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Product Specification: PVC-105

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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	Type F, Form U, Subform Ua, Grade C, Class I, Category 1
UL Standard	224
CSA Standard	File #: E38155 C22.2 No. 198 File #: LL52040

Physical Properties:

Operating temperature range	-20°C to 105°C
Dimensions	Shall conform to table I
Tensile strength	2800 psi, nominal
Ultimate elongation	300%
Specific gravity (Clear)	1.25
(Colors)	1.35

Electrical Properties:

Voltage Rating	300 Volts (For sizes 0 – 24) 600 Volts (For sizes 5/16 – 2 1/2)
Dielectric Strength	800 volts/mil
Volume Resistivity	10 ¹³ ohm/cm

Chemical Properties:

Corrosive Effect	Non-corrosive
Fungus Resistance	Does not support growth
Flammability	Self-extinguishing, does not support combustion
Water Absorption	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)

PART NUMBER	INSIDE DIAMETER			WALL THICKNESS		
	NOMINAL	MINIMUM	MAXIMUM	NOMINAL	MINIMUM	MAXIMUM
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