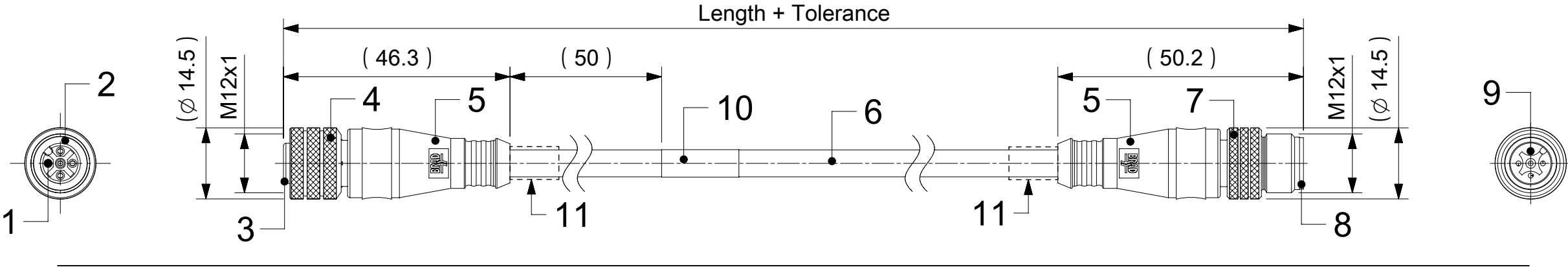


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



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:

Thicker Overmold for Cables with bigger Outer Diameter

SCALE 1:2

	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
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	---
	-	PRINTING FOR CABLES lxx	---	---
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	-	OVERMOULDING 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
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
DIMENSION UNITS		SCALE		mo lex CSE M12 XP AC FE STR MA STR XM DE PRODUCT CUSTOMER DRAWING
mm		1:1		
GENERAL TOLERANCES (UNLESS SPECIFIED)		CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#506884		
ANGULAR TOL ± 1.0 °		EC NO: 662770		
4 PLACES ±		DRWN: SUGEEB 2021/02/23		
3 PLACES ±		CHK'D: GGA 2021/06/02		
2 PLACES ± 0.05		APPR: GGA 2021/06/02		
1 PLACE ± 0.3		INITIAL REVISION:		
0 PLACES ± 0.5		DRWN: JMARSZALEK 2016/09/19		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPR: RSILLER 2016/12/08		
THIRD ANGLE PROJECTION		DRAWING	SERIES	DOCUMENT NUMBER
		A3-SIZE	120066	1200668165
				DOC TYPE
				PSD
				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).

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

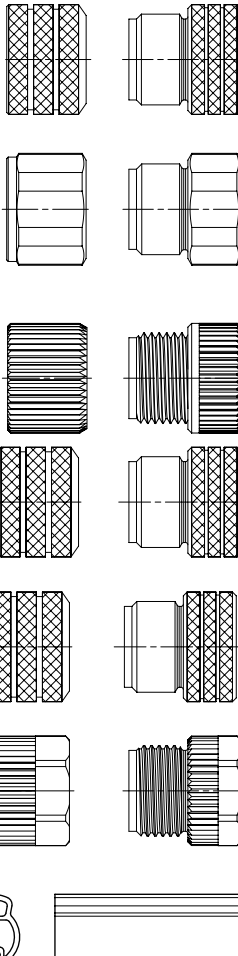
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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:
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						molex					
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)				EC NO: 662770 DRWN: SUGEEB2021/02/23 CHK'D: GGA2021/06/02 APPR: GGA2021/06/02						CSE M12 XP AC FE STR MA STR XM DE					
ANGULAR TOL ± 1.0 °															
4 PLACES		±													
3 PLACES		±													
2 PLACES		± 0.05													
1 PLACE		± 0.3		INITIAL REVISION: DRWN: JMARSZALEK2016/09/19 APPR: RSILLER2016/12/08						DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
0 PLACES		± 0.5								1200668165		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	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E57	5	0.34mm²	PVC GREY	-	-	-	-5°C to +70°C	-	-
I02	3 / 4 / 8	0.25mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm²	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	0.50mm²	PUR BLACK	-	-	-40°C to +90°C, >7.5xO.D.	-15°C to +90°C, >12.5xO.D.	-	-
P19	8	0.25mm²	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	0.34mm²	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
P82	3 / 4 / 5	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S19	8	0.25mm²	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	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES

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

10	9	8	7	6	5	4	3	2	1								
PART LIST																	
No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length						
1	1200070023	884030S20M060H	6m	48	1200071238	884030S20M015H	1.5m	95	1200660887	884030K03M030	3m						
2	1200070095	883030I03M003	0.3m	49	1200071254	884030P82M050	5m	96	1200660891	884030K03M040	4m						
3	1200070096	883030I03M006	0.6m	50	1200071264	884030S20M040H	4m	97	1200660895	884030K03M050	5m						
4	1200070097	883030I03M010	1m	51	1200071272	884030S20M005	0.5m	98	1200660898	884030K03M060	6m						
5	1200070098	883030I03M020	2m	52	1200071279	885030I26M050	5m	99	1200660899	884030K03M070	7m						
6	1200070099	883030I03M030	3m	53	1200071338	884030I20M030	3m	100	1200660900	884030K03M080	8m						
7	1200070100	883030I03M050	5m	54	1200071343	883030E52M003A	0.3m	101	1200660901	884030K03M090	9m						
8	1200070101	883030I03M100	10m	55	1200071428	884030P82M0407	4m	102	1200660902	884030K03M100	10m						
9	1200070110	883030S20M010	1m	56	1200071501	884030P82M003	0.3m	103	1200660904	884030K03M120	12m						
10	1200070111	883030S20M020	2m	57	1200071580	884030P82M030	3m	104	1200660905	884030K03M140	14m						
11	1200070480	884030I03M010	1m	58	1200071582	884030P82M015	1.5m	105	1200660906	884030K03M150	15m						
12	1200070481	884030I03M020	2m	59	1200071624	884030E52M030A	3m	106	1200660907	884030K03M160	16m						
13	1200070483	884030I03M050	5m	60	1200071627	884030I03M0205	2m	107	1200660909	884030K03M200	20m						
14	1200070484	884030I03M060	6m	61	1200071647	884030P82M0307	3m	108	1200660911	884030K03M250	25m						
15	1200070485	884030I03M100	10m	62	1200072106	885030I26M005	0.5m	109	1200660915	884030K05M070	7m						
16	1200070494	884030P82M0057	0.5m	63	1200072359	885030I26M015	1.5m	110	1200660918	884030K05M140	14m						
17	1200070499	884030S20M020	2m	64	1200072601	884030P82M0201	2m	111	1200660921	884030K05M200	20m						
18	1200070500	884030S20M030	3m	65	1200660271	884030A09M020	2m	112	1200660922	884030K05M210	21m						
19	1200070502	884030S20M050	5m	66	1200660273	884030A09M0208	2m	113	1200661034	885030K03M010	1m						
20	1200070504	884030S20M100	10m	67	1200660277	884030A09M030	3m	114	1200661035	885030K03M020	2m						
21	1200070597	885030S26M010	1m	68	1200660286	884030A09M0508	5m	115	1200661036	885030K03M030	3m						
22	1200070653	884030E52M200A	20m	69	1200660291	884030A09M070	7m	116	1200661038	885030K03M050	5m						
23	1200070774	884030I03M006	0.6m	70	1200660683	884030K05M003	0.3m	117	1200661042	885030K03M090	9m						
24	1200070785	884030I03M030	3m	71	1200660684	884030K05M005	0.5m	118	1200661043	885030K03M100	10m						
25	1200070798	884030P82M010	1m	72	1200660686	884030K05M006	0.6m	119	1200661044	885030K03M150	15m						
26	1200070799	884030P82M020	2m	73	1200660687	884030K05M010	1m	120	1200661434	884030E52M020A	2m						
27	1200070867	884030E52M100A	10m	74	1200660688	884030K05M015	1.5m	121	1200661438	884030K05M250	25m						
28	1200070890	885030I26M010	1m	75	1200660689	884030K05M020	2m	122	1200661441	884030K05M190	19m						
29	1200070891	885030I26M020	2m	76	1200660690	884030K05M030	3m	123	1200661472	884030E52M050A	5m						
30	1200070892	885030I26M030	3m	77	1200660691	884030K05M040	4m	124	1200661543	884030K03M180	18m						
31	1200070937	884030P82M100	10m	78	1200660692	884030K05M050	5m	125	1200661574	888030S19M120	12m						
32	1200070956	883030E52M020A	2m	79	1200660693	884030K05M060	6m	126	1200661575	888030S19M030	3m						
33	1200070961	885030I03M030	3m	80	1200660694	884030K05M080	8m	127	1200661576	888030S19M050	5m						
34	1200071026	884030E52M010A	1m	81	1200660695	884030K05M100	10m	128	1200661577	888030S19M100	10m						
35	1200071035	884030S20M010H	1m	82	1200660696	884030K05M120	12m	129	1200661664	885030K03M005	0.5m						
36	1200071066	884030P82M0067	0.6m	83	1200660697	884030K05M150	15m	130	1200661685	885030K03M120	12m						
37	1200071067	884030P82M0037	0.3m	84	1200660698	884030K05M180	18m	131	1200661906	884030K03M500	50m						
38	1200071068	884030P82M0107	1m	85	1200660699	884030K05M230	23m	132	1200665012	885030P82M0307	3m						
39	1200071069	884030P82M0157	1.5m	86	1200660700	884030K05M300	30m										
40	1200071088	884030P82M0207	2m	87	1200660857	884030B02M020	2m										
41	1200071137	884030S20M030H	3m	88	1200660860	884030B02M030	3m										
42	1200071141	884030S20M020H	2m	89	1200660862	884030B02M050	5m										
43	1200071161	884030S20M100H	10m	90	1200660867	884030B02M100	10m										
44	1200071162	884030P82M006	0.6m	91	1200660878	884030K03M003	0.3m										
45	1200071178	884030S20M006H	0.6m	92	1200660880	884030K03M006	0.6m										
46	1200071188	884030S20M050H	5m	93	1200660881	884030K03M010	1m										
47	1200071237	884030S20M005H	0.5m	94	1200660883	884030K03M020	2m										
DOCUMENT STATUS				P1	RELEASE DATE		2021/06/02	05:45:39									
FORMAT: master-B-prod-A3 REVISION: 1 DATE: 2020/01/14				9	8	7	6	5	4	3	2	1					
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 CSE M12 XP AC FE STR MA STR XM DE									
mm		1:1															
GENERAL TOLERANCES (UNLESS SPECIFIED)																	
ANGULAR TOL		±		1.0 °													
4 PLACES		±				EC NO: 662770 DRWN: SUGEEB 2021/02/23											
3 PLACES		±				CHK'D: GGA 2021/06/02											
2 PLACES		±		0.05		APPR: GGA 2021/06/02											
1 PLACE		±		0.3		INITIAL REVISION: DRWN: JMARSZALEK 2016/09/19				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
0 PLACES		±		0.5		APPR: RSILLER 2016/12/08				1200668165		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		4 OF 5			

