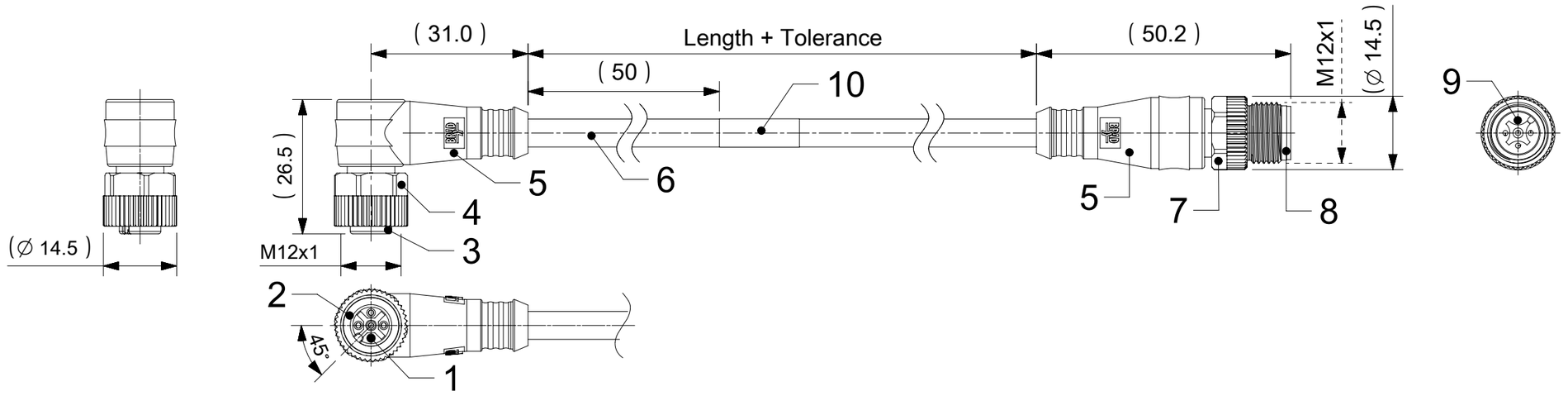
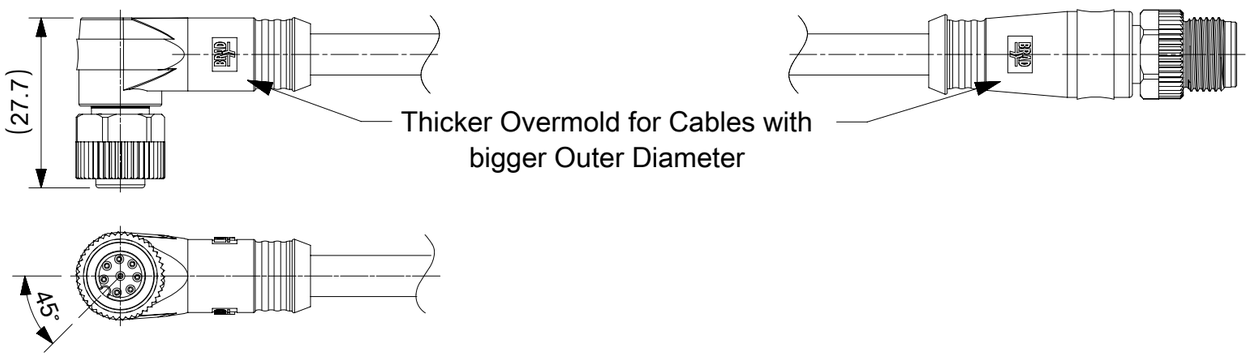
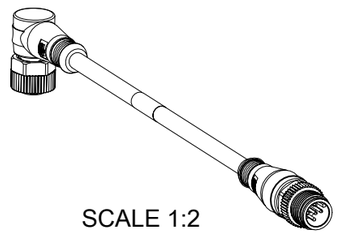
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT





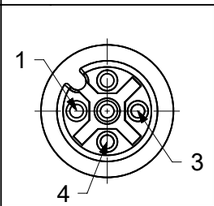
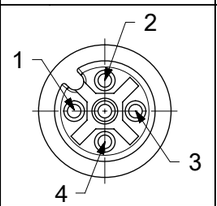
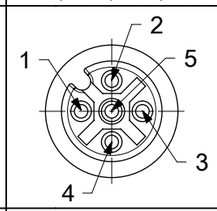
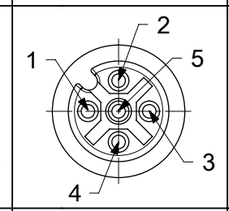
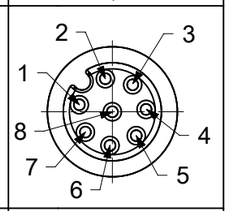
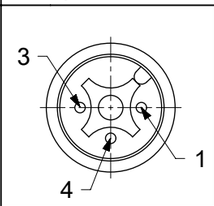
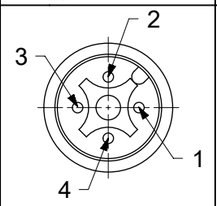
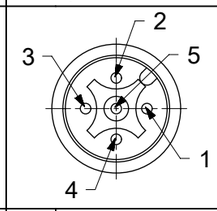
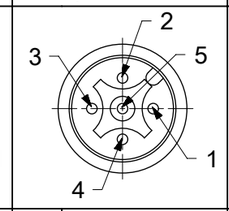
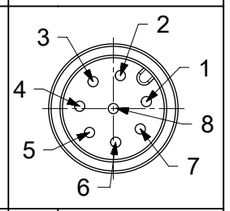


SCALE 1:2

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		5 POLES		8 POLES	
CABLE	B30, B55		B30, B33, B36, B55		B30, B33, B36, B55		B42		B41, B49	
FEMALE										
MALE										
CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	WHITE
	2	---	2	WHITE	2	WHITE	2	WHITE	2	BROWN
	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	GREEN
	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	YELLOW
	5	---	5	---	5	GREY	5	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
10	1	LABEL OR PRINTING	VINYL / ---	---
9	3 / 4 / 5	CONTACT M12 MALE	COPPER	SELECTIVE GOLD OVER NICKEL
	8		BRASS	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE	SEE SHEET 2	SEE SHEET 2
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	SEE SHEET 2	SEE SHEET 2
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5	CONTACT M12 FEMALE	BRONZE	SELECTIVE GOLD OVER NICKEL
	8		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

FUNCTIONAL SYMBOLS: FA = 0, FC = 0, FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0 °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.05
1 PLACE	± 0.1
0 PLACES	± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: ADDED NEW PNS

EC NO: 695290
DRWN: MDHARMANTI 2021/12/02
CHK'D: RSILLER 2022/02/11
APPR: RSILLER 2022/02/11

INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	A7

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3	GENERAL MARKET	1 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2022/02/11 06:52:46

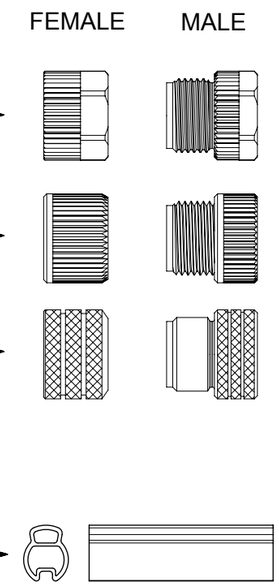
FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

