

ADAPTER/KAT Series

Glossary	2
Selection Adapter Types	3
Roll-back Repair with Adapters	3
Tinel-Lock Adapters	3
Tinel-Lock Ring and Braid	4
Cross reference table	4
Part Number Explanation	5
Tinel-Lock Adapter Code 18	6
Tinel-Lock Adapter Code 21	7
Tinel-Lock Adapter Code 40	8
Tinel-Lock Adapter Code 41	9
Tinel-Lock Adapter Code 54	10
Tinel-Lock Adapter Code 58	11
Tinel-Lock Adapter Code 76	12
Tinel-Lock Adapter Code 78	13

ADAPTER / KAT Series

Glossary

Kukdong connector code

Kukdong uses a numerical code used to identify connectors with similar adapter interfaces. This code is used to determine the adapter family part number.

Adapter type

Three types are offered : Tinel-Lock, Braided and Spin-coupling. Each is designed to offer a suitable interface between connector and heat-shrinkable moulded part.

Adapter part number

This is the Kukdong sequence of numbers and letters that completely describes the adapter series, size, material, finish and modification codes.

Entry size

Entry sizes are specified on Braided and Tinel-Lock adapters only. It is the diameter of the hole through which the cable enters into the adapter. It is expressed in sixteenths of an inch. ie. 08 entry is 12.7mm(0.5in).

Ring designator

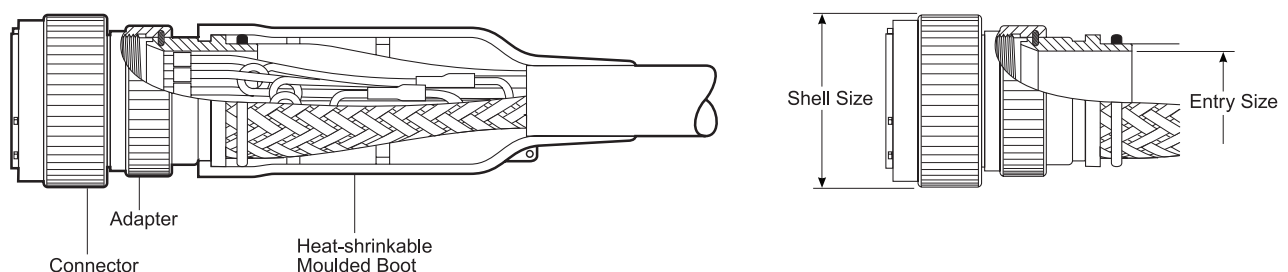
A two letter code that is part of the Tinel-Lock adapter part number. It specifies the size of Tinel-Lock ring to suit different types of cable braid.

Shell size

This is the size of connector as specified by the connector manufacturer. It is normally a two digit number between 08 and 24, although certain connectors are obtainable in either larger or smaller sizes, or use letter codes.

Order number

This is a two digit Kukdong number that specifies the size of the adapter that will mate to the corresponding shell size of connector. The order number is frequently the same as the connector shell size, but should be checked by reference to the appropriate Kukdong Product Information sheet.



Cut-away view showing complete screened cable termination

ADAPTER/KAT Series

Selection Adapter Types

Kukdong offer several types of adapter for unscreened and screened termination systems. The choice is largely dependent upon the screening level required and the braid termination method.

The three principal adapter types are:

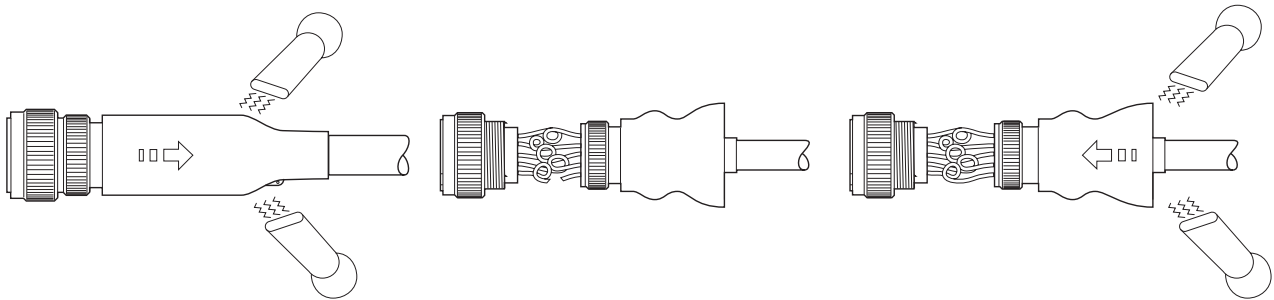
1. Tinel-Lock adapter
2. Braided adapter
3. Spin-Coupling adapter

Roll-back Repair with Adapters

More than 85 percent of cable repairs are made within 75mm (3 in) of the connectors — usually because of a broken pin or wire.

By reheating the heat shrinkable boot and unscrewing the adapter coupling nut, the boot can be 'rolled back' providing access to the rear of the connector for repair.

This technique is applicable to Tinel-Lock adapters and braided adapters.



Tinel-Lock Adapters

This termination system consists of a modified spin-coupling type adapter with a Tinel-Lock ring.

