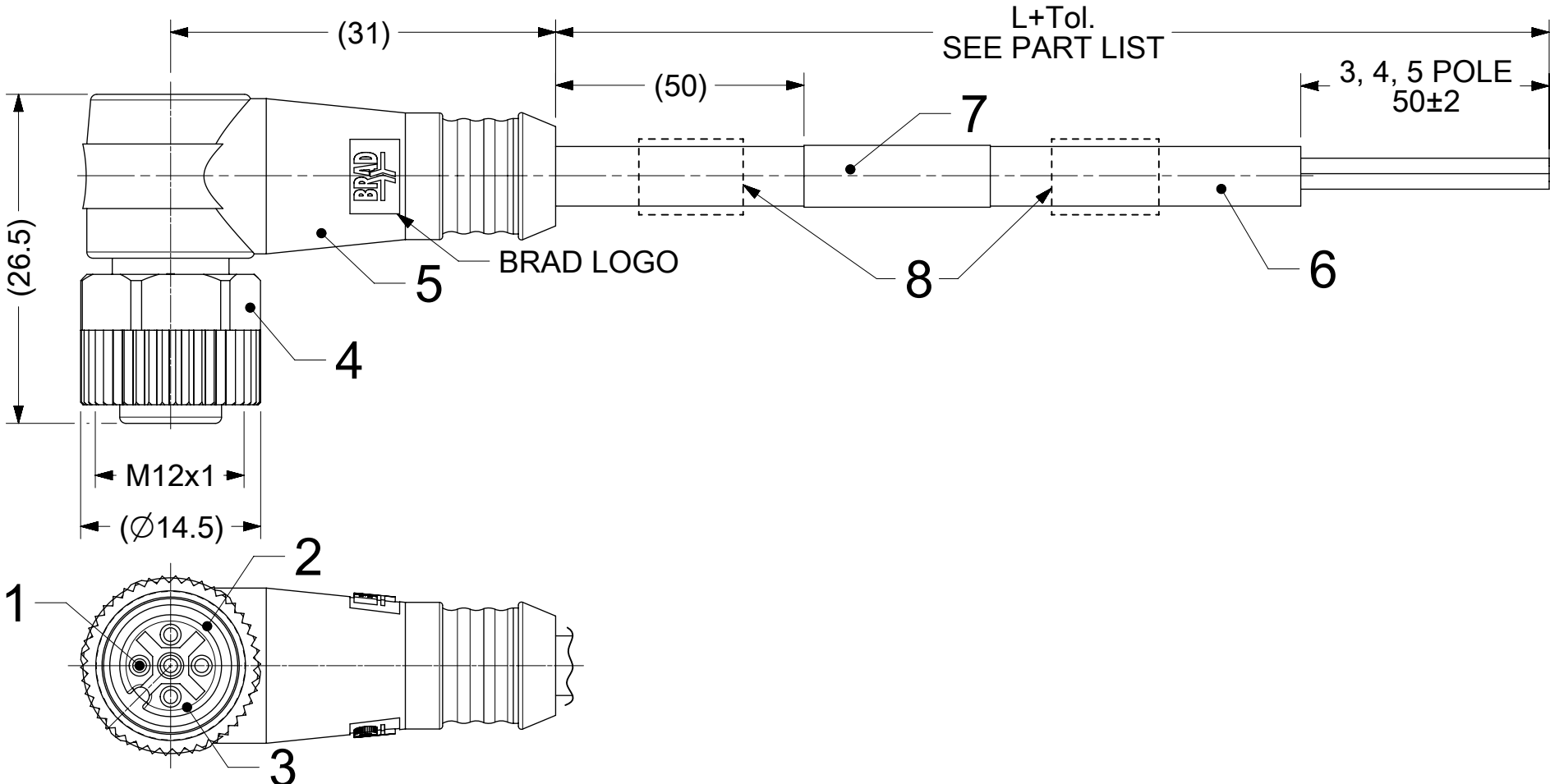


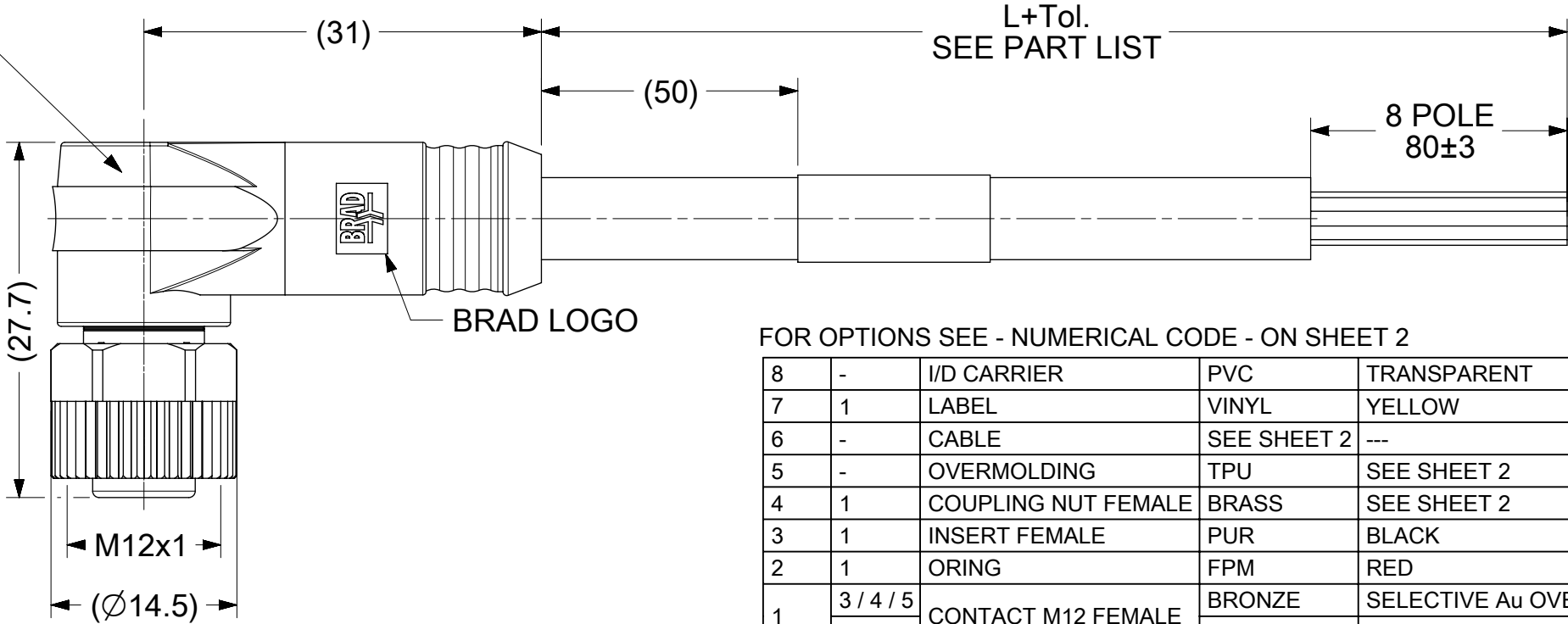
FEMALE PLUG M12 90° ANGLED

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 / +80°C



Thicker Overmold for Cables
with bigger Outer Diameter (Ø>6)



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 OR GREEN/YELLOW	5	GREY
						6	PINK
						7	BLUE
						8	RED

CODING REQUIRED TO IEC 61076-2-101

DOCUMENT STATUS	P1	RELEASE DATE	2022/02/28	09:13:47
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FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

8	-	I/D CARRIER	PVC	TRANSPARENT
7	1	LABEL	VINYL	YELLOW
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	BRASS	SEE SHEET 2
3	1	INSERT FEMALE	PUR	BLACK
2	1	ORING	FPM	RED
1	3 / 4 / 5	CONTACT M12 FEMALE	BRONZE	SELECTIVE Au OVER Ni
	8		BRASS	SELECTIVE Au OVER Ni
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH / COLOR

FUNCTIONAL SYMBOLS

$\sqrt{A} = 0$

$\sqrt{E} = 0$

$\sqrt{F} = 0$

DIVISIONAL SYMBOLS

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

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:

EC NO: 697196

DRWN: SSM

CHK'D: RSILLER

APPR: RSILLER

INITIAL REVISION:

DRWN: SSM

APPR: RSILLER

2021/12/13

2022/02/28

2022/02/28

2021/12/13

2022/02/28

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

molex

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200656607

DOC TYPE

PSD

DOC PART

000

REVISION

A

SEE SHEET 3

GENERAL MARKET

1 OF 3

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

8

0

X

0

0

1

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:
001=Plug Female
90° Angled

Cable type: See Table

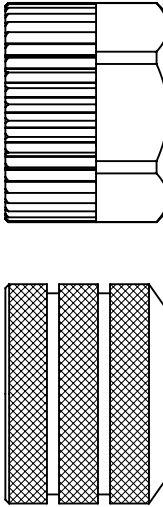
Units:
M=Meter

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

OVERMOLD COLOR:
BLANK (STANDARD)= BLACK
Y= YELLOW, A= GREY,
G= BLACK, R= RED

COUPLING NUT:
BLANK (STANDARD)= KNURLED
/HEX BRASS, Ni PLATED
7 = KNURLED BRASS, Ni PLATED,
TEFLON COATED
5 = KNURLED DERLIN

H = 2 pcs. of I/D Carrier
PVC Transparent
(Cables 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 TESTED	OTHER	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	TPU BLACK	STYLE 21215	YES	-40°C to +90°C, 5xO.D.	-25°C to +80°C, 7.5xO.D.	5 MIO CYCLES	WELD SLAG RESISTANCE	SD-120209-001
B42	5									SD-120209-001
B41	8	0.25mm²	TPU ORANGE							SD-120209-006
B36	4	0.34mm²								SD-120209-001
B33	4 / 5	0.34mm²								SD-120209-001
B55	4 / 5	0.34mm²								1552200001 PS

FUNCTIONAL SYMBOLS

FA

=

0

FE

=

0

FE

=

0

DIVISIONAL SYMBOLS

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

DIMENSION UNITS

SCALE

CURRENT REV DESC:

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

EC NO: 697196

DRWN: SSM

CHK'D: RSILLER

APPR: RSILLER

INITIAL REVISION:

DRWN: SSM

APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

2021/12/13

2022/02/28

2022/02/28

2021/12/13

2022/02/28

A3-SIZE

120065

SEE SHEET 3

GENERAL MARKET

2 OF 3

mo

lex

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

1200656607

PSD

000

A

DOCUMENT STATUS

P1

RELEASE DATE

2022/02/28

09:13:47

FORMAT: mss-16-000-A3

REVISION: 1

DATE: 2020/01/11

10

9

8

7

6

5

4

3

2

1

10	9	8	7	6	5	4	3	2	1
PART LIST									
MOLEX PN	ENGINEERING No	L [mm]	MOLEX PN	ENG No.	L [mm]				
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1200652260	803001B30M020	2000	1200659525	805001B30M100	10000				
1200652261	803001B30M050	5000	1200659748	805001B30M150	15000				
1200652262	803001B30M100	10000	1200656484	805001B30M200	20000				
1200652263	804001B30M010	1000	1200657181	805001B33M005A	500				
1200652264	804001B30M020	2000	1200656658	805001B33M010A	1000				
1200659470	804001B30M030	3000	1200656659	805001B33M020A	2000				
1200652265	804001B30M050	5000	1200656660	805001B33M030A	3000				
1200659807	804001B30M083	8300	1200656661	805001B33M050A	5000				
1200652266	804001B30M100	10000	1200656662	805001B33M100A	10000				
1200659401	804001B30M150	15000	1200656663	805001B33M150A	15000				
1200659471	804001B30M200	20000	1200656664	805001B33M200A	20000				
1200659472	804001B30M250	25000	1200657182	805001B33M300A	30000				
1200659473	804001B30M300	30000	1200657183	805001B33M400A	40000				
1200657144	804001B33M005A	500	1200657184	805001B33M500A	50000				
1200656607	804001B33M010A	1000	1200652267	805001B42M010	1000				
1200656608	804001B33M020A	2000	1200652268	805001B42M020	2000				
1200656609	804001B33M030A	3000	1200652269	805001B42M050	5000				
