



# Series 970 PowerTrip™ Connectors and Accessories Accessories

390-055 EMI/RFI Submersible Backshell

## SUBMERSIBLE EMI BACKSHELL

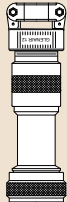
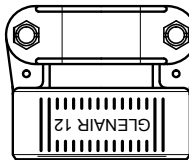
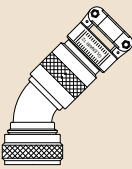
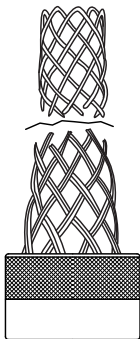
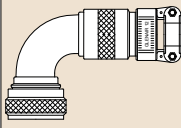


Heavy duty backshell features positive detent self-locking spin coupling for high vibration environments. For use with shielded, jacketed power cable. Splined connector interface. Terminate cable shield to inner and outer ground rings. Heavy duty cable clamps fit most cable sizes, or choose wire mesh stainless steel cordgrip. Withstands six feet water immersion for 48 hours. Aluminum or stainless steel with silicone O-rings and gland. Stainless steel telescoping clamp screws. Meets environmental, electrical and mechanical requirements of AS85049 Category 1A Heavy Duty.

MATERIALS AND FINISHES
Adapters, elbows, follower, coupling nut: aluminum or stainless steel. See <b>How To Order</b> for material & finish options.
Hardware: stainless steel
Wire Mesh Cordgrip: stainless steel
Screws: stainless steel
Grommet, O-rings: fluorosilicone

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	STRAIN RELIEF TYPE AND SIZE	LENGTH CODE																																																																
<b>390PS055</b> Straight Exit 	<b>ME</b> Aluminum / Electroless Nickel RoHS Compliant  <b>NF</b> Aluminum / Cadmium with Olive Drab Chromate  <b>ZR</b> Aluminum / Zinc-Nickel with Non-Reflective Black Chromate RoHS Compliant	<b>18</b> <b>20</b> <b>24</b> <b>28</b> <b>32</b> <b>36</b> <b>40</b>	<b>Heavy Duty Saddle Clamp</b> 	<i>Omit for 45° and 90° styles. The Length Code is the length of the front adapter in 1/2 inch increments</i>  <table border="1"> <thead> <tr> <th>Code</th> <th colspan="2">Length</th> </tr> <tr> <th></th> <th>In.</th> <th>mm.</th> </tr> </thead> <tbody> <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.	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																									
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<b>390PM055</b> 45° Exit 	<b>MT</b> Aluminum / Nickel-PTFE RoHS Compliant  <b>Z1</b> Stainless Steel / Passivated RoHS Compliant		<b>Wire Mesh Cordgrip</b> 	<table border="1"> <thead> <tr> <th rowspan="2">Code</th> <th colspan="2">Cable Diameter Min.</th> <th colspan="2">Cable Diameter Max.</th> </tr> <tr> <th>In.</th> <th>mm.</th> <th>In.</th> <th>mm.</th> </tr> </thead> <tbody> <tr><td>06H</td><td>.250</td><td>6.4</td><td>.437</td><td>11.1</td></tr> <tr><td>08H</td><td>.387</td><td>9.8</td><td>.562</td><td>14.3</td></tr> <tr><td>10H</td><td>.350</td><td>8.9</td><td>.625</td><td>15.9</td></tr> <tr><td>12H</td><td>.500</td><td>12.7</td><td>.750</td><td>19.1</td></tr> <tr><td>16H</td><td>.625</td><td>15.9</td><td>.937</td><td>23.8</td></tr> <tr><td>20H</td><td>.875</td><td>22.2</td><td>1.250</td><td>31.8</td></tr> <tr><td>24H</td><td>1.000</td><td>25.4</td><td>1.375</td><td>34.9</td></tr> <tr><td>28H</td><td>1.250</td><td>31.8</td><td>1.625</td><td>41.3</td></tr> <tr><td>32H</td><td>1.437</td><td>36.5</td><td>1.875</td><td>47.6</td></tr> <tr><td>36H</td><td>1.625</td><td>41.3</td><td>2.125</td><td>54.0</td></tr> <tr><td>40H</td><td>1.875</td><td>47.6</td><td>2.375</td><td>60.3</td></tr> </tbody> </table>	Code	Cable Diameter Min.		Cable Diameter Max.		In.	mm.	In.	mm.	06H	.250	6.4	.437	11.1	08H	.387	9.8	.562	14.3	10H	.350	8.9	.625	15.9	12H	.500	12.7	.750	19.1	16H	.625	15.9	.937	23.8	20H	.875	22.2	1.250	31.8	24H	1.000	25.4	1.375	34.9	28H	1.250	31.8	1.625	41.3	32H	1.437	36.5	1.875	47.6	36H	1.625	41.3	2.125	54.0	40H	1.875	47.6	2.375	60.3
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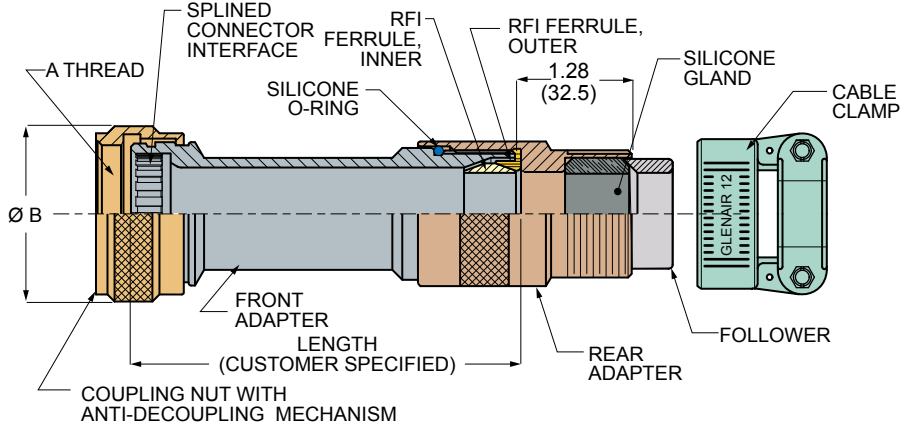
## Accessories

