KUKDONG Electronic Precision Co., Ltd.

IN2CONNECT
ELECTRONIC CONNECTORS

MIL-DTL-26482 SERIES II CONNECTOR



www.kdep.co.kr

MIL-DTL-26482 Series II Connectors are used in the demanding high reliability and a quick -mating, three point bayonet coupling system.







KUKDONG 극동전자정밀주식회사
KUKDONG Electronic Precision Co., Ltd.

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Introduction

The KD MIL-DTL-26482 Series II connectors are used extensively in the demanding high reliability and a quick-mating, three point bayonet coupling system, which have an excellent electrical, mechanical, and environmental characteristic. Therefore it is widely applied in fields that require the highest reliability such as aviation equipment and state-of-the-art missile communication tools. The KD rugged high-quality silicone seals, the connectors work in the harshest of conditions.

Applications

Miltary and industrial environments requiring a miniature, high density, environmental connector.

- Commercial and military aircraft
- Instrumentation
- High-temperature industrial equipment
- Avionics

Features

High-Quality Contact System

The KD MIL-DTL-26482 Series II connectors use industry standard M39029 crimp-style contacts and the field proven little caesar contact retention clip that locks the contact into place while allowing easy insertion and removal with simple and low-cost plastic tools.

Wide Range of Cable Accessories Including Military Standard

Unlike MIL-DTL-26482 Series I style connectors, MIL-DTL-26482 Series II style are supplies without rear accessories but with military standard rear threads. This lets users choose from one of the broadest array of endbells, including M85049 standard endbells, from low-cost simple cable tie versions to fully environmental sealed EMI shielded endbells.

Broad Operating Temperatures

The KDs are constructed using high-quality silicone for the peripheral, interfacial and wire seals. This, along with the stable hard dielectric insert material that houses the Little Caesar contact retention clip provide operating temperature from -55aaa up to +200aaa.

Rear Contact Insertion and Release System

Used properly, the insertion and extraction tools naver touch or come in contact with or damage the interfacial seals, a common problem with front release contact systems.

Cork in a Bottle Interfacial Seal System

Socket inserts are constructed with a hard dielectric and funnel-shaped contact lead-ins which not only assist aligning the contacts when mating, but also provide for compression of the raised individual contact seals on the high-quality silicone interfacial seals of the pin insert.

Technical Data

Electrical Data

Current Rating

Wire Size AWG	Contact Size AWG	Current MAX. [A]
24	20	3.0
20	20	7.5
20	16	7.5
16	16	13.0
14	12	17.0
12	12	23.0

Insulation Resistance

5,000 Megaohms minimum at 25°C
500 Megaohms minimum at 200°C class L
500 Megaohms minimum at 175°C class W

Operating & Test Voltage

Service rating	Operating voltage AC(rms)	
	Sea level	70,000 ft
I	600V	300V
II	1,000V	450V

Service rating	Test voltage AC(rms)	
	Sea level	70,000 ft
I	1,500V	375V
II	2,300V	500V

Insulation Strip Length

Wire Size AWG	Contact Size AWG	Strip Length. [mm]
20 - 24	20	4.76
16 - 20	16	7.14
12 - 14	12	7.14

Mechanical Features

Ambient temperature

- 55°C to + 200°C

Mating Cycles

500cycle

Salt Spray

Class W 48 hours unmated. 452 hours mated per MIL-STD-1344 Method and MIL-DTL-26482

Vibration

10㎲ max at 10 to 2,000 Hz (20g) discontinuity per MIL-STD-1344 Method 2005 per MIL-DTL-26482

Shock

150g's/6ms duration, three major axes 10㎲ max discontinuity per MIL-DTL-26482

Contact Retention

Per MIL-STD-1344A method 2007 per MIL-DTL-26482

Contact Size AWG	Test force [LB]
20	20
16	25
12	30

Wire Sealing Range

Contact Size AWG	Wire Sealing Range Min. [mm]	Wire Sealing Range Max. [mm]
20	1.02	2.11
16	1.35	2.62
12	2.46	4.01

