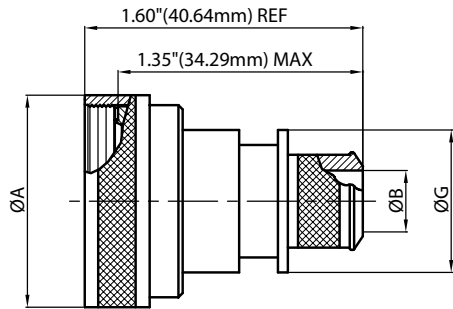


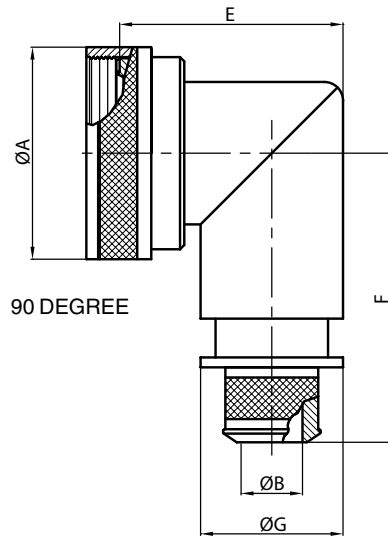
### For Connector Family L

**38999 Series III, IV**

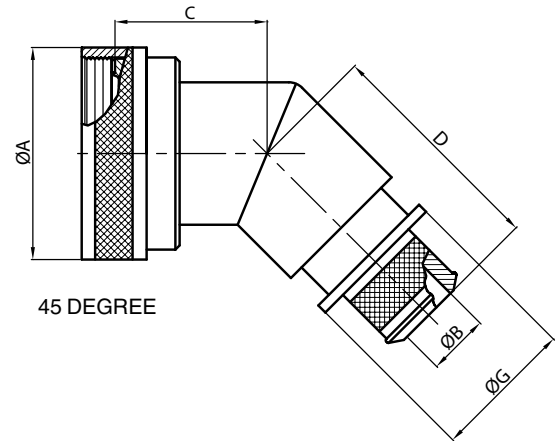
Connector Family "L", includes MIL-DTL-38999 Series III and Series IV



STRAIGHT



90 DEGREE



45 DEGREE

#### MIL Part Number

**M85049 / 88 -11 W 03**

MIL Series

Slash Sheet:  
88: Straight, Self-Lock  
90: 90°, Self-Lock  
89: 45°, Self-Lock

Entry Size:  
See Table-A

Finish:  
See Table-2  
(pg. 486)

Shell Size:  
See Table-A

TABLE-A

MIL PART NUMBER DESIGNATOR		CONNECTOR SHELL SIZE/ CODE (REF.)	A DIA. (MAX)		B DIA. (MAX)		C (MAX)		D (MAX)		E (MAX)		F (MAX.)		G MAX	
CONNECTOR SHELL SIZE	ENTRY SIZE		INCH	MM	+0.00	+0.00	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
					-0.02	-0.50										
9	02	09 / A	0.86	21.82	N/A	N/A	1.01	25.65	1.16	29.46	1.38	34.93	1.42	35.99	N/A	N/A
	03				0.26	6.60									0.56	14.22
11	02	11 / B	0.99	25.04	N/A	N/A	1.03	26.16	1.19	30.23	1.44	36.50	1.48	37.59	N/A	N/A
	03				0.32	8.13									0.63	16.00
13	02	13 / C	1.16	29.36	0.32	8.13	1.06	26.92	1.21	30.73	1.56	39.67	1.55	39.45	0.63	16.00
	03				0.45	11.43									0.75	19.05
15	02	15 / D	1.28	32.54	0.45	11.43	1.08	27.43	1.24	31.50	1.69	42.85	1.61	41.00	0.75	19.05
	03				0.57	14.48									0.89	22.61
17	02	17 / E	1.41	35.71	0.51	12.95	1.11	28.19	1.26	32.00	1.75	44.45	1.68	42.62	0.82	20.83
	03				0.64	16.26									0.95	24.13
19	02	19 / F	1.52	38.51	0.64	16.26	1.12	28.45	1.27	32.26	1.88	47.63	1.77	45.03	0.95	24.13
	03				0.76	19.30									1.07	27.18
21	02	21 / G	1.64	41.68	0.64	16.26	1.15	29.21	1.30	33.02	1.94	49.23	1.80	45.62	0.95	24.13
	03				0.82	20.83									1.13	28.07
23	02	23 / H	1.77	44.86	0.70	17.78	1.17	29.72	1.33	33.78	2.06	52.37	1.86	47.22	1.02	25.99
	03				0.95	24.13									1.26	32.00
25	02	25 / J	1.89	48.03	0.76	19.30	1.20	30.48	1.35	34.29	2.13	53.98	1.92	48.74	1.07	27.18
	03				1.01	25.65									1.32	33.53