### 390-055 EMI/RFI Submersible Backshell

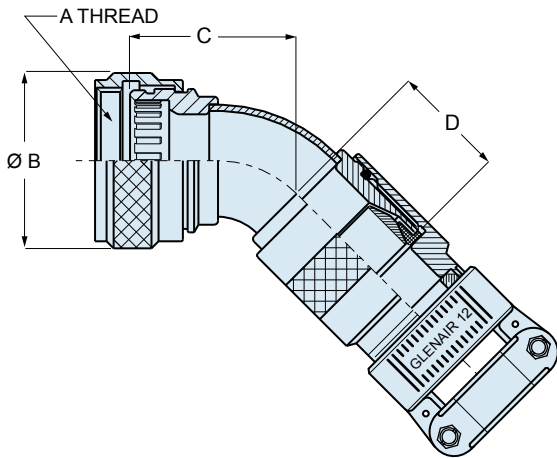


#### 390PS055 STRAIGHT EXIT

Shell Size	A Thread	ø B Max.	
		In.	mm.
18	1.125-18 UNEF-2B	1.39	35.3
20	1.250-18 UNEF-2B	1.53	38.9
24	1.4375-18 UNEF-2B	1.72	43.7
28	1.8125-16 UN-2B	2.13	54.1
32	2.0625-16 UNS-2B	2.35	59.7
36	2.250-16 UN-2B	2.59	65.8
40	2.500-16 UN-2B	2.87	70.6

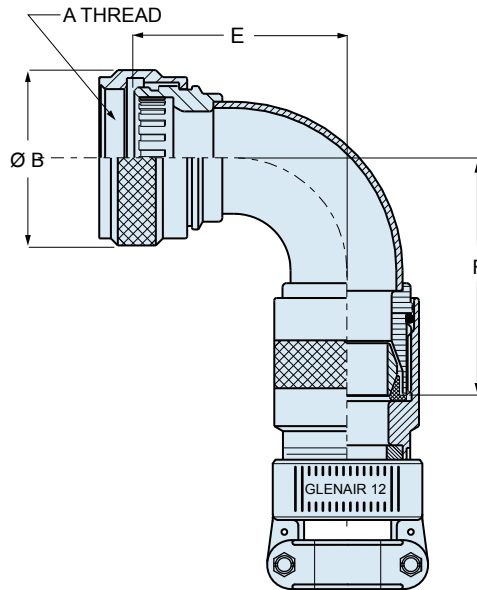


#### 390PM055 45° EXIT



Shell Size	A Thread Class 2B	ø B Max.		C Max.		D Max.	
		In.	mm.	In.	mm.	In.	mm.
18	1.125-18 UNEF	1.39	35.3	1.250	31.8	2.468	62.7
20	1.250-18 UNEF	1.53	38.9	1.312	33.3	2.657	67.5
24	1.4375-18 UNEF	1.72	43.7	1.406	35.7	3.063	77.8
28	1.8125-16 UN	2.13	54.1	1.500	38.1	3.656	92.9
32	2.0625-16 UNS	2.35	59.7	1.675	42.5	3.845	97.7
36	2.250-16 UN	2.59	65.8	1.799	45.7	4.230	107.4
40	2.500-16 UN	2.87	70.6	1.861	47.3	4.459	113.3

