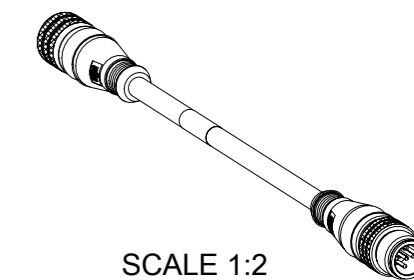
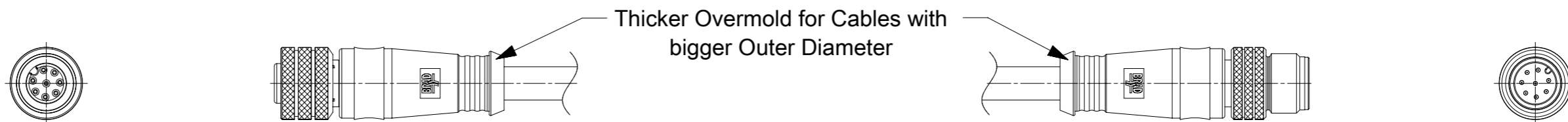
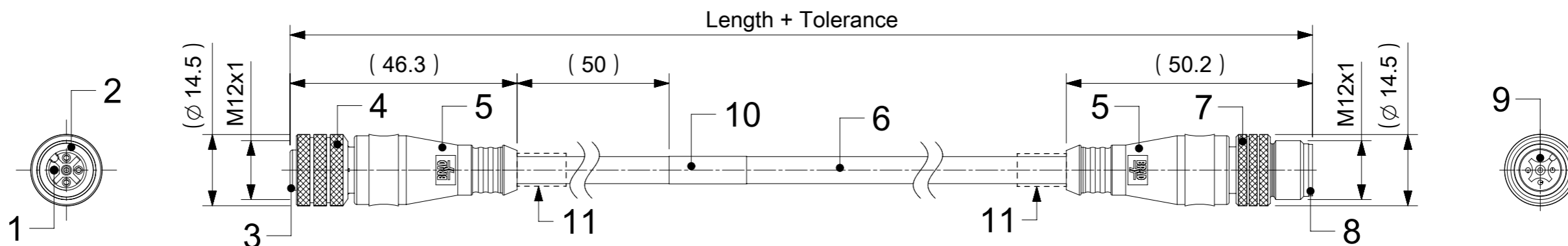


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



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

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	SCALE	CURRENT REV	DESC:	OBSOLETE PART NUMBERS
mm	1:1	AS PER	PCN#506884	
GENERAL TOLERANCES (UNLESS SPECIFIED)				
ANGULAR TOL	± 1.0°			
4 PLACES	±	EC NO:	662770	
3 PLACES	±	DRWN:	SUGEEB	2021/02/23
2 PLACES	± 0.05	CHK'D:	GGA	2021/06/02
1 PLACE	± 0.3	APPR:	GGA	2021/06/02
0 PLACES	± 0.5	INITIAL REVISION:		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN:	JMARZALEK	2016/09/19
THIRD ANGLE PROJECTION		APPR:	RSILLER	2016/12/08
DRAWING	A3-SIZE	SERIES	120066	
MATERIAL NUMBER	CUSTOMER	DOCUMENT NUMBER	1200668165	DOC TYPE
SEE TABLE	GENERAL MARKET	DOC PART	000	REVISION
				A4
				SHEET NUMBER
				1 OF 5