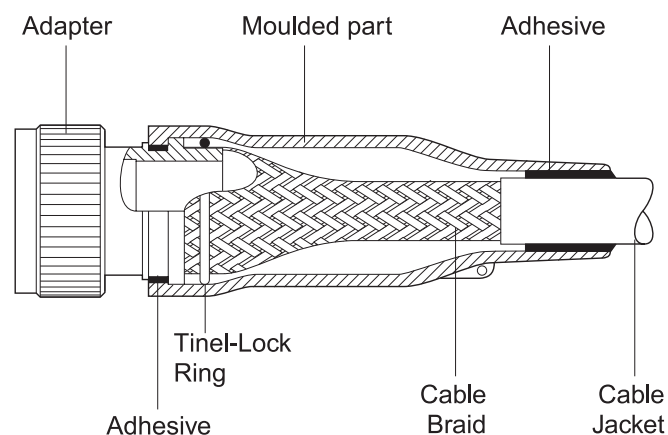
The Tinel-Lock ring is made from a special shape memory metal that which shrinks uniformly when heated.

The Tinel-Lock ring is used to terminate copper cable braid directly onto the rear of the adapter.

The adapter entry size and ring designator must be selected to suit the cable diameter and braid type.

The resulting 360° termination withstands severe shock, vibration, temperature cycling and corrosion.

Straight, 45°, and 90° configurations are available.

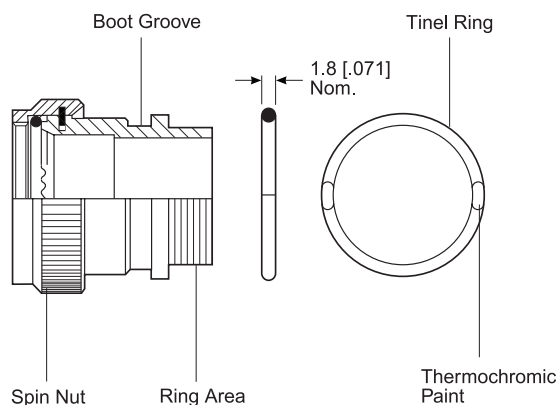


ADAPTER / KAT Series

Tinel-Lock Ring and Braid

The Tinel-Lock ring designator must be specified according to the type of cable braid used, and is added to the part number after the adapter entry size.

There are two types of ring, AI and BI for each entry size.



Braid type	Ring designator★
Single layer 36AWG	AI
Single layer 34AWG	AI
Single layer 32AWG	BI
Single layer 30AWG	BI
Double layer 36AWG	BI
Double layer 34AWG	BI

★ A or B = Size of braid
I = insulating layer

Tinel-rings are marked with thermochromic paint which changes color when the correct installation temperature is reached. BI-type rings are identified with a red spot.

Braid type, material, and construction are variable. If in doubt, contact Kukdong for advice.

Cross reference table

Wire gauge (AWG) to diameter and area for solid conductor

AWG	Diameter		Area	
	mm	in	mm	in×10 ⁻³
40	0.079	0.0031	0.0049	0.0076
39	0.089	0.0035	0.0062	0.0096
38	0.102	0.0040	0.0081	0.0126
37	0.114	0.0045	0.0103	0.0159
36	0.127	0.0050	0.0127	0.0196
35	0.142	0.0056	0.0159	0.0246
34	0.160	0.0063	0.0201	0.0312
33	0.180	0.0071	0.0255	0.0396
32	0.203	0.0080	0.0324	0.0503
31	0.226	0.0089	0.0401	0.0622
30	0.254	0.0100	0.0507	0.0786
29	0.287	0.0113	0.0647	0.100
28	0.320	0.0126	0.0804	0.125

