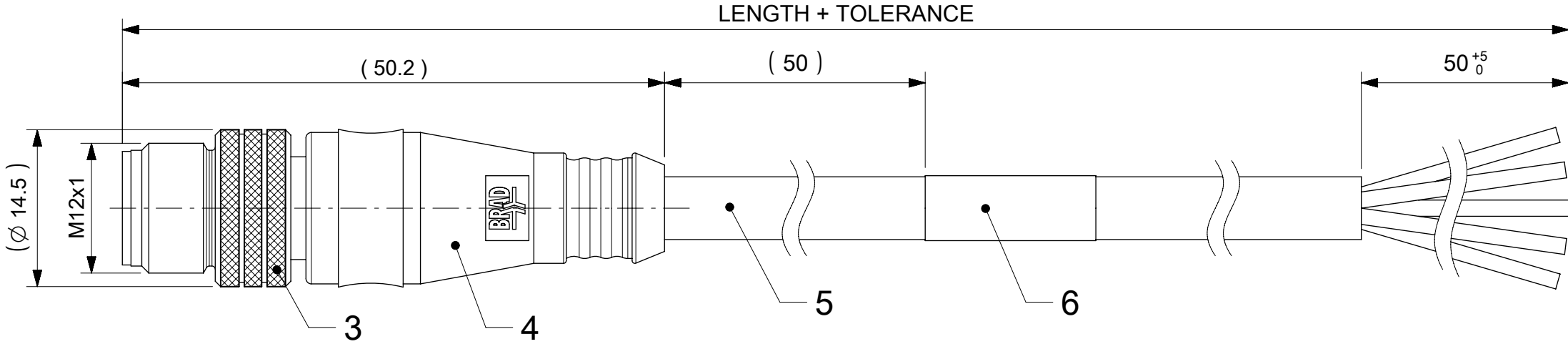
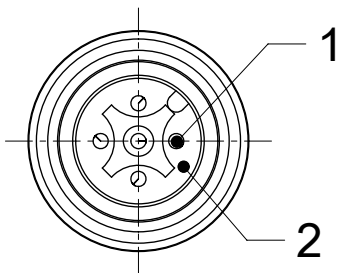
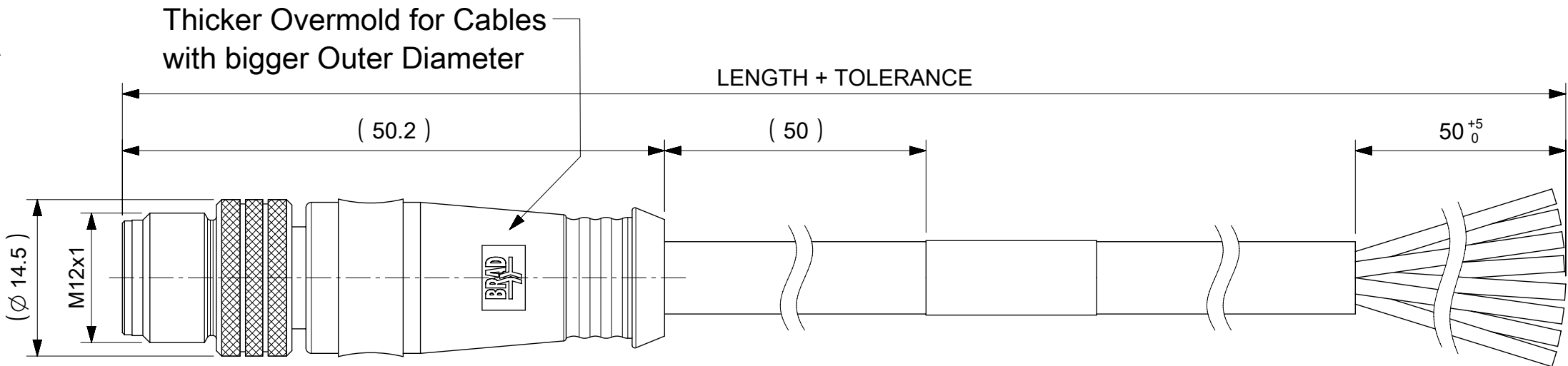
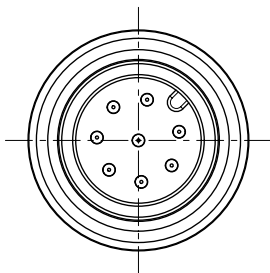


