

Lightweight, General Purpose, High Density Connectors

The KO series, designed primarily for instrumentation and aircraft/ground support equipment, is now used in such varied applications as rapid transit, machine tools, recreational vehicles and automotive test instrumentation.

The KO connector features Acme thread for quick disconnect. It has a peripheral O ring seal and is suitable for environmental applications when the rear of the connector is potted. The insulators are of polyamide sandwich construction. Shells are

diecast aluminum and the contacts are solder type. Straight, 45° and 90° endbells are available. The KO series offers a wide variety of contact arrangements and shell styles for many low cost, high density connector applications.

Standard Data

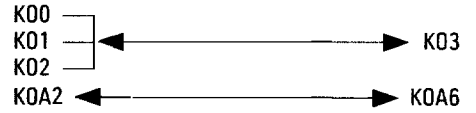
MATERIALS AND FINISHES

Shell Material: Die cast aluminum alloy per QQ-A-591
Shell Finish: .0002 inches cadmium plate with clear chromate conversion coating
Insulation: Polyamide (nylon) UL 94V-2 rated
Contact Termination: Solder
Contact Material: Copper Alloy
Contact Finish: .00002 inches gold over .0001 inches silver
Number of Contacts: 3-50
Contact Arrangements: 9
Coupling Method: Special Acme thread coupling nut
Contact Rating: #20—7.5 amps #16—22 amps #12—41 amps

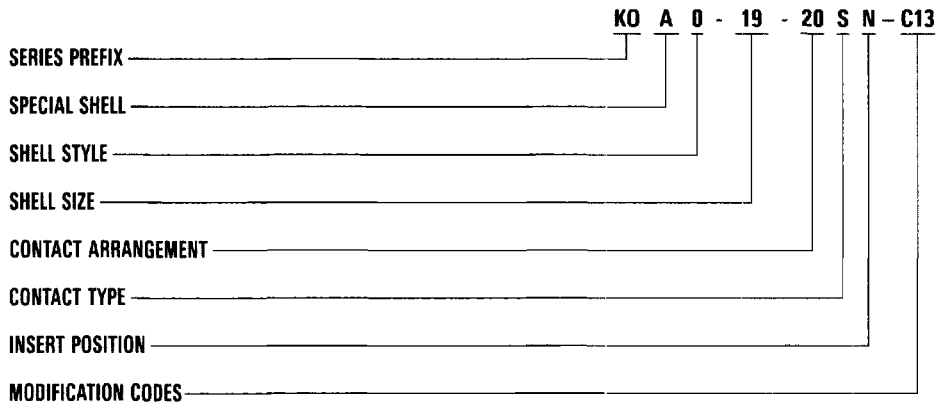
SERVICE RATING

Test Voltage AC (rms) 60 cps		
Sea Level - Disengaged with grommet removed		
Service	Voltage	
1	1250	
2	2400	
3	3000	
70,000 Feet - Simulated Altitude	Engaged	Disengaged
Service		
1	940	310
2	1800	600
3	2250	750
Temperature Rating — -55° to +125°C		

MATING GUIDE



How To Order – Connectors



SERIES PREFIX

KO – ITT Cannon prefix

SPECIAL SHELL

- A – used with 38, 48 and 50 contact arrangements only—not available in wall-mount receptacle
- B – used with A10 layout only. (To receive high current contacts, #16, #12)

SHELL STYLE

- 0 – wall mounting receptacle—will take endbell
- 1 – cable connecting receptacle—will take endbell
- 2 – box mounting receptacle—will not take endbell
- 3 – plug

SHELL SIZE

16, 19, 21

CONTACT ARRANGEMENT

See page 359

CONTACT TYPE

- P – Pin
- S – Socket

INSERT POSITION

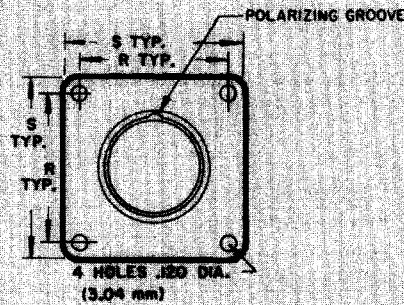
N – Normal. See page 359 for alternate insert positions.

