# **3M** 4270 Series Electrically Conductive Connector Covers

## **Conductive Composite**

3M<sup>™</sup> 4270 Series Connector Covers feature a new unique Conductive Composite material. The material is made intrinsically conductive by uniformly distributing a conductive matrix of fibers during compounding. The covers are permanently volume conductive and free of carbon black particulate. The 4270 Series Covers do not leave black marks and are more suited to clean situations.

### Noncorrosive

4270 Series Connector Covers are noncorrosive and produce no visible corrosion when tested to Federal Test Method 101C using Kovar test plates.

### **Military Application**

4270 Series Circular Connectors Covers were designed to meet the requirements and intentions of MS90376, and MIL PRF 5501/31A or 32A. Prominent military contractors have qualified these materials to their own specifications and are encouraging their use.

Conforma	bil	lity
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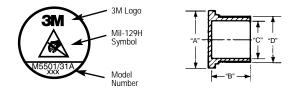
The material used in the covers were also selected for its resilience. Properly sized, the covers provide a snug, secure fit. This helps keep connectors clean and prevents the cover from accidentally falling off.

Material Properties							
Property	Test Method	Typical Value					
Resistivity	ASTM D991	<10 <sup>5</sup> ohm-cm					
Contact Corrosivity	FTM 101C Metod 3005 (Kovar plate)	Pass					
Crayoning	3M	Not visible					
Elongation	ASTM D638	25%					
Tensile	ASTM D638	1500 psi					
Vicat Softening	ASTM MD 1525	96°C					
Out Gassing	ASTM E595	Pass					

### Chemical Susceptibility

Chemical	Reactions
Dilute Acids	Slight Attack
Dilute Alkalines	Slight Attack
Concentrated Acids	Severe Attack
Concentrated Alkalines	Severe Attack
Methanol, Ethanol, and Isopropanol	Resistant
Hydrocarbons	Slight Attack
Ketones	Dissolves
Oil and Gasoline	Severe Attack

# Model 4270 Circular Cover



Product Description	Old Prod. Desc.	"A"	"B"	"C"	"D"		
Packaged 100/bag; 10 bags/box							
4270 M5501-31A-250	4270-4R	.670	.500	.250	.336		
4270 M5501/31A-313	4270-5R	.670	.500	.313	.399		
4270 M5501/31A-375	4270-6R	.670	.500	.375	.461		
4270 M5501/31A-413	4270-8Y	.670	.625	.413	.483		
4270 M5501/31A-480	4270-8R	.740	.500	.480	.540		
4270 M5501/31A-500	4270-9R	.750	.500	.500	.586		
4270 M5501/31A-530	4270-10Y	.750	.625	.530	.595		
4270 M5501/31A-605	4270-10R	.840	.500	.605	.665		
4270 M5501/31A-655	4270-12Y	.860	.625	.655	.715		
4270 M5501/31A-720	4270-12R	.970	.500	.720	.755		
4270 M5501/31A-785	4270-14Y	1.031	.625	.785	.845		
4270 M5501/31A-850	4270-14R	1.125	.500	.850	.905		
4270 M5501/31A-893	4270-16Y	1.125	.625	.893	.963		
4270 M5501/31A-973	4270-16R	1.220	.500	.973	1.035		
4270 M5501/31A-1028	4270-18Y	1.250	.625	1.28	1.088		
4270 M5501/31A-1093	4270-18R	1.330	.562	1.093	1.155		
4270 M5501/31A-1125	4270-19R	1.400	.562	1.125	1.213		

Product Description	Old Prod. Desc.	"A"	"B″	"C″	"D″	
Packaged 50/bag; 10 bags/box						
4270 M5501/31A-1150	4270-20Y	1.406	.625	1.150	1.215	
4270 M5501/31A-1231	4270-20R	1.465	.562	1.231	1.301	
4270 M5501/31A-1270	4270-22Y	1.500	.625	1.270	1.340	
4270 M5501/31A-1340	4270-22R	1.590	.562	1.340	1.410	
4270 M5501/31A-1390	4270-24Y	1.640	.625	1.390	1.460	
4270 M5501/31A-1463	4270-24R	1.700	.562	1.463	1.533	
4270 M5501/31A-1540	4270-25Y	1.810	.625	1.540	1.580	
4270 M5501/31A-1645	4270-28Y	1.875	.625	1.645	1.718	
4270 M5501/31A-1715	4270-28R	1.950	.562	1.715	1.790	
Packaged 25/bag; 10 b	ags/box					
4270 M5501/31A-1890	4270-32Y	2.125	.625	1.890	1.970	
4270 M5501/31A-1965	4270-32R	2.220	.562	1.965	2.040	
4270 M5501/31A-2140	4270-36Y	2.340	.625	2.140	2.210	
4270 M5501/31A-2215	4270-36R	2.435	.600	2.215	2.290	
4270 M5501/31A-2380	4270-40Y	2.600	.625	2.380	2.450	
4270 M5501/31A-2440	4270-40R	2.660	.600	2.440	2.530	
4270 M5501/31A-2630	4270-44Y	2.875	.625	2.630	2.700	
4270 M5501/31A-2720	4270-44R	2.960	.600	2.720	2.812	
4270 M5501/31A-2880	4270-48Y	3.125	.625	2.880	2.950	
4270 M5501/31A-2960	4270-48R	3.225	.600	2.960	3.050	

# Model 4272 "D" Type Cover

(( M5501/32A 🛆 3M	Product Description	Old Prod. Desc.	"A"	"B"	"C"	"D"	"E″	"F″	"G″	"H"
	Nominal Dimensions	Packaged 100/b	ag; 10 l	bags/bo	x					
Model Mil-129H and a	4272 M5501/32A-50P	4272-50P	2.112	2.179	2.279	.636	.536	.469	.280	.240
Number Symbol 3M Logo Size	4272 M5501/32A-50S	4272-50S	2.049	2.116	2.216	.574	.474	.407	.280	.240
	4272 M5501/32A-37P	4272-37P	2.216	2.283	2.383	.530	.430	.363	.280	.240
	4272 M5501/32A-37S	4272-37S	2.143	2.210	2.310	.462	.362	.295	.280	.240
	4272 M5501/32A-25P	4272-25P	1.586	1.635	1.735	.530	.430	.363	.280	.240
"F" "E" "D"	4272 M5501/32A-25S	4272-25S	1.495	1.562	1.662	.462	.362	.295	.280	.240
	4272 M5501/32A-15P	4272-15P	1.040	1.107	1.177	.512	.436	.369	.280	.240
	4272 M5501/32A-15S	4272-15S	.955	1.022	1.122	.462	.362	.295	.280	.240
	4272 M5501/32A-9P	4272-9P	.708	.775	.849	.512	.434	.367	.280	.240
5"	4272 M5501/32A-9S	4272-9S	.627	.694	.794	.462	.362	.295	.280	.240

# For ordering information, technical information, product information or to request a copy of the Material Safety Data Sheet, you can reach us at:

#### Phone: 1-800-328-1368

Fax: 100-800-828-9329 or 1-800-512-984-2210

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