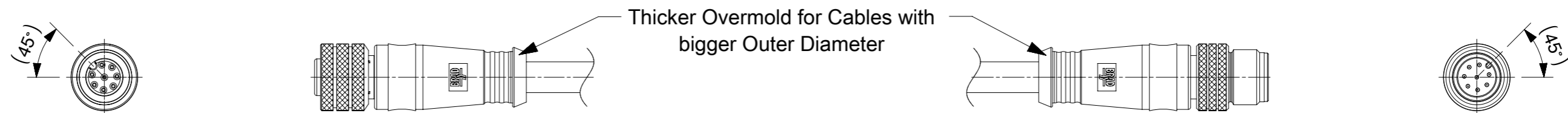
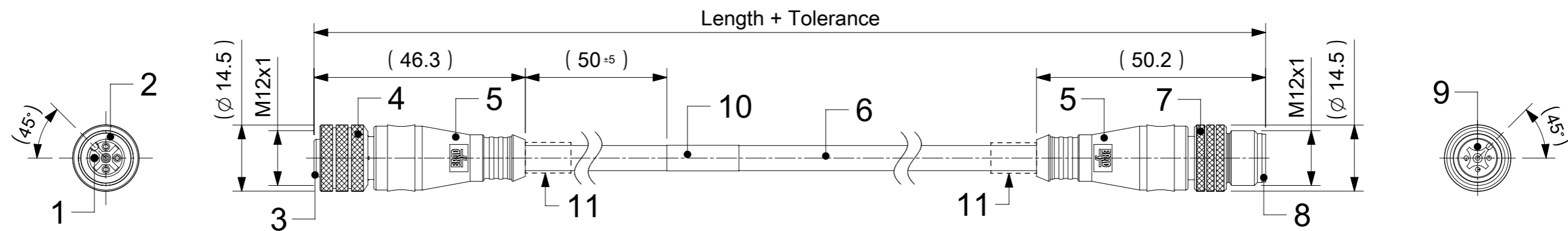


# FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



## 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

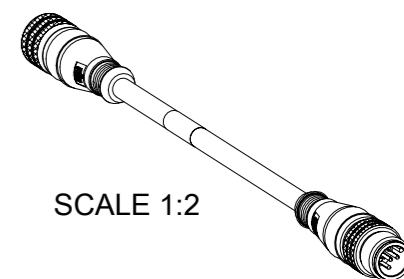
PROTECTION CLASS: IP 67

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

CODING REQUIRED TO IEC 61076-2-101



SCALE 1:2

## FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
11	SEE SHEET 2	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	TPU	---
7	1	COUPLING NUT MALE	---	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING BLACK	TPU	---
4	1	COUPLING NUT FEMALE	---	---
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	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: 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

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120066

MATERIAL NUMBER: SEE PART LIST

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 4

EC NO: 734641

DRWN: RSCHIEBER 2022/12/01

CHK'D: RSILLER 2023/01/12

APPR: RSILLER 2023/01/12

INITIAL REVISION:

DRWN: JMARSZALEK 2016/09/19

APPR: RSILLER 2016/12/08

DOCUMENT NUMBER: 1200668165

DOC TYPE: PSD

DOC PART: 000

REVISION: A6

PRODUCT CUSTOMER DRAWING

molex

CSE M12 XP AC FE STR MA STR XM DE

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

8 8 X 0 3 0 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:  
030=Plug Female Straight  
to Plug Male Straight

