



PLUG: MM-213-031-113-4300

RECEPTACLE: MK-263-031-445-220S

PLUG: MN-211-031-113-4300

RECEPTACLE: ML-261-031-445-220S

XX-XXX-XXX-XXX-XXXX-XXX

PLUG

RECEPTACLE

SERIES	
MM .050" Rugged Metal I/O Connector	MK .050" Rugged Metal PC Board Mount Connector
MN .050" Rugged Plastic I/O Connector	ML .050" Rugged Plastic PC Board Mount Connector
(MM & MN mate with MK, ML, MM, MN receptacles) (MK & ML mate with MK, ML, MM, MN plugs)	

BODY	
2 2-Row (Sizes 9 thru 37)	2 2-Row (Sizes 9 thru 37)
3 3-Row (Size 51 & 69**)	3 3-Row (Size 51 & 69**)
4 4-Row (Size 100)	4 4-Row (Size 100)
BODY STYLE:	BODY STYLE:
1 Plug, straight, with ears	6 Receptacle, right angle, narrow footprint, w/ mtg holes
BODY MATERIAL:	BODY MATERIAL:
1 Polyphenylene Sulfide (MN only)	1 Polyphenylene Sulfide (ML only)
2 Polyphenylene Sulfide with electroless nickel shell	2 Polyphenylene Sulfide with electroless nickel shell
3 Polyphenylene Sulfide with electrodeposited cadmium shell ☒	3 Polyphenylene Sulfide with electrodeposited cadmium shell ☒
4 Polyphenylene Sulfide with hard anodized black shell	4 Polyphenylene Sulfide with hard anodized black shell
5 Polyphenylene Sulfide with stainless steel shell	5 Polyphenylene Sulfide with stainless steel shell

SIZE	
XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100	XXX 009, 015, 021, 025, 031, 037, 051, 069***, 100

CONTACTS	
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:
11 Pin, straight, solder cup	43 Socket, right angle, PCB leads, .109"
14 Pin, straight, .500" pigtails (.018 dia)	44 Socket, right angle, PCB leads, .140"
15 Pin, straight, 1.000" pigtails (.018 dia)	45 Socket, right angle, PCB leads, .172"
16 Pin, straight, crimped wire	
PLATING OPTIONS:	PLATING OPTIONS:
1 50 µ" Au contacts (crimp wire)	3 50 µ" Au contacts: 10 µ" Au terminations
3 50 µ" Au contacts: 10 µ" Au terminations (solder cup, pigtail)	5 50 µ" Au contacts: Sn/Pb alloy terminations ☒
5 50 µ" Au contacts: Sn/Pb alloy terminations (pigtail) ☒	7 50 µ" Au contacts: SAC305 terminations
7 50 µ" Au contacts: SAC305 terminations (pigtail)	

HARDWARE	
STYLE OF HARDWARE:	STYLE OF HARDWARE:
00 None	00 None
22 Two fixed jacknut assemblies (62*)	22 Two fixed jacknut assemblies (62*)
41 Two turning jackscrews, allen head, retaining ring (81*)	41 Two turning jackscrews, allen head, retaining ring**** (81*)
42 Two long turning jackscrews, allen head, retaining ring (82*)	99 Keying hardware, see options below (Body material 2, 3 and 4 only)
43 Two turning jackscrews, slot head, retaining ring (83*)	
44 Two long turning jackscrews, slot head, retaining ring (84*)	
45 Two turning jackscrews, allen head, captivated** (85*)	
99 Keying hardware, see options below (Body material 2, 3 and 4 only)	
POLARIZATION / WIRING:	POLARIZATION / WIRING
00 None	0R Reversed body polarization
XX For wiring codes, see page MA-3 & MA-4	0S Standard body polarization

OPTIONS	
KSXX Two turning jackscrews. See page MA-6 for keying options (KJ*)	KPXX Two fixed jacknuts and interfacial sealing gasket. See page MA-6 for keying options (KN*)
	900 Interfacial sealing gasket
	0B7 Threaded inserts and interfacial sealing gasket, standard body polarization

* = Use numbers or letters in parenthesis when ordering size 100.

