

SAE 100(R1-R19)

SAE 100R1

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, a single steel wire braid reinforcement, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Min	Reinforcement Dia Max	OD Type AT Max	Cover Thickness Type AT Min	Cover Thickness Type AT Max	Max W.P Type AT MPa	Max W.P Type S MPa	Min Bend Radius
5	-3	4.6	5.4	8.9	10.1	12.5	0.8	1.5	21	25.0	90
6.3	-4	6.2	7.0	10.6	11.7	14.1	0.8	1.5	19.2	22.5	100
8	-5	7.7	8.5	12.1	13.3	15.7	0.8	1.5	17.5	21.5	115
10	-6	9.3	10.1	14.5	15.7	18.1	0.8	1.5	15.7	18.0	125
12.5	-8	12.3	13.5	17.5	19.0	21.5	0.8	1.5	14	16.0	180
16	-10	15.5	16.7	20.6	22.2	24.7	0.8	1.5	10.5	13.0	205
19	-12	18.6	19.8	24.6	26.2	28.6	0.8	1.5	8.7	10.5	240
25	-16	25.0	26.4	32.5	34.1	36.6	0.8	1.5	7	8.7	300
31.5	-20	31.4	33.0	39.3	41.7	44.8	1.0	2.0	4.3	6.2	420
38	-24	37.7	39.3	45.6	48.0	52.0	1.3	2.5	3.5	5.0	500
51	-32	50.4	52.0	58.7	61.9	65.9	1.3	2.5	2.6	4.0	630

SAE 100R2

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, steel wire reinforcement according to the hose type and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Min	Reinforcement Dia Max	OD Type AT Max	Cover Thickness Type AT Min	Cover Thickness Type AT Max	Max W.P Type AT MPa	Max W.P Type S MPa	Min Bend Radius
5	-3	4.6	5.4	10.6	11.7	14.1	0.8	1.5	35	41.5	90
6.3	-4	6.2	7.0	12.1	13.3	15.7	0.8	1.5	35	40.0	100
8	-5	7.7	8.5	13.7	14.9	17.3	0.8	1.5	29.7	35.0	115
10	-6	9.3	10.1	16.1	17.3	19.7	0.8	1.5	28	33.0	125
12.5	-8	12.3	13.5	19.0	20.6	23.1	0.8	1.5	24.5	27.5	180
16	-10	15.5	16.7	22.2	23.8	26.3	0.8	1.5	19.2	25.0	205
19	-12	18.6	19.8	26.2	27.8	30.2	0.8	1.5	15.7	21.5	240
25	-16	25.0	26.4	34.1	35.7	38.9	1.0	2.0	14	16.5	300
31.5	-20	31.4	33.0	43.2	45.6	49.6	1.3	2.5	11.3	12.5	420
38	-24	37.7	39.3	49.6	52.0	56.0	1.3	2.5	8.7	9.0	500
51	-32	50.4	52.0	62.3	64.7	68.6	1.3	2.5	7.8	8.0	630
63	-40	63.1	65.1	74.6	77.8	81.8	1.3	2.5	7	7.0	760


SAE 100R3
Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, two braids of suitable fiber, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Min	OD Max	Max Working Pressure MPa	Min Bend Radius
5	-3	4.5	5.4	11.9	13.5	10.5	75
6.3	-4	6.1	7.0	13.5	15.1	8.7	75
8	-5	7.6	8.5	16.7	18.3	8.4	100
10	-6	9.2	10.1	18.3	19.8	7.8	100
12.5	-8	12.4	13.5	23.0	24.6	7	125
16	-10	15.6	16.7	26.2	27.8	6.1	140
19	-12	18.7	19.8	31.0	32.5	5.2	150
25	-16	25.1	26.2	36.9	39.3	3.9	205
31.5	-20	31.4	32.9	42.9	46.0	2.6	250


SAE 100R4
Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, a reinforcement consisting of a ply or plies of woven or braided textile fibers with a suitable spiral of body steel wire, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Max	Max Working Pressure MPa	Min Bend Radius
19	-12	18.2	19.8	34.9	2.1	125
25	-16	24.6	26.2	41.3	1.7	150
31.5	-20	30.6	33.0	50.8	1.4	200
38	-24	36.9	39.3	57.2	1.05	255
51	-32	49.2	52.4	69.9	0.7	300
63	-40	61.9	65.1	82.6	0.4	355
76	-48	74.6	77.8	95.3	0.4	460
89	-56	87.3	90.5	107.9	0.3	530
102	-64	100.0	103.2	120.7	0.25	610