MODIFICATION CODES

- C13— Melamine insulator material
- D – Diallyl Phthalate insulator material

Wall Mounting Receptacle

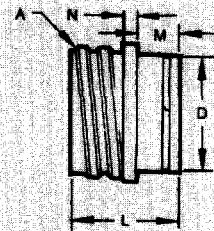
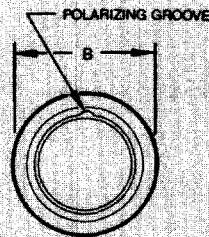
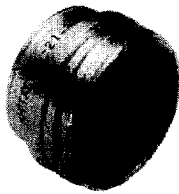
K00



Part Number by Shell Size	A thd. Spl. Acme	D dia. ± .005	L	M	N	R ± .005	S
K00-16L-**	1 -6	.833 (21.15)	.796 (20.24)	.328 (8.33)	.093 (2.36)	1.078 (27.38)	1.359 (34.51)
K00-19L-**	1-3/16-6	1.020 (25.90)	.796 (20.24)	.328 (8.33)	.093 (2.36)	1.219 (30.96)	1.500 (38.10)
K00-21L-**	1-5/16-6	1.175 (29.84)	.796 (20.24)	.328 (8.33)	.093 (2.36)	1.297 (32.94)	1.687 (42.84)

Cable Connecting Receptacle

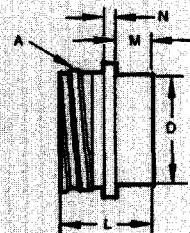
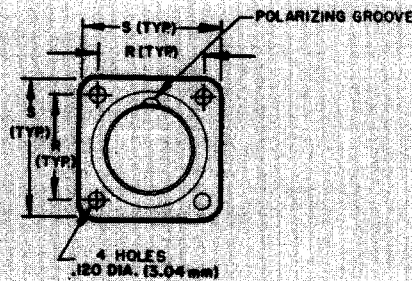
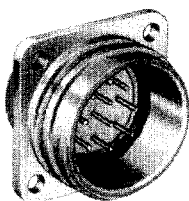
K01



Part Number by Shell Size	A thd. Spl. Acme	B dia. ± .005	D dia. ± .005	L	M	N
K01-16-**	1 -6	1.010 (25.65)	.833 (21.15)	.765 (19.44)	.396 (7.54)	.093 (2.36)
K01-19-**	1-3/16-6	1.197 (30.40)	1.020 (25.90)	.765 (19.44)	.396 (7.54)	.093 (2.36)
K01-21-**	1-5/16-6	1.322 (33.57)	1.175 (29.84)	.765 (19.44)	.396 (7.54)	.093 (2.36)
K0A1-21-**	1-5/16-6	1.312 (33.32)	1.195 (30.35)	.719 (18.26)	—	—

Box Mounting Receptacle

K02

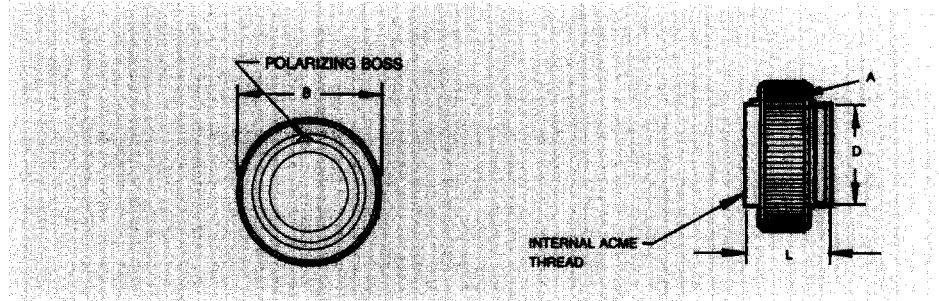
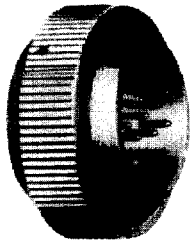


