

DETAIL SPECIFICATION SHEET

HOSE, RUBBER, HYDRAULIC PRESSURE-TYPE, TYPE 100R1
SINGLE-WIRE-BRAIDED REINFORCEMENT HOSE

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and MIL-DTL-52471.

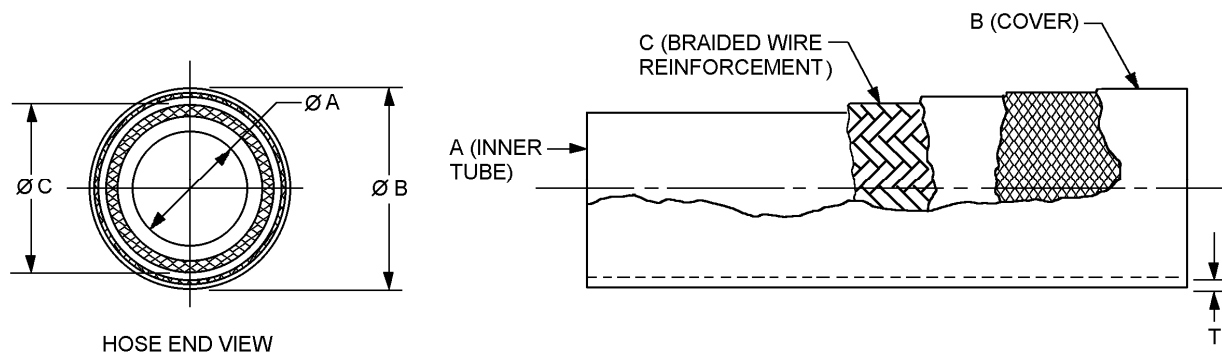


FIGURE 1. Hose: type 100R1, single wire braid reinforcement.

Operating pressure. The operating pressure shall be as specified in table I.

TABLE I. Hose operating pressure. 1/ 2/

Hose ID dash number	Hose size (ID)			Operating pressure max	
	inch fraction	inch decimal	mm	psi	MPa
-4	1/4	.250	6.35	2750	19
-6	3/8	.375	9.53	2250	15.5
-8	1/2	.500	12.70	2000	13.8
-12	3/4	.750	19.05	1250	8.6
-16	1	1.000	25.40	1000	6.9
-20	1-1/4	1.250	31.75	625	4.3
-24	1-1/2	1.500	38.10	500	3.5
-32	2	2.000	50.80	375	2.6

1/ Dimensions are in inches

2/ Metric equivalents are given for information only.

Hose dimensions. The hose dimensions shall be as specified in table II.

TABLE II. Dimensions, type 100R1 hose. 1/ 2/

Hose ID dash number	Metric size <u>3/</u>	ID Hose size Inch (mm)	A Inner tube ID mm <u>4/</u>	
			Min	Max
-4	6.3	.250 (6.35)	4.6	7.0
-6	10	.375 (9.53)	9.3	10.1
-8	12.5	.500 (12.70)	12.3	13.5
-12	19	.750 (19.05)	18.6	19.8
-16	25	1.000 (25.40)	25.0	26.4
-20	31.5	1.250 (31.75)	31.4	33.0
-24	38	1.500 (38.10)	37.7	39.3
-32	51	2.000 (50.80)	50.4	52.0

1/ Dimensions are in inches

2/ Metric equivalents are given for information only.

3/ Metric size number is not a dimension, it is a label used to identify the product size, see ISO 4397.

4/ Metric size is specified in SAE J517 and is not a soft conversion.

Cover dimensions. Cover dimensions shall be as specified in table III.

TABLE III. Cover dimensions, type 100R1 hose. 1/ 2/

Hose ID dash number	Hose ID Inch (mm)	B cover				B Cover alternate maximum outside diameter	
		Minimum OD		Maximum OD			
		Inch	mm	Inch	mm	Inch	mm
-4	.250 (6.35)	.594	15.09	.656	16.66	.557	14.15
-6	.375 (9.53)	.750	19.05	.812	20.62	.713	18.11
-8	.500 (12.70)	.875	22.23	.938	23.83	.846	21.49
-12	.750 (19.05)	1.156	29.36	1.219	30.96	1.127	28.63
-16	1.000 (25.40)	1.453	36.91	1.547	39.29	1.440	36.58
-20	1.250 (31.75)	1.750	44.45	1.875	47.63	1.766	44.86
-24	1.500 (38.10)	2.000	50.80	2.125	53.98	2.047	51.99
-32	2.000 (50.80)	2.562	65.07	2.688	68.28	2.594	65.89

1/ Dimensions are in inches

2/ Metric equivalents are given for information only.

Wire reinforcement. The wire reinforcement shall be as specified in table IV.

