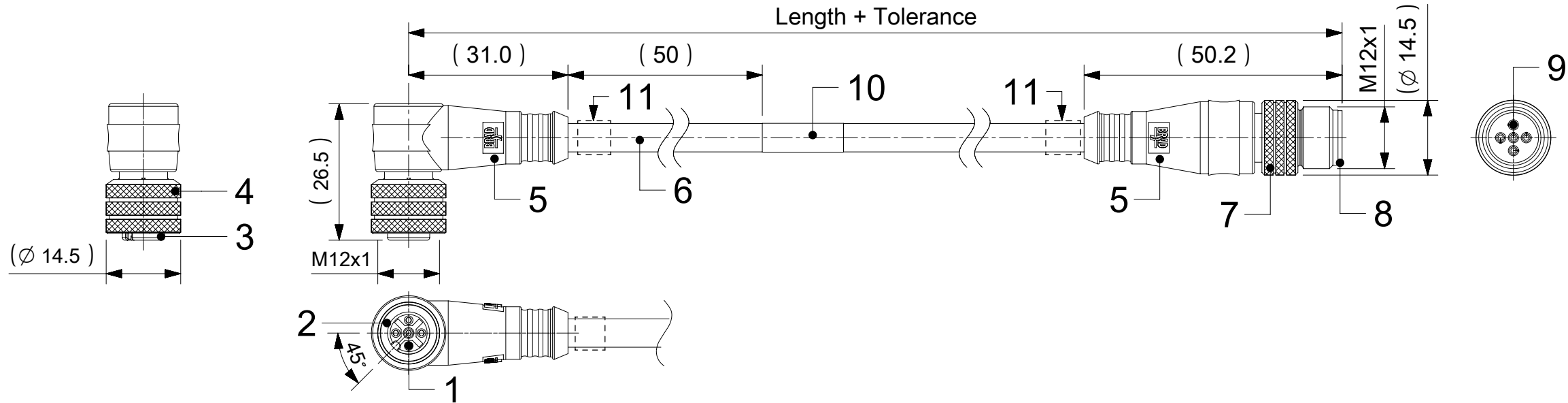


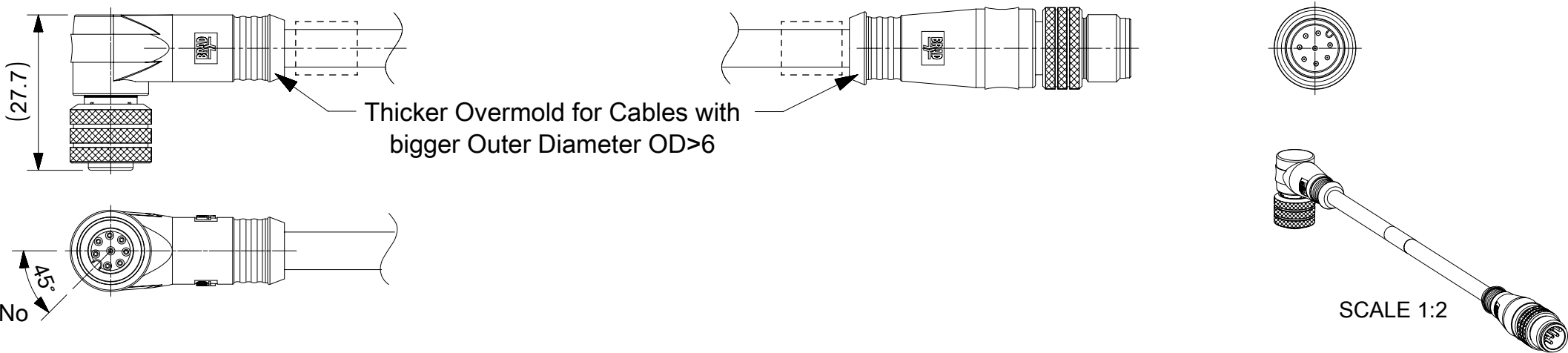
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



