

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

80X000XXXXXX

80=M12x1
Single ended

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

Heads style:
000=Plug Female 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

Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
9=Knurled / Hexagonal Brass Ni Plated

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

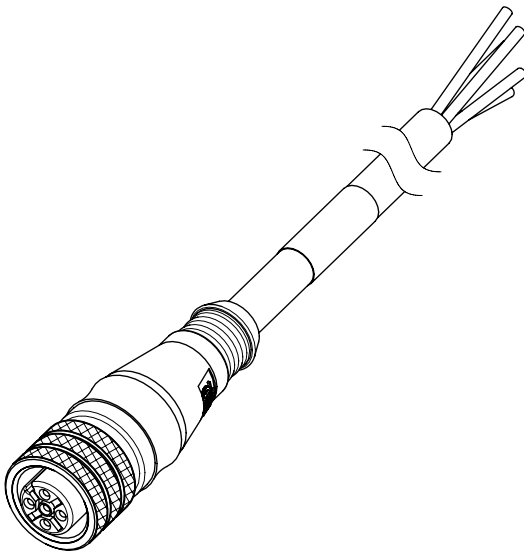
COUPLING NUTS

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.	-	-

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

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

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420
DRWN: RSILLER
CHK'D: THAERDT
APPR: THAERDT

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING
A3-SIZE

SERIES
120065

DOCUMENT NUMBER
1200651978

CUSTOMER
GENERAL MARKET

SHEET NUMBER
2 OF 4

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

2022/10/28
2022/10/28
2022/10/28

2016/01/11
2016/04/08

PSD
000
A11

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	1200060001	803000E03M020	2m	36	1200060458	804000P03M0501	5m	71	1200063673	803000P03M1001	10m	106	1200658008	804000H09M050H	5m
2	1200060002	803000E03M050	5m	37	1200060461	804000P03M200	20m	72	1200063779	805000E03M300	30m	107	1200658009	804000H09M100H	10m
3	1200060003	803000E03M100	10m	38	1200060634	805000E03M020	2m	73	1200063940	804000P03M0051	0.5m	108	1200658020	805000P03M040	4m
4	1200060004	803000P03M020	2m	39	1200060638	805000E03M100	10m	74	1200064033	804000P03M120	12m	109	1200658021	808000P02M150	15m
5	1200060005	803000P03M050	5m	40	1200060646	805000P03M003	0.3m	75	1200064093	803000P03M032	3.2m	110	1200658022	808000P02M030	3m
6	1200060006	803000P03M100	10m	41	1200060647	805000P03M020	2m	76	1200064292	805000P03M200	20m	111	1200658064	804000P03M010	1m
7	1200060014	804000E03M020	2m	42	1200060649	805000P03M100	10m	79	1200064422	804000E03M120	12m	112	1200658081	805000E03M200	20m
8	1200060015	804000E03M050	5m	43	1200061337	804000E03M0205	2m	80	1200064434	804000H09M050G	5m	113	1200658165	805000E03M030	3m
9	1200060016	804000E03M100	10m	44	1200061431	805000P03M150	15m	81	1200065004	805000P03M0201	2m	114	1200658172	805000H09M020	2m
10	1200060018	804000P03M020	2m	45	1200061528	804000E03M250	25m	82	1200065006	804000H09M250G	25m	115	1200658173	805000H09M050	5m
11	1200060019	804000P03M050	5m	46	1200061765	803000P03M002	0.2m	83	1200065012	803000P03M030G	3m	116	1200658174	805000H09M100	10m
12	1200060027	803000E03M006	0.6m	47	1200061785	804000P03M006	0.6m	84	1200650951	808000P02M020	2m	117	1200658175	803000H09M020	2m
13	1200060032	804000E03M005	0.5m	48	1200061913	804000E03M300	30m	85	1200650952	808000P02M040	4m	118	1200658176	803000H09M050	5m