MALE PLUG M12 STRAIGHT



NOTES:
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V
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	
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

7	SEE MATRIX	D CARRIER	PVC	TRANSPARENT
6	1	LABEL YELLOW	VINYL	---
5	-	CABLE	SEE SHEET 2	---
4	-	OVERMOLDING BLACK	TPU	---
3	1	COUPLING NUT MALE	BRASS	NICKEL
2	1	INSERT MALE BLACK	PUR	---
1	3 / 4 / 5 / 8	CONTACT M12 MALE	BRASS	SELECTIVE Au OVER Ni
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												
	DIMENSION UNITS		SCALE		CURRENT REV DESC: NEW P/N ADDED			molex					
	mm		2:1										
	F_A = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)			CSE M12 XP AC MA STR XM SE UNSH							
F_E = 0													
F_D = 0													
DIVISIONAL SYMBOLS	ANGULAR TOL ± 1.0 °		EC NO: 780340 DRWN: RSCHIEBER 2024/03/14 CHK'D: RSILLER 2024/03/18 APPR: RSILLER 2024/03/18			PRODUCT CUSTOMER DRAWING							
	4 PLACES ±												
	3 PLACES ±					INITIAL REVISION: DRWN: JMARSZALEK 2016/01/12 APPR: RSILLER 2016/04/08		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION	
	2 PLACES ± 0.05							1200659185		PSD	000	A12	
	1 PLACE ± 0.3							MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
	0 PLACES ± 0.5							SEE TABLE		GENERAL MARKET		1 OF 4	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING	SERIES							
					A3-SIZE	120065							

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

OPTIONS

80X006XXXXXX

80=M12x1
Single ended

Contacts:
3=3 Contacts
4=4 Contacts
5=5 Contacts
8=8 Contacts

Heads style:
006=Plug Male Straight

Cable type: See Table

Units:
M=Meter

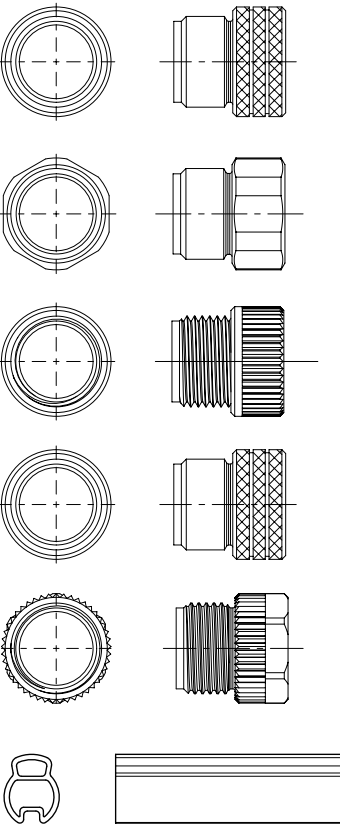
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

Overmold color:
Blank (Standard)=Black
A=Grey / G=Black / Y=Yellow
For Cable A09=Yellow

Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1 or 8=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
9=Knurled / Hexagonal Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

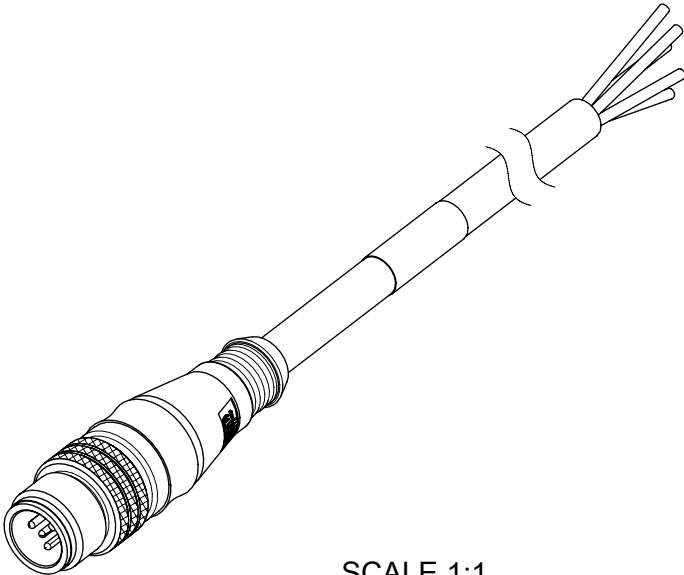


CABLE INFORMATION (for more information see Cable Data Sheet).