Part Number by Shell Size	A thd. Spl. Acme	D dia. ± .005	L	M	N	R ± .005	S
K02-16-**	1 -6	.833 (21.15)	.765 (19.44)	.296 (7.54)	.093 (2.36)	.843 (21.41)	1.125 (28.57)
K02-19-**	1-3/16-6	1.020 (25.90)	.765 (19.44)	.296 (7.54)	.093 (2.36)	.972 (24.68)	1.250 (31.75)
K02-21-**	1-5/16-6	1.175 (29.84)	.765 (19.44)	.296 (7.54)	.093 (2.36)	1.062 (26.97)	1.343 (34.11)
K0A2-21-**	1-5/16-6	1.312 (33.32)	.785 (19.94)	.313 (7.95)	.062 (1.57)	1.156 (29.36)	1.500 (38.10)

**Add contact arrangement, contact type (P for pin, S for socket) and, if required, alternate insert position.
NOTE: Unless specified, all inch dimensions are ±.015 (0.38). Hole dimensions are ±.005 (0.13).

Plug

K03

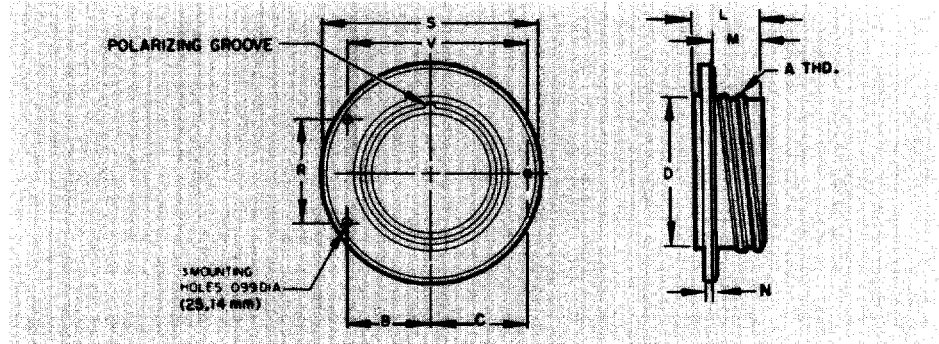
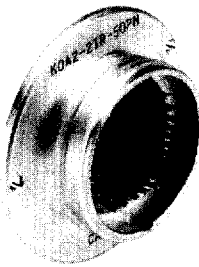


Part Number by Shell Size	A thd. Spl. Acme	B dia.	D dia. $\pm .005$	L
K03-16-**	1 -6	1.171 (29.74)	.833 (21.15)	.734 (18.65)
K03-19-**	1-3/16-6	1.375 (34.92)	1.020 (25.90)	.734 (18.65)
K03-21-**	1-5/16-6	1.468 (37.28)	1.175 (29.84)	.734 (18.65)
K0A3-21-**	1-5/16-6	1.500 (38.10)	1.195 (30.35)	.692 (17.58)

**Add contact arrangement, contact type (P for pin, S for socket) and, if required, alternate insert position.

Box Mounting Receptacle with Round Flange

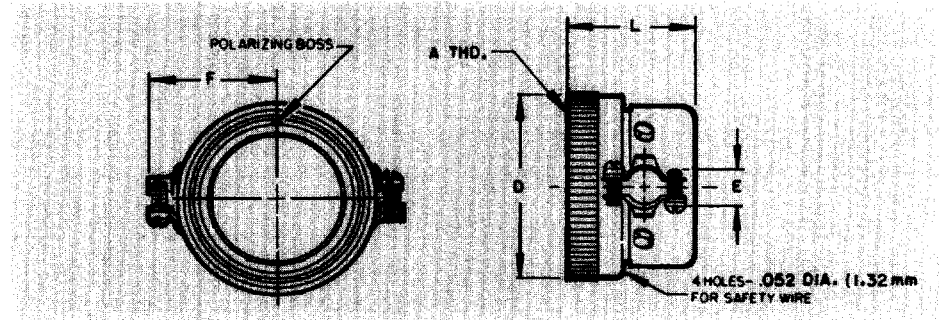
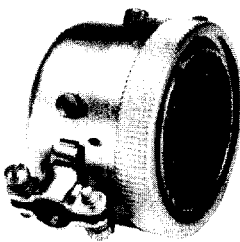
Special KO



Part Number by Shell Size	A Thread Acme	D dia.	L	M	N	R $\pm .005$	S	V $\pm .005$
K0A2-21R-*	1-5/16-6	1.312 (33.32)	.593 (15.08)	.406 (10.31)	.093 (2.38)	.936 (23.77)	1.906 (48.41)	1.606 (40.79)