14	1200060034	804000P03M025	2.5m	49	1200061958	803000E03M021	2.1m	86	1200650953	808000P02M050	5m	119	1200658177	803000H09M100	10m
15	1200060107	803000E03M003	0.3m	50	1200062071	803000E03M060	6m	87	1200650954	808000P02M060	6m	120	1200658178	804000H09M020	2m
16	1200060113	803000E03M030	3m	51	1200062098	803000P03M006	0.6m	88	1200650955	808000P02M080	8m	121	1200658179	804000H09M050	5m
17	1200060116	803000E03M0505	5m	52	1200062130	804000E03M050H	5m	89	1200650956	808000P02M0801	8m	122	1200658190	804000H09M100	10m
18	1200060117	803000E03M1005	10m	53	1200062167	804000P03M100H	10m	90	1200650957	808000P02M100	10m	124	1200658197	805000P03M010	1m
19	1200060119	803000E03M150	15m	54	1200062264	804000E03M1505	15m	91	1200651769	803000P03M050G	5m	125	1200658208	805000E03M0061	✱ 0.6m
20	1200060121	803000E03M200	20m	55	1200062347	804000P03M050H	5m	92	1200651780	804000P03M050G	5m	126	1200658210	805000E03M0501	✱ 5m
21	1200060121	803000E03M200	20m	56	1200062521	805000P03M030	3m	93	1200651782	804000P03M100	10m	127	1200658219	803000E03M0201	✱ 2m
22	1200060124	803000E03M2505	25m	57	1200062772	803000P03M250	25m	94	1200651792	805000P03M050	5m	128	1200658224	808000E02M050	5m
23	1200060152	803000P03M010	1m	58	1200062811	803000P03M100H	10m	95	1200651794	808000P02M010	1m	129	1200658228	804000E03M3001	✱ 30m
24	1200060153	803000P03M030	3m	59	1200062853	804000P03M150	15m	96	1200651795	808000P02M070	7m	130	1200658244	808000H08M050	5m
25	1200060157	803000P03M150	15m	60	1200062866	804000E03M020H	2m	97	1200651817	808000P02M200	20m	131	1200658264	808000H08M100	10m
26	1200060158	803000P03M200	20m	61	1200062992	804000E03M200H	20m	98	1200651818	808000P02M250	25m	133	1200658277	808000E02M020	2m
27	1200060426	804000E03M010	1m	62	1200063121	804000P03M0053	0.5m	99	1200651820	808000P02M300	30m	134	1200658278	808000E02M100	10m
28	1200060427	804000E03M0201	✱✱ 2m	63	1200063224	804000E03M003	0.3m	100	1200651978	805000E03M050	5m	135	1200658288	804000E03M050G	5m
29	1200060428	804000E03M030	3m	65	1200063314	805000E03M010	1m	101	1200652143	804000P03M040	4m	136	1200658309	808000E02M0501	5m
30	1200060429	804000E03M0501	✱ 5m	66	1200063402	804000P03M003	0.3m	102	1200652144	804000P03M060	6m	137	1200658321	804000P03M005	0.5m
31	1200060430	804000E03M0505	5m	67	1200063407	804000E03M1001	✱ 10m	103	1200652154	805000P03M060	6m	138	1200658331	805000E03M050H	5m
32	1200060431	804000E03M150	15m	68	1200063415	803000P03M0707	7m	104	1200655073	808000P02M003	0.3m	139	1200658350	803000E03M1001	✱ 10m
33	1200060432	804000E03M200	20m	69	1200063443	804000E03M030H	3m	105	1200655081	805000E03M150	15m				
34	1200060456	804000P03M0201	2m	70	1200063647	804000E03M2001	20m								
35	1200060457	804000P03M030	3m												