** = Captive hardware is factory installed and non-removable.

☒ = Option not RoHS compliant

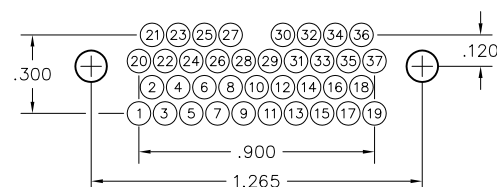
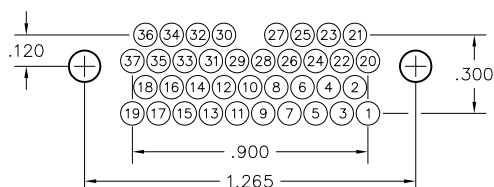
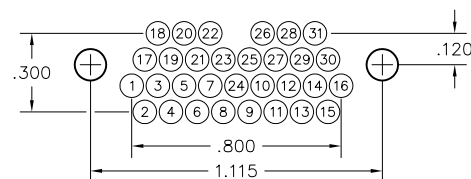
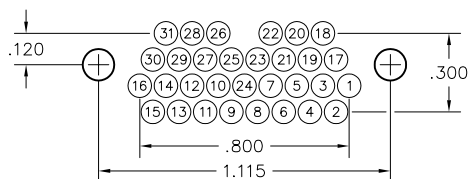
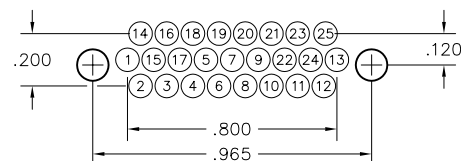
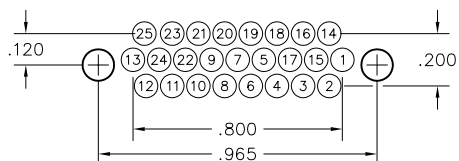
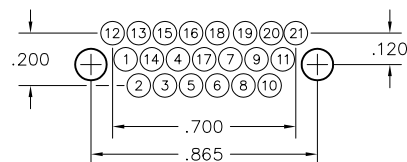
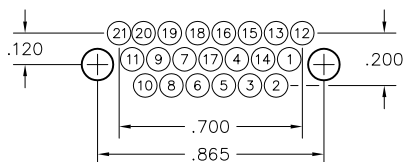
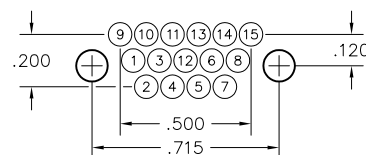
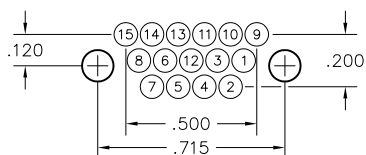
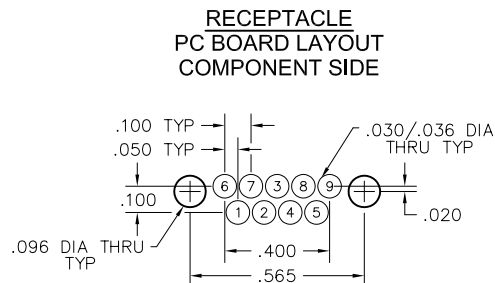
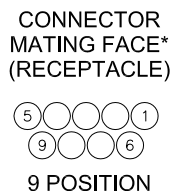
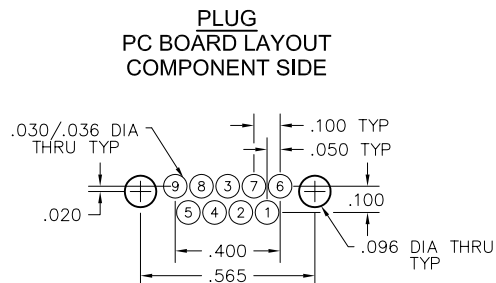
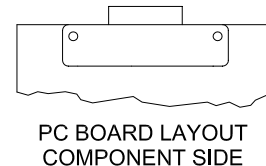
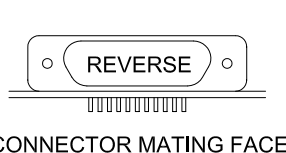
*** = 69 position connectors are available in metal only.

