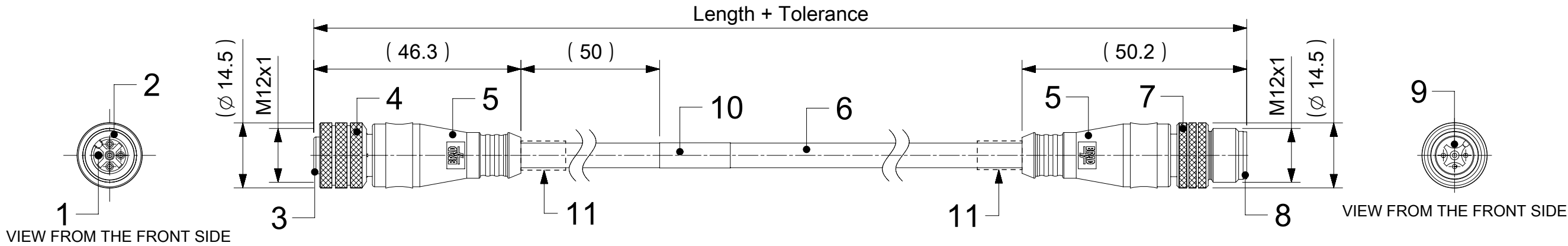


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



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

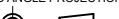
PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +85°C

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															
FA=0 FE=0 FD=0 DIVISIONAL SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: NEW P/N'S ADDED TO THE DRAWING 12335											
		mm		1:1		EC NO: 769491 DRWN: VHANDI2023/10/30 CHK'D: RSILLER2023/11/21 APPR: RSILLER2023/11/21 INITIAL REVISION: DRWN: JMARSZALEK2016/09/16 APPR: RSILLER2016/12/08											
		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		SERIES		DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
						A3-SIZE		120066		1200668084		PSD		000		A17	
										MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
										SEE SHEET 3-4		GENERAL MARKET		1 OF 4			

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

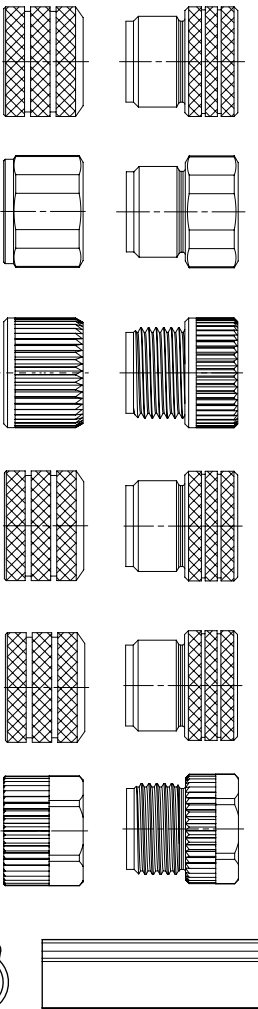
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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

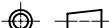
COUPLING NUTS
FEMALE MALE



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 $\frac{F}{A}=0$ $\frac{F}{C}=0$ $\frac{F}{E}=0$ 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: NEW P/N'S ADDED TO THE DRAWING 12335 EC NO: 769491 DRWN: VHANDI 2023/10/30 CHK'D: RSILLER 2023/11/21 APPR: RSILLER 2023/11/21 INITIAL REVISION: DRWN: JMARSZALEK 2016/09/16 APPR: RSILLER 2016/12/08					molex CSE M12 XP AC FE STR MA STR XM DE					
	mm		1:1												
	GENERAL TOLERANCES (UNLESS SPECIFIED)														
	ANGULAR TOL ± 1.0°														
	4 PLACES		±							PRODUCT CUSTOMER DRAWING					
	3 PLACES		±												
	2 PLACES		± 0.05		DOCUMENT NUMBER 1200668084					DOC TYPE PSD	DOC PART 000	REVISION A17			
	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 SHEET 3-4		CUSTOMER GENERAL MARKET		SHEET NUMBER 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											
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1200668380884030H09M0404m			1200668804888030P02M020H2m			1200070486884030P03M0030.3m			1200071408885030P03M0303m		
1200668244884030H09M0505m			1200660581888030P02M0303m			1200668687884030P03M0050.5m			1200668796885030P03M030H3m		
1200668550884030H09M050H5m			1200660582888030P02M0404m			1200070487884030P03M0060.6m			1200668163885030P03M0404m		
1200668737884030H09M0555.5m			1200660583888030P02M0505m			1200070488884030P03M0101m			1200071049885030P03M0505m		
1200669926884030H09M065H6.5m			1200668806888030P02M050H5m			1200072762884030P03M01011m			1200073049885030P03M05015m		
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1200669931884030H09M075H7.5m			1200668352888030P02M25025m			1200060050884030P03M0151.5m			1200668088885030P03M0707m		
1200669932884030H09M080H8m			1200669133888030P02M300830m			1200070489884030P03M0202m			1200071284885030P03M10010m		
1200668381884030H09M10010m			1200668810888030P02M350H35m			1200072763884030P03M02012m			1200668798885030P03M100H10m		
5P CABLE H09			1200668544888030P02M50050m			1200668754884030P03M020H2m			1200072656885030P03M12012m		
1200668509885030H09M0060.6m						1200060051884030P03M0303m			1200073084885030P03M15015m		
1200668497885030H09M0101m			3P CABLE P03			1200072764884030P03M03013m			1200669111885030P03M150H15m		
1200669756885030H09M015H1.5m			1200070102883030P03M0030.3m			1200072803884030P03M0404m			1200668238885030P03M20020m		
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1200669762885030H09M020H2m			1200660498883030P03M0101m			1200072650884030P03M05055m			1200668775885030P03M30030m		
1200669757885030H09M025H2.5m			1200071123883030P03M010H1m			1200072010884030P03M050H5m			1200668801885030P03M300H30m		
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			1200660502883030P03M0505m			1200668723884030P03M35035m					
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6