Plug with Junction Shell

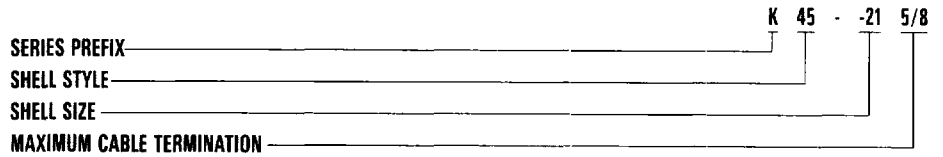
Special KO



Part Number by Shell Size	A Thread Acme	D dia.	E	F Approx.	L $\pm .046$
K0A6-21S2C-*	1-5/16-6	1.500 (38.10)	.312 (7.93)	1.000 (25.40)	1.031 (26.19)

*Add contact arrangement and contact type (P for pin, S for socket).
NOTE: Unless specified, all inch dimensions are $\pm .015$ (0.38). Hole dimensions are $\pm .005$ (0.13).

How To Order – Endbells



SERIES PREFIX
K – ITT Cannon prefix

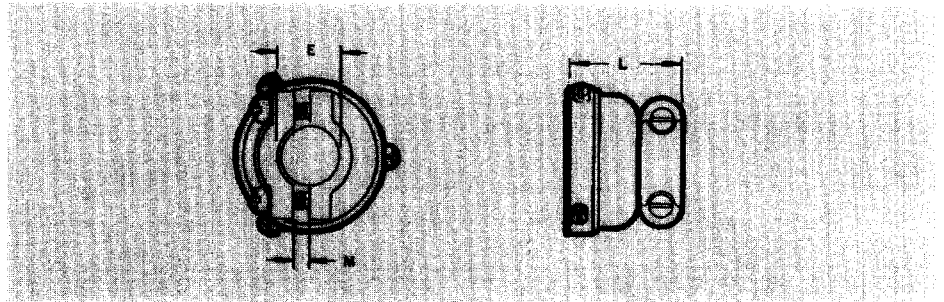
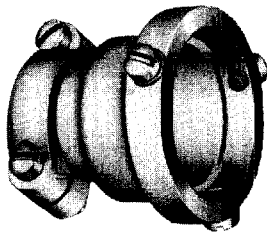
SHELL STYLE
06 – straight
08 – 90°
45 – 45°

SHELL SIZE
16, 19, 21

MAXIMUM CABLE TERMINATION
Size 16 – 3/8"
Size 19 – 1/2"
Size 21 – 5/8"

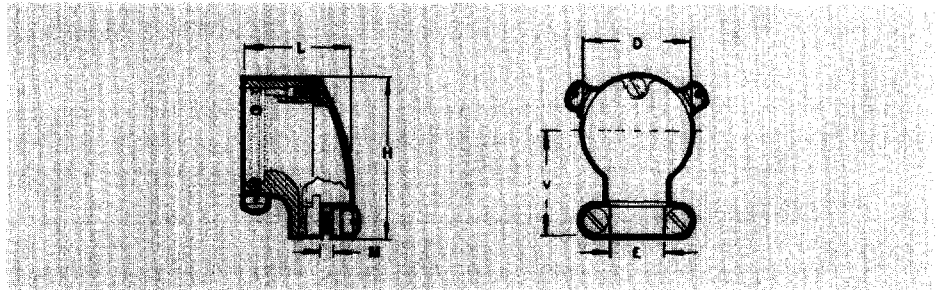
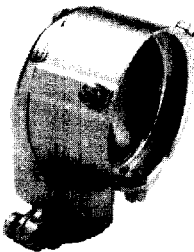
Endbells

