



Board (Narrow Footprint) to Cable

.050"

9 thru 100 Contacts

Rugged Board Mount

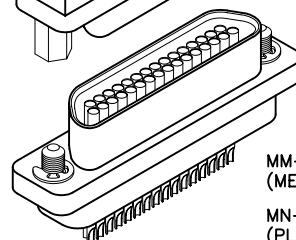
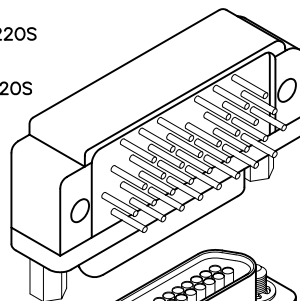
MK, ML

Rugged Cable

MM, MN

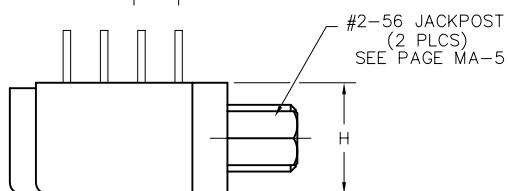
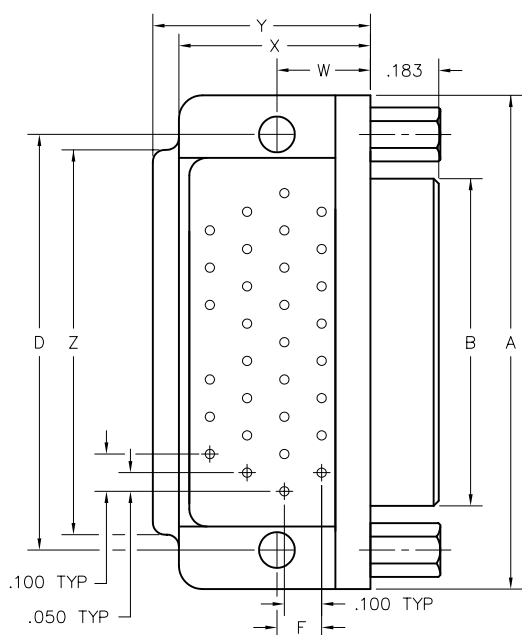
MK-253-031-335-220S
(METAL)

ML-251-031-335-220S
(PLASTIC)

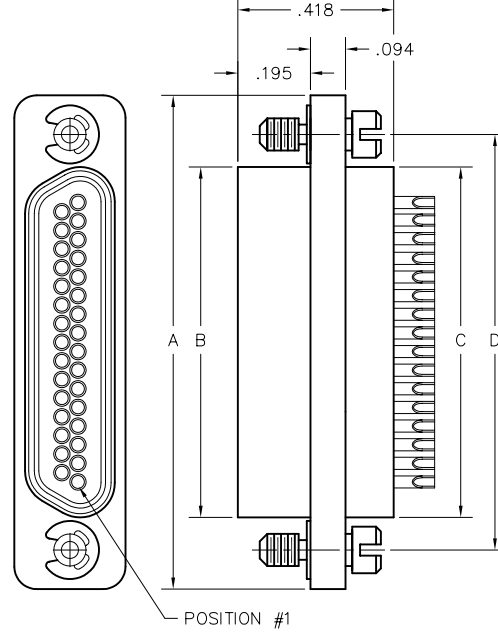
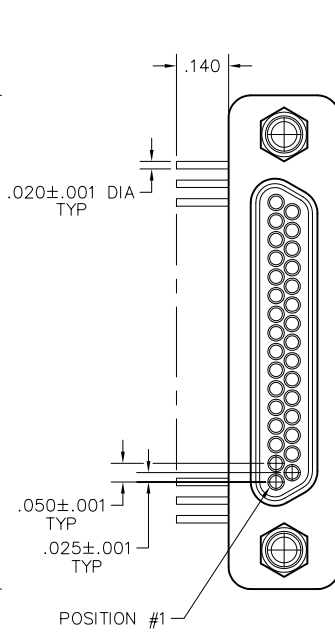


MM-223-031-213-4100
(METAL)

MN-221-031-213-4100
(PLASTIC)