NOTES:

✱ - Part No. with Yellow PVC overmolding

✱✱ - Part No. with Black PVC overmolding

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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

120065

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER 2022/10/28

CHK'D: THAERDT 2022/10/28

APPR: THAERDT 2022/10/28

INITIAL REVISION:

DRWN: JMARSZALEK 2016/01/11

APPR: RSILLER 2016/04/08

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

3 OF 4

DOCUMENT STATUS

P1

RELEASE DATE

2022/10/28 12:26:20

9

8

7

6

5

4

3

2

1

10

9

8

7

6

5

4

3

2

1

142

1200658492

804000P03M100G

10m

143

1200658502

805000E03M005

0.5m

144

1200658503

805000E03M0201

2m

145

1200658511

808000E02M010

1m

146

1200658525

808000P02C350

0.35m

147

1200658545

804000P03M015

1.5m

148

1200658550

804000H09M015

1.5m

149

1200658551

808000E02M1001

10m

150

1200658562

803000E03M010

1m

151

1200658563

803000E03M040

4m

152

1200658570

804000E03M040

4m

153

1200658590

808000E02M030

3m

154

1200658591

808000E02M040

4m

155

1200658592

805000E03M040

4m

156

1200658609

804000P02M020

2m

157

1200658610

803000P03M040

4m

161

1200658632

805000H09M010

1m

162

1200658633

805000H09M015

1.5m

163

1200658634

805000H09M030

3m

164

1200658635

805000H09M040

4m

165

1200658636

803000H09M010

1m

166

1200658637

803000H09M015

1.5m

167

1200658638

803000H09M030

3m

168

1200658639

803000H09M040

4m

169

1200658640

804000H09M010

1m

170

1200658641

804000H09M040

4m

171

1200658642

808000H08M010

1m

172

1200658643

808000H08M015

1.5m

173

1200658644

808000H08M020

2m

174

1200658645

808000H08M030

3m

175

1200658646

808000H08M040

4m

176

1200658780

805000H09M200

20m

177

1200658782

804000E03M060

6m

178

1200658812

808000E02M150

15m

179

1200658813

808000H08M025

2.5m

181

1200658880

804000H09M200

20m

182

1200658882

804000E03M100H

10m

183

1200658887

803000E03M020H

2m

184

1200658889

803000E03M050H

5m

185

1200658891

804000H09M003

0.3m

186

1200658894

804000E03M020G

2m

187

1200658896

804000E03M075

7.5m

188

1200658899

808000H08M250

25m

192

1200658927

804000P02M050

5m

194

1200658930

808000H08M150

15m

196

1200658983

804000E03M002

0.2m

197

1200658984

808000E02M2501

25m

199

1200658991

805000P03M100H

10m

200

1200659038

804000E02M100

10m

201

1200659040

804000E02M050

5m

202

1200659052

808000E02M2001

20m

203

1200659053

808000E02M3001

30m

209

1200659088

804000P03M050HY

5m

210

1200659092

808000P02M050Y

5m

217

1200659123

804000P03M100HY

10m

218

1200659144

805000H09M300

30m

219

1200659187

808000E02M4001

40m

221

1200659200

808000E02M250H

25m

222

1200659207

805000E03C230

0.23m

223

1200659214

805000P03M300

30m

224

1200659256

808000E02M200

20m

225

1200659279

805000E03M007

0.7m

226

1200659280

805000E03M350

35m

227

1200659282

805000P03M005

0.5m

228

1200659283

805000P03M007

0.7m

229

1200659302

804000P03M1005

10m

230

1200659326

805000P03M020H

2m

231

1200659329

805000P03M150H

15m

232

1200659330

805000P03M200H

20m

233

1200659334

808000P02M200H

20m

234

1200659340

804000P03M1501

15m

235

1200659341

804000P03M2501

25m

236

1200659368

805000E03M015

1.5m

237

1200659370

804000P03M020Y

2m

238

1200659387

808000E02M500

50m

239

1200659388

804000P03M012

1.2m

241

1200659397

808000P02M100Y

10m

242

1200659399

808000P02M015

1.5m

243

1200659474

804000P03M250

25m

244

1200659475

804000P03M300

30m

245

1200659509

805000E03M600

60m

246

1200659552

808000P02M050H

5m

247

1200659553

808000P02M100H

10m

248

1200659554

808000P02M150H

15m

249

1200659584

803000H09M003

0.3m

250

1200659594

805000P03M300H

30m

251

1200659595

805000P03M350H

35m

252

1200659613

808000E02M300

30m

253

1200659786

804000E02M041

4.1m

254

1200659790

804000E02M020

2m

255

1200659538

808000E02M100

10m

256

1200656061

803000E02M010

1m

257

1200656303

805000E03M050Y

5m

258

1200656436

804000P03M0601

6m

259

1200656766

808000P02M350

35m

260

1200656767

808000P02M400

40m

261

1200657197

803000E03M005

0.5m

262

1200657198

803000E03M015

1.5m

263

1200657129

804000P03M400

40m

264

1200657130

804000P03M500

50m

265

1200657131

804000E03M006

0.6m

266

1200657132

804000E03M008

0.8m

267

1200657133

804000E03M015

1.5m

268

1200657134

804000E03M024

2.4m

269

1200657135

804000E03M070

7m

270

1200657136

804000E03M080

8m

271

1200657137

804000E03M090

9m

272

1200657138

804000E03M180

18m

273

1200657139

804000E03M350

35m

274

1200657140

804000E03M400

40m

275

1200657141

804000E03M450

45m

276

1200657142

804000E03M500

50m

277

1200657143

804000E03M550

55m

278

1200657180

805000E03M070

7m

279

1200657264

805000H09M500

50m

280

1200657306

805000H09M100H

10m

NOTES:

✱

- Part No. with Yellow PVC overmolding

✱✱

- Part No. with Black PVC overmolding

DOCUMENT STATUS

P1

RELEASE DATE

2022/10/28

12:26:20

9

8

7

6

5

4

3

2

1

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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

120065

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

INITIAL REVISION:

DRWN: JMARSALEK

2016/01/11

APPR: RSILLER

2016/04/08

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER

2022/10/28

CHK'D: THAERDT

2022/10/28

APPR: THAERDT

2022/10/28

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

SHEET NUMBER

4 OF 4

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

OPTIONS

8 0 X 0 0 0 X X X X X X X X X

80=M12x1
Single ended

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

Heads style:
000=Plug Female Straight

Cable type: See Table

Units:
M=Meter

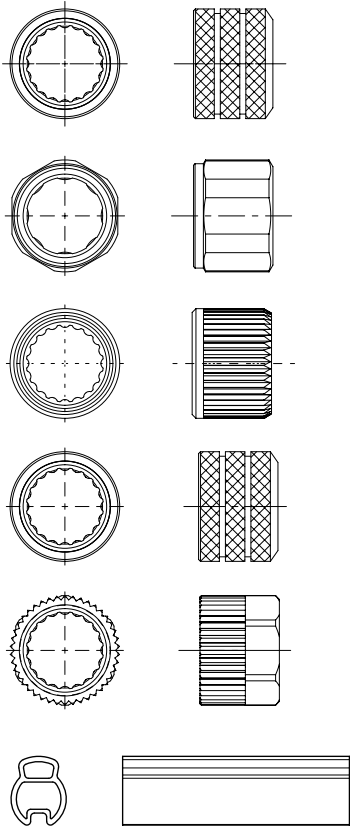
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