ADAPTER/KAT Series

PART NUMBER EXPLANATION

Tinel-Lock Adapter

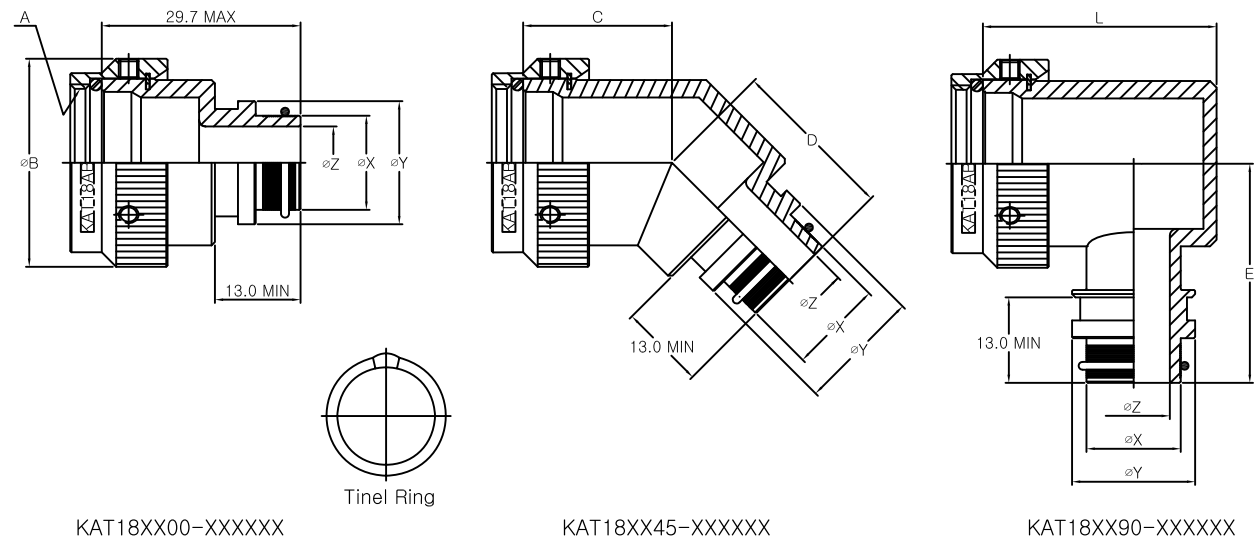
K	AT	58	A	B	00	-	18 [★]	10	AI	
										Ring designator
									AI	
									BI	
										Entry Size
										04, 05, 06, 07, 08, 10, 12, 14, 16, 18, 20, 22, 24
										Shell Size
										08-08 10-10SL 12-12s, 12 14-14s, 14 16-16s, 16 18-18
										20-20 22-22 24-24 28-28 32-32 36-36 40-40
										Angle
										00 : 0°
										45 : 45°
										90 : 90°
										Finish
										B : Cadmium QQ-p-416, Type II, Class 3 over electroless nickel
										C : Nickel Plating
										J : Passivated
										Material
										A : Aluminium alloy
										S : Stainless steel
										Connector Code
										18 [★] - MIL-DTL-5015D
										21 - MIL-DTL-26482 I
										40 - MIL-DTL-38999 III&IV
										41 - MIL-DTL-38999 I&II
										54 - MIL-DTL-5015G
										MIL-DTL-26482 II
										MIL-DTL-81703 III
										MIL-DTL-83723 I&III
										58 - KDB Connector
										76 - BS 9522-F0017
										78 - BS 9522-F0032
										Tinel-Lock Adapter
										Company Prefix (KUKDONG)

★ Code 18 (manufacturer code)

Manu- facturer code	Connecteor manufacturer MS3100/3101/3106
-	Manufacturer code not required
A	Amphenol-Class A
B	Bendix-Class A/E/R
C	Cannon-Class A/E/R
D	Unknown-Class A/E/R
R	Amphenol-Class R

ADAPTER / KAT Series

Tinel-Lock Adapter Code 18 (MIL-DTL-5015)



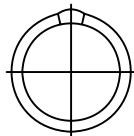
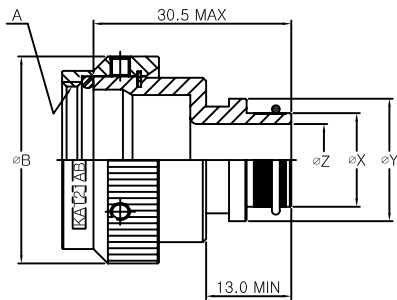
K	AT	18	A	B	00	-	16	08	AI	
										Ring designator
										AI, BI
										Entry Size
										Shell Size
										Angle
										00: 0°, 45: 45°, 90: 90°
										Finish
										B: Cadmium
										QQ-p-416, Type II, Class 3
										over electroless nickel
										C: Nickel Plating
										J: Passivated
										Material
										A: Aluminium alloy
										S: Stainless steel
										Connector Code
										Tinel-Lock Adapter
										Company Prefix (KUKDONG)

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.4}$	$\varnothing Z_{-0.5}^{+0.2}$
04	31.5	9.5	14.0	6.3
05	34.3	11.1	15.6	7.9
06	35.8	12.7	17.2	9.5
07	37.3	14.3	18.8	11.1
08	39.1	15.9	20.3	12.7
10	41.4	19.0	23.5	15.9
12	45.5	22.2	26.7	19.0
14	48.8	25.4	29.8	22.2
16	51.8	28.5	33.0	25.4
18	54.9	31.7	36.2	28.5
20	58.2	34.9	39.3	31.7
22	66.8	38.1	42.5	34.9
24	70.1	41.3	45.7	38.1

Shell Size	A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
10SL	9/16-24UNEF	21.6	21.1	24.1	31.2	07
12s & 12	5/8-24UNEF	23.4	21.1	24.1	31.2	08
14s & 14	3/4-20UNEF	26.4	21.8	24.9	33.0	10
16s & 16	7/8-20UNEF	31.2	22.6	25.9	36.1	12
18	1 -20UNEF	34.3	23.4	26.7	37.6	12
20	1 1/8-18UNEF	37.6	24.1	27.4	39.4	16
22	1 1/4-18UNEF	40.6	24.9	28.2	40.9	18
24	1 3/8-18UNEF	43.9	24.9	28.2	42.4	20
28	1 5/8-18UNEF	53.3	27.4	29.7	47.2	24
32	1 7/8-16UN	56.6	28.2	31.2	48.8	24
36	2 1/8-16UN	63.0	31.2	32.3	52.1	24

