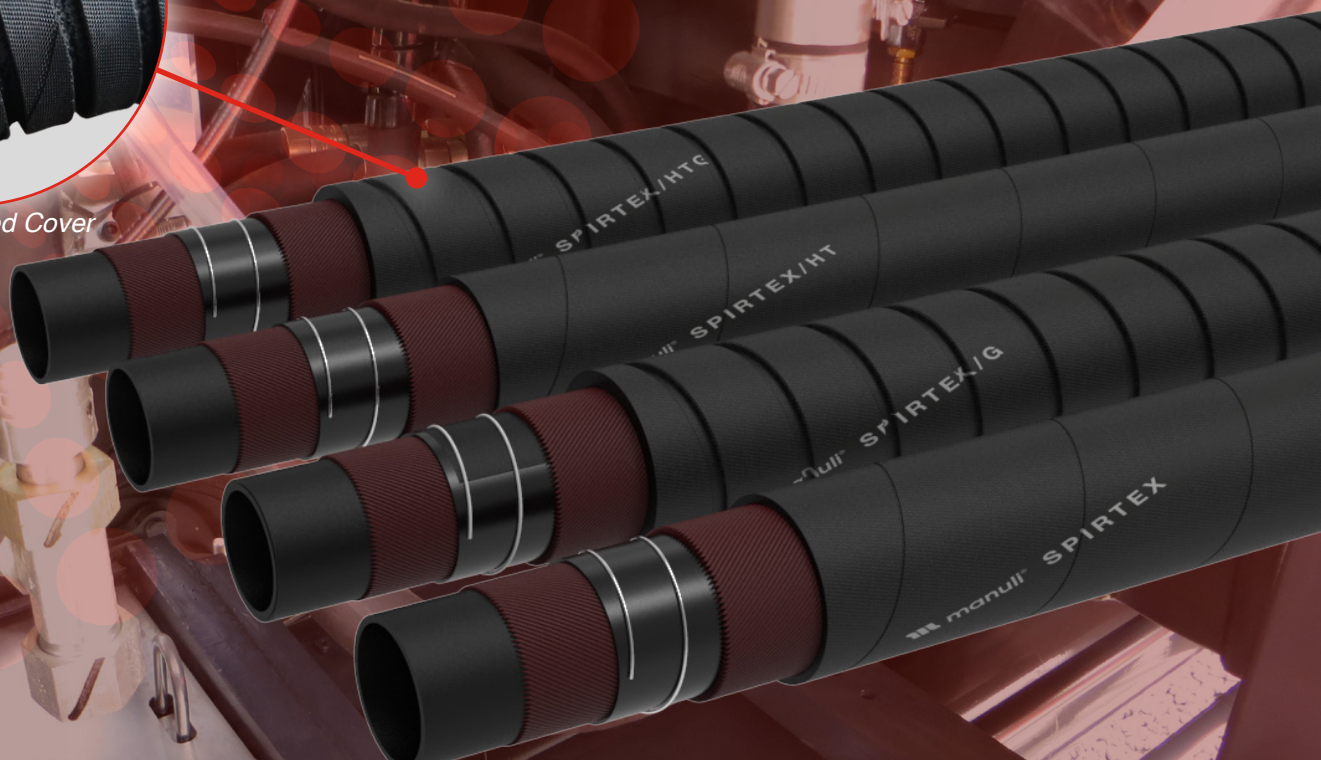
However, sometimes even more is expected, and so to further enhance our product offering we have now also developed 3 additional members of the Spirtex family:

- **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

To find out more about how these evolutions for the Spirtex hose family can benefit your operations, contact your local Manuli Hydraulics Sales Representative now.



