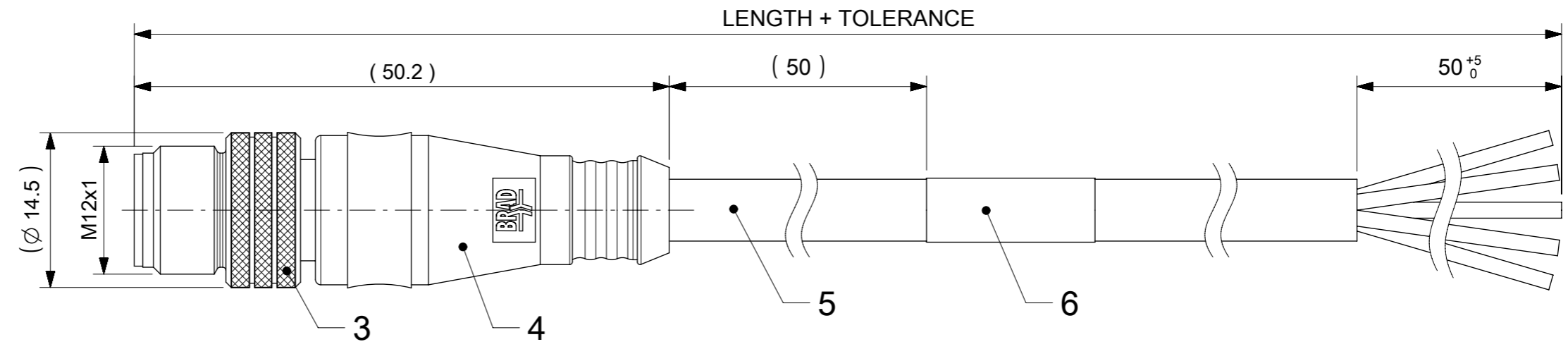
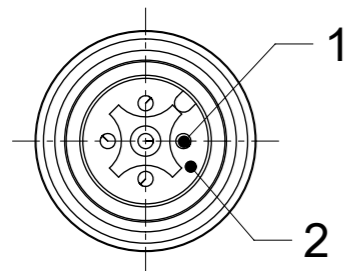


# MALE PLUG M12 STRAIGHT



**NOTES:**

RATED VOLTAGE: 3, 4 contacts 250V

5 contacts 60V

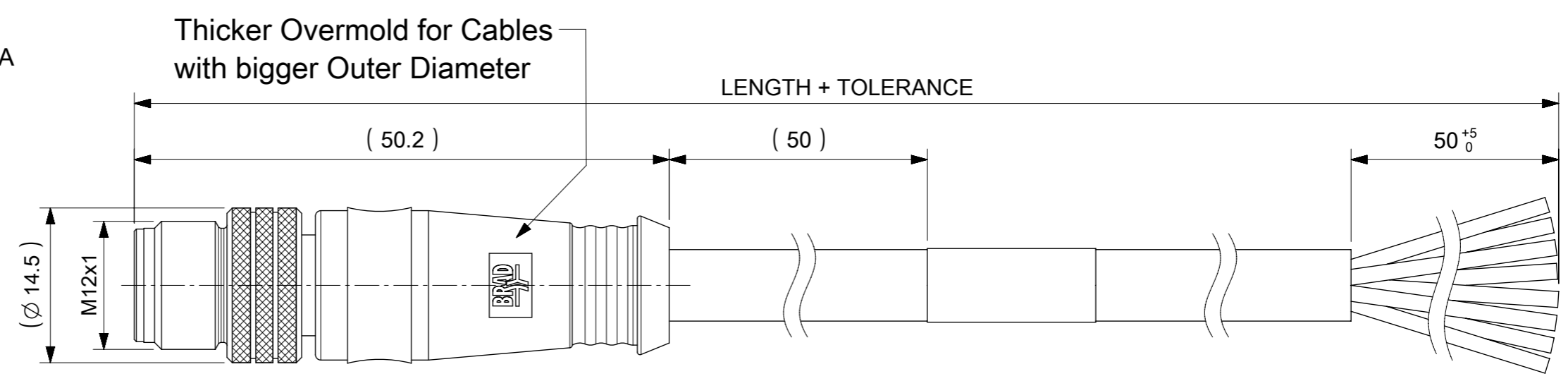
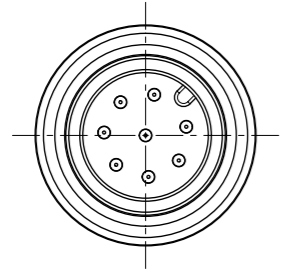
8 contacts 30V

