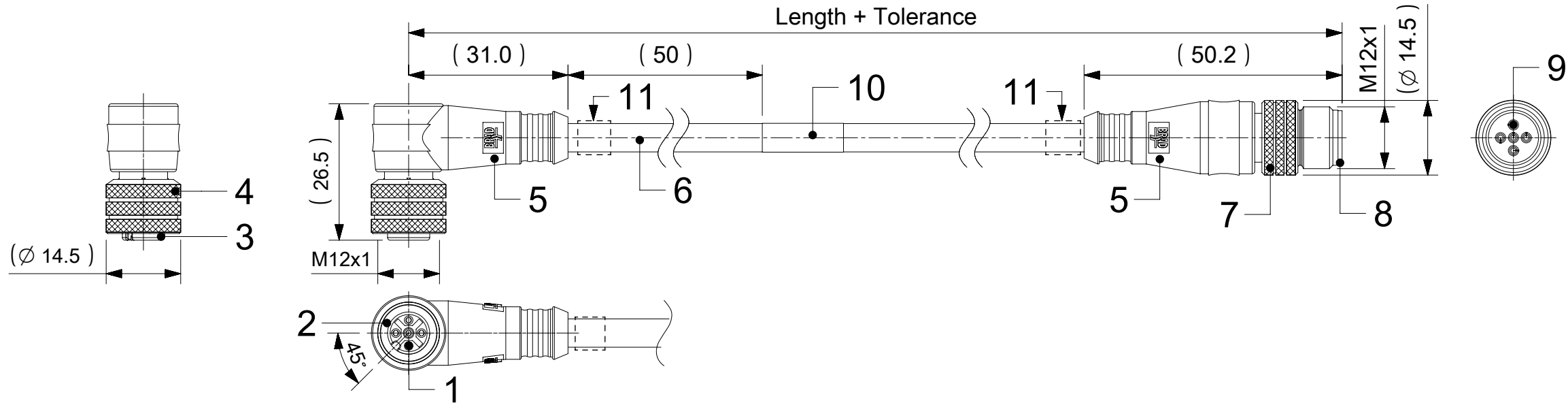


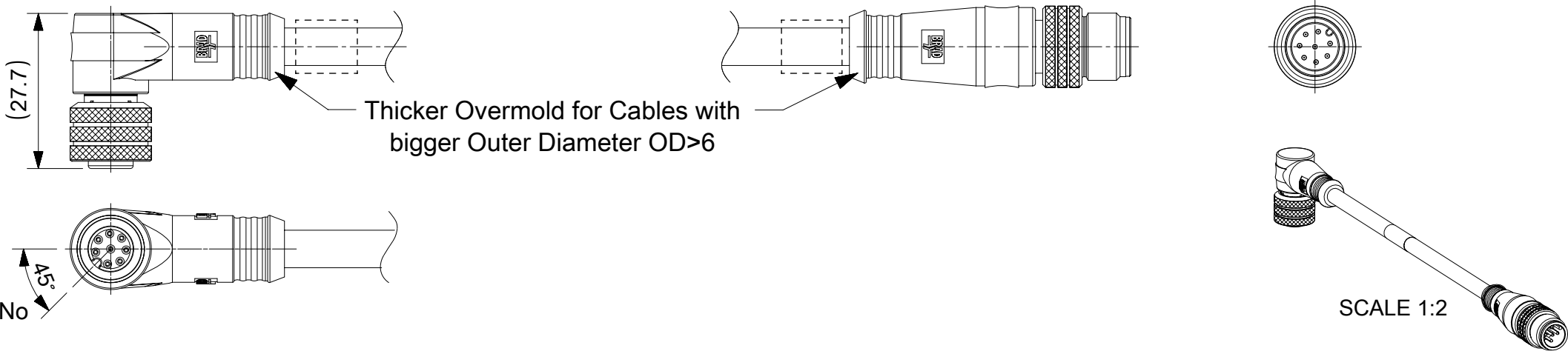
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



NOTES:

RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
5 contacts 60V per IEC 60664
5 contacts 250V per UL 2238
8 contacts 30V per IEC 60664
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A
PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +85°C

