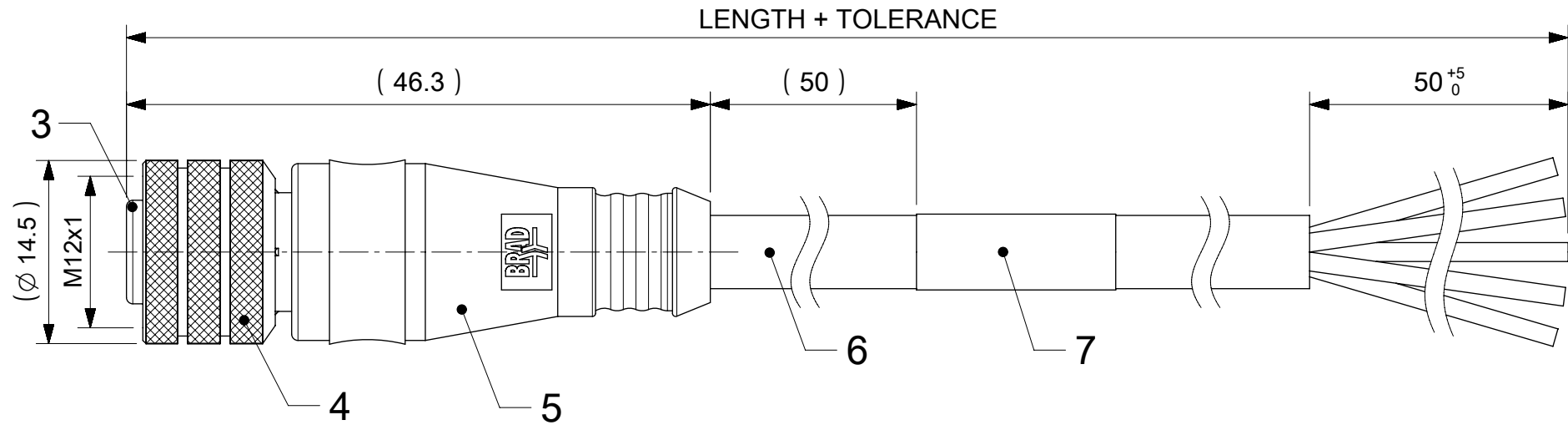
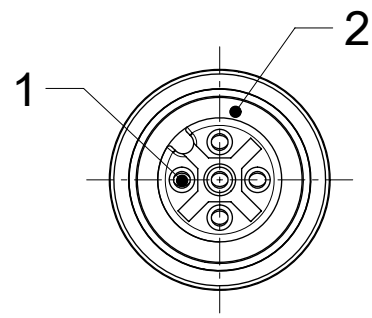
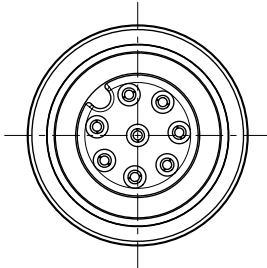


FEMALE PLUG M12 STRAIGHT

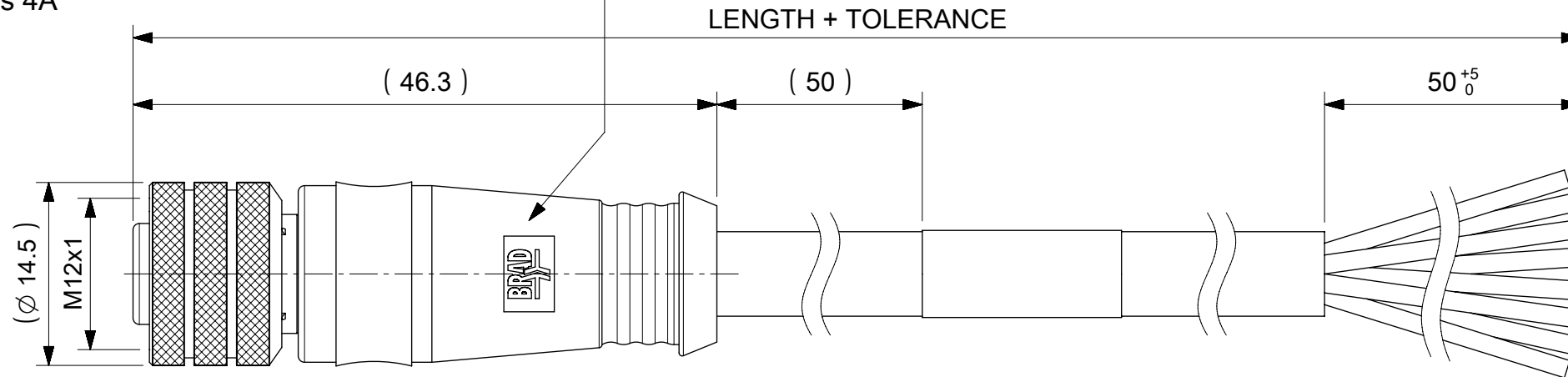


NOTES:

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



Thicker Overmold for Cables with bigger Outer Diameter



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

QUALITY SYMBOLS FA = 0 FE = 0 FF = 0 GV = 0 CH = 0 X = 0 BK = 0 VC = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS: mm SCALE: 2:1			
	EC NO: 120529 DRWN: BBRAUCH CHK'D: BBRAUCH APPR: BBRAUCH	2017/06/30 2017/08/30	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	DRWN BY: JMARSZALEK DATE: 2016/01/11 CHK'D BY: _____ DATE: _____ APPR BY: RSILLER DATE: 2016/04/08		PRODUCT CUSTOMER DRAWING CSE M12 XP AC FE STR XM SE UNSH
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A3 THIRD ANGLE PROJECTION	SERIES: 120065 MATERIAL NUMBER: SEE SHEET 3-4 CUSTOMER: GENERAL MARKET		
	RELEASE STATUS: P1 RELEASE DATE: 30.08.2017 06:51:03		DOCUMENT NUMBER: 1200651978 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 4			

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

8 0 X 0 0 0 X X X X X X X X X

80=M12x1
Single ended

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

Heads style:
000=Plug Female Straight

Cable type: See Table

Units:
M=Meter

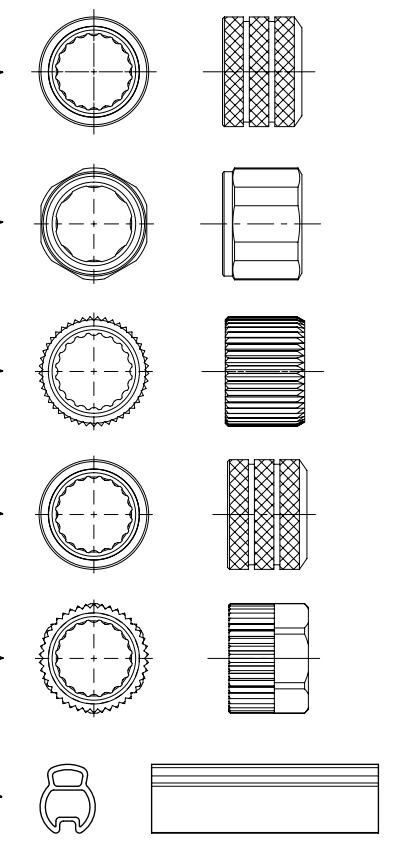
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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

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

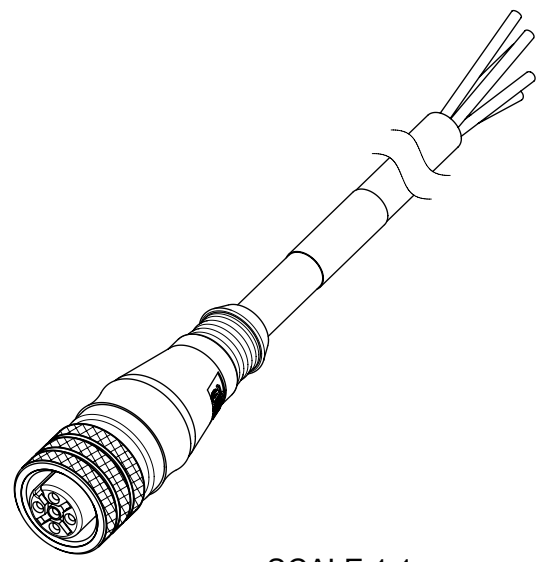


CABLE INFORMATION (for more information see Cable Data Sheet).