RATED CURRENT: 3, 4, 5 contacts 4A

8 contacts 2A

PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C



## CONTACTS POSITION FRONT VIEW:

3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
1	BROWN	1	BROWN	1	BROWN	1	WHITE
2	---	2	WHITE	2	WHITE	2	BROWN
3	BLUE	3	BLUE	3	BLUE	3	GREEN
4	BLACK	4	BLACK	4	BLACK	4	YELLOW
5	---	5	---	5	GREY	5	GREY
						6	PINK
						7	BLUE
						8	RED

CODING REQUIRED TO IEC 61076-2-101

### FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
6	1	LABEL YELLOW	VINYL	---
5	-	CABLE	SEE SHEET 2	---
4	-	OVERMOLDING BLACK	TPU	---
3	1	COUPLING NUT MALE	BRASS	NICKEL
2	1	INSERT MALE BLACK	PUR	---
1	3 / 4 / 5 / 8	CONTACT M12 MALE	BRASS	SELECTIVE Au OVER Ni

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

<b>SYMBOLS</b> DIMENSION UNITS: mm SCALE: 2:1 GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL: ± 1.0° 4 PLACES: ± 3 PLACES: ± 2 PLACES: ± 0.05 1 PLACE: ± 0.3 0 PLACES: ± 0.5 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	CURRENT REV DESC: NEW PN'S ADDED EC NO: 603321 DRWN: AKONDRACIUK 2018/08/23 CHK'D: MIWASIECZKO 2018/08/24 APPR: MIWASIECZKO 2018/08/24		 CSE M12 XP AC MA STR XM SE UNSH PRODUCT CUSTOMER DRAWING	
	INITIAL REVISION: DRWN: JMARSZALEK 2016/01/12 APPR: RSILLER 2016/04/08			
THIRD ANGLE PROJECTION 	DRAWING: A3-SIZE	SERIES: 120065	MATERIAL NUMBER: SEE SHEET 3-4	CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 4

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

8 0 X 0 0 6 X X X X X X X X

OPTIONS

80=M12x1 Single ended

Contacts:  
3=3 Contacts  
4=4 Contacts  
5=5 Contacts  
8=8 Contacts

Heads style:  
006=Plug Male Straight

Cable type: See Table

Units:  
M=Meter

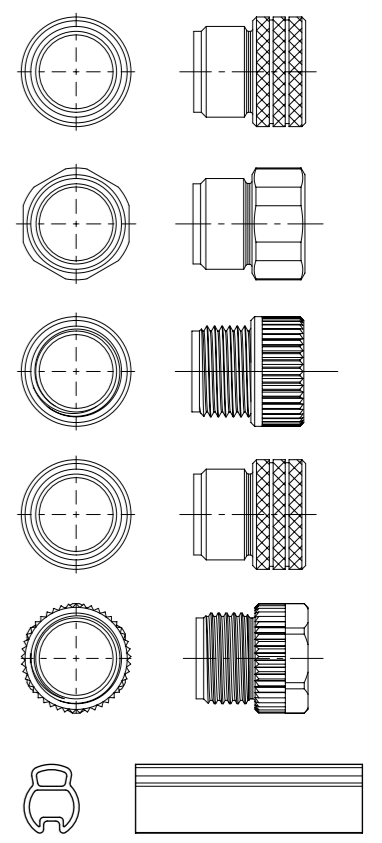
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