* FOR CABLES lxx USE PRINTING ON THE CABLE IN THE SAME MEASUREMENT LIKE FOR LABEL – ENGINEERING No



CONTACTS POSITION FRONT VIEW:

	3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
FEMALE								
MALE								
CONNECTIONS	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 OR GREEN/YELLOW	5	GREY
							6	PINK
							7	BLUE
CODING REQUIRED TO IEC 61076-2-101								

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

11	SEE PART LIST	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES lxx	---	---
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE Au OVER Ni
8	1	INSERT MALE BLACK	SEE PART LIST	---
7	1	COUPLING NUT MALE	SEE PART LIST	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING BLACK	SEE PART LIST	---
4	1	COUPLING NUT FEMALE	SEE PART LIST	---
3	1	INSERT FEMALE BLACK	SEE PART LIST	---
2	1	O-RING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE Au OVER Ni
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M			molex								
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)							CSE M12 XP AC FE RA MA STR XM DE								
ANGULAR TOL ± 1.0 °															
4 PLACES ±															
3 PLACES ±				EC NO: 791338 DRWN: RSILLER 2024/07/03 CHK'D: THAERDT 2024/07/03 APPR: THAERDT 2024/07/03			PRODUCT CUSTOMER DRAWING								
2 PLACES ± 0.05															
1 PLACE ± 0.3															
0 PLACES ± 0.5				INITIAL REVISION: DRWN: JMARSZALEK 2016/10/06 APPR: RSILLER 2016/12/08			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION					DRAWING		SERIES		1200660973		PSD	000	A11
		THIRD ANGLE PROJECTION		A3-SIZE		120066		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
										GENERAL MARKET		1 OF 4			

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

OPTIONS

88X0X1XXXXXX

88=Micro-Change
M12x1
Double ended

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

Heads style:
031=Plug Female 90°
to Plug Male Straight
021=Plug Female 90°
to Plug Male Straight
with Female
Coupling Nut

Cable type: See Table

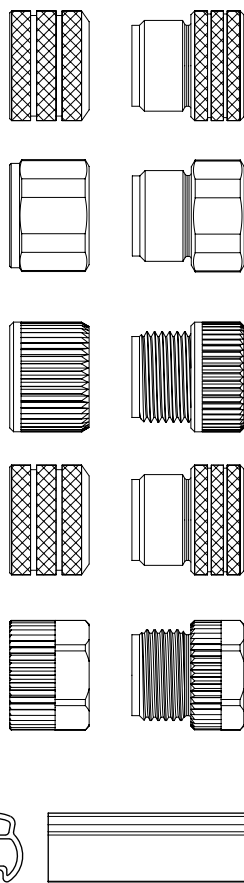
Units:
M=Meter
C=Centimeter

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

Coupling Nut:
Blank (Standard)=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
9=Knurled / Hexagonal Brass Ni Plated SW13

H= 2 pcs. of I/D Carrier PVC Transparent
(Cables Ixx & P82 always with 2 pcs. of
I/D Carrier even if no H in Engineering No.)

COUPLING NUT
FEMALE MALE



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
I03	3 / 4 / 5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
K03	4	18AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
K05	3 / 4 / 5	22AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
P82	3 / 4 / 5	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S20	3 / 4 / 5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
E02	3 / 4 / 5 / 8	0.25mm²	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	0.34mm²	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.	-	-
H09	3 / 4 / 5	0.34mm²	PUR BLACK LSOH	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	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
H08	8	0.25mm²	PUR BLACK LSOH	UL 21198/10493	UL 21198/10493	-40°C to +80°C, >5xO.D.	-25°C to +80°C, >10xO.D.	2 000 000 cycles, Temp max 60°C	-
P02	8	0.25mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-

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

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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

CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M

EC NO: 791338
DRWN: RSILLER
CHK'D: THAERDT
APPR: THAERDT

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING A3-SIZE

SERIES 120066

2024/07/03
2024/07/03
2024/07/03

2016/10/06
2016/12/08

DOCUMENT NUMBER 1200660973

MATERIAL NUMBER

CUSTOMER GENERAL MARKET

DOC TYPE PSD

DOC PART 000

REVISION A11

SHEET NUMBER 2 OF 4

molex

CSE M12 XP AC FE RA MA STR XM DE

PRODUCT CUSTOMER DRAWING

	10	9	8	7	6	5	4	3	2	1			
F	PART LIST										F		
	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	F
	1	1200060052	884031I20M005	0.5m	36	1200072725	885031I26M005	0.5m	71	1200665039	884031S20M003	0.3m	
	2	1200060053	884031I20M010	1m	37	1200072726	885031I26M010	1m	72	1200665053	884031S20M060H	6m	
E	3	1200060054	884031I20M015	1.5m	38	1200659070	884031I20M010Y	1m	73	1200665074	884031K05M080	8m	E
	4	1200060055	884031I20M020	2m	39	1200659071	884031I20M015Y	1.5m	74	1200668052	883031S20M006	0.6m	
	5	1200070132	883031I03M003	0.3m	40	1200659115	884031I20M005Y	0.5m	75	1200668071	884031S20M020	2m	
	6	1200070133	883031I03M006	0.6m	41	1200660374	884031K05M005	0.5m	76	1200668191	883031S20M030	3m	
D	7	1200070134	883031I03M010	1m	42	1200660375	884031K05M006	0.6m	77	1200668237	883031S20M100	10m	D
	8	1200070136	883031I03M020	2m	43	1200660376	884031K05M010	1m	78	1200668258	883031I03M080	8m	
	9	1200070137	883031I03M030	3m	44	1200660377	884031K05M015	1.5m	79	1200668287	884031I20M025	2.5m	
	10	1200070138	883031I03M050	5m	45	1200660378	884031K05M020	2m	80	1200668667	884031I20M030Y	3m	
C	11	1200070152	883031S20M010	1m	46	1200660379	884031K05M030	3m	81	1200070443	884021S20M003	0.3m	C
	12	1200070153	883031S20M020	2m	47	1200660380	884031K05M040	4m	82	1200070444	884021S20M006	0.6m	
	13	1200070156	883031S20M050	5m	48	1200660381	884031K05M050	5m	83	1200070445	884021S20M010	1m	
	14	1200070522	884031I03M020	2m	49	1200660382	884031K05M060	6m	84	1200070446	884021S20M020	2m	
B	15	1200070523	884031I03M030	3m	50	1200660383	884031S20M010	1m	85	1200070447	884021S20M030	3m	B
	16	1200070534	884031S20M030	3m	51	1200660546	884031K05M100	10m	86	1200070449	884021S20M050	5m	
	17	1200070651	884031I03M006	0.6m	52	1200661046	885031K03M010	1m	87	1200668160	883021S20M010	1m	
	18	1200070768	884031S20M050	5m	53	1200661047	885031K03M020	2m	88	1200668608	883031E02M020	2m	
A	19	1200070783	884031S20M100H	10m	54	1200661049	885031K03M040	4m	89	1200668613	883031E02M030	3m	A
	20	1200071138	884031S20M010H	1m	55	1200661050	885031K03M050	5m	90	1200659035	883031E02M050	5m	
	21	1200071139	884031S20M020H	2m	56	1200661769	884031K05M150	15m	91	1200668612	883031E02M100	10m	
	22	1200071164	884031S20M003H	0.3m	57	1200669556	885031P03M015	1.5m	92	1200668908	883031E03M003H	0.3m	
B	23	1200071179	8840										