1200656610	804001B33M050A	5000	1200652270	805001B42M100	10000				
1200656611	804001B33M100A	10000	1200659542	805001B42M200	20000				
1200656612	804001B33M150A	15000	1200656666	805001B55M010Y	1000				
1200656613	804001B33M200A	20000	1200656667	805001B55M020Y	2000				
1200656852	804001B36M0107Y	1000	1200656668	805001B55M030Y	3000				
1200656391	804001B36M0207H	2000	1200656669	805001B55M050Y	5000				
1200659432	804001B36M0207Y	2000	1200656670	805001B55M100Y	10000				
1200656392	804001B36M0507H	5000	1200656671	805001B55M150Y	15000				
1200659433	804001B36M0507Y	5000	1200656672	805001B55M200Y	20000				
1200656393	804001B36M1007H	10000	1200652310	808001B41M010	1000				
1200659434	804001B36M1007Y	10000	1200652311	808001B41M020	2000				
1200656627	804001B55M010Y	1000	1200652312	808001B41M050	5000				
1200656628	804001B55M020Y	2000	1200659789	808001B41M083	8300				
1200656629	804001B55M030Y	3000	1200652313	808001B41M100	10000				
1200656630	804001B55M050Y	5000	1200656022	808001B41M150	15000				
1200656631	804001B55M100Y	10000	1200656486	808001B41M200	20000				
1200656632	804001B55M150Y	15000							
1200656633	804001B55M200Y	20000							
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1200659523	805001B30M020	2000							
1200656665	805001B30M030	3000							

NOTE:
* (STAR) - INDICATES THESE PNS ONLY HAVE ID CARRIER IN BOM.

DOCUMENT STATUS	P1	RELEASE DATE	2022/02/28	09:13:47
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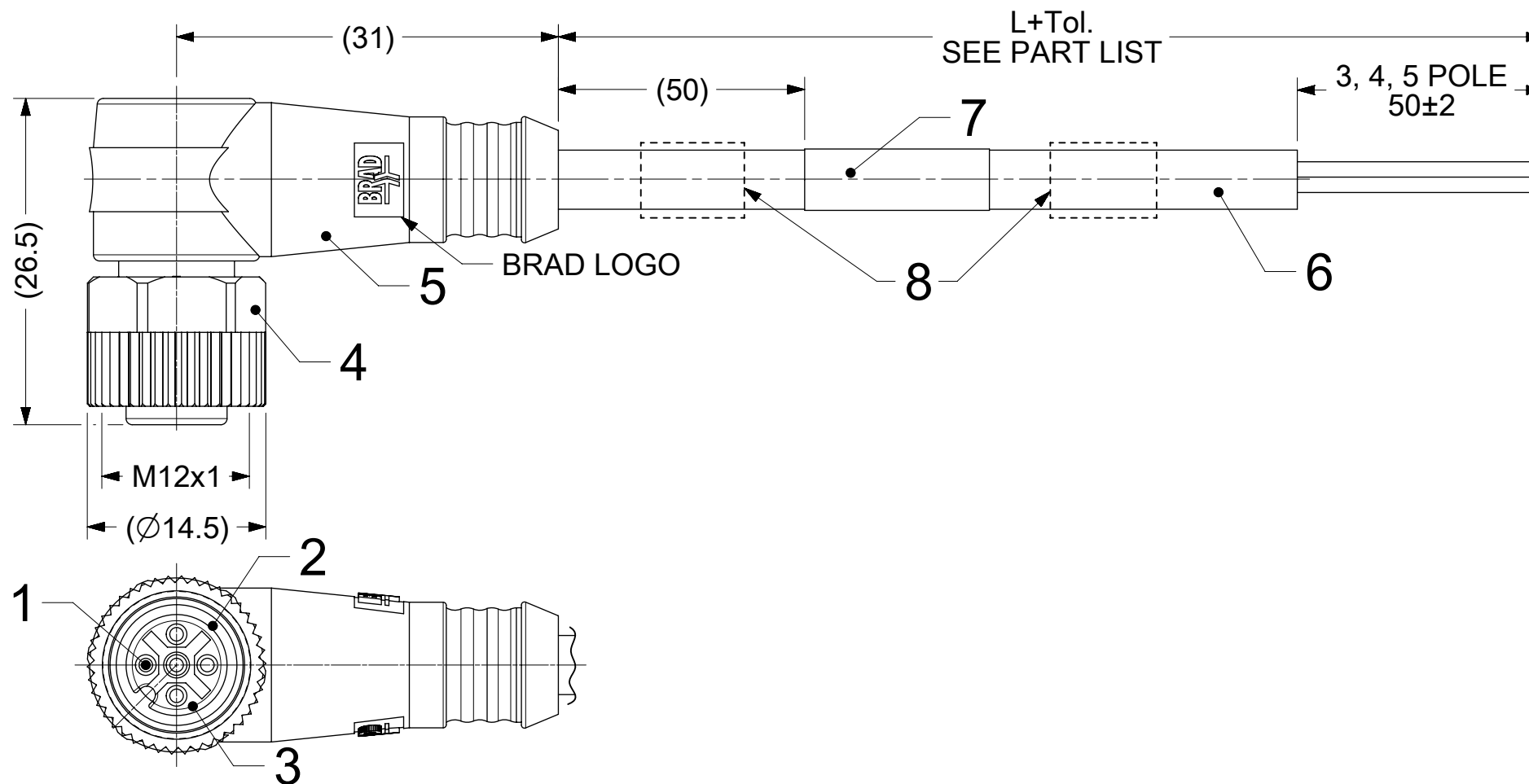
TABLE OF LENGTH TOLERANCES		
OVER	UP TO AND INCLUDING	TOLERANCE
0	1000	+40 0
1000	5000	+60 0
5000	10000	+80 0
10000	20000	+140 0
20000	30000	+160 0
30000	>	+1% OF LENGTH

