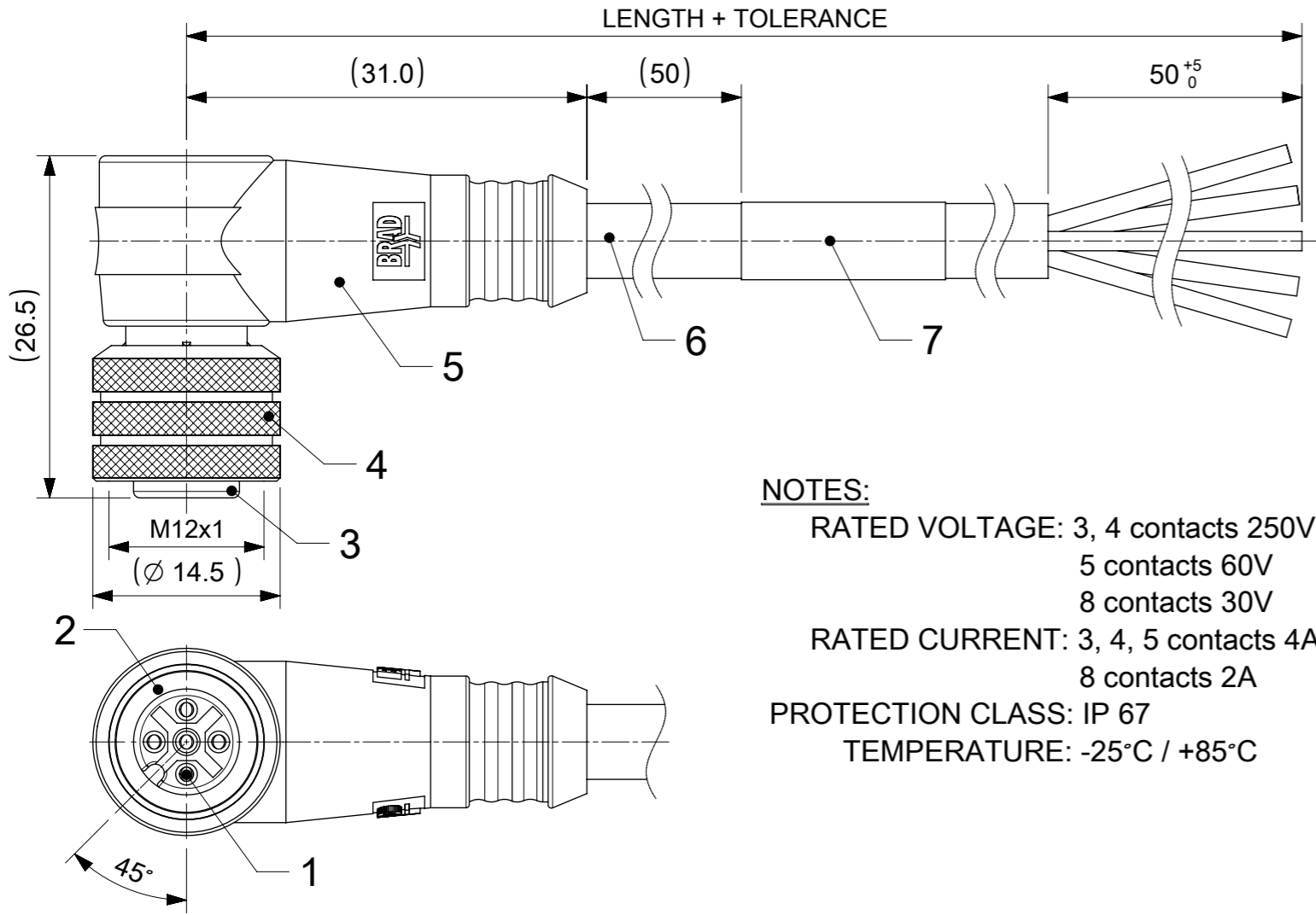
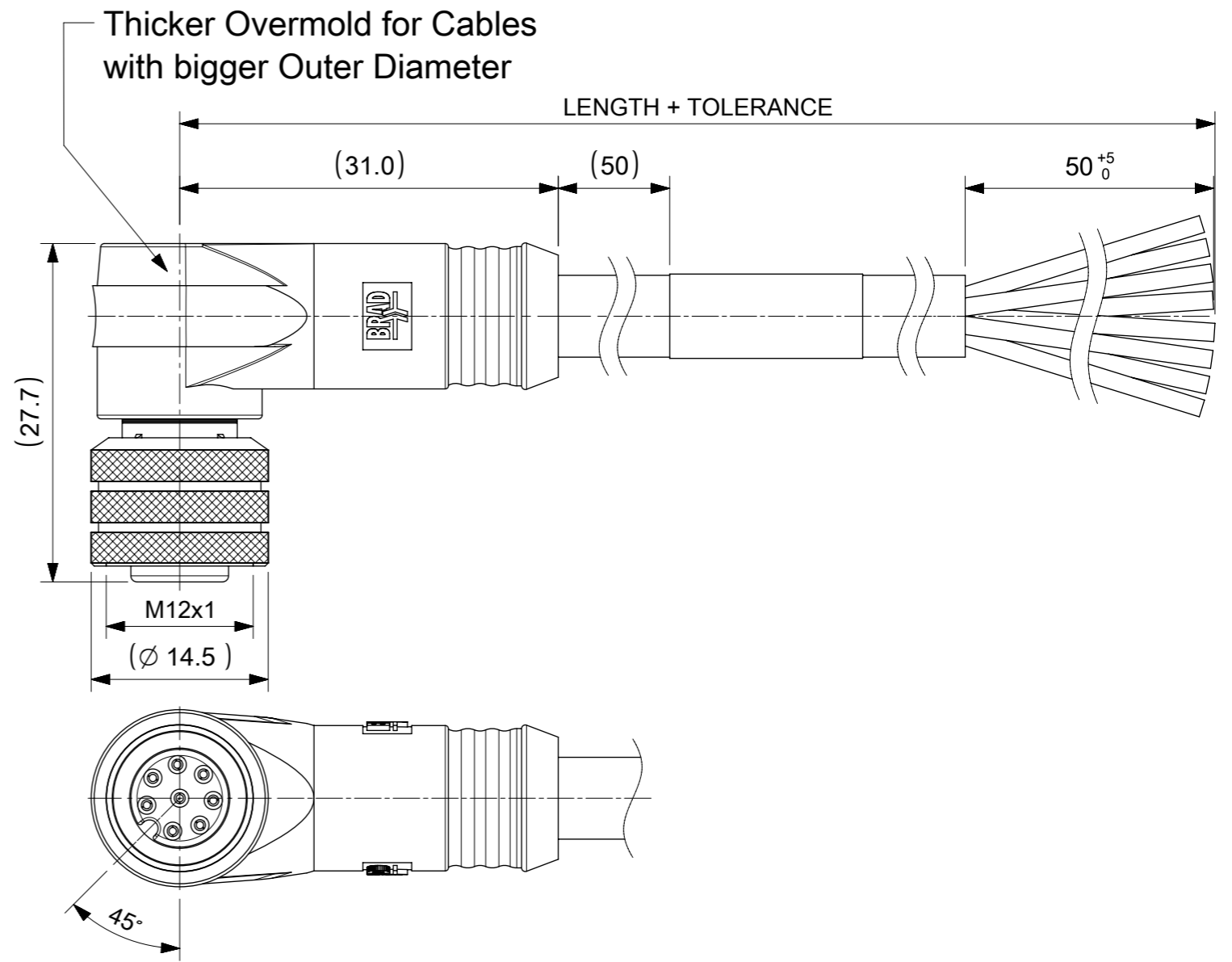