K06 Straight



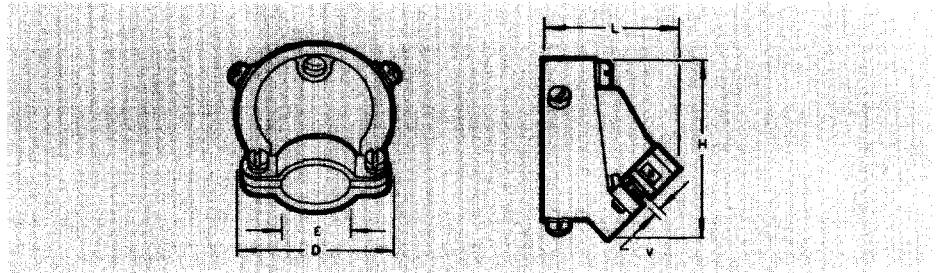
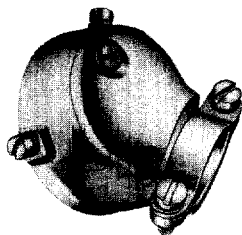
Part Number by Shell Size	E dia.	L	M	Part Number by Shell Size	E dia.	L	M
K06-16-3/8	.406 (10.31)	.875 (22.22)	.093 (2.36)	K06-21-5/8	.656 (16.66)	1.062 (26.97)	.125 (3.17)
K06-19-1/2	.531 (13.48)	.968 (24.58)	.125 (3.17)	K0A6-21-5/8	.656 (16.66)	1.062 (26.97)	.125 (3.17)

K08 90°



Part Number by Shell Size	D	E dia.	H	L	M	V	Part Number by Shell Size	D	E dia.	H	L	M	V
K08-16-3/8	.968 (24.58)	.406 (10.31)	1.359 (34.52)	.984 (24.99)	.093 (2.36)	.867 (22.22)	K08-21-5/8	1.312 (33.32)	.656 (16.66)	1.906 (48.41)	1.234 (31.34)	.125 (3.17)	1.250 (31.75)
K08-19-1/2	1.156 (29.36)	.531 (13.48)	1.672 (42.47)	1.109 (28.16)	.125 (3.17)	1.093 (27.76)	K0A8-21-5/8	1.312 (33.32)	.656 (16.66)	1.906 (48.41)	1.234 (31.34)	.125 (3.17)	1.250 (31.75)

K45 45°

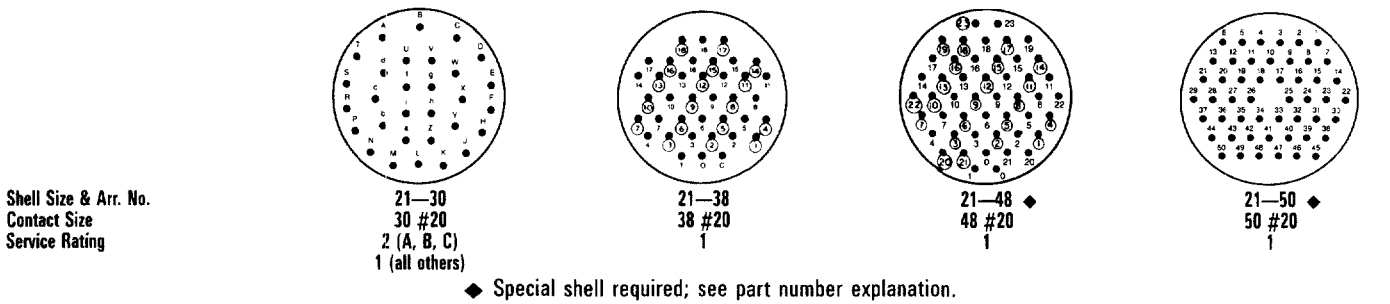
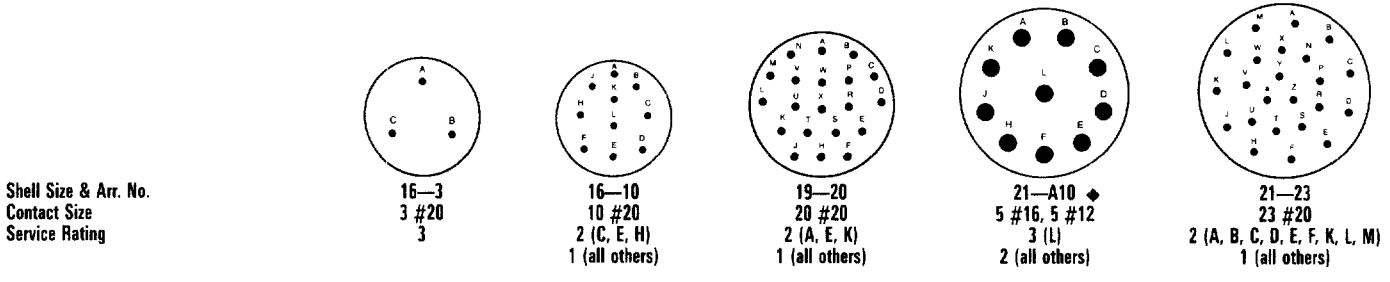


