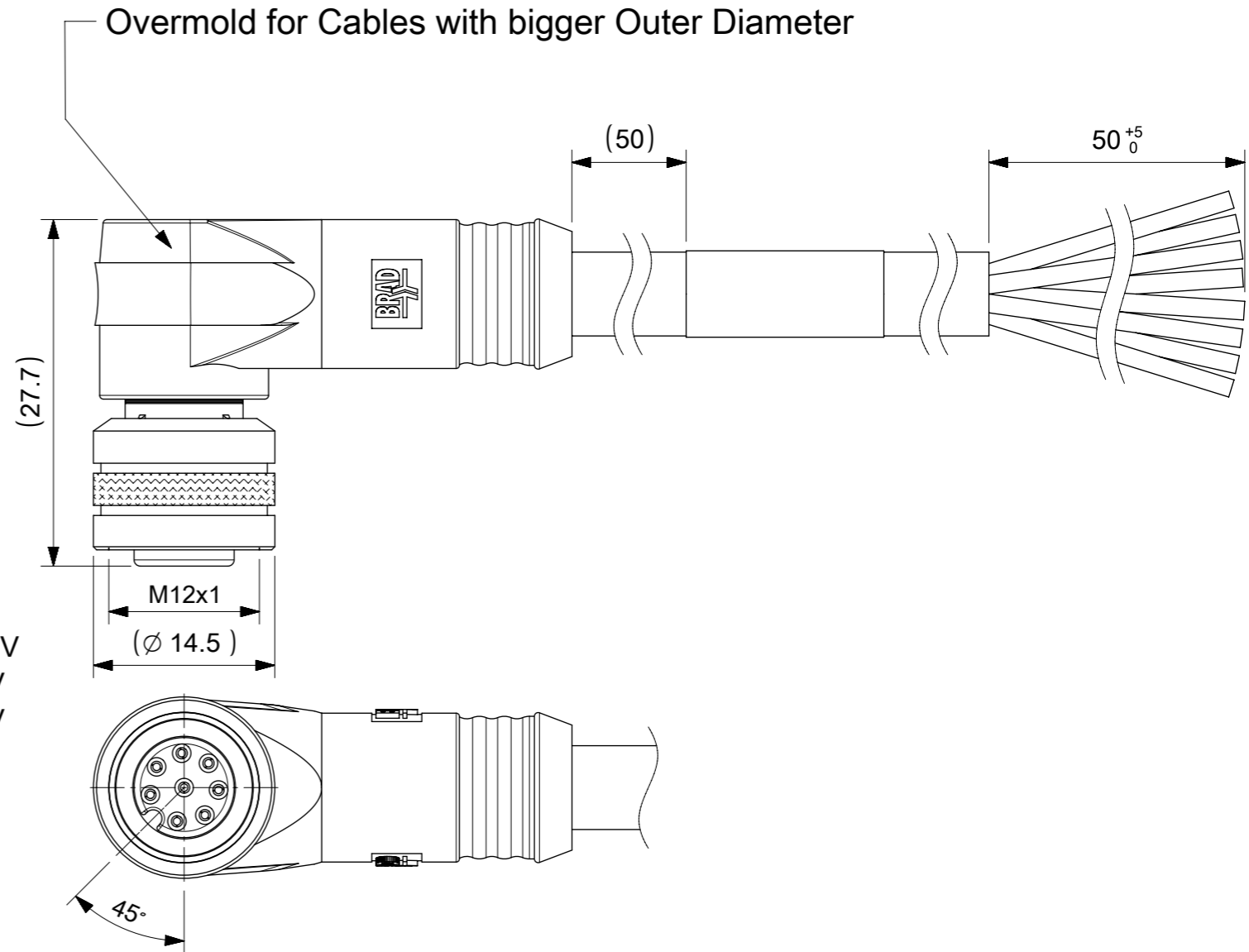
