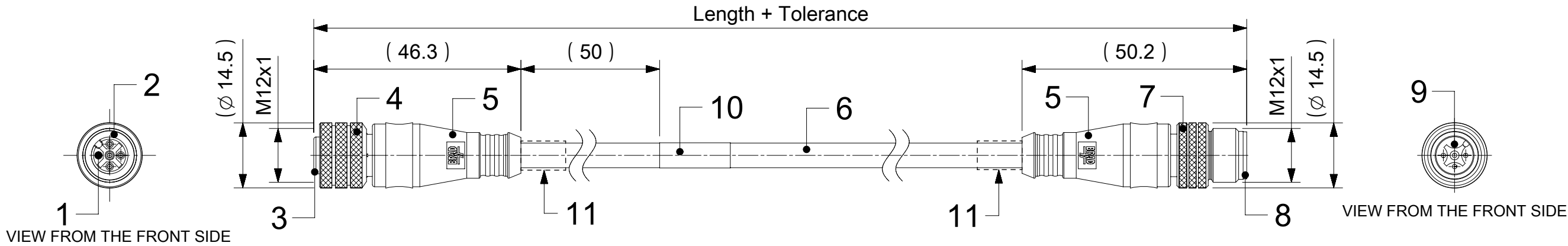


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



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

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	GREY	5	GREY
							6	PINK
							7	BLUE
CODING REQUIRED TO IEC 61076-2-101								

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

11	SEE SHEET 2	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	-
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	-
7	1	COUPLING NUT MALE	-	-
6	-	CABLE	SEE SHEET 2	-
5	-	OVERMOULDING BLACK	TPU	-
4	1	COUPLING NUT FEMALE	-	-
3	1	INSERT FEMALE BLACK	PUR	-
2	1	O-RING RED	FPM	-
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

FUNCTIONAL SYMBOLS THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIVISIONAL SYMBOLS	SCALE 1:1	CURRENT REV DESC: NEW P/N'S ADDED TO THE DRAWING 12335		
	mm	EC NO: 769491		
	GENERAL TOLERANCES (UNLESS SPECIFIED)	DRWN: VHANDI 2023/10/30		
	ANGULAR TOL ± 1.0 °	CHK'D: RSILLER 2023/11/21		
	4 PLACES ±	APPR: RSILLER 2023/11/21		
	3 PLACES ±	INITIAL REVISION:		
	2 PLACES ± 0.05	DRWN: JMARSZALEK 2016/09/16		
	1 PLACE ± 0.3	APPR: RSILLER 2016/12/08		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES
			A3-SIZE	120066
		DOCUMENT NUMBER		DOC TYPE
		1200668084		PSD
		CUSTOMER		DOC PART
		GENERAL MARKET		000
		SHEET NUMBER		REVISION
		1 OF 4		A17

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

OPTIONS

8	8	X	0	3	0	X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---	---	---	---	---	---	---

88=Micro-Change
M12x1
Double ended

Contacts:
3=3 Contacts
4=4 Contacts
5=5 Contacts
8=8 Contacts

Heads style:
030=Plug Female Straight
to Plug Male Straight

Cable type: See Table

Units:
M=Meter
C=Centimeter

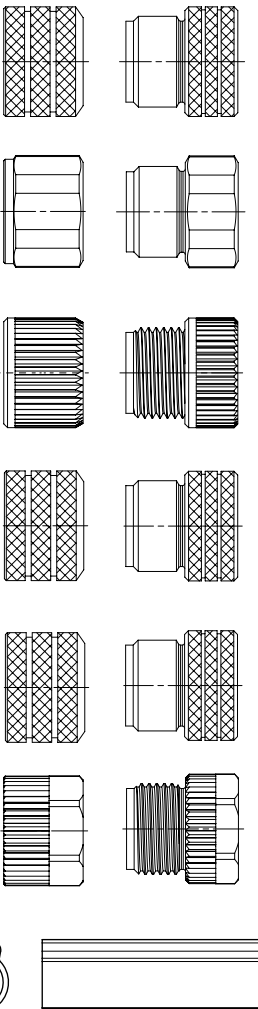
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

Overmold color:
Blank (Standard)=Black
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 _____
8=Type 316 stainless steel _____
9=Knurled / Hexagonal Brass Ni Plated SW13

H= 2 pcs. of I/D Carrier PVC Transparent

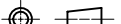
COUPLING NUTS
FEMALE MALE



CABLE INFORMATION (for more information see Cable Data Sheet).