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

Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
9=Knurled / Hexagonal Brass Ni Plated

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

COUPLING NUTS

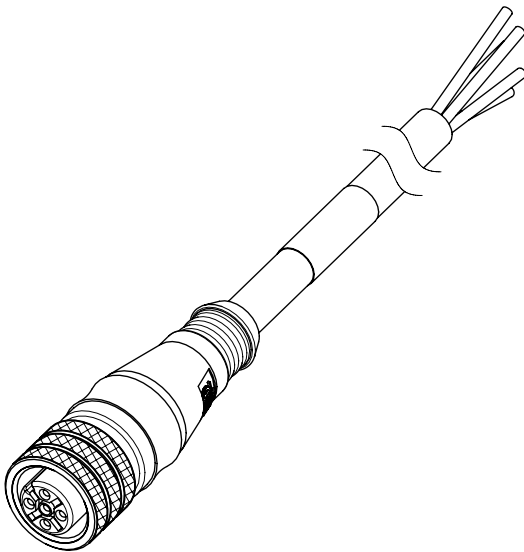


CABLE INFORMATION (for more information see Cable Data Sheet).

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.	-	-

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

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 PN ADD TO DRAWING			molex				
mm		1:1									
GENERAL TOLERANCES (UNLESS SPECIFIED)							CSE M12 XP AC FE STR XM SE UNSH				
ANGULAR TOL ± 1.0 °											
4 PLACES		±					EC NO: 726420				
3 PLACES		±		DRWN: RSILLER 2022/10/28							
2 PLACES		± 0.05		CHK'D: THAERDT 2022/10/28							
1 PLACE		± 0.3		APPR: THAERDT 2022/10/28							
0 PLACES		± 0.5		INITIAL REVISION:							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRWN: JMARSZALEK 2016/01/11			DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
				APPR: RSILLER 2016/04/08			1200651978		PSD	000	A11
				THIRD ANGLE PROJECTION			DRAWING		SHEET NUMBER		
				A3-SIZE		SERIES		MATERIAL NUMBER		CUSTOMER	
				120065				GENERAL MARKET		2 OF 4	

