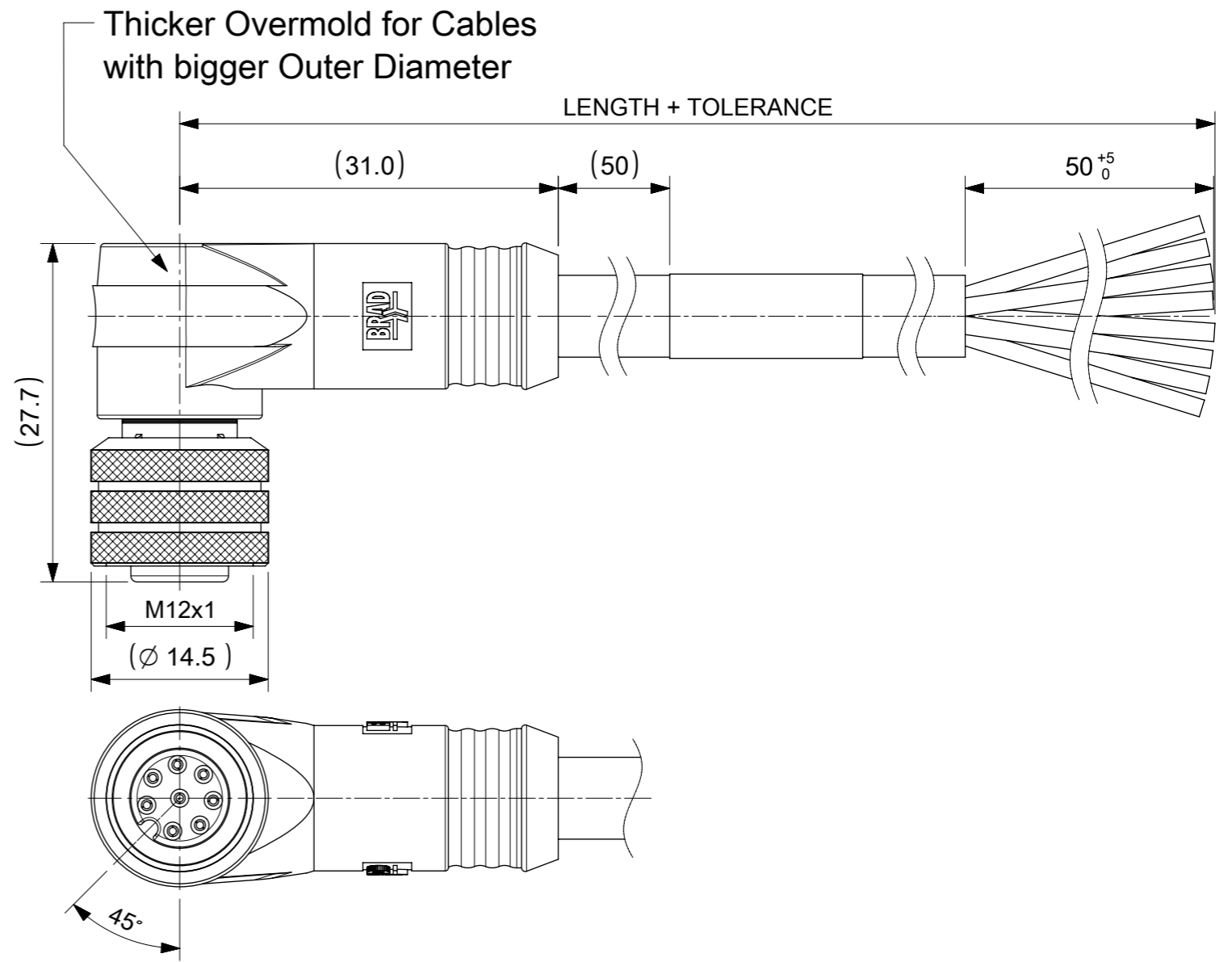