TABLE IV. Wire reinforcement dimensions, type 100R1 hose. 1/ 2/

Hose ID dash number	Hose ID inch (mm)	C Wire reinforcement				T Alternate cover thickness range			
		Minimum OD		Maximum OD		Minimum		Maximum	
		Inch	mm	Inch	mm	Inch	mm	Inch	mm
-4	.250 (6.35)	.416	10.57	.461	11.71	.030	0.76	.060	1.52
-6	.375 (9.53)	.571	14.50	.617	15.67	.030	0.76	.060	1.52
-8	.500 (12.70)	.688	17.48	.750	19.05	.030	0.76	.060	1.52
-12	.750 (19.05)	.969	24.61	1.031	26.19	.030	0.76	.060	1.52
-16	1.000 (25.40)	1.281	32.54	1.344	34.14	.030	0.76	.060	1.52
-20	1.250 (31.75)	1.547	39.29	1.641	41.68	.040	1.02	.080	2.03
-24	1.500 (38.10)	1.797	45.64	1.891	48.03	.050	1.27	.100	2.54
-32	2.000 (50.80)	2.312	58.72	2.438	61.93	.050	1.27	.100	2.54

1/ Dimensions are in inches.2/ Metric equivalents are given for information only.

Concentricity. The concentricity shall be as specified in table V.

TABLE V. Concentricity. 1/ 2/

Hose ID dash number	Hose ID inches	Concentricity Full indicator movement (FIM) between			
		Tube ID (A) and cover OD (B)		Tube ID (A) and reinforcement OD (C)	
		Inch	mm	Inch	mm
-4	.250 (6.35)	.030	0.76	.017	0.43
-6 to -12	.375 (9.53) .500 (12.70) .750 (19.05)	.040	1.02	.024	0.61
-16 to -32	1.000 (25.40) 1.250 (31.75) 1.500 (38.10) 2.000 (50.80)	.050	1.27	.031	0.79

1/ Dimensions are in inches.2/ Metric equivalents are given for information only.

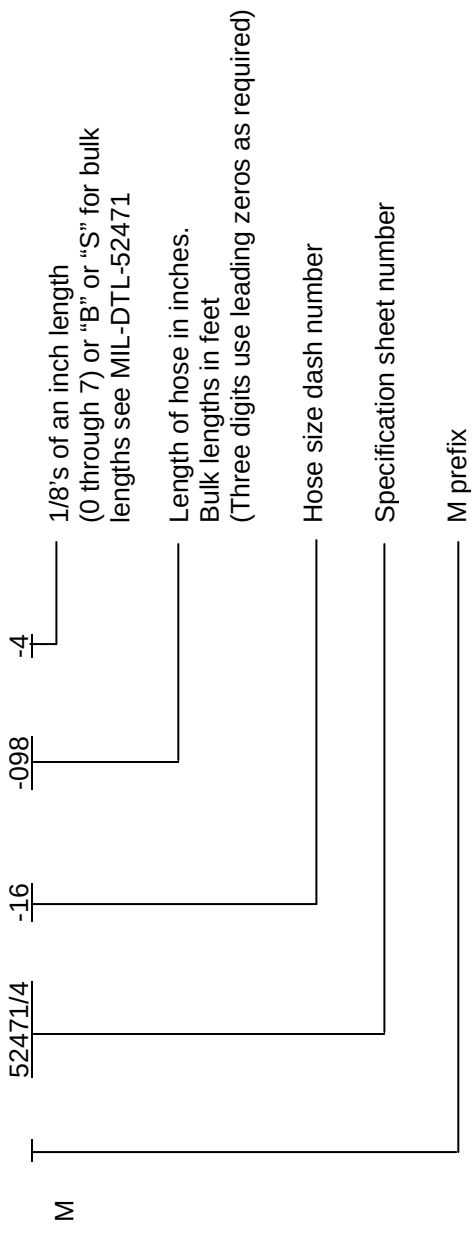
REQUIREMENTS:

The hose shall be as specified on figure 1 and in tables I through V.

Inside and outside diameters are measured at least 2 inches (50.80 mm) from the end.

MIL-DTL-52471/4C

Part or Identifying Number (PIN): The PIN consists of the letter "M" the specification sheet number a dash, hose size number, a dash, a three digit number for length of hose (inches for specific lengths, feet for bulk lengths), a dash and the letter B or S for bulk lengths or a number for 1/8's of an inch.



PIN examples:

M52471/4-16-500-B (1 inch hose 500 feet long).
M52471/4-6-096-3 (3/8 inch hose 96 and 3/8 inches long).

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue, due to the extent of the changes.

Referenced documents. In addition to MIL-DTL-52471, this document references the following:

ISO 4397
SAE J517

CONCLUDING MATERIAL

Custodians:
Army - AT
Navy - SH
Air Force - 99
DLA - CC

Preparing activity:
DLA - CC

(Project 4720-2007-020)

Review activities:

Army - GL
Navy -CG, MC, SA

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <http://assist.daps.dla.mil>.