38999  
III  
HD  
Dualok  
II  
I  
SJT  
Accessories  
Aquacon  
Herm/Seal  
PCB

High Speed  
Fiber Optics  
Contacts

EMI Filter  
Transient

26482  
Matrix 2

83723  
III  
Matrix | Pyle

26500  
Pyle

5015  
Crimp Rear Release  
Matrix

22992  
Class L

Back-Shells

Options  
Others

#### MATERIALS & FINISHES

Amphenol offers adapters in the following standard finishes. The base material is aluminum alloy.

#### MATERIAL:

- Aluminum parts: As per ASTM B 211, 221, 209, 85, 26
- Steel parts: 300 series, as per AMS-QQ-S-763/ASTM A 582
- Elastomers: Fluro Silcon, Silicon
- Other parts: Suitable corrosion resistant material

#### MIL (QPL) QUALIFICATION

Many Amphenol Backshells are qualified to SAE-AS 85049 standard. (Old standard is MIL-C-85049).

TABLE-2 (PLATING FINISHES)

Amphenol Designation	MIL Designation	Finish	Guiding Specifications/Requirements
A	A	Anodize, Black*	To meet AS85049 requirements
B		Anodize, Hard*	AMS-A-8625, Type-III, Class-1
L		Nickel, Bright	AMS-QQ-290, Class-1, Grade-F
M		Electroless Nickel	AMS-C-26074, Class-4, Grade-B
N	N	Electroless Nickel	To meet AS85049 requirements
T		Cadmium, Bright	AMS-QQ-P-416, Type-I, Class-2
U		Cadmium, Olive drab	AMS-QQ-P-416, Type II, Class 3
V		Cadmium, Olive drab over Electroless Nickel	AMS-QQ-P-416, Type-II, Class-3 (Cadmium); AMS-C-26074, Class-4, grade-B (Nickel)
W	W	Cadmium, Olive drab over Electroless Nickel	To meet AS85049 requirements
Y		Zinc-Cobalt, Dark Olive drab	ASTM-B840
Z		Zinc-Cobalt, Black	ASTM-B840

For availability of other finishes, email your special requirements: email: sales@backshellworld.com

\* Non conductive coatings.

#### ASSEMBLY TORQUE VALUES

Amphenol recommends the following torque values for its adapters while assembling them to the connectors. These values are based on the coupling thread strength specified in SAE-AS85049 standard.

Connector Shell Size	Torque (Inch-Pounds)
8, 9	40
3, 10, 10SL, 11	40
7, 12, 12S, 13	40
14, 14S, 15	40
16, 16S, 17	40
18, 19, 27	40
20, 21, 37	80
22, 23	80
24, 25, 61	80
28	100
32	100
36	100
40	120
44	120
48	120

#### STYLE-2 CONFIGURATION

Some design consideration will require bigger diameter cable to be terminated in the smaller shell size connectors. Cable with heavy/thicker shielding, many wires for different branches/routing are some of the examples. Such cable termination will require a bigger adapter body with cable entry dimensions more than the connector rear side dimensions Amphenol also supports this kind of application. The coupling end of the adapter will be modified to Style-2 design as shown in the figure below in such cases. The overall length of the Style-2 design adapters would be increased by approx. 1 inch (25.4mm) as shown. This alternative design is applicable for all the Backshell Families listed in this catalog.

