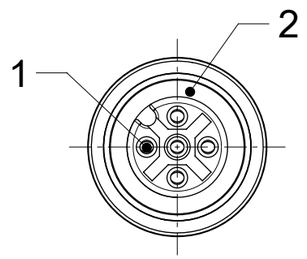
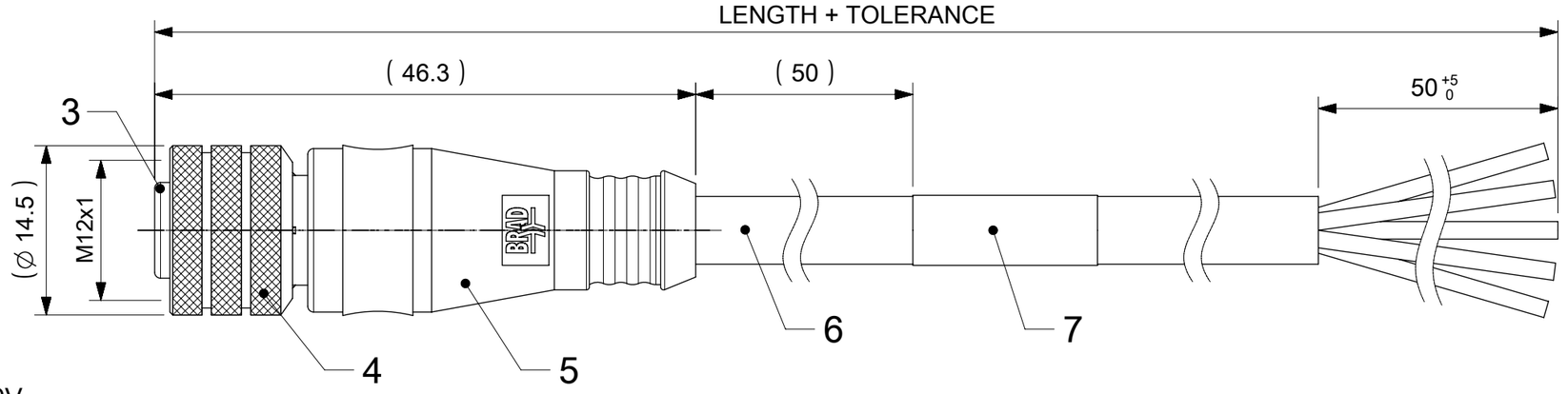
FEMALE PLUG M12 STRAIGHT





NOTES:

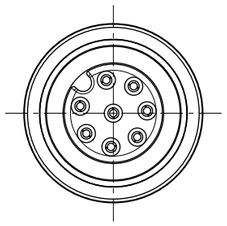
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

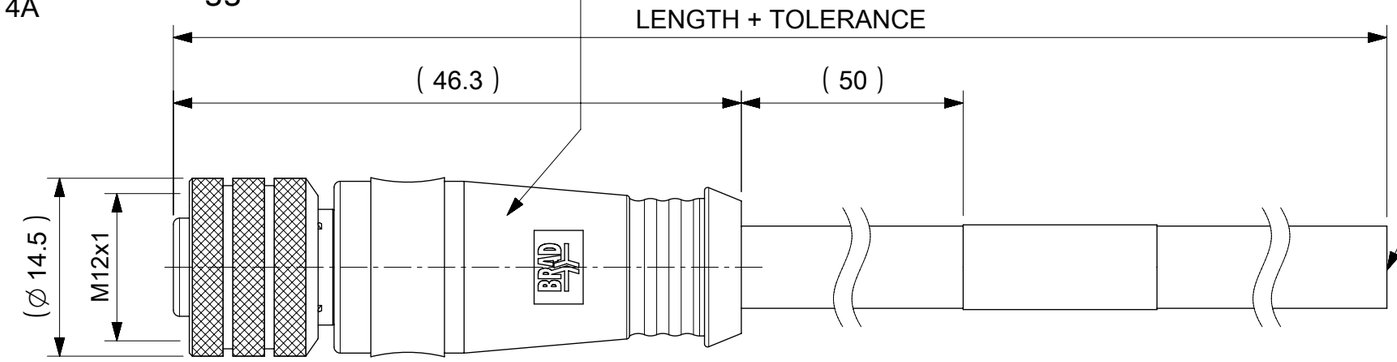
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A

PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C

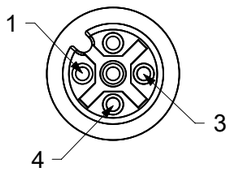
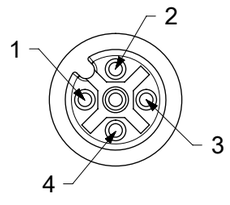
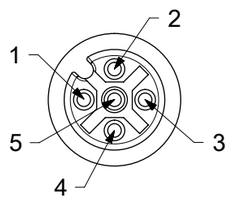
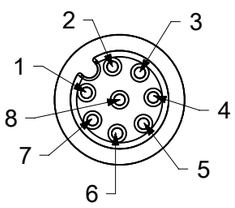
Thicker Overmold for Cables with bigger Outer Diameter





For Shielded Cables testing ends are cut off after test

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 OR YELLOW/GREEN	4	BLACK	4	BLACK	4	YELLOW
5	---	5	---	5	GREY OR YELLOW/GREEN	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	---
	-	PRINTING FOR CABLES Ixx	---	---
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

DIMENSION UNITS	SCALE
mm	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

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: OBSOLETED PART NUMBERS AS PER PCN#506884

EC NO: 662770
DRWN: SUGEEB 2021/02/22
CHK'D: GGA 2021/06/02
APPR: GGA 2021/06/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658605	PSD	000	A5

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEETS 3,4	GENERAL MARKET	1 OF 4

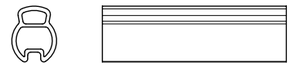
DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02 05:45:21

FORMAT: master-tb-prod-A3
REVISION: J
DATE: 2020/01/14

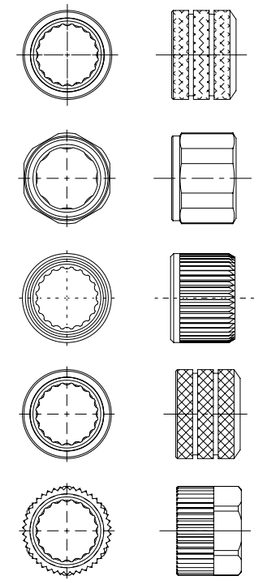
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

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

- 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, C=Centimeter
- Length Examples: 005=0.5 unit, 010=1 unit, 100=10 units
- Overmold color: Blank (Standard)=Black TPU; Blank=Yellow TPU for cables A09,S19,S20,S26; Blank=Yellow TPE-E for cables K03,K05; 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; Blank=7 for cables I20, I26, K03, K05, P82, S26; 9=Knurled / Hexagonal Brass Ni Plated SW13
- OPTIONS: 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.)

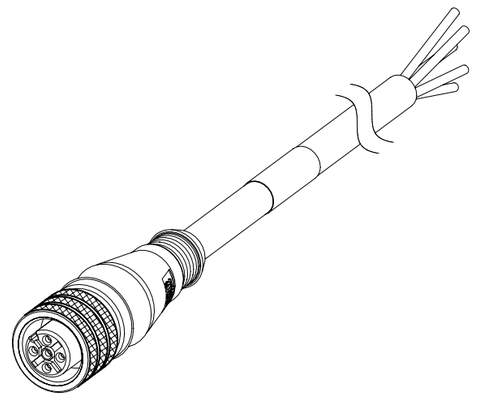


COUPLING NUTS



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
E13	3	18AWG	PVC YELLOW	UL 2661/1731	I/II A/B 80°C/300V	-	-	-	-
E52	3 / 4 / 8	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E63	5	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
H12	4	0.50mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-50°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000, Temp max 60°C	-
H69	4	0.20mm²	PUR GREY LS0H	-	-	-	-	-	-
I02	3 / 4 / 8	0.25mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I04	4	0.50mm²	PVC CEI GREY	-	-	-25°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	-	-
K03	4 / 5	0.34mm²	TPE YELLOW	UL JEC 60332-1 or PLCT	I/II 90°C/300V	-	-	-	-
K05	3 / 4 / 5	0.34mm²	TPE YELLOW	UL ITC E195601 or PLC	I/II A/B 90°C/300V	-	-	-	-
P04	4	0.50mm²	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-	-
P12	3 / 5	0.50mm²	PUR BLACK	-	-	-30°C to +90°C	-5°C to +90°C	-	-
P19	8	0.25mm²	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	2 000 000 cycles, 15xO.D.	YES
P20	3 / 4 / 5	0.34mm²	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
P82	3 / 4 / 5	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C, 5xO.D.	-40°C to +105°C, 7.5xO.D.	-	-
S19	8	0.25mm²	PVC YELLOW	UL 2661/1569	C22.2 II A 105°C/300V	-30°C to +105°C, 10xO.D.	-15°C to +105°C, 15xO.D.	-	YES
S20	3 / 4 / 5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES



SCALE 1:1

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	SCALE
mm	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: OBSOLETED PART NUMBERS AS PER PCN#506884

EC NO: 662770
DRWN: SUGEEB 2021/02/22
CHK'D: GGA 2021/06/02
APPR: GGA 2021/06/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658605	PSD	000	A5

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEETS 3, 4	GENERAL MARKET	2 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02 05:45:21

FORMAT: master-tb-prod-A3
REVISION: J
DATE: 2020/01/14

PART LIST

No.	Part No.	Engineering No.	Cable Length
1	1200060017	804000I03M050	5m
2	1200060030	803000I03M050	5m
3	1200060033	804000I03M100	10m
4	1200060035	804000P82M0507	5m
5	1200060036	804000P82M1007	10m
6	1200060145	803000I03M020	2m
7	1200060148	803000I03M100	10m
8	1200060166	803000S20M010	1m
9	1200060167	803000S20M020	2m
10	1200060168	803000S20M030	3m
11	1200060170	803000S20M050	5m
12	1200060171	803000S20M100	10m
13	1200060173	803000S20M150	15m
14	1200060436	804000E52M200A	20m
15	1200060452	804000I03M020	2m
16	1200060454	804000I03M030	3m
17	1200060466	804000P82M030	3m
18	1200060467	804000P82M050	5m
19	1200060468	804000P82M100	10m
20	1200060469	804000S20M010	1m
21	1200060470	804000S20M020	2m
22	1200060471	804000S20M0201	* 2m
23	1200060472	804000S20M030	3m
24	1200060474	804000S20M050	5m
25	1200060476	804000S20M100	10m
26	1200060478	804000S20M150	15m
27	1200060644	805000I03M030	3m
28	1200060645	805000I03M100	10m
29	1200060715	805000P82M050	5m
30	1200061240	803000P82M0507	5m
31	1200061559	803000I20M100	10m
32	1200061620	804000E52M3001A	30m
33	1200061680	804000H69M050	5m
34	1200061727	805000I26M050	5m
35	1200061936	805000E63M050A	5m
36	1200061955	804000I03M200A	20m
37	1200061956	804000I03M300A	30m
38	1200061957	804000I03M400A	40m
39	1200061970	804000I03M100A	10m
40	1200062003	805000I03M050	5m
41	1200062037	804000S20M050H	5m
42	1200062040	804000S20M030H	3m
43	1200062049	808000E52M050	5m
44	1200062094	803000H69M050	5m
45	1200062254	804000P82M0207	2m
46	1200062268	804000S20M020H	2m
47	1200062363	804000S20M100H	10m
48	1200062364	804000P04M020G	2m
49	1200062454	803000P82M0067	0.6m
50	1200062496	804000S20M010H	1m
51	1200062604	804000P20M100	10m
52	1200062656	804000P20M030	3m
53	1200062657	804000P20M050	5m
54	1200062675	808000P19M030	3m
55	1200062676	808000P19M050	5m
56	1200062754	803000P82M0047	0.4m
57	1200062765	808000P19M020	2m
58	1200062858	805000P12M100	10m
59	1200062869	804000P20M150	15m
60	1200062969	805000I26M100	10m
61	1200063017	804000P04M0083	0.8m
62	1200063035	805000P20M100	10m
63	1200063041	805000P12M0033	0.3m
64	1200063114	804000P04M0163	1.6m
65	1200063141	803000P12M0033	0.3m
66	1200063182	804000S20M0501H	5m
67	1200063205	804000I03M060	6m
68	1200063409	804000S20M1001	* 10m
69	1200063562	804000I04M030	3m
70	1200063569	803000S20M003	0.3m
71	1200063684	804000S20M2001	* 20m
72	1200063819	804000E52K0011A	100m
73	1200063824	805000I03M050G	5m
74	1200063859	804000S20M0501	* 5m
75	1200063913	805000P20M003	0.3m
76	1200063993	804000S20M200	20m
77	1200064044	804000P82M020	2m
78	1200064072	804000P82M006	0.6m
79	1200064073	803000P82M0107	1m
80	1200064161	804000I20M100	10m
81	1200064164	804000I20M020	2m
82	1200064230	804000I03M080	8m
83	1200064254	804000E52M010A	1m
84	1200064256	803000P82M0207	2m
85	1200064445	805000P12M023	2.3m
86	1200064490	804000P20M020	2m
87	1200065005	805000P82M0207	2m
88	1200651108	803000K05M020	2m
89	1200651110	803000K05M050	5m
90	1200651121	804000K05M020	2m
91	1200651124	804000K05M050	5m
92	1200651126	804000K05M100	10m
93	1200651767	803000E52M050A	5m
94	1200651778	804000E52M050A	5m
95	1200651857	804000E52M100A	10m
96	1200652019	808000P19M100	10m
97	1200655003	805000S26M050	5m
98	1200655009	805000S26M100	10m
99	1200655010	804000S20M150H	15m
100	1200655025	805000I03M100G	10m
101	1200655074	808000P19M060	6m
102	1200656198	808000S19M010	1m
103	1200656199	808000S19M020	2m
104	1200656200	808000S19M030	3m
105	1200656201	808000S19M050	5m
106	1200658015	805000E63M020A	2m
107	1200658086	805000P12M020	2m
108	1200658104	808000P19M150	15m
109	1200658221	804000I20M050	5m
110	1200658230	805000S20M050	5m
111	1200658236	808000E52M020	2m
112	1200658242	804000H69M300	30m
113	1200658252	805000S26M020	2m
114	1200658256	808000S19M006	0.6m
115	1200658282	804000P20M250	25m
116	1200658283	805000I03M020	2m
117	1200658293	803000E52M3001A	30m
118	1200658299	805000P82M100	10m
119	1200658474	805000S20M020	2m
120	1200658524	803000E13M030	3m
121	1200658543	804000I20M150	15m
122	1200658593	803000I03M040	4m
123	1200658599	804000I03M010	1m
124	1200658600	804000I03M040	4m
125	1200658605	805000I03M010	1m
126	1200658606	805000I03M040	4m
127	1200658677	808000I02M010	1m
128	1200658678	808000I02M020	2m
129	1200658679	808000I02M030	3m
130	1200658680	808000I02M040	4m
131	1200658681	808000I02M050	5m
132	1200658682	808000I02M100	10m
133	1200658701	804000I03M010G	1m
134	1200658702	804000I03M020G	2m
135	1200658703	804000I03M030G	3m
136	1200658704	804000I03M040G	4m
137	1200658705	804000I03M050G	5m
138	1200658706	804000I03M100G	10m
139	1200658817	805000I26M010	1m
140	1200658902	804000P82M2007	20m