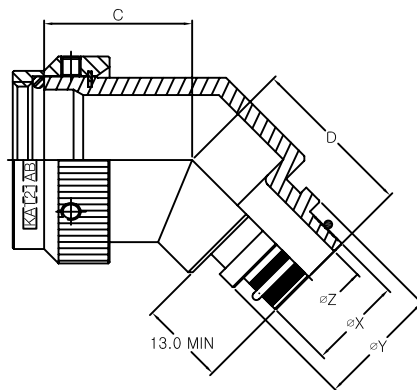
ADAPTER / KAT Series

Tinel-Lock Adapter Code 21 (MIL-DTL-26482 Series I)

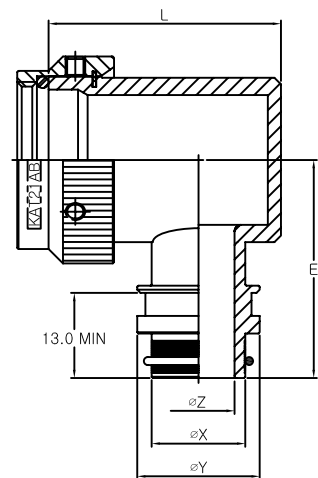


Tinel Ring

KAT21XX00-XXXXXX



KAT21XX45-XXXXXX



KAT21XX90-XXXXXX

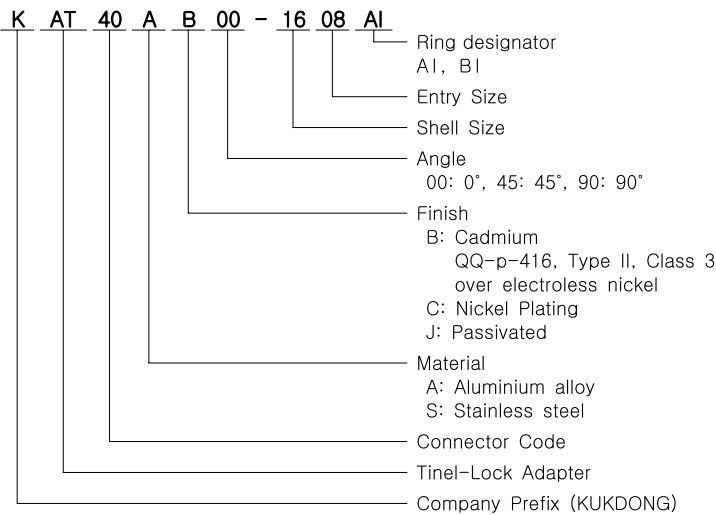
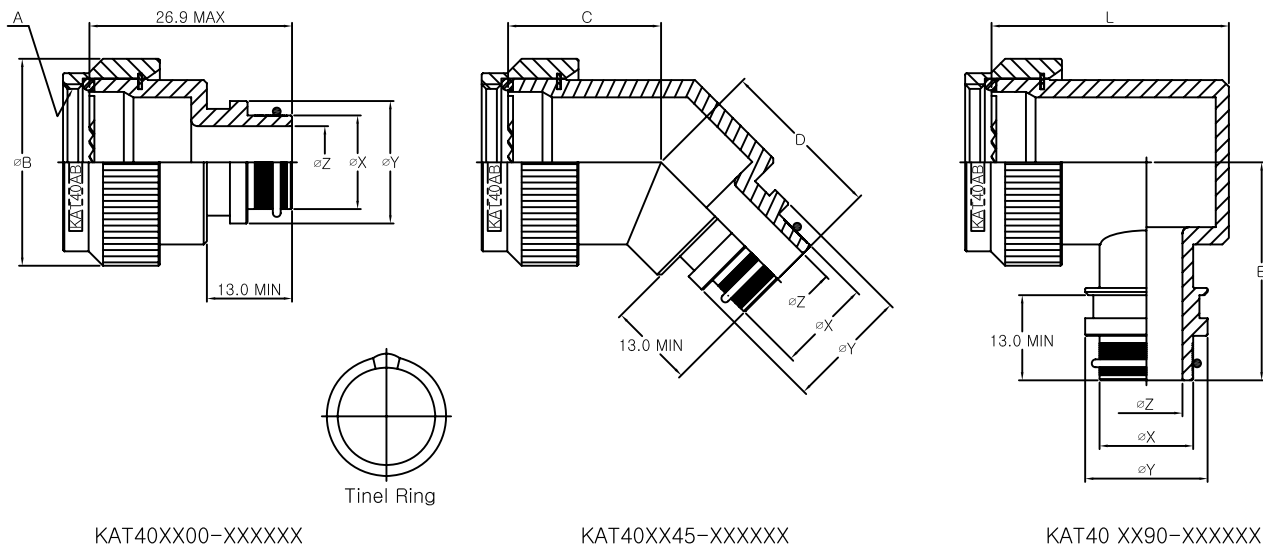
K	AT	21	A	B	00	-	16	08	Al
Ring designator									
Al, Bl									
Entry Size									
Shell Size									
Angle									
00: 0°, 45: 45°, 90: 90°									
Finish									
B: Cadmium									
QQ-p-416, Type II, Class 3									
over electroless nickel									
C: Nickel Plating									
J: Passivated									
Material									
A: Aluminium alloy									
S: Stainless steel									
Connector Code									
Tinel-Lock Adapter									
Company Prefix (KUKDONG)									

