

PLUG: MM-312-051-153-4400

RECEPTACLE: MK-322-051-235-2200

PLUG: MN-311-051-153-4400

RECEPTACLE: ML-321-051-235-2200

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)	3 3-Row (Size 51)
4 4-Row (Size 100)	4 4-Row (Size 100)

BODY STYLE:	
1 Plug, straight, with ears	2 Receptacle, straight, narrow footprint, w/ mtg holes

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 <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, 100	XXX 009, 015, 021, 025, 031, 037, 051, 100

CONTACTS	
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:
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	

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 <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

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*)	99 Keying hardware, see options below (Body material 2, 3 and 4 only)
Two long turning jackscrews, allen head, retaining ring (82*)	
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:	
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.

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

= Option not RoHS compliant



Cable to Board (Narrow Footprint)

.050"

9 thru 100 Contacts

Rugged Cable

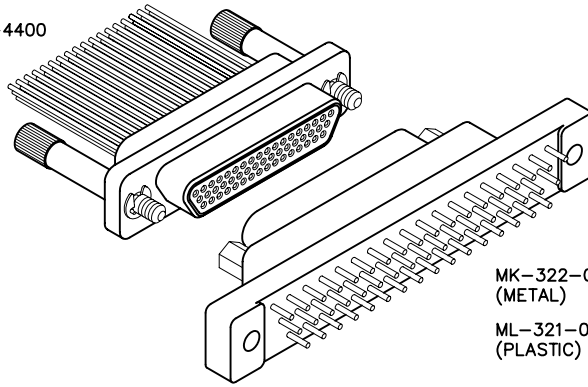
MM, MN

Rugged Board Mount

MK, ML

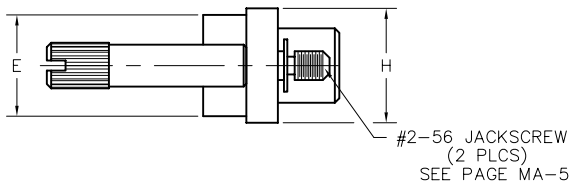
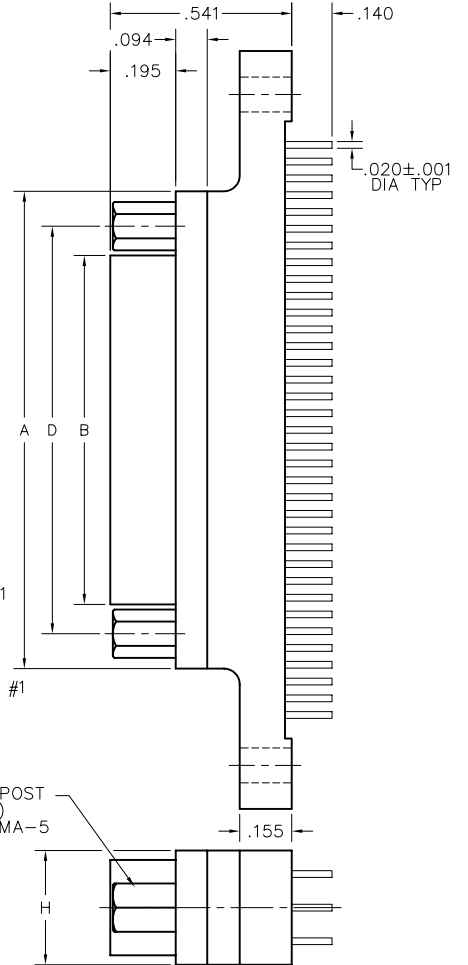
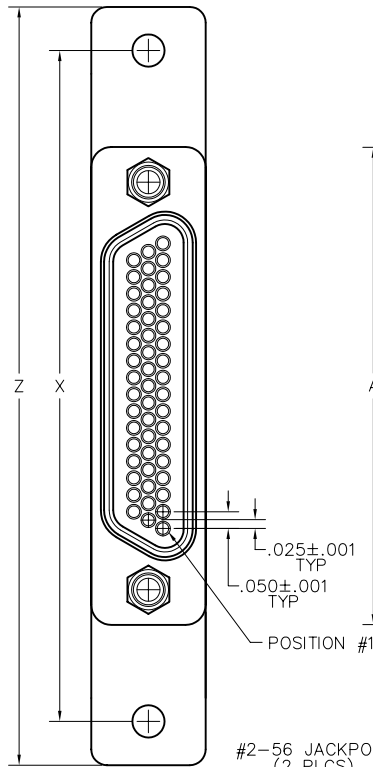
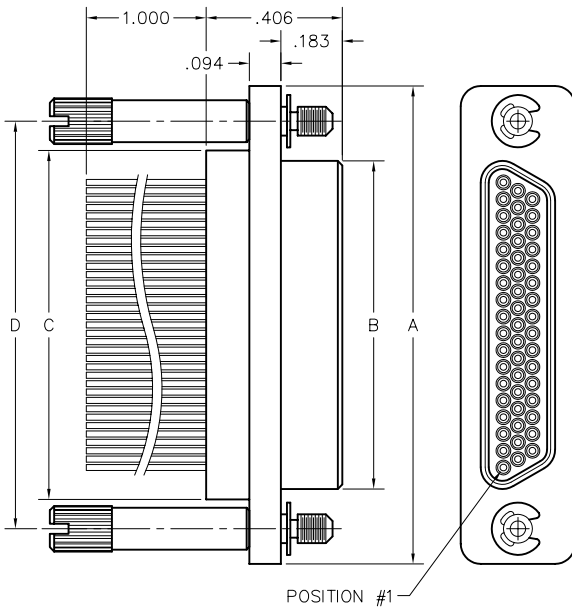
MM-312-051-153-4400
(METAL)

MN-311-051-153-4400
(PLASTIC)



MK-322-051-235-2200
(METAL)

ML-321-051-235-2200
(PLASTIC)



PLUG

RECEPTACLE

SIZE	CONTACT ROWS	DIMENSIONS										HARDWARE	MOUNTING HOLE
		A	B		C	D	E	H	X	Z	MAX		
			PLUG MAX	RCPT MAX									
9	2	.775	.334	.400	.390	.565	.270	.298	1.150	1.390	#2-56 UNC THD (.092 DIA THRU)	.096 DIA OR #2-56 UNC THREADED INSERT	
15		.925	.484	.550	.540	.715							
21		1.075	.634	.700	.690	.865							
25		1.175	.734	.800	.790	.965							
31		1.325	.884	.950	.940	1.115							
37	3	1.475	1.034	1.100	1.090	1.265	.310	.341	2.000	2.270	#4-40 UNC THD (.147 DIA THRU)	.125 DIA OR #2-56 UNC THREADED INSERT	
51	1.425	.984	1.050	1.040	1.215								
100	4	2.160	1.384	1.508	1.432	1.800							.360

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