

Series 970 PowerTrip™ Connectors and Accessories  
Accessories  
440-069 EMI/RFI Adapter



**440-069 EMI/RFI ADAPTER, BAND-MASTER™ SHIELD TERMINATION**


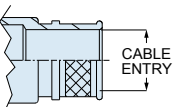
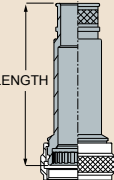


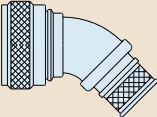
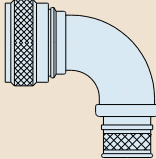
Spin coupling EMI/RFI adapter with anti-decoupling ratchet prevents loosening under vibration. Fits standard Series 970 connectors. Terminate cable shield to backshell with **Band-Master™ ATS** (Advanced Termination System) stainless steel band. Optional heatshrink boot provides strain relief and environmental seal. Backshell features splined connector interface for improved mechanical and electrical performance.



MATERIALS AND FINISHES
Adapter: aluminum or stainless steel. See <b>How To Order</b> for material & finish options.
Anti-decoupling spring: high-grade engineering thermoplastic

INSTALLATION TORQUE	
Shell Size	Recommended Installation Torque Inch-Pounds ± 5
18	116
20, 24	136
28, 32, 36	148
40	164

**HOW TO ORDER**

SERIES	SHELL MATERIAL / FINISH	SHELL SIZE	CABLE ENTRY CODE	LENGTH CODE	OPTIONAL BAND STRAP	OPTIONAL SHRINK BOOT																																																																																																											
<b>440PS069</b> Straight Exit 	<b>ME</b> Aluminum / Electroless Nickel RoHS Compliant  <b>NF</b> Aluminum / Cadmium with Olive Drab Chromate  <b>NFP</b> Aluminum / Cadmium with Olive Drab Chromate, Nickel-plated Shield Termination Area, Polysulfide Barrier (See Application Note)  <b>ZR</b> Aluminum / Zinc-Nickel with Non-Reflective Black Chromate RoHS Compliant  <b>MT</b> Aluminum / Nickel-PTFE RoHS Compliant  <b>Z1</b> Stainless Steel / Passivated RoHS Compliant	<b>18</b> <b>20</b> <b>24</b> <b>28</b> <b>32</b> <b>36</b> <b>40</b>	 <table border="1"> <thead> <tr> <th>Code</th> <th colspan="2">Cable Entry</th> </tr> <tr> <th></th> <th>In.</th> <th>mm.</th> </tr> </thead> <tbody> <tr><td>02</td><td>.250</td><td>6.4</td></tr> <tr><td>03</td><td>.375</td><td>9.5</td></tr> <tr><td>04</td><td>.500</td><td>12.7</td></tr> <tr><td>05</td><td>.625</td><td>15.9</td></tr> <tr><td>06</td><td>.750</td><td>19.1</td></tr> <tr><td>07</td><td>.875</td><td>22.2</td></tr> <tr><td>08</td><td>1.000</td><td>25.4</td></tr> <tr><td>09</td><td>1.125</td><td>28.6</td></tr> <tr><td>10</td><td>1.250</td><td>31.8</td></tr> <tr><td>11</td><td>1.375</td><td>34.9</td></tr> <tr><td>12</td><td>1.500</td><td>38.1</td></tr> <tr><td>13</td><td>1.625</td><td>41.3</td></tr> <tr><td>14</td><td>1.750</td><td>44.5</td></tr> <tr><td>15</td><td>1.875</td><td>47.6</td></tr> <tr><td>16</td><td>2.000</td><td>50.8</td></tr> <tr><td>17</td><td>2.125</td><td>54.0</td></tr> <tr><td>18</td><td>2.250</td><td>57.2</td></tr> <tr><td>19</td><td>2.375</td><td>60.3</td></tr> <tr><td>20</td><td>2.500</td><td>63.5</td></tr> </tbody> </table>	Code	Cable Entry			In.	mm.	02	.250	6.4	03	.375	9.5	04	.500	12.7	05	.625	15.9	06	.750	19.1	07	.875	22.2	08	1.000	25.4	09	1.125	28.6	10	1.250	31.8	11	1.375	34.9	12	1.500	38.1	13	1.625	41.3	14	1.750	44.5	15	1.875	47.6	16	2.000	50.8	17	2.125	54.0	18	2.250	57.2	19	2.375	60.3	20	2.500	63.5	<p><i>Omit</i> for 45° and 90° styles.</p> <p>The <b>Length Code</b> is the length of the adapter in ½ inch increments. Minimum length is 2 inches.</p>  <table border="1"> <thead> <tr> <th rowspan="2">Code</th> <th colspan="2">Length</th> </tr> <tr> <th>In.</th> <th>mm.</th> </tr> </thead> <tbody> <tr><td>-4</td><td>2.0</td><td>51</td></tr> <tr><td>-5</td><td>2.5</td><td>64</td></tr> <tr><td>-6</td><td>3.0</td><td>76</td></tr> <tr><td>-7</td><td>3.5</td><td>89</td></tr> <tr><td>-8</td><td>4.0</td><td>102</td></tr> <tr><td>-9</td><td>4.5</td><td>114</td></tr> <tr><td>-10</td><td>5.0</td><td>127</td></tr> <tr><td>-11</td><td>5.5</td><td>140</td></tr> <tr><td>-12</td><td>6.0</td><td>152</td></tr> <tr><td>-13</td><td>6.5</td><td>165</td></tr> <tr><td>-14</td><td>7.0</td><td>178</td></tr> <tr><td>-15</td><td>7.5</td><td>191</td></tr> <tr><td>-16</td><td>8.0</td><td>203</td></tr> </tbody> </table>	Code	Length		In.	mm.	-4	2.0	51	-5	2.5	64	-6	3.0	76	-7	3.5	89	-8	4.0	102	-9	4.5	114	-10	5.0	127	-11	5.5	140	-12	6.0	152	-13	6.5	165	-14	7.0	178	-15	7.5	191	-16	8.0	203	<p><b>K</b> Adapter supplied with pre-coiled stainless steel shield termination band</p> <p><i>Omit</i> if bands will be purchased separately. Refer to Band-Master strap and tool ordering information in this catalog.</p> 	<p><b>T</b> Adapter supplied with standard heatshrink boot.</p> <p><b>S</b> Adapter supplied with low-smoke, zero halogen heatshrink boot.</p> <p><i>Omit</i> if boots will be purchased separately. Refer to heatshrink boot ordering information in this catalog.</p> 
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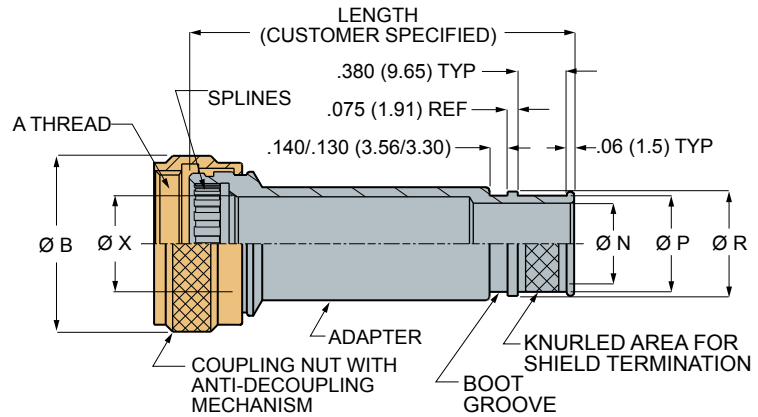