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

* FOR CABLES lxx USE PRINTING ON THE CABLE IN THE SAME MEASUREMENT LIKE FOR LABEL – ENGINEERING No

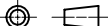


CONTACTS POSITION FRONT VIEW:

	3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
FEMALE	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
MALE	3	---	3	---	3	---	3	---
	4	---	4	---	4	---	4	---
	1	---	1	---	1	---	1	---
	2	---	2	---	2	---	2	---
	5	---	5	---	5	---	5	---
CONNECTIONS	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

11	SEE PART LIST	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	SEE PART LIST	---
7	1	COUPLING NUT MALE	SEE PART LIST	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING BLACK	SEE PART LIST	---
4	1	COUPLING NUT FEMALE	SEE PART LIST	---
3	1	INSERT FEMALE BLACK	SEE PART LIST	---
2	1	O-RING 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		CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M				molex							
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)								CSE M12 XP AC FE RA MA STR XM DE							
ANGULAR TOL ± 1.0 °															
4 PLACES ±				EC NO: 791338		PRODUCT CUSTOMER DRAWING		DOCUMENT NUMBER 1200660973		DOC TYPE PSD		DOC PART 000		REVISION A11	
3 PLACES ±				DRWN: RSILLER 2024/07/03											
2 PLACES ± 0.05				CHK'D: THAERDT 2024/07/03											
1 PLACE ± 0.3				APPR: THAERDT 2024/07/03											
0 PLACES ± 0.5				INITIAL REVISION:		2016/10/06									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
				A3-SIZE		120066				GENERAL MARKET		1 OF 4			

	10	9	8	7	6	5	4	3	2	1			
F	PART LIST										F		
	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	F
	1	1200060052	884031I20M005	0.5m	36	1200072725	885031I26M005	0.5m	71	1200665039	884031S20M003	0.3m	
	2	1200060053	884031I20M010	1m	37	1200072726	885031I26M010	1m	72	1200665053	884031S20M060H	6m	
E	3	1200060054	884031I20M015	1.5m	38	1200659070	884031I20M010Y	1m	73	1200665074	884031K05M080	8m	E
	4	1200060055	884031I20M020	2m	39	1200659071	884031I20M015Y	1.5m	74	1200668052	883031S20M006	0.6m	
	5	1200070132	883031I03M003	0.3m	40	1200659115	884031I20M005Y	0.5m	75	1200668071	884031S20M020	2m	
	6	1200070133	883031I03M006	0.6m	41	1200660374	884031K05M005	0.5m	76	1200668191	883031S20M030	3m	
D	7	1200070134	883031I03M010	1m	42	1200660375	884031K05M006	0.6m	77	1200668237	883031S20M100	10m	D
	8	1200070136	883031I03M020	2m	43	1200660376	884031K05M010	1m	78	1200668258	883031I03M080	8m	
	9	1200070137	883031I03M030	3m	44	1200660377	884031K05M015	1.5m	79	1200668287	884031I20M025	2.5m	
	10	1200070138	883031I03M050	5m	45	1200660378	884031K05M020	2m	80	1200668667	884031I20M030Y	3m	
C	11	1200070152	883031S20M010	1m	46	1200660379	884031K05M030	3m	81	1200070443	884021S20M003	0.3m	C
	12	1200070153	883031S20M020	2m	47	1200660380	884031K05M040	4m	82	1200070444	884021S20M006	0.6m	
	13	1200070156	883031S20M050	5m	48	1200660381	884031K05M050	5m	83	1200070445	884021S20M010	1m	
	14	1200070522	884031I03M020	2m	49	1200660382	884031K05M060	6m	84	1200070446	884021S20M020	2m	
B	15	1200070523	884031I03M030	3m	50	1200660383	884031S20M010	1m	85	1200070447	884021S20M030	3m	B
	16	1200070534	884031S20M030	3m	51	1200660546	884031K05M100	10m	86	1200070449	884021S20M050	5m	
	17	1200070651	884031I03M006	0.6m	52	1200661046	885031K03M010	1m	87	1200668160	883021S20M010	1m	
	18	1200070768	884031S20M050	5m	53	1200661047	885031K03M020	2m	88	1200668608	883031E02M020	2m	
A	19	1200070783	884031S20M100H	10m	54	1200661049	885031K03M040	4m	89	1200668613	883031E02M030	3m	A
	20	1200071138	884031S20M010H	1m	55	1200661050	885031K03M050	5m	90	1200659035	883031E02M050	5m	
	21	1200071139	884031S20M020H	2m	56	1200661769	884031K05M150	15m	91	1200668612	883031E02M100	10m	
	22	1200071164	884031S20M003H	0.3m	57	1200669556	885031P03M015	1.5m	92	1200668908	883031E03M003H	0.3m	
B	23	1200071179	8840										

