

DETAIL SPECIFICATION SHEET

HOSE, RUBBER, HYDRAULIC PRESSURE-TYPE, TYPE 100R2
DOUBLE-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.

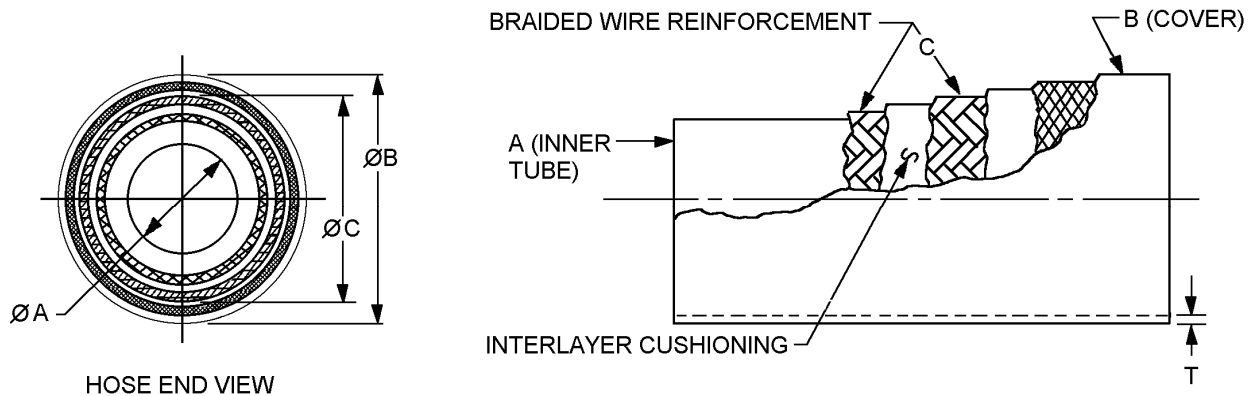


FIGURE 1. Hose construction and dimension, type 100R2, double wire braided reinforcement.

Hose operating pressure. Hose operating pressure shall be as specified in table I.

TABLE I. Hose operating pressure. 1/ 2/

Hose ID dash number	Hose ID			Operating pressure max	
	Inch fraction	Inch decimal	mm	psi	MPa
-4	1/4	.250	6.35	5000	34.5
-6	3/8	.375	9.53	4000	27.6
-8	1/2	.500	12.70	3500	24.1
-12	3/4	.750	19.05	2250	15.5
-16	1	1.000	25.40	2000	13.8
-20	1-1/4	1.250	31.75	1625	11.2
-24	1-1/2	1.500	38.10	1250	8.6
-32	2	2.000	50.80	1125	7.8

1/ Dimensions are in inches.

2/ Metric equivalents are given for information only.

Dimensions. Dimensions shall be as specified in table II.

TABLE II. Dimensions, type 100R2 hose.

Hose ID dash number	Metric size <u>1/</u>	ID Hose size (inch)	A Inner tube	
			Inside diameter mm <u>2/</u>	
			min	max
-4	6.3	1/4	6.2	7.0
-6	10	3/8	9.3	10.1
-8	12.5	1/2	12.3	13.5
-12	19	3/4	18.6	19.8
-16	25	1	25.0	26.4
-20	31.5	1-1/4	31.4	33.0
-24	38	1-1/2	37.7	39.3
-32	51	2	50.4	52.0

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

2/ Metric size is taken from SAE J517 and is not a soft conversion.

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

TABLE III. Cover dimensions, type 100R2 hose. 1/ 2/

Hose ID dash number	Hose ID (inch)	B Cover				B Cover alternate	
		Maximum outside diameter		Minimum outside diameter		Maximum outside diameter	
		Inch	mm	Inch	mm	Inch	mm
-4	1/4	.719	18.26	.656	16.66	.619	15.72
-6	3/8	.875	22.23	.812	20.62	.777	19.74
-8	1/2	1.000	25.40	.938	23.83	.908	23.06
-12	3/4	1.281	32.54	1.219	30.96	1.190	30.23
-16	1	1.609	40.87	1.516	38.51	1.531	38.89
-20	1-1/4	2.062	52.37	1.938	49.23	1.953	49.61
-24	1-1/2	2.312	58.72	2.188	55.58	2.203	55.96
-32	2	2.812	71.42	2.688	68.28	2.703	68.66

1/ Dimensions are in inches.