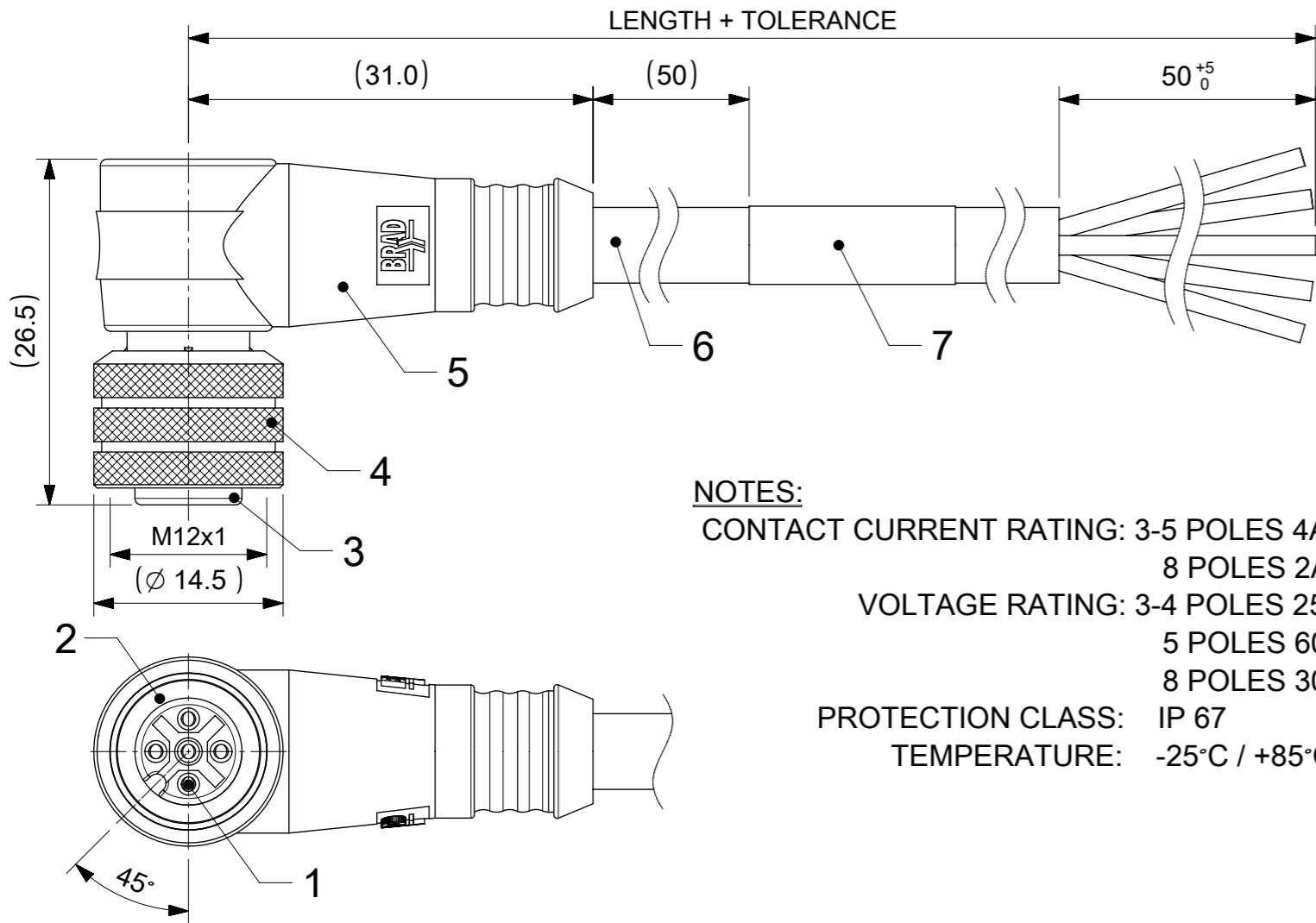