5

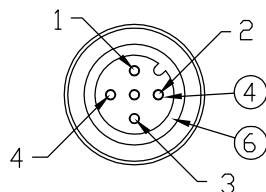
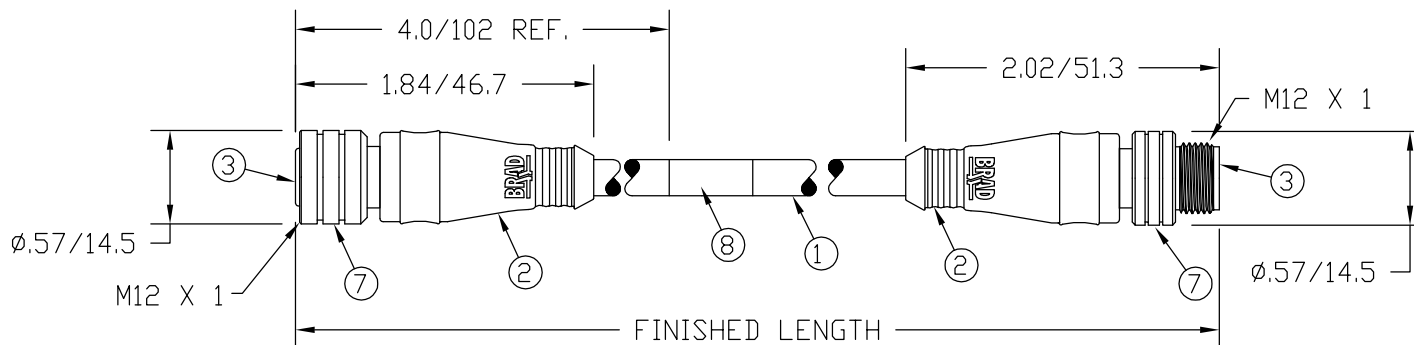
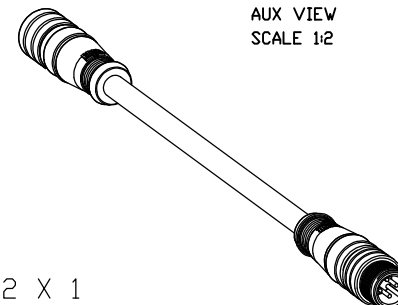
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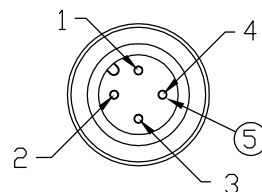
2

1

MATERIAL NUMBER	ENGINEERING NUMBER	FINISHED LENGTH
120007-0487	884030P03M006	.6M +44.5 -0 [1.97' +1.75' -0]
120007-0488	884030P03M010	1.0M +55.6 -0 [3.27' +2.19' -0]
120007-0489	884030P03M020	2.0M +88.9 -0 [6.56' +3.50' -0]
120006-0051	884030P03M030	3.0M +88.9 -0 [9.84' +3.50' -0]
120007-2803	884030P03M040	4.0M +165.1 -0 [13.12' +6.50' -0]
120007-0490	884030P03M050	5.0M +165.1 -0 [16.40' +6.50' -0]

AUX VIEW
SCALE 1:2

FEMALE FACE VIEW



MALE FACE VIEW

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

WIRING DIAGRAM

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: BWOODMAN 09/07/29
APPR: JFMURPHY 2009/08/21
REV
A

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±----	±----
3 PLACES	±----	±----
2 PLACES	±----	±.01
1 PLACE	±0.3	±----

ANGULAR ±----°
DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONSDIMENSION STYLE
IN/MM

DRAWN BY	DATE
BWOODMAN	2009/08/14
CHECKED BY	DATE
VOU	2009/08/14
APPROVED BY	DATE
---	---
MATERIAL NO.	SEE TABLE
SIZE	A

SCALE
1:1DESIGN UNITS
INCHTHIRD ANGLE
PROJECTIONMICRO-CHANGE CORDSET
4P MA/FE SINGLE KEY
#22/4 BLACK PUR CABLE

MOLEX INCORPORATED

DOCUMENT NO. SD-120007-001

SHEET NO.
1 OF 1THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX
INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

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4

3

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1