# FEMALE PLUG M12 90° ANGLED



**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 | CHK'D: RSILLER | 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

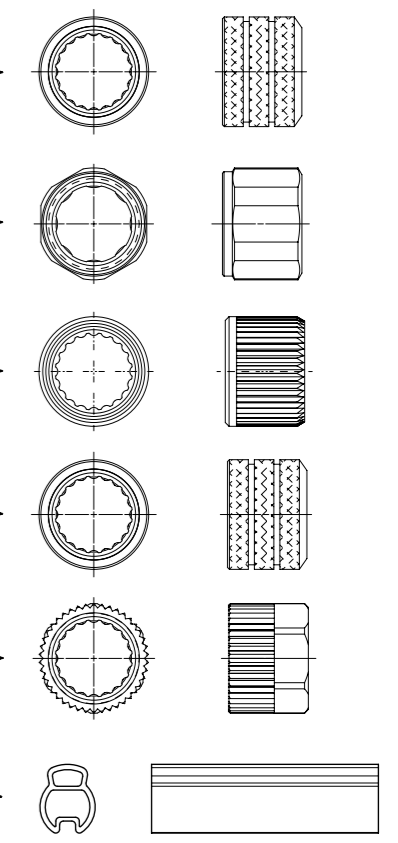
Length  
Examples:  
005=0.5 unit  
010=1 unit  
100=10 units

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

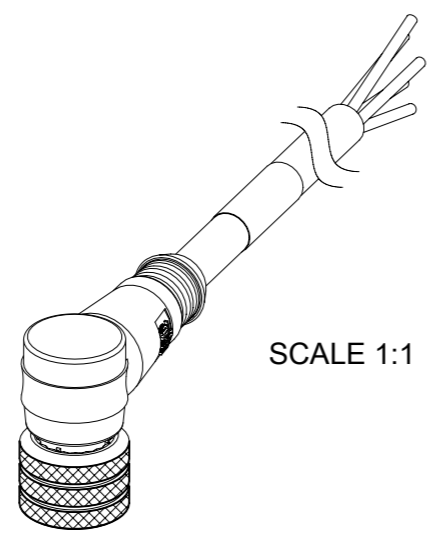


CABLE INFORMATION (for more information see Cable Data Sheet).