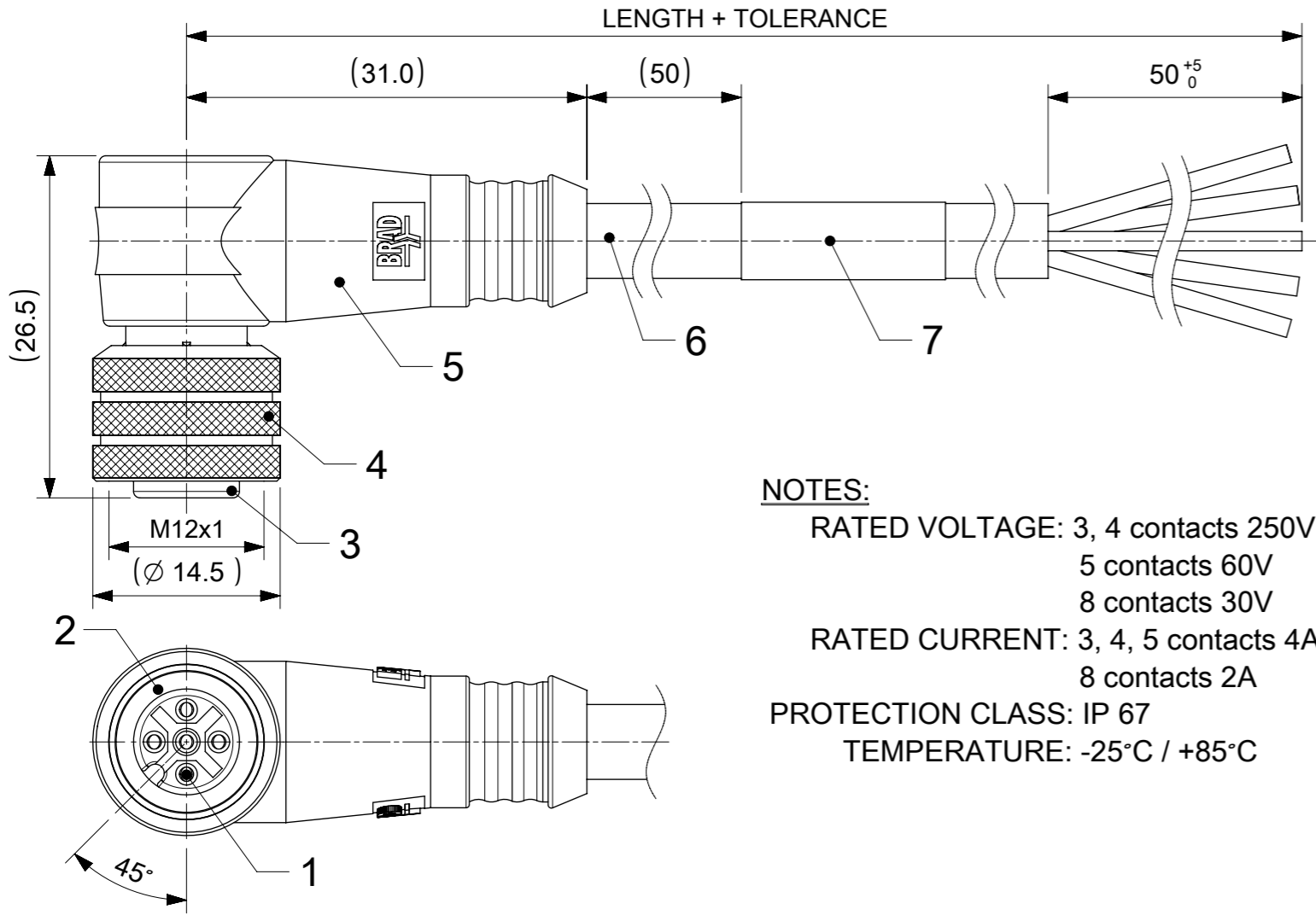