NEW Corrugated Cover



SPIRTEX

SAE 100 R4 SUCTION AND RETURN HOSE



TECHNICAL DATA

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"	-	-	29.0	1.14	21	300	84	1,210	80	3.15	438	0.29	MF+M00321-12	-
H80002025*	25	-16	1"	-	-	35.5	1.40	17	240	70	1,010	100	3.94	551	0.37	MF+M00930-16	-
H80002031*	31	-20	1.1/4"	-	-	42.5	1.67	14	200	56	810	130	5.12	676	0.45	MF+M00920-20	-
H80002038*	38	-24	1.1/2"	-	-	49.0	1.93	11	160	44	630	170	6.69	948	0.64	MF+M00910-24	-
H80002051*	51	-32	2"	-	-	62.0	2.44	7	100	28	400	200	7.87	1,226	0.82	MF+M00910-32	-
H80002063*	63	-40	2.1/2"	-	-	76.0	2.99	4	60	17	240	235	9.25	2,141	1.44	MF+M03400-40	-
H80002076*	76	-48	3"	-	-	88.0	3.46	4	60	17	240	300	11.81	2,479	1.67	MF+M03400-48	-
H80002089*	89	-56	3.1/2"	-	-	103.5	4.07	3	40	12	170	350	13.78	3,425	2.30	MF+M03400-56	-
H80002102*	102	-64	4"	-	-	115.0	4.53	3	20	12	170	400	15.75	3,588	2.41	MF+M03400-64	-

KEY FEATURES

- 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
- 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

CONTINUOUS SERVICE TEMPERATURE RANGE

-40 °C, -40 °F

100 °C, 212 °F

TUBE

NBR synthetic rubber

REINFORCEMENT

High tensile synthetic cord, helix body wire

COVER

Weather resistant synthetic rubber

APPLICABLE SPECS

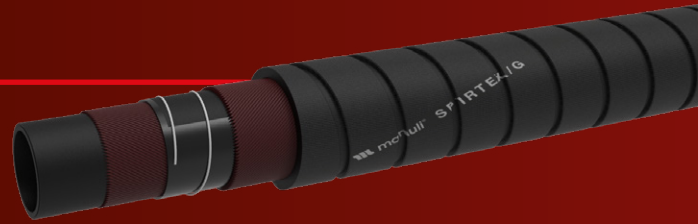
SAE J517 100 R4, Manuli® Design; two-thirds the SAE J517 100 R4 minimum bend radius

TYPE APPROVALS

CU-TR

SPIRTEX/G

HIGH FLEXIBILITY SUCTION AND RETURN HOSE
EXCEEDS SAE 100 R4



TECHNICAL DATA

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
H80023019*	19	- 12	3/4"	-	-	30.4	1.19	21	300	84	1,218	62.0	2.44	560	0.38	SR + D08100-12	-
H80023025*	25	- 16	1"	-	-	36.9	1.45	17	250	70	1,015	75.0	2.95	745	0.50	SR + D08100-16	-
H80023031*	31	- 20	1.1/4"	-	-	43.9	1.72	14	200	56	812	100.0	3.93	850	0.57	SR + D08100-20	-
H80023038*	38	- 24	1.1/2"	-	-	50.7	1.99	11	160	44	638	127.0	5.00	1,000	0.67	SR + D08100-24	-
H80023051*	51	- 32	2"	-	-	63.4	2.49	7	100	28	406	150.0	5.90	1,414	0.95	SR + D08100-32	-
H80023063*	63	- 40	2.1/2"	-	-	77.4	3.04	4	60	16	232	177.0	6.96	2,357	1.58	SR + D08100-40	-
H80023076*	76	- 48	3"	-	-	89.4	3.51	4	60	16	232	230.0	9.05	2,712	1.82	SR + D08100-48	-
H80023089*	89	- 56	3.1/2"	-	-	104.9	4.12	3	40	12	174	265.0	10.43	3,465	2.33	SR + D08100-56	-
H80023102*	102	- 64	4"	-	-	116.4	4.58	3	40	12	174	305.0	12.00	3,832	2.57	SR + D08100-64	-

KEY FEATURES

- 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 100 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

CONTINUOUS SERVICE TEMPERATURE RANGE

-40 °C, -40 °F

100 °C, 212 °F

TUBE

NBR synthetic rubber

REINFORCEMENT

High tensile synthetic cord, helix body wire

COVER

Weather resistant synthetic rubber, grooved cover style

APPLICABLE SPECS

Exceeds SAE J517 100 R4, Manuli® Design; half the SAE J517 100 R4 minimum bend radius