# FEMALE PLUG M12 90° ANGLED



**NOTES:**

CONTACT CURRENT RATING: 3-5 POLES 4A  
 8 POLES 2A  
 VOLTAGE RATING: 3-4 POLES 250V  
 5 POLES 60V  
 8 POLES 30V  
 PROTECTION CLASS: IP 67  
 TEMPERATURE: -25°C / +85°C

**CONTACT POSITION FRONT VIEW:**

3 POLES		4 POLES		5 POLES		8 POLES	
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 OR PRINTING	VINYL / ---	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING 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 GOLD OVER NICKEL

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

QUALITY SYMBOLS	EC NO: 103195 DRWN: JMARSZALEK CHK'D: RSILLER APPR: RSILLER	2015/10/30 2016/04/08	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2	DIMENSION UNITS: MM SCALE: 2:1 DRWN BY: JMARSZALEK DATE: 2015/10/30 CHK'D BY: RSILLER DATE: 2016/04/08 APPR BY: RSILLER DATE: 2016/04/08	 CSE M12 XP AC FE RA XM SE UNSH PRODUCT CUSTOMER DRAWING
					SERIES: 120065 MATERIAL NUMBER: SEE SHEET 3-4 CUSTOMER: GENERAL MARKET
					DOCUMENT NUMBER: 1200658573 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 4

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

OPTIONS

80X001XXXXXX

80=M12x1  
Single ended

Poles:  
3=3 Poles  
4=4 Poles  
5=5 Poles  
8=8 Poles

Heads style:  
001=Plug Female  
90° Angled

Cable type: See Table

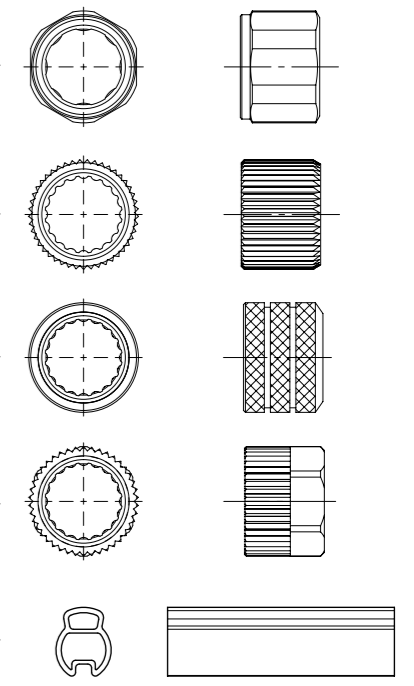
Units:  
M=Meter  
C=Centimeter  
T=10x Meter

Length  
Examples:  
005=0.5 units  
010=1 units  
020=1 units  
050=5 units  
100=10 units  
150=15 units  
200=20 units

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

Coupling Nut:  
Blank (Standard)=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  
(Cables lxx & P82 always with  
2 pcs. I/D Carrier)



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°/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°/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°/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles, Temp max 60°C	-
H09	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles, Temp max 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

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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QUALITY SYMBOLS FA = 0 FE = 0 FB = 0 ▼ = 0 C = 0 X = 0 ■ = 0 ▽ = 0	2015/10/30 2016/04/08 EC NO: 103195 DRWN: JMARSZALEK CHK'D: RSILLER APPR: RSILLER	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE	<b>molex</b> <sup>®</sup>
		ANGULAR TOL ± 1.0 °		MM	1:1	
4 PLACES ±		3 PLACES ±		DRWN BY	DATE	CSE M12 XP AC FE RA XM SE UNSH
2 PLACES ± 0.05		1 PLACE ± 0.1		JMARSZALEK	2015/10/30	
0 PLACES ± 0.2		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING
				RSILLER	2016/04/08	
				APPR BY	DATE	SERIES
				A3		THIRD ANGLE PROJECTION
				DRAWING SIZE		MATERIAL NUMBER
				A3		120065
				CUSTOMER		GENERAL MARKET
				DOCUMENT NUMBER		1200658573
				DOC TYPE		PSD
				DOC PART		000
				SHEET NUMBER		2 OF 4


PART LIST

Pos.	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

Pos.	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

Pos.	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

Pos.	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

<p>QUALITY SYMBOLS</p> <p>FA = 0</p> <p>FE = 0</p> <p>FB = 0</p> <p>FC = 0</p> <p>FD = 0</p> <p>FE = 0</p> <p>FF = 0</p> <p>FG = 0</p> <p>FH = 0</p> <p>FI = 0</p> <p>FJ = 0</p> <p>FK = 0</p> <p>FL = 0</p>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	2015/10/30	2016/04/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		
	EC NO: 103195 DRWN: JMARSZALEK CHK'D: APPR: RSILLER	DIMENSION UNITS: MM SCALE: 1:1		 CSE M12 XP AC FE RA XM SE UNSH PRODUCT CUSTOMER DRAWING	
		DRWN BY: JMARSZALEK DATE: 2015/10/30			
		ANGULAR TOL ± 1.0 °			
		4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2			
		CHK'D BY: RSILLER DATE: 2016/04/08			
	APPR BY: RSILLER DATE: 2016/04/08		DRAWING SIZE: A3 THIRD ANGLE PROJECTION		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
	SERIES: 120065 MATERIAL NUMBER: SEE PART LIST CUSTOMER: GENERAL MARKET		DOCUMENT NUMBER: 1200658573 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 3 OF 4		

