

FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



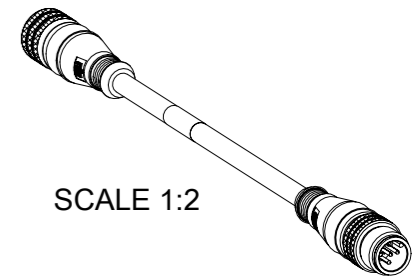
NOTES:

- 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

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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

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

CURRENT REV DESC: NEW P/N ADDED

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

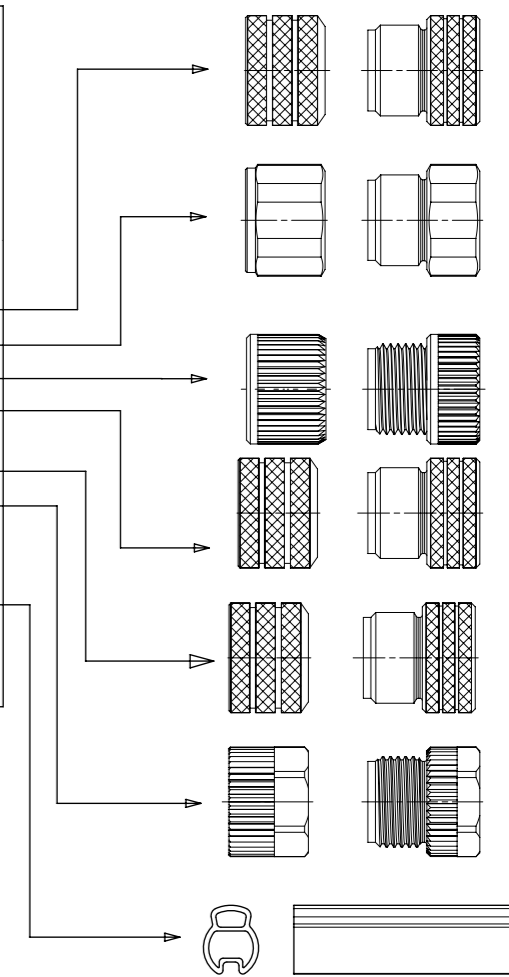
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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


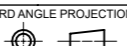


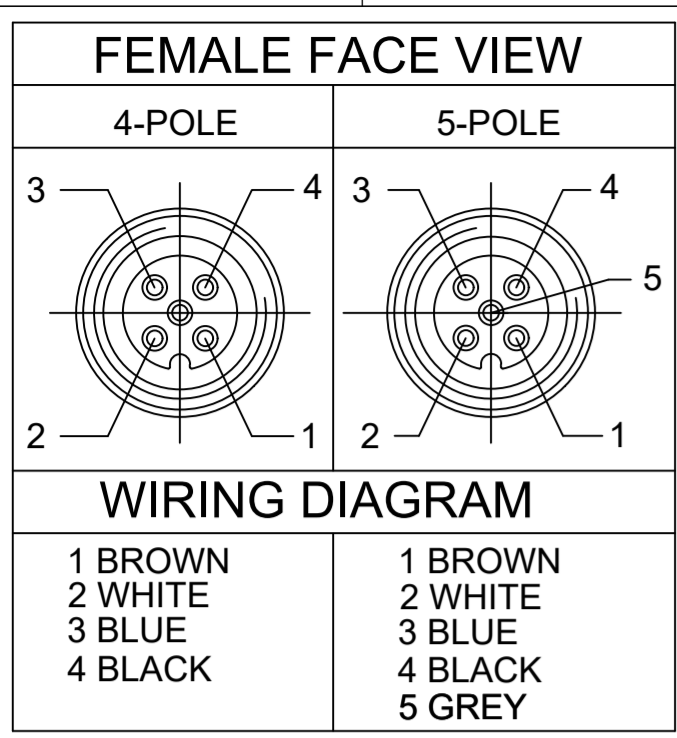
CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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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 DOC PART REVISION							
0 PLACES	± 0.5	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		2 OF 4	