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	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		<b>molex</b>																					
	<table border="1"> <tr> <th>FUNCTIONAL SYMBOLS</th> <th>DIMENSION UNITS</th> <th>SCALE</th> </tr> <tr> <td><math>\nabla_A = 0</math></td> <td>mm</td> <td>1:1</td> </tr> <tr> <td><math>\nabla_E = 0</math></td> <td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td> </tr> <tr> <td><math>\nabla_{E'} = 0</math></td> <td colspan="2">ANGULAR TOL <math>\pm 1.0^\circ</math></td> </tr> <tr> <td rowspan="5">DIVISIONAL SYMBOLS</td> <td>4 PLACES</td> <td><math>\pm</math></td> </tr> <tr> <td>3 PLACES</td> <td><math>\pm</math></td> </tr> <tr> <td>2 PLACES</td> <td><math>\pm 0.05</math></td> </tr> <tr> <td>1 PLACE</td> <td><math>\pm 0.3</math></td> </tr> <tr> <td>0 PLACES</td> <td><math>\pm 0.5</math></td> </tr> </table>	FUNCTIONAL SYMBOLS	DIMENSION UNITS			SCALE	$\nabla_A = 0$	mm	1:1	$\nabla_E = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		$\nabla_{E'} = 0$	ANGULAR TOL $\pm 1.0^\circ$		DIVISIONAL SYMBOLS	4 PLACES	$\pm$	3 PLACES	$\pm$	2 PLACES	$\pm 0.05$	1 PLACE	$\pm 0.3$	0 PLACES
FUNCTIONAL SYMBOLS	DIMENSION UNITS	SCALE																							
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	1 PLACE	$\pm 0.3$																							
	0 PLACES	$\pm 0.5$																							
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 2 OF 4																		