Materials & Finishes

Shell

Meterial	Aluminum alloy
Finish	Olive drab cadmium plate finish as standard

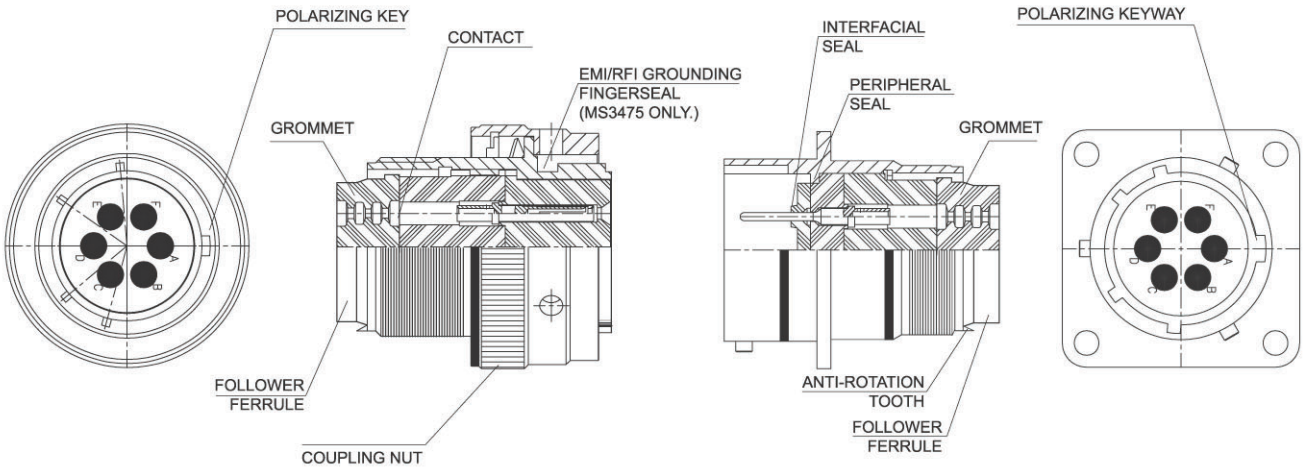
Insulator, Grommet and seals

Meterial	[Insulator]	Rigid plastic dielectric
	[Grommet]	Silicone based elastomer
	[Seal]	Silicone based elastomer