PLUG



RECEPTACLE

DIMENSIONS																
SIZE	CONTACT ROWS	A	B		C	D	E	F	H	W	X MAX	Y MAX	Z	HARDWARE	MOUNTING HOLE	
			PLUG MAX	RCPT MAX			POTTING WELL MAX									
9	2	.775	.334	.400	.390	.565	.270	.020	.298	.250	.420	.420	.775	#2-56 UNC THD (.092 DIA THRU)	.096 DIA OR #2-56 UNC THREADED INSERT	
15		.925	.484	.550	.540	.715		.925								
21		1.075	.634	.700	.690	.865		1.075								
25		1.175	.734	.800	.790	.965		1.175								
31		1.325	.884	.950	.940	1.115		1.080								
37	3	1.475	1.034	1.100	1.090	1.265	.310	.150	.341	.300	.430	.450	.520	1.180	#2-56 UNC THD (.092 DIA THRU)	.096 DIA OR #2-56 UNC THREADED INSERT
51		1.425	.984	1.050	1.040	1.215								1.220		
69*		1.725	1.284	1.350	1.340	1.515								1.450		
100	4	2.160	1.384	1.508	1.432	1.800	.360	.200	.384	.400	.590	1.000	1.810	#4-40 UNC THD (.147 DIA THRU)	.125 DIA OR #2-56 UNC THREADED INSERT	
* = 69 POSITION CONNECTORS ARE AVAILABLE IN METAL ONLY.																

* = 69 POSITION CONNECTORS ARE AVAILABLE IN METAL ONLY.

PLUG: MK-253-031-335-220S

RECEPTACLE: MM-223-031-213-4100

PLUG: ML-251-031-335-220S

RECEPTACLE: MN-221-031-213-4100

XX-XXX-XXX-XXX-XXXX-XXX

PLUG

RECEPTACLE

SERIES	
MK .050" Rugged Metal PC Board Mount Connector	MM .050" Rugged Metal I/O Connector
ML .050" Rugged Plastic PC Board Mount Connector (MK & ML mate with MK, ML, MM, MN receptacles)	MN .050" Rugged Plastic I/O Connector (MM & MN 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:
5 Plug, right angle, narrow footprint, w/ mtg holes	2 Receptacle, straight, with ears
BODY MATERIAL:	BODY MATERIAL:
1 Polyphenylene Sulfide (ML only)	1 Polyphenylene Sulfide (MN 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	
TYPE CONTACTS/TERMINATIONS:	TYPE CONTACTS/TERMINATIONS:
32 Pin, right angle, PCB leads, .109"	21 Socket, straight, solder cup
33 Pin, right angle, PCB leads, .140"	24 Socket, straight, .500" pigtails (.018 dia)
34 Pin, right angle, PCB leads, .172"	25 Socket, straight, 1.000" pigtails (.018 dia)
	26 Socket, straight, crimped wire
PLATING OPTIONS:	PLATING OPTIONS:
3 50 µ" Au contacts; 10 µ" Au terminations	1 50 µ" Au contacts (crimp wire)
5 50 µ" Au contacts; Sn/Pb alloy terminations <input checked="" type="checkbox"/>	3 50 µ" Au contacts; 10 µ" Au terminations (solder cup, pigtail)
7 50 µ" Au contacts; SAC305 terminations	5 50 µ" Au contacts; Sn/Pb alloy terminations (pigtail) <input checked="" type="checkbox"/>
	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*)
99 Keying hardware, see options below (Body material 2, 3 and 4 only)	42 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:	POLARIZATION / WIRING
0R Reversed body polarization	00 None
0S Standard body polarization	XX For wiring codes, see page MA-3 & MA-4

OPTIONS	
KPXX Two fixed jacknuts. See page MA-6 for keying options (KN*)	KSXX Two turning jackscrews and interfacial sealing gasket. See page MA-6 for keying options (KJ*)
94P Mil-Spec footprint (size 100 only), standard body polarization	900 Interfacial sealing gasket
0B7 Threaded inserts, standard body polarization	
0BJ Mil-Spec footprint (size 100 only) with threaded inserts, standard body polarization	

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

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

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

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

☒ = Option not RoHS compliant

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[MK-252-037-325-410S](#)