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Product Specification: PVC-105

Date Issued: 06/20/01

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Product Description: This specification covers flexible, high temperature, polyvinylchloride tubing. It shall be free from wrinkles, cracks, blisters, and bubbles, and shall be reasonably free from other small defects such as dents and scratches.

Construction Requirements

Applicable Standards:

MIL-I-631D

UL Standard

CSA Standard

Type F, Form U, Subform Ua,
Grade C, Class I, Category 1
224

File #: E38155

C22.2 No. 198

File #: LL52040

Physical Properties:

Operating temperature range

Dimensions

Tensile strength

Ultimate elongation

Specific gravity (Clear)

(Colors)

-20°C to 105°C

Shall conform to table I

2800 psi, nominal

300%

1.25

1.35

Electrical Properties:

Voltage Rating

Dielectric Strength

Volume Resistivity

300 Volts (For sizes 0 – 24)

600 Volts (For sizes 5/16 – 2 ½)

800 volts/mil

10¹³ ohm/cm

Chemical Properties:

Corrosive Effect

Fungus Resistance

Flammability

Water Absorption

Non-corrosive

Does not support growth

Self-extinguishing, does
not support combustion

0.5% maximum

TABLE 1

<u>PART NUMBER</u>	<u>INSIDE DIAMETER</u>			<u>WALL THICKNESS</u>		
	<u>NOMINAL</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>NOMINAL</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
PVC-105-24	0.022	0.020	0.027	0.012	0.010	0.014
PVC-105-22	0.027	0.025	0.032	0.012	0.010	0.014
PVC-105-20	0.034	0.032	0.039	0.016	0.013	0.019
PVC-105-19	0.038	0.036	0.044	0.016	0.013	0.019
PVC-105-18	0.042	0.040	0.049	0.016	0.013	0.019
PVC-105-17	0.047	0.045	0.054	0.016	0.013	0.019
PVC-105-16	0.053	0.051	0.061	0.016	0.013	0.019
PVC-105-15	0.059	0.057	0.067	0.016	0.013	0.019
PVC-105-14	0.066	0.064	0.072	0.016	0.013	0.019
PVC-105-13	0.076	0.072	0.080	0.016	0.013	0.019
PVC-105-12	0.085	0.081	0.089	0.016	0.013	0.019
PVC-105-11	0.095	0.091	0.101	0.016	0.013	0.019
PVC-105-10	0.106	0.102	0.112	0.016	0.013	0.019
PVC-105-9	0.118	0.114	0.124	0.020	0.017	0.023
PVC-105-8	0.133	0.129	0.141	0.020	0.017	0.023
PVC-105-7	0.148	0.144	0.158	0.020	0.017	0.023
PVC-105-6	0.166	0.162	0.178	0.020	0.017	0.023
PVC-105-5	0.186	0.182	0.198	0.020	0.017	0.023
PVC-105-4	0.208	0.204	0.224	0.020	0.017	0.023
PVC-105-3	0.234	0.229	0.249	0.020	0.017	0.023

TABLE 1 (CON'T)

<u>PART NUMBER</u>	<u>INSIDE DIAMETER</u>			<u>WALL THICKNESS</u>		
	<u>NOMINAL</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>	<u>NOMINAL</u>	<u>MINIMUM</u>	<u>MAXIMUM</u>
PVC-105-2	0.263	0.258	0.278	0.020	0.017	0.023
PVC-105-1	0.294	0.289	0.311	0.020	0.017	0.023
PVC-105-0	0.330	0.325	0.347	0.020	0.017	0.023
PVC-105-5/16	-----	0.313	0.334	0.025	0.022	0.028
PVC-105-3/8	-----	0.375	0.399	0.025	0.022	0.028
PVC-105-7/16	-----	0.438	0.462	0.025	0.022	0.028
PVC-105-1/2A	-----	0.500	0.524	0.025	0.022	0.028
PVC-105-9/16	-----	0.562	0.592	0.030	0.025	0.035
PVC-105-5/8	-----	0.625	0.655	0.030	0.025	0.035
PVC-105-3/4	-----	0.750	0.786	0.035	0.030	0.040
PVC-105-7/8	-----	0.875	0.911	0.035	0.030	0.040
PVC-105-1	-----	1.000	1.036	0.035	0.030	0.040
PVC-105-1-1/8	-----	1.125	1.161	0.040	0.035	0.045
PVC-105-1-1/4	-----	1.250	1.290	0.040	0.035	0.045
PVC-105-1-1/2	-----	1.500	1.550	0.045	0.039	0.051
PVC-105-2	-----	2.000	2.070	0.060	0.050	0.070
PVC-105-2-1/2	-----	2.500	2.527	0.070	0.058	0.082