SAE 100R5
Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, a single wire braid reinforcement and a fiber braided cover. A braid or fabric of suitable material may be used over the inner tube to anchor the synthetic rubber to the wire. All braids and fabrics shall be oil and mildew resistant.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Min	OD Max	Max Working Pressure MPa	Min Bend Radius
5	-4	4.8	5.5	12.7	13.7	21	75
6.3	-5	6.4	7.2	14.3	15.3	21	85
8	-6	7.9	8.7	16.7	17.6	15.7	100
11	-8	10.3	11.1	18.9	20.0	14	115
12.5	-10	12.7	13.7	22.8	24.0	12.2	140
16	-12	15.9	17.0	26.8	28.0	10.5	165
22	-16	22.2	23.3	30.6	32.2	5.6	185
29	-20	28.6	29.8	37.3	38.9	4.3	230
35	-24	34.9	36.1	43.7	45.2	3.5	265
46	-32	46.0	47.2	55.2	57.6	2.4	335
60	-40	60.3	61.9	71.8	74.2	2.4	610
76	-48	76.2	77.8	89.3	91.7	1.4	840

 **SAE 100R6**

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, a layer or layers of suitable fiber, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Min	OD Max	Max Working Pressure MPa	Min Bend Radius
5	-3	4.2	5.4	10.3	11.9	3.5	50
6.3	-4	5.6	7.2	11.9	13.5	2.8	65
8	-5	7.2	8.8	13.5	15.1	2.8	75
10	-6	8.7	10.3	15.1	16.7	2.8	75
12.5	-8	11.9	13.5	19.0	20.6	2.8	100
16	-10	15.1	16.7	22.2	23.8	2.4	125
19	-12	18.3	19.9	25.4	27.8	2.1	150

 **SAE 100R7**

Construction:

This hose shall consist of a thermoplastic inner tube resistant to hydraulic fluids with suitable synthetic fiber reinforcement, and a hydraulic fluid and weather resistant thermoplastic cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Max	Max Working Pressure MPa	Min Bend Radius
3.2	-2	3.4	4.0	9.5	21	25
5	-3	4.6	5.4	11.4	21	90
6.3	-4	6.2	7.0	13.7	19.2	100
8	-5	7.7	8.5	15.6	17.5	115
10	-6	9.3	10.3	18.4	15.7	125
12.5	-8	12.3	13.5	22.5	14	180
16	-10	15.5	16.7	25.8	10.5	205
19	-12	18.6	19.8	28.6	8.7	240
25	-16	25.0	26.4	36.7	7	300

 **SAE 100R8**

Construction:

This hose shall consist of a thermoplastic inner tube resistant to hydraulic fluids with suitable synthetic fiber reinforcement, and a hydraulic fluid and weather resistant thermoplastic cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Max	Max Working Pressure MPa	Min Bend Radius
3.2	-2	3.4	4.0	10.5	42	25
5	-3	4.6	5.4	14.6	35	90
6.3	-4	6.2	7.0	16.8	35	100
10	-6	9.3	10.3	20.3	28	125
12.5	-8	12.3	13.5	24.6	24.5	180
16	-10	15.5	16.7	29.8	19.2	205
19	-12	18.6	19.8	33.0	15.7	240
25	-16	25.0	26.4	38.6	14	300

 **SAE 100R12**

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, four spiral plies of steel wire wrapped in alternating directions, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Min	Reinforcement Dia Max	OD Min	OD Max	Max W.P MPa	Min Bend Radius
10	-6	9.3	10.1	16.6	17.8	19.5	21.0	28	125
12.5	-8	12.3	13.5	19.9	21.5	23.0	24.6	28	180
16	-10	15.5	16.7	23.8	25.4	26.6	28.2	28	200
19	-12	18.6	19.8	26.9	28.4	29.9	31.5	28	240
25	-16	25.0	26.4	34.1	35.7	36.8	39.2	28	300
31.5	-20	31.4	33.0	42.7	45.1	45.4	48.6	21	420
38	-24	37.7	39.3	49.2	51.6	51.9	55.0	17.5	500
51	-32	50.8	52.0	62.5	64.8	65.1	68.3	17.5	640

 **SAE 100R13**

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, multiple spiral plies of heavy steel wire wrapped in alternating directions, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Min	Reinforcement Dia Max	OD Min	OD Max	Max W.P MPa	Min Bend Radius
19	-12	18.6	19.8	28.2	29.8	31.0	33.2	35	240
25	-16	25.0	26.4	34.9	36.4	37.6	39.8	35	300
31.5	-20	31.4	33.0	45.6	48.0	48.3	51.3	35	420
38	-24	37.7	39.3	53.1	55.5	55.8	58.8	35	500
51	-32	50.4	52.0	66.9	69.3	69.5	72.7	35	640

SAE 100R14

Construction:

This hose shall consist of an inner tube of polytetrafluoroethylene (PTFE), reinforced with a single braid of 303XX series stainless steel wire.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Min	OD Max	Max W.P MPa	Proof Pressure MPa	Min Burst Pressure MPa	Min Bend Radius
3.2	-3	2.8	3.8	5.3	6.8	10.5	41.4	82.7	40
5	-4	4.4	5.2	7.1	8.2	10.5	34.5	68.9	50
6.3	-5	6.0	6.9	8.9	10.1	10.5	31.0	62.0	75
8	-6	7.5	8.4	10.4	11.6	10.5	27.6	55.2	100
10	-7	9.1	10.0	12.2	13.4	10.5	24.1	48.3	125
11	-8	9.9	10.9	12.9	14.3	7	20.7	41.4	135
12.5	-10	12.3	13.3	15.3	16.8	5.6	20.7	41.4	165
16	-12	15.3	16.5	18.6	20.1	5.6	17.2	34.5	200
19	-14	18.4	19.6	21.3	23.3	5.6	16.8	27.6	230
22	-16	21.4	23.0	24.6	26.9	5.6	12.1	24.1	230
25	-18	24.6	26.2	27.8	29.8	5.6	12.1	24.1	300
29	-20	27.8	29.4	31.9	33.5	4.2	8.6	17.2	410