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

OPTIONS

8	8	X	0	3	1	X	X	X	X	X	X	X	X

- 88=M12x1 Double ended
- Poles: 3=3 Poles, 4=4 Poles, 5=5 Poles, 8=8 Poles
- Heads style: 031=Plug Female 90° to Plug Male Straight
- 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 / R=Red
- Coupling Nut: Blank (Standard)=Knurled/Hex Brass, Ni Plated; 5=Knurled Derlin; 7=Knurled Brass Ni Plated, Teflon Coated
- H= 2 pcs. of I/D Carrier PVC Transparent (Cable B36 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: TEMP. / BENDING RADIUS	DRAG CHAIN	CABLE PRODUCT SPECIFICATION	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	TPU Black	UL 21215/758	C22.2 I/II A/B 80°/600V	-40°C to +90°C 5xO.D.	-25°C to +80°C 7.5xO.D.	-5°C to +60°C 7.5xO.D.	up to 5 000 000 cycles at temp 20°C	1552200001	SD-120209-001
B33	4 / 5	0.34mm²	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm²	TPU Orange								SD-120209-001
B41	8	0.25mm²	TPU Black								SD-120209-006
B42	5	0.34mm²	TPU Black								SD-120209-001
B55	4 / 5	0.34mm²	TPU Yellow								n/a

CABLE LENGTH TOLERANCES		
LENGTH	TOLERANCE	
shorter 1m	+40 mm	-0 mm
1m-5m	+60 mm	-0 mm
5m-10m	+80 mm	-0 mm
10m-20m	+140 mm	-0 mm
20m-30m	+160 mm	-0 mm
longer 30m	+1%	-0 mm

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

FUNCTIONAL SYMBOLS: FA= 0; FC= 0; FP= 0

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0 °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.05
1 PLACE	± 0.1
0 PLACES	± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: ADDED NEW PNS

EC NO: 695290
DRWN: MDHARMANTI 2021/12/02
CHK'D: RSILLER 2022/02/11
APPR: RSILLER 2022/02/11

INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	A7

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE SHEET 3	GENERAL MARKET	2 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2022/02/11 06:52:46

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

PART LIST

Lp.	MOLEX PN	ENGINEERING No	L [mm]
1	1200668877	883031B30M006	600
2	1200668878	883031B30M010	1000
3	1200668879	883031B30M020	2000
4	1200668880	883031B30M030	3000
5	1200668881	883031B30M050	5000
6	1200668882	883031B30M100	10000
7	1200668829	884031B30M006	600
8	1200668830	884031B30M010	1000
9	1200668831	884031B30M020	2000
10	1200668832	884031B30M030	3000
11	1200668833	884031B30M050	5000
12	1200668834	884031B30M100	10000
13	1200669285	884031B30M150	15000
14	1200669520	884031B30M015	1500
15	1200669566	884031B30M200	20000
16	1200668997	885031B30M006	600
17	1200668998	885031B30M010	1000
18	1200668999	885031B30M020	2000
19	1200669000	885031B30M030	3000
20	1200669001	885031B30M050	5000
21	1200669002	885031B30M100	10000
22	1200669241	885031B30M0067	600
23	1200669243	885031B30M0207	2000
24	1200669371	885031B30M010H	1000
25	1200669677	885031B30M150	15000
26	1200669678	885031B30M200	20000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
27	1200669569	884031B33M005	500
28	1200669570	884031B33M010	1000
29	1200669571	884031B33M020	2000
30	1200669572	884031B33M030	3000
31	1200669573	884031B33M050	5000
32	1200669574	884031B33M100	10000
33	1200669581	884031B33M005A	500
34	1200669582	884031B33M010A	1000
35	1200669621	884031B33M020A	2000
36	1200669622	884031B33M030A	3000
37	1200669623	884031B33M050A	5000
38	1200669624	884031B33M100A	10000
39	1200669625	884031B33M150A	15000
40	1200669626	884031B33M200A	20000
41	1200669670	885031B33M010A	1000
42	1200669671	885031B33M020A	2000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
43	1200669672	885031B33M030A	3000
44	1200669673	885031B33M050A	5000
45	1200669674	885031B33M100A	10000
46	1200669675	885031B33M150A	15000
47	1200669676	885031B33M200A	20000
48	1200669908	885031B33M005A	500
49	1200669909	885031B33M300A	300000
50	1200669910	885031B33M400A	400000
51	1200669911	885031B33M500A	500000