# FEMALE PLUG M12 90° ANGLED



**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
7	1	LABEL YELLOW	VINYL	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING BLACK	TPU	---
4	1	COUPLING NUT FEMALE	BRASS	NICKEL
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT M12 FEMALE	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

FUNCTIONAL SYMBOLS:  $\nabla_A = 0$ ,  $\nabla_E = 0$ ,  $\nabla_V = 0$

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

DIVISIONAL SYMBOLS: DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION:

DRAWING: A3-SIZE | SERIES: 120065 | MATERIAL NUMBER: SEE SHT 3+4 | CUSTOMER: GENERAL MARKET | SHEET NUMBER: 1 OF 4

EC NO: 640127 | DRWN: RSCHEIBER | 2020/06/23 | APPR: RSILLER | 2020/06/23

INITIAL REVISION: DRWN: JMARSZALEK | 2015/10/30 | APPR: RSILLER | 2016/04/08

CURRENT REV DESC: NEW P/N ADDED

**molex**

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1200658573 | DOC TYPE: PSD | DOC PART: 000 | REVISION: A6

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

8 0 X 0 0 1 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:  
001=Plug Female  
90° Angled

Cable type: See Table

Units:  
M=Meter

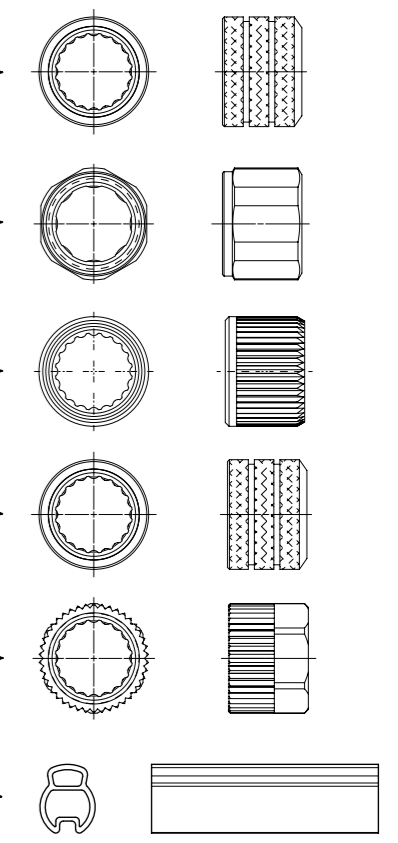
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

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

Coupling Nut:  
Blank (Standard) & 3=Knurled Brass Ni Plated  
1=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

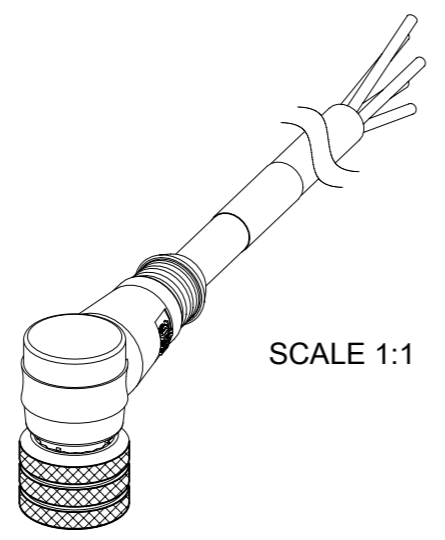


CABLE INFORMATION (for more information see Cable Data Sheet).

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.	-	-

CABLE LENGTH TOLERANCES

LENGTH	TOLERANCE
0m-1m	+40 mm
>1m-5m	+60 mm
>5m-10m	+80 mm
>10m-20m	+140 mm
>20m-30m	+160 mm
>30m	+1% length



