

# 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

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

DIMENSION UNITS: mm SCALE: 2:1

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

MATERIAL NUMBER: SEE TABLE

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 4

EC NO: 732259

DRWN: SANTHN 2022/12/20

CHK'D: GGA 2022/12/21

APPR: GGA 2022/12/21

INITIAL REVISION:

DRWN: JMARSZALEK 2016/01/12

APPR: RSILLER 2016/04/08

DOCUMENT NUMBER: 1200659185

DOC TYPE: PSD

DOC PART: 000

REVISION: A11

**molex**

CSE M12 XP AC MA STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

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

8 0 X 0 0 6 X X X X X X X X

OPTIONS

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	0.25mm <sup>2</sup>	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	0.34mm <sup>2</sup>	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	0.25mm <sup>2</sup>	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	0.34mm <sup>2</sup>	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	0.25mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm <sup>2</sup>	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
A09	3	0.34mm <sup>2</sup>	PVC YELLOW	-	-	-	-	-	-
K03	5	0.82mm <sup>2</sup>	TPE YELLOW	-	-	-	-	-	-
K05	4	0.38mm <sup>2</sup>	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



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DIMENSION UNITS	SCALE	CURRENT REV DESC: REMOVED OBSOLETE PART NUMBER AS PER PCN#512871.	<b>molex</b>		
mm	1:1		CSE M12 XP AC MA STR XM SE UNSH		
GENERAL TOLERANCES (UNLESS SPECIFIED)			PRODUCT CUSTOMER DRAWING		
ANGULAR TOL	± 1.0 °	EC NO: 732259	DOCUMENT NUMBER	DOC TYPE	DOC PART
4 PLACES	±	DRWN: SANTHN	1200659185	PSD	000
3 PLACES	±	CHK'D: GGA			A11
2 PLACES	± 0.05	APPR: GGA			
1 PLACE	± 0.3	INITIAL REVISION:			
0 PLACES	± 0.5	DRWN: JMARSZALEK			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	SERIES	MATERIAL NUMBER	CUSTOMER
			A3-SIZE	120065	GENERAL MARKET
				SEE TABLE	2 OF 4



# PART LIST

No.	Part No.	Engineering No.	Cable Length
141	1200659191	804006P03M300	30m
142	1200659192	804006P03M350	35m
143	1200659193	804006P03M400	40m
144	1200659194	804006E03M250	25m
145	1200659195	804006E03M300	30m
146	1200659196	804006E03M350	35m
147	1200659197	804006E03M400	40m
148	1200659198	804006E03M450	45m
149	1200659224	805006P03M200	20m
150	1200659225	805006P03M300	30m
151	1200659254	804006E03M500	50m
152	1200659281	805006P03M150	15m
153	1200659285	805006E03M150	15m
154	1200659316	805006P03M005H	0.5m
155	1200659317	805006P03M007H	0.7m
156	1200659318	805006P03M010H	1m
157	1200659319	805006P03M020H	2m
158	1200659320	805006P03M050H	5m
159	1200659321	805006P03M100H	10m
160	1200659322	805006P03M150H	15m
161	1200659323	805006P03M200H	20m
162	1200659324	805006P03M300H	30m
163	1200659325	805006P03M350H	35m
164	1200659367	805006E03M015	1.5m
165	1200659454	805006E03M045	4.5m
166	1200659455	805006E03M075	7.5m
167	1200659513	805006E03M030H	3m
168	1200659514	805006E03M045H	4.5m
169	1200659515	805006E03M075H	7.5m
170	1200659550	804006E03M120H	12m
171	1200659551	805006E03M010H	1m
172	1200659557	804006P03M003	0.3m
173	1200659612	804006P03M080	8m
174	1200659692	803006E02M020	2m
175	1200659983	804006E02M075	7.5m

No.	Part No.	Engineering No.	Cable Length
176	1200659991	804006E02M0705	7m
177	1200656021	804006H09M050H	5m
178	1200659539	808006E02M100	** 10m
179	1200656293	803006E03M080	8m
180	1200656294	803006E03M120	12m
181	1200656295	804006E03M080	8m
182	1200656297	808006H08M005	0.5m
183	1200650843	803006A09M0208	* 2m
184	1200651374	805006K03M020	2m
185	1200652151	805006K03M050	5m
186	1200651129	804006K05M020	2m
187	1200651131	804006K05M050	5m
188	1200651133	804006K05M100	10m
189	1200657191	805006E03M005	0.5m
190	1200656974	805006H09M003	0.3m
191	1200657157	804006P03M002	0.2m
192	1200657158	804006P03M005	0.5m
193	1200657159	804006E03M015	1.5m
194	1200657263	805006H09M250	25m
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No.	Part No.	Engineering No.	Cable Length
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No.	Part No.	Engineering No.	Cable Length
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NOTES:  
 \* - Part No. with Yellow PVC overmolding  
 \*\* - Part No. with Black PVC overmolding

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3 PLACES	±	CHK'D: GGA		2022/12/21		INITIAL REVISION:				
2 PLACES	± 0.05	APPR: GGA		2022/12/21		DRWN: JMARSZALEK				
1 PLACE	± 0.3	APPR: RSILLER		2016/01/12		SERIES				
0 PLACES	± 0.5			2016/04/08		MATERIAL NUMBER				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING	SERIES	CUSTOMER		SHEET NUMBER		
				A3-SIZE	120065	SEE PART LIST		GENERAL MARKET		4 OF 4