Contacts

Meterial	Copper alloy
Finish	Gold plate

Cross Sections

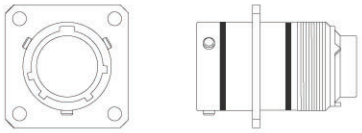


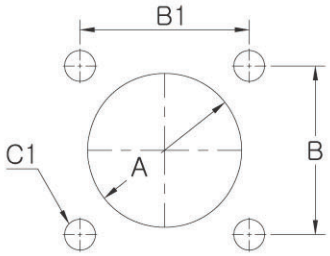
PLUG **RECEPTACLE**

Mounting Dimensions

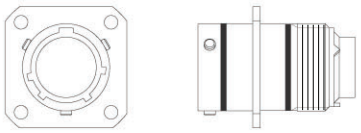
Mounting holes

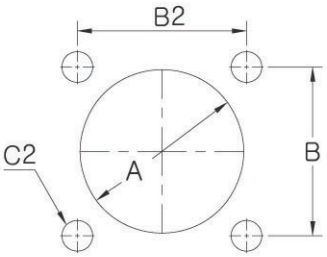
KD3470 Mount



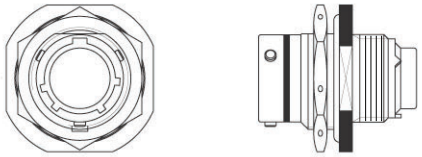


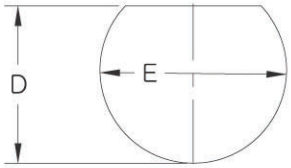
KD3472 Mount





KD3474 Mount



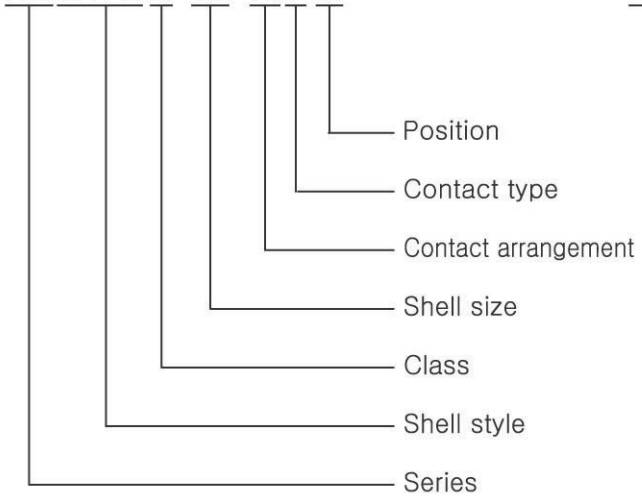


Shell size	∅A +0.25	B1 +0.25	B2 ±0.10	∅C1 +0.50	∅C2 +0.50	D ±0.13	∅E ±0.13
8	14.30	14.96	18.64	2.79	3.56	13.61	14.53
10	17.27	18.14	20.62	2.79	3.56	16.79	17.70
12	21.82	20.50	23.83	2.79	3.56	20.93	22.73
14	24.99	22.89	26.19	2.79	3.56	24.08	25.65
16	28.14	24.49	28.58	2.79	3.56	27.23	28.33
18	31.32	26.85	30.56	2.79	3.56	30.40	32.00
20	34.49	29.24	32.94	2.79	3.56	33.58	35.18
22	37.67	31.62	34.93	2.79	3.56	36.75	38.35
24	40.89	34.80	38.10	3.48	3.56	39.93	41.53

How to order

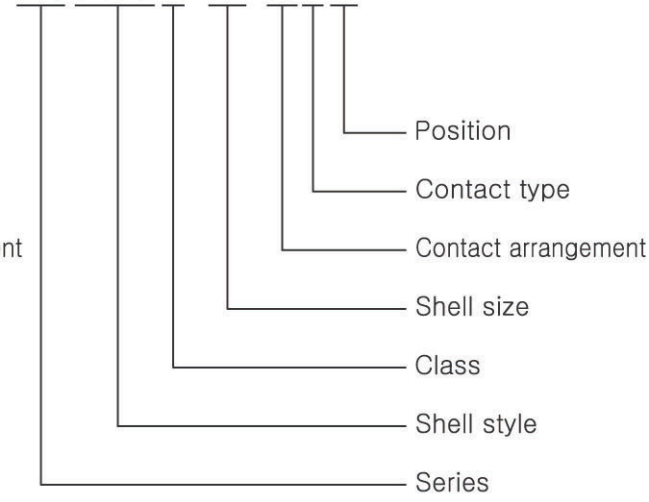
KD Order Reference

KD3470W 12-10PW



MS Order Reference

MS3470W 12-10PW



Series

KD KUKDONG Brand
(According to Military Standard)
MS Military Standard

Shell style

3470 Narrow Flange Receptacle
3471 Cable Receptacle
3472 Wide Flange Receptacle
3474 Jam Nut Recaptacle
3475 Straight Plug and RFI Shielded
3476 Straight Plug

Class

A Non-conductive fluid resistant insert
Anodized finish
L Conductive fluid resistant insert
Electroless nickel finish
W Corrosive and fluid resistant
Olive drab cadmium plated

