

Standard-K® is the most enduring quick-disconnect connector ever developed for the electronics industry. Sixty years of flawless service has proven Standard-K to be rugged, reliable, light weight, and economical. Standard-K was developed during the golden age of connector design, when no compromises were made in the selection of construction materials. Standard-K insulators are made of diallyl phthalate or phenolic-thermosets which offer near perfect resistance to chemicals, superior electrical insulating properties, and excellent dimensional stability. Special Acme threads lock the connector halves together, while heavily plated light weight aluminum housings insure a rugged, corrosion resistant interconnection. Standard-K was originally developed for use on aircraft, television cameras, transmitters, and instruments, but has since found applications in oil field equipment, fixed and touring audio gear, shipboard circuit breakers, and test equipment. Standard-K is extremely versatile, with eight shell styles and over 45 contact arrangements from 2 to 110 circuits. Contacts are available in ratings from 5 amps up to 80 amps covering virtually any operating requirement. Standard-K has no complicated parts, special tooling, or demanding wire preparation requirements. Assembly of the connector is simple and fool-proof using a soldering iron and a screwdriver. Need something you don't see listed? We can custom tailor a connector for your application. Call us with your needs.

Applications

- Multi-pin Power/Signal Connections
- Test Equipment & Systems
- Industrial Machinery & Automation
- Instrument Panels
- Motion Control & Robotics
- Power Supplies & Generators
- Ground Support for Aircraft & Satellites
- Refrigeration Equipment
- Oil Field Equipment
- Television Cameras
- Professional Audio Equipment
- Medical Equipment
- Transportation Equipment
- Food Processing Equipment
- Security Systems

Features

Proven Design

Over 60 years of service in rugged, harsh environments.

Superior Materials

Standard-K insulators are made of diallyl phthalate or phenolic, offering near perfect resistance to chemicals, superior electrical insulating properties, and excellent dimensional stability. Aluminum housings with a heavy, clear plating insure a rugged corrosion resistant interconnection.

Quick Connect, Disconnect

Special Acme Threads lock the connector halves together and allow rapid mating and un-mating of the connector halves.

Variety of Shell Styles

Straight or right angle cable mounted plugs mate with two flange sizes of panel

mounted receptacles. All configurations are available with both male or female contacts. Rotational polarization is a standard option to avoid mis-mating connector pairs when more than one connector with the same layout is used on the same system.

Simple Assembly & Termination

Standard-K has no complicated parts, special tooling, or demanding wire preparation requirements. Assembly of the connector is simple and fool-proof using a soldering iron and a screw driver.

Wide Range of Wire Gauges and Current Carrying Capabilities

Wire sizes from 26 through 4 AWG can be accommodated. Contacts are rated from 5 amps for a size #20 contact up to 80 amps for a size #4 contact.



PEI-Genesis

Standard-K® is a registered trademark of PEI-Genesis.

Technical Specifications



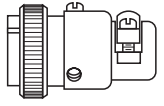
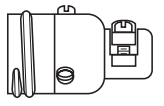
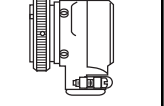
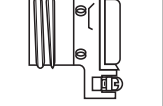
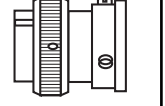
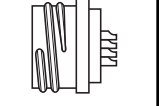
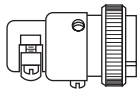
MATERIALS & FINISHES

Shell	Aluminum alloy, solid shell
Plating	NEW! Clear chromate over cadmium per QQ-P-416 Type II class 3 thickness or electroless nickel
Insulator	Diallyl phthalate, fabricated phenolic or mineral filled glass
Contacts	Copper alloy
Plating	Silver plate, (gold plate optional)

ELECTRICAL DATA

Operating Voltage/Test Voltage	There shall be no evidence of breakdown when the test voltages indicated in the chart on page 74 are applied, for a period of one minute between the contacts and between the shell and the contacts.	
Laboratory Conditions	Ambient Temperature	23°C to 27°C
	Relative Humidity	69% to 73%
	Barometric Pressure	29.70" to 9.75"
	Insert Material	Phenolic XXX-P or molded diallyl phthalate
Current Rating	See chart on page 74 .	