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

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

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

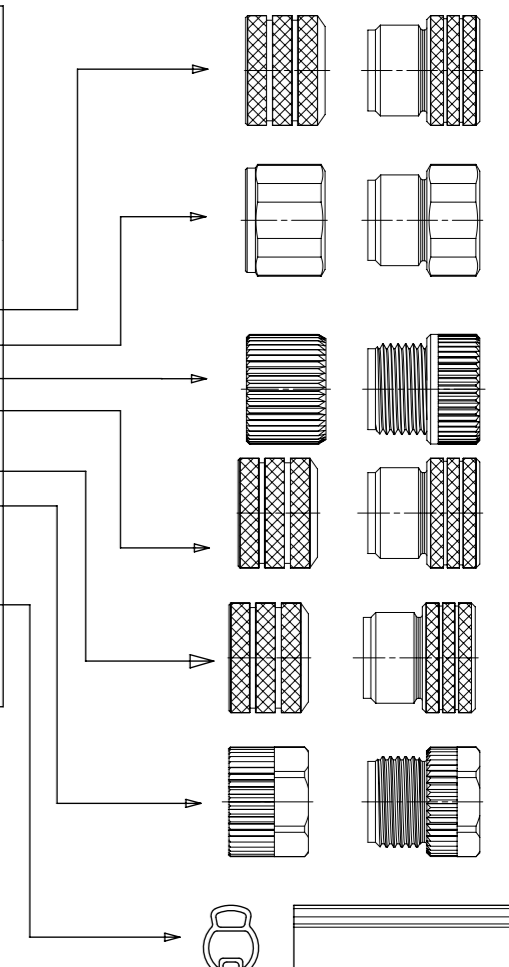
Units:
 M=Meter

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.)

COUPLING NUT
 FEMALE MALE


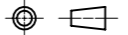


CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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: OBSOLETE PART NUMBERS AS PER PCN#506884							
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 DOC PART REVISION							
0 PLACES	± 0.5	PSD 000 A4							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
			A3-SIZE	120066	SEE TABLE	GENERAL MARKET		2 OF 5	

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 ²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E57	5	0.34mm ²	PVC GREY	-	-	-	-5°C to +70°C	-	-
I02	3 / 4 / 8	0.25mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm ²	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 ²	PUR BLACK	-	-	-40°C to +90°C, >7.5xO.D.	-15°C to +90°C, >12.5xO.D.	-	-
P19	8	0.25mm ²	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 ²	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
P82	3 / 4 / 5	0.34mm ²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S19	8	0.25mm ²	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 ²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm ²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES

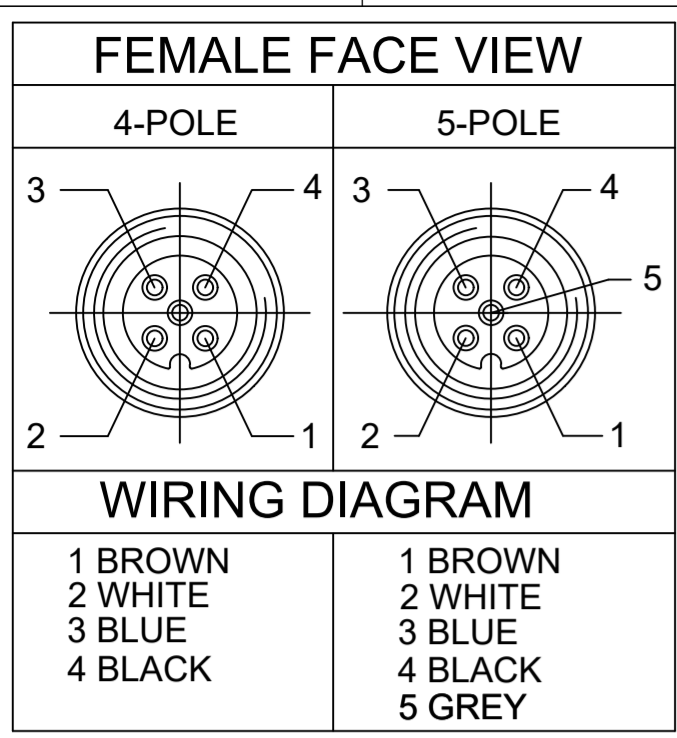
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										
DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#506884								
mm	1:1									
GENERAL TOLERANCES (UNLESS SPECIFIED)										
ANGULAR TOL	± 1.0 °	EC NO: 662770 DRWN: SUGEEB 2021/02/23 CHK'D: GGA 2021/06/02 APPR: GGA 2021/06/02								
4 PLACES	±									
3 PLACES	±	PRODUCT CUSTOMER DRAWING								
2 PLACES	± 0.05									
1 PLACE	± 0.3	INITIAL REVISION: DRWN: JMARSZALEK 2016/09/19 APPR: RSILLER 2016/12/08								
0 PLACES	± 0.5									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
			A3-SIZE	120066	SEE TABLE	GENERAL MARKET	1200668165	PSD	000	A4