# 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
1	1200060007	803001E03M020	2m	36	1200060664	805001P03M100	10m	71	1200651787	804001P03M100	10m	106	1200658483	808001P02M150	15m
2	1200060008	803001E03M050	5m	37	1200061318	803001P03M010	1m	72	1200651793	805001P03M050	5m	107	1200658513	804001H09M020	2m
3	1200060009	803001E03M100	10m	38	1200061336	804001E03M0205	2m	73	1200652147	804001P03M040	4m	108	1200658541	804001E03M070	7m
4	1200060011	803001P03M020	2m	39	1200061443	804001E03M1501*	15m	74	1200652156	805001P03M060	6m	109	1200658564	803001E03M040	4m
5	1200060012	803001P03M050	5m	40	1200061538	803001E03M051	5.1m	75	1200658010	804001H09M050H	5m	110	1200658573	805001E03M010	1m
6	1200060013	803001P03M100	10m	41	1200061540	803001E03M033	3.3m	76	1200658011	804001H09M100H	10m	111	1200658574	805001E03M030	3m
7	1200060021	804001E03M020	2m	42	1200061541	803001E03M022	2.2m	77	1200658046	803001E03M006	0.6m	112	1200658575	805001E03M040	4m
8	1200060022	804001E03M050	5m	43	1200061542	803001E03M011	1.1m	78	1200658047	803001E03M0061*	0.6m	113	1200658585	808001E02M010	1m
9	1200060023	804001E03M100	10m	44	1200061552	803001E03M066	6.6m	79	1200658048	803001E03M0401*	4m	114	1200658586	808001E02M020	2m
10	1200060024	804001P03M020	2m	45	1200061553	803001E03M058	5.8m	80	1200658071	804001E03M050H	5m	115	1200658587	808001E02M030	3m
11	1200060025	804001P03M050	5m	46	1200061760	805001P03M150	15m	81	1200658184	805001P03M040	4m	116	1200658588	808001E02M040	4m
12	1200060175	803001E03M010	1m	47	1200061986	804001P03M010	1m	82	1200658185	804001H09M150G	15m	117	1200658589	808001E02M100	10m
13	1200060178	803001E03M030	3m	48	1200062027	803001P03M022	2.2m	83	1200658193	804001H09M050	5m	118	1200658611	803001P03M040	4m
14	1200060184	803001E03M150	15m	49	1200062292	803001E03M003	0.3m	84	1200658194	804001H09M100	10m	119	1200658617	805001P03M010	1m
15	1200060187	803001E03M200	20m	50	1200062313	804001P03M100H	10m	85	1200658195	804001H09M150	15m	120	1200658619	808001P02M010	1m
16	1200060212	803001P03M030	3m	51	1200062837	803001P03M006	0.6m	86	1200658196	804001H09M200	20m	121	1200658620	808001P02M030	3m
17	1200060216	803001P03M150	15m	52	1200063340	803001P03M025	2.5m	87	1200658206	804001P03M060	6m	122	1200658624	804001P03M010G	1m
18	1200060479	804001E03M010	1m	53	1200063405	804001P03M003	0.3m	88	1200658234	803001E03M0501*	5m	123	1200658625	804001P03M030G	3m
19	1200060480	804001E03M0201	2m	54	1200063648	804001E03M2001*	20m	89	1200658245	808001H08M050	5m	124	1200658627	805001P03M030	3m
20	1200060481	804001E03M030	3m	55	1200063793	804001P03M140	14m	90	1200658261	808001E02M050	5m	125	1200658631	804001P03M040G	4m
21	1200060482	804001E03M040	4m	56	1200064145	804001E03M3001*	30m	91	1200658268	803001E03M0505	5m	126	1200658647	808001H08M010	1m
22	1200060483	804001E03M0501*	5m	57	1200064174	804001E03M5005	50m	92	1200658269	803001E03M1005	10m	127	1200658648	808001H08M015	1.5m
23	1200060485	804001E03M1001*	10m	58	1200064289	804001P03M400	40m	93	1200658271	804001E03M0505	5m	128	1200658649	808001H08M020	2m
24	1200060486	804001E03M150	15m	59	1200064350	804001P03M120	12m	94	1200658296	805001H09M020	2m	129	1200658650	808001H08M030	3m
25	1200060487	804001E03M200	20m	60	1200064391	804001P03M1001	10m	95	1200658297	805001H09M050	5m	130	1200658651	808001H08M040	4m
26	1200060488	804001E03M250	25m	61	1200064402	804001E03M005	0.5m	96	1200658298	805001H09M100	10m	131	1200658652	808001H08M100	10m
27	1200060489	804001E03M300	30m	62	1200064433	804001H09M050G	5m	97	1200658310	808001E02M0501	5m	132	1200658664	805001H09M010	1m
28	1200060510	804001P03M030	3m	63	1200064436	804001H09M100G	10m	98	1200658311	803001P03M200	20m	133	1200658665	805001H09M015	1.5m
29	1200060516	804001P03M150	15m	64	1200065013	803001P03M030G	3m	99	1200658312	803001P03M300	30m	134	1200658666	805001H09M030	3m
30	1200060517	804001P03M200	20m	65	1200650960	808001P02M020	2m	100	1200658314	805001P03M200	20m	135	1200658667	805001H09M040	4m
31	1200060652	805001E03M020	2m	66	1200650961	808001P02M040	4m	101	1200658338	804001E03M050G	5m	136	1200658668	804001H09M010	1m
32	1200060654	805001E03M050	5m	67	1200650962	808001P02M050	5m	102	1200658339	804001E03M100G	10m	137	1200658669	804001H09M015	1.5m
33	1200060655	805001E03M0501*	5m	68	1200650963	808001P02M100	10m	103	1200658359	805001E03M150	15m	138	1200658670	804001H09M030	3m
34	1200060657	805001E03M100	10m	69	1200651783	804001P03M020G	2m	104	1200658403	803001P03M003	0.3m	139	1200658671	804001H09M040	4m
35	1200060663	805001P03M020	2m	70	1200651785	804001P03M050G	5m	105	1200658482	804001E03M015	1.5m	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
FA = 0 FB = 0 FC = 0	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
DIVISIONAL SYMBOLS	EC NO: 640127 DRWN: RSCHIEBER 2020/06/23 CHK'D: RSILLER 2020/06/23 APPR: RSILLER 2020/06/23 INITIAL REVISION: DRWN: JMARSZALEK 2015/10/30 APPR: RSILLER 2016/04/08
DOCUMENT STATUS: P1 RELEASE DATE: 2020/06/23 15:10:37	DOCUMENT NUMBER: 1200658573 DOC TYPE: PSD DOC PART: 000 REVISION: A6
THIRD ANGLE PROJECTION	DRAWING: A3-SIZE SERIES: 120065 MATERIAL NUMBER: SEE SHT 3+4 CUSTOMER: GENERAL MARKET SHEET NUMBER: 3 OF 4

# 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
200			
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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	DRAWING: <b>A3-SIZE</b>



CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658573	PSD	000	A6