Mating Guide

	 K-21	 K-22	 K-23	 K-24	 K-31	 K-32
K-21		●		●		●
K-22	●		●		●	
K-23		●		●		●
K-24	●		●		●	
K-31		●		●		
K-32	●		●		●	



PEI-Genesis

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See back cover for contact details • www.PeiGenesis.com

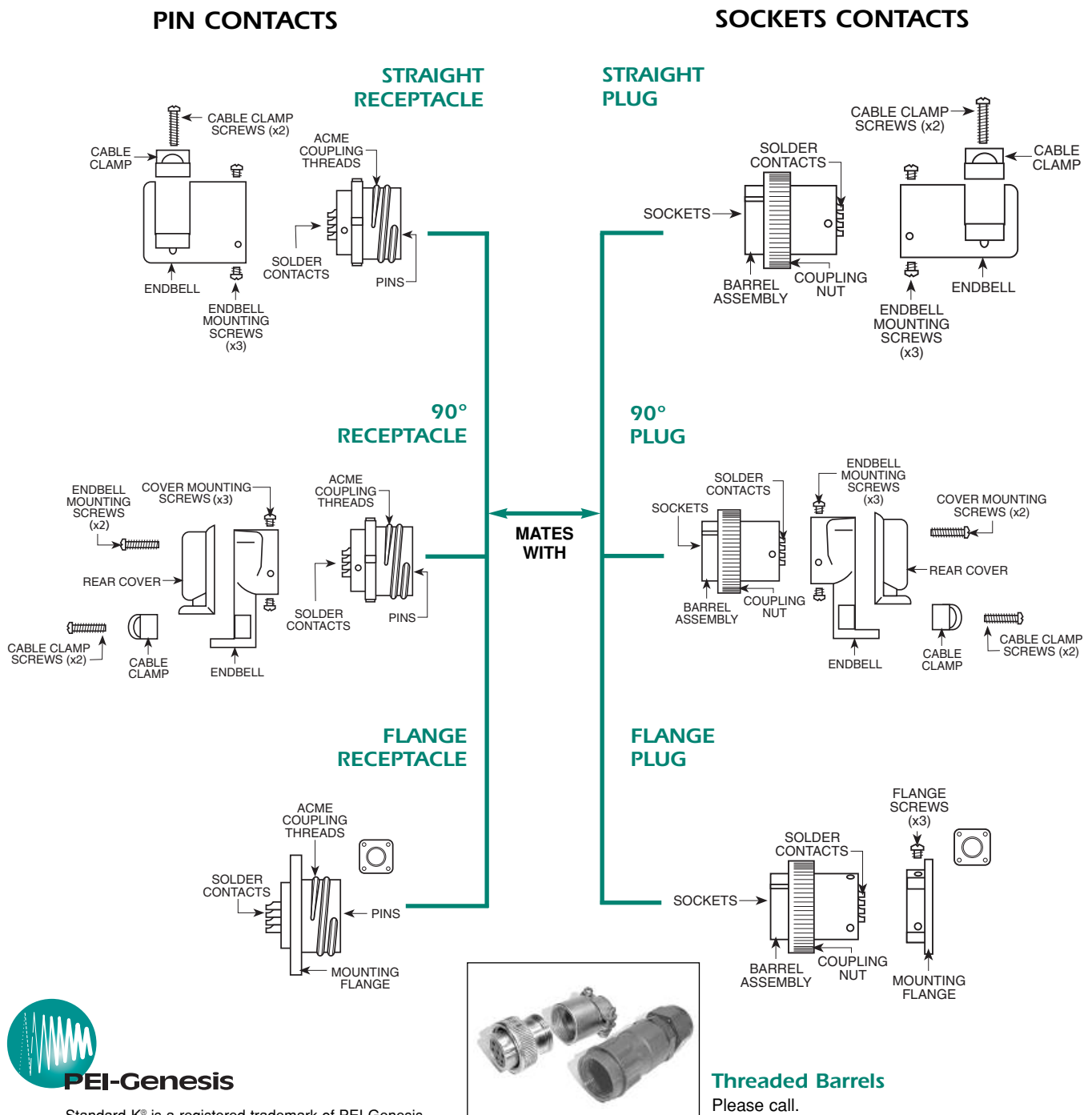
Specifications subject to change.

Technical Specifications

MECHANICAL

Operating Temperature	-67°F to +257°F (-55°C to +125°C)
Mating Life	500 Cycles minimum
Contact Type	Solder pot or crimp, mini coax
Number of Circuits	2 to 110
Polarization	Key and keyway plus optional rotational polarization
Color	Silver. Insulators are brown or black.

Exploded View



PEI-Genesis

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Layouts by Number of Contacts

STEP 1: Choose the shell size layout by number of contacts

Choose the contact arrangement from the layouts pictured on pages SK 6 and SK7 or the chart below. Layout designations include a letter prefix indicating the shell size. The coupling diameter of the shells are as follows: WK = 7/8" GK = 1-3/16" SK = 1-5/16" NK = 1-9/16" FK = 1-13/16" LK = 2-1/2"