PART LIST

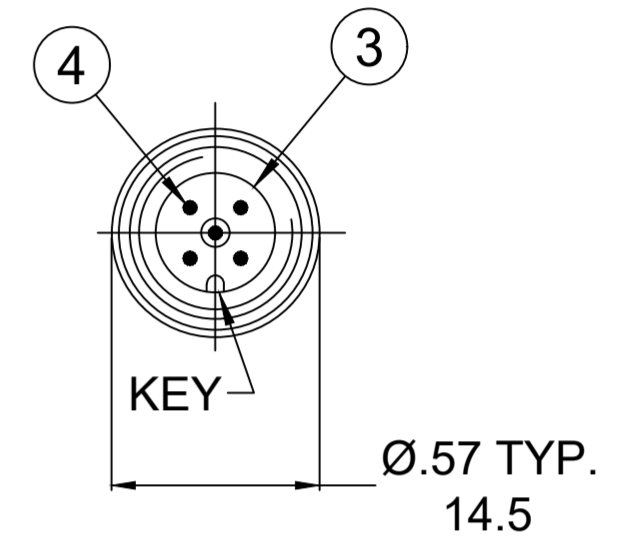
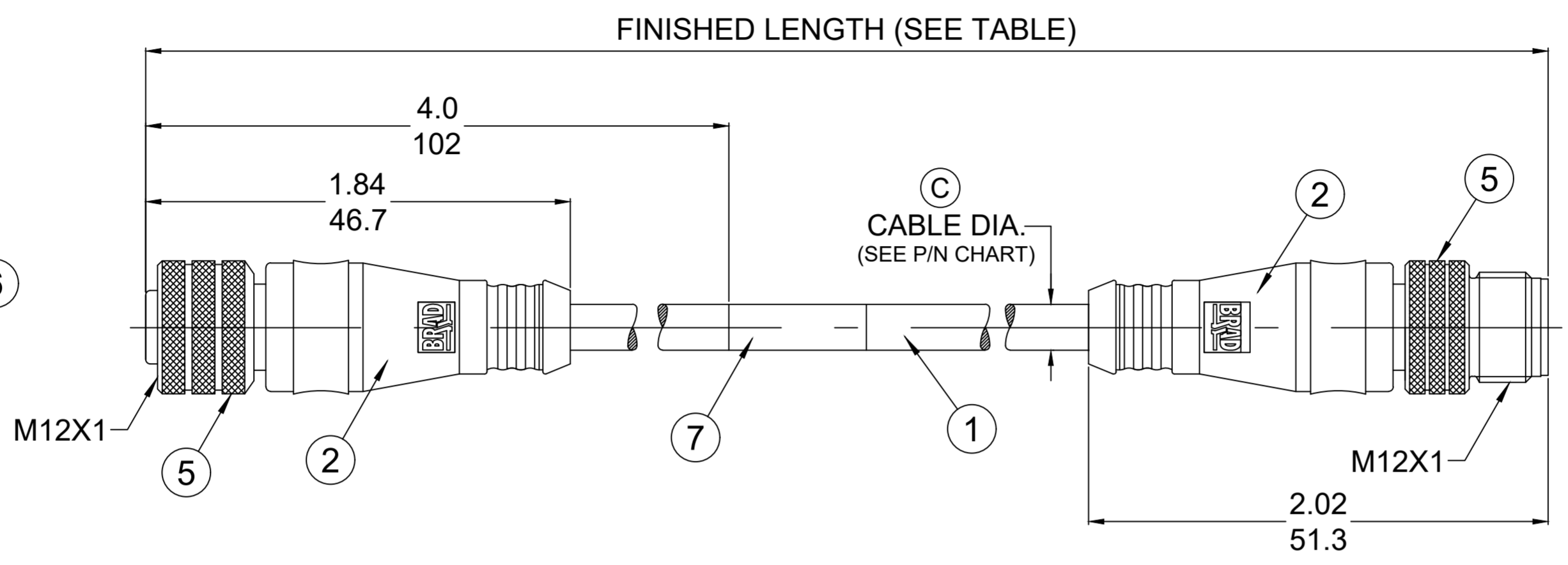
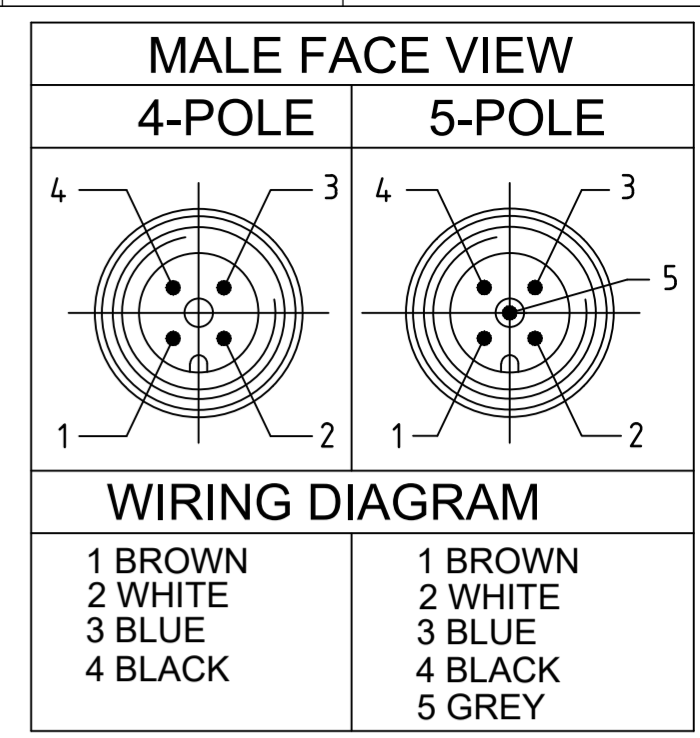
No.	Part No.	Engineering No.	Cable Length
171	1200668735	884030P82M0707Y	7m
172	1200668736	885030I26M015Y	1.5m
173	1200668773	885030P82M0107	1m
174	1200668873	885030I26M050Y	5m
175	1200669113	884030A09M0308	3m
176	1200669118	884030P82M0307Y	3m
177	1200669149	883030I03M010Y	1m
178	1200669218	885030I03M100Y	10m
179	1200669227	884030K05M500	50m
180	1200669228	884030K05M600	60m
181	1200718014	884030P82M0607	6m
182	1200660166	883030A09M010	1m
183	1200660261	884030A09M005	0.5m
184	1200660262	884030A09M006	0.6m
185	1200660266	884030A09M010	1m
186	1200660269	884030A09M015	1.5m
187	1200660294	884030A09M080	8m
188	1200660299	884030A09M1008	10m
189	1200660434	885030A09M050	5m
190	1200661037	885030K03M040	4m
191	1200661039	885030K03M060	6m
192	1200661041	885030K03M080	8m
193	1200661684	885030K03M300	30m
194	1200661686	885030K03M180	18m
195	1200661687	885030K03M230	23m
196	1200668081	885030E57M100A	10m