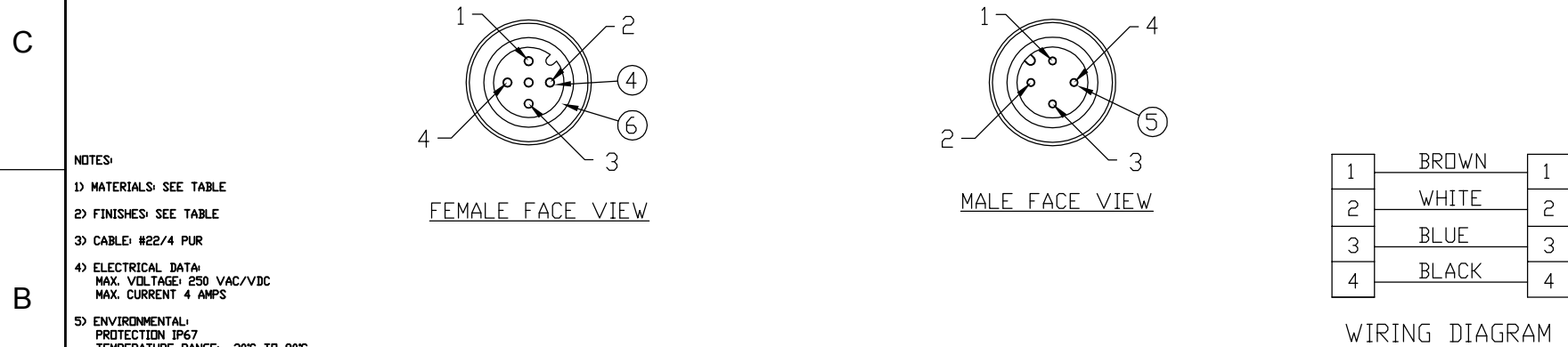
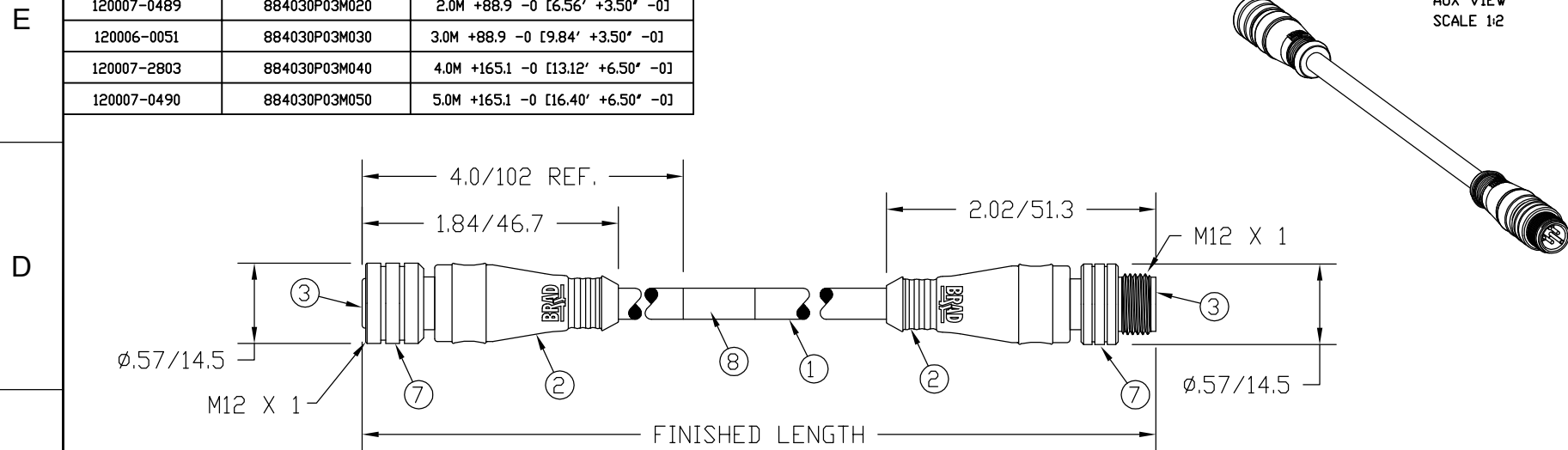
CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E02	3 / 4 / 5 / 8	0.25mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E03	3 / 4 / 5	0.34mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
H08	3 / 4 / 5 / 8	0.25mm²	PUR BLACK LS0H	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	-
H09	3 / 4 / 5	0.34mm²	PUR BLACK LS0H	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	-
P02	3 / 4 / 5 / 8	0.25mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-

CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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: NEW P/N'S ADDED TO THE DRAWING 12335		molex				
	mm		1:1								
	GENERAL TOLERANCES (UNLESS SPECIFIED)						CSE M12 XP AC FE STR MA STR XM DE				
ANGULAR TOL ± 1.0 °											
DIVISIONAL SYMBOLS	4 PLACES		±		EC NO: 769491 DRWN: VHANDI 2023/10/30 CHK'D: RSILLER 2023/11/21 APPR: RSILLER 2023/11/21		PRODUCT CUSTOMER DRAWING				
	3 PLACES		±								
	2 PLACES		± 0.05								
	1 PLACE		± 0.3		INITIAL REVISION: DRWN: JMARSZALEK 2016/09/16 APPR: RSILLER 2016/12/08		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
	0 PLACES		± 0.5				1200668084		PSD	000	A17
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER
						A3-SIZE	120066	SEE SHEET 3-4		GENERAL MARKET	2 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2023/11/21	12:03:28
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10	9	8	7	6	5	4	3	2	1
PART LIST									
MOLEX PN			Engineering No.			Length			
1200668174			884030H09M030			3m			
1200668380			884030H09M040			4m			
1200668244			884030H09M050			5m			
1200668550			884030H09M050H			5m			
1200668737			884030H09M055			5.5m			
1200669926			884030H09M065H			6.5m			
1200669927			884030H09M070H			7m			
1200669931			884030H09M075H			7.5m			
1200669932			884030H09M080H			8m			
1200668381			884030H09M100			10m			
5P CABLE H09									
1200668509			885030H09M006			0.6m			
1200668497			885030H09M010			1m			
1200669756			885030H09M015H			1.5m			
1200668500			885030H09M020			2m			
1200669762			885030H09M020H			2m			
1200669757			885030H09M025H			2.5m			
1200668510			885030H09M030			3m			
1200669763			885030H09M030H			3m			
1200668853			885030H09M040			4m			
1200668501			885030H09M050			5m			
1200668854			885030H09M060			6m			
1200668502			885030H09M092			9.2m			
1200668511			885030H09M100			10m			
1200668683			885030H09M150			15m			
1200668684			885030H09M200			20m			
8P CABLE P02									
1200661455			888030P02M005			0.5m			
1200660579			888030P02M010			1m			
1200668803			888030P02M010H			1m			
1200660585			888030P02M100			10m			
1200668807			888030P02M100H			10m			
1200669353			888030P02M130			13m			
1200660586			888030P02M150			15m			
1200668808			888030P02M150H			15m			
1200668327			888030P02M200			20m			
1200668809			888030P02M200H			20m			
MOLEX PN			Engineering No.			Length			
1200660580			888030P02M020			2m			
1200668804			888030P02M020H			2m			
1200660581			888030P02M030			3m			
1200660582			888030P02M040			4m			
1200660583			888030P02M050			5m			
1200668806			888030P02M050H			5m			
1200660584			888030P02M060			6m			
1200668352			888030P02M250			25m			
1200669133			888030P02M3008			30m			
1200668810			888030P02M350H			35m			
1200668544			888030P02M500			50m			
3P CABLE P03									
1200070102			883030P03M003			0.3m			
1200070104			883030P03M006			0.6m			
1200660498			883030P03M010			1m			
1200071123			883030P03M010H			1m			
1200668691			883030P03M010YH			1m			
1200660500			883030P03M020			2m			
1200071131			883030P03M0201			2m			
1200071114			883030P03M020H			2m			
1200668690			883030P03M020YH			2m			
1200660501			883030P03M030			3m			
1200071122			883030P03M030H			3m			
1200668646			883030P03M030HY			3m			
1200072104			883030P03M040			4m			
1200660502			883030P03M050			5m			
1200071047			883030P03M050H			5m			
1200668713			883030P03M050HY			5m			
1200071288			883030P03M060			6m			
1200070105			883030P03M100			10m			
1200071273			883030P03M100H			10m			
1200668712			883030P03M100HY			10m			
1200072658			883030P03M120			12m			
1200071053			883030P03M150			15m			
MOLEX PN			Engineering No.			Length			
4P CABLE P03									
1200070486			884030P03M003			0.3m			
1200668687			884030P03M005			0.5m			
1200070487			884030P03M006			0.6m			
1200070488			884030P03M010			1m			
1200072762			884030P03M0101			1m			
1200072649			884030P03M0105			1m			
1200060050			884030P03M015			1.5m			
1200070489			884030P03M020			2m			
1200072763			884030P03M0201			2m			
1200668754			884030P03M020H			2m			
1200060051			884030P03M030			3m			
1200072764			884030P03M0301			3m			
1200072803			884030P03M040			4m			
1200070490			884030P03M050			5m			
1200072650			884030P03M0505			5m			
1200072010			884030P03M050H			5m			
1200072804			884030P03M060			6m			
1200669717			884030P03M080			8m			
1200668815			884030P03M0805			8m			
1200071029			884030P03M100			10m			
1200665031			884030P03M100H			10m			
1200668720			884030P03M150			15m			
1200072105			884030P03M200			20m			
1200668721			884030P03M250			25m			
1200668722			884030P03M300			30m			
1200668723			884030P03M350			35m			
1200668724			884030P03M400			40m			
5P CABLE P03									
1200668903			885030P03C130			0.13m			
1200073083			885030P03M006			0.6m			
1200668794			885030P03M006H			0.6m			
1200071947			885030P03M007			0.7m			
1200668084			885030P03M010			1m			
1200668795			885030P03M010H			1m			
1200668765			885030P03M015			1.5m			
1200070596			885030P03M020			2m			
1200668602			885030P03M020G			2m			
MOLEX PN			Engineering No.			Length			
1200668086			885030P03M0283			2.8m			
1200071408			885030P03M030			3m			
1200668796			885030P03M030H			3m			
1200668163			885030P03M040			4m			
1200071049			885030P03M050			5m			
1200073049			885030P03M0501			5m			
1200668797			885030P03M050H			5m			
1200668088			885030P03M070			7m			
1200071284			885030P03M100			10m			
1200668798			885030P03M100H			10m			
1200072656			885030P03M120			12m			
1200073084			885030P03M150			15m			
1200669111			885030P03M150H			15m			
1200668238			885030P03M200			20m			
1200668800			885030P03M200H			20m			
1200668775			885030P03M300			30m			
1200668801			885030P03M300H			30m			
1200668802			885030P03M350H			35m			