Layout	Hot Products	CONTACTS								AMPS	Test Voltage 60 cps (ac rms)	Optional Rotations	
		Total	Sizes (max AWG wire gauge)										
			20*	16*	14	10	8	6	4				
WK-M2	✓	2		2						10	2350	W, X	
SK-S2		2							2	80	2050	-	
GK-V2		2			2					15	3450	-	
GK-C3		3			1				2	15/60	1300	V, X, Y	
NK-E3		3							3	80	2350	-	
WK-C3	✓	3		1		2				10/30	1300	W	
WK-3	✓	3			3					15	1700	V, W, X, Z	
WK-4	✓	4		4						10	1300	V, W, Z	
NK-P4		4							4	60	2350	W, X, Y, Z	
GK-4	✓	4				4				30	1300	-	
WK-S4		4		2		2				10/30	1300	W, Z	
WK-5	✓	5		5						10	1300	V, W, X, Y, Z	
SK-5		5				5				30	2050	-	
WK-S5		5		4		1				10/30	1300	-	
SK-6	✓	6				6				30	1700	W	
WK-6	✓	6		6						10	1300	V, W, X, Y, Z	
WK-A7	✓	7		7						10	1300	V, W, X, Y, Z	
GK-R7		7		5	2					10/15	3050 (7) 1300 (1-6)	V, X, Y	
SK-M7		7		3		4				10/30	2050	-	
NK-M8		8				8				30	2050	-	
WK-8	✓	8	8							5	2050	V, W, X, Y, Z	
NK-L8	✓	8			4		4			15/40	2050	V, X, Y	
GK-8		8			8					15	1300	-	
GK-S8	✓	8		4		4				10/30	1300	-	
NK-D8		8			8					15	2600	-	
GK-9	✓	9		9						10	1700	V, W, X, Y, Z	
SK-M10		10		8		2				10/30	2050	V, W, Z	
NK-L11	✓	11		1	8	2				10/15/30	2050	-	
GK-12	✓	12		12						10	1300	V, W, X, Y, Z	
NK-12		12		12						15	2050	V, W, X, Y, Z	
SK-D12		12		8		4				10/30	1300	W, X, Y	
NK-L15		15			15					15	1700	-	
SK-C16	✓	16		14		2				10/30	1300	W, X, Y, Z	
SK-19	✓	19		19						10	1300	W, X, Y, Z	
FK-L20		20		13		7				5	2050	-	
FK-W20	✓	20	Uses Coax contacts (sold separately)**								-	1000	-
NK-L23	✓	23		19	2	2				10/15/30	1300	-	
SK-24	✓	24	24							5	1700	-	
NK-27	✓	27		27						10	1300	V, W, X, Y, Z	
FK-32		32		32						10	2900 (1-2) 1700 (3-32)	-	
FK-37	✓	37		37						10	1300	V, W, X, Y, Z	
FK-46	✓	46		46						10	1300	V, W, X, Y, Z	
FK-75	✓	75	75							10	1300	W, X, Y, Z	
LK-81		81		81						10	1300	V, W, X, Y, Z	
LK-110		110	110							5	1000	V, W, X, Y, Z	

* Size 20 contacts are gold plated. Size 16 are standard silver plated, optional gold plated (add -A95 suffix to part number). All other sizes silver plated.

** Call for more information.

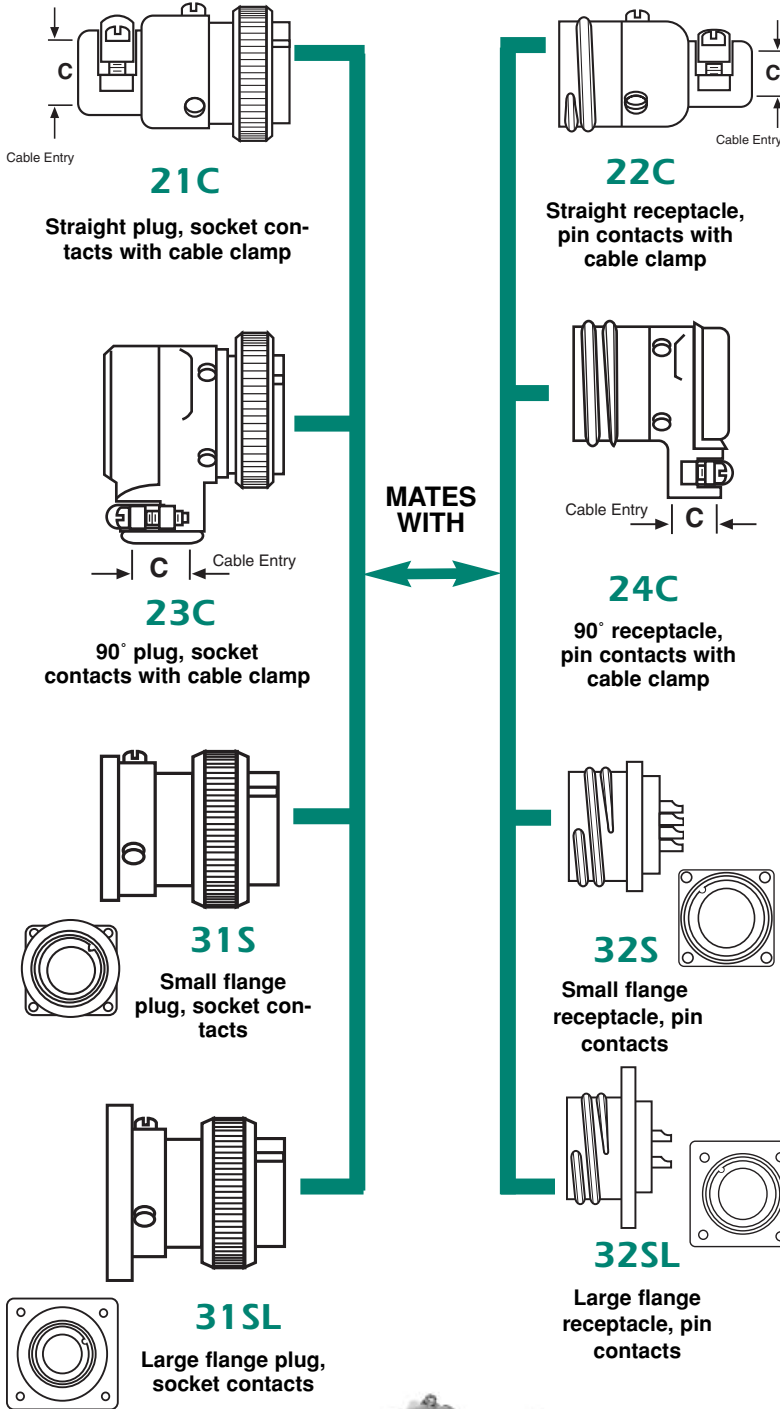
✓ Indicates most popular layouts.