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.4}$	$\varnothing Z_{-0.5}^{+0.2}$
04	31.0	9.5	14.0	6.3
05	32.8	11.1	15.6	7.9
06	34.3	12.7	17.2	9.5
07	35.8	14.3	18.8	11.1
08	37.3	15.9	20.3	12.7
10	40.6	19.0	23.5	15.9
12	43.7	22.2	26.7	19.0
14	47.0	25.4	29.8	22.2
16	50.0	28.5	33.0	25.4
18	53.3	31.7	36.2	28.5

Shell Size	A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
8	7/16-28UNEF	18.3	21.6	23.1	29.0	04
10	9/16-24UNEF	21.6	22.4	23.9	30.5	06
12	11/16-24UNEF	24.9	23.1	24.6	32.3	08
14	13/16-20UNEF	28.2	23.4	24.9	33.5	10
16	15/16-20UNEF	31.2	24.1	25.7	34.8	12
18	1 1/16-18UNEF	34.5	24.4	25.9	36.3	12
20	1 3/16-18UNEF	37.6	25.1	26.7	38.1	14
22	1 5/16-18UNEF	40.6	25.7	27.4	39.6	16
24	1 7/16-18UNEF	43.2	26.2	27.7	40.9	18

ADAPTER / KAT series

Tinel-Lock Adapter Code 40 (MIL-DTL-38999 Series III & IV)

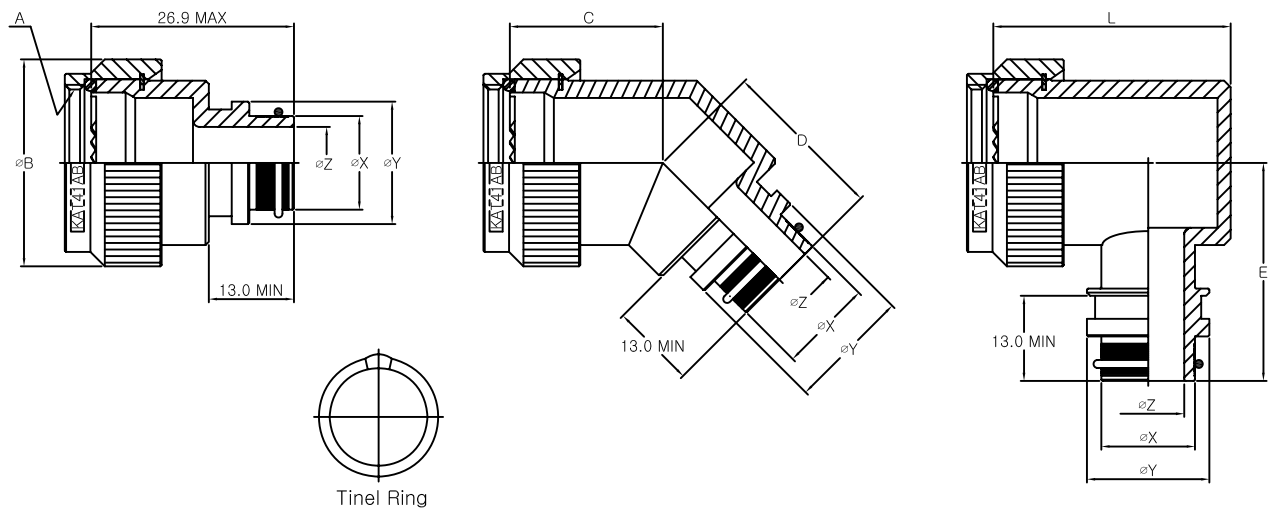


Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.4}$	$\varnothing Z_{-0.5}^{+0.2}$
04	31.2	9.5	14.0	6.3
05	32.8	11.1	15.6	7.9
06	34.3	12.7	17.2	9.5
07	36.1	14.3	18.8	11.1
08	37.6	15.9	20.3	12.7
10	40.6	19.0	23.5	15.9
12	43.9	22.2	26.7	19.0
14	47.0	25.4	29.8	22.2
16	50.8	28.5	33.0	25.4
18	54.1	31.7	36.2	28.5
20	57.2	34.9	39.3	31.7

Shell Size		A	$\varnothing B$	C	D	E	Entry
Commercial	Military	Thread-2B	MAX	MAX	MAX	MAX	MAX
9	A	M12 × 1.0	19.1	20.8	22.6	27.9	04
11	B	M15 × 1.0	21.6	21.3	23.4	30.5	07
13	C	M18 × 1.0	25.4	22.1	24.1	32.0	08
15	D	M22 × 1.0	29.2	22.6	24.1	34.0	10
17	E	M25 × 1.0	31.8	23.4	24.9	35.6	12
19	F	M28 × 1.0	35.6	24.1	25.7	36.8	14
21	G	M31 × 1.0	38.1	24.6	26.4	38.4	16
23	H	M34 × 1.0	41.9	25.4	27.2	39.9	18
25	J	M37 × 1.0	44.5	25.9	27.2	42.4	20

