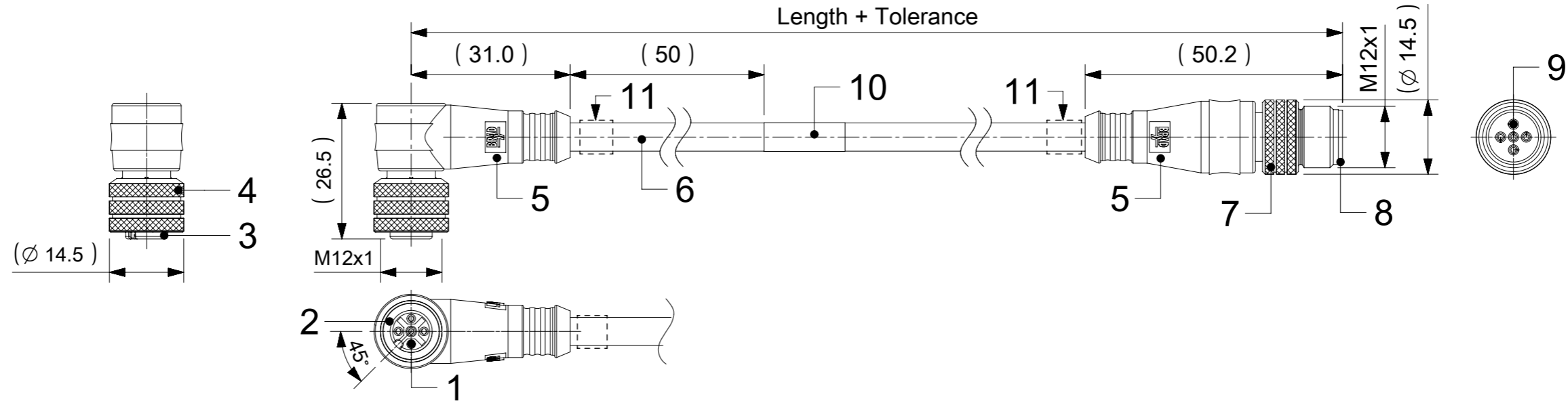


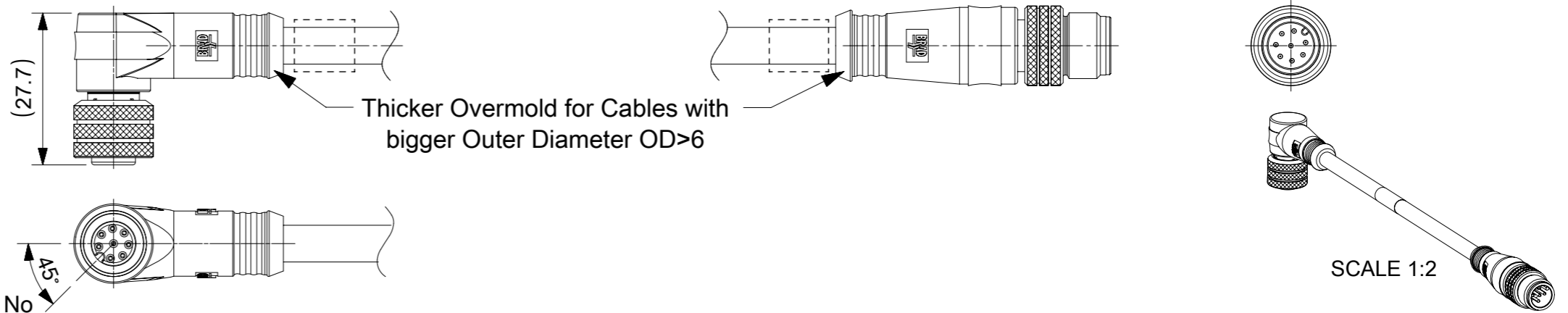
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



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 Ixx 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	GREY OR GREEN/YELLOW	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
11	SEE PART LIST	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES Ixx	---	---
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	-	OVERMOLDING 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

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'S ADDED	
▲/ = 0	mm	SCALE	1:1	
▽/ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			
▽/ = 0	ANGULAR TOL ± 1.0°			
DIVISIONAL SYMBOLS	4 PLACES	±	EC NO: 667665	
	3 PLACES	±	DRWN: RSCHIEBER	2021/06/21
	2 PLACES	± 0.05	CHK'D: RSILLER	2021/06/22
	1 PLACE	± 0.3	APPR: RSILLER	2021/06/22
	0 PLACES	± 0.5	INITIAL REVISION:	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
			A3-SIZE	120066
		MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
		SEE SHEET 3, 4	GENERAL MARKET	1 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/22	10:25:51
-----------------	----	--------------	------------	----------