Part Number by Shell Size	D	E dia.	H	L	V
K45-16-3/8	.968 (25.58)	.406 (10.31)	1.078 (27.38)	.890 (22.60)	.093 (2.36)
K45-19-1/2	1.156 (29.36)	.531 (13.48)	1.296 (32.91)	1.015 (25.78)	.125 (3.17)
K45-21-5/8	1.312 (33.32)	.656 (16.66)	1.500 (38.10)	1.078 (27.38)	.125 (3.17)

NOTE: Unless specified, all inch dimensions are $\pm .015$ (0.38).

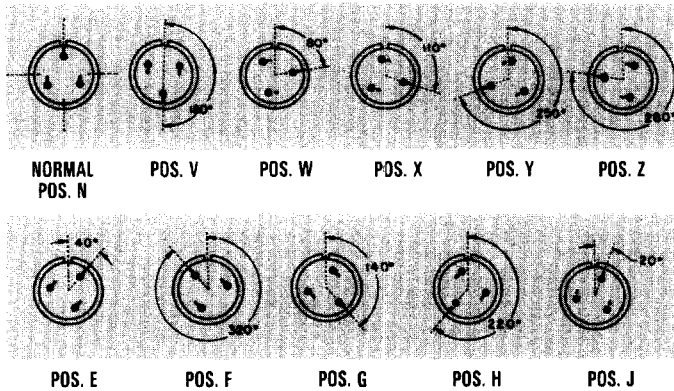
Contact Arrangements

Face View Of Pin Insert



Alternate Positions

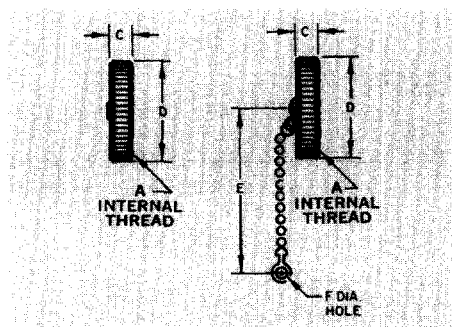
21-38 and 21-48 arrangements are 180° from those shown.



(Viewed from face of pin insert)

Shell	Arr. No.	Insert Positions Available										
		N	V	W	X	Y	Z	E	F	G	H	J
16	3	•	•	•	•	•	•	•	•	•	•	•
	10	•	•	•	•	•	•	•	•	•	•	•
19	20	•	•	•	•	•	•	•	•	•	•	•
	13	•	•	•	•	•	•	•	•	•	•	•
	23	•	•	•	•	•	•	•	•	•	•	•
21	30	•	•	•	•	•	•	•	•	•	•	•
	38	•	•	•	•	•	•	•	•	•	•	•
	48	•	•	•	•	•	•	•	•	•	•	•
	50	•	•	•	•	•	•	•	•	•	•	•
21-A10	◆	•	•	•	•	•	•	•	•	•	•	

KO2 Dust Caps



NOTE: Unless specified, all inch dimensions are ±.015 (0.38)

Part Number	A Thread	C	D dia.	E	F dia.
LESS CHAIN	WITH CHAIN	Acme			
KO2-16-1-DC	KO2-16-DC	1 -6	.313 (7.95)	1.250 (31.75)	3.250 (82.55)
KO2-19-1-DC	KO2-19-DC	1-3/16-6	.313 (7.95)	1.313 (33.35)	3.250 (82.55)
KO2-21-1-DC	KO2-21-DC	1-5/16-6	.313 (7.95)	1.438 (36.52)	3.250 (82.55)

KO2 metal dust caps can be used with any KO receptacle with external threads. Plastic dust caps are provided for plugs and receptacles with internal threads.