FUNCTIONAL SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
FA = 0 FE = 0 FE = 0		DIMENSION UNITS		SCALE		CURRENT REV DESC: EC NO: 697196 DRWN: SSM2021/12/13 CHK'D: RSILLER2022/02/28 APPR: RSILLER2022/02/28							
		mm		1:1									
		GENERAL TOLERANCES (UNLESS SPECIFIED)											
DIVISIONAL SYMBOLS		ANGULAR TOL ± 1.0 °				INITIAL REVISION: DRWN: SSM2021/12/13 APPR: RSILLER2022/02/28							
		4 PLACES		±									
		3 PLACES		±									
		2 PLACES		± 0.05									
		1 PLACE		± 0.3									
DIVISIONAL SYMBOLS		0 PLACES		± 0.5		PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER 1200656607 DOC TYPE PSD DOC PART 000 REVISION A							
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS											
		THIRD ANGLE PROJECTION											
				DRAWING A3-SIZE		SERIES 120065		MATERIAL NUMBER SEE SHEET 3		CUSTOMER GENERAL MARKET		SHEET NUMBER 3 OF 3	

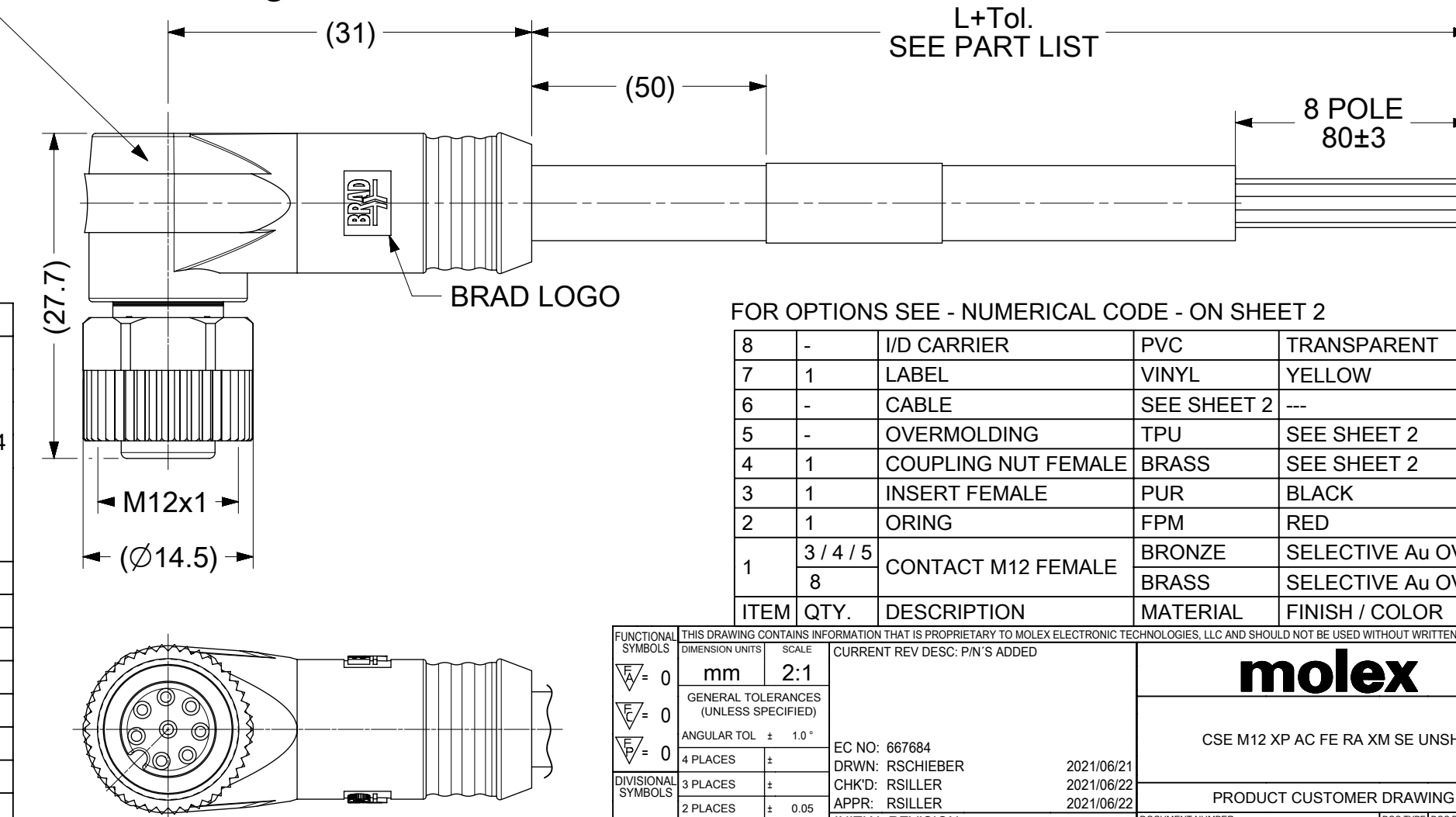
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FEMALE PLUG M12 90° ANGLED		

NOTES:

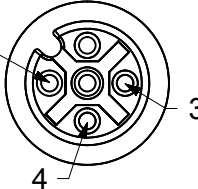
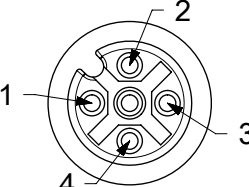
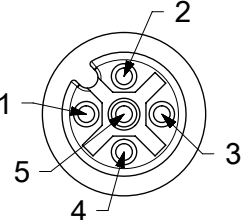
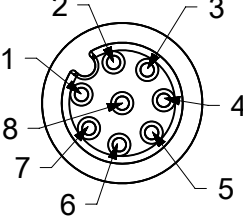
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A
PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +80°C



Thicker Overmold for Cables —
with bigger Outer Diameter ($\phi > 6$)