Cable type: See Table

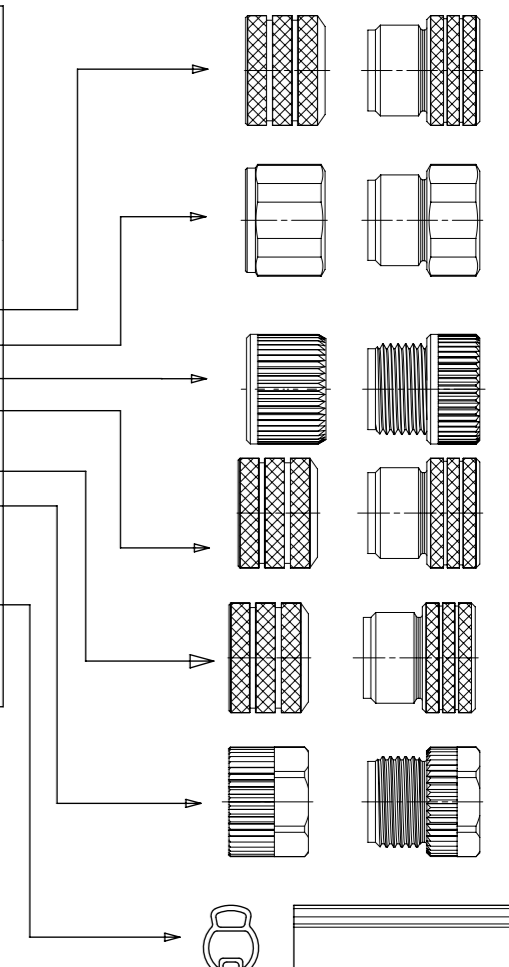
Units:  
M=Meter

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  
8=Type 316 stainless steel  
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 PVC for cables  
A09, S19, S20, S26  
Blank=Yellow TPE-E for cables  
K03, K05  
A=Grey / G=Black / Y=Yellow

COUPLING NUT  
FEMALE MALE


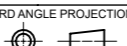


CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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 ADDED							
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0 °	CSE M12 XP AC FE STR MA STR XM DE							
4 PLACES	±	PRODUCT CUSTOMER DRAWING							
3 PLACES	±	DOCUMENT NUMBER							
2 PLACES	± 0.05	1200668165							
1 PLACE	± 0.3	DOC TYPE							
0 PLACES	± 0.5	PSD							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	REVISION		
			A3-SIZE	120066	SEE PART LIST	GENERAL MARKET	000	A6	2 OF 4

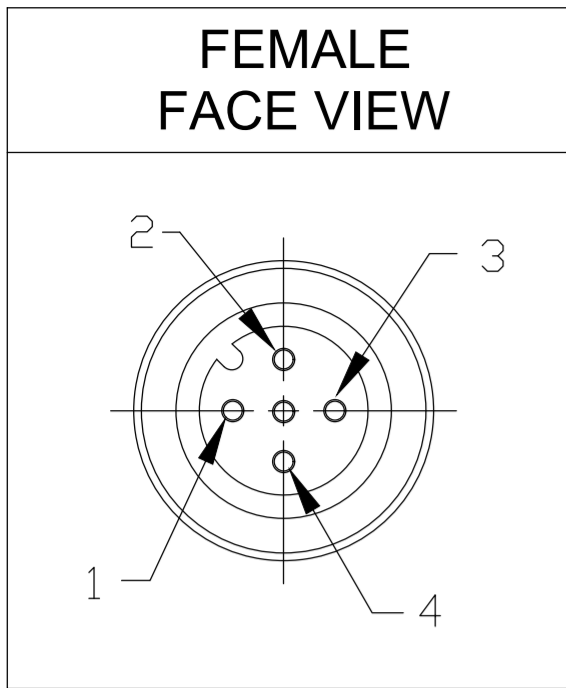
# CABLE INFORMATION (for more information see Cable Data Sheet).

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
A09	4	22AWG	PVC YELLOW	UL 2661	I/II A/B 80°C/300V	-	-	-	-
B02	4	18AWG	PUR YELLOW	UL 20549	I/II A/B 80°C/300V	-	-	-	-
E52	3 / 4	0.34mm <sup>2</sup>	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E57	5	0.34mm <sup>2</sup>	PVC GREY	-	-	-	-5°C to +70°C	-	-
I02	3 / 4 / 8	0.25mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
K03	4 / 5	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 PLTC	I/II A/B 90°C/300V	max 105°C	-	-	-
P04	4	0.50mm <sup>2</sup>	PUR BLACK	-	-	-40°C to +90°C, >7.5xO.D.	-15°C to +90°C, >12.5xO.D.	-	-
P19	8	0.25mm <sup>2</sup>	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	0.34mm <sup>2</sup>	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
P82	3 / 4 / 5	0.34mm <sup>2</sup>	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S19	8	0.25mm <sup>2</sup>	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	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES

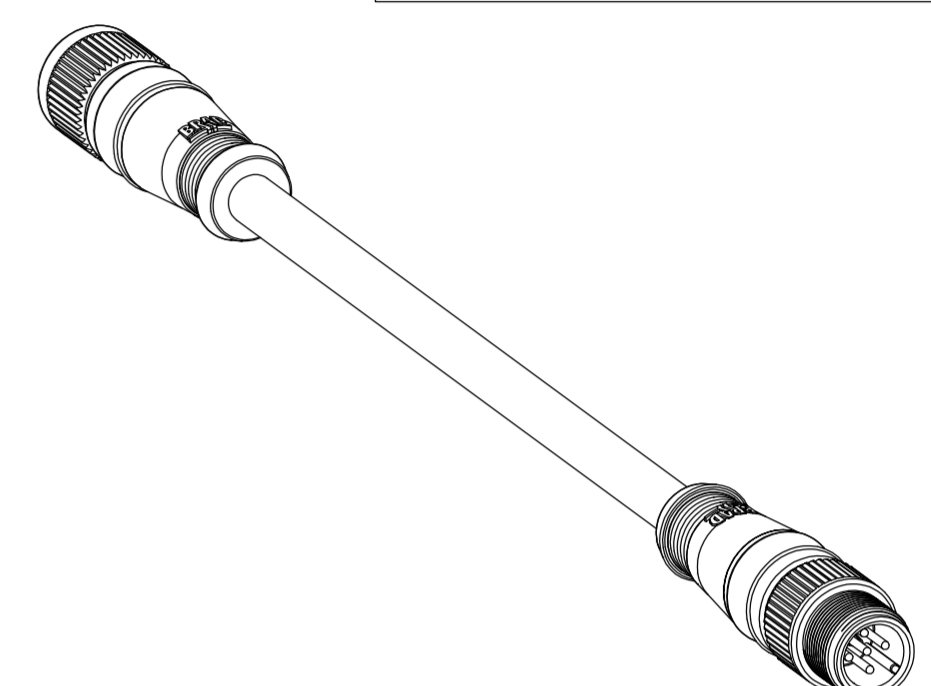
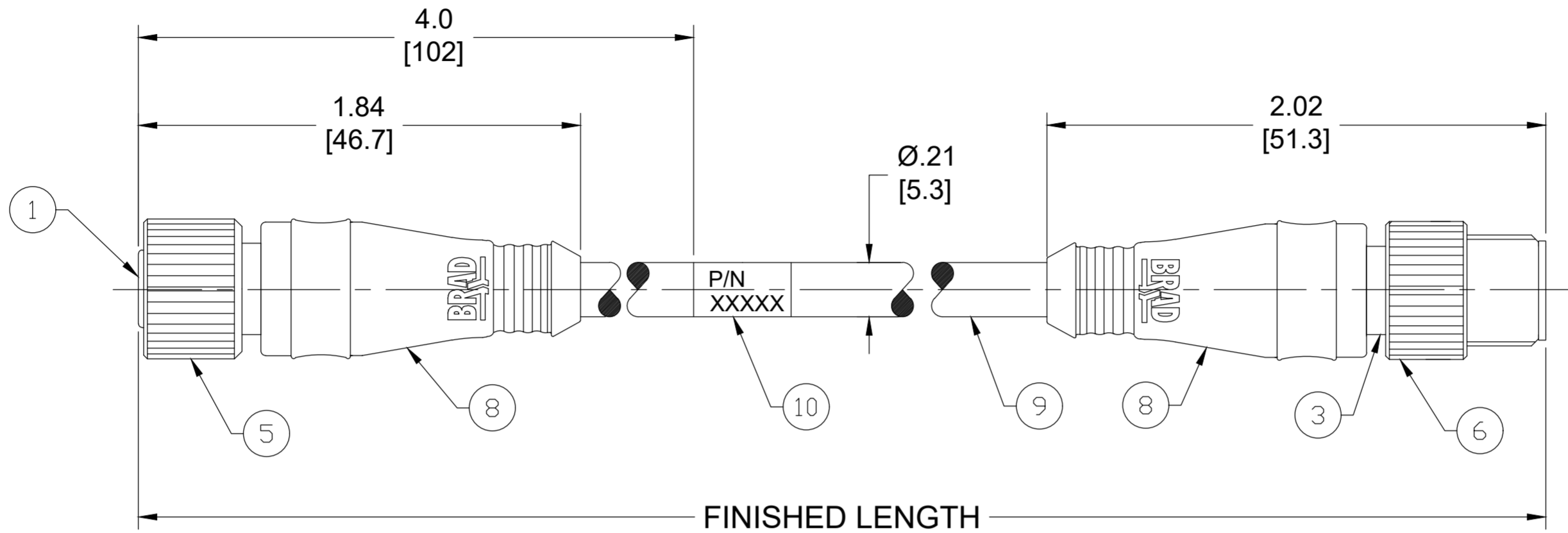
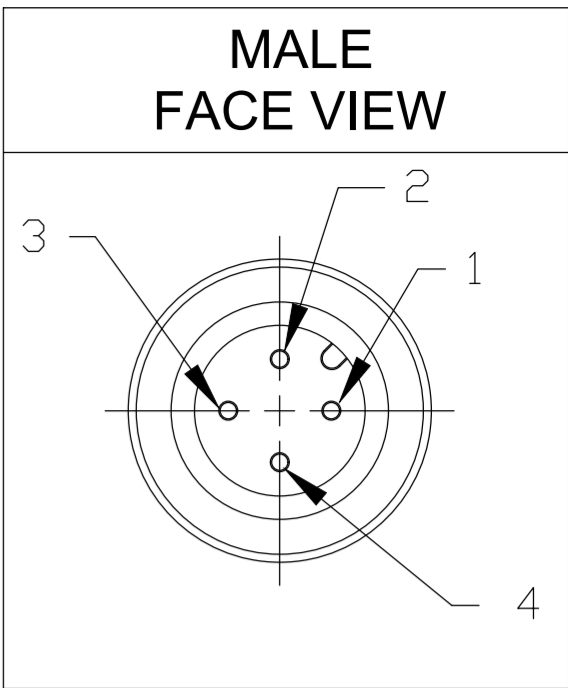
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
DIMENSION UNITS	SCALE	CURRENT REV DESC: NEW P/N ADDED							
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0 °	EC NO: 734641 DRWN: RSCHIEBER 2022/12/01 CHK'D: RSILLER 2023/01/12 APPR: RSILLER 2023/01/12							
4 PLACES	±								
3 PLACES	±	PRODUCT CUSTOMER DRAWING							
2 PLACES	± 0.05								
1 PLACE	± 0.3	INITIAL REVISION:				DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
0 PLACES	± 0.5	DRWN: JMARSZALEK 2016/09/19 APPR: RSILLER 2016/12/08				1200668165	PSD	000	A6
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
			A3-SIZE	120066	SEE PART LIST	GENERAL MARKET		3 OF 4	