NOTES:

* - Part No. with Yellow PVC overmolding

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
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: OBSOLETED PART NUMBERS AS PER PCN#506884

EC NO: 662770
DRWN: SUGEEB 2021/02/22
CHK'D: GGA 2021/06/02
APPR: GGA 2021/06/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658605	PSD	000	A5

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	3 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02 05:45:21

FORMAT: master-tb-prod-A3
REVISION: J
DATE: 2020/01/14

PART LIST

No.	Part No.	Engineering No.	Cable Length
141	1200658972	808000S19M100	10m
142	1200659026	805000P82M1007	10m
143	1200659049	805000P20M050	5m
144	1200659060	804000I03M050Y	5m
145	1200659064	803000I03M050Y	5m
146	1200659065	804000I03M100Y	10m
147	1200659066	804000P82M0507Y	5m
148	1200659067	804000P82M1007Y	10m
149	1200659075	804000I03M020Y	2m
150	1200659085	805000I03M050Y	5m
151	1200659087	804000P82M0207Y	2m
152	1200659090	805000I26M100Y	10m
153	1200659113	804000H12M050	5m
154	1200659116	805000I26M050Y	5m
155	1200659119	803000I03M020Y	2m
156	1200659175	808000S19M200H	20m
157	1200659177	804000I03M030Y	3m
158	1200659183	808000S19M150H	15m
159	1200659271	804000H12M100	10m
160	1200659371	805000I03M100Y	10m
161	1200659376	804000S20M350	35m
162	1200659390	803000S20M070	7m
163	1200659393	805000P12M050	5m
164	1200659558	803000I20M100Y	10m
165	1200659593	804000H12M020	2m
166	1200659621	804000I04M050	5m
167	1200659635	805000P20M300	30m
168	1200659694	804000P82M1507Y	15m
169	1200659767	804000H12M0209	2m
170	1200659768	804000H12M0309	3m
171	1200659769	804000H12M0509	5m
172	1200659770	804000H12M1009	10m
173	1200659989	805000S26M200	20m
174	1200659997	808000E52M100	10m
175	1200868439	808000S19M150	15m

No.	Part No.	Engineering No.	Cable Length
176	1200651122	804000K05M030	3m
177	1200651367	805000K03M020	2m
178	1200651370	805000K03M050	5m
179	1200651373	805000K03M100	10m
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No.	Part No.	Engineering No.	Cable Length
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Pos.	Part No.	Engineering No.	Cable Length
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THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE
mm	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: OBSOLETED PART NUMBERS AS PER PCN#506884