SPIRTEX/HT

HIGH PERFORMANCE SUCTION AND RETURN HOSE
EXCEEDS SAE 100 R4



TECHNICAL DATA

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"	-	-	28.5	1.12	25	360	100	1,450	80	3.15	530	0.36	MF+M00321-12	-
H80003025*	25	-16	1"	-	-	35.0	1.38	25	360	100	1,450	100	3.94	640	0.43	MF+M00930-16	-
H80003031*	31	-20	1.1/4"	-	-	42.0	1.65	17	250	70	1,010	130	5.12	870	0.58	MF+M00920-20	-
H80003038*	38	-24	1.1/2"	-	-	48.5	1.91	17	250	70	1,010	170	6.69	1,120	0.75	MF+M00910-24	-
H80003051*	51	-32	2"	-	-	61.5	2.42	10	150	42	600	200	7.87	1,188	0.80	MF+M00910-32	-
H80003063*	63	-40	2.1/2"	-	-	75.0	2.95	10	150	42	600	235	9.25	2,330	1.57	MF+M03400-40	-
H80003076*	76	-48	3"	-	-	87.5	3.44	7	100	28	400	300	11.81	2,800	1.88	MF+M03400-48	-
H80003089*	89	-56	3.1/2"	-	-	103.0	4.06	5	70	21	300	350	13.78	3,045	2.05	MF+M03400-56	-
H80003102*	102	-64	4"	-	-	114.5	4.51	5	70	21	300	400	15.75	3,590	2.41	MF+M03400-64	-

KEY FEATURES

- Hardwall hose used for the suction and delivery of hydraulic oils
- Improved minimum bend radius
- Higher working pressure than SAE J517 100R4 spec.
- Long lasting in severe applications
- Resistance to Vacuum
- Special rubber compounds for high aging resistance
- 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

CONTINUOUS SERVICE TEMPERATURE RANGE

-40 °C, -40 °F

135 °C, 275 °F

TUBE

NBR synthetic rubber

REINFORCEMENT

High tensile synthetic cord, helix body wire

COVER

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

APPLICABLE SPECS

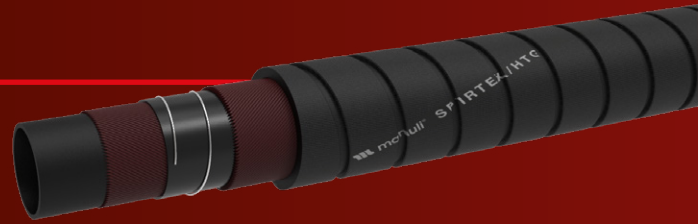
SAE J517 100 R4, Manuli® Design; two-thirds of the SAE J517 100 R4 minimum bend radius

TYPE APPROVALS

CU-TR

SPIRTEX/HTG

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



TECHNICAL DATA																	
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	1,218	33.0	1.29	500	0.34	SR + D08100-10	-
H80058019*	19	- 12	3/4"	-	-	30.4	1.19	21	300	84	1,218	36.0	1.41	560	0.38	SR + D08100-12	-
H80058025*	25	- 16	1"	-	-	36.9	1.45	17	250	70	1,015	40.0	1.57	745	0.50	SR + D08100-16	-
H80058031*	31	- 20	1.1/4"	-	-	43.9	1.72	14	200	56	812	50.0	1.96	850	0.57	SR + D08100-20	-

KEY FEATURES

- 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 100 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

CONTINUOUS SERVICE TEMPERATURE RANGE

-40 °C, -40 °F

135 °C, 275 °F

TUBE

NBR synthetic rubber

REINFORCEMENT

High tensile synthetic cord, helix body wire

COVER

Weather and ozone resistant synthetic rubber, corrugated cover type

APPLICABLE SPECS

Exceeds SAE J517 100 R4, Manuli® Design; one quarter the SAE J517 100 R4 minimum bend radius