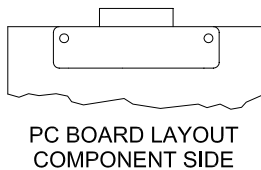
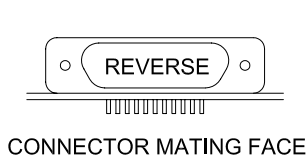
**** = Connector body has no mounting holes.



Recommended PC Board Layout

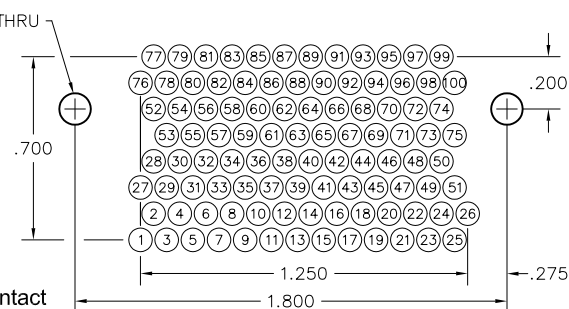
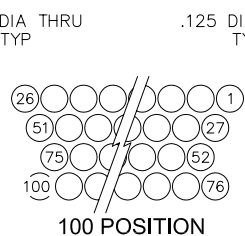
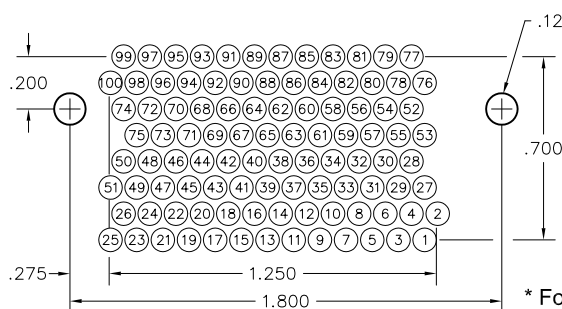
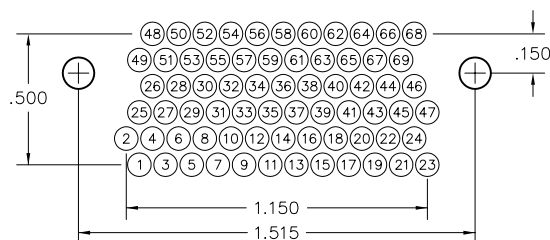
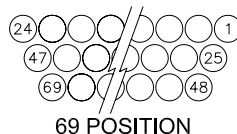
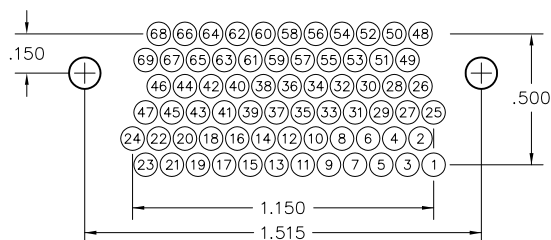
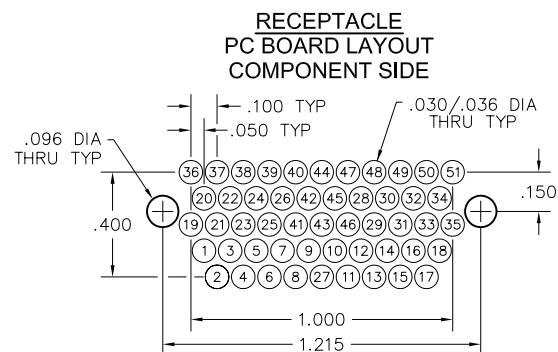
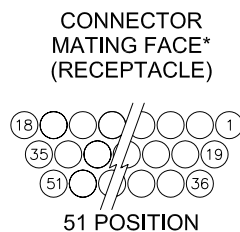
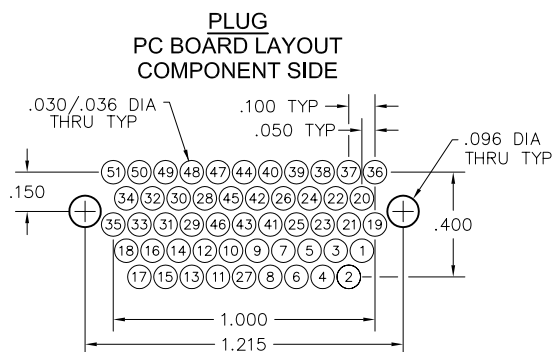
Right Angle, Narrow Footprint
Reverse Polarization





