

FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



NOTES:

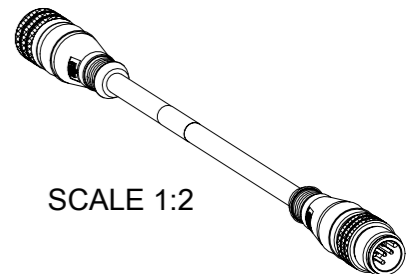
RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
 5 contacts 60V per IEC 60664
 5 contacts 250V per UL 2238
 8 contacts 30V per IEC 60664

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: 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

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

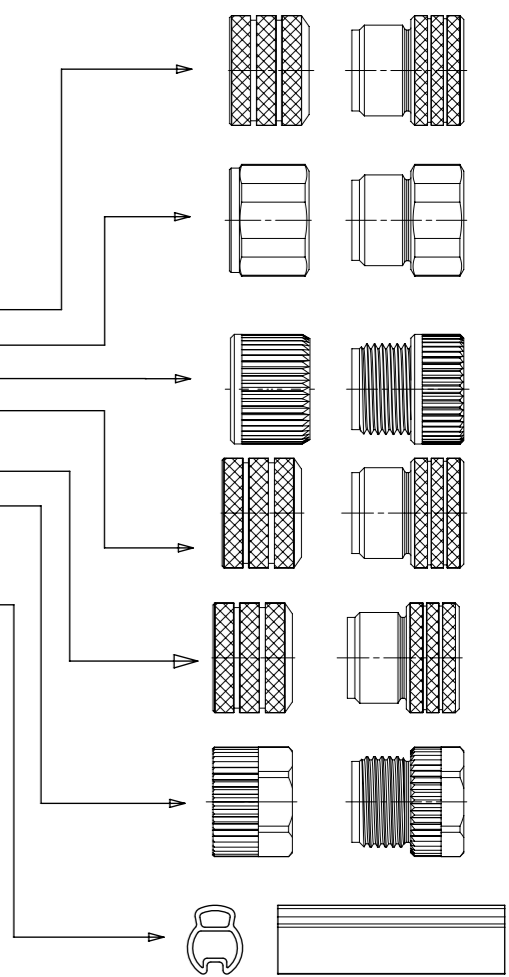
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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




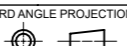
CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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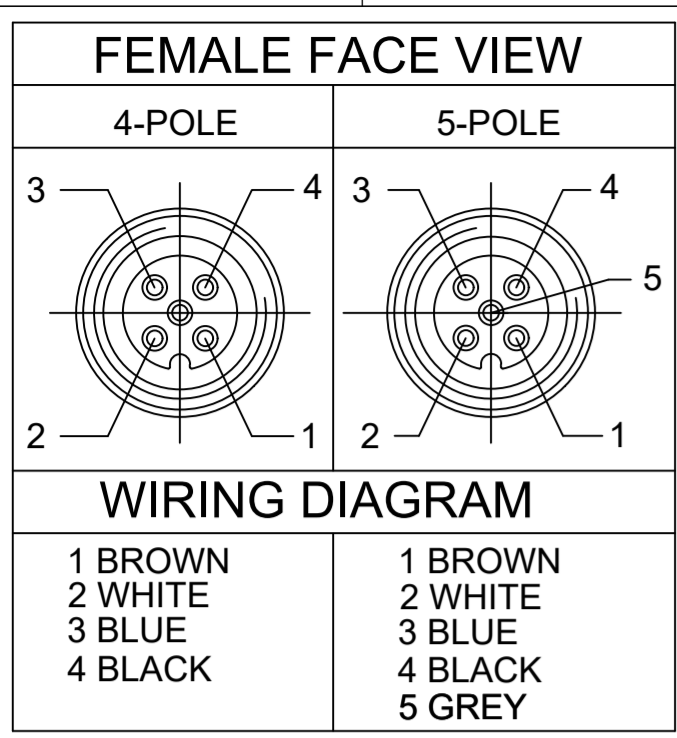
DIMENSION UNITS	SCALE	CURRENT REV DESC: NEW P/N ADDED		molex		
mm	1:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)				CSE M12 XP AC FE STR MA STR XM DE		
ANGULAR TOL ± 1.0 °				PRODUCT CUSTOMER DRAWING		
4 PLACES	±	EC NO: 734641		DOCUMENT NUMBER		
3 PLACES	±	DRWN: RSCHIEBER	2022/12/01	1200668165		
2 PLACES	± 0.05	CHK'D: RSILLER	2023/01/12	DOC TYPE	DOC PART	REVISION
1 PLACE	± 0.3	APPR: RSILLER	2023/01/12	PSD	000	A6
0 PLACES	± 0.5	INITIAL REVISION:		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JMARSZALEK	2016/09/19	2 OF 4		
THIRD ANGLE PROJECTION		APPR: RSILLER	2016/12/08			
DRAWING		SERIES	MATERIAL NUMBER	CUSTOMER		
A3-SIZE		120066	SEE PART LIST	GENERAL MARKET		