**R*K Reverse
Standard K
Connector**

Please call.

STEP 2: Choose shell style



STEP 3: Choose cable clamp

(Insert the capacity in inches for standard clamps, insert the suffix code for straight sealed endbells).

Straight Endbells 21C/22C							
Dimension C: (Maximum cable clamp capacity)							
Inches	1/4	5/16	3/8	1/2	5/8	3/4	7/8
WK	✓	✓	✓	✓	✓		
GK				✓	✓		
SK				✓	✓	✓	
NK				✓	✓		
FK							✓
LK							✓

Right Angle Endbells 23C/24C							
Dimension C: (Maximum cable clamp capacity)							
Inches	3/8	1/2	5/8	7/8	11/16	3/4	1
WK	✓		✓				
GK		✓	✓				
SK	✓	✓				✓	
NK					✓		✓
FK			✓	✓			
LK	Not available in 23C or 24C						

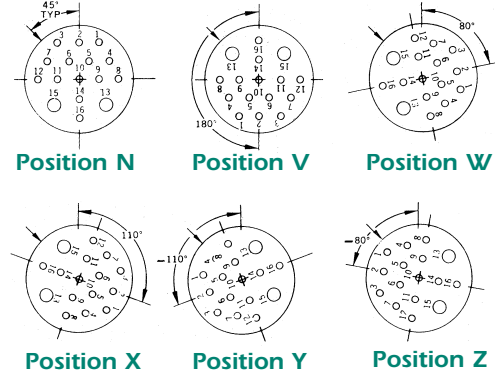
STEP 4: Optional rotations

Choose a rotation (omit this character for normal orientation). Refer to chart on [page 74](#) for rotations for your layout.

NOTES:

- Shell polarizing means is indicated by arrow at 45° and will remain constant regardless of insert rotation.
- Insert to be rotated within the shell to the required position as viewed from engaging end of pin insert, wire side of socket insert.
- Consult factory for alternate positions available for each layout or for alternate positions not shown.

See Note 1



STEP 5: Shell plating

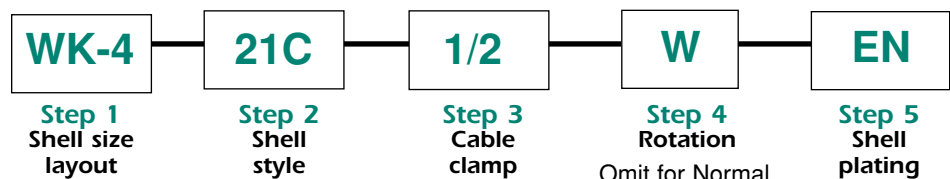
omit - (for Clear Chromate over Cadmium)

EN - Electroless Nickel



STEP 6: Create part number

Create your ordering # by using the above 5 steps.