#### 390PN055 90° EXIT



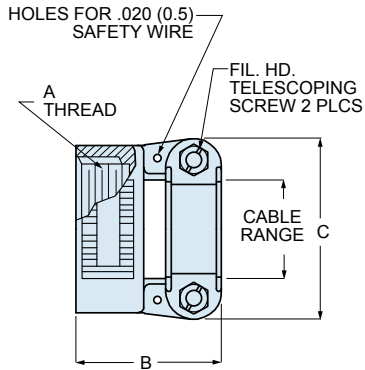
Shell Size	A Thread Class 2B	ø B Max.		E Max.		F Max.	
		In.	mm.	In.	mm.	In.	mm.
18	1.125-18 UNEF	1.39	35.3	1.906	48.4	1.812	46.0
20	1.250-18 UNEF	1.53	38.9	2.031	51.6	1.938	49.2
24	1.4375-18 UNEF	1.72	43.7	2.281	57.9	2.188	55.6
28	1.8125-16 UN	2.13	54.1	2.531	64.3	2.625	66.7
32	2.0625-16 UNS	2.35	59.7	2.625	66.7	2.895	73.5
36	2.250-16 UN	2.59	65.8	2.875	73.0	3.145	79.9
40	2.500-16 UN	2.87	70.6	3.025	76.8	3.295	83.7



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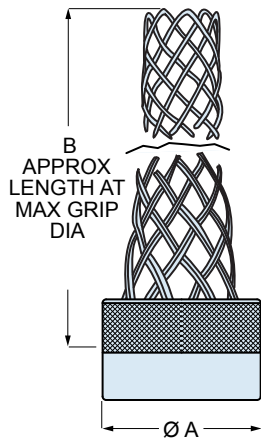
390-055 EMI/RFI Submersible Backshell

## SADDLE CLAMP DIMENSIONS



Clamp Size	Cable Range				A Thread Class 2B	B Max.		C Max.	
	Min.		Max.			In.	mm.	In.	mm.
	In.	mm.	In.	mm.					
06H	.250	6.4	.437	11.1	.750-20UNEF	1.301	33.04	1.145	29.1
08H	.387	9.8	.562	14.3	.875-20UNEF	1.301	33.04	1.332	33.8
10H	.350	8.9	.625	15.9	1.000-20UNEF	1.301	33.04	1.332	33.8
12H	.500	12.7	.750	19.1	1.1875-18UNEF	1.332	33.83	1.551	39.4
16H	.625	15.9	.937	23.8	1.4375-18UNEF	1.426	36.22	1.770	45.0
20H	.875	22.2	1.250	31.8	1.750-18UNS	1.613	40.97	2.113	53.7
24H	1.000	25.4	1.375	34.9	2.000-18UNS	1.645	41.78	2.363	60.0
28H	1.250	31.8	1.625	41.3	2.250-16UN	1.920	48.77	2.770	70.4
32H	1.437	36.5	1.875	47.6	2.500-16UN	1.920	48.77	3.020	76.7
36H	1.625	41.3	2.125	54.0	2.750-16UN	2.060	53.32	3.250	82.6
40H	1.875	47.6	2.375	60.3	3.000-16UN	2.060	53.32	3.500	88.9

## WIRE MESH GRIP DIMENSIONS



Grip Size	Cable Range				Ø A Max.		B Approx.	
	Min.		Max.		In.	mm.	In.	mm.
	In.	mm.	In.	mm.				
06K	.310	7.8	.438	11.1	.942	23.9	4.000	101
08K	.438	11.1	.500	12.7	1.067	27.1	4.120	105
10K	.500	12.7	.625	15.8	1.192	30.3	4.370	111
12K	.625	15.9	.750	19.1	1.380	35.1	5.000	127
14K	.750	19.1	.875	22.2	1.563	39.7	6.000	152
16K	.875	22.2	1.000	25.4	1.563	39.7	6.250	158
20K	1.000	25.4	1.250	31.8	1.875	47.6	7.250	184
24K	1.125	28.6	1.375	34.9	2.225	57.3	8.000	203
28K	1.375	34.9	1.625	41.2	2.505	63.6	8.500	216
32K	1.625	41.3	1.875	47.6	2.755	70.0	9.000	229
40K	2.125	53.9	2.375	60.3	3.225	82.7	9.500	241

## ALTERNATE CONFIGURATION FOR LARGE CABLES

If the cable 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