ADAPTER / KAT Series

Tinel-Lock Adapter Code 41 (MIL-DTL-38999 Series I & II)



KAT41XX00-XXXXXX

KAT41XX45-XXXXXX

KAT41XX90-XXXXXX

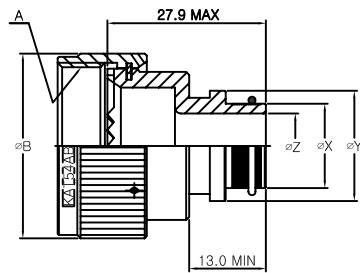
K	AT	41	A	B	00	-	16	08	AI
									Ring designator AI, BI
									Entry Size
									Shell Size
									Angle 00: 0°, 45: 45°, 90: 90°
									Finish B: Cadmium QQ-p-416, Type II, Class 3 over electroless nickel C: Nickel Plating J: Passivated
									Material A: Aluminium alloy S: Stainless steel
									Connector Code
									Tinel-Lock Adapter
									Company Prefix (KUKDONG)

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.1}$	$\varnothing Z_{-0.5}^{+0.2}$
04	27.2	9.5	14.0	6.3
05	28.7	11.1	15.6	7.9
06	30.2	12.7	17.2	9.5
07	31.8	14.3	18.8	11.1
08	33.5	15.9	20.3	12.7
10	36.6	19.0	23.5	15.9
12	39.9	22.2	26.7	19.0
14	42.9	25.4	29.8	22.2
16	46.2	28.5	33.0	25.4
18	49.3	31.7	36.2	28.5

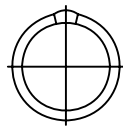
Shell Size		A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
Series I	Series II						
9	8	7/16-28UNEF	19.1	17.5	23.1	29.2	04
11	10	9/16-24UNEF	21.6	18.3	23.6	30.7	06
13	12	11/16-24UNEF	25.4	18.8	24.4	32.5	08
15	14	13/16-20UNEF	29.0	19.3	24.9	34.0	10
17	16	15/16-20UNEF	31.8	20.1	25.4	35.6	12
19	18	1 1/16-18UNEF	35.6	20.6	26.2	37.1	12
21	20	1 3/16-18UNEF	38.1	21.3	26.9	38.9	14
23	22	1 5/16-18UNEF	41.9	22.1	27.4	40.4	16
25	24	1 7/16-18UNEF	44.5	22.6	28.2	41.9	18

ADAPTER / KAT Series

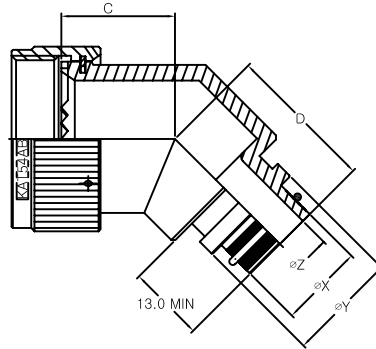
Tinel-Lock Adapter Code 54 (MIL-DTL-5015(MS3400), MIL-DTL-26482 Series II
MIL-DTL-81703 Series III, MIL-DTL-83723 Series I & III)



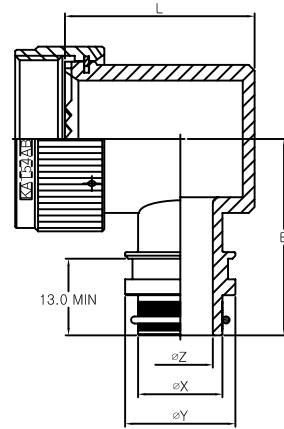
KAT54XX00-XXXXXX



Tinel Ring



KAT54XX45-XXXXXX



KAT54XX90-XXXXXX

K AT 54 A B 00 - 16 08 AI

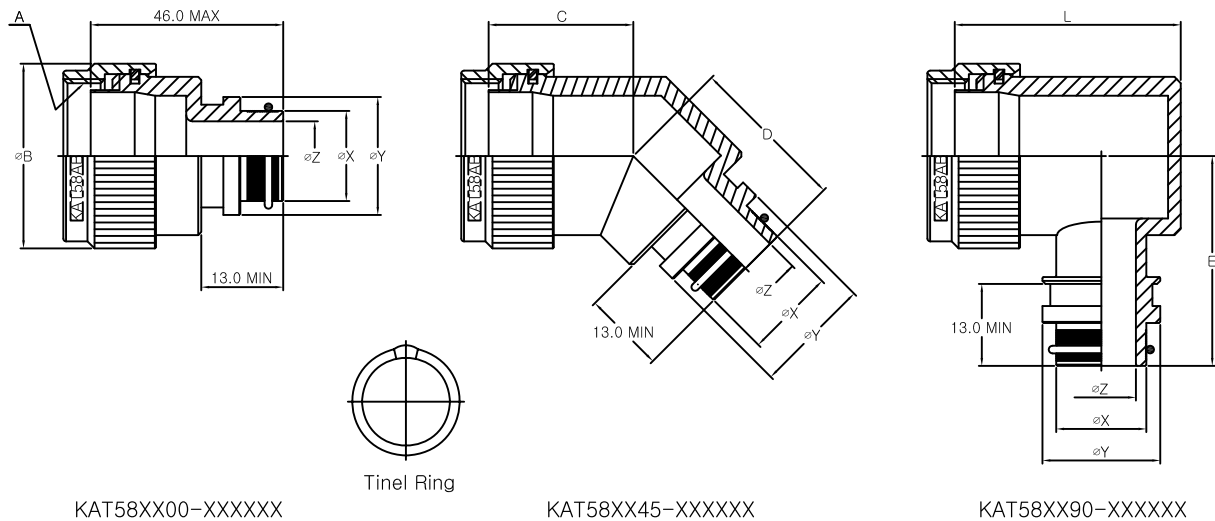
- AI: Single Braid
- BI: Double Braid
- Entry Size
- Shell Size
- Angle
- 00: 0°, 45: 45°, 90: 90°
- Finish
- B: Cadmium
- QQ-p-416, Type II, Class 3 over electroless nickel
- C: Nickel Plating
- J: Passivated
- Material
- A: Aluminium alloy
- S: Stainless steel
- Connector Code
- Tinel-Lock Adapter
- Company Prefix (KUKDONG)