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200660973	PSD	000	A7

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

8 8 X 0 X 1 X X X X X X X X

OPTIONS

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

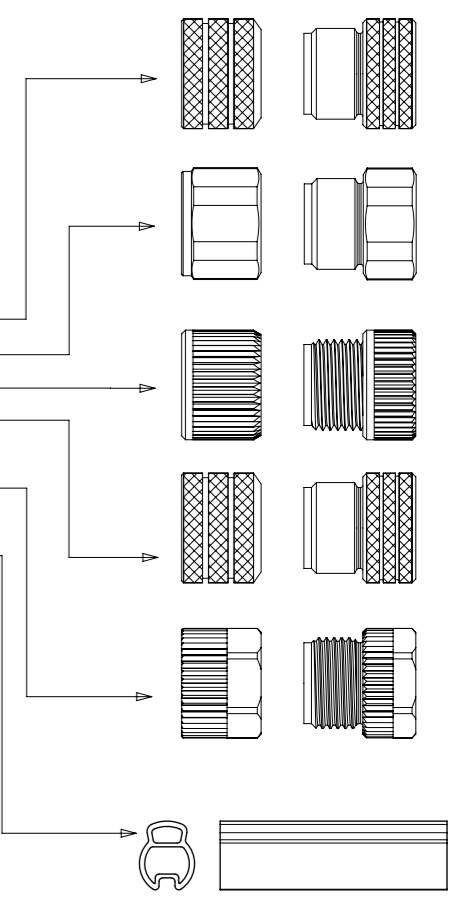
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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.)

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
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
B02	4	18AWG	PUR YELLOW	UL 20549	I/II A/B 80°C/300V	-	-	-	-
I03	3 / 4 / 5	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm ²	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	0.34mm ²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S20	3 / 4 / 5	0.34mm ²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
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.	-	-
H09	3 / 4 / 5	0.34mm ²	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	0.34mm ²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
H08	8	0.25mm ²	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	0.25mm 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

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

FUNCTIONAL SYMBOLS: $\sqrt{A} = 0$, $\sqrt{E} = 0$, $\sqrt{V} = 0$

DIVISIONAL SYMBOLS: 4 PLACES \pm , 3 PLACES \pm , 2 PLACES ± 0.05 , 1 PLACE ± 0.3 , 0 PLACES ± 0.5

SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL $\pm 1.0^\circ$

CURRENT REV DESC: NEW P/N'S ADDED

EC NO: 667665
DRWN: RSCHIEBER 2021/06/21
CHK'D: RSILLER 2021/06/22
APPR: RSILLER 2021/06/22

INITIAL REVISION:
DRWN: JMARSZALEK 2016/10/06
APPR: RSILLER 2016/12/08

molex

CSE M12 XP AC FE RA MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1200660973
DOC TYPE: PSD
DOC PART: 000
REVISION: A7

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE
SERIES: 120066
MATERIAL NUMBER: SEE SHEET 3, 4
CUSTOMER: GENERAL MARKET
SHEET NUMBER: 2 OF 4