Overmold color:  
Blank (Standard)=Black  
A=Grey / G=Black / Y=Yellow  
For Cable A09=Yellow

Coupling Nut:  
Blank (Standard) & 3=Knurled Brass Ni Plated  
1 or 8=Hexagonal Stainless steel  
5=Knurled Derlin  
7=Knurled Brass Ni Plated, Teflon Coated  
9=Knurled / Hexagonal Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

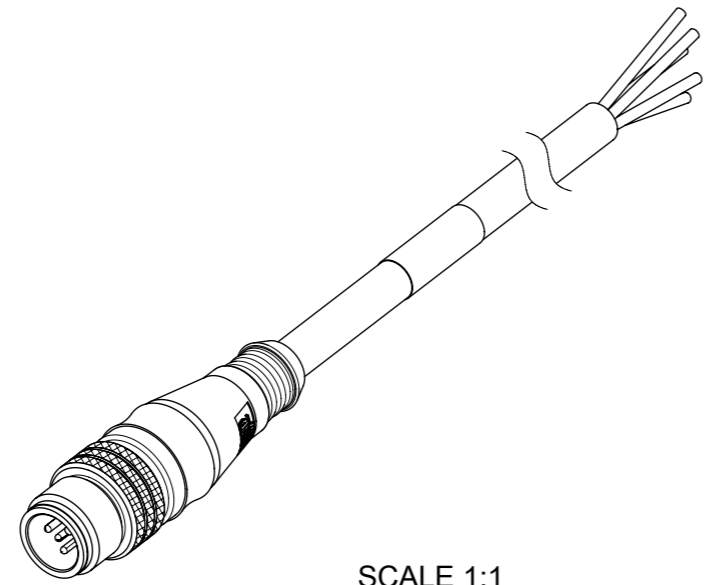


CABLE INFORMATION (for more information see Cable Data Sheet).

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E02	3 / 4 / 5 / 8	0.25mm <sup>2</sup>	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E03	3 / 4 / 5	0.34mm <sup>2</sup>	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
H08	3 / 4 / 5 / 8	0.25mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
H09	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
P02	3 / 4 / 5 / 8	0.25mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
A09	3	0.34mm <sup>2</sup>	PVC YELLOW						

CABLE LENGTH TOLERANCES

OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+2% of finished length



SCALE 1:1

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SYMBOLS: DIMENSION UNITS: mm SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL ± 1.0°

4 PLACES ±  
3 PLACES ±  
2 PLACES ± 0.05  
1 PLACE ± 0.3  
0 PLACES ± 0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120065

MATERIAL NUMBER: SEE SHEET 3-4

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 2 OF 4

CURRENT REV DESC: NEW PN'S ADDED

EC NO: 603321

DRWN: AKONDRACIUK 2018/08/23

CHK'D: MIWASIECZKO 2018/08/24

APPR: MIWASIECZKO 2018/08/24

INITIAL REVISION:  
DRWN: JMARSZALEK 2016/01/12  
APPR: RSILLER 2016/04/08

DOCUMENT NUMBER: 1200659185

DOC TYPE: PSD

DOC PART: 000

REVISION: A6

moLEX

CSE M12 XP AC MA STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

# PART LIST

No.	Part No.	Engineering No.	Cable Length
1	1200060046	804006E03M120	12m
2	1200060047	804006P03M050	5m
3	1200060240	803006E03M020	2m
4	1200060241	803006E03M050	5m
5	1200060242	803006E03M100	10m
6	1200060256	803006P03M002	0.2m
7	1200060257	803006P03M020	2m
8	1200060260	803006P03M030	3m
9	1200060261	803006P03M050	5m
10	1200060558	804006E03M006	0.6m
11	1200060559	804006E03M010	1m
12	1200060560	804006E03M020	2m
13	1200060561	804006E03M030	3m
14	1200060562	804006E03M050	5m
15	1200060563	804006E03M100	10m
16	1200060570	804006P03M020	2m
17	1200060571	804006P03M030	3m
18	1200060572	804006P03M100	10m
19	1200060667	805006E03M020	2m
20	1200060668	805006E03M030	3m
21	1200060680	805006P03M020	2m
22	1200060682	805006P03M050	5m
23	1200061345	805006E03M050	5m
24	1200061611	803006E03M150	15m
25	1200061633	804006P03M010	1m
26	1200061853	803006P03M010	1m
27	1200061855	804006P03M006	0.6m
28	1200062017	803006E03M030	3m
29	1200062082	805006P03M060	6m
30	1200062122	804006E03M0201 *	2m
31	1200062209	805006E03M100	10m
32	1200062351	803006E03M0505	5m
33	1200062352	803006E03M1005	10m
34	1200062426	804006E03M200	20m
35	1200062560	808006P02M005	0.5m