Recommended PC Board Layout

Right Angle, Narrow Footprint
Reverse Polarization

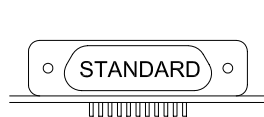


* For pin (plug) connectors, the contact numbers are reversed left to right.

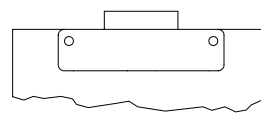


Recommended PC Board Layout

Right Angle, Narrow Footprint
Standard Polarization

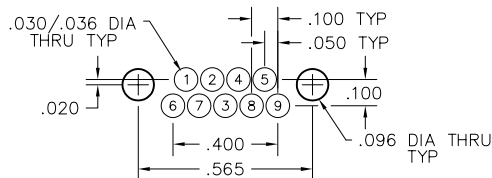


CONNECTOR MATING FACE

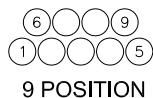


PC BOARD LAYOUT
COMPONENT SIDE

PLUG
PC BOARD LAYOUT
COMPONENT SIDE

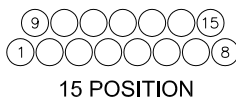
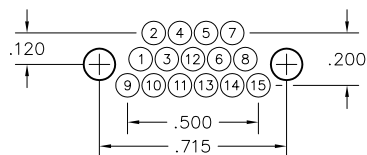
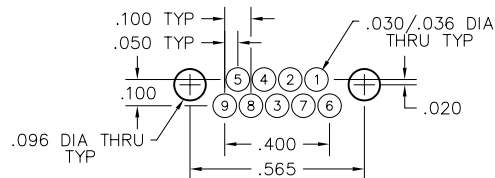


CONNECTOR
MATING FACE*
(RECEPTACLE)

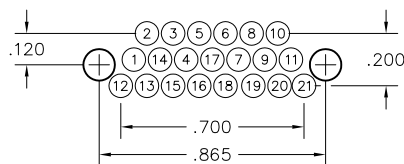
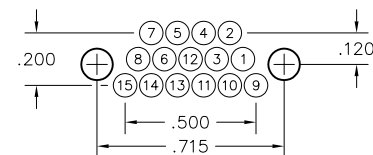


9 POSITION

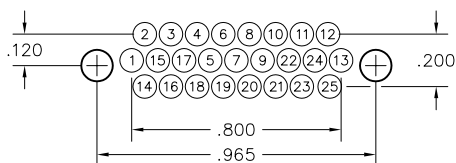
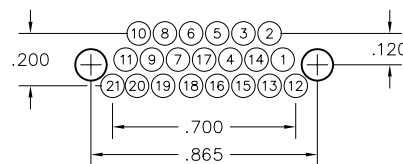
RECEPTACLE
PC BOARD LAYOUT
COMPONENT SIDE



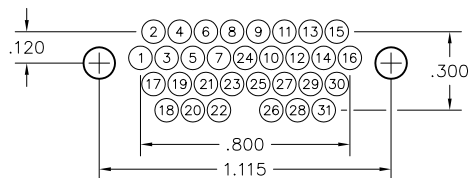
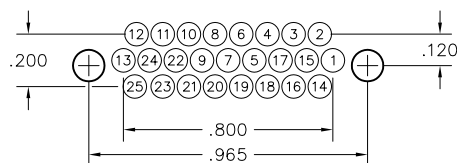
15 POSITION