- NOTES:
- 1) MATERIALS: SEE TABLE
 - 2) FINISHES: SEE TABLE
 - 3) CABLE: #22/4 PUR
 - 4) ELECTRICAL DATA:
MAX. VOLTAGE: 250 VAC/VDC
MAX. CURRENT 4 AMPS
 - 5) ENVIRONMENTAL:
PROTECTION IP67
TEMPERATURE RANGE: -20°C TO 80°C
 - 6) WRAP LABEL IS MARKED WITH P/N, DATE CODE,
VOLTAGE & AMPERAGE.
 - 7) ASSEMBLY IS RoHS COMPLIANT.

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
8	1	LABEL	MYLAR	BLACK/YELLOW
7	2	COUPLER	BRASS	NICKEL PLATED
6	1	O-RING	VITON	RED
5	4	PIN CONTACT	COPPER ALLOY	GOLD OVER NICKEL
4	4	SOCKET CONTACT	COPPER ALLOY	GOLD OVER NICKEL
3	2	INSERT	PUR	BLACK
2	2	OVERMOLD	PUR	YELLOW
1	1	#22/4 CABLE	PUR JACKET	BLACK

RELEASED DRAWING EC NO: WEL2010-0054 DRWN: BWOODMAN 8/14/09 CHKD: BWOODMAN09/07/29 APPR: JFMURPHY 2009/08/21	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
			mm	INCH	DRAWN BY BWOODMAN	DATE 2009/08/14	TITLE MICRO-CHANGE CORDSET 4P MA/FE SINGLE KEY #22/4 BLACK PUR CABLE MOLEX INCORPORATED		
			4 PLACES	±----	±----	CHECKED BY VOU		DATE 2009/08/14	
			3 PLACES	±----	±----	APPROVED BY ----		DATE ----	
			2 PLACES	±----	±.01				
1 PLACE	±0.3	±----	ANGULAR ±----°						
A	REV		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-120007-001		SHEET NO. 1 OF 1
					SIZE A	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			