

**PLUG:** MM-213-025-161-41WQ  
**RECEPTACLE:** MK-283-025-435-220R  
**PLUG:** MN-211-025-161-41WQ  
**RECEPTACLE:** ML-281-025-435-220R  
 XX-XXX-XXX-XXX-XXXX-XXX

PLUG		RECEPTACLE	
<b>SERIES</b>			
MM .050" Rugged Metal I/O Connector	MN .050" Rugged Plastic I/O Connector (MM & MN mate with MK, ML, MM, MN receptacles)	MK .050" Rugged Metal PC Board Mount Connector	ML .050" Rugged Plastic PC Board Mount Connector (MK & ML mate with MK, ML, MM, MN plugs)
<b>BODY</b>			
2 2-Row (Sizes 9 thru 37)	3 3-Row (Size 51)	4 4-Row (Size 100)	
BODY STYLE: 1 Plug, straight, with ears		BODY STYLE: 8 Receptacle, right angle, standard footprint, w/ mtg holes	
BODY MATERIAL: 1 Polyphenylene Sulfide (MN only)		BODY MATERIAL: 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	
<b>SIZE</b>			
XXX 009, 015, 021, 025, 031, 037, 051, 100		XXX 009, 015, 021, 025, 031, 037, 051, 100	
<b>CONTACTS</b>			
TYPE CONTACTS/TERMINATIONS: 11 Pin, straight, solder cup		TYPE CONTACTS/TERMINATIONS: 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: 1 50 μ" Au contacts (crimp wire)		PLATING OPTIONS: 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)			
<b>HARDWARE</b>			
STYLE OF HARDWARE: 00 None		STYLE OF HARDWARE: 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)	
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: 00 None		POLARIZATION / WIRING OR Reversed body polarization	
XX For wiring codes, see page MA-3 & MA-4			
<b>OPTIONS</b>			
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	
		05K Mil-Spec footprint (size 100 only)	
		0B7 Threaded inserts and interfacial sealing gasket	
		0BJ Mil-Spec footprint (size 100 only) with threaded inserts and interfacial sealing gasket	

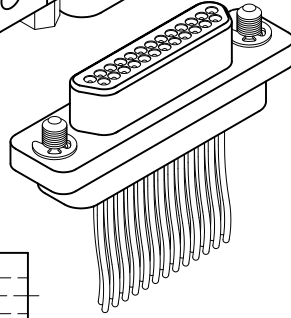
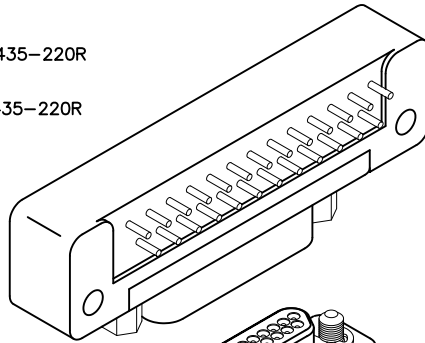
\* = Use numbers or letters in parenthesis when ordering size 100.

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

= Option not RoHS compliant



MK-283-025-435-220R  
(METAL)  
ML-281-025-435-220R  
(PLASTIC)



MM-213-025-161-41WQ  
(METAL)  
MN-211-025-161-41WQ  
(PLASTIC)

# Board (Standard Footprint) to Cable

.050"