PART LIST

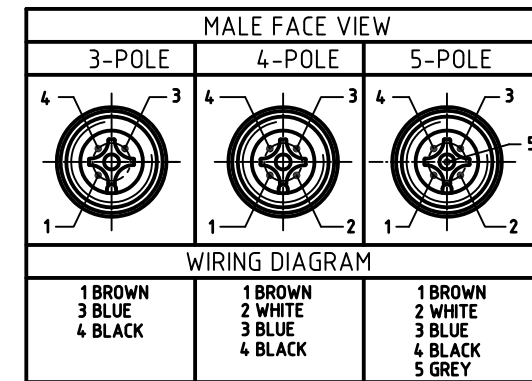
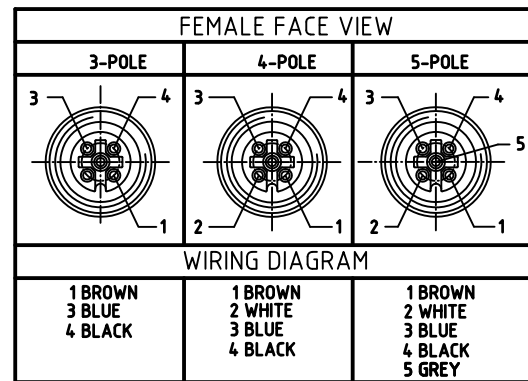
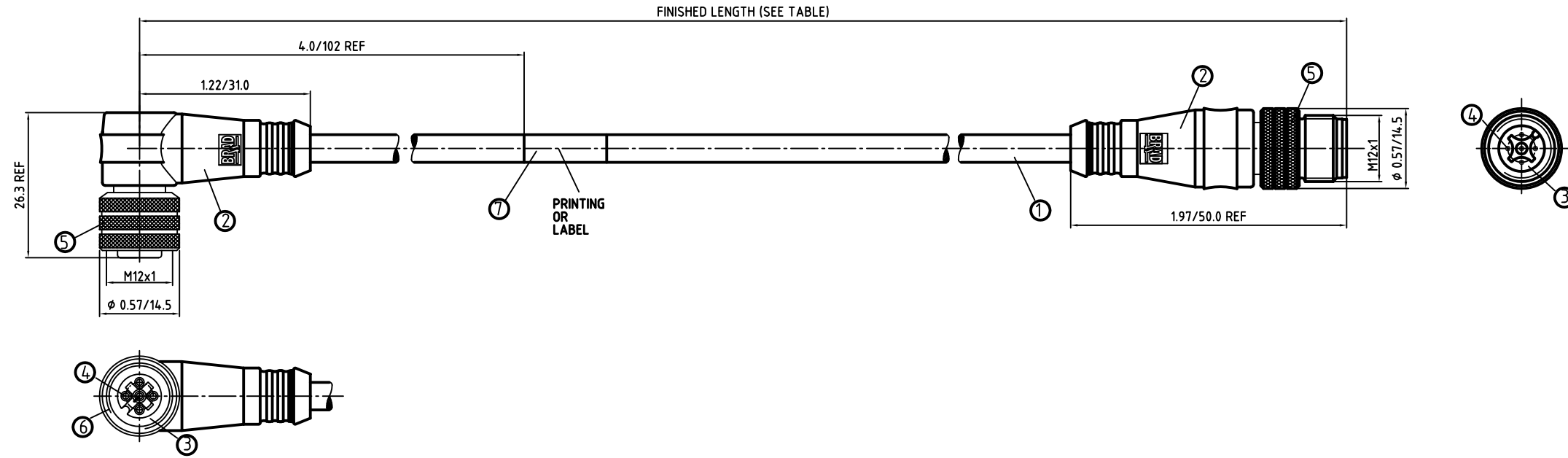
No.	Part No.	Engineering No.	Cable Length
1	1200060052	884031I20M005	0.5m
2	1200060053	884031I20M010	1m
3	1200060054	884031I20M015	1.5m
4	1200060055	884031I20M020	2m
5	1200070132	883031I03M003	0.3m
6	1200070133	883031I03M006	0.6m
7	1200070134	883031I03M010	1m
8	1200070136	883031I03M020	2m
9	1200070137	883031I03M030	3m
10	1200070138	883031I03M050	5m
11	1200070152	883031S20M010	1m
12	1200070153	883031S20M020	2m
13	1200070156	883031S20M050	5m
14	1200070522	884031I03M020	2m
15	1200070523	884031I03M030	3m
16	1200070534	884031S20M030	3m
17	1200070651	884031I03M006	0.6m
18	1200070768	884031S20M050	5m
19	1200070783	884031S20M100H	10m
20	1200071010	884031P82M100	10m
21	1200071096	884031P82M0037	0.3m
22	1200071138	884031S20M010H	1m
23	1200071139	884031S20M020H	2m
24	1200071143	884031P82M0107	1m
25	1200071144	884031P82M0207	2m
26	1200071164	884031S20M003H	0.3m
27	1200071179	884031S20M006H	0.6m
28	1200071183	884031S20M030H	3m
29	1200071189	884031S20M050H	5m
30	1200071200	884031S20M015H	1.5m
31	1200071236	884031S20M005H	0.5m
32	1200071280	884031S20M040H	4m
33	1200071318	884031P82M0067	0.6m
34	1200071341	884031I20M030	3m
35	1200071493	883031P82M0507	5m