SAE 100R15

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, multiple spiral plies of heavy steel wire wrapped in alternating directions, and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Max	OD Max	Max W.P MPa	Min Bend Radius
10	-6	9.3	10.1	20.3	23.3	42	150
12.7	-8	12.3	13.5	24.0	26.8	42	200
19	-12	18.6	19.8	32.9	36.1	42	265
25	-16	25.0	26.4	38.9	42.9	42	330
31.5	-20	31.4	33.0	48.4	51.5	42	445
38	-24	37.7	39.3	56.3	59.6	42	530

SAE 100R16

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, steel wire reinforcement according to hose design (one or two braids), and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Max	OD Type AT Max	Cover Thickness Type AT Min	Cover Thickness Type AT Max	Max W.P Type s MPa	Max W.P Type AT MPa	Min Bend Radius
6.3	-4	6.2	7.0	12.3	14.5	0.8	1.5	40.0	35	50
8	-5	7.7	8.5	13.3	15.7	0.8	1.5	35.0	29.7	55
10	-6	9.3	10.1	15.9	18.8	0.8	1.5	33.0	28	65
12.5	-8	12.3	13.5	19.0	22.0	0.8	1.5	27.5	24.5	90
16	-10	15.5	16.7	22.6	25.4	0.8	1.5	25.0	19.2	100
19	-12	18.6	19.8	26.3	29.0	0.8	1.5	21.5	15.7	120
25	-16	25.0	26.4	34.0	36.6	0.8	1.5	16.5	14	150
31.5	-20	31.4	33.0	41.9	44.3	1.0	2.0	12.5	11.3	210

SAE 100R17

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, steel wire reinforcement according to hose design (one or two braids), and an oil and weather resistant synthetic rubber cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Max	OD Type AT Max	Cover Thickness Type AT Min	Cover Thickness Type AT Max	Max W.P Type AT MPa	Min Bend Radius
5	-3	4.6	5.4	10.1	11.6	0.8	1.5	21	45
6.3	-4	6.2	7.0	11.0	13.2	0.8	1.5	21	50
8	-5	7.7	8.5	13.0	15.0	0.8	1.5	21	55
10	-6	9.3	10.1	15.0	17.0	0.8	1.5	21	65
12.5	-8	12.3	13.5	18.8	21.1	0.8	1.5	21	90
16	-10	15.5	16.7	23.6	25.9	0.8	1.5	21	100
19	-12	18.6	19.8	27.7	30.3	0.8	1.5	21	120
25	-16	25.0	26.4	35.6	38.6	0.8	2.2	21	150

SAE 100R18

Construction:

This hose shall consist of a thermoplastic inner tube resistant to hydraulic fluids with suitable synthetic fiber reinforcement, and a hydraulic fluid and weather resistant thermoplastic cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	OD Max	Max W.P MPa	Min Bend Radius
3.2	-2	3.4	4.0	9.5	21	25
5	-3	4.6	5.4	10.8	21	30
6.3	-4	6.2	7.0	13.5	21	45
8	-5	7.7	8.5	16.6	21	50
10	-6	9.3	10.3	18.4	21	75
12.5	-8	12.3	13.5	22.8	21	90
16	-10	15.5	16.8	27.2	21	125
19	-12	18.6	19.8	31.5	21	165
25	-16	25.0	26.4	40.4	21	250

SAE 100R19

Construction:

This hose shall consist of an inner tube of oil resistant synthetic rubber, steel wire reinforcement according to hose design (one or two braids), and an oil and weather resistant cover.

Specification:

Metric Size	SAE Dash Size	ID Min	ID Max	Reinforcement Dia Max	OD Type AT Max	Cover Thickness Type AT Min	Cover Thickness Type AT Max	Max W.P MPa	Min Bend Radius
5	-3	4.6	5.4	10.8	12.7	0.8	1.5	28	45
6.3	-4	6.2	7.0	12.4	14.4	0.8	1.5	28	50
8	-5	7.7	8.5	14.2	16.3	0.8	1.5	28	55
10	-6	9.3	10.1	16.0	18.0	0.8	1.5	28	65
12.5	-8	12.3	13.5	20.4	22.6	0.8	1.5	28	90
16	-10	15.5	16.7	25.9	27.5	0.8	1.5	28	100
19	-12	18.6	19.8	29.7	32.5	0.8	1.5	28	120
25	-16	25.0	26.4	37.0	39.4	0.8	1.6	28	150