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.1}$	$\varnothing Z_{-0.5}^{+0.2}$
04	28.4	9.5	14.0	6.3
05	30.2	11.1	15.6	7.9
06	31.8	12.7	17.2	9.5
07	33.3	14.3	18.8	11.1
08	35.1	15.9	20.3	12.7
10	38.1	19.0	23.5	15.9
12	41.1	22.2	26.7	19.0
14	44.5	25.4	29.8	22.2
16	47.8	28.5	33.0	25.4
18	50.8	31.7	36.2	28.5
20	53.8	34.9	39.3	31.7
22	57.2	38.1	42.5	34.9
24	60.5	41.3	45.7	38.1

Shell Size		A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
MIL-DTL-26482 II	MIL-DTL-5015G						
8		1/2-20UNEF	15.7	19.1	23.1	27.9	04
10	10SL	5/8-24UNEF	18.6	19.6	23.6	29.5	06
12	12s & 12	3/4-20UNEF	21.8	20.3	24.1	31.0	08
14	14s & 14	7/8-20UNEF	25.0	20.8	24.6	32.5	08
16	16s & 16	1 -20UNEF	28.2	21.3	25.4	34.3	10
18	18	1 1/16-18UNEF	30.9	21.8	25.7	35.6	12
20	20	1 3/16-18UNEF	34.2	22.4	26.4	37.1	14
22	22	1 5/16-18UNEF	37.3	23.1	26.9	38.9	16
24	24	1 7/16-18UNEF	40.5	23.6	27.7	40.4	18
	28	1 3/4-18UNS	50.0	24.9	29.2	45.2	22
	32	2 -18UNS	56.4	26.2	30.5	48.3	24
	36	2 1/4-16UN	62.7	27.4	31.8	51.6	24

ADAPTER / KAT Series

Tinel-Lock Adapter Code 58 (KDB Connector)



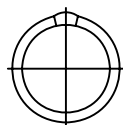
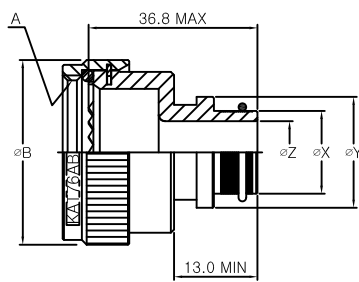
K	AT	58	A	B	00	-	16	08	AI
									AI: Single Braid
									BI: Double Braid
									Entry Size
									Shell Size
									Angle
									00: 0°, 45: 45°, 90: 90°
									Finish
									B: Cadmium
									QQ-p-416, Type II, Class 3
									over electroless nickel
									C: Nickel Plating
									J: Passivated
									Material
									A: Aluminium alloy
									S: Stainless steel
									Connector Code
									Tinel-Lock Adapter
									Company Prefix (KUKDONG)

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.1}$	$\varnothing Z_{-0.5}^{+0.2}$
04	43.5	9.5	14.0	6.3
05	44.5	11.1	15.6	7.9
06	46.0	12.7	17.2	9.5
07	47.5	14.3	18.8	11.1
08	49.5	15.9	20.3	12.7
10	52.5	19.0	23.5	15.9
12	55.5	22.2	26.7	19.0
14	59.0	25.4	29.8	22.2
16	62.0	28.5	33.0	25.4
18	65.0	31.7	36.2	28.5
20	69.0	34.9	39.3	31.7
22	71.0	38.1	42.5	34.9
24	73.5	41.3	45.7	38.1

Shell Size	A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
10SL	9/16-24UNEF	20.1	19.5	22.5	27.0	05
12s & 12	5/8-24UNEF	23.4	21.5	22.5	28.0	06
14s & 14	3/4-20UNEF	24.9	22.5	23.0	28.5	07
16s & 16	7/8-20UNEF	27.7	23.5	23.5	30.0	08
18	1 -20UNEF	31.2	31.5	23.5	30.5	10
20	1 1/8-18UNEF	35.8	32.0	25.0	33.0	12
22	1 1/4-18UNEF	38.9	33.0	25.5	33.5	14
24	1 3/8-18UNEF	41.9	33.5	26.0	36.0	16
28	1 5/8-18UNEF	48.5	35.0	27.0	37.5	18
32	1 7/8-16UN	54.6	36.5	28.0	40.0	22
36	2 1/8-16UN	68.6	38.0	29.0	45.0	24