Layouts by Shell Size






Contact Arrangements

(Front View, Pin Insert)

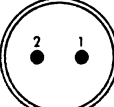

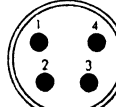
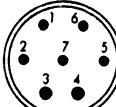
SHELL SIZE WK

					
Contacts	WK-M2 2	WK-3 3	WK-C3 3	WK-4 4	WK-S4 4
Wires	2-#16	3-#14	1-#16 (3) 2-#10 (1 & 2)	4-#16	2-#16 (1 & 3) 2-#10 (2 & 4)



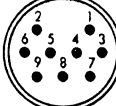
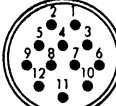
SHELL SIZE WK

					
Contacts	WK-5 5	WK-S5 5	WK-6 6	WKA7 7	WK-8 8
Wiring	5-#16	4-#16 (1-4) 1-#10 (5)	6-#16	7-#16	8-#20


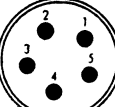
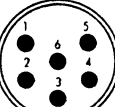

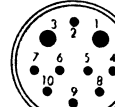
SHELL SIZE GK

				
Contacts	GK-V2 2	GK-C3 3	GK-4 4	GK-R7 7
Wires	2-#14	1-#14 (1) 2-#6 (2 & 3)	4-#10	5-#16 (1, 2, 5, 6, 7) 2-#14 (3 & 4)

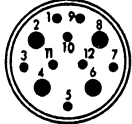
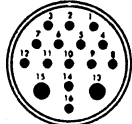
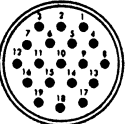
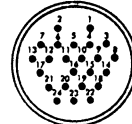
SHELL SIZE GK

				
Contacts	GK-8 8	GK-S8 8	GK-9 9	GK-12 12
Wires	8-#14	4-#16 (2, 3, 5, 6) 4-#10 (1, 4, 7, 8)	9-#16	12-#16

SHELL SIZE SK

					
Contacts	SK-S2 2	SK-5 5	SK-6 6	SK-M7 7	SK-M10 10
Wires	2-#4	5-#10	6-#10	3-#16 (2, 6, 7) 4-#10 (1, 3, 4, 5)	8-#16 (2, 4-10) 2-#10 (1 & 3)

SHELL SIZE SK

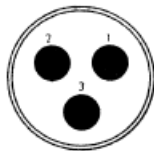
				
Contacts	SK-D12 12	SK-C16 16	SK-19 19	SK-24 24
Wires	8-#16 (1, 3, 5, 7, 9-12) 4-#10 (2, 4, 6, 8)	14-#16 (1-12, 14, 16) 2-#10 (13 & 15)	19-#16	24-#20

Layouts by Shell Size

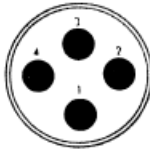
Contact Arrangements

(Front View, Pin Insert)

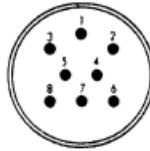
SHELL SIZE NK



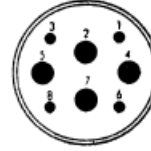
NK-E3
3
3-#4



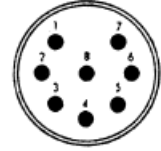
NK-P4
4
4-#6



NK-D8
8
8-#14



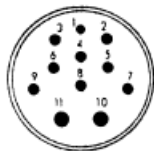
NK-L8
8
4-#14 (1, 3, 6, 8)
4-#8 (2, 4, 5, 7)



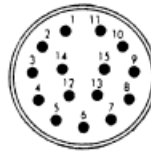
NK-M8
8
8-#10

Contacts
Wires

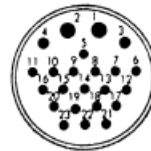
SHELL SIZE NK



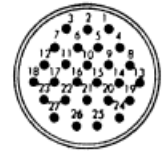
NK-L11
11
1-#16 (1)
8-#14 (2-9)
2-#10 (10-11)



NK-L15
15
15-#14



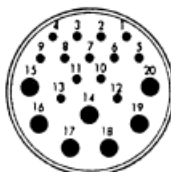
NK-L23
23
19-#16 (5-23)
2-#14 (3,4)
2-#10 (1, 2)



NK-27
27
27-#16

Contacts
Wires

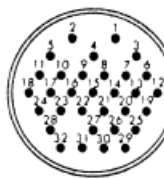
SHELL SIZE FK



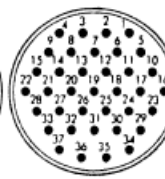
FK-L20
20
13-#16 (1-13)
7-#10 (14-20)



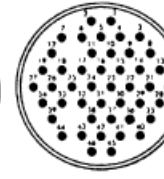
FK-W20
20
20 min. coax.
Call for contacts