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: OBSOLETE PART NUMBERS AS PER PCN#506884			molex							
mm	1:1											
GENERAL TOLERANCES (UNLESS SPECIFIED)					CSE M12 XP AC FE STR MA STR XM DE							
ANGULAR TOL	± 1.0 °				PRODUCT CUSTOMER DRAWING							
4 PLACES	±	EC NO: 662770			2021/02/23							
3 PLACES	±	DRWN: SUGEEB			2021/06/02							
2 PLACES	± 0.05	CHK'D: GGA			2021/06/02							
1 PLACE	± 0.3	APPR: GGA			2021/06/02							
0 PLACES	± 0.5	INITIAL REVISION:			DOCUMENT NUMBER							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JMARSZALEK			2016/09/19			1200668165		PSD	000	A4
		APPR: RSILLER			2016/12/08							
		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER					
			A3-SIZE	120066	SEE TABLE	GENERAL MARKET	5 OF 5					

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02	05:45:39
-----------------	----	--------------	------------	----------



PART NO	ENGINEERING NO.	FINISHED LENGTH	POLES	CABLE DIA.
1200660878	884030K03M003	0.3M [12 IN]	4	.26 [6.6]
1200662229	885030K03M700	70M [229FT 8 IN]	5	.28 [7.1]



- NOTES:
1. MATERIAL: AS NOTED
 2. FINISH: AS NOTED
 3. ELECTRICAL:
VOLTAGE: 4 & 5P 250V
CURRENT: 4A
 4. TEMP RATING: -20°TO +105°C
 5. PROTECTION: IP67 (WHEN MATED)
 6. UL RECOGNIZED FILE: E152210
CSA CERTIFIED FILE: LR6837 (C)
 7. ALL DIMENSIONS ARE FOR REFERENCE
UNLESS TOLERANCED OR NOTED OTHERWISE

PART NO. MATRIX 88X030K03XXXX

POLES (4, 5) LENGTH
M010 = 1 METER
M050 = 5 METER
M100 = 10 METER

MECHANICAL CHARACTERISTICS: (C)

TORSIONAL FLEX TEST	10 MILLION CYCLES PER MIL-C-13777G
BEND FLEX TEST	10 MILLION CYCLES PER MIL-C-13777G
WELD SLAG RESISTANCE	WOODHEAD STANDARD S-300

ITEM	COMPONENT	MATERIAL	FINISH
1	CABLE-#18/4-5	TPE JACKET	YELLOW
2	OVERMOLD	TPC	YELLOW
3	INSERT	PUR	BLACK
4	SOCKET/PIN CONTACT	COPPER ALLOY	GOLD OVER NICKEL
5	COUPLER	BRASS	TEFLON/NICKEL
6	O-RING	VITON	RED
7	LABEL	MYLAR	BLACK/YELLOW

(C)

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

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

FUNCTIONAL SYMBOLS: FA=0, EC=0, EP=0

DIMENSION UNITS: INCH/MM, SCALE: NTS

GENERAL TOLERANCES (UNLESS SPECIFIED):

	mm	INCH
4 PLACES	±----	±----
3 PLACES	±----	±----
2 PLACES	±----	±----
1 PLACE	±----	±----
0 PLACES	±----	±----
ANGULAR TOL	± ---- °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: C-SIZE

SERIES: 120066

CURRENT REV DESC: ITEM# 2 WAS TPE. REMOVED 3P DETAILS. ADDED CSA, MECH CHARACTERISTICS & TOL CHART. ADDED DIMS & MATERIAL TABLE.

EC NO: 645633

DRWN: ABENJAMINLW 2020/09/18

CHK'D: RSTONE 2020/09/29

APPR: BWOODMAN 2020/10/23

INITIAL REVISION:

DRWN: LSTEMMLE 2010/02/01

APPR: FPACHER 2010/02/03

DOCUMENT NUMBER: SD-120066-020

DOC TYPE/DOC PART: PSD 001

REVISION: C

MATERIAL NUMBER: SEE CHART

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 1