FORMAT: master-tb-prod-A3 REVISION: J1 DATE: 2021/05/01	9	8
---	---	---

4	3	2	1
---	---	---	---

10		9		8		7		6		5		4		3		2		1	
F	Pos.	Part No.	Engineering No.	Cable Length	Pos.	Part No.	Engineering No.	Cable Length	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION DIMENSION UNITS SCALE 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 DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS THIRD ANGLE PROJECTION DRAWING SERIES MATERIAL NUMBER CUSTOMER SHEET NUMBER A3-SIZE 120066 1200660973 GENERAL MARKET 4 OF 4 EC NO: 791338 DRWN: RSILLER CHK'D: THAERDT APPR: THAERDT 2024/07/03 2024/07/03 2024/07/03 2016/10/06 2016/12/08 INITIAL REVISION: DRWN: JMARSZALEK APPR: RSILLER 2024/07/03 2024/07/03 2024/07/03 2016/10/06 2016/12/08 CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M										

147

1200668845

884031H09M018

1.8m

148

1200668212

884031H09M020

2m

149

1200668847

884031H09M021

2.1m

150

1200668215

884031H09M030

3m

151

1200668670

884031H09M050

5m

152

1200668671

884031H09M100

10m

153

1200070526

884031P03M003

0.3m

154

1200070527

884031P03M006

0.6m

155

1200060056

884031P03M010

1m

156

1200060057

884031P03M020

2m

157

1200070529

884031P03M030

3m

158

1200071187

884031P03M050

5m

159

1200072012

884031P03M100

10m

160

1300288001

885031D12M020

2m

161

1200668658

885031E02M020

2m

162

1200668610

885031E02M050

5m

163

1200668660

885031E02M100

10m

164

1200668339

885031E03M006

0.6m

165

1200668189

885031E03M010

1m

166

1200668278

885031E03M020

2m

167

1200668340

885031E03M030

3m

168

1200668279

885031E03M050

5m

169

1200668653

885031E03M070

7m

170

1200668348

885031E03M100

10m

171

1200668761

885031E03M150

15m

172

1200669229

885031H09C250

25m

173

1200668512

885031H09M006

0.6m

174

1200668496

885031H09M010

1m

175

1200668513

885031H09M020

2m

176

1200668514

885031H09M030

3m

177

1200668515

885031H09M050

5m

178

1200668516

885031H09M100

10m

179

1200073085

885031P03M006

0.6m

180

1200668188

885031P03M010

1m

181

1200072376

885031P03M0105

1m

182

1200070917

885031P03M020

2m

183

1200668091

885031P03M025

2.5m

184

1200070919

885031P03M030

3m

185

1200668273

885031P03M050

5m

186

1200073086

885031P03M100

10m

187

1200070434

884021E03M020

2m

188

1200658319

888031H08M050

5m

189

1200668673

888031E02M0041

0.4m

190

1200668849

888031P02M150

15m

Pos.

Part No.

Engineering No.

