

**PLUG:** MM-312-051-161-45WP  
**RECEPTACLE:** MK-342-051-225-2200  
**PLUG:** MN-311-051-161-45WP  
**RECEPTACLE:** ML-341-051-225-2200  
 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)

<b>BODY STYLE:</b>	<b>BODY STYLE:</b>
1 Plug, straight, with ears	4 Receptacle, straight, standard footprint
<b>BODY MATERIAL:</b>	<b>BODY MATERIAL:</b>
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 <input checked="" type="checkbox"/>	3 Polyphenylene Sulfide with electrodeposited cadmium shell <input checked="" type="checkbox"/>
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	
<b>TYPE CONTACTS/TERMINATIONS:</b>	<b>TYPE CONTACTS/TERMINATIONS:</b>
11 Pin, straight, solder cup	22 Socket, straight, PCB leads, .109"
14 Pin, straight, .500" pigtails (.018 dia)	23 Socket, straight, PCB leads, .140"
15 Pin, straight, 1.000" pigtails (.018 dia)	24 Socket, straight, PCB leads, .172"
16 Pin, straight, crimped wire	
<b>PLATING OPTIONS:</b>	<b>PLATING OPTIONS:</b>
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 <input checked="" type="checkbox"/>
5 50 µ" Au contacts: Sn/Pb alloy terminations (pigtail) <input checked="" type="checkbox"/>	7 50 µ" Au contacts: SAC305 terminations
7 50 µ" Au contacts: SAC305 terminations (pigtail)	

HARDWARE	
<b>STYLE OF HARDWARE:</b>	<b>STYLE OF HARDWARE:</b>
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)	
<b>POLARIZATION / WIRING:</b>	<b>POLARIZATION / WIRING</b>
00 None	00 None
XX For wiring codes, see page MA-3 & MA-4	

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

\* = Use numbers or letters in parenthesis when ordering size 100.      \*\*\* = 69 position connectors are available in metal only.  
 \*\* = Captive hardware is factory installed and non-removable.      \*\*\*\* = Connector body has no mounting holes.  
☒ = Option not RoHS compliant



# Cable to Board (Standard Footprint)

.050"