FUNCTIONAL SYMBOLS ∇/A = 0 ∇/E = 0 ∇/V = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE 1:1	CURRENT REV DESC: NEW P/N ADDED						
	mm	GENERAL TOLERANCES (UNLESS SPECIFIED)							
	4 PLACES ±	ANGULAR TOL ± 1.0°							
	3 PLACES ±	2 PLACES ± 0.05							
DIVISIONAL SYMBOLS	1 PLACE ± 0.3	EC NO: 640127	DRWN: RSCHIEBER	2020/06/23					
0 PLACES ± 0.5	DRWN: JMARSZALEK	2015/10/30	2016/04/08	CSE M12 XP AC FE RA XM SE UNSH PRODUCT CUSTOMER DRAWING					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
		A3-SIZE	120065	SEE SHT 3+4	GENERAL MARKET	1200658573	PSD	000	A6
									SHEET NUMBER
									2 OF 4

# PART LIST

No.	Part No.	Engineering No.	Cable Length
1	1200060007	803001E03M020	2m
2	1200060008	803001E03M050	5m
3	1200060009	803001E03M100	10m
4	1200060011	803001P03M020	2m
5	1200060012	803001P03M050	5m
6	1200060013	803001P03M100	10m
7	1200060021	804001E03M020	2m
8	1200060022	804001E03M050	5m
9	1200060023	804001E03M100	10m
10	1200060024	804001P03M020	2m
11	1200060025	804001P03M050	5m
12	1200060175	803001E03M010	1m
13	1200060178	803001E03M030	3m
14	1200060184	803001E03M150	15m
15	1200060187	803001E03M200	20m
16	1200060212	803001P03M030	3m
17	1200060216	803001P03M150	15m
18	1200060479	804001E03M010	1m
19	1200060480	804001E03M0201	2m
20	1200060481	804001E03M030	3m
21	1200060482	804001E03M040	4m
22	1200060483	804001E03M0501	* 5m
23	1200060485	804001E03M1001	* 10m
24	1200060486	804001E03M150	15m
25	1200060487	804001E03M200	20m
26	1200060488	804001E03M250	25m
27	1200060489	804001E03M300	30m
28	1200060510	804001P03M030	3m
29	1200060516	804001P03M150	15m
30	1200060517	804001P03M200	20m
31	1200060652	805001E03M020	2m
32	1200060654	805001E03M050	5m
33	1200060655	805001E03M0501	* 5m
34	1200060657	805001E03M100	10m
35	1200060663	805001P03M020	2m


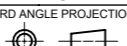
No.	Part No.	Engineering No.	Cable Length
36	1200060664	805001P03M100	10m
37	1200061318	803001P03M010	1m
38	1200061336	804001E03M0205	2m
39	1200061443	804001E03M1501	* 15m
40	1200061538	803001E03M051	5.1m
41	1200061540	803001E03M033	3.3m
42	1200061541	803001E03M022	2.2m
43	1200061542	803001E03M011	1.1m
44	1200061552	803001E03M066	6.6m
45	1200061553	803001E03M058	5.8m
46	1200061760	805001P03M150	15m
47	1200061986	804001P03M010	1m
48	1200062027	803001P03M022	2.2m
49	1200062292	803001E03M003	0.3m
50	1200062313	804001P03M100H	10m
51	1200062837	803001P03M006	0.6m
52	1200063340	803001P03M025	2.5m
53	1200063405	804001P03M003	0.3m
54	1200063648	804001E03M2001	* 20m
55	1200063793	804001P03M140	14m
56	1200064145	804001E03M3001	* 30m
57	1200064174	804001E03M5005	50m
58	1200064289	804001P03M400	40m
59	1200064350	804001P03M120	12m
60	1200064391	804001P03M1001	10m
61	1200064402	804001E03M005	0.5m
62	1200064433	804001H09M050G	5m
63	1200064436	804001H09M100G	10m
64	1200065013	803001P03M030G	3m
65	1200650960	808001P02M020	2m
66	1200650961	808001P02M040	4m
67	1200650962	808001P02M050	5m
68	1200650963	808001P02M100	10m
69	1200651783	804001P03M020G	2m
70	1200651785	804001P03M050G	5m