Shell size

8, 10, 12, 14, 16, 18, 20, 22, 24

Contact arrangement

See Page 7 ~ 10

Contact type

P Pin contact
S Socket contact

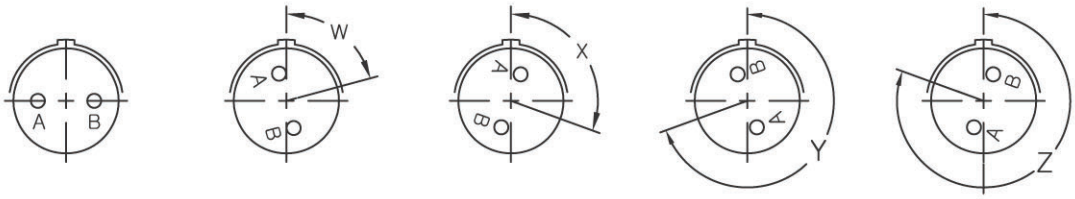
Position

See Page 7

Contact Arrangements

Alternate Insert Positions

※ View shows pin front side or socket rear side



Shell Size	Insert Number	Contacts				Alternate pos.				Service rating
		Tot	20	16	12	W	X	Y	Z	
8	8-3	3	3			60	210			I
	8-4	4	4			45				I
	8-33	3	3			90				I
	8-98	3	3							I
10	10-6	6	8			90				I
12	12-3	3	3					180		II
	12-8	8	8			90	112	203	292	I
	12-10	10	10			60	155	270	295	I
14	14-4	4			4	45				I
	14-5	5		5		40	92	184	273	II
	14-12	12	8	4		43	90			I
	14-15	15	14	1		17	110	155	234	I
	14-18	18	18			15	90	180	270	I
	14-19	19	19			30	165	315		I
16	16-8	8		8		54	152	180	331	II
	16-14	14	8		6	25	78	180	240	I
	16-23	23	22	1		158	270			I
	16-26	26	26			60		275	338	I
	16-99	23	21	2		66	156	223	340	I
18	18-8	8			8	180				I
	18-11	11		11		62	119	241	340	II
	18-32	32	32			85	138	222	265	I
20	20-16	16		16		238	318	333	347	II
	20-39	39	37	2		63	144	252	333	I
	20-41	41	41			45	126	225		I
22	22-12	12			12					I
	22-21	21		21		16	135	175	349	II
	22-41	41	27	14		39	135	264		I
	22-55	55	55			30	142	226	314	I
24	24-19	19			19	30	165	315		II
	24-31	31		31		90	225	255		I
	24-61	61	61			90	180	270	324	I

Contact Arrangements

Contact Size
◒ 12 ⊕ 16 ⊖ 20

Shell Size 8






Insert number	8-3	8-4	8-33	8-98
No. of contacts	3	4	3	3
Contact size	20	20	20	20
Service rating	I	I	I	I

Shell Size 10



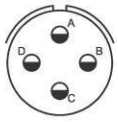
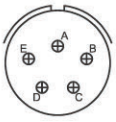
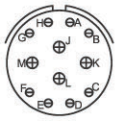
Shell Size 12





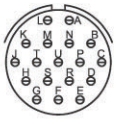
Insert number	10-6	12-3	12-8	12-10
No. of contacts	6	3	8	10
Contact size	20	16	20	20
Service rating	I	II	I	I

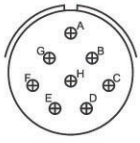
Shell Size 14


Insert number	14-4	14-5	14-12	14-15
No. of contacts	4	5	8 4	14 1
Contact size	12	16	20 16	20 16
Service rating	I	II	I	I

Shell Size 16





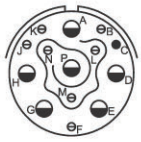
Insert number	14-18	14-19	16-8
No. of contacts	18	19	8
Contact size	20	20	16
Service rating	I	I	II

MIL-DTL-26482 Series II

Contact Arrangements

Contact Size

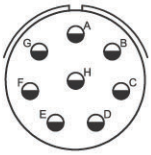
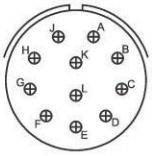
◒	⊕	⊖
12	16	20