No.	Part No	Engineering No.	Cable Length
36	1200072725	885031I26M005	0.5m
37	1200072726	885031I26M010	1m
38	1200659070	884031I20M010Y	1m
39	1200659071	884031I20M015Y	1.5m
40	1200659115	884031I20M005Y	0.5m
41	1200660374	884031K05M005	0.5m
42	1200660375	884031K05M006	0.6m
43	1200660376	884031K05M010	1m
44	1200660377	884031K05M015	1.5m
45	1200660378	884031K05M020	2m
46	1200660379	884031K05M030	3m
47	1200660380	884031K05M040	4m
48	1200660381	884031K05M050	5m
49	1200660382	884031K05M060	6m
50	1200660383	884031S20M010	1m
51	1200660546	884031K05M100	10m
52	1200661046	885031K03M010	1m
53	1200661047	885031K03M020	2m
54	1200661049	885031K03M040	4m
55	1200661050	885031K03M050	5m
56	1200661769	884031K05M150	15m
57	1200669556	885031P03M015	1.5m
58	1200660969	884031K03M003	0.3m
59	1200661481	884031K03M120	12m
60	1200660971	884031K03M006	0.6m
61	1200660973	884031K03M010	1m
62	1200660975	884031K03M015	1.5m
63	1200660976	884031K03M020	2m
64	1200660977	884031K03M030	3m
65	1200660978	884031K03M040	4m
66	1200660980	884031K03M050	5m
67	1200660982	884031K03M060	6m
68	1200660983	884031K03M070	7m
69	1200660984	884031K03M090	9m
70	1200660985	884031K03M100	10m

Pos.	Part No.	Engineering No.	Cable Length
106	1200668912	883031E03M050H	5m
107	1200668175	883031E03M060	6m
108	1200070127	883031E03M100	10m
109	1200658762	883031H09M006	0.6m
110	1200658763	883031H09M010	1m
111	1200658764	883031H09M020	2m
112	1200658765	883031H09M030	3m
113	1200669349	883031H09M030H	3m
114	1200658766	883031H09M040	4m
115	1200658767	883031H09M050	5m
116	1200658768	883031H09M100	10m
117	1200070140	883031P03M003	0.3m
118	1200070141	883031P03M006	0.6m
119	1200070142	883031P03M010	1m
120	1200668324	883031P03M010G	1m
121	1200071121	883031P03M010H	1m
122	1200070143	883031P03M020	2m
123	1200668325	883031P03M020G	2m
124	1200668753	883031P03M020H	2m
125	1200070144	883031P03M030	3m
126	1200668326	883031P03M030G	3m
127	1200070145	883031P03M050	5m
128	1200668520	883031P03M070	7m
129	1200070146	883031P03M100	10m
130	1200070507	884031E03M003	0.3m
131	1200070508	884031E03M006	0.6m
132	1200070509	884031E03M010	1m
133	1200668361	884031E03M015	1.5m
134	1200070511	884031E03M020	2m
135	1200070512	884031E03M030	3m
136	1200669260	884031E03M030H	3m
137	1200070904	884031E03M050	5m
138	1200071157	884031E03M060	6m
139	1200071278	884031E03M100	10m
140	1200072011	884031E03M200	20m
141	1200668669	884031H09M006	0.6m
142	1200668846	884031H09M008	0.8m

FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

FORMAT: master-u
REVISION: J1
DATE: 2021/05/01

F	Pos. Part No. Engineering No. Cable Length				Pos. Part No. Engineering No. Cable Length				F		
	143	1200668210	884031H09M009	0.9m	191	1200656208	888031H08C250	2.5m			
	144	1200668484	884031H09M010	1m	192	1200656209	888031H08M005	0.5m			
	145	1200668848	884031H09M013	1.3m	193	1200656210	888031H08M008	0.8m			
	146	1200668488	884031H09M015	1.5m	194	1200656211	888031H08M012	1.2m			
E	147	1200668845	884031H09M018	1.8m	195	1200656212	888031H08M015	1.5m	E		
	148	1200668212	884031H09M020	2m	196	1200070057	883021E03M006	0.6m			
	149	1200668847	884031H09M021	2.1m	197	1200070058	883021E03M020	2m			
	150	1200668215	884031H09M030	3m	198	1200070439	884021P03M006	0.6m			
	151	1200668670	884031H09M050	5m	199	1200070440	884021P03M010	1m			
D	152	1200668671	884031H09M100	10m	200	1200070441	884021P03M020	2m	D		
	153	1200070526	884031P03M003	0.3m	201	1200070442	884021P03M030	3m			
	154	1200070527	884031P03M006	0.6m	202	1200070870	883021P03M050	5m			
	155	1200060056	884031P03M010	1m	203	1200072191	883021E03M030	3m			
	156	1200060057	884031P03M020	2m	204	1200072198	883021E03M050	5m			
C	157	1200070529	884031P03M030	3m	205	1200665038	884021E03M050	5m	C		
	158	1200071187	884031P03M050	5m	206	1200668061	884021E03M006	0.6m			
	159	1200072012	884031P03M100	10m	207	1200668219	884021E03M030	3m			
	160	1300288001	885031D12M020	2m	208	1200668673	888031E02M0041	0.4m			
	161	1200668658	885031E02M020	2m	209	1200669541	884031P03M015	1.5m			
B	162	1200668610	885031E02M050	5m	210	1200669885	884031E03M004	0.4m	B		
	163	1200668660	885031E02M100	10m	211	1200669886	884031E03M005	0.5m			
	164	1200668339	885031E03M006	0.6m	212	1200669887	884031E03M013	1.3m			
	165	1200668189	885031E03M010	1m	213	1200669888	884031E03M080	8m			
	166	1200668278	885031E03M020	2m	214	1200070510	883031E03M070	7m			
A	167	1200668340	885031E03M030	3m					A		
	168	1200668279	885031E03M050	5m							
	169	1200668653	885031E03M070	7m							
	170	1200668348	885031E03M100	10m							
	171	1200668761	885031E03M150	15m							
	172	1200669229	885031H09C250	25m							
	173	1200668512	885031H09M006	0.6m							
	174	1200668496	885031H09M010	1m							
	175	1200668513	885031H09M020	2m							
	176	1200668514	885031H09M030	3m							
	177	1200668515	885031H09M050	5m							
	178	1200668516	885031H09M100	10m							
	179	1200073085	885031P03M006	0.6m							
	180	1200668188	885031P03M010	1m							
	181	1200072376	885031P03M0105	1m							
	182	1200070917	885031P03M020	2m							
	183	1200668091	885031P03M025	2.5m							
	184	1200070919	885031P03M030	3m							
	185	1200668273	885031P03M050	5m							
	186	1200073086	885031P03M100	10m							
	187	1200070434	884021E03M020	2m							
	188	1200658319	888031H08M050	5m							
	189	1200668673	888031E02M0041	0.4m							
	190	1200668849	888031P02M150	15m							
	DOCUMENT STATUS				P1	RELEASE DATE	2024/07/03	14:19:30			
FORMAT: master-b-prod-A3				9				8			
REVISION: 11				7				6			
DATE: 2021/05/01				5				4			
				3				2			
				1							

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M			molex							
mm		1:1												
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 791338 DRWN: RSILLER 2024/07/03 CHK'D: THAERDT 2024/07/03 APPR: THAERDT 2024/07/03			CSE M12 XP AC FE RA MA STR XM DE							
ANGULAR TOL ± 1.0 °														
4 PLACES		±					INITIAL REVISION: DRWN: JMARSZALEK 2016/10/06 APPR: RSILLER 2016/12/08			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
3 PLACES		±								1200660973		PSD	000	A11
2 PLACES		± 0.05												
1 PLACE		± 0.3												
0 PLACES		± 0.5												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER				
						A3-SIZE	120066		GENERAL MARKET	4 OF 4				

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
DIMENSION UNITS		SCALE		CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M				molex							
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)								EC NO: 791338 DRWN: RSILLER2024/07/03 CHK'D: THAERDT2024/07/03 APPR: THAERDT2024/07/03				CSE M12 XP AC FE RA MA STR XM DE			
ANGULAR TOL ± 1.0 °				PRODUCT CUSTOMER DRAWING											
4 PLACES		±		DOCUMENT NUMBER		DOC TYPE						DOC PART		REVISION	
3 PLACES		±		1200660973		PSD						000		A11	
2 PLACES		± 0.05													
1 PLACE		± 0.3													
0 PLACES		± 0.5		INITIAL REVISION: DRWN: JMARSZALEK2016/10/06 APPR: RSILLER2016/12/08				MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		GENERAL MARKET					
						A3-SIZE		120066		4 OF 4					