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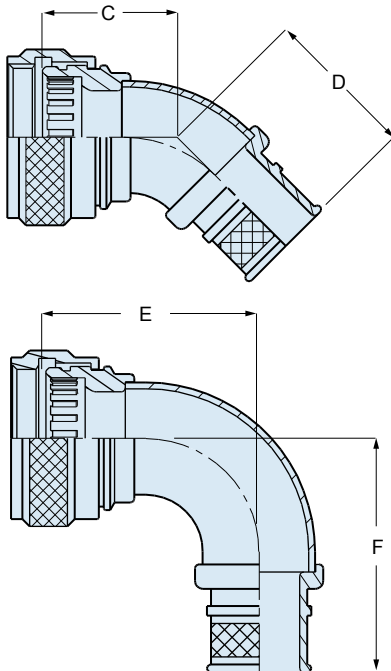
## 440-069 EMI/RFI Adapter

### 440-069 EMI/RFI ADAPTER, BAND-MASTER™ SHIELD TERMINATION

Shell Size	A Thread	ø B Max.		ø X Min.	
		In.	mm.	In.	mm.
18	1.125-18 UNEF-2B	1.39	35.3	.724	18.4
20	1.250-18 UNEF-2B	1.53	38.9	.858	21.8
24	1.4375-18 UNEF-2B	1.72	43.7	1.043	26.5
28	1.8125-16 UN-2B	2.13	54.1	1.353	34.4
32	2.0625-16 UNS-2B	2.35	59.7	1.620	41.2
36	2.250-16 UN-2B	2.59	65.8	1.823	46.3
40	2.500-16 UN-2B	2.87	70.6	2.050	52.1