No.	Part No.	Engineering No.	Cable Length
36	1200062596	805006E03M003	0.3m
37	1200062631	805006P03M120	12m
38	1200062799	805006E03M010	1m
39	1200062830	804006E03M0205	2m
40	1200062877	804006E03M0505	5m
41	1200062920	804006E03M1005	10m
42	1200063018	803006P03M0303	3m
43	1200063077	804006E02M005	0.5m
44	1200063470	804006E03M010H	1m
45	1200063472	804006P03M200	20m
46	1200063731	805006P03M0065	0.6m
47	1200063732	804006E03M0501	5m
48	1200063733	804006E03M1001 *	10m
49	1200063856	804006E03M1501 *	15m
50	1200063941	804006P03M0401	4m
51	1200063953	805006E03M035	3.5m
52	1200063969	804006E03M2001 **	20m
53	1200064160	803006P03M005	0.5m
54	1200064231	804006E03M2501 *	25m
55	1200064240	804006P03M070	7m
56	1200064251	804006E03M003	0.3m
57	1200064252	804006E03M005	0.5m
58	1200064261	804006P03M011	1.1m
59	1200064347	804006P03M007	0.7m
60	1200064353	803006E03M003	0.3m
61	1200064393	804006P03M020G	2m
62	1200064464	803006P03M005G	0.5m
63	1200065002	805006P03M0201	2m
64	1200650964	808006P02M020	2m
65	1200650967	808006P02M040	4m
66	1200650968	808006P02M050	5m
67	1200650969	808006P02M100	10m
68	1200650970	808006P02M200	20m
69	1200651763	808006P02M030	3m
70	1200652141	804006P03M040	4m

No.	Part No.	Engineering No.	Cable Length
71	1200652157	805006P03M040	4m
72	1200652158	805006P03M100	10m
73	1200655011	805006P03M005	0.5m
74	1200655051	805006E03M006	0.6m
75	1200658016	808006P02M060	6m
76	1200658055	803006P03M003	0.3m
77	1200658057	803006P03M035	3.5m
78	1200658076	804006P03M0505	5m
79	1200658092	805006P03M010	1m
80	1200658109	808006P02M003	0.3m
81	1200658110	808006P02M150	15m
82	1200658181	808006P02M010	1m
83	1200658209	805006E03M0061 *	0.6m
84	1200658217	805006P03M090	9m
85	1200658223	808006E02M003	0.3m
86	1200658226	808006E02M0038	0.3m
87	1200658247	803006H09M100	10m
88	1200658248	803006H09M050	5m
89	1200658263	808006H08M100	10m
90	1200658463	804006P03M150	15m
91	1200658478	808006E02M040	4m
92	1200658500	805006E03M1001	10m
93	1200658518	804006E03M0201H	2m
94	1200658519	804006E03M0501H	5m
95	1200658526	803006E03M005	0.5m
96	1200658542	804006E03M070	7m
97	1200658546	808006E02M050	5m
98	1200658552	808006E02M0031	0.3m
99	1200658565	803006E03M010	1m
100	1200658566	803006E03M040	4m
101	1200658571	804006E03M040	4m
102	1200658576	808006E02M010	1m
103	1200658577	808006E02M020	2m
104	1200658578	808006E02M030	3m
105	1200658579	808006E02M100	10m

