PRODUCT SPECIFICATION 02-06

1.0 SCOPE

This specification covers the .062 diameter pin and socket terminal product line with their associated connector housings designed for use on copper wire.

2.0 PRODUCT DESCRIPTION

The product line described in general terms is found in catalog M200. The connector is made in 1, 2, 3, 4, 5, 6, 8, 9, 12, 15, 24 and 36 circuit sizes. Connector plugs and receptacles are nylon and provided with optional mounting ears for snap-in panel mounting. The housing accepts wire ranges 30 thru 18 AWG and insulation diameters of .040 thru .120 inches.

3.0 RECOGNIZED AGENCY APPROVALS

3.1 Underwriters' Laboratories: E29179

3.2 Canadian Standards Association: 19980

	SHT.	REV.
	5	D
	4	E
	3	D
T	2	D
S2	1	E
13		

REVISIONS	
A	REVISED X RELEASE 410X 5-21-71 ER/ WM
B	RELEASE NO. 938X 7-6-72 BBM
C	RELEASE NO. 1194X 8-17-72 EWC
	FILMED MICROFILMED
D	REMOVE 'X', SH. 1 REMOVE 1.1 &2. / SH 4 REV. THRU PER ECO# 6326 10/13/82
E	SHEET 1: ADDED SHT. / REV. BOX - SHT. 4: REVISED TERM. RETENTION INTO HOUSING - SECTION 4.5.2 PER ECR # 9018 4-23-86 JCS

UNLESS OTHERWISE SPECIFIED TOLERANCES:
3-PLACE DEC. DIMS ±.005
2-PLACE DEC. DIMS ±.010
FRACTIONAL DIMS ±1/64
ANGULAR ±1/2°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS, UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING

SCALE: 2 | DRWN BY: | CHK'D BY: WM

.062 MINIATURE PIN TERMINALS

MOLEX PRODUCTS CO.

DOWNERS GROVE, ILL. 60515, U.S.A.

DATE 4/27/71

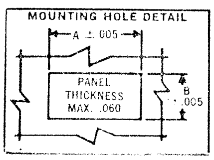
4.0 MECHANICAL SPECIFICATIONS

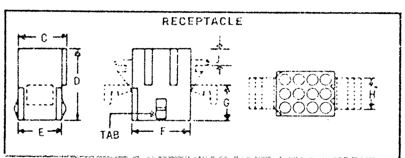
4.1 Materials, Dimensions

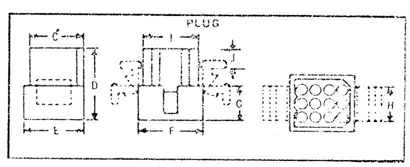
4.1.1 Standard .062" molded nylon connectors .145 inch center to center spacings

Circuits (a)	1		2		3		4		4		5		6		8		9		12		15(b)		24		36(c)	
RECEPTACLE	1625-1		1625-2		1625-3		1625-4		2004		1625-5		1625-6		1649		1625-9		1625-12		1625-15		1625-24		1772	
	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P	R	P
A	N/A	N/A	.265	.318	.265	.318	.260	.312	.400	.465	.265	.318	.505	.607	.330	N/A	.552	.615	.563	.614	.563	.614	.715	.765	.707	.825
B	N/A	N/A	.505	.609	.650	.754	.785	.865	.506	.615	.940	1.044	.552	.615	1.715	N/A	.650	.752	.795	.903	.934	1.042	1.079	1.182	1.677	1.795
C	N/A	N/A	N/A	.295	N/A	.295	.207	.292	N/A	.537	N/A	.305	N/A	.600	.310	.268	.530	.530	.530	.530	.527	.550	.665	.693	.855	.802
D •	.781	.750	.781	.750	.781	.750	.781	.750	.750	.750	.781	.750	.781	.750	.781	.750	.781	.750	.781	.750	.781	.750	.750	.750	.781	.750
E	.192 Dia.	N/A	.192	.295	.192	.295	.192	.297	.339	.537	.192	.305	.494	.600	.220	.308	.494	.592	.489	.592	.487	.590	.634	.742	.689	.802
F	N/A	.298 Dia.	.340	.443	.485	.588	.630	.734	.339	.537	.775	.888	.344	.450	1.505	1.595	.489	.587	.634	.737	.770	.876	.918	1.027	1.508	1.618
G	N/A	N/A	.395	.375	.395	.375	.395	.375	.370	.350	.395	.375	.395	.395	.395	.375	.395	.375	.395	.375	.395	.375	.370	.350	.395	.375
H	N/A	N/A	.188	.188	.188	.188	.188	.188	.250	.250	.188	.188	.375	.375	.310	N/A	.375	.375	.375	.375	.375	.375	.500	.500	.625	.625
I	N/A	.200 Dia.	N/A	.348	N/A	.488	N/A	.635	N/A	.340	N/A	.780	N/A	.345	N/A	1.505	N/A	.490	N/A	.635	N/A	.774	N/A	.928	N/A	N/A
J	N/A	N/A	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21	.21

Available with strain relief 1815: Collar dia. .230" — Part 15-04-0201; .342" — Part 1504-0206; .280" — Part 15-04-0208.
•Available with strain relief 1864: Collar dia. .415" — Part 15-04-0202; .500" — Part 15-04-0203. Dimensions C to J are included for reference only. Dimensions subject to nominal variations. **N/A** — Not available or not applicable.