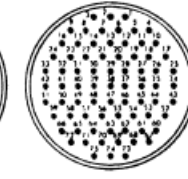
FK-32
32
32-#16



FK-37
37
37-#16



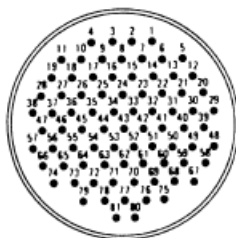
FK-46
46
46-#16



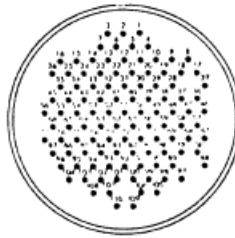
FK-75
75
75-#20

Contacts
Wires

SHELL SIZE LK



LK-81
81
81- #16



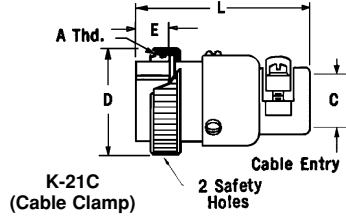
LK-110
110
110- #20

Contacts
Wiring

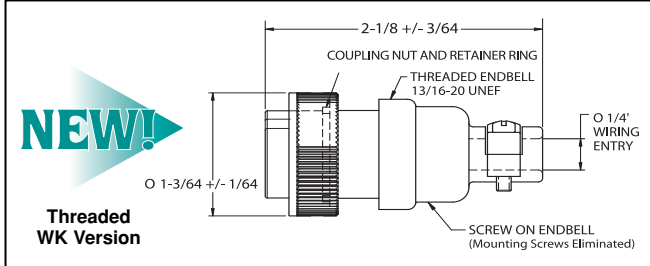
Dimensions

K-21C Straight Plug

Socket Contacts



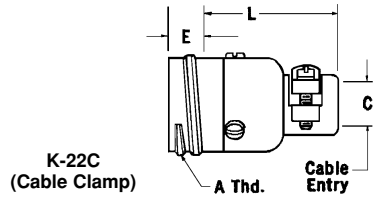
Socket Inserts



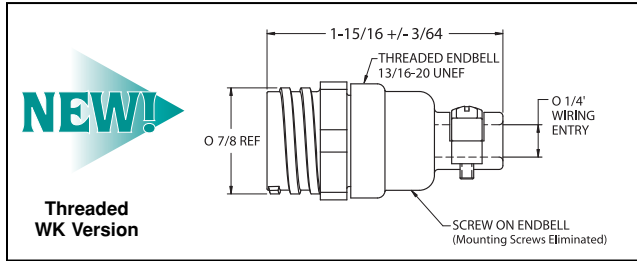
Part Number	D DIA $\pm 1/64$	E $\pm 1/64$	L $\pm 3/64$	A THD	C
WK-(*)-21C	1-3/64	7/16	2-3/32	7/8-6	 See chart on page 75.
GK-(*)-21C	1-23/64	7/16	2-3/16	1-3/16-6	
SK-(*)-21C	1-15/32	7/16	2-3/16	1-5/16-6	
NK-(*)-21C	1-47/64	7/16	2-5/32	1-9/16-6	
FK-(*)-21C	2-1/64	7/16	2-5/16	1-13/16-6	
LK-(*)-21C	2-7/8	1/2	3-1/8	2-1/2-6	

K-22C Straight Receptacle

Pin Contacts



Pin Inserts

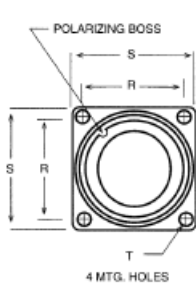


Part Number	E $\pm 1/64$	L $\pm 3/64$	A THD	C
WK-(*)-22C	7/16	1-29/32	7/8-6	 See chart on page 75.
GK-(*)-22C	7/16	2	1-3/16-6	
SK-(*)-22C	7/16	2	1-5/16-6	
NK-(*)-22C	7/16	1-31/32	1-9/16-6	
FK-(*)-22C	7/16	2-5/32	1-13/16-6	
LK-(*)-22C	1/2	2-15/16	2-1/2-6	

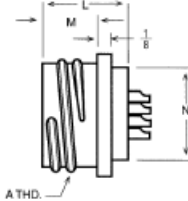
K-32S & K-32SL Wall Mount Receptacles

Pin Contacts

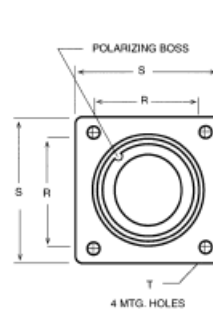
Pin Inserts



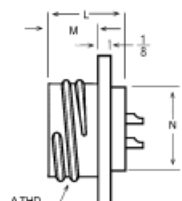
K-32S (Small Flange)



Pin Inserts



K-32SL (Large Flange)



K-32S (small flange) and K-32SL (large flange)