Cable Length

191

1200656208

888031H08C250

2.5m

192

1200656209

888031H08M005

0.5m

193

1200656210

888031H08M008

0.8m

194

1200656211

888031H08M012

1.2m

195

1200656212

888031H08M015

1.5m

196

1200070057

883021E03M006

0.6m

197

1200070058

883021E03M020

2m

198

1200070439

884021P03M006

0.6m

199

1200070440

884021P03M010

1m

200

1200070441

884021P03M020

2m

201

1200070442

884021P03M030

3m

202

1200070870

883021P03M050

5m

203

1200072191

883021E03M030

3m

204

1200072198

883021E03M050

5m

205

1200665038

884021E03M050

5m

206

1200668061

884021E03M006

0.6m

207

1200668219

884021E03M030

3m

208

1200668673

888031E02M0041

0.4m

209

1200669541

884031P03M015

1.5m

210

1200669885

884031E03M004

0.4m

211

1200669886

884031E03M005

0.5m

212

1200669887

884031E03M013

1.3m

213

1200669888

884031E03M080

8m

214

1200070510

883031E03M070

7m

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

DIMENSION UNITS

SCALE

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

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

SERIES

A3-SIZE

120066

CURRENT REV DESC: ADD NEW PN FOR NEW LENGTH 7M

EC NO: 791338

DRWN: RSILLER

CHK'D: THAERDT

APPR: THAERDT

2024/07/03

2024/07/03

2024/07/03

INITIAL REVISION:

DRWN: JMARSZALEK

APPR: RSILLER

2016/10/06

2016/12/08

DOCUMENT NUMBER

1200660973

DOC TYPE

PSD

DOC PART

000

REVISION

A11

CSE M12 XP AC FE RA MA STR XM DE

PRODUCT CUSTOMER DRAWING

GENERAL MARKET

4 OF 4

DOCUMENT STATUS

P1

RELEASE DATE

2024/07/03

14:19:30

9

8

7

6

5

4

3

2

1

FORMAT: master-b-prod-A3

REVISION: 11

DATE: 2021/05/01

9

8

7

6

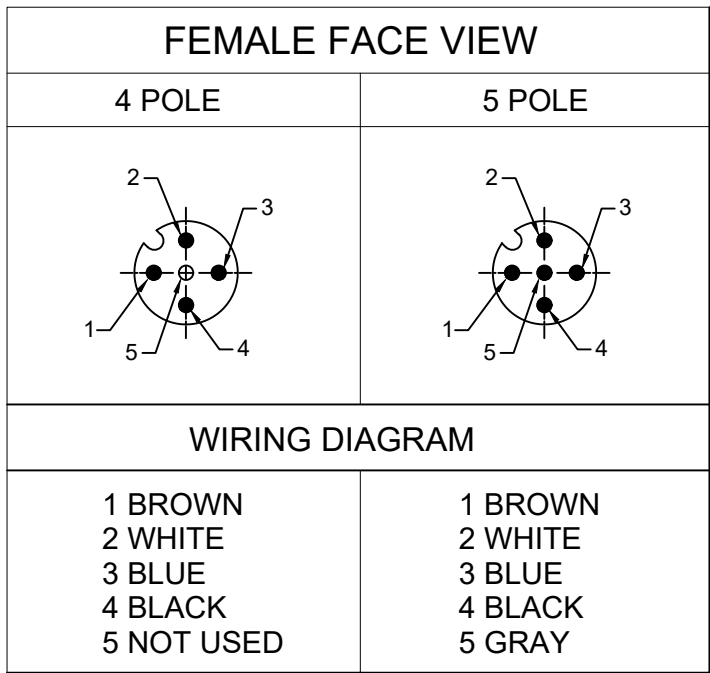
5

4

3

2

1



NOTES:

1. MATERIAL: AS NOTED

2. FINISH: AS NOTED

3. ELECTRICAL:
VOLTAGE: 250V
CURRENT: 4A

4. TEMP RATING: -20°TO +105°C

5. PROTECTION: IP67 (WHEN MATED)

6. COUPLING THREAD: M12X1

7. UL RECOGNIZED FILE: E152210
CSA CERTIFIED FILE: LR6837

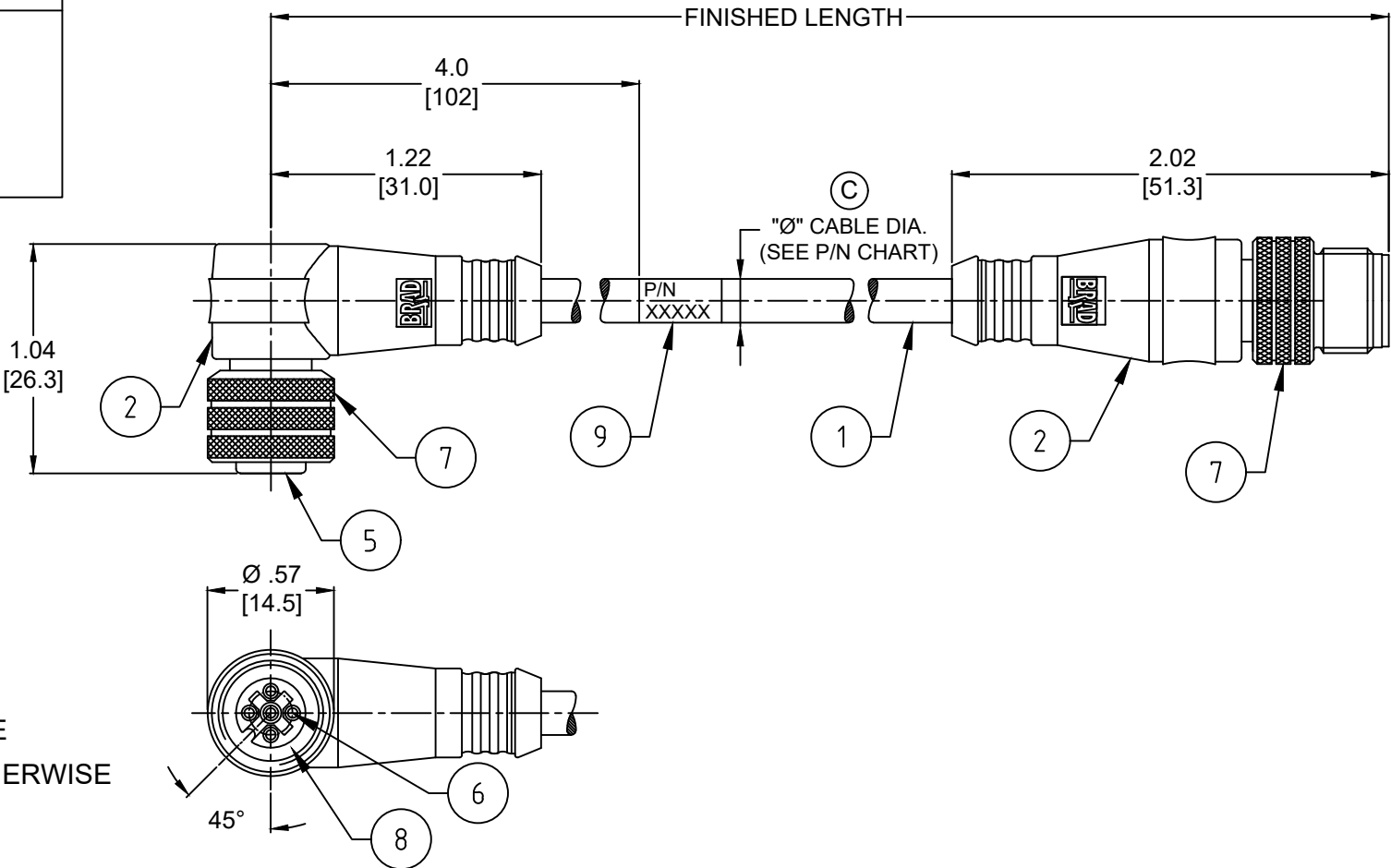
8. ALL DIMENSIONS ARE FOR REFERENCE
UNLESS TOLERANCED OR NOTED OTHERWISE

CABLE FLEX CHARACTERISTICS	
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