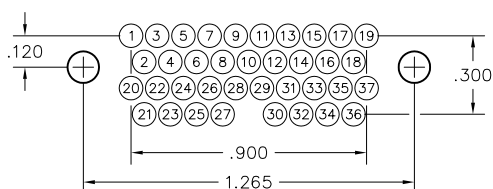
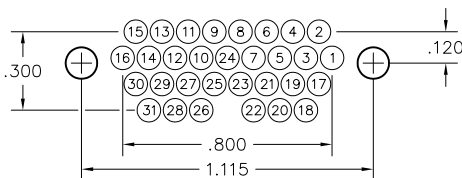
21 POSITION



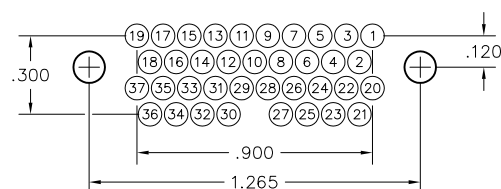
25 POSITION

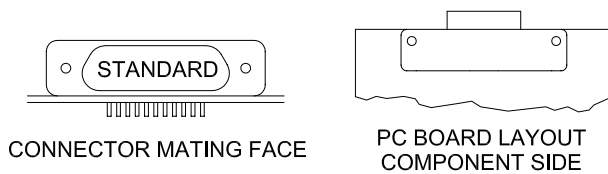


31 POSITION



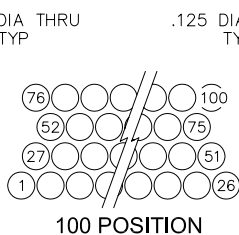
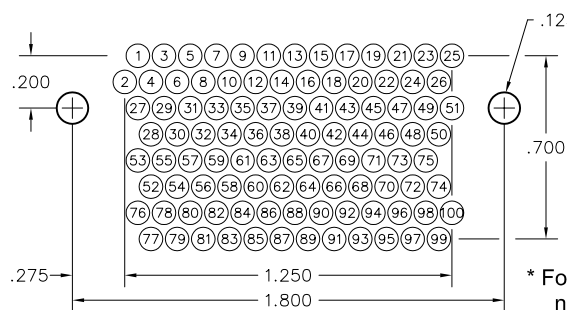
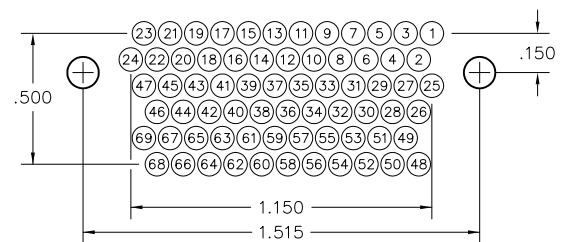
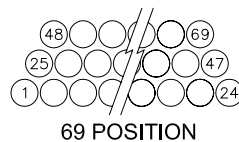
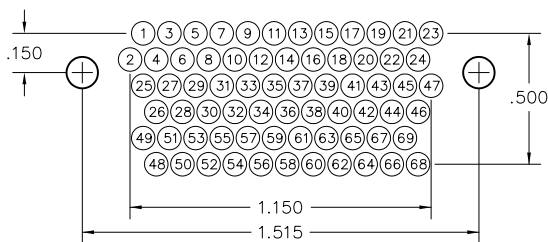
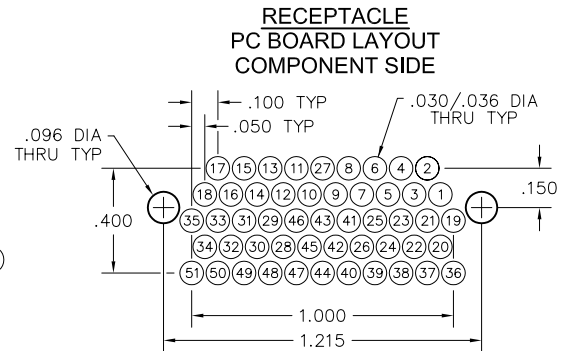
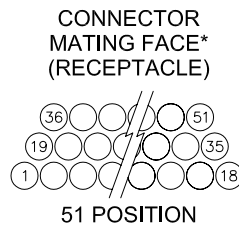
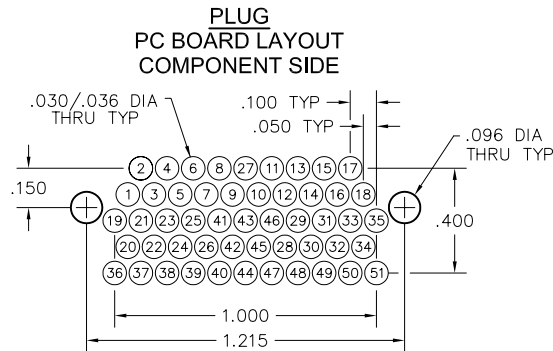
37 POSITION



