



Adding reliability to your hydraulic systems

C1T (G1) One Wire Braid Hose – SAE 100R1 Type AT

Meets performance requirements of DIN 20022 1SN / EN 853 1SN
Meets Flame Resistance Acceptance Designation "U.S. MSHA 2G"

Recommended For : Medium pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R1 Type AT and performance requirements of DIN 20022 1SN / EN 853 1SN. **Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.** Suitable for use with non-skive ferrules.

Tube : Oil-resistant synthetic rubber (Nitrile).

Reinforcement : One braid of high-tensile steel wire.

Cover : Oil and abrasion-resistant synthetic rubber (Modified Nitrile).

Temperature Range[‡] : For Hydraulic Oil Lines -40°C to +100°C



Made in India for Domestic & Global Markets

SPECIFICATIONS

Description	Hose I.D.		Hose O.D.		Braid O.D. (Mean)		Working Pressure		Minimum Burst Pressure		Minimum Bend Radius
	in.	mm	in.	mm	in.	mm	psi	bar	psi	bar	in.
4C1T (G1)	1/4	6.4	0.53	13.5	0.44	11.3	3,275	226	13,100	904	2.00
5C1T	5/16	7.9	0.59	15.1	0.52	13.2	3,125	216	12,500	864	2.25
6C1T (G1)	3/8	9.5	0.69	17.1	0.59	15.0	2,600	180	10,400	720	2.50
8C1T (G1)	1/2	12.7	0.82	20.3	0.72	18.2	2,325	160	9,300	640	3.50
10C1T	5/8	15.9	0.94	23.5	0.84	21.3	1,900	131	7,600	524	4.00
12C1T	3/4	19.0	1.10	27.6	1.00	25.4	1,525	105	6,100	420	4.75
16C1T	1	25.4	1.41	35.4	1.31	33.3	1,275	88	5,100	352	6.00
20C1T (G1)	1 1/4	31.8	1.72	43.7	1.59	40.4	925	64	3,700	256	8.25
24C1T (G1)	1 1/2	38.1	1.96	49.8	1.85	46.8	725	50	2,900	200	10.00
32C1T (G1)	2	50.8	2.52	64.0	2.37	60.3	600	41	2,400	164	12.50
1-Wire	2 1/2*	63.5	2.88	77.5	2.88	73.2	390	27	1,560	108	30.00
1-Wire	3*	76.4	3.44	92.6	3.45	87.6	315	22	1,260	88	33.00

*Gates Proprietary Hose. Not covered under SAE/DIN/EN Stds., Half Bend Radius Feature.

High Temperature C1TH Hose is also available.

Suitable for high temperatures upto 135°C constant and 149°C intermittent.

C1A-One Wire Braid Thick Cover Hose - SAE 100R 1 Type A

C6 One Fiber Braid Hose[#] – SAE 100R6

Meets performance requirements of EN 854

Recommended For : Hydraulic oil lines, heavy-duty transmission oil, anti-freeze solutions. Meets or exceeds requirements of SAE 100R6 / EN 854.

Tube : Specially compounded, oil-resistant, synthetic rubber (Nitrile).

Reinforcement : One braid of high tenacity synthetic textile yarn.

Cover : Oil and abrasion resistant synthetic rubber. (Modified Nitrile).

Temperature Range[‡] : For Hydraulic Oil Lines -40°C to +100°C



Made in India for Domestic & Global Markets

SPECIFICATIONS

Description	Hose I.D.		Hose O.D.		Working Pressure		Minimum Burst Pressure		Vacuum	Minimum Bend Radius
	in.	mm	in.	mm	psi	bar	psi	bar	in. Hg	in.
4C6	1/4	6.4	0.50	12.7	400	28	1,600	112	28	2.5
5C6	5/16	7.9	0.56	14.2	400	28	1,600	112	28	3.0
6C6	3/8	9.5	0.63	16.0	400	28	1,600	112	28	3.0
8C6	1/2	12.7	0.78	19.7	400	28	1,600	112	18	4.0
10C6	5/8	15.9	0.91	23.0	350	24	1,400	96	15	5.0
12C6	3/4	19.0	1.06	26.9	300	21	1,200	84	15	6.0
16C6	1*	25.4	1.38	34.9	200	14	800	56	15	7.0

Not covered under Half Bend Radius Feature.

*Branded has low pressure hydraulic hose. Not covered under SAE Std.

High Temperature C6H Hose is also available in all sizes from 1/4" to 3/4".