EC NO: 662770
DRWN: SUGEEB 2021/02/22
CHK'D: GGA 2021/06/02
APPR: GGA 2021/06/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200658605	PSD	000	A5

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	4 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02 05:45:21

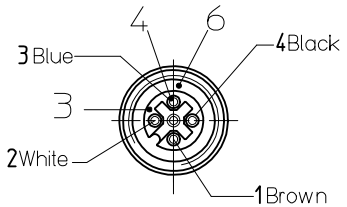
FORMAT: master-tb-prod-A3
REVISION: J
DATE: 2020/01/14

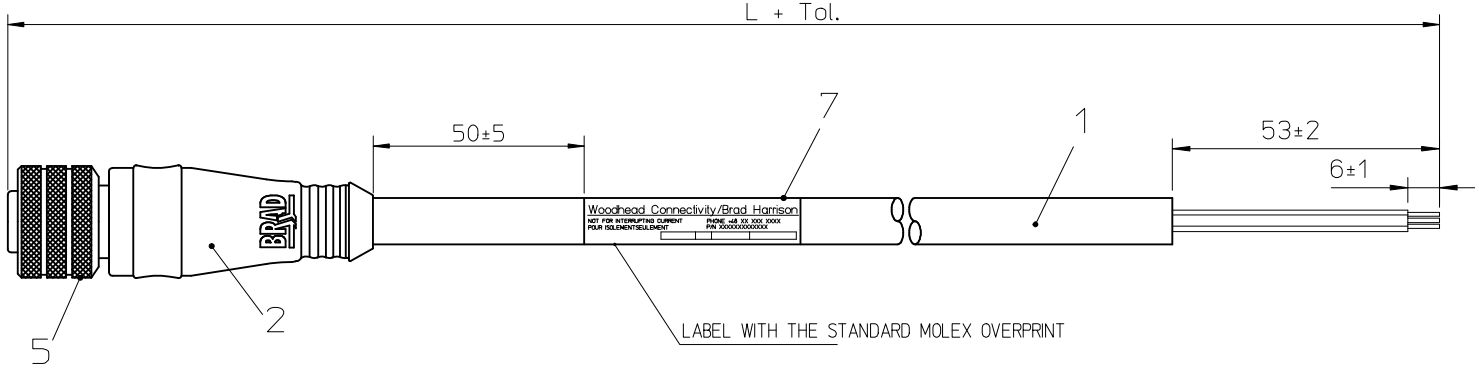
Table of length tolerances		
Over	Up to and including	Tolerance
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% of length

CHART 1

MOLEX PN	ENGINEERING No.	L [mm]
1200659593	804000H12M020	2000
1200659113	804000H12M050	5000
1200659271	804000H12M100	10000

VIEW FROM THE FRONT SIDE





Notes:
1) Material: See Table
2) Finish: See Table
3) Cable: Cable 4x0.5 mm2
ENVIRONMENTAL:
- OPERATING TEMPERATURE: -25°C to +80°C
- VOLTAGE RATING: 250V
- AMPERAGE RATING: 4A
- PROTECTION: IP67

BILL OF MATERIALS:

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
7	1	LABEL	VINYL	YELLOW/BLACK
6	1	GASKET	FPM	RED
5	1	M12 FE COUPLING NUT	BRASS	NICKEL PLATING
4	4	CONTACT	BRONZE	GOLD OVER NICKEL PLATING
3	1	INSERT FEMALE 4P AC	PUR	BLACK
2	-	OVERMOULD	PUR	BLACK
1	-	CABLE LSZO	PUR	BLACK

NEW PN ADDED
EC NO: IPG2015-1290
DRWN:WSTRASZKIEWI 2015/01/22
CH'KD:FGALIK 2015/01/22
APPR:MIWASIECZKO 2015/01/30
DESCRIPTION
B
REV

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.05	± ---
1 PLACE	± 0.3	± ---
0 PLACE	± 0.5	± ---
ANGULAR ±---°		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: ---
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: EJABLONSKA01 DATE: 2013/09/30
CHECKED BY: MSZWAJKOWSKI DATE: 2013/09/30
APPROVED BY: MIWASIECZKO DATE: 2013/10/03
MATERIAL NO.: SEE CHART 1

TITLE: CSE M12 AC 4P FE STR PUR XXM UNISH SE

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DOCUMENT NO.: SD-120065-066
SHEET NO.: 1 OF 1
SIZE: A3

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