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

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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

CURRENT REV DESC: OBSOLETE PART NUMBERS
AS PER PCN#506884

EC NO: 662770
DRWN: SUGEEB
CHK'D: GGA
APPR: GGA

2021/02/23
2021/06/02
2021/06/02

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

2016/09/19
2016/12/08

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

120066

MATERIAL NUMBER

SEE TABLE

CUSTOMER

GENERAL MARKET

SHEET NUMBER

5 OF 5

1200668165

PSD

000

A4

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

molex

CSE M12 XP AC FE STR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT STATUS

P1

RELEASE DATE

2021/06/02

05:45:39

9

8

7

6

5

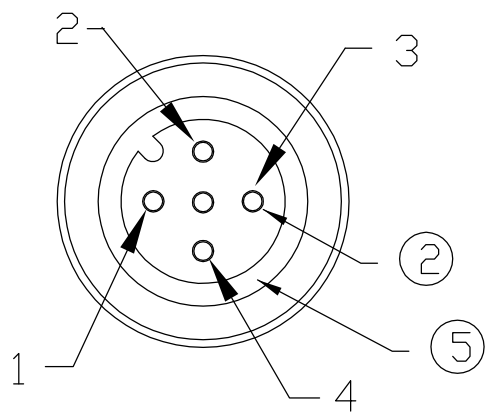
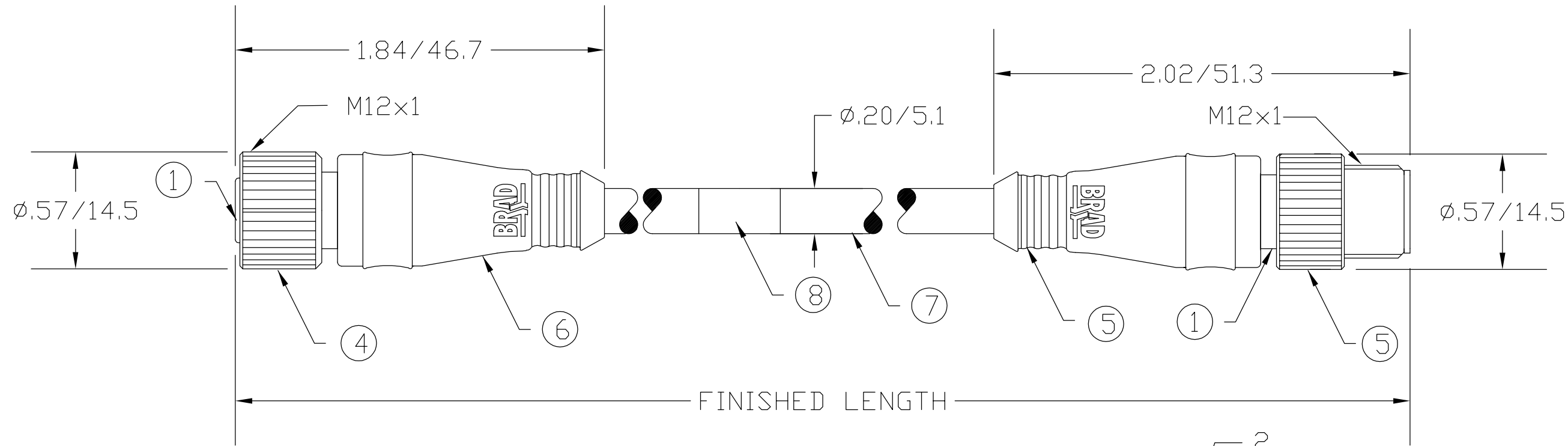
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3