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	1200060001	803000E03M020	2m	36	1200060458	804000P03M0501	5m	71	1200063673	803000P03M1001	10m	106	1200658008	804000H09M050H	5m
2	1200060002	803000E03M050	5m	37	1200060461	804000P03M200	20m	72	1200063779	805000E03M300	30m	107	1200658009	804000H09M100H	10m
3	1200060003	803000E03M100	10m	38	1200060634	805000E03M020	2m	73	1200063940	804000P03M0051	0.5m	108	1200658020	805000P03M040	4m
4	1200060004	803000P03M020	2m	39	1200060638	805000E03M100	10m	74	1200064033	804000P03M120	12m	109	1200658021	808000P02M150	15m
5	1200060005	803000P03M050	5m	40	1200060646	805000P03M003	0.3m	75	1200064093	803000P03M032	3.2m	110	1200658022	808000P02M030	3m
6	1200060006	803000P03M100	10m	41	1200060647	805000P03M020	2m	76	1200064292	805000P03M200	20m	111	1200658064	804000P03M010	1m
7	1200060014	804000E03M020	2m	42	1200060649	805000P03M100	10m	79	1200064422	804000E03M120	12m	112	1200658081	805000E03M200	20m
8	1200060015	804000E03M050	5m	43	1200061337	804000E03M0205	2m	80	1200064434	804000H09M050G	5m	113	1200658165	805000E03M030	3m
9	1200060016	804000E03M100	10m	44	1200061431	805000P03M150	15m	81	1200065004	805000P03M0201	2m	114	1200658172	805000H09M020	2m
10	1200060018	804000P03M020	2m	45	1200061528	804000E03M250	25m	82	1200065006	804000H09M250G	25m	115	1200658173	805000H09M050	5m
11	1200060019	804000P03M050	5m	46	1200061765	803000P03M002	0.2m	83	1200065012	803000P03M030G	3m	116	1200658174	805000H09M100	10m
12	1200060027	803000E03M006	0.6m	47	1200061785	804000P03M006	0.6m	84	1200650951	808000P02M020	2m	117	1200658175	803000H09M020	2m
13	1200060032	804000E03M005	0.5m	48	1200061913	804000E03M300	30m	85	1200650952	808000P02M040	4m	118	1200658176	803000H09M050	5m
14	1200060034	804000P03M025	2.5m	49	1200061958	803000E03M021	2.1m	86	1200650953	808000P02M050	5m	119	1200658177	803000H09M100	10m
15	1200060107	803000E03M003	0.3m	50	1200062071	803000E03M060	6m	87	1200650954	808000P02M060	6m	120	1200658178	804000H09M020	2m
16	1200060113	803000E03M030	3m	51	1200062098	803000P03M006	0.6m	88	1200650955	808000P02M080	8m	121	1200658179	804000H09M050	5m
17	1200060116	803000E03M0505	5m	52	1200062130	804000E03M050H	5m	89	1200650956	808000P02M0801	8m	122	1200658190	804000H09M100	10m
18	1200060117	803000E03M1005	10m	53	1200062167	804000P03M100H	10m	90	1200650957	808000P02M100	10m	124	1200658197	805000P03M010	1m
19	1200060119	803000E03M150	15m	54	1200062264	804000E03M1505	15m	91	1200651769	803000P03M050G	5m	125	1200658208	805000E03M0061	✱ 0.6m
20	1200060121	803000E03M200	20m	55	1200062347	804000P03M050H	5m	92	1200651780	804000P03M050G	5m	126	1200658210	805000E03M0501	✱ 5m
21	1200060121	803000E03M200	20m	56	1200062521	805000P03M030	3m	93	1200651782	804000P03M100	10m	127	1200658219	803000E03M0201	✱ 2m
22	1200060124	803000E03M2505	25m	57	1200062772	803000P03M250	25m	94	1200651792	805000P03M050	5m	128	1200658224	808000E02M050	5m
23	1200060152	803000P03M010	1m	58	1200062811	803000P03M100H	10m	95	1200651794	808000P02M010	1m	129	1200658228	804000E03M3001	✱ 30m
24	1200060153	803000P03M030	3m	59	1200062853	804000P03M150	15m	96	1200651795	808000P02M070	7m	130	1200658244	808000H08M050	5m
25	1200060157	803000P03M150	15m	60	1200062866	804000E03M020H	2m	97	1200651817	808000P02M200	20m	131	1200658264	808000H08M100	10m
26	1200060158	803000P03M200	20m	61	1200062992	804000E03M200H	20m	98	1200651818	808000P02M250	25m	133	1200658277	808000E02M020	2m
27	1200060426	804000E03M010	1m	62	1200063121	804000P03M0053	0.5m	99	1200651820	808000P02M300	30m	134	1200658278	808000E02M100	10m
28	1200060427	804000E03M0201	✱✱ 2m	63	1200063224	804000E03M003	0.3m	100	1200651978	805000E03M050	5m	135	1200658288	804000E03M050G	5m
29	1200060428	804000E03M030	3m	65	1200063314	805000E03M010	1m	101	1200652143	804000P03M040	4m	136	1200658309	808000E02M0501	5m
30	1200060429	804000E03M0501	✱ 5m	66	1200063402	804000P03M003	0.3m	102	1200652144	804000P03M060	6m	137	1200658321	804000P03M005	0.5m
31	1200060430	804000E03M0505	5m	67	1200063407	804000E03M1001	✱ 10m	103	1200652154	805000P03M060	6m	138	1200658331	805000E03M050H	5m
32	1200060431	804000E03M150	15m	68	1200063415	803000P03M0707	7m	104	1200655073	808000P02M003	0.3m	139	1200658350	803000E03M1001	✱ 10m
33	1200060432	804000E03M200	20m	69	1200063443	804000E03M030H	3m	105	1200655081	805000E03M150	15m				
34	1200060456	804000P03M0201	2m	70	1200063647	804000E03M2001	20m								
35	1200060457	804000P03M030	3m												

NOTES:

✱ - Part No. with Yellow PVC overmolding

✱✱ - Part No. with Black PVC overmolding

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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

120065

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER 2022/10/28

CHK'D: THAERDT 2022/10/28

APPR: THAERDT 2022/10/28

INITIAL REVISION:

DRWN: JMARSZALEK 2016/01/11

APPR: RSILLER 2016/04/08

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

3 OF 4

DOCUMENT STATUS

P1

RELEASE DATE

2022/10/28 12:26:20

9

8

7

6

5

4

3

2

1

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
142	1200658492	804000P03M100G	10m	176	1200658780	805000H09M200	20m	217	1200659123	804000P03M100HY	10m
143	1200658502	805000E03M005	0.5m	177	1200658782	804000E03M060	6m	218	1200659144	805000H09M300	30m
144	1200658503	805000E03M0201	2m	178	1200658812	808000E02M150	15m	219	1200659187	808000E02M4001	40m
145	1200658511	808000E02M010	1m	179	1200658813	808000H08M025	2.5m	221	1200659200	808000E02M250H	25m
146	1200658525	808000P02C350	0.35m	181	1200658880	804000H09M200	20m	222	1200659207	805000E03C230	0.23m
147	1200658545	804000P03M015	1.5m	182	1200658882	804000E03M100H	10m	223	1200659214	805000P03M300	30m
148	1200658550	804000H09M015	1.5m	183	1200658887	803000E03M020H	2m	224	1200659256	808000E02M200	20m
149	1200658551	808000E02M1001	10m	184	1200658889	803000E03M050H	5m	225	1200659279	805000E03M007	0.7m
150	1200658562	803000E03M010	1m	185	1200658891	804000H09M003	0.3m	226	1200659280	805000E03M350	35m
151	1200658563	803000E03M040	4m	186	1200658894	804000E03M020G	2m	227	1200659282	805000P03M005	0.5m
152	1200658570	804000E03M040	4m	187	1200658896	804000E03M075	7.5m	228	1200659283	805000P03M007	0.7m
153	1200658590	808000E02M030	3m	188	1200658899	808000H08M250	25m	229	1200659302	804000P03M1005	10m
154	1200658591	808000E02M040	4m	192	1200658927	804000P02M050	5m	230	1200659326	805000P03M020H	2m
155	1200658592	805000E03M040	4m	194	1200658930	808000H08M150	15m	231	1200659329	805000P03M150H	15m
156	1200658609	804000P02M020	2m	196	1200658983	804000E03M002	0.2m	232	1200659330	805000P03M200H	20m
157	1200658610	803000P03M040	4m	197	1200658984	808000E02M2501	25m	233	1200659334	808000P02M200H	20m
161	1200658632	805000H09M010	1m	199	1200658991	805000P03M100H	10m	234	1200659340	804000P03M1501	15m
162	1200658633	805000H09M015	1.5m	200	1200659038	804000E02M100	10m	235	1200659341	804000P03M2501	25m
163	1200658634	805000H09M030	3m	201	1200659040	804000E02M050	5m	236	1200659368	805000E03M015	1.5m
164	1200658635	805000H09M040	4m	202	1200659052	808000E02M2001	20m	237	1200659370	804000P03M020Y	2m
165	1200658636	803000H09M010	1m	203	1200659053	808000E02M3001	30m	238	1200659387	808000E02M500	50m
166	1200658637	803000H09M015	1.5m	209	1200659088	804000P03M050HY	5m	239	1200659388	804000P03M012	1.2m
167	1200658638	803000H09M030	3m	210	1200659092	808000P02M050Y	5m	241	1200659397	808000P02M100Y	10m
168	1200658639	803000H09M040	4m					242	1200659399	808000P02M015	1.5m
169	1200658640	804000H09M010	1m					243	1200659474	804000P03M250	25m
170	1200658641	804000H09M040	4m					244	1200659475	804000P03M300	30m
171	1200658642	808000H08M010	1m					245	1200659509	805000E03M600	60m
172	1200658643	808000H08M015	1.5m								
173	1200658644	808000H08M020	2m								
174	1200658645	808000H08M030	3m								
175	1200658646	808000H08M040	4m								

NOTES:

* - Part No. with Yellow PVC overmolding

** - Part No. with Black PVC overmolding

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

120065

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER 2022/10/28

CHK'D: THAERDT 2022/10/28

APPR: THAERDT 2022/10/28

INITIAL REVISION:

DRWN: JMARSZALEK 2016/01/11

APPR: RSILLER 2016/04/08

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

DOCUMENT STATUS

P1

RELEASE DATE

2022/10/28 12:26:20

10

9

8

7

6

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3

2

1

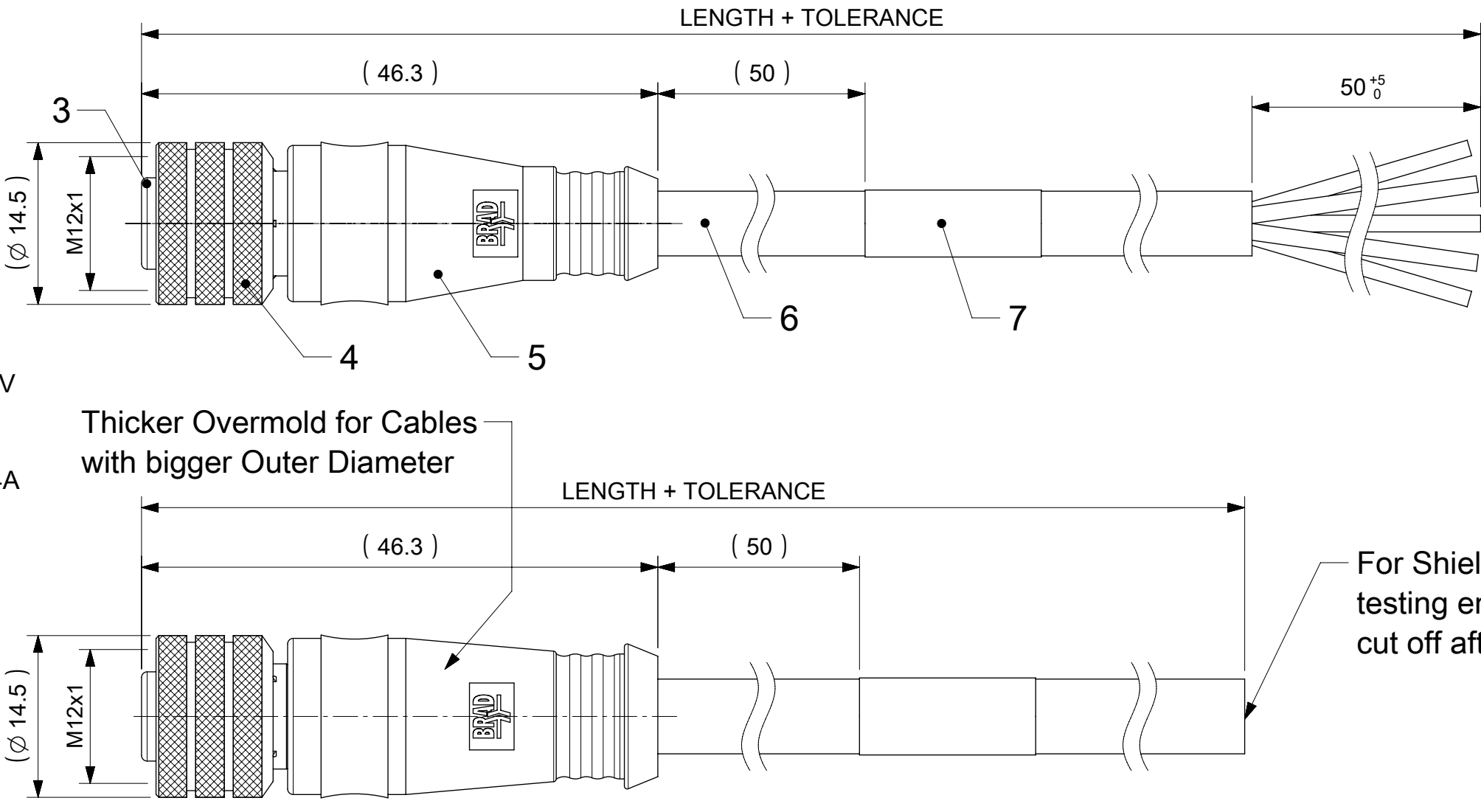
FORMAT: master-b-prod-A3

REVISION: J1

DATE: 2021/05/01

FEMALE 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 OR YELLOW/GREEN	4	BLACK	4	BLACK	4	YELLOW
5	---	5	---	5	GREY OR YELLOW/GREEN	5	GREY
						6	PINK
						7	BLUE
						8	RED

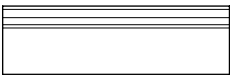
CODING REQUIRED TO IEC 61076-2-101

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

7	1	LABEL YELLOW	VINYL	---	
	-	PRINTING FOR CABLES lxx	---	---	
6	-	CABLE	SEE SHEET 2	---	
5	-	OVERMOLDING BLACK	TPU	---	
4	1	COUPLING NUT FEMALE	BRASS	NICKEL	
3	1	INSERT FEMALE BLACK	PUR	---	
2	1	ORING RED	FPM	---	
1	3 / 4 / 5 / 8	CONTACT M12 FEMALE	BRASS	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		CURRENT REV DESC: ADDED NEW P/N: 1200651287; 1200651293; 1200651300; 1200652022			
mm		molex CSE M12 XP AC FE STR XM SE UNSH			
SCALE 2:1					
GENERAL TOLERANCES (UNLESS SPECIFIED)		PRODUCT CUSTOMER DRAWING			
ANGULAR TOL ± 1.0 °					
4 PLACES ±		EC NO: 775470			
3 PLACES ±		DRWN: AKABADI 2023/10/22			
2 PLACES ± 0.05		CHK'D: THAERDT 2024/01/30			
1 PLACE ± 0.3		APPR: THAERDT 2024/01/30			
0 PLACES ± 0.5		INITIAL REVISION:			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JMARSZALEK 2016/01/12			
		APPR: RSILLER 2016/04/08			
THIRD ANGLE PROJECTION		DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
		1200658605	PSD	000	A7
DRAWING		SHEET NUMBER	MATERIAL NUMBER	CUSTOMER	
A3-SIZE		120065	SEE PART LIST	GENERAL MARKET	
				1 OF 4	

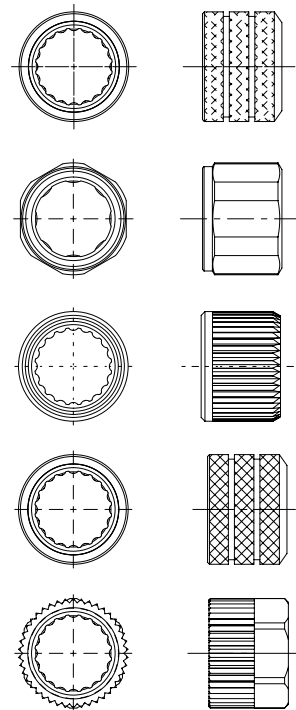
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

OPTIONS



H= 2 pcs. of I/D Carrier
PVC Transparent
(Cables lxx & P82 always
with 2 pcs. of I/D Carrier
even if no H in
Engineering No.)