PART LIST

Pos.	Part No.	Engineering No.	Cable Length	Pos.	Part No.	Engineering No.	Cable Length
141	1200658714	803001H09M015	1.5m	176	1200659164	804001E03M025	2.5m
142	1200658715	803001H09M020	2m	177	1200659173	803001E03M050H	5m
143	1200658716	803001H09M030	3m	178	1200659181	803001E03M100H	10m
144	1200658717	803001H09M040	4m	179	1200659182	804001E03M020H	2m
145	1200658718	803001H09M050	5m	180	1200659235	803001E03M300	30m
146	1200658719	803001H09M100	10m	181	1200659266	804001P03M020Y	2m
147	1200658783	804001E03M060	6m	182	1200659342	804001P03M1501	15m
148	1200658884	804001E03M100H	10m	183	1200659343	804001P03M2501	25m
149	1200658898	804001E03M150H	15m	184	1200659352	805001E03M1001	10m
150	1200658931	808001E02M150	15m	185	1200659353	805001E03M2501	25m
151	1200658932	808001E02M250	25m	186	1200659373	803001E02M030	3m
152	1200658976	803001P03M0505	5m	187	1200659398	808001P02M100Y	10m
153	1200658988	805001P03M050H	5m	188	1200659502	805001E03M005	0.5m
154	1200658989	805001P03M100H	10m	189	1200659592	805001E03M080	8m
155	1200658992	804001P03M050H	5m	190	1200659637	808001E02M1001	10m
156	1200659032	804001E02M050	5m	191	1200659675	804001H09M220	22m
157	1200659033	804001E02M100	10m	192	1200659738	804001P03M015	1.5m
158	1200659039	804001E02M070	7m	193			
159	1200659048	804001E02M1001	10m	194			
160	1200659056	803001E03M050Y	5m	195			
161	1200659057	803001E03M100Y	10m	196			
162	1200659061	804001E03M020Y	2m	197			
163	1200659062	804001E03M050Y	5m	198			
164	1200659063	804001E03M100Y	10m	199			
165	1200659074	803001E03M150Y	15m	200			
166	1200659077	804001E03M150Y	15m	201			
167	1200659083	805001E03M100Y	10m	202			
168	1200659095	804001H09M050HY	5m	203			
169	1200659099	804001H09M050Y	5m	204			
170	1200659101	808001H08M050Y	5m	205			
171	1200659105	808001H08M100Y	10m	206			
172	1200659108	804001P03M050HY	5m	207			
173	1200659124	804001H09M100HY	10m	208			
174	1200659140	805001H09M200	20m	209			
175	1200659147	805001E03M200	20m	210			

Pos.	Part No.	Engineering No.	Cable Length
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<p>QUALITY SYMBOLS</p> <p>FA = 0</p> <p>FE = 0</p> <p>FP = 0</p> <p>FV = 0</p> <p>FC = 0</p> <p>FX = 0</p> <p>FS = 0</p> <p>FV = 0</p>	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
	2015/10/30	2016/04/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		
	EC NO: 103195 DRWN: JMARSZALEK CHK'D: APPR: RSILLER	4 PLACES ±		DIMENSION UNITS	SCALE
		3 PLACES ±		MM	1:1
		2 PLACES ± 0.05		DRWN BY	DATE
		1 PLACE ± 0.1		JMARSZALEK	2015/10/30
		0 PLACES ± 0.2		CHK'D BY	DATE
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR BY	DATE	
	A		RSILLER	2016/04/08	
	A3		DRAWING SIZE	THIRD ANGLE PROJECTION	

# molex®

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
120065	SEE PART LIST	GENERAL MARKET
DOCUMENT NUMBER		DOC TYPE
1200658573		PSD
DOC PART	SHEET NUMBER	
000	4 OF 4	