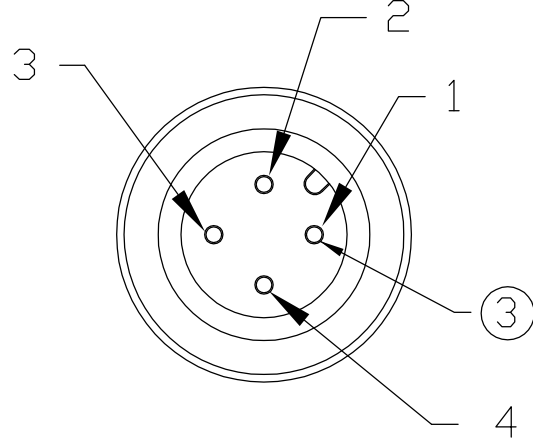
2

1

MATERIAL NUMBER	OLD PART NUMBER	FINISHED LENGTH
120066-0259	884030A09M003	.98' +.75" -0 [.3M +19.1 -0]
120066-0262	884030A09M006	1.97' +1.75" -0 [.6M +44.5 -0]
120066-0266	884030A09M010	3.27' +2.19" -0 [1.0M +55.6 -0]
120066-0271	884030A09M020	6.56' +3.50" -0 [2.0M +88.9 -0]
120066-0277	884030A09M030	9.84' +3.50" -0 [3.0M +88.9 -0]
120066-0279	884030A09M040	13.12' +6.50" -0 [4.0M +165.1 -0]
120066-0284	884030A09M050	16.40' +6.50" -0 [5.0M +165.1 -0]
120066-0297	884030A09M100	32.81' +12.50" -0 [10.0M +317.5 -0]
120066-0313	884030A09M200	65.62' +24.50" -0 [20.0M +622.3 -0]



FEMALE FACE VIEW



MALE FACE VIEW

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

WIRING DIAGRAM

ITEM	COMPONENT	MATERIAL	FINISH
1	INSERT	PUR	BLACK
2	CONTACT SOCKET	COPPER ALLOY	GOLD OVER NICKEL
3	CONTACT PIN	COPPER ALLOY	GOLD OVER NICKEL
4	COUPLING NUT	BRASS	NICKEL PLATED
5	O-RING	VITON	RED
6	OVERMOLD	PUR	YELLOW
7	CABLE-22 AWG, 26 x #36 COPPER STRANDING, 4 CONDUCTOR, 300V	PVC	YELLOW
8	LABEL	MYLAR	BLACK/YELLOW

VOLTAGE RATING	250 VAC/VDC
AMPERAGE RATING	4 AMPS
PROTECTION	IP67
OPERATING TEMPERATURE	-20°C TO 105°C
UL CERTIFICATIONS	UL RECOGNIZED, FILE NO. E152210
CSA CERTIFICATIONS	CSA CERTIFIED, FILE NO. LR6837

RLSD DRAWING

EC NO: WNA2009-0631

DRWN: BWOODMAN 3/27/09

CH'KD: JM

APPR: JFMURPHY 2009/04/01

A

DESCRIPTION

REV

QUALITY SYMBOL

▽=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 DIMENSIONS

DIMENSION STYLE

IN/MM

DRAWN BY

DATE

BW

2009/03/27

CHECKED BY

DATE

TW

2009/03/27

APPROVED BY

DATE

MATERIAL NO.

SEE CHART

SIZE

C

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE

DESIGN UNITS

THIRD ANGLE PROJECTION

TITLE

MICRO-CHANGE CORDSET
4 POLE MALE/FEMALE
PVC CABLE

molex

MOLEX INCORPORATED

DOCUMENT NO.

SD-120066-005

SHEET NO.

1 OF 1