2/ Metric equivalents are given for information only.

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

TABLE IV. Wire reinforcement dimensions, type 100R2 hose. 1/ 2/

Hose ID dash number	Hose ID (inch)	C				T			
		Wire reinforcement				Alternate cover thickness range			
		Minimum outside diameter		Maximum outside diameter		Minimum		Maximum	
		Inch	mm	Inch	mm	Inch	mm	Inch	mm
-4	1/4	.477	12.12	.523	13.28	.031	0.79	.060	1.52
-6	3/8	.633	16.08	.681	17.30	.031	0.79	.060	1.52
-8	1/2	.750	19.05	.812	20.62	.031	0.79	.060	1.52
-12	3/4	1.031	26.19	1.094	27.79	.031	0.79	.060	1.52
-16	1	1.344	34.14	1.406	35.71	.042	1.07	.085	2.16
-20	1-1/4	1.703	43.26	1.797	45.64	.050	1.27	.100	2.54
-24	1-1/2	1.953	49.61	2.047	51.99	.050	1.27	.100	2.54
-32	2	2.453	62.31	2.547	64.69	.050	1.27	.100	2.54

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

Concentricity. Concentricity shall be as specified in table V.

TABLE V. Concentricity. 1/ 2/

Hose ID dash number	Hose ID (inch)	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	1/4	.030	0.76	.021	0.53
-6 through -12	3/8, 1/2, 3/4	.040	1.02	.028	0.71
-12 through -32	1, 1-1/4, 1-1/2, 2	.050	1.27	.035	0.89

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

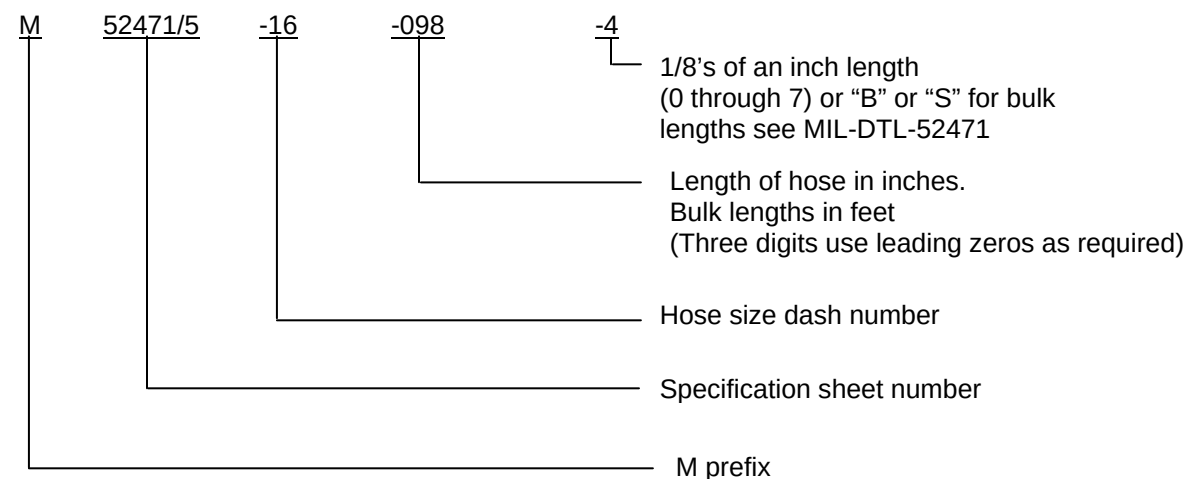
REQUIREMENTS:

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-52471/5C

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:

M52471/5-16-500-B (1 inch hose 500 feet long).

M52471/5-6-096-3 (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 4720-2007-021)

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>.