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 ²	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 ²	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 ²	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 ²	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 ²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm ²	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



SCALE 1:1

QUALITY SYMBOLS FA = 0 FE = 0 FB = 0 FV = 0 FC = 0 FX = 0 FS = 0 FT = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				DIMENSION UNITS: mm SCALE: 1:1			
	EC NO: 120529 DRWN: BBRAUCH CHK'D: BBRAUCH APPR: BBRAUCH	2017/06/30 2017/08/30	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5		DRWN BY: JMARSZALEK DATE: 2016/01/11	CHK'D BY: DATE:		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A3	THIRD ANGLE PROJECTION		APPR BY: RSILLER DATE: 2016/04/08	SERIES: 120065	MATERIAL NUMBER: SEE SHEET 3-4	CUSTOMER: GENERAL MARKET
DOCUMENT NUMBER: 1200651978						DOC TYPE: PSD	DOC PART: 000	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	1200060001	803000E03M020	2m	36	1200060458	804000P03M0501	5m	71	1200063673	803000P03M1001	10m	106	1200658008	804000H09M050H	5m
2	1200060002	803000E03M050	5m	37	1200060461	804000P03M200	20m	72	1200063779	805000E03M300	30m	107	1200658009	804000H09M100H	10m
3	1200060003	803000E03M100	10m	38	1200060634	805000E03M020	2m	73	1200063940	804000P03M0051	0.5m	108	1200658020	805000P03M040	4m
4	1200060004	803000P03M020	2m	39	1200060638	805000E03M100	10m	74	1200064033	804000P03M120	12m	109	1200658021	808000P02M150	15m
5	1200060005	803000P03M050	5m	40	1200060646	805000P03M003	0.3m	75	1200064093	803000P03M032	3.2m	110	1200658022	808000P02M030	3m
6	1200060006	803000P03M100	10m	41	1200060647	805000P03M020	2m	76	1200064292	805000P03M200	20m	111	1200658064	804000P03M010	1m
7	1200060014	804000E03M020	2m	42	1200060649	805000P03M100	10m	77	1200064313	805000P03M200G	20m	112	1200658081	805000E03M200	20m
8	1200060015	804000E03M050	5m	43	1200061337	804000E03M0205	2m	78	1200064390	804000P03M1001	10m	113	1200658165	805000E03M030	3m
9	1200060016	804000E03M100	10m	44	1200061431	805000P03M150	15m	79	1200064422	804000E03M120	12m	114	1200658172	805000H09M020	2m
10	1200060018	804000P03M020	2m	45	1200061528	804000E03M250	25m	80	1200064434	804000H09M050G	5m	115	1200658173	805000H09M050	5m
11	1200060019	804000P03M050	5m	46	1200061765	803000P03M002	0.2m	81	1200065004	805000P03M0201	2m	116	1200658174	805000H09M100	10m
12	1200060027	803000E03M006	0.6m	47	1200061785	804000P03M006	0.6m	82	1200065006	804000H09M250G	25m	117	1200658175	803000H09M020	2m
13	1200060032	804000E03M005	0.5m	48	1200061913	804000E03M300	30m	83	1200065012	803000P03M030G	3m	118	1200658176	803000H09M050	5m
14	1200060034	804000P03M025	2.5m	49	1200061958	803000E03M021	2.1m	84	1200650951	808000P02M020	2m	119	1200658177	803000H09M100	10m
15	1200060107	803000E03M003	0.3m	50	1200062071	803000E03M060	6m	85	1200650952	808000P02M040	4m	120	1200658178	804000H09M020	2m
16	1200060113	803000E03M030	3m	51	1200062098	803000P03M006	0.6m	86	1200650953	808000P02M050	5m	121	1200658179	804000H09M050	5m
17	1200060115	803000E03M0501	*	52	1200062130	804000E03M050H	5m	87	1200650954	808000P02M060	6m	122	1200658190	804000H09M100	10m
18	1200060116	803000E03M0505	5m	53	1200062167	804000P03M100H	10m	88	1200650955	808000P02M080	8m	123	1200658191	804000H09M150	15m
19	1200060117	803000E03M1005	10m	54	1200062264	804000E03M1505	15m	89	1200650956	808000P02M0801	8m	124	1200658197	805000P03M010	1m
20	1200060119	803000E03M150	15m	55	1200062347	804000P03M050H	5m	90	1200650957	808000P02M100	10m	125	1200658208	805000E03M0061	**
21	1200060121	803000E03M200	20m	56	1200062521	805000P03M030	3m	91	1200651769	803000P03M050G	5m	126	1200658210	805000E03M0501	*
22	1200060124	803000E03M2505	25m	57	1200062772	803000P03M250	25m	92	1200651780	804000P03M050G	5m	127	1200658219	803000E03M0201	*
23	1200060152	803000P03M010	1m	58	1200062811	803000P03M100H	10m	93	1200651782	804000P03M100	10m	128	1200658224	808000E02M050	5m
24	1200060153	803000P03M030	3m	59	1200062853	804000P03M150	15m	94	1200651792	805000P03M050	5m	129	1200658228	804000E03M3001	*
25	1200060157	803000P03M150	15m	60	1200062866	804000E03M020H	2m	95	1200651794	808000P02M010	1m	130	1200658244	808000H08M050	5m
26	1200060158	803000P03M200	20m	61	1200062992	804000E03M200H	20m	96	1200651795	808000P02M070	7m	131	1200658264	808000H08M100	10m
27	1200060426	804000E03M010	1m	62	1200063121	804000P03M0053	0.5m	97	1200651817	808000P02M200	20m	132	1200658270	804000E03M1005	10m
28	1200060427	804000E03M0201	**	63	1200063224	804000E03M003	0.3m	98	1200651818	808000P02M250	25m	133	1200658277	808000E02M020	2m
29	1200060428	804000E03M030	3m	64	1200063227	804000P03M0063	0.6m	99	1200651820	808000P02M300	30m	134	1200658278	808000E02M100	10m
30	1200060429	804000E03M0501	*	65	1200063314	805000E03M010	1m	100	1200651978	805000E03M050	5m	135	1200658288	804000E03M050G	5m
31	1200060430	804000E03M0505	5m	66	1200063402	804000P03M003	0.3m	101	1200652143	804000P03M040	4m	136	1200658309	808000E02M0501	5m
32	1200060431	804000E03M150	15m	67	1200063407	804000E03M1001	*	102	1200652144	804000P03M060	6m	137	1200658321	804000P03M005	0.5m
33	1200060432	804000E03M200	20m	68	1200063415	803000P03M0707	7m	103	1200652154	805000P03M060	6m	138	1200658331	805000E03M050H	5m
34	1200060456	804000P03M0201	2m	69	1200063443	804000E03M030H	3m	104	1200655073	808000P02M003	0.3m	139	1200658350	803000E03M1001	*
35	1200060457	804000P03M030	3m	70	1200063647	804000E03M2001	20m	105	1200655081	805000E03M150	15m	140	1200658473	804000H09M030	3m