Suitable for high temperatures upto 135°C constant and 149°C intermittent.

WORLD CLASS FEATURES

Half Bend Radius Feature

Flexibility allows round

Abrasion Resistant

Ozone & Weather Resistant

Robust Construction

High Safety

Longer Life

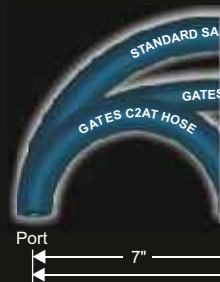


Illustration of GATES 1/2" Reduced Hose Length

Note : Gates also offers several other hoses for special applications. To find out the hose suitable for your application, contact us.

Due to continual improvement, Gates reserves the right to change specifications without notice.

C2AT (G2) Two Wire Braid Hose – SAE 100R2 Type AT

Meets performance requirements of DIN 20022 2SN / EN 853 2SN
Meets Flame Resistance Acceptance Designation "U.S. MSHA 2G"



Made in India for Domestic & Global Markets

Recommended For : High pressure hydraulic oil lines. Meets or exceeds the requirements of SAE 100R2 Type AT and performance requirement of DIN 20022 2SN / EN 853 2SN. **Provides tighter than standard minimum bend radius and greater flexibility for easier plumbing.** Suitable for use with non-skive ferrules.

Tube : Oil resistant synthetic rubber (Nitrile).

Reinforcement : Two braids of high-tensile steel wire.

Cover : Oil and abrasion resistant thin synthetic rubber (Modified Nitrile).

Temperature Range [‡] : For Hydraulic Oil Lines -40°C to +100°C

SPECIFICATIONS

Description	Hose I.D.		Hose O.D.		Braid O.D. (Mean)		Working Pressure		Minimum Burst Pressure		Minimum Bend Radius
	in.	mm	in.	mm	in.	mm	psi	bar	psi	bar	in.
4C2AT (G2)	1/4	6.4	0.58	15.0	0.50	12.8	5,800	400	23,200	1,600	2.00
5C2AT	5/16	7.9	0.65	16.5	0.57	14.4	5,100	352	20,400	1,408	2.25
6C2AT	3/8	9.5	0.73	18.8	0.65	16.6	4,800	331	19,200	1,324	2.50
8C2AT	1/2	12.7	0.86	21.8	0.78	19.7	4,000	276	16,000	1,104	3.50
10C2AT	5/8	15.9	0.98	25.1	0.91	23.0	3,625	250	14,500	1,000	4.00
12C2AT	3/4	19.0	1.14	29.0	1.06	26.9	3,100	214	12,400	856	4.75
16C2AT	1	25.4	1.48	37.6	1.37	34.8	2,400	166	9,600	664	6.00
20C2AT (G2)	1 1/4	31.8	1.87	47.5	1.75	44.5	1,825	126	7,300	504	8.25
24C2AT (G2)	1 1/2	38.1	2.15	54.6	2.00	50.8	1,300	90	5,200	360	10.00
32C2AT (G2)	2	50.8	2.65	67.3	2.50	63.5	1,175	81	4,700	324	12.50
40C2A	2 1/2 [†]	63.5	3.24	82.5	3.00	76.2	1,000	69	4,000	276	30.00
2-Wire	3 [*]	76.4	3.80	96.7	3.59	91.3	650	45	2,600	180	33.00

[†]The Hose is suitable for hot air applications only. Not covered under Half Bend Radius Feature.

^{*}Gates Proprietary Hose. Not covered under SAE/DIN/EN Stds., Half Bend Radius Feature.

High Temperature C2ATH Hose is also available in sizes 1 1/4", 1 1/2" and 2".

Suitable for high temperatures upto 135°C constant and 149°C intermittent.

C2A - Two Wire Braid Thick Cover Hose - SAE 100R2 Type A

C3 Two Fiber Braid Hose[#] – SAE 100R3

Meets performance requirements of EN 854



Made in India for Domestic & Global Markets

Recommended For : Hydraulic oil lines, anti-freeze solutions or water. Meets or exceeds requirements of SAE 100R3 / EN 854.

Tube : Synthetic rubber (Nitrile).

Reinforcement : Two braids of high tenacity synthetic textile yarn.

Cover : Modified Nitrile.

Temperature Range [‡] : For Hydraulic Oil Lines -40°C to +100°C.