No.	Part No.	Engineering No.	Cable Length
36	1200071575	884031P82M006	0.6m
37	1200071576	884031P82M010	1m
38	1200071577	884031P82M015	1.5m
39	1200071578	884031P82M0307	3m
40	1200071579	884031P82M050	5m
41	1200071581	884031P82M020	2m
42	1200071832	884031I20M050	5m
43	1200071833	884031I20M100	10m
44	1200071893	884031S20M100	10m
45	1200071994	885031P82M0307	3m
46	1200072696	883031S20M010H	1m
47	1200072725	885031I26M005	0.5m
48	1200072726	885031I26M010	1m
49	1200659070	884031I20M010Y	1m
50	1200659071	884031I20M015Y	1.5m
51	1200659115	884031I20M005Y	0.5m
52	1200660374	884031K05M005	0.5m
53	1200660375	884031K05M006	0.6m
54	1200660376	884031K05M010	1m
55	1200660377	884031K05M015	1.5m
56	1200660378	884031K05M020	2m
57	1200660379	884031K05M030	3m
58	1200660380	884031K05M040	4m
59	1200660381	884031K05M050	5m
60	1200660382	884031K05M060	6m
61	1200660383	884031S20M010	1m
62	1200660546	884031K05M100	10m
63	1200660928	884031B02M005	0.5m
64	1200660929	884031B02M006	0.6m
65	1200660931	884031B02M010	1m
66	1200660935	884031B02M020	2m
67	1200660937	884031B02M030	3m
68	1200660940	884031B02M050	5m
69	1200660942	884031B02M060	6m
70	1200660947	884031B02M100	10m

No.	Part No.	Engineering No.	Cable Length
71	1200660971	884031K03M006	0.6m
72	1200660973	884031K03M010	1m
73	1200660975	884031K03M015	1.5m
74	1200660976	884031K03M020	2m
75	1200660977	884031K03M030	3m
76	1200660978	884031K03M040	4m
77	1200660980	884031K03M050	5m
78	1200660982	884031K03M060	6m
79	1200660983	884031K03M070	7m
80	1200660984	884031K03M090	9m
81	1200660985	884031K03M100	10m
82	1200665007	884031P82M0157	1.5m
83	1200665039	884031S20M003	0.3m
84	1200665053	884031S20M060H	6m
85	1200665074	884031K05M080	8m
86	1200668052	883031S20M006	0.6m
87	1200668071	884031S20M020	2m
88	1200668191	883031S20M030	3m
89	1200668221	884031P82M0407	4m
90	1200668237	883031S20M100	10m
91	1200668247	884031P82M0057	0.5m
92	1200668258	883031I03M080	8m
93	1200668287	884031I20M025	2.5m
94	1200668392	884031P82M0607	6m
95	1200668531	884031P82M0507	5m
96	1200668532	884031P82M1007	10m
97	1200668647	884031P82M0067Y	0.6m
98	1200668666	884031P82M0107Y	1m
99	1200668667	884031I20M030Y	3m
100	1200070443	884021S20M003	0.3m
101	1200070444	884021S20M006	0.6m
102	1200070445	884021S20M010	1m
103	1200070446	884021S20M020	2m
104	1200070447	884021S20M030	3m
105	1200070449	884021S20M050	5m

Pos.	Part No.	Engineering No.	Cable Length
106	1200668160	883021S20M010	1m
107	1200668608	883031E02M020	2m
108	1200668613	883031E02M030	3m
109	1200659035	883031E02M050	5m
110	1200668612	883031E02M100	10m
111	1200668908	883031E03M003H	0.3m
112	1200070118	883031E03M006	0.6m
113	1200668909	883031E03M006H	0.6m
114	1200070119	883031E03M010	1m
115	1200668910	883031E03M010H	1m
116	1200070945	883031E03M015	1.5m
117	1200668967	883031E03M015H	1.5m
118	1200070121	883031E03M020	2m
119	1200072445	883031E03M020H	2m
120	1200070123	883031E03M030	3m
121	1200668911	883031E03M030H	3m
122	1200072164	883031E03M040	4m
123	1200668968	883031E03M040H	4m
124	1200070125	883031E03M050	5m
125	1200668912	883031E03M050H	5m
126	1200668175	883031E03M060	6m
127	1200070127	883031E03M100	10m
128	1200658762	883031H09M006	0.6m
129	1200658763	883031H09M010	1m
130	1200658764	883031H09M020	2m
131	1200658765	883031H09M030	3m
132	1200669349	883031H09M030H	3m
133	1200658766	883031H09M040	4m
134	1200658767	883031H09M050	5m
135	1200658768	883031H09M100	10m
136	1200070140	883031P03M003	0.3m
137	1200070141	883031P03M006	0.6m
138	1200070142	883031P03M010	1m
139	1200668324	883031P03M010G	1m
140	1200071121	883031P03M010H	1m
141	1200070143	883031P03M020	2m
142	1200668325	883031P03M020G	2m