No.	Part No.	Engineering No.	Cable Length
71	1200651787	804001P03M100	10m
72	1200651793	805001P03M050	5m
73	1200652147	804001P03M040	4m
74	1200652156	805001P03M060	6m
75	1200658010	804001H09M050H	5m
76	1200658011	804001H09M100H	10m
77	1200658046	803001E03M006	0.6m
78	1200658047	803001E03M0061	* 0.6m
79	1200658048	803001E03M0401	* 4m
80	1200658071	804001E03M050H	5m
81	1200658184	805001P03M040	4m
82	1200658185	804001H09M150G	15m
83	1200658193	804001H09M050	5m
84	1200658194	804001H09M100	10m
85	1200658195	804001H09M150	15m
86	1200658196	804001H09M200	20m
87	1200658206	804001P03M060	6m
88	1200658234	803001E03M0501	* 5m
89	1200658245	808001H08M050	5m
90	1200658261	808001E02M050	5m
91	1200658268	803001E03M0505	5m
92	1200658269	803001E03M1005	10m
93	1200658271	804001E03M0505	5m
94	1200658296	805001H09M020	2m
95	1200658297	805001H09M050	5m
96	1200658298	805001H09M100	10m
97	1200658310	808001E02M0501	5m
98	1200658311	803001P03M200	20m
99	1200658312	803001P03M300	30m
100	1200658314	805001P03M200	20m
101	1200658338	804001E03M050G	5m
102	1200658339	804001E03M100G	10m
103	1200658359	805001E03M150	15m
104	1200658403	803001P03M003	0.3m
105	1200658482	804001E03M015	1.5m

No.	Part No.	Engineering No.	Cable Length
106	1200658483	808001P02M150	15m
107	1200658513	804001H09M020	2m
108	1200658541	804001E03M070	7m
109	1200658564	803001E03M040	4m
110	1200658573	805001E03M010	1m
111	1200658574	805001E03M030	3m
112	1200658575	805001E03M040	4m
113	1200658585	808001E02M010	1m
114	1200658586	808001E02M020	2m
115	1200658587	808001E02M030	3m
116	1200658588	808001E02M040	4m
117	1200658589	808001E02M100	10m
118	1200658611	803001P03M040	4m
119	1200658617	805001P03M010	1m
120	1200658619	808001P02M010	1m
121	1200658620	808001P02M030	3m
122	1200658624	804001P03M010G	1m
123	1200658625	804001P03M030G	3m
124	1200658627	805001P03M030	3m
125	1200658631	804001P03M040G	4m
126	1200658647	808001H08M010	1m
127	1200658648	808001H08M015	1.5m
128	1200658649	808001H08M020	2m
129	1200658650	808001H08M030	3m
130	1200658651	808001H08M040	4m
131	1200658652	808001H08M100	10m
132	1200658664	805001H09M010	1m
133	1200658665	805001H09M015	1.5m
134	1200658666	805001H09M030	3m
135	1200658667	805001H09M040	4m
136	1200658668	804001H09M010	1m
137	1200658669	804001H09M015	1.5m
138	1200658670	804001H09M030	3m
139	1200658671	804001H09M040	4m
140	1200658713	803001H09M010	1m

## NOTES:

\* - Part No. with Yellow TPC overmolding

FUNCTIONAL 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 P/N ADDED		
	$\nabla_A = 0$ $\nabla_B = 0$ $\nabla_C = 0$	DIMENSION UNITS <b>mm</b>	SCALE <b>1:1</b>	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL $\pm 1.0^\circ$ 4 PLACES $\pm$ 3 PLACES $\pm$ 2 PLACES $\pm 0.05$ 1 PLACE $\pm 0.3$ 0 PLACES $\pm 0.5$	
DIVISIONAL SYMBOLS	EC NO: 640127 DRWN: RSCHIEBER CHK'D: RSILLER APPR: RSILLER		2020/06/23 2020/06/23 2020/06/23		PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER <b>1200658573</b> DOC TYPE PSD DOC PART 000 REVISION <b>A6</b>
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 	DRAWING <b>A3-SIZE</b>	SERIES <b>120065</b>	