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

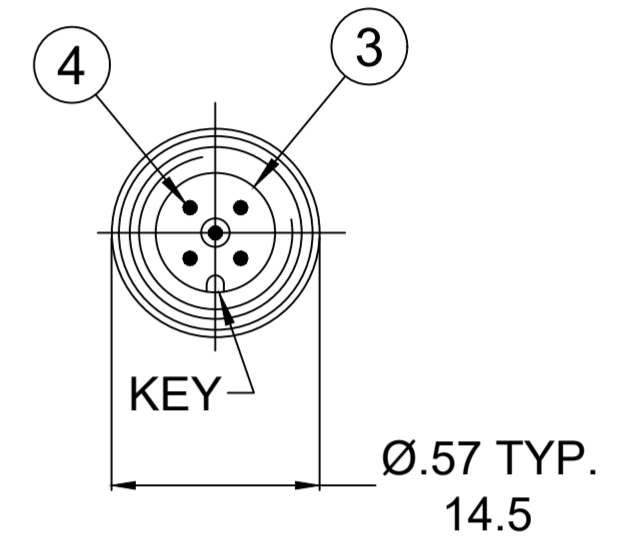
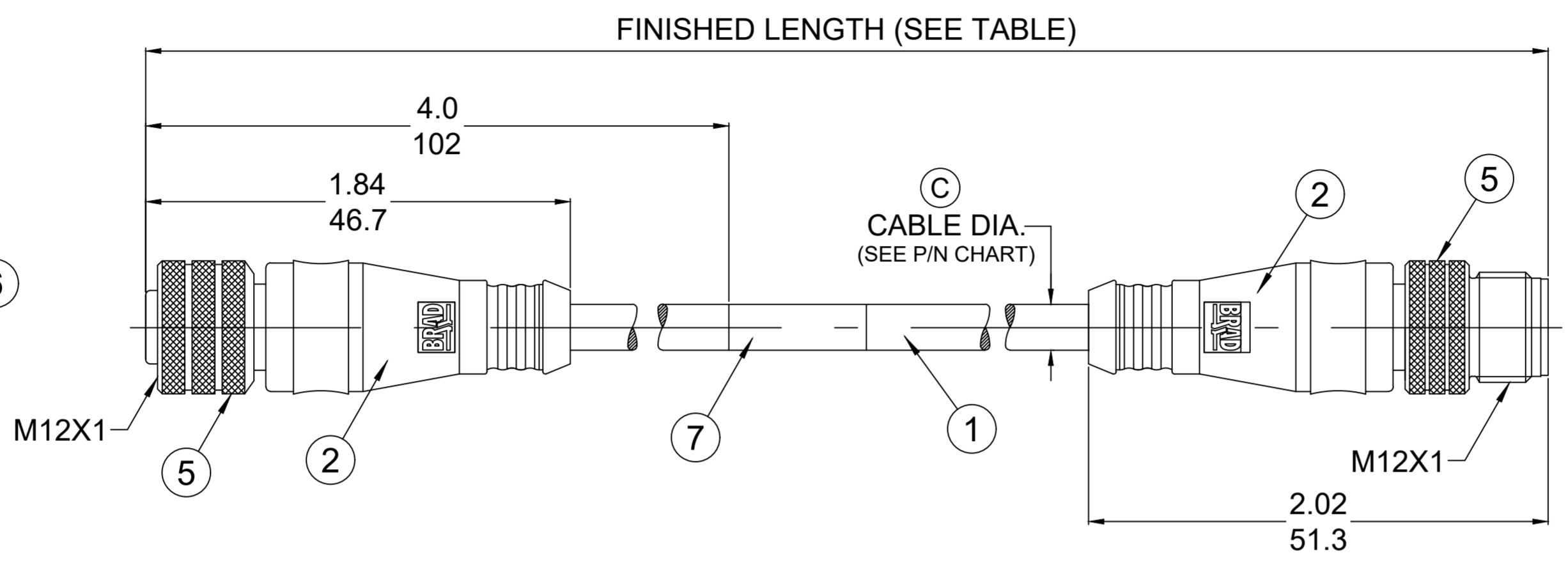
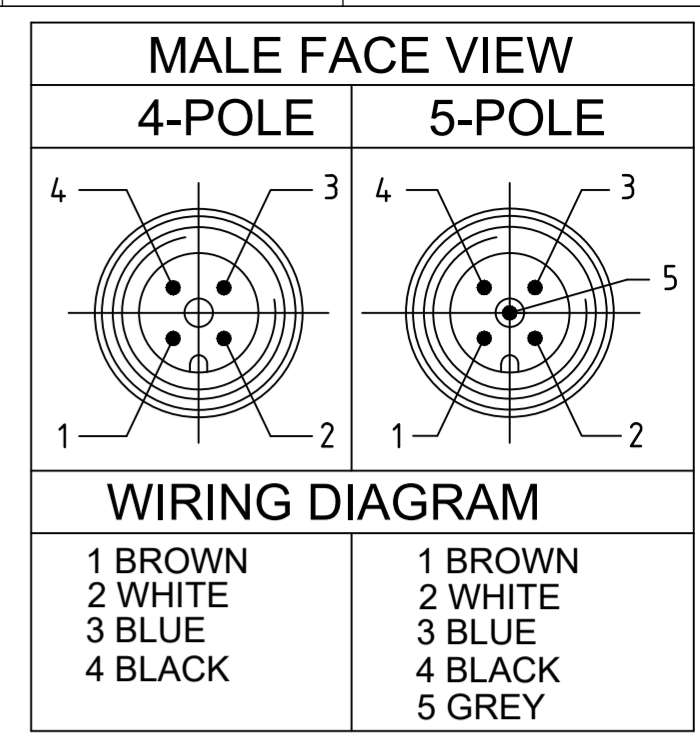
CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
A09	4	22AWG	PVC YELLOW	UL 2661	I/II A/B 80°C/300V	-	-	-	-
B02	4	18AWG	PUR YELLOW	UL 20549	I/II A/B 80°C/300V	-	-	-	-
E52	3 / 4	0.34mm ²	PVC GREY	-	-	-30°C to +70°C	-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	 CSE M12 XP AC FE STR MA STR XM DE								
GENERAL TOLERANCES (UNLESS SPECIFIED)										
ANGULAR TOL	± 1.0 °	PRODUCT CUSTOMER DRAWING								
4 PLACES	±	EC NO: 734641	2022/12/01							
3 PLACES	±	DRWN: RSCHIEBER	2023/01/12							
2 PLACES	± 0.05	CHK'D: RSILLER	2023/01/12							
1 PLACE	± 0.3	APPR: RSILLER	2023/01/12							
0 PLACES	± 0.5	INITIAL REVISION:	DOCUMENT NUMBER							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JMARSZALEK	2016/09/19				1200668165		DOC TYPE	DOC PART
		APPR: RSILLER	2016/12/08						PSD	000
		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	REVISION			
			A3-SIZE	120066	SEE PART LIST	GENERAL MARKET	A6			
							SHEET NUMBER			
							3 OF 4			

DOCUMENT STATUS	P1	RELEASE DATE	2023/01/12	11:47:32
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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, FC=0, FP=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 REVISION: PSD 001 C

MATERIAL NUMBER: SEE CHART

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 1