

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.

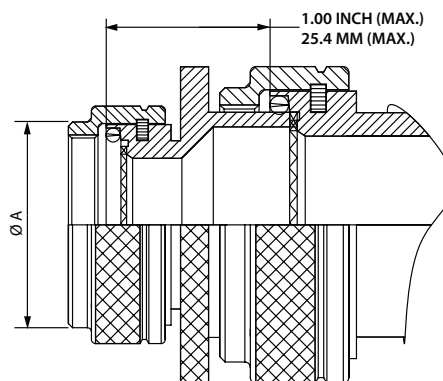
ASSEMBLY TORQUE VALUES

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.mm) as shown. This alternative design is applicable for all the Backshell Families listed in this catalog.

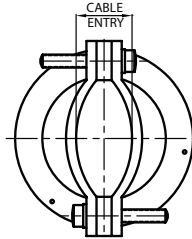
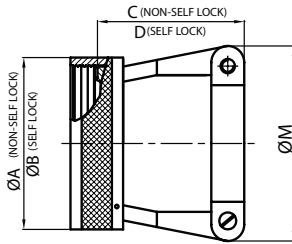


26482 Matrix Series 2

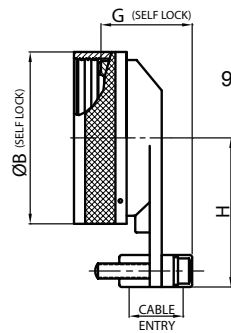
5015 Matrix (MS345X)

83723 Matrix & Pyle Series III

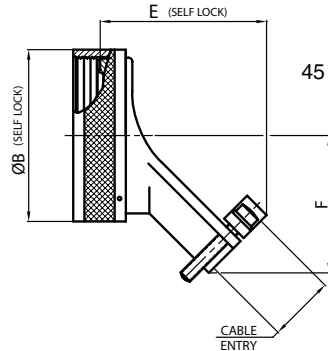
Connector Family "J", includes:
MIL-DTL-26482 Series 2,
MIL-DTL-5015 Matrix (MS345X)
MIL-DTL-83723 Series III



STRAIGHT



90 DEGREE



45 DEGREE

MIL Part Number

M85049 / 52 - 10 W

MIL Series

Slash Sheet:

52: Straight

51: 90°

43: 45°

Coupling:

S: Self-Lock

-: Non Self-Lock for 45° & Straight

-1-: Non Self-Lock for 90°

Finish:

See Table-2
(pg. 486)

Dash Number:
See Table-A

TABLE - A

MIL PART NUMBER DESIGNATOR	CONNECTOR SHELL SIZE	A DIA.(MAX)		B DIA.(MAX)		C (MAX)		D (MAX)		E (MAX)		F (MAX)	
		INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
8	8	0.62	15.67	0.89	22.48	0.63	16.00	0.73	18.54	1.32	33.53	0.77	19.61
10	10	0.73	18.64	1.01	25.65	0.74	18.80	0.85	21.59	1.36	34.65	0.80	20.40
12	7/12	0.86	21.79	1.14	28.83	0.86	21.84	0.98	24.89	1.44	36.53	0.87	22.00
14	12/14	0.98	24.99	1.26	32.00	0.86	21.84	0.98	24.89	1.48	37.59	0.93	23.57
16	19/16	1.11	28.24	1.39	35.18	0.99	25.15	1.10	27.94	1.59	40.28	0.99	25.17
18	27/18	1.22	30.94	1.51	38.35	1.24	31.50	1.35	34.29	1.70	43.28	1.11	28.19
20	37/20	1.35	34.16	1.64	41.53	1.36	34.54	1.48	37.59	1.75	44.40	1.17	29.77
22	22	1.47	37.29	1.76	44.70	1.49	37.85	1.60	40.64	1.79	45.52	1.24	31.37
24	24	1.59	40.46	1.89	47.88	1.61	40.89	1.73	43.94	1.84	46.63	1.30	32.94
28	28	1.97	50.01	2.14	54.23	1.76	44.70	1.88	47.75	1.96	49.81	1.54	39.19
32	32	2.22	56.36	2.40	60.83	1.95	49.53	2.13	54.10	2.05	52.04	1.67	42.37
36	36	2.47	62.71	2.64	66.93	2.33	59.18	2.44	61.98	2.09	53.16	1.79	45.54
40	40	2.72	69.06	2.89	73.28	2.51	63.75	2.63	66.80	2.09	53.19	1.92	48.72
44	44	2.97	75.41	3.14	79.63	2.89	73.41	3.00	76.20	2.36	59.94	2.13	54.15
48	48	3.22	81.76	3.39	85.98	3.26	82.80	3.40	86.36	2.45	62.18	2.26	57.33

Note: For more cable entry and length options, email: sales@backshellworld.com
All dimensions for reference only.

Strain Relief Clamp

Straight, 90° and 45°, Self-Lock/Non Self-Lock, cont.

For Connector Family J

26482 Matrix Series 2

5015 Matrix (MS345X)

83723 Matrix & Pyle Series III

Connector Family "J", includes:
MIL-DTL-26482 Series 2,
MIL-DTL-5015 Matrix (MS345X)
MIL-DTL-83723 Series III

TABLE – A

MIL PART NUMBER DESIGNATOR	CONNECTOR SHELL SIZE	G (MAX)		H (MAX)		M (MAX)		CABLE ENTRY			
		INCH	MM	INCH	MM	INCH	MM	MIN		MAX	
								INCH	MM	INCH	MM
08	8	0.93	23.62	0.75	18.95	0.78	19.86	0.13	3.18	0.20	5.18
10	10	1.02	25.91	0.81	20.45	0.86	21.89	0.19	4.75	0.29	7.26
12	7/12	1.21	30.73	0.87	22.02	1.00	25.48	0.29	7.39	0.42	10.57
14	12/14	1.27	32.26	0.93	23.62	1.06	26.95	0.35	8.92	0.48	12.09
16	19/16	1.42	36.07	0.99	25.25	1.33	33.88	0.50	12.73	0.63	15.90
18	27/18	1.53	38.86	1.17	29.74	1.47	37.24	0.52	13.16	0.71	17.93
20	37/20	1.65	41.91	1.23	31.34	1.57	39.93	0.58	14.76	0.83	21.11
22	22	1.78	45.21	1.30	32.92	1.69	42.88	0.64	16.36	0.96	24.28
24	24	1.90	48.26	1.36	34.49	1.79	45.47	0.71	17.93	1.08	27.46
28	28	2.20	55.88	1.57	39.93	2.04	51.69	0.75	19.05	1.19	30.15
32	32	2.27	57.66	1.80	45.64	2.39	60.60	0.88	22.23	1.25	31.75
36	36	2.39	60.71	1.92	48.82	2.50	63.40	0.94	23.83	1.38	34.93
40	40	2.52	64.01	2.05	51.99	2.57	65.18	0.94	23.83	1.50	38.10
44	44	2.77	70.36	2.30	58.32	2.86	72.64	1.19	30.18	1.75	44.45
48	48	2.89	73.41	2.42	61.49	3.34	84.94	1.31	33.32	1.88	47.63

Note: For more cable entry and length options, email: sales@backshellworld.com
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26482
Matrix 2

83723
III
Matrix | Pyle

26500
Pyle

5015
Crimp Rear
Release
Matrix

22992
Class I

Back-
Shells

Options
Others