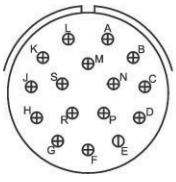
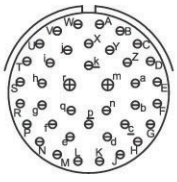
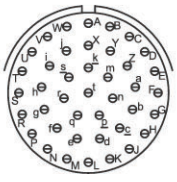

Insert number	16-14	16-23	16-26	16-99
No. of contacts	8 6	22 1	26	21 2
Contact size	20 16	20 16	20	20 16
Service rating	I	I	I	I

Shell Size 18


Insert number	18-8	18-11	18-30
No. of contacts	8	11	29 1
Contact size	12	16	20 16
Service rating	I	II	I

Shell Size 20

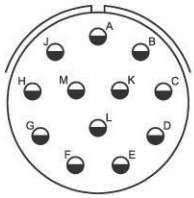




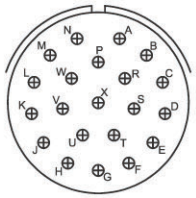
Insert number	20-16	20-39	20-41
No. of contacts	16	37 2	41
Contact size	16	20 16	20
Service rating	II	I	I

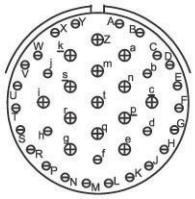
Contact Arrangements

Contact Size
12 16 20

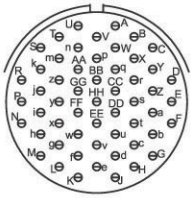
Shell Size 22





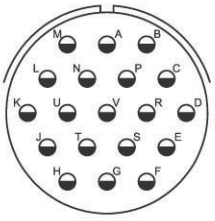


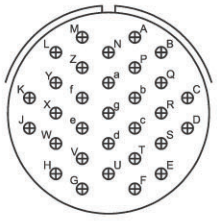
Insert number	22-12	22-21	22-41
No. of contacts	12	21	27 14
Contact size	12	16	20 16
Service rating	I	II	I

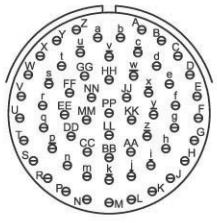


Insert number	22-55
No. of contacts	55
Contact size	20
Service rating	I

Shell Size 24





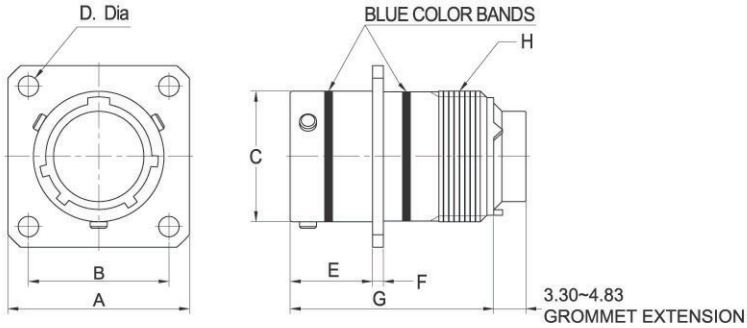


Insert number	24-19	24-31	24-61
No. of contacts	19	31	61
Contact size	12	16	20
Service rating	I	I	I