No.	Part No.	Engineering No.	Cable Length
106	1200658612	803006P03M040	4m
107	1200658613	803006P03M100	10m
108	1200658653	803006H09M010	1m
109	1200658654	803006H09M015	1.5m
110	1200658655	803006H09M020	2m
111	1200658656	803006H09M030	3m
112	1200658657	803006H09M040	4m
113	1200658658	808006H08M010	1m
114	1200658659	808006H08M015	1.5m
115	1200658660	808006H08M020	2m
116	1200658661	808006H08M030	3m
117	1200658662	808006H08M040	4m
118	1200658663	808006H08M050	5m
119	1200658727	804006H09M010	1m
120	1200658728	804006H09M015	1.5m
121	1200658729	804006H09M020	2m
122	1200658730	804006H09M030	3m
123	1200658731	804006H09M040	4m
124	1200658732	804006H09M050	5m
125	1200658733	804006H09M100	10m
126	1200658741	805006H09M010	1m
127	1200658742	805006H09M015	1.5m
128	1200658743	805006H09M020	2m
129	1200658744	805006H09M030	3m
130	1200658745	805006H09M040	4m
131	1200658746	805006H09M050	5m
132	1200658747	805006H09M100	10m
133	1200658784	804006E03M0101H	1m
134	1200658785	804006E03M1001H	10m
135	1200658814	808006H08M025	2.5m
136	1200658815	808006E02M003G	0.3m
137	1200658859	808006E02M0061G	0.6m
138	1200658876	804006E03M150	15m
139	1200658881	803006E03M050G	5m
140	1200658888	804006E03M020H	2m

## NOTES:

- \* - Part No. with Yellow PVC overmolding
- \*\* - Part No. with Black PVC overmolding

<b>SYMBOLS</b>  = 0  = 0  = 0  = 0  = 0  = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS: <b>mm</b> SCALE: <b>1:1</b>	CURRENT REV DESC: NEW PN'S ADDED EC NO: 603321 DRWN: AKONDRACIUK 2018/08/23 CHK'D: MIWASIECZKO 2018/08/24 APPR: MIWASIECZKO 2018/08/24	 CSE M12 XP AC MA STR XM SE UNSH		
	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	INITIAL REVISION: DRWN: JMARSZALEK 2016/01/12 APPR: RSILLER 2016/04/08	PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: <b>1200659185</b> DOC TYPE: PSD DOC PART: 000 REVISION: <b>A6</b>		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIRD ANGLE PROJECTION DRAWING:  SERIES: <b>A3-SIZE</b> MATERIAL NUMBER: <b>120065</b>	CUSTOMER: <b>SEE PART LIST</b> GENERAL MARKET	SHEET NUMBER: <b>3 OF 4</b>		
	DOCUMENT STATUS: P1   RELEASE DATE: 2018/08/24 07:05:33				