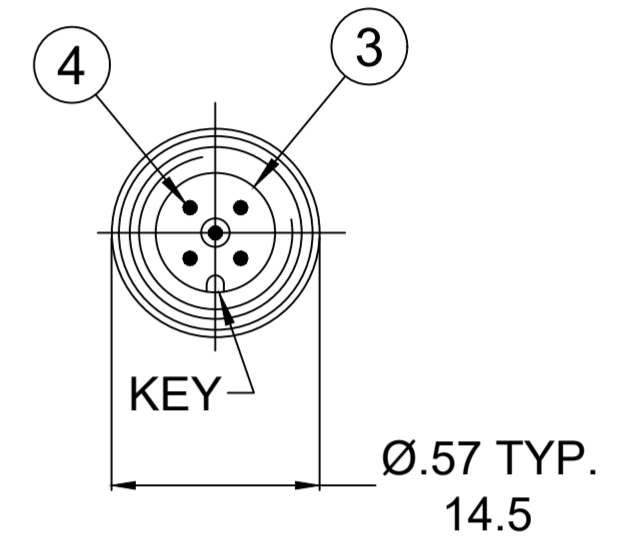
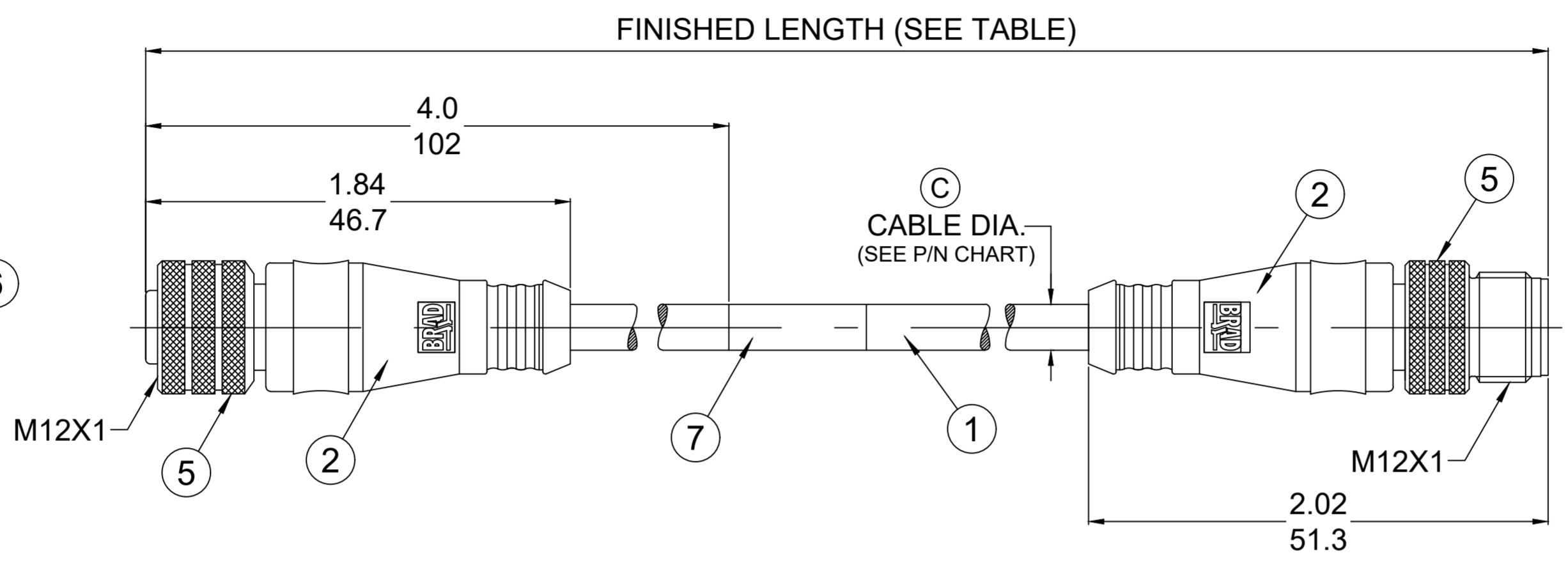
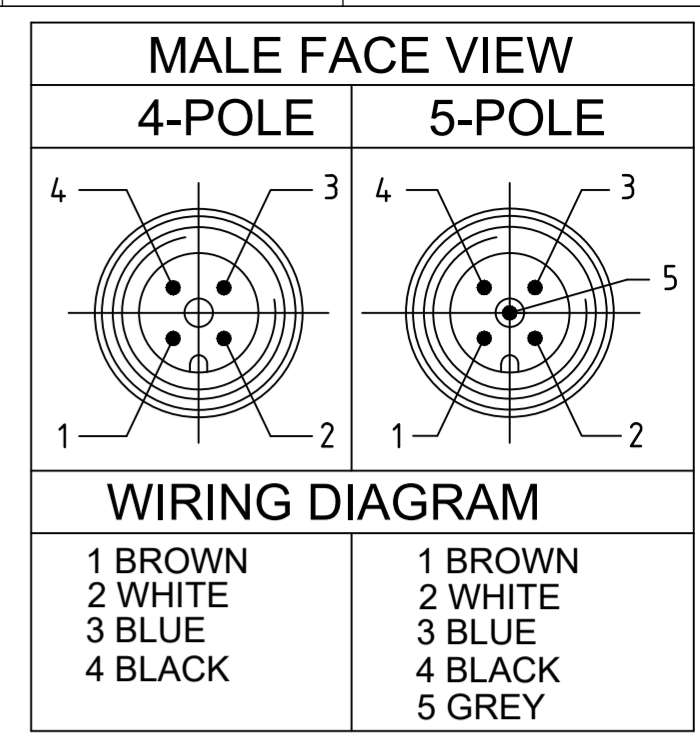
CABLE INFORMATION (for more information see Cable Data Sheet).

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 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

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DIMENSION UNITS	SCALE	CURRENT REV DESC: NEW P/N ADDED							
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: 734641			DOCUMENT NUMBER				
3 PLACES	±	DRWN: RSCHIEBER 2022/12/01			1200668165				
2 PLACES	± 0.05	CHK'D: RSILLER 2023/01/12			DOC TYPE				
1 PLACE	± 0.3	APPR: RSILLER 2023/01/12			PSD				
0 PLACES	± 0.5	INITIAL REVISION:			DOC PART				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION			DRAWING		SERIES		REVISION
					A3-SIZE		120066		A6
		MATERIAL NUMBER			CUSTOMER		SHEET NUMBER		
		SEE PART LIST			GENERAL MARKET		3 OF 4		



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

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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	± ---- °	

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

THIRD ANGLE PROJECTION

DRAWING: C-SIZE, SERIES: 120066

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