NOTES:

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

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
QUALITY SYMBOLS		2017/06/30		2017/08/30		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS		SCALE	
	= 0	EC NO: 120529 DRWN: BBRAUCH CHK'D: BBRAUCH APPR: BBRAUCH		4 PLACES ±		ANGULAR TOL ± 1.0 °		mm		1:1	
	= 0							DRWN BY		DATE	
	= 0							JMARSZALEK		2016/01/11	
	= 0							CHK'D BY		DATE	
	= 0							APPR BY		DATE	
	= 0	RSILLER		2016/04/08		DRAWING SIZE		THIRD ANGLE PROJECTION			
	= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		A3							
	= 0	A2		REV							
RELEASE STATUS			P1	RELEASE DATE			30.08.2017	06:51:03			

molex®

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
120065	SEE PART LIST	GENERAL MARKET

DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
1200651978	PSD	000	3 OF 4

PART LIST

No.	Part No.	Engineering No.	Cable Length
141	1200658475	804000E03M1501	* 15m
142	1200658492	804000P03M100G	10m
143	1200658502	805000E03M005	0.5m
144	1200658503	805000E03M0201	2m
145	1200658511	808000E02M010	1m
146	1200658525	808000P02C350	0.35m
147	1200658545	804000P03M015	1.5m
148	1200658550	804000H09M015	1.5m
149	1200658551	808000E02M1001	10m
150	1200658562	803000E03M010	1m
151	1200658563	803000E03M040	4m
152	1200658570	804000E03M040	4m
153	1200658590	808000E02M030	3m
154	1200658591	808000E02M040	4m
155	1200658592	805000E03M040	4m
156	1200658609	804000P02M020	2m
157	1200658610	803000P03M040	4m
158	1200658622	804000P03M010G	1m
159	1200658623	804000P03M030G	3m
160	1200658630	804000P03M040G	4m
161	1200658632	805000H09M010	1m
162	1200658633	805000H09M015	1.5m
163	1200658634	805000H09M030	3m
164	1200658635	805000H09M040	4m
165	1200658636	803000H09M010	1m
166	1200658637	803000H09M015	1.5m
167	1200658638	803000H09M030	3m
168	1200658639	803000H09M040	4m
169	1200658640	804000H09M010	1m
170	1200658641	804000H09M040	4m
171	1200658642	808000H08M010	1m
172	1200658643	808000H08M015	1.5m
173	1200658644	808000H08M020	2m
174	1200658645	808000H08M030	3m
175	1200658646	808000H08M040	4m