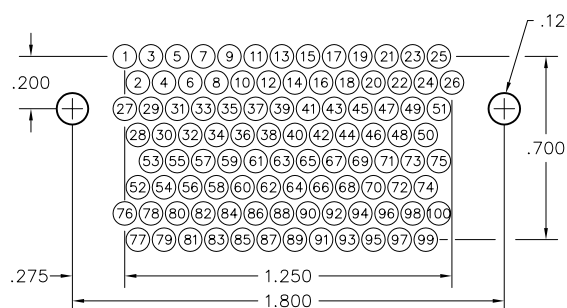
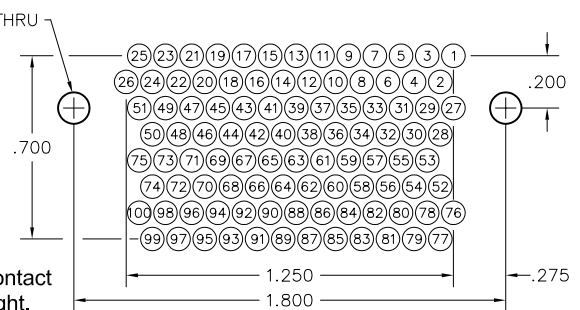


Recommended PC Board Layout

Right Angle, Narrow Footprint
Standard Polarization

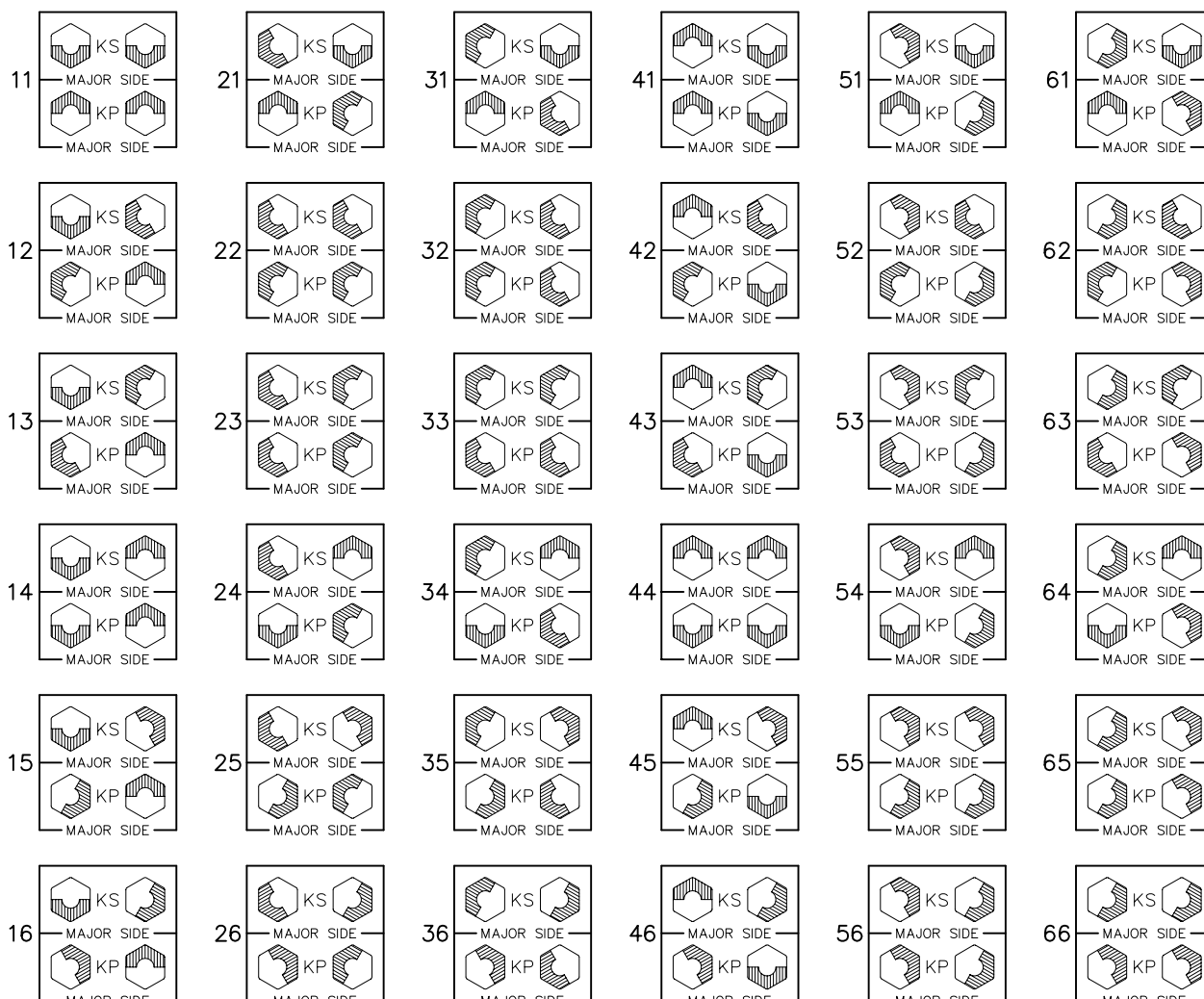


* For pin (plug) connectors, the contact numbers are reversed left to right.



Mil-Spec Footprint
For Mil-Spec footprint, use "Option" -94P

Polarized Keying Hardware

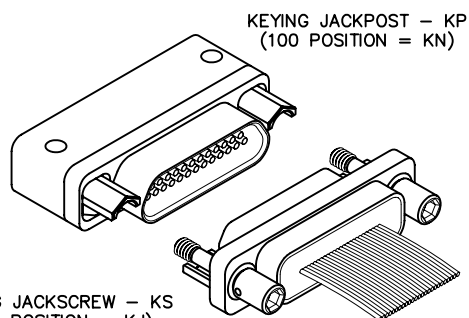


Select the appropriate two digit number above and include as the last two digits of the hardware code in the part number.
(Keying hardware is factory installed and non-removable).

Example:

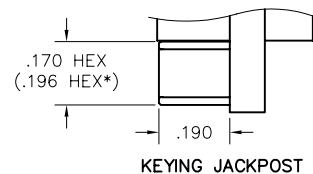
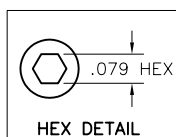
MM-213-025-161-99WA-KS11

MK-263-025-435-990S-KP11

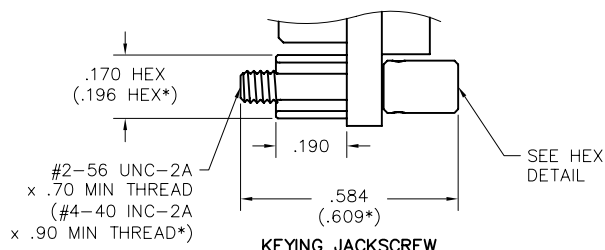


KEYING JACKPOST - KP
(100 POSITION = KN)

KEYING JACKSCREW - KS
(100 POSITION = KJ)



KEYING JACKPOST



KEYING JACKSCREW

* = Dimensions for 100 position connectors