9	WRAP LABEL	VINYL	BLACK/YELLOW
8	O-RING	VITON	RED
7	COUPLER	BRASS	TEFLON/NICKEL
6	CONTACT SOCKET	COPPER ALLOY	GOLD OVER NICKEL
5	INSERT (FEMALE)	PUR	BLACK
4	CONTACT PIN	COPPER ALLOY	GOLD OVER NICKEL
3	INSERT (MALE)	PUR	BLACK
2	OVERMOLD	TPC	YELLOW
1	CABLE #18/4-5 AWG	TPE JACKET	YELLOW
ITEM	DESCRIPTION	MATERIAL	FINISH

DOCUMENT STATUS | P1 | RELEASE DATE | 2021/07/14 | 21:16:12

PART NO	ENGINEERING NO.	FINISHED LENGTH	POLES	CABLE DIA.
1200660969	884031K03M003	0.3M [1FT]	4	.26/6.6
1202010015	884031K03M200	20M [65FT 7 IN]		
1200661045	885031K03M005	0.5M [1FT 8 IN]	5	.28/7.1
1200661961	885031K03M200	20M [65FT 7 IN]		

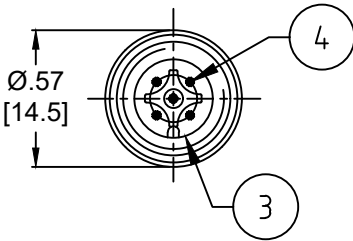
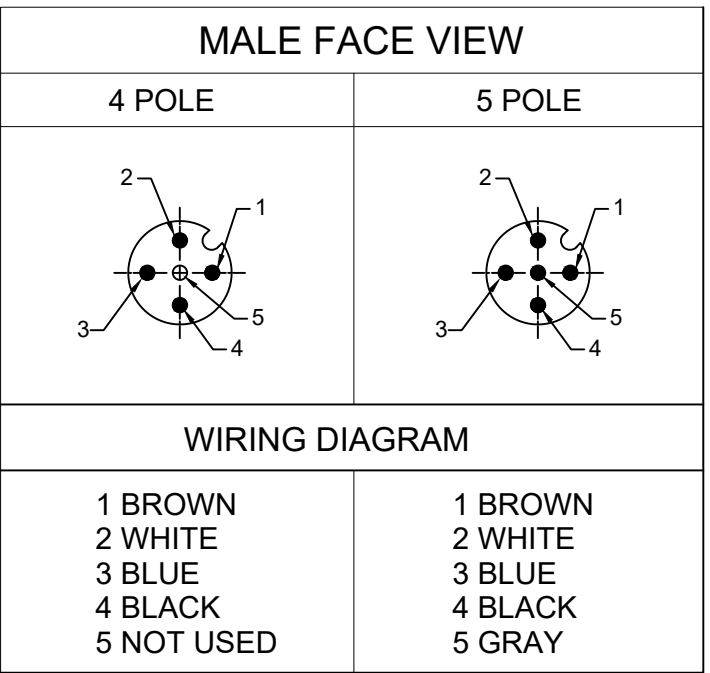


PART NO. MATRIX

884031K03M003

POLES (4 & 5)