SPECIFICATIONS

Description	Hose I.D.		Hose O.D.		Working Pressure		Minimum Burst Pressure		Vacuum	Minimum Bend Radius
	in.	mm	in.	mm	psi	bar	psi	bar	in. Hg	in.
4C3	1/4	6.4	0.56	14.5	1,250	86	5,000	344	28	3.0
5C3	5/16	7.9	0.69	17.5	1,200	83	4,800	332	28	4.0
6C3	3/8	9.5	0.75	19.1	1,125	80	4,500	320	28	4.0
8C3	1/2	12.7	0.94	23.9	1,000	69	4,000	276	28	5.0
10C3	5/8	15.9	1.06	27.0	875	61	3,500	244	28	5.5
12C3	3/4	19.0	1.25	31.8	750	52	3,000	208	28	6.0
16C3	1	25.4	1.50	38.1	565	39	2,250	156	20	8.0

[#] Not covered under Half Bend Radius Feature.

[‡]For Water, Water / Oil Emulsions and Water / Glycol Solutions:

• Pressure Lines : Max. Temp. Limit + 93°C • Return Lines : Max. Temp. Limit + 82°C •

Do not operate at T_{max} & P_{max} simultaneously.

FEATURES & BENEFITS

Results in cost savings

Fitting in small spaces

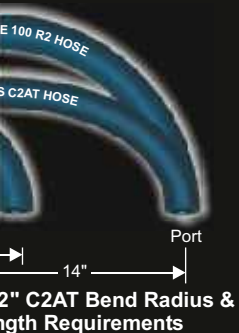
Resistant Cover

Weather Resistant

Design

Safety Factor

Longer Life



2" C2AT Bend Radius & Length Requirements

For specific requirement, please refer to our product catalog or contact your nearest Gates representative.
We reserve the right to alter specifications without notice

Switch To Gates C1T Hose

Advantages Of C1T Over SAE R5 Hose

More Flexible : Half Bend Radius Hose

Gates C1T hoses are impulse tested at half the SAE bend radii.

Our construction is optimised for better performance at tighter bend radii.

SIZE GATES C1T	BEND RADIUS (mm)		SIZE SAE R5
	GATES C1T	SAE R5	
1/4"	51	86	1/4"
5/16"	56	102	5/16"
1/2"	89	117	13/32"
1/2"	89	140	1/2"
5/8"	102	165	5/8"
1"	153	187	7/8"
1-1/4"	204	229	1-1/8"
1-1/2"	254	267	1-3/8"
2"	318	337	1-13/16"
2"	318	610	2-3/8"

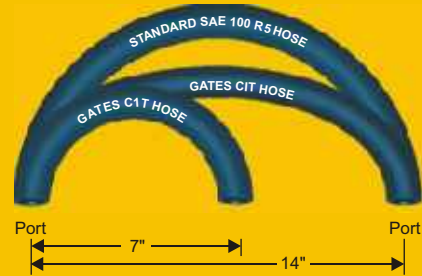


Illustration of GATES 1/2" C1T hose Bend Radius & Reduced Hose Length Requirements

Higher Pressure : Better Performance

Our standard working pressures are much above the standard SAE requirements. They also meet performance requirements of DIN/EN.



GATES C1T



SAE R5

Illustration of GATES 1/2" C1T hose working pressure over Std. SAE R5 hose

SIZE GATES C1T	WORKING PRESSURE (psi)		SIZE SAE R5
	GATES C1T	SAE R5	
1/4"	3275	3000	1/4"
5/16"	3125	2250	5/16"
1/2"	2325	2000	13/32"
1/2"	2325	1750	1/2"
5/8"	1900	1500	5/8"
1"	1275	800	7/8"
1-1/4"	925	625	1-1/8"
1-1/2"	725	500	1-3/8"
2"	600	350	1-13/16"
2"	600	350	2-3/8"

Better Impulse Performance

SIZE GATES C1T	IMPULSE (CYCLES)		SIZE SAE R5
	GATES C1T	SAE R5	
1/4"	4,50,000 CYCLES AT 93°C	1,50,000 CYCLES AT 93°C	1/4"
5/16"			5/16"
1/2"			13/32"
1/2"			1/2"
5/8"	1,00,000 CYCLES AT 93°C	1,00,000 CYCLES AT 93°C	7/8"
1"			1-1/8"
1-1/4"			1-3/8"
1-1/2"			1-13/16"
2"			2-3/8"

Light Weight



Re-usable Fittings can also be used



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Authorised Dealer