4.1.2 Terminals: Refer to sales drawing 02-06-* (SD-1560 Series)

SEE SH 1
FILMED MICROFILMED
8-17-72
REVISIONS

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DRWN BY

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DOWNERS GROVE, ILL. 60515, U.S.A.

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4.2 Temperature Rise: Maximum Temperature rise is 30°C for all connector assemblies when used at their maximum rated current (Underwriters' Laboratories requirement).

4.3 Ambient temperature range: -40°C to 105°C

4.4 Humidity:

4.4.1 Test method - exposure shall be 96 hours with a 95% to 100 % relative humidity and a temperature of 100° ± 5% F. A one ampere current shall be placed through a male/female assembly within one hour after removing from the Humidity Chamber (18 AWG stranded wire).

4.4.2 Requirement - the maximum MV drop across both terminals shall be 15 MV. The probe should be placed on the wire approximately 1" from the crimp barrel.

4.5 Engage/Disengage forces for standard terminal (.008 stock 70/30 brass):

4.5.1 Plug and Receptacle Connector

	AVG. SINGLE CIRCUIT FORCES:	
No. of Cycles	Engage	Disengage
1st	2.0 lbs.	1.8 lbs.
10th	1.3 lbs.	1.0 lbs.

.062 MINIATURE PIN TERMINALS

MOLEX PRODUCTS CO.
molex
DOWNERS GROVE, ILL. 60515, U.S.A.

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4.5.2 Terminal Insertion and Retention in Connector Housing

	INSERTION	RETENTION
Male and Female	2.5 lbs.	20 lbs. min. using 18 AWG (by wire pull test method)

4.6 Terminal crimp strength - minimum pull out force in pounds is given in the following table for various wire sizes (AWG)

WIRE GAGE	18	20	22	24	26	28	30
PULL OUT FORCE (LBS.)	20	15	10	8	5	3	2

5.0 ELECTRICAL SPECIFICATIONS

5.1 Rated Voltage, currents

Circuits (a)	1	2	3	4	4	5	6	8	9	12	15(b)	24	36(c)
RECEPTACLE	1625-1	1625-2	1625-3	1625-4	2004	1625-5	1625-6	1649	1625-9	1625-12	1625-15	1625-24	1772
Max. Amp.	5	5	5	5	5	5	5	5	5	5	5	4	4
Max. Volts	250	250	250	250	250	250	250	250	250	250	250	250	250
Holding Tabs Only	03-06-1011	03-06-1023	03-06-1032	03-06-1042	03-06-1044	03-06-1056	03-06-1062	N/A	03-06-1092	03-06-1122	03-06-1152	03-06-1242	03-06-1362
With EARS AND TABS	N/A	03-06-1022	03-06-1031	03-06-1041	03-06-1043	03-06-1055	03-06-1061	03-06-1081	03-06-1091	03-06-1121	03-06-1151	03-06-1241	03-06-1361

PLUG 212

Max. Amp	5	5	5	5	5	5	5	5	5	5	5	4	4
Max. Volts	250	250	250	250	250	250	250	250	250	250	250	250	250
With Mounting Ears Only	N/A	03-06-2022	03-06-2031	03-06-2041	03-06-2043	03-06-2054	03-05-2062	N/A	03-06-2091	03-06-2121	03-06-2151	03-06-2241	03-06-2361
Without Mounting Ears	03-06-2011	03-06-2023	03-06-2032	03-06-2042	03-06-2044	03-06-2055	03-06-2061	03-06-2081	03-06-2092	03-06-2122	03-06-2152	03-06-2242	03-06-2362

SEE SHEET 1

SEE SHEET 1

FILMED MICROFILMED

C 8-17-72 REVISIONS

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5.2 Terminal resistance (voltage drop measured at one amp) (18 AWG stranded wire).

1) 1st Terminal Engagement 3.2 MV ± 10%

2) 10th Terminal Engagement 3.4 MV ± 10%

The above voltage is measured across the friction connection of pin. The voltage drop is approximately 1 MV greater when including the mated terminals plus both crimps. In this case the probes should be placed on the wire approximately 1" from the crimp barrel.

5.3 High Voltage Test

Terminals mounted in a connector must withstand 1500 volts RMS applied between adjacent terminals for 60 seconds without breakdown.

REFERENCE: QC spec M-50-003

REVISIONS	
D	SEE SHEET 1
	FILMED / MICROFILMED
C	8-17-72
B	RELEASE № 938X 7-6-72
A	5-21-71

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