DOCUMENT STATUS	P1	RELEASE DATE	2023/01/12	11:47:32
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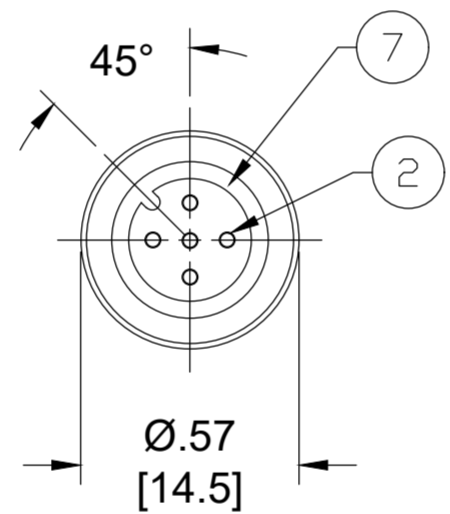




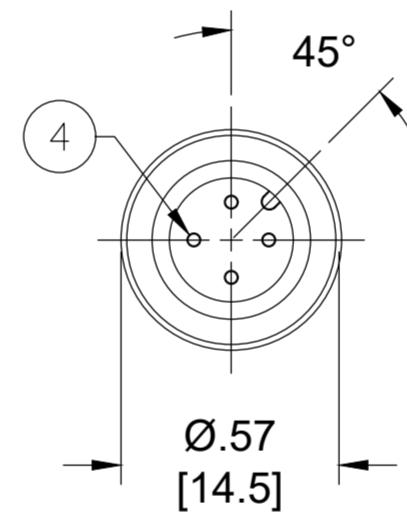
PART NO	ENGINEERING NO.	FINISHED LENGTH
1200660259	884030A09M003	0.3M [ 1FT ]
1200660297	884030A09M100	10M [ 32FT 9 IN ]
1200661907	884030A09M350	35M [ 114FT 10 IN ]