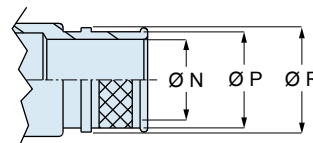


### 45° AND 90° DIMENSIONS



Shell Size	C Max.		D Max.		E Max.		F Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.
18	1.250	31.8	2.468	62.7	1.906	48.4	1.812	46.0
20	1.312	33.3	2.657	67.5	2.031	51.6	1.938	49.2
24	1.406	35.7	3.063	77.8	2.281	57.9	2.188	55.6
28	1.500	38.1	3.656	92.9	2.531	64.3	2.625	66.7
32	1.675	42.5	3.845	97.7	2.625	66.7	2.895	73.5
36	1.799	45.7	4.230	107.4	2.875	73.0	3.145	79.9
40	1.861	47.3	4.459	113.3	3.025	76.8	3.295	83.7

### CABLE ENTRY DIMENSIONS



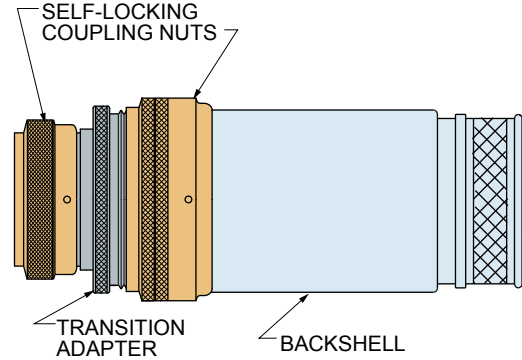
Cable Entry Code	ø N		ø P		ø R		Heatshrink Boot Ref.*
	In.	mm.	In.	mm.	In.	mm.	
<b>02</b>	.250	6.4	.375	9.53	.437	11.10	770-003S112
<b>03</b>	.375	9.5	.500	12.70	.562	14.27	770-001S103
<b>04</b>	.500	12.7	.625	15.88	.687	17.45	770-001S104
<b>05</b>	.625	15.9	.750	19.05	.812	20.62	770-001S104
<b>06</b>	.750	19.1	.875	22.23	.937	23.80	770-001S105
<b>07</b>	.875	22.2	1.000	25.40	1.062	26.97	770-001S105
<b>08</b>	1.000	25.4	1.125	28.58	1.187	30.15	770-001S106
<b>09</b>	1.125	28.6	1.250	31.75	1.312	33.32	770-001S107
<b>10</b>	1.250	31.8	1.375	34.93	1.437	36.50	770-001S107
<b>11</b>	1.375	34.9	1.500	38.10	1.562	39.67	770-001S107
<b>12</b>	1.500	38.1	1.625	41.28	1.687	42.85	770-001S108
<b>13</b>	1.625	41.3	1.750	44.45	1.812	46.02	770-001S108
<b>14</b>	1.750	44.5	1.875	47.63	1.937	49.20	770-001S108
<b>15</b>	1.875	47.6	2.000	50.80	2.062	52.37	770-001S109
<b>16</b>	2.000	50.8	2.125	53.98	2.187	55.55	770-001S109
<b>17</b>	2.125	54.0	2.250	57.15	2.313	58.75	770-003S110
<b>18</b>	2.250	57.2	2.375	60.37	2.438	61.93	770-003S110
<b>19</b>	2.375	60.3	2.500	63.50	2.563	65.10	770-003S110
<b>20</b>	2.500	63.5	2.625	66.68	2.688	68.28	770-003S110

\* Heatshrink boot part number specifies standard material. For low-smoke, zero halogen change "S1" to "S2".

**ALTERNATE CONFIGURATION FOR LARGE CABLES**

If the cable entry diameter exceeds the diameter of the backshell shown in the table at right, the backshell will be supplied with a *transition adapter*. The clamp and adapters are first installed over the cable jacket, and then are threaded onto the transition adapter. On straight exit backshells, the transition adapter does not affect the length. On 45° and 90° versions the transition adapter adds 1.00 inch (25.4mm) maximum to the backshell length.

Shell Size	Backshell Inside Diameter	
	In.	mm.
18	.72	18.3
20	.85	21.7
24	1.04	26.4
28	1.35	34.3
32	1.62	41.1
36	1.82	46.3
40	2.05	52.0



**APPLICATION NOTE: POLYSULFIDE BARRIER FOR GALVANIC CORROSION PROTECTION**

Olive drab (OD) cadmium (Cd) over electroless nickel (EN) is available in two versions. The standard version, designated as Glenair code **NF**, is a uniform Cd/EN finish over the entire part. A second version, designated as Glenair code **NFP**, is selectively plated with electroless nickel in the knurled shield attachment area. A polysulfide barrier separates the electroless nickel area from the cadmium plated area. This selectively plated version prevents galvanic corrosion that could potentially occur if nickel-coated shield braid is attached to a cadmium plated surface.

**The Polysulfide Process**

First, the part is plated with electroless nickel. Next, a tape mask is applied to the shield termination area. Following cadmium plating and chromate conversion coating, the tape is removed, exposing the electroless nickel. Polysulfide is applied with a brush to completely seal the transition area between the nickel and cadmium. The final step is to oven cure the polysulfide.