Lp.	MOLEX PN	ENGINEERING NO	L [mm]
48	1200669060	885031B36M0057Y	500
49	1200669061	885031B36M0107Y	1000
50	1200669062	885031B36M0207Y	2000
51	1200669063	885031B36M0307Y	3000
52	1200669064	885031B36M0407Y	4000
53	1200669065	885031B36M0507Y	5000
54	1200669066	885031B36M0607Y	6000
55	1200669067	885031B36M0807Y	8000
56	1200669068	885031B36M1007Y	10000
57	1200669069	885031B36M1207Y	12000
58	1200669070	885031B36M1507Y	15000
59	1200669071	885031B36M1807Y	18000
60	1200669072	885031B36M2007Y	20000
61	1200669073	885031B36M2507Y	25000
62	1200669074	885031B36M3007Y	30000
63	1200669549	885031B36M0057H	500
64	1200669550	885031B36M0107H	1000
65	1200669551	885031B36M0157H	1500
66	1200669552	885031B36M0207H	2000
67	1200669553	885031B36M0307H	3000
68	1200669554	885031B36M0507H	5000
69	1200669555	885031B36M1007H	10000
70	1200668861	884031B36M0507H	5000
71	1200668862	884031B36M1007H	10000
72	1200669047	884031B36M0057Y	500
73	1200669048	884031B36M0107Y	1000
74	1200669049	884031B36M0157Y	1500
75	1200669050	884031B36M0207Y	2000
76	1200669051	884031B36M0307Y	3000
77	1200669052	884031B36M0407Y	4000
78	1200669053	884031B36M0607Y	6000
79	1200669054	884031B36M0807Y	8000
80	1200669055	884031B36M1207Y	12000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
81	1200669056	884031B36M1507Y	15000
82	1200669057	884031B36M2007Y	20000
83	1200669058	884031B36M2507Y	25000
84	1200669059	884031B36M3007Y	30000
85	1200669534	884031B36M0057H	500
86	1200669535	884031B36M0107H	1000
87	1200669536	884031B36M0157H	1500
88	1200669537	884031B36M0207H	2000
89	1200669538	884031B36M0307H	3000
90	1200669539	884031B36M0507H	5000
91	1200669540	884031B36M1007H	10000
92	1200669564	884031B36M0067Y	600

Lp.	MOLEX PN	ENGINEERING No	L [mm]
93	1200668887	888031B41M050	5000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
94	1200668835	885031B42M006	600
95	1200668836	885031B42M010	1000
96	1200668837	885031B42M020	2000
97	1200668838	885031B42M030	3000
98	1200668839	885031B42M050	5000
99	1200668840	885031B42M100	10000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
100	1200669272	884031B55M010Y	1000
101	1200669273	884031B55M020Y	2000
102	1200669274	884031B55M030Y	3000
103	1200669275	884031B55M050Y	5000
104	1200669276	884031B55M060Y	6000
105	1200669277	884031B55M100Y	10000
106	1200669278	884031B55M150Y	15000
107	1200669419	884031B55M070Y	7000
108	1200669420	884031B55M200Y	20000
109	1200669730	884031B55M005Y	500

Lp.	MOLEX PN	ENGINEERING No	L [mm]
110	1200669679	885031B55M010Y	1000
111	1200669680	885031B55M020Y	2000
112	1200669681	885031B55M030Y	3000
113	1200669682	885031B55M050Y	5000
114	1200669683	885031B55M100Y	10000
115	1200669684	885031B55M150Y	15000
116	1200669685	885031B55M200Y	20000

Lp.	MOLEX PN	ENGINEERING No	L [mm]
117	1200669744	884031B30M080	8000

DOCUMENT STATUS	P1	RELEASE DATE	2022/02/11 06:52:46

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

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

FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0
DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.1
0 PLACES	±	0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: ADDED NEW PNS

EC NO: 695290
DRWN: MDHARMANTI 2021/12/02
CHK'D: RSILLER 2022/02/11
APPR: RSILLER 2022/02/11

INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	A7

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