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.	-	-
A09	3	0.34mm²	PVC YELLOW	-	-	-	-	-	-
K03	5	0.82mm²	TPE YELLOW	-	-	-	-	-	-
K05	4	0.38mm²	TPE YELLOW	-	-	-	-	-	-

CABLE LENGTH TOLERANCES

OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+2% of finished length



SCALE 1:1

FUNCTIONAL SYMBOLS

√A/ = 0

√E/ = 0

√E/ = 0

DIVISIONAL SYMBOLS

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

CURRENT REV DESC: NEW P/N ADDED

EC NO: 780340

DRWN: RSCHIEBER

CHK'D: RSILLER

APPR: RSILLER

2024/03/14

2024/03/18

2024/03/18

INITIAL REVISION:

DRWN: JMARSZALEK

APPR: RSILLER

2016/01/12

2016/04/08

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

mm

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

2024/03/18

2024/03/18

2016/01/12

2016/04/08

A3-SIZE

120065

SEE TABLE

GENERAL MARKET

2 OF 4

molex

CSE M12 XP AC MA STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

1200659185

PSD

000

A12

DOCUMENT STATUS | P1 | RELEASE DATE | 2024/03/18 07:49:31

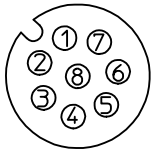
FORMAT: master-b-prod-A3
REVISION: 11
DATE: 2021/05/01

987654321

10	9	8	7	6	5	4	3	2	1			
PART LIST												
F	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length
	1	1200060046	804006E03M120	12m	36	1200062596	805006E03M003	0.3m	71	1200652158	805006P03M100	10m
	2	1200060047	804006P03M050	5m	37	1200062631	805006P03M120	12m	72	1200655011	805006P03M005	0.5m
	3	1200060240	803006E03M020	2m	38	1200062799	805006E03M010	1m	73	1200655051	805006E03M006	0.6m
	4	1200060241	803006E03M050	5m	39	1200062830	804006E03M0205	2m	74	1200658055	803006P03M003	0.3m
E	5	1200060242	803006E03M100	10m	40	1200062877	804006E03M0505	5m	75	1200658092	805006P03M010	1m
	6	1200060256	803006P03M002	0.2m	41	1200062920	804006E03M1005	10m	76	1200658109	808006P02M003	0.3m
	7	1200060257	803006P03M020	2m	42	1200063018	803006P03M0303	3m	77	1200658209	805006E03M0061	✱ 0.6m
	8	1200060260	803006P03M030	3m	43	1200063077	804006E02M005	0.5m	78	1200658247	803006H09M100	10m
	9	1200060261	803006P03M050	5m	44	1200063470	804006E03M010H	1m	79	1200658248	803006H09M050	5m
D	10	1200060558	804006E03M006	0.6m	45	1200063472	804006P03M200	20m	80	1200658463	804006P03M150	15m
	11	1200060559	804006E03M010	1m	46	1200063731	805006P03M0065	0.6m	81	1200658500	805006E03M1001	10m
	12	1200060560	804006E03M020	2m	47	1200063732	804006E03M0501	5m	82	1200658518	804006E03M0201H	2m
	13	1200060561	804006E03M030	3m	48	1200063733	804006E03M1001	✱ 10m	83	1200658519	804006E03M0501H	5m
	14	1200060562	804006E03M050	5m	49	1200063856	804006E03M1501	✱ 15m	84	1200658526	803006E03M005	0.5m
C	15	1200060563	804006E03M100	10m	50	1200063941	804006P03M0401	4m	85	1200658542	804006E03M070	7m
	16	1200060570	804006P03M020	2m	51	1200063953	805006E03M035	3.5m	86	1200658546	808006E02M050	5m
	17	1200060571	804006P03M030	3m	52	1200063969	804006E03M2001	✱✱ 20m	87	1200658565	803006E03M010	1m
	18	1200060572	804006P03M100	10m	53	1200064160	803006P03M005	0.5m	88	1200658566	803006E03M040	4m
	19	1200060667	805006E03M020	2m	54	1200064231	804006E03M2501	✱ 25m	89	1200658571	804006E03M040	4m
B	20	1200060668	805006E03M030	3m	55	1200064240	804006P03M070	7m	90	1200658576	808006E02M010	1m
	21	1200060680	805006P03M020	2m	56	1200064251	804006E03M003	0.3m	91	1200658612	803006P03M040	4m
	22	1200060682	805006P03M050	5m	57	1200064252	804006E03M005	0.5m	92	1200658613	803006P03M100	10m
	23	1200061345	805006E03M050	5m	58	1200064261	804006P03M011	1.1m	93	1200658653	803006H09M010	1m
	24	1200061611	803006E03M150	15m	59	1200064347	804006P03M007	0.7m	94	1200658654	80	

FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

8 POLE MM

FEMALE INSERT 3P
VIEW FROM FRONT SIDE

Pin	WIRE COLOR	Wire color
1	WHITE	WH
2	BROWN	BN
3	GREEN	GN
4	YELLOW	YE
5	GREY	GY
6	PINK	PK
7	BLUE	BU
8	RED	RD

Tablica tolerancji długości

Table of length tolerances

Powyżej Over	Do-włącznie Up to and including	Tolerancja (+) Tolerance
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% długości of length

PART No MATRIX

8

B-Micro
Change

0

B-Portable

8

B-3 Core
4-4 Core
5-5 Core

0

B06+ Male straight

0

6

X

H08 - UL Listed LS0H Black
PUR 0.25mm² (24AWG)

X

P02 - 24AWG BLACK PUR CABLE

X

E02 - CABLE PVC BLACK 0.25mm²

M

M-Metres
F-Feet

X

LENGTH
020-2 METRES
050-5 METRES
200-20 METRES

X

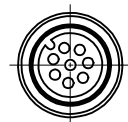
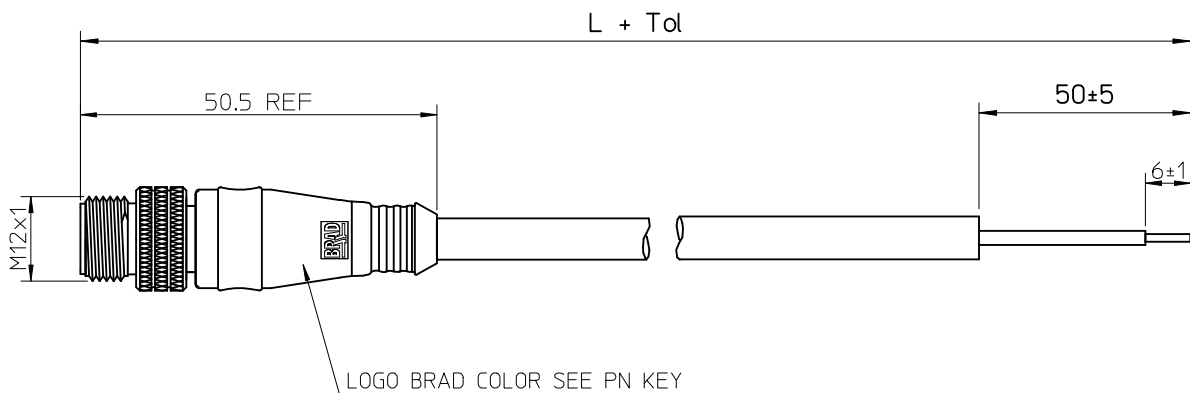
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OPTIONS