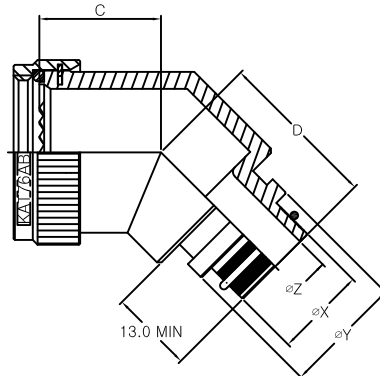
ADAPTER / KAT Series

Tinel-Lock Adapter Code 76 (BS 9522-F0017)

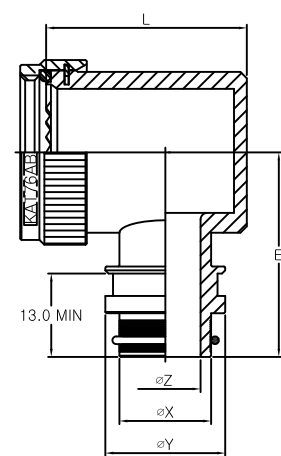


Tinel Ring

KAT76XX00-XXXXXX



KAT76XX45-XXXXXX



KAT76XX90-XXXXXX

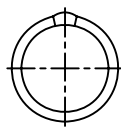
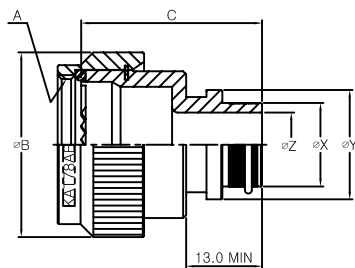
K	AT	76	A	B	00	-	16	08	Al
									Al: Single Braid
									Bl: Double Braid
									Entry Size
									Shell Size
									Angle
									00: 0°, 45: 45°, 90: 90°
									Finish
									B: Cadmium
									QQ-p-416, Type II, Class 3
									over electroless nickel
									C: Nickel Plating
									J: Passivated
									Material
									A: Aluminium alloy
									S: Stainless steel
									Connector Code
									Tinel-Lock Adapter
									Company Prefix (KUKDONG)

Entry Size	L MAX	$\varnothing X_{-0.1}^0$	$\varnothing Y_{\pm 0.1}$	$\varnothing Z_{-0.5}^{+0.2}$
04	31.0	9.5	14.0	6.3
05	32.8	11.1	15.6	7.9
06	34.3	12.7	17.2	9.5
07	35.8	14.3	18.8	11.1
08	37.3	15.9	20.3	12.7
10	40.6	19.0	23.5	15.9
12	43.7	22.2	26.7	19.0
14	47.0	25.4	29.8	22.2
16	50.0	28.5	33.0	25.4
18	53.3	31.7	36.2	28.5

Shell Size	A Thread-2B	$\varnothing B$ MAX	C MAX	D MAX	E MAX	Entry MAX
8	7/16-28UNEF	20.1	18.8	22.1	26.7	04
10	9/16-24UNEF	23.1	19.3	22.9	28.2	07
12	11/16-24UNEF	27.2	20.1	23.4	30.2	08
14	13/16-20UNEF	30.2	20.8	24.1	31.8	10
16	15/16-20UNEF	33.5	21.3	24.6	33.5	12
18	1 1/16-18UNEF	36.6	22.1	25.4	35.1	12
20	1 3/16-18UNEF	39.9	22.6	25.9	36.6	16
22	1 5/16-18UNEF	42.9	23.4	26.7	38.1	18
24	1 7/16-18UNEF	45.5	24.6	27.2	39.4	20

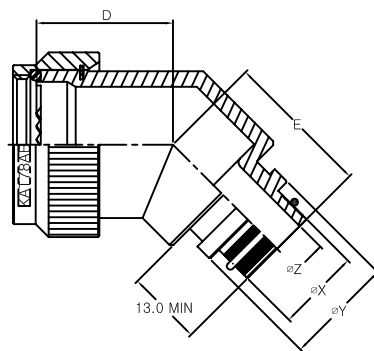
ADAPTER / KAT Series

Tinel-Lock Adapter Code 78 (BS 9522-F0032)

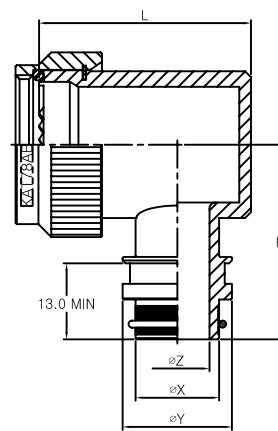


Tinel Ring

KAT78XX00-XXXXXX



KAT78XX45-XXXXXX



KAT78XX90-XXXXXX

K	AT	78	A	B	00	-	16	08	AI