MIL-DTL-26482 Series II

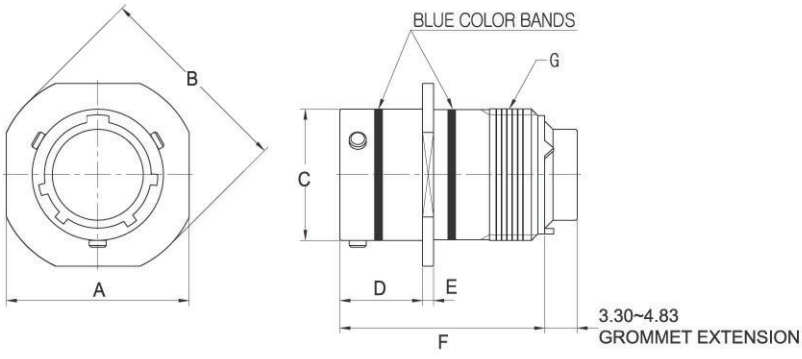
Connector Dimensions

KD3470
MS3470
Narrow Flange Receptacle



Shell size	□A max	□B ±0.10	⌀C ±0.08	⌀D ±0.25	E		F		G max	H THD-2A
					min	max	min	max		
8	21.03	15.08	11.96	3.05	10.95	11.74	1.16	1.98	30.86	1/2-20UNF
10	24.23	18.26	14.94	3.05	10.95	11.74	1.16	1.98	30.86	5/8-24UNEF
12	26.59	20.62	19.00	3.05	10.95	11.74	1.16	1.98	30.86	3/4-20UNEF
14	28.98	23.01	22.17	3.05	10.95	11.74	1.16	1.98	30.86	7/8-20UNEF
16	31.34	24.61	25.35	3.05	10.95	11.74	1.16	1.98	30.86	1-20UNEF
18	33.73	26.97	25.52	3.05	10.95	11.74	1.16	1.98	30.86	1 1/16-18UNEF
20	36.91	29.36	31.70	3.05	14.12	14.91	1.98	2.80	32.39	1 3/16-18UNEF
22	40.08	31.75	34.87	3.05	14.12	14.91	1.98	2.80	32.39	1 5/16-18UNEF
24	43.26	34.93	38.05	3.73	14.96	15.75	1.98	2.80	32.39	1 7/16-18UNEF

KD3471
MS3471
Cable Connecting Receptacle

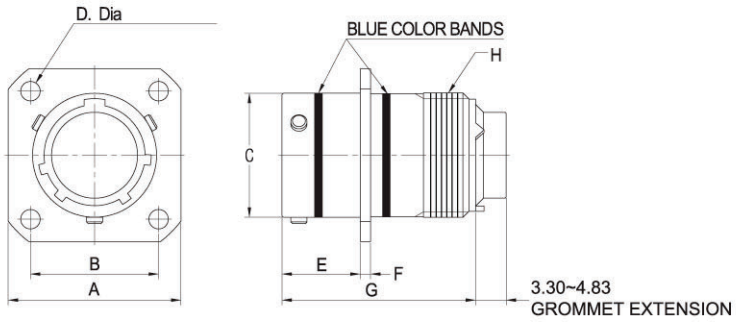


Shell size	□A max	⌀B		⌀C ±0.08	D		E		F max	H THD-2A
		min	max		min	max	min	max		
8	21.03	23.32	24.34	11.96	10.95	11.74	1.16	1.98	30.86	1/2-20UNF
10	24.23	26.46	27.48	14.94	10.95	11.74	1.16	1.98	30.86	5/8-24UNEF
12	26.59	28.85	29.87	19.00	10.95	11.74	1.16	1.98	30.86	3/4-20UNEF
14	28.98	31.24	32.26	22.17	10.95	11.74	1.16	1.98	30.86	7/8-20UNEF
16	31.34	33.63	34.65	25.35	10.95	11.74	1.16	1.98	30.86	1-20UNEF
18	33.73	36.02	37.04	28.52	10.95	11.74	1.16	1.98	30.86	1 1/16-18UNEF
20	36.91	39.16	40.18	31.70	14.12	14.91	1.98	2.80	32.39	1 3/16-18UNEF
22	40.08	42.37	43.39	34.87	14.12	14.91	1.98	2.80	32.39	1 5/16-18UNEF
24	43.26	45.51	46.53	38.05	14.96	15.75	1.98	2.80	32.39	1 7/16-18UNEF