- NOTES:**
- MATERIAL: AS NOTED
  - FINISH: AS NOTED
  - ELECTRICAL:  
VOLTAGE: 250V  
CURRENT: 4A
  - TEMP RATING: -20°TO +105°C
  - PROTECTION: IP67 (WHEN MATED)
  - COUPLING THREAD: M12X1
  - UL RECOGNIZED FILE: E152210  
CSA CERTIFIED FILE: LR6837
  - ALL DIMENSIONS ARE FOR REFERENCE UNLESS TOLERANCED OR NOTED OTHERWISE



FEMALE FACE VIEW



MALE FACE VIEW

1	BROWN	1
2	WHITE	2
3	BLUE	3
4	BLACK	4

WIRING DIAGRAM

10	LABEL	VINYL	BLACK/YELLOW
9	CABLE #22 AWG,	PVC	YELLOW
8	OVERMOLD	TPU	YELLOW
7	O-RING	VITON	RED
6	MALE COUPLING NUT	BRASS	NICKEL PLATED
5	FEMALE COUPLING NUT	BRASS	NICKEL PLATED
4	CONTACT PIN	COPPER ALLOY	GOLD OVER NICKEL
3	MALE INSERT	PUR	BLACK
2	CONTACT SOCKET	COPPER ALLOY	GOLD OVER NICKEL
1	FEMALE INSERT	PUR	BLACK
ITEM	COMPONENT	MATERIAL	FINISH

**PART NO. MATRIX**  
**884030A09M003**  
 FINISHED LENGTH  
 M005 = 0.5 METER  
 M010 = 1 METER  
 M100 = 10 METER

**CABLE LENGTH TOLERANCES**

<.3M [1FT]:	+19mm-0 [ +.75in-0]
.3 - .9M [1 - 3FT]:	+44.5mm-0 [+1.75in-0]
.9 - 1.8M [3 - 6FT]:	+55.6mm-0 [+2.19in-0]
1.8 - 3.7M [6 - 12FT]:	+88.9mm-0 [+3.50in-0]
3.7 - 7.3M [12 - 24FT]:	+165.1mm-0 [+6.50in-0]
7.3-14.6M [24 - 48FT]:	+317.5mm-0 [+12.50in-0]
14.6 - 30.5M [48-100FT]:	+622.3mm-0 [+24.50in-0]
OVER 30M [100FT]	+2% OF FINISHED LENGTH

FUNCTIONAL SYMBOLS FA=0 FC=0 FP=0	DIMENSION UNITS <b>INCH/MM</b>	SCALE <b>NTS</b>	CURRENT REV DESC: ITEM #8 WAS PUR ITEM #10 WAS MYLAR. ADDED TOL CHART & PN MATRIX. MODIFIED PN CHART		
	GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 671333	DRWN: ABENJAMINLW	2021/05/03
DIVISIONAL SYMBOLS	4 PLACES ±----	±----	CHK'D: RSTONE	2021/07/23	
	3 PLACES ±----	±----	APPR: BWOODMAN	2021/07/28	
1 PLACE ±----			INITIAL REVISION:		MICRO-CHANGE CORDSET, M12, 4 POLE, FEMALE-MALE, STRAIGHT, SINGLE KEY, #22 AWG
0 PLACES ±----			DRWN: BWOODMAN		
ANGULAR TOL ± ---- °			APPR: JFMURPHY	2009/03/27	PRODUCT CUSTOMER DRAWING
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	DOCUMENT NUMBER
				SERIES	DOC TYPE/DOC PART/REVISION
				120066	<b>SD-120066-005</b>
				C-SIZE	MATERIAL NUMBER
				SEE CHART	CUSTOMER
				GENERAL MARKET	SHEET NUMBER
					<b>1 OF 1</b>