Order Number	For K-32S and K-32SL				For K-32S			For K-32SL		
	L $\pm 3/64$	N $\pm .005$	M $\pm 1/64$	A THD.	R $\pm .005$	S $\pm 1/64$	T $\pm .005$	R $\pm .005$	S $\pm 1/64$	T $\pm .005$
WK-(*)-32S	3/4	3/4	7/16	7/8-6	.729	15/16	.120	.972	1-5/16	.144
GK-(*)-32S	3/4	1	7/16	1-3/16-6	.972	1-1/4	.120	1.193	1-9/16	.169
SK-(*)-32S	3/4	1-1/8	7/16	1-5/16-6	1.038	1-3/8	.120	1.282	1-11/16	.169
NK-(*)-32S	3/4	1-3/8	7/16	1-9/16-6	1.259	1-5/8	.144	1.503	1-15/16	.169
FK-(*)-32S	3/4	1-5/8	7/16	1-13/16-6	1.503	1-7/8	.144	1.679	2-1/8	.169
LK-(*)-32S	27/32	2-1/4	1/2	2-1/2-6	2.077	2-9/16	.169	2.210	2-7/8	.169

For K-32SL (large flange), add "L" to nomenclature, e.g., WK-(*)-32S becomes WK-(*)-32SL. Large flange most popular.
* Add contact arrangement.

See back cover for contact details • www.Peigenesis.com

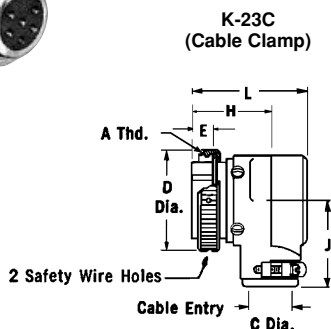
Specifications subject to change.

Dimensions

K-23C 90° Angle Plug

Socket Contacts

Socket Inserts

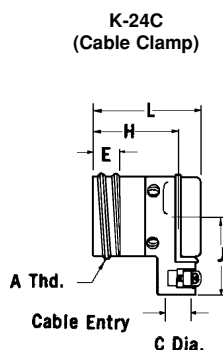


Part Number	C ±1/64	D ±1/64	E ±1/64	H ±3/64	J ±1/64	L ±1/16	A THD
WK-(*)-23C-3/8"	13/32	1-3/64	7/16	1-23/64	1	1-3/4	7/8-6
WK-(*)-23C-1/2"	17/32	1-3/64	7/16	1-31/64	1	2	7/8-6
WK-(*)-23C-5/8"	21/32	1-3/64	7/16	1-9/16	1	2-9/64	7/8-6
GK-(*)-23C-1/2"	17/32	1-23/64	7/16	1-7/16	1-9/32	1-15/16	1-3/16-6
GK-(*)-23C-5/8"	21/32	1-23/64	7/16	1-9/16	1-9/32	2-5/32	1-3/16-6
SK-(*)-23C-1/2"	17/32	1-15/32	7/16	1-29/64	1-7/16	1-15/16	1-5/16-6
SK-(*)-23C-5/8"	21/32	1-15/32	7/16	1-17/32	1-7/16	2-3/32	1-5/16-6
SK-(*)-23C-3/4"	25/32	1-15/32	7/16	1-19/32	1-7/16	2-7/32	1-5/16-6
NK-(*)-23C-11/16"	23/32	1-47/64	7/16	1-35/64	1-9/16	2-1/8	1-9/16-6
FK-(*)-23C-5/8"	21/32	2-1/64	7/16	1-33/64	1-23/32	2-1/16	1-13/16-6

K-24C 90° Angle Receptacle

Pin Contacts

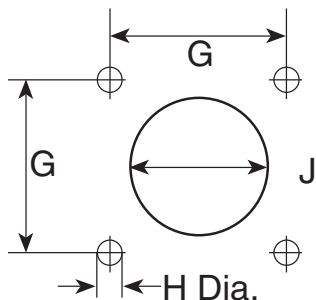
Pin Inserts



Part Number	C ±1/64	E ±1/64	H ±3/64	J ±1/64	L ±1/16	A THD
WK-(*)-24C-3/8"	13/32	7/16	1-11/64	1	1-9/16	7/8-6
WK-(*)-24C-1/2"	17/32	7/16	1-19/64	1	1-13/16	7/8-6
WK-(*)-24C-5/8"	21/32	7/16	1-3/8	1	1-61/64	7/8-6
GK-(*)-24C-1/2"	17/32	7/16	1-1/4	1-9/32	1-3/4	1-3/16-6
GK-(*)-24C-5/8"	21/32	7/16	1-3/8	1-9/32	1-31/32	1-3/16-6
SK-(*)-24C-1/2"	17/32	7/16	1-17/64	1-7/16	1-3/4	1-5/16-6
SK-(*)-24C-5/8"	21/32	7/16	1-11/32	1-7/16	1-29/32	1-5/16-6
SK-(*)-24C-3/4"	25/32	7/16	1-13/32	1-7/16	2-1/32	1-5/16-6
NK-(*)-24C-11/16"	23/32	7/16	1-23/64	1-9/16	1-15/16	1-9/16-6
FK-(*)-24C-5/8"	21/32	7/16	1-23/64	1-23/32	1-7/8	1-13/16-6

* Add contact arrangement.