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'S ADDED			
	$\nabla_A = 0$ $\nabla_E = 0$ $\nabla_P = 0$	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	INITIAL REVISION: DRWN: JMARSZALEK 2016/10/06 APPR: RSILLER 2016/12/08		DOCUMENT NUMBER: 1200660973		DOC TYPE: PSD
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120066	MATERIAL NUMBER: SEE PART LIST
				CUSTOMER: GENERAL MARKET	REVISION: A7
				SHEET NUMBER: 3 OF 4	



CONNECTOR SPECIFICATION:

VOLTAGE RATING	250 VAC/VDC
AMPERAGE RATING	max. 4 AMPS
PROTECTION	IP67
OPERATING TEMPERATURE	-20°C TO 80°C
UL CERTIFICATIONS	UL RECOGNIZED, FILE NO. E152210
CSA CERTIFICATIONS	LR6837

ITEM	COMPONENT	MATERIAL	FINISH
7	LABLE	MYLAR	BLACK/YELLOW
6	O-RING	VITON	RED
5	COUPLER	BRASS	NICKEL PLATED
4	SOCKET/PIN CONTACT	COPPER ALLOY	GOLD OVER NICKEL
3	INSERT	NYLON	BLACK
2	OVERMOLD	TPE	YELLOW
1	CABLE- 18/3-5 (COPPER STRANDING) 3/4/5 CONDUCT. 300V	TPE JACKET	YELLOW

DESCRIPTION EC NO.: WEU2010-0363 DRWN: LSTEMMLE CHKD: NS APPR: FPACHER 15.02.10 2010/02/16	QUALITY SYMBOLS ▽ = 0 ▽/C = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE IN/MM	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm INCH	DRAWN BY DATE LSTEMMLE 2010/02/03	MICRO-CHANGE CORDSET 3/4/5 P. FE 90 / MA STR 18/3-5 YELLOW TPE CABLE		
		4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±--- ±.01 1 PLACE ±0.3 ±--- ANGULAR ± --- °	CHECKED BY DATE RE 2010/02/04	MOLEX INCORPORATED		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE FPACHER 2010/02/15	MATERIAL NO. SEE TABLE SHEET 2	DOCUMENT NO. SD-120066-031	SHEET NO. 1 OF 2
2 REV		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

10

9

8

7

6

5

4

3

2

1

F

F

POL	MATERIAL NUMBER	ENGINEERING NUMBER	FINISHED LENGTH
4	1200660935	884031B02M020	2.0M +88.9 -0 [6.56' +3.50" -0]
4	1200660937	884031B02M030	3.0M +88.9 -0 [9.84' +3.50" -0]
4	1200660939	884031B02M040	4.0M +165.1 -0 [13.12' +6.50" -0]
4	1200660940	884031B02M040	5.0M +165.1 -0 [16.40' +6.50" -0]
4	1200660942	884031B02M060	6.0M +165.1 -0 [19.69' +6.50" -0]

E

E

D

D

C



C

B

B

A

A

DESCRIPTION EC NO.: WEU2010-0363 DRWN: LSTEMMLE CHKD: NS APPR: FPACHER 2010/02/16	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	 = 0  = 0	mm	INCH	IN/MM		1:1	METRIC		
REV	4 PLACES	±---	±---	DRAWN BY	DATE	MICRO-CHANGE CORDSET 3/4/5 P. FE 90 / MA STR 18/3-5 YELLOW TPE CABLE			
	3 PLACES	±---	±---	LSTEMMLE	2010/02/03				
	2 PLACES	±---	±.01	CHECKED BY	DATE	MOLEX INCORPORATED			
	1 PLACE	±0.3	±---	RE	2010/02/04				
	ANGULAR ± --- °		APPROVED BY	DATE	MATERIAL NO.		DOCUMENT NO.	SHEET NO.	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		FPACHER	2010/02/15	SEE TABLE		SD-120066-031	2 OF 2	
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
			A3						

10

9

8

7

6

5

4

3

2

1