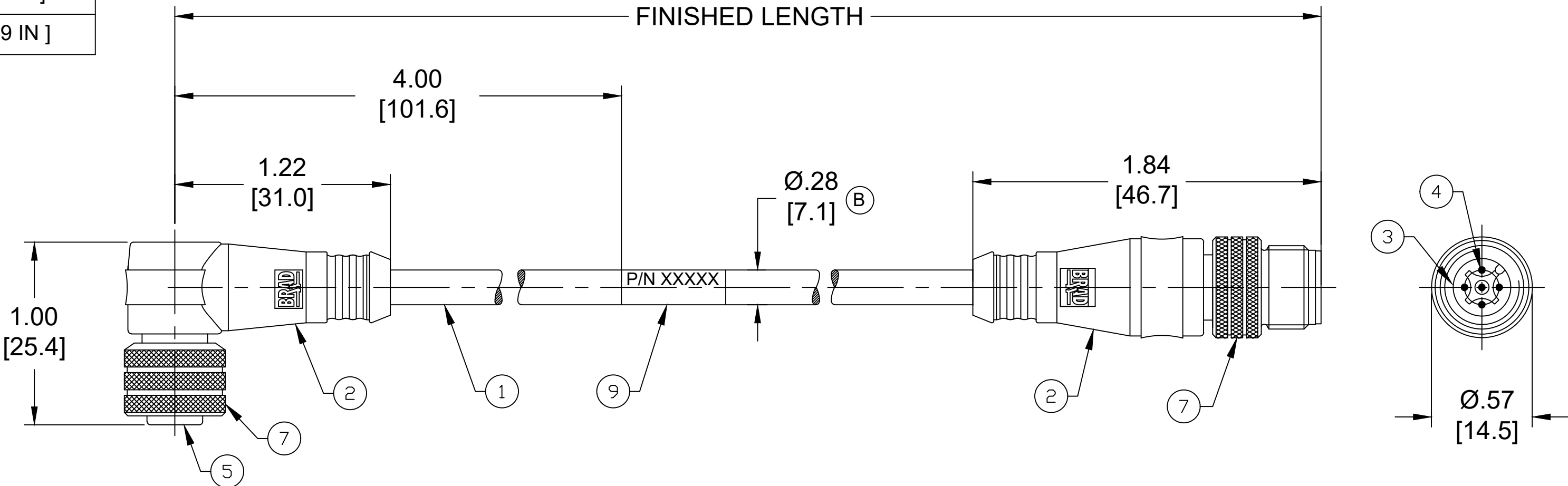
FINISHED LENGTH
M005 = 0.5 METER
M010 = 1 METER
M100 = 10 METER



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	

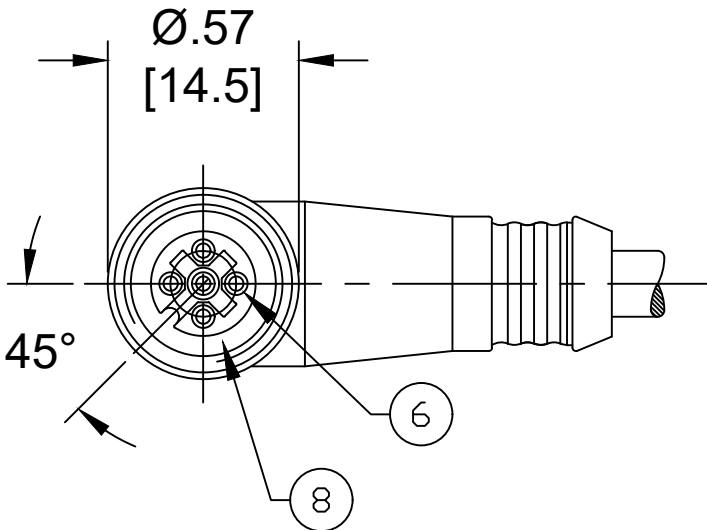
FUNCTIONAL SYMBOLS $\frac{F}{A}=0$ $\frac{F}{C}=0$ $\frac{F}{E}=0$ DIVISIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION													
	DIMENSION UNITS		SCALE		CURRENT REV DESC: ITEM #2 WAS TPE. ITEM #9 WAS MYLAR. REMOVED 3 POLE DETAILS. ADDED UL, CSA, TOL CHART & CABLE DIA. MODIFIED PN CHART & FACE VIEWS			molex MICRO-CHANGE CORDSET, M12 4-5 POLE, FEMALE 90DEG - MALE STRAIGHT, SINGLE KEY, #18 AWG TPE HI-FLEX						
	INCH/MM		NTS											
	GENERAL TOLERANCES (UNLESS SPECIFIED)													
		mm	INCH	EC NO: 6698893										
	4 PLACES	±----	±----	DRWN: ABENJAMINLW			2021/06/30							
	3 PLACES	±----	±----	CHK'D: RSTONE			2021/07/12							
	2 PLACES	±----	±----	APPR: BWOODMAN			2021/07/14							
	1 PLACE	±----	±----	INITIAL REVISION:										
	0 PLACES	±----	±----	DRWN: LSTEMMLE			2010/02/01							
	ANGULAR TOL ± ---- °			APPR: FPACHER			2010/02/03							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
					A3-SIZE		120066		SEE CHART		GENERAL MARKET		1 OF 1	