9 thru 100 Contacts

Rugged Cable

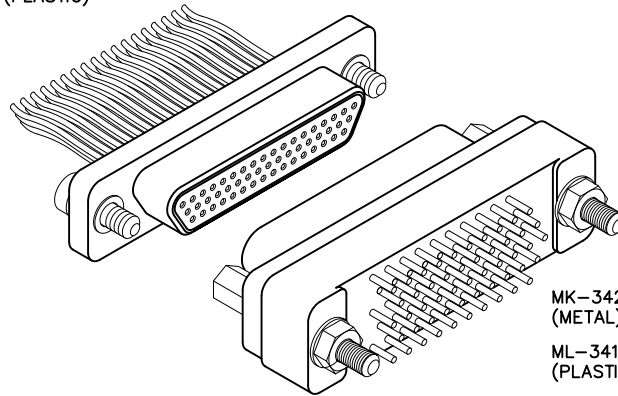
**MM, MN**

Rugged Board Mount

**MK, ML**

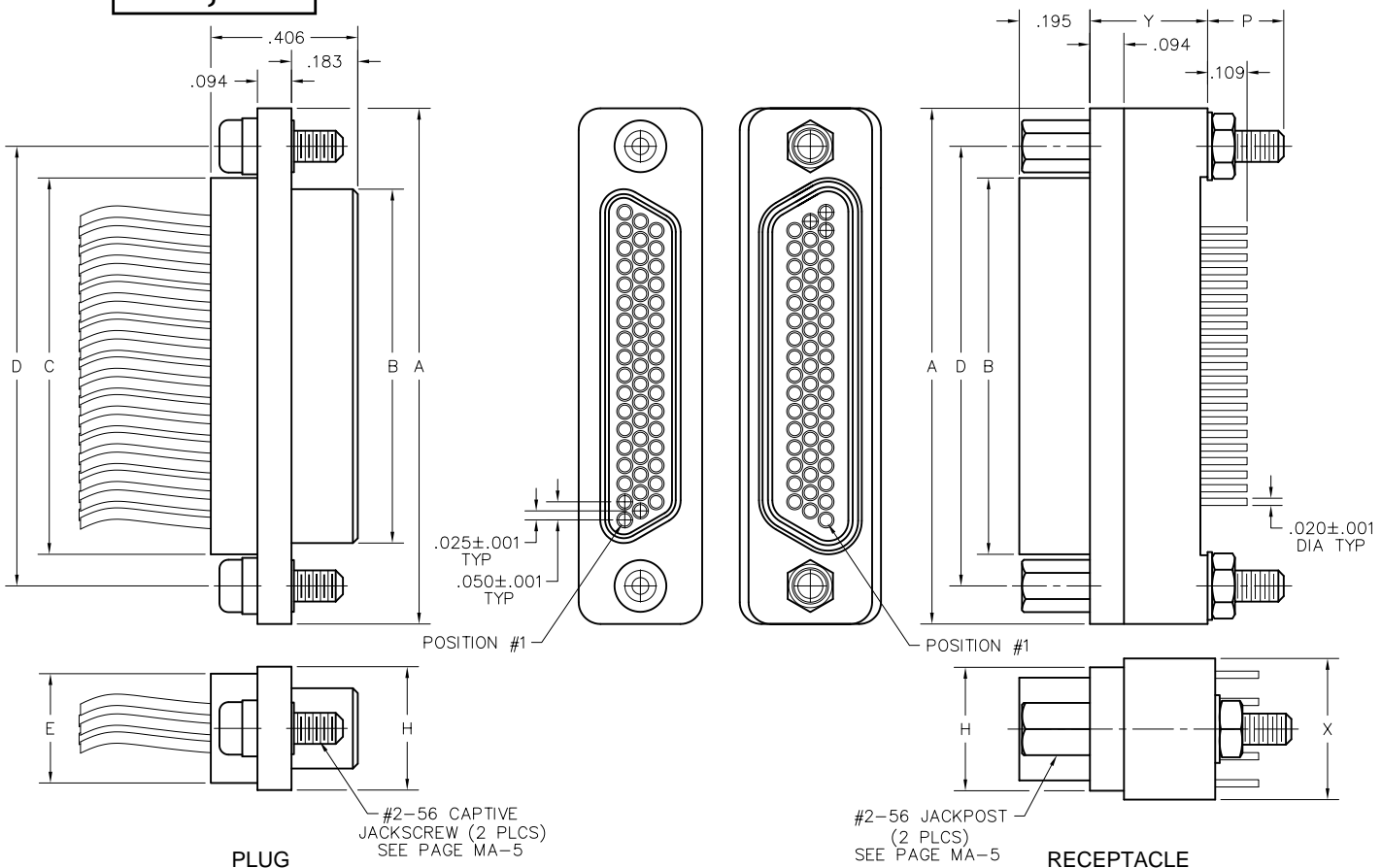
MM-312-051-161-45WP  
(METAL)

MN-311-051-161-45WP  
(PLASTIC)

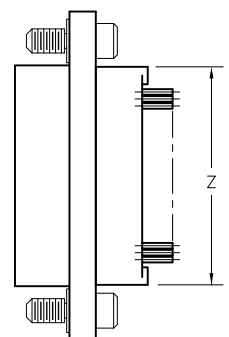


MK-342-051-225-2200  
(METAL)

ML-341-051-225-2200  
(PLASTIC)



DIMENSIONS													
SIZE	CONTACT ROWS	A	B		C	D	E	H	P	X	Y	Z***	HARDWARE
			PLUG MAX	RCPT MAX			POTTING WELL MAX						
9	2	.775	.334	.400	.390	.565	.270	.298	.210	.298	.280	.390	#2-56 UNC THD (#2-56 CLEARANCE OR #2-56 UNC THREADED INSERT)
15		.925	.484	.550	.540	.715						.540	
21		1.075	.634	.700	.690	.865						.690	
25		1.175	.734	.800	.790	.965						.780	
31		1.325	.884	.950	.940	1.115			.930				
37	3	1.475	1.034	1.100	1.090	1.265	.310	.341	.214	.390	.330**	1.080	
51		1.425	.984	1.050	1.040	1.215					1.046		
69		1.725	1.284	1.350	1.340	1.515					1.346		
100	4	2.160	1.384	1.508	1.432	1.800	.360	.384	.216	.490	.379	1.530	#4-40 UNC THD (#4-40 CLEARANCE OR #4-40 UNC THREADED INSERT)
* = 69 POSITION CONNECTORS ARE AVAILABLE IN METAL ONLY.													
** = 37 POSITION WITH TURNING HARDWARE "Y" DIMENSION IS .280.													
*** = "Z" DIMENSION IS .100													



\* = 69 POSITION CONNECTORS ARE AVAILABLE IN METAL ONLY.  
\*\* = 37 POSITION WITH TURNING HARDWARE "Y" DIMENSION IS .280.  
\*\*\* = "Z" DIMENSION FOR TURNING JACKSCREW ONLY

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