# PART LIST

No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length
141	1200658890	804006H09M003	0.3m	176	1200659224	805006P03M200	20m	211	1200650843	803006A09M0208	* 2m	246			
142	1200658892	803006H09M003	0.3m	177	1200659225	805006P03M300	30m	212				247			
143	1200658893	804006E03M050H	5m	178	1200659254	804006E03M500	50m	213				248			
144	1200658895	804006H09M200	20m	179	1200659281	805006P03M150	15m	214				249			
145	1200658897	805006E03M200	20m	180	1200659284	808006E02M150	15m	215				250			
146	1200658913	805006P03M030	3m	181	1200659285	805006E03M150	15m	216				251			
147	1200658918	808006E02M005H	0.5m	182	1200659316	805006P03M005H	0.5m	217				252			
148	1200658919	808006E02M010H	1m	183	1200659317	805006P03M007H	0.7m	218				253			
149	1200659034	804006E02M050	5m	184	1200659318	805006P03M010H	1m	219				254			
150	1200659036	804006E02M070	7m	185	1200659319	805006P03M020H	2m	220				255			
151	1200659037	804006E02M100	10m	186	1200659320	805006P03M050H	5m	221				256			
152	1200659041	808006E02M005	0.5m	187	1200659321	805006P03M100H	10m	222				257			
153	1200659080	804006E03M020Y	2m	188	1200659322	805006P03M150H	15m	223				258			
154	1200659104	803006E03M010Y	1m	189	1200659323	805006P03M200H	20m	224				259			
155	1200659109	804006E02M020	2m	190	1200659324	805006P03M300H	30m	225				260			
156	1200659110	808006E02M0501	* 5m	191	1200659325	805006P03M350H	35m	226				261			
157	1200659111	803006E02M050	5m	192	1200659367	805006E03M015	1.5m	227				262			
158	1200659141	805006H09M200	20m	193	1200659454	805006E03M045	4.5m	228				263			
159	1200659142	805006H09M300	30m	194	1200659455	805006E03M075	7.5m	229				264			
160	1200659145	805006E03M300	30m	195	1200659513	805006E03M030H	3m	230				265			
161	1200659149	805006H09M005	0.5m	196	1200659514	805006E03M045H	4.5m	231				266			
162	1200659154	804006P03M100Y	10m	197	1200659515	805006E03M075H	7.5m	232				267			
163	1200659178	804006P03M075	7.5m	198	1200659550	804006E03M120H	12m	233				268			
164	1200659179	804006P03M015	1.5m	199	1200659551	805006E03M010H	1m	234				269			
165	1200659185	805006E03M080	8m	200	1200659557	804006P03M003	0.3m	235				270			
166	1200659186	804006E03M060	6m	201	1200659612	804006P03M080	8m	236				271			
167	1200659190	804006P03M250	25m	202	1200659692	803006E02M020	2m	237				272			
168	1200659191	804006P03M300	30m	203	1200659983	804006E02M075	7.5m	238				273			
169	1200659192	804006P03M350	35m	204	1200659991	804006E02M0705	7m	239				274			
170	1200659193	804006P03M400	40m	205	1200656021	804006H09M050H	5m	240				275			
171	1200659194	804006E03M250	25m	206	1200659539	808006E02M100	** 10m	241				276			
172	1200659195	804006E03M300	30m	207	1200656293	803006E03M080	8m	242				277			
173	1200659196	804006E03M350	35m	208	1200656294	803006E03M120	12m	243				278			
174	1200659197	804006E03M400	40m	209	1200656295	804006E03M080	8m	244				279			
175	1200659198	804006E03M450	45m	210	1200656297	808006H08M005	0.5m	245				280			

## NOTES:

- \* - Part No. with Yellow PVC overmolding
- \*\* - Part No. with Black PVC overmolding

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: NEW PN'S ADDED		<b>molex</b>		
	DIMENSION UNITS	SCALE	EC NO: 603321				
	mm	1:1	DRWN: AKONDRACIUK	2018/08/23	CSE M12 XP AC MA STR XM SE UNSH		
	GENERAL TOLERANCES (UNLESS SPECIFIED)		CHK'D: MIWASIECZKO	2018/08/24			
ANGULAR TOL	± 1.0°	APPR: MIWASIECZKO	2018/08/24	PRODUCT CUSTOMER DRAWING			
4 PLACES	±	INITIAL REVISION:		DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
3 PLACES	±	DRWN: JMARSZALEK	2016/01/12	1200659185	PSD	000	A6
2 PLACES	± 0.05	APPR: RSILLER	2016/04/08	MATERIAL NUMBER		CUSTOMER	
1 PLACE	± 0.3	THIRD ANGLE PROJECTION		DRAWING		SERIES	
0 PLACES	± 0.5	DRAWING		A3-SIZE		120065	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING		SERIES		MATERIAL NUMBER	
		DRAWING		SERIES		CUSTOMER	
		DRAWING		SERIES		SHEET NUMBER	
		DRAWING		SERIES		4 OF 4	

DOCUMENT STATUS	P1	RELEASE DATE	2018/08/24	07:05:33
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