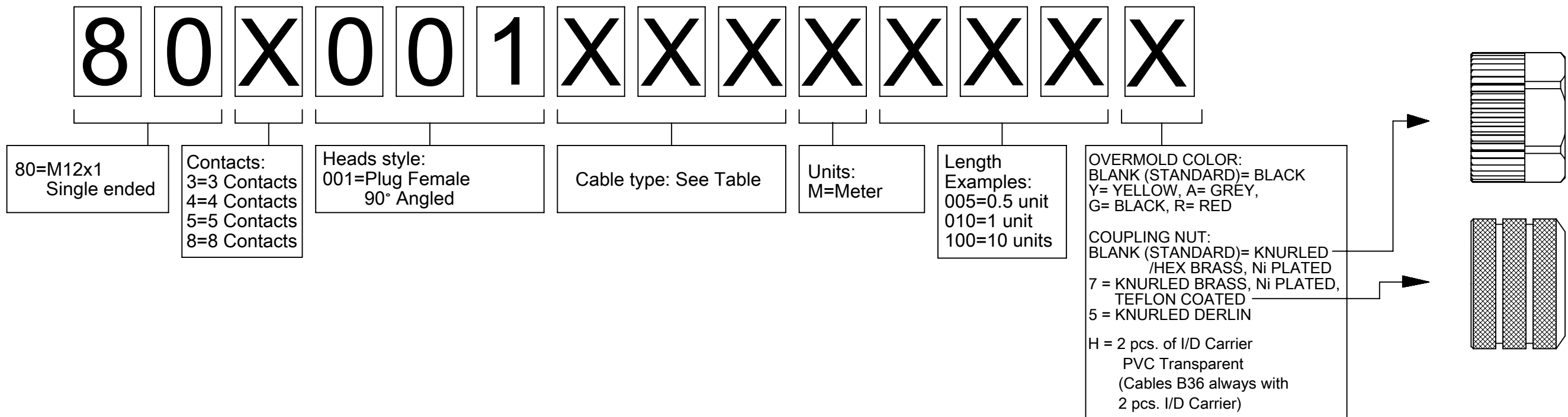
CONTACTS POSITION FRONT VIEW:

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 OR GREEN/YELLOW	5	GREY
						6	PINK
						7	BLUE
						8	RED

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2				
8	-	I/D CARRIER	PVC	TRANSPARENT
7	1	LABEL	VINYL	YELLOW
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	BRASS	SEE SHEET 2
3	1	INSERT FEMALE	PUR	BLACK
2	1	ORING	FPM	RED
1	3 / 4 / 5	CONTACT M12 FEMALE	BRONZE	SELECTIVE Au OVER N
	8		BRASS	SELECTIVE Au OVER N
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH / COLOR

FUNCTIONAL SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION															
√ = 0 √ = 0 √ = 0		DIMENSION UNITS		SCALE		CURRENT REV DESC: P/N'S ADDED				molex							
		mm		2:1													
		GENERAL TOLERANCES (UNLESS SPECIFIED)								EC NO: 667684 DRWN: RSCHIEBER 2021/06/21 CHK'D: RSILLER 2021/06/22 APPR: RSILLER 2021/06/22				CSE M12 XP AC FE RA XM SE UNSH			
		ANGULAR TOL ± 1.0 °															
		4 PLACES		±													
DIVISIONAL SYMBOLS		3 PLACES		±		INITIAL REVISION: DRWN: FSCHAFHAUSER 2014/02/10 APPR: CBURGER 2014/05/07				PRODUCT CUSTOMER DRAWING							
		2 PLACES		± 0.05													
		1 PLACE		± 0.3													
		0 PLACES		± 0.5													
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS												THIRD ANGLE PROJECTION		DRAWING	
						A3-SIZE		120065		SEE SHEET 3		GENERAL MARKET		1 OF 3			

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



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	DRAW CHAIN TESTED	OTHER	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	TPU BLACK	STYLE 21215	YES	-40°C to +90°C, 5xO.D.	-25°C to +80°C, 7.5xO.D.	5 MIO CYCLES	WELD SLAG RESISTANCE	SD-120209-001
B42	5									SD-120209-001
B41	8	0.25mm²	SD-120209-006							
B36	4	0.34mm²	TPU ORANGE							SD-120209-001
B33	4 / 5	0.34mm²	TPU GRAY							SD-120209-001
B55	4 / 5	0.34mm²	TPU YELLOW							1552200001 PS