12	11	10	9	8	7	6	5	4	3	2	1
PART NO	ENGINEERING NO.	FINISHED LENGTH	(B)								
1200661047	885031K03M020	2M [6FT 7 IN]									
1200661048	885031K03M030	3M [9FT 10 IN]									
1200668732	885031K03M100	10M [32FT 9 IN]									

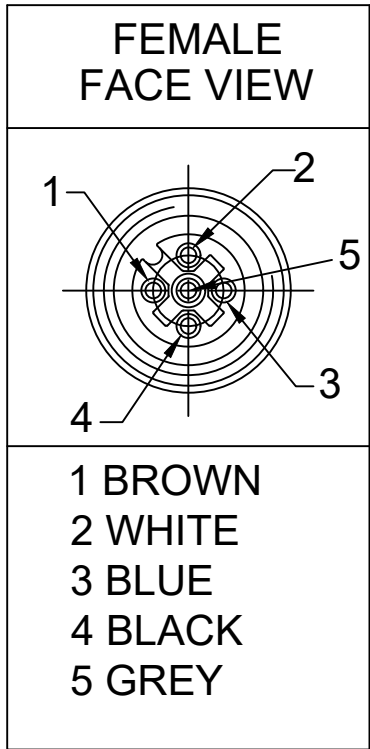


NOTES:

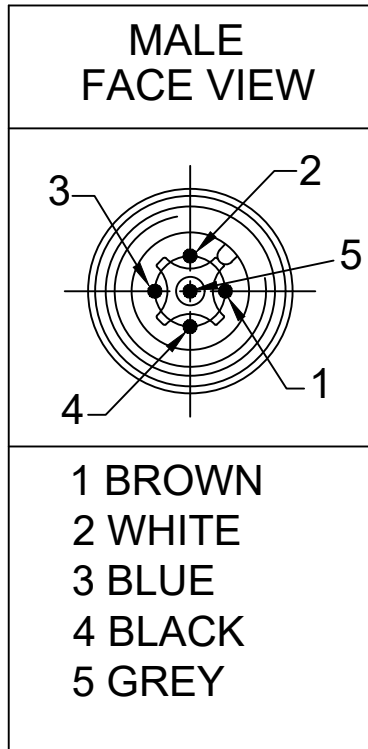
1. MATERIAL: AS NOTED
2. FINISH: AS NOTED
3. ELECTRICAL:
VOLTAGE: 250V
CURRENT: 4A
4. TEMP RATING: -20°TO +105°C (B)
5. PROTECTION: IP67 (WHEN MATED)
6. COUPLING THREAD: M12X1
7. UL RECOGNIZED FILE: E152210
CSA CERTIFIED FILE: LR6837 (B)
8. ALL DIMENSIONS ARE FOR REFERENCE
UNLESS TOLERANCED OR NOTED OTHERWISE



WIRING DIAGRAM



WIRING DIAGRAM



PART NO. MATRIX
885031K03M006

FINISHED LENGTH
M005 = 0.5 METER
M010 = 1 METER
M100 = 10 METER

MECHANICAL CHARACTERISTICS: (B)

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

(B)

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

9	LABEL	VINYL	BLACK/YELLOW	(B)
8	GASKET	VITON	RED	
7	COUPLER	BRASS	NICKEL/TEFLON	
6	CONTACT SOCKET	COPPER ALLOY	Au OVER Ni	(B)
5	INSERT (FEMALE)	TPU	BLACK	
4	CONTACT PIN	COPPER ALLOY	Au OVER Ni	
3	INSERT (MALE)	PUR	BLACK	(B)
2	OVERMOLD	TPC	YELLOW	
1	CABLE #18/5 AWG	TPE	YELLOW	
ITEM	DESCRIPTION	MATERIAL	FINISH	