COUPLING NUTS



80=M12x1
Single ended

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

Heads style:
000=Plug Female Straight

Cable type: See Table

Units:
M=Meter
C=Centimeter

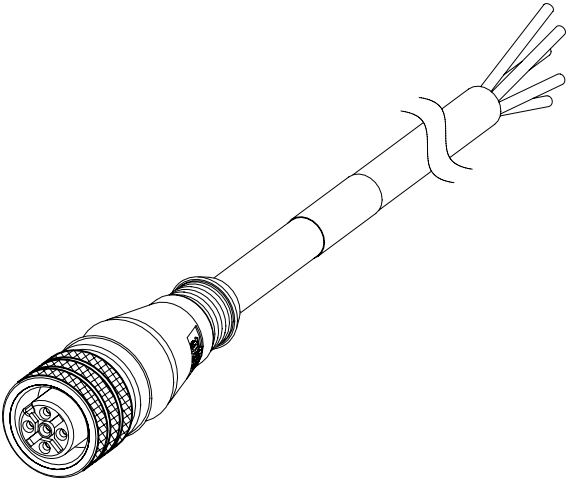
Length
Examples:
005=0.5 unit
010=1 unit
100=10 units

Overmold color:
Blank (Standard)=Black TPU
Blank=Yellow TPU for cables A09,S19,S20,S26
Blank=Yellow TPE-E for cables K03,K05
A=Grey / G=Black / Y=Yellow

Coupling Nut:
Blank (Standard) & 3=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
9=Knurled / Hexagonal Brass Ni Plated SW13

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
E13	3	18AWG	PVC YELLOW	UL 2661/1731	I/II A/B 80°C/300V	-	-	-	-
E52	3 / 4 / 8	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E63	5	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
H12	4	0.50mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-50°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000, Temp max 60°C	-
H69	4	0.20mm²	PUR GREY LS0H	-	-	-	-	-	-
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	-	-
I04	4	0.50mm²	PVC CEI GREY	-	-	-25°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	-	-
K03	4 / 5	0.34mm²	TPE YELLOW	UL JEC 60332-1 or PLCT	I/II 90°C/300V	-	-	-	-
K05	3 / 4 / 5	0.34mm²	TPE YELLOW	UL ITC E195601 or PLC	I/II A/B 90°C/300V	-	-	-	-
P04	4	0.50mm²	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-	-
P12	3 / 5	0.50mm²	PUR BLACK	-	-	-30°C to +90°C	-5°C to +90°C	-	-
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



SCALE 1:1

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

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	

CURRENT REV DESC: ADDED NEW P/N:
1200651287; 1200651293; 1200651300; 1200652022

EC NO: 775470
DRWN: AKABADI
CHK'D: THAERDT
APPR: THAERDT

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

2023/10/22

2024/01/30

2024/01/30

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

DOC TYPE

DOC PART

REVISION

1200658605

PSD

000

A7

SEE PART LIST

GENERAL MARKET

2 OF 4

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

DOCUMENT STATUS

P1

RELEASE DATE

2024/01/30

10:40:43

9

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6

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4

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2

1

10	9	8	7	6	5	4	3	2	1
PART LIST									
MOLEX P/N			ENGINEERING No.		L [mm]				
3P CABLE E13									
1200658524	803000E13M030		3000						
3P CABLE E52									
1200651767	803000E52M050A		5000						
1200658293	803000E52M3001A		30000						
4P CABLE E52									
1200064254	804000E52M010A		1000						
1200651778	804000E52M050A		5000						
1200651857	804000E52M100A		10000						
1200060436	804000E52M200A		20000						
1200061620	804000E52M3001A		30000						
1200063819	804000E52K0011A		100000						
8P CABLE E52									
1200657335	808000E52M005		500						
1200658236	808000E52M020		2000						
1200062049	808000E52M050		5000						
1200659997	808000E52M100		10000						
5P CABLE E63									
1200658015	805000E63M020A		2000						
1200061936	805000E63M050A		5000						
4P CABLE H12									
1200659593	804000H12M020		2000						
1200659767	804000H12M0209		2000						
1200659768	804000H12M0309		3000						
1200659113	804000H12M050		5000						
1200659769	804000H12M0509		5000						
1200659271	804000H12M100		10000						
1200659770	804000H12M1009		10000						
3P CABLE H69									
1200062094	803000H69M050		5000						
4P CABLE H69									
1200061680	804000H69M050		5000						
1200658242	804000H69M300		30000						
8P CABLE I02									
1200658677	808000I02M010		1000						
1200658678	808000I02M020		2000						
1200658679	808000I02M030		3000						
1200658680	808000I02M040		4000						
1200658681	808000I02M050		5000						
1200658682	808000I02M100		10000						

NOTES:

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- Part No. with Yellow PVC overmolding

DOCUMENT STATUS	P1	RELEASE DATE	2024/01/30	10:40:43																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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