Panel Cutouts

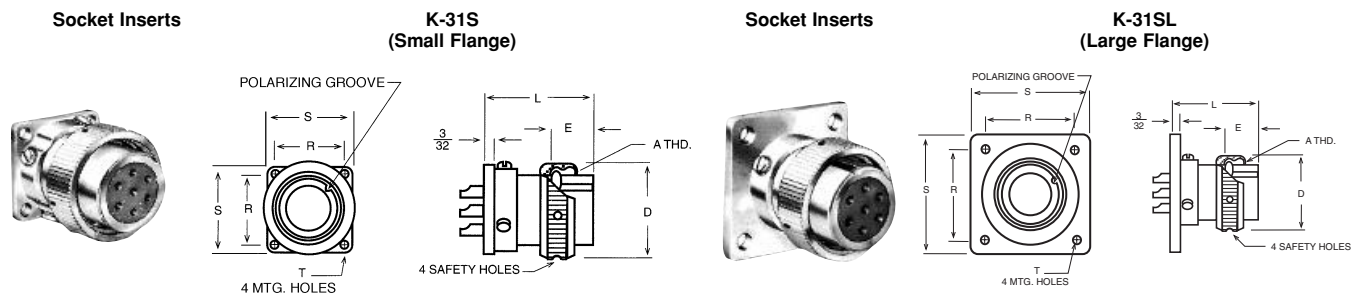


Shell Size	G+/-0.005				H min.		J min.
	31S	32S	31SL	32SL	31S	32S	
WK	.729	.972	.134	.154	.785		
GK	.972	1.193	.134	.177	1.040		
SK	1.038	1.282	.134	.177	1.160		
NK	1.259	1.503	.154	.177	1.410		
FK	1.503	1.679	.154	.177	1.660		
LK	2.077	2.210	.177	.177	2.330		

Dimensions

K-31S & K-31SL Wall Mount Plug

Socket Contacts



K-31S (small flange) and K-31SL (large flange)

Order Number	For K-31S and K-31SL				For K-31S			For K-31SL		
	D	E	L	A THD.	R	S	T	R	S	T
WK-(*)-31S	1-3/64	7/16	1-3/16	7/8-6	.730	15/16	.120	.972	1-5/16	.144
GK-(*)-31S	1-23/64	7/16	1-7/32	1-3/16-6	.972	1-1/4	.120	1.192	1-9/16	.169
SK-(*)-31S	1-15/32	7/16	1-7/32	1-5/16-6	1.038	1-3/8	.120	1.280	1-11/16	.169
NK-(*)-31S	1-47/64	7/16	1-7/32	1-9/16-6	1.259	1-5/8	.169	1.500	1-15/16	.169
FK-(*)-31S	2-1/64	7/16	1-1/4	1-13/16-6	1.502	1-7/8	.169	1.678	2-1/8	.169
LK-(*)-31S	2-7/8	1/2	1-13/32	2-1/2-6	2.077	2-9/16	.169	2.210	2-7/8	.169

For K-31SL (large flange), add "L" to nomenclature, e.g., WK-(*)-31S becomes WK-(*)-31SL. Large flange most popular.
 * Add contact arrangement.

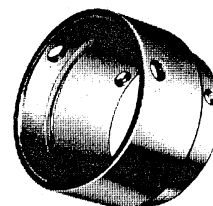
Other Products

Dust Caps

Metal threaded dust caps with chain, or low cost, press-fit plastic dust caps are available.

SHELL SIZE	FOR PLUGS		FOR RECEPTACLES	
	METAL W/CHAIN	PLASTIC	METAL W/CHAIN	PLASTIC
WK	WK-59A-2	WK-P	WK-60A-2	WK-R
GK	GK-59A-2	GK-P	GK-60A-2	GK-R
SK	SK-59A-2	SK-P	SK-60A-2	SK-R
NK	NK-59A-2	NK-P	NK-60A-2	NK-R
FK	FK-59A-2	FK-P	FK-60A-2	FK-R
LK	LK-59A-2	LK-P	LK-60A-2	LK-R

Barrel Extensions



SHELL SIZE	PART NUMBER	LENGTH
SK	019961-0001	1 7/32"
NK	019961-0014	1/2"
	019961-0021	3/4"
	019961-0006	1 1/8"
FK	019961-0003	1 7/32"
	019961-0016	1"
LK	019961-0012	1"