DOCUMENT STATUS	P1	RELEASE DATE	2020/06/23	15:10:37
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# PART LIST

No.	Part No.	Engineering No.	Cable Length
141	1200658714	803001H09M015	1.5m
142	1200658715	803001H09M020	2m
143	1200658716	803001H09M030	3m
144	1200658717	803001H09M040	4m
145	1200658718	803001H09M050	5m
146	1200658719	803001H09M100	10m
147	1200658783	804001E03M060	6m
148	1200658884	804001E03M100H	10m
149	1200658898	804001E03M150H	15m
150	1200658931	808001E02M150	15m
151	1200658932	808001E02M250	25m
152	1200658976	803001P03M0505	5m
153	1200658988	805001P03M050H	5m
154	1200658989	805001P03M100H	10m
155	1200658992	804001P03M050H	5m
156	1200659032	804001E02M050	5m
157	1200659033	804001E02M100	10m
158	1200659039	804001E02M070	7m
159	1200659048	804001E02M1001	10m
160	1200659056	803001E03M050Y	5m
161	1200659057	803001E03M100Y	10m
162	1200659061	804001E03M020Y	2m
163	1200659062	804001E03M050Y	5m
164	1200659063	804001E03M100Y	10m
165	1200659074	803001E03M150Y	15m
166	1200659077	804001E03M150Y	15m
167	1200659083	805001E03M100Y	10m
168	1200659095	804001H09M050HY	5m
169	1200659099	804001H09M050Y	5m
170	1200659101	808001H08M050Y	5m
171	1200659105	808001H08M100Y	10m
172	1200659108	804001P03M050HY	5m
173	1200659124	804001H09M100HY	10m
174	1200659140	805001H09M200	20m
175	1200659147	805001E03M200	20m

No.	Part No.	Engineering No.	Cable Length
176	1200659164	804001E03M025	2.5m
177	1200659173	803001E03M050H	5m
178	1200659181	803001E03M100H	10m
179	1200659182	804001E03M020H	2m
180	1200659235	803001E03M300	30m
181	1200659266	804001P03M020Y	2m
182	1200659342	804001P03M1501	15m
183	1200659343	804001P03M2501	25m
184	1200659352	805001E03M1001	10m
185	1200659353	805001E03M2501	25m
186	1200659373	803001E02M030	3m
187	1200659398	808001P02M100Y	10m
188	1200659502	805001E03M005	0.5m
189	1200659592	805001E03M080	8m
190	1200659637	808001E02M1001	10m
191	1200659675	804001H09M220	22m
192	1200659738	804001P03M015	1.5m
193	1200659775	803001P03M050HY	5m
194	120063754	808001P02M0501A	5m
195	1200656065	808001E02M0601	6m
196	1200659637	808001E02M1001	10m
197	1200656595	804001E02M0501	5m
198	1200656382	808001P02M400	40m
199	1200656575	805001P03M300	30m
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No.	Part No.	Engineering No.	Cable Length
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No.	Part No.	Engineering No.	Cable Length
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<b>FUNCTIONAL SYMBOLS</b> $\nabla_A = 0$ $\nabla_E = 0$ $\nabla_P = 0$	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 P/N ADDED	
	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL $\pm 1.0^\circ$		EC NO: 640127 DRWN: RSCHIEBER   2020/06/23 CHK'D: RSILLER   2020/06/23 APPR: RSILLER   2020/06/23	
	<b>DIVISIONAL SYMBOLS</b> 4 PLACES $\pm$ 3 PLACES $\pm$ 2 PLACES $\pm 0.05$ 1 PLACE $\pm 0.3$ 0 PLACES $\pm 0.5$		INITIAL REVISION: DRWN: JMARSZALEK   2015/10/30 APPR: RSILLER   2016/04/08	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 	

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658573	PSD	000	A6

DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
A3-SIZE	120065	SEE SHT 3+4	GENERAL MARKET	4 OF 4