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/22	13:20:30
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FUNCTIONAL SYMBOLS F = 0 F = 0 F = 0 DIVISIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																												
	DIMENSION UNITS			SCALE			CURRENT REV DESC: P/N'S ADDED						molex CSE M12 XP AC FE RA XM SE UNSH																
	mm			1:1																									
	GENERAL TOLERANCES (UNLESS SPECIFIED)																												
	ANGULAR TOL ± 1.0 °																												
	4 PLACES						EC NO: 667684						PRODUCT CUSTOMER DRAWING																
	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:						DOCUMENT NUMBER			DOC TYPE			DOC PART			REVISION							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						THIRD ANGLE PROJECTION						DRAWING			SERIES			MATERIAL NUMBER			CUSTOMER			SHEET NUMBER					
												A3-SIZE			120065			SD-120065-076			PSD			001			A5		
																		SEE SHEET 3			GENERAL MARKET			2 OF 3					

PART LIST

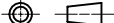
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3	1200652261	803001B30M050	5000 +60
4	1200652262	803001B30M100	10000 +80
5	1200652263	804001B30M010	1000 +40
6	1200652264	804001B30M020	2000 +60
7	1200652265	804001B30M050	5000 +60
8	1200652266	804001B30M100	10000 +80
9	1200659401	804001B30M150	15000 +160
10	1200659470	804001B30M030	3000 +60
11	1200659471	804001B30M200	20000 +160
12	1200659472	804001B30M250	25000 +160
13	1200659473	804001B30M300	30000 +300
14	1200659522	805001B30M010	1000 +40
15	1200659523	805001B30M020	2000 +60
16	1200659524	805001B30M050	5000 +60
17	1200659525	805001B30M100	10000 +80
18	1200659748	805001B30M150	15000 +160
19	1200659807	804001B30M083	8300 +80
20	1200652310	808001B41M010	1000 +40
21	1200652311	808001B41M020	2000 +60
22	1200652312	808001B41M050	5000 +60
23	1200652313	808001B41M100	10000 +80
24	1200656022	808001B41M150	15000 +160
25	1200659789	808001B41M083	8300 +80
26	1200652267	805001B42M010	1000 +40
27	1200652268	805001B42M020	2000 +60
28	1200652269	805001B42M050	5000 +60
29	1200652270	805001B42M100	10000 +80
30	1200659542	805001B42M200	20000 +160
31	1200656391	804001B36M0207H	2000 +60
32	1200656392	804001B36M0507H	5000 +60
33	1200656393	804001B36M1007H	10000 +80
34	1200656484	805001B30M200	20000 +160
35	1200656486	808001B41M200	20000 +160
36	*1200659432	804001B36M0207Y	2000 +60
37	*1200659433	804001B36M0507Y	5000 +60
38	*1200659434	804001B36M1007Y	10000 +80
39	1200656607	804001B33M010A	1000 +40
40	1200656608	804001B33M020A	2000 +60

NOTE:

* (STAR) - INDICATES THESE PNS ONLY HAVE ID CARRIER IN BOM.

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/22	13:20:30
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[illegible]

FUNCTIONAL SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
DIMENSION UNITS		SCALE		CURRENT REV DESC: P/N'S ADDED				molex							
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)															
ANGULAR TOL		± 1.0 °						CSE M12 XP AC FE RA XM SE UNSH							
4 PLACES		±													
3 PLACES		±													
2 PLACES		± 0.05		EC NO: 667684				PRODUCT CUSTOMER DRAWING							
1 PLACE		± 0.3		DRWN: RSCHIEBER 2021/06/21											
0 PLACES		± 0.5		CHK'D: RSILLER 2021/06/22											
DIVISIONAL SYMBOLS		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: RSILLER 2021/06/22				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
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				DRWN: FSCHAFFHAUSER 2014/02/10				SD-120065-076		PSD		001		A5	
				APPR: CBURGER 2014/05/07											
				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		120065		SEE SHEET 3		GENERAL MARKET		3 OF 3	