MIL-DTL-26482 Series II

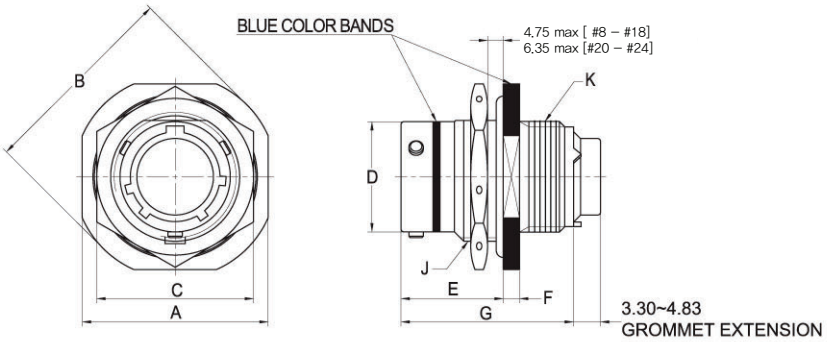
Connector Dimensions

KD3472
MS3472
Wide Flange Receptacle



Shell size	□A max	□B ±0.10	⌀C ±0.08	⌀D ±0.25	E		F		G max	H THD-2A
					min	max	min	max		
8	27.05	18.64	11.96	3.81	11.73	12.53	1.16	1.98	30.86	1/20-20UNEF
10	28.98	20.62	14.94	3.81	11.73	12.53	1.16	1.98	30.86	5/8-24UNEF
12	32.16	23.83	19.00	3.81	11.73	12.53	1.16	1.98	30.86	3/4-20UNEF
14	34.54	26.19	22.17	3.81	11.73	12.53	1.16	1.98	30.86	7/8-20UNEF
16	36.91	28.58	25.35	3.81	11.73	12.53	1.16	1.98	30.86	1-20UNEF
18	38.91	30.56	28.52	3.81	11.73	12.53	1.16	1.98	30.86	1 1/16-18UNEF
20	42.88	32.94	31.70	3.81	14.12	14.91	1.98	2.80	32.39	1 3/16-18UNEF
22	44.86	34.93	34.87	3.81	14.12	14.91	1.98	2.80	32.39	1 5/16-18UNEF
24	48.03	38.10	38.05	3.81	14.96	15.75	1.98	2.80	32.39	1 7/16-18UNEF

KD3474
MS3474
Jam Nut Receptacle

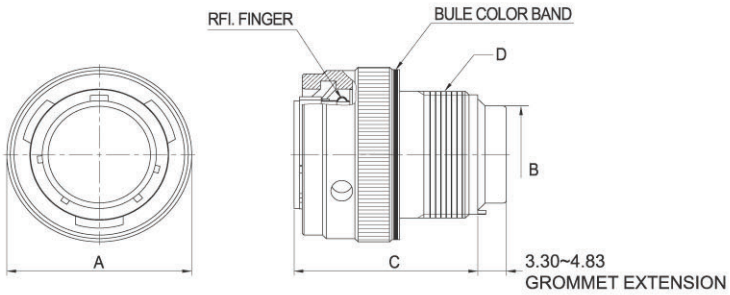


Shell size	□A max	⌀B		C max	⌀D ± 1.30	E		F		G max	J (Mounting) THD-2A	K (Accessory) THD-2A
		min	max			min	max	min	max			
8	24.23	26.59	27.38	19.48	13.34	16.71	17.96	2.18	2.87	30.86	9/16-24UNEF	1/2-20UNF
10	27.38	29.77	30.56	22.66	16.51	16.71	17.96	2.18	2.87	30.86	11/16-24UNEF	5/8-24UNEF
12	32.16	34.54	35.33	27.41	20.65	16.71	17.96	2.18	2.87	30.86	7/8-20UNEF	3/4-20UNEF
14	35.33	37.72	38.55	30.61	23.80	16.71	17.96	2.18	2.87	30.86	1-20UNEF	7/8-20UNEF
16	38.51	40.89	41.68	33.76	26.95	16.71	17.96	2.18	2.87	30.86	1 1/8-18UNEF	1-20UNEF
18	41.68	44.07	44.86	36.96	30.12	16.71	17.96	2.18	2.87	30.86	1 1/4-18UNEF	1 1/16-18UNEF
20	46.43	48.84	49.63	40.11	33.30	18.31	19.61	2.44	3.76	32.39	1 3/8-18UNEF	1 3/16-18UNEF
22	49.63	51.99	52.78	43.31	36.47	18.31	19.61	2.44	3.76	32.39	1 1/2-18UNEF	1 5/16-18UNEF
24	52.78	55.17	55.96	46.46	39.65	18.31	19.61	2.44	3.76	32.39	1 5/8-18UNEF	1 7/16-18UNEF