No.	Part No.	Engineering No.	Cable Length
176	1200658780	805000H09M200	20m
177	1200658782	804000E03M060	6m
178	1200658812	808000E02M150	15m
179	1200658813	808000H08M025	2.5m
180	1200658860	808000E02M0061G	0.6m
181	1200658880	804000H09M200	20m
182	1200658882	804000E03M100H	10m
183	1200658887	803000E03M020H	2m
184	1200658889	803000E03M050H	5m
185	1200658891	804000H09M003	0.3m
186	1200658894	804000E03M020G	2m
187	1200658896	804000E03M075	7.5m
188	1200658899	808000H08M250	25m
189	1200658907	804000H09M020H	2m
190	1200658920	808000E02M005H	0.5m
191	1200658921	808000E02M010H	1m
192	1200658927	804000P02M050	5m
193	1200658928	805000E03M1001	10m
194	1200658930	808000H08M150	15m
195	1200658977	805000P03M050G	5m
196	1200658983	804000E03M002	0.2m
197	1200658984	808000E02M2501	25m
198	1200658990	805000P03M050H	5m
199	1200658991	805000P03M100H	10m
200	1200659038	804000E02M100	10m
201	1200659040	804000E02M050	5m
202	1200659052	808000E02M2001	20m
203	1200659053	808000E02M3001	30m
204	1200659054	803000E03M050Y	5m
205	1200659055	803000E03M100Y	10m
206	1200659058	804000E03M050Y	5m
207	1200659059	804000E03M100Y	10m
208	1200659082	805000E03M100Y	10m
209	1200659088	804000P03M050HY	5m
210	1200659092	808000P02M050Y	5m

No.	Part No.	Engineering No.	Cable Length
211	1200659097	804000H09M050Y	5m
212	1200659100	808000E02M050Y	5m
213	1200659102	808000H08M100Y	10m
214	1200659103	808000E02M100Y	10m
215	1200659106	808000E02M150Y	15m
216	1200659107	808000H08M150Y	15m
217	1200659123	804000P03M100HY	10m
218	1200659144	805000H09M300	30m
219	1200659187	808000E02M4001	40m
220	1200659199	808000E02M150H	15m
221	1200659200	808000E02M250H	25m
222	1200659207	805000E03C230	0.23m
223	1200659214	805000P03M300	30m
224	1200659256	808000E02M200	20m
225	1200659279	805000E03M007	0.7m
226	1200659280	805000E03M350	35m
227	1200659282	805000P03M005	0.5m
228	1200659283	805000P03M007	0.7m
229	1200659302	804000P03M1005	10m
230	1200659326	805000P03M020H	2m
231	1200659329	805000P03M150H	15m
232	1200659330	805000P03M200H	20m
233	1200659334	808000P02M200H	20m
234	1200659340	804000P03M1501	15m
235	1200659341	804000P03M2501	25m
236	1200659368	805000E03M015	1.5m
237	1200659370	804000P03M020Y	2m
238	1200659387	808000E02M500	50m
239	1200659388	804000P03M012	1.2m
240	1200659389	804000P03M075	7.5m
241	1200659397	808000P02M100Y	10m
242	1200659399	808000P02M015	1.5m
243	1200659474	804000P03M250	25m
244	1200659475	804000P03M300	30m
245	1200659509	805000E03M600	60m

No.	Part No.	Engineering No.	Cable Length
246	1200659552	808000P02M050H	5m
247	1200659553	808000P02M100H	10m
248	1200659554	808000P02M150H	15m
249	1200659584	803000H09M003	0.3m
250	1200659594	805000P03M300H	30m
251	1200659595	805000P03M350H	35m
252	1200659613	808000E02M300	30m
253	1200659786	804000E02M041	4.1m
254	1200659790	804000E02M020	2m
255	1200659538	808000E02M100	** 10m
256	1200656061	803000E02M010	1m
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NOTES:

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

QUALITY SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	= 0	2017/06/30 2017/08/30 EC NO: 120529 DRWN: BBRAUCH CHK'D: APPR: BBRAUCH	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE
	= 0		ANGULAR TOL ± 1.0 °		mm	1:1
	= 0		4 PLACES ±	DRWN BY		DATE
	= 0		3 PLACES ±	JMARSZALEK	2016/01/11	
	= 0		2 PLACES ± 0.05	CHK'D BY		DATE
	= 0		1 PLACE ± 0.3	APPR BY		DATE
	= 0	0 PLACES ± 0.5	RSILLER		2016/04/08	
	= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWING SIZE	THIRD ANGLE PROJECTION		
	= 0	A2	A3			
RELEASE STATUS			P1	RELEASE DATE	30.08.2017	06:51:03

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
120065	SEE PART LIST	GENERAL MARKET
DOCUMENT NUMBER		DOC TYPE
1200651978		PSD
DOC PART	SHEET NUMBER	
000	4 OF 4	