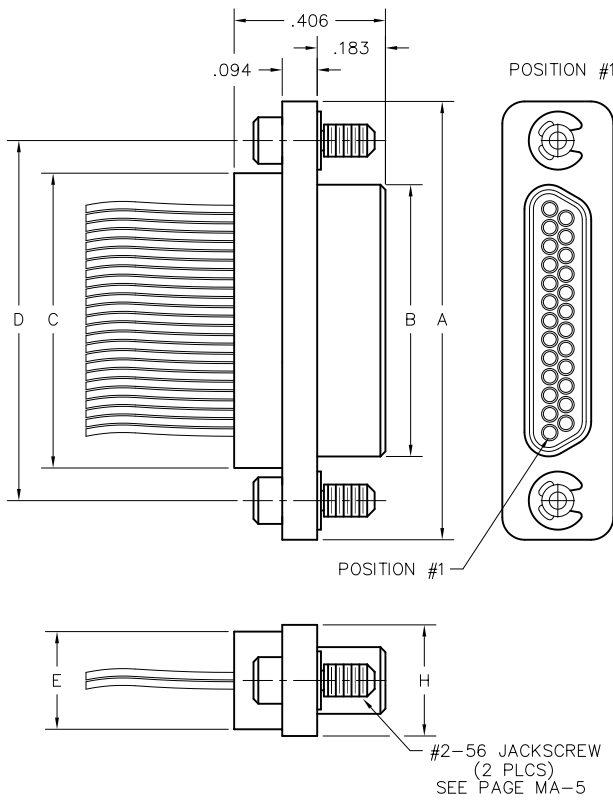
9 thru 100 Contacts

Rugged Board Mount

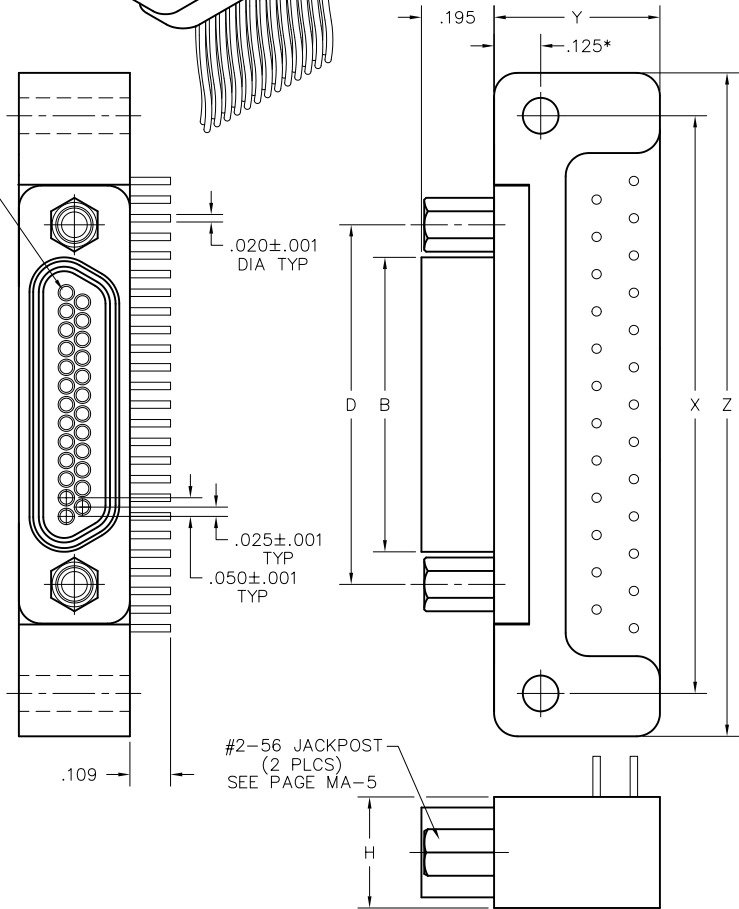
**MK, ML**

Rugged Cable

**MM, MN**



PLUG



RECEPTACLE

SIZE	CONTACT ROWS	DIMENSIONS										HARDWARE	MOUNTING HOLE
		A	B		C	D	E	H	X	Y	Z		
			PLUG MAX	RCPT MAX									
9	2	.775	.334	.400	.390	.565	.270	.298	1.150	.455	1.390	#2-56 UNC THD	.096 DIA OR #2-56 UNC THREADED INSERT
15		.925	.484	.550	.540	.715			1.300		1.540		
21		1.075	.634	.700	.690	.865			1.450		1.690		
25		1.175	.734	.800	.790	.965			1.550		1.790		
31		1.325	.884	.950	.940	1.115			1.800		2.040		
37		1.475	1.034	1.100	1.090	1.265			2.100		2.340		
51	3	1.425	.984	1.050	1.040	1.215	.310	.341	1.600	.565	1.875	#4-40 UNC THD	.125 DIA OR #4-40 UNC THREADED INSERT
100	4	2.160	1.384	1.508	1.432	1.800	.360	.384	2.500	.665**	2.780		

\* = .225 FOR ".05K" AND "0BJ" SPECIAL CODES (MIL-SPEC FOOTPRINT FOR 100 POSITION ONLY)  
\*\* = .765 MAX FOR ".05K" AND "0BJ" SPECIAL CODES (MIL-SPEC FOOTPRINT FOR 100 POSITION ONLY)

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