MIL-DTL-26482 Series II

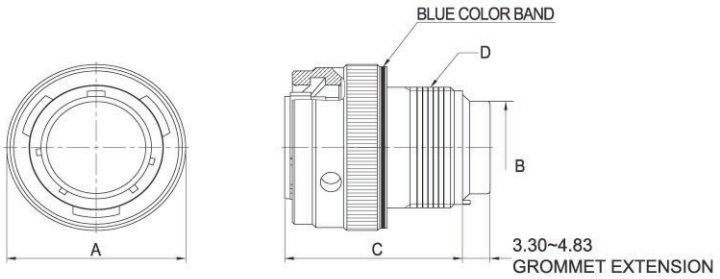
Connector Dimensions

KD3475
MS3475
Straight Plug (RFI Shielded)



Shell size	⌀A max	⌀B max	C max	D THD-2A
8	19.86	7.75	31.24	1/20-20UNF
10	23.52	10.29	31.24	5/8-24UNEF
12	26.49	13.49	31.24	3/4-20UNEF
14	30.04	16.89	31.24	7/8-20UNEF
16	33.15	20.07	31.24	1-20UNEF
18	35.33	22.07	31.24	1 1/16-18UNEF
20	38.89	25.25	31.24	1 3/16-18UNEF
22	42.05	28.42	31.24	1 5/16-18UNEF
24	45.14	31.60	31.24	1 7/16-18UNEF

KD3476
MS3476
Straight Plug



Shell size	⌀A max	⌀B max	C max	D THD-2A
8	19.86	7.75	31.24	1/20-20UNF
10	23.52	10.29	31.24	5/8-24UNEF
12	26.49	13.49	31.24	3/4-20UNEF
14	30.04	16.89	31.24	7/8-20UNEF
16	33.15	20.07	31.24	1-20UNEF
18	35.33	22.07	31.24	1 1/16-18UNEF
20	38.89	25.25	31.24	1 3/16-18UNEF
22	42.05	28.42	31.24	1 5/16-18UNEF
24	45.14	31.60	31.24	1 7/16-18UNEF

MIL-DTL-26482 Series II

Sealing Plug

Contact Size	Military No.	Color Code
20	MS27488-20	Red
16	MS27488-16	Blue
12	MS27488-12	Yellow

Insertion / Removal Tools

Contact Size	Color Code	Military No.
20	Red / White	M81969/14-11
16	Blue / White	M81969/14-03
12	Yellow / White	M81969/14-04

Contacts

Contact Size	Wire Range		Contact [Military No.]	
	AWG	mm^2	PIN	SOCKET
20	20 - 24	0.2 - 0.6	M39029/4-110	M39029/5-115
16	16 - 20	0.5 - 1.4	M39029/4-111	M39029/5-116
12	12 - 14	2.0 - 3.0	M39029/4-113	M39029/5-118

Crimping Tools

Contact Size	Wire Range		Finished Wire Dia. Range	Crimping Tool	Turnet / Positioner
	AWG	mm^2	mm^2		
20	20 - 24	0.2 - 0.6	1.02 - 2.11	M22520/1-01, /2-01	M22520/1-02, /2-02
16	16 - 20	0.5 - 1.4	1.34 - 2.62	M22520/1-01	M22520/1-02
12	12 - 14	2.0 - 3.0	2.46 - 4.01	M22520/1-01	M22520/1-02