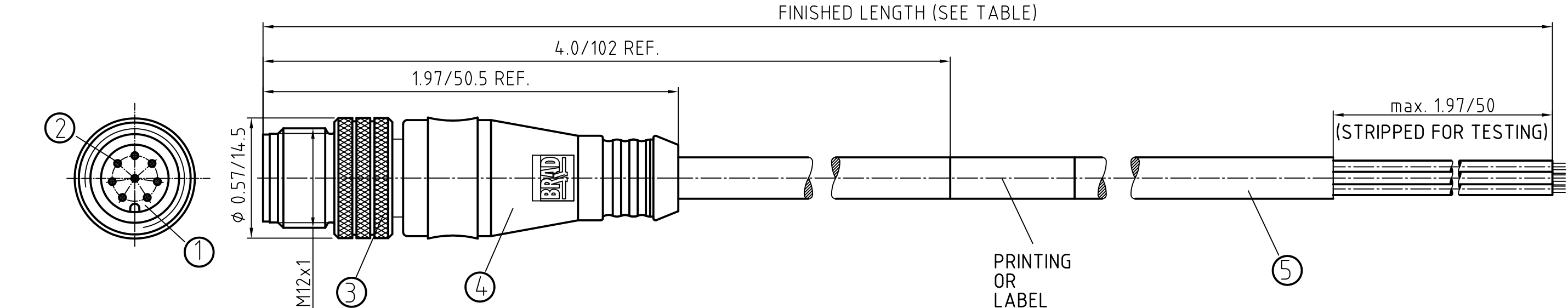
X

X

OVERMOULD COLOR

Blank=BLACK (Standard)
A=GREY
Y=YELLOWCoupling Nut Material
Blank-Standard
S-Stainless Steel
5-BainnVIEW FROM
FRONT SIDE

DRAWING UPDATE EC NO: IPG2013-0156 DRWN:HWALCZAK 2012/07/03 CHKD: APPR:MIWASIECZKO 2012/10/11	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE ---	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION			
			4 PLACES 3 PLACES 2 PLACES 1 PLACE	mm	INCH	DRAWN BY HWALCZAK	DATE 2012/02/10	TITLE CSE M12 8P AC MA STR PUR XM SE UNSH				
				±---	±---	CHECKED BY	DATE					
				±---	±---	JMARSZALEK	2012/02/16					
				±---	±---	APPROVED BY	DATE					
				±---	±---	MDYSZEWSKA	2012/02/16					
			ANGULAR ±---°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATRIX DRAWING		SD-120065-001		1 OF 1			
					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					
					A3							



MALE FACE VIEW

8-POLE

1 WHITE
2 BROWN
3 GREEN
4 YELLOW
5 GREY
6 PINK
7 BLUE
8 RED

WIRING DIAGRAM

POL	MATERIAL NUMBER	ENGINEERING NUMBER	FINISHED LENGTH
8	1200650964	808006P02M020	6.56' +3.50" -0 [2.0M +88.9 -0]

ITEM	COMPONENT	MATERIAL	FINISH
1	INSERT	POLYURETHANE (PUR)	BLACK
2	CONTACT MATERIAL CONTACT PLATING	BRASS GOLD	CuZn Ni/Au
3	COUPLING NUT	BRASS	NICKEL PLATED
4	OVERMOLD	POLYURETHANE (PUR)	BLACK
5	CABLE- 0.25 ² /24 AWG (COPPER STRANDING) 8 CONDUCT. 300V	JACKET: PUR/PVC INSUL.: POLYPROP	JACKET: BLACK

CONNECTOR SPECIFICATION:

VOLTAGE RATING	30 VAC/36 VDC
AMPERAGE RATING	2 AMPS
PROTECTION CLASS	IP68
OPERATING TEMPERATURE	-30°C TO 80°C
UL CERTIFICATIONS	NOT APPLICABLE
CSA CERTIFICATIONS	NOT APPLICABLE

DESCRIPTION EC NO: WEU2011-0033 DRWN: LSTEMMLE 21.07.10 CHKD: AP APPR: REISSNER 2010/11/05	QUALITY SYMBOLS ▽ = 0 ▽/C = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY LS	DATE 2010/01/13	MICRO-CHANGE CORDSET 8-POL MALE STR SE 24/8 BLACK PUR/PVC CABLE			
		4 PLACES	±---	±---	CHECKED BY RE	DATE 2010/07/21				
		3 PLACES	±---	±---	APPROVED BY REISSNER	DATE 2010/11/05				
		2 PLACES	±---	±.01	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-120065-032		SHEET NO. 1 OF 1	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						