

# FEMALE PLUG M12 90° ANGLED



**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: CABLE INFORMATION ON SHEET 2



## 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

## FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
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

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 ± 0.1  
 0 PLACES ± 0.2

EC NO: 726454  
 DRWN: LIKITV 2022/09/27  
 CHK'D: GGA 2022/11/30  
 APPR: GGA 2022/11/30

INITIAL REVISION:  
 DRWN: JMARSZALEK 2016/01/11  
 APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE SERIES: 120065 MATERIAL NUMBER: SEE PART LIST CUSTOMER: GENERAL MARKET SHEET NUMBER: 1 OF 5

DOCUMENT NUMBER: 1200658471 DOC TYPE: PSD DOC PART: 000 REVISION: A12

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

CODING REQUIRED TO IEC 61076-2-101

DOCUMENT STATUS	P1	RELEASE DATE	2022/11/30	11:33:43
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ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

8 0 X 0 0 1 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:  
001=Plug Female  
90° Angled

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

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

OPTIONS

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 TPU for cables A09,S19,S20,S26  
Blank=Yellow TPE-E for cables K03,K05  
A=Grey / G=Black / Y=Yellow  
Blank=Yellow PVC for cable E13  
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

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
A09	3 / 4 / 5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661	I/II A/B 90°C/300V	-	-	-	-
E13	3	18AWG	PVC YELLOW	UL 2661/1731	I/II A/B 80°C/300V	-	-	-	-
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.	-	-
E52	3 / 4 / 8	0.34mm <sup>2</sup>	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
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	-
H12	4	0.50mm <sup>2</sup>	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	0.20mm <sup>2</sup>	PUR GREY LS0H	-	-	-	-	-	-
I02	3 / 4 / 8	0.25mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I04	4	0.50mm <sup>2</sup>	PVC CEI GREY	-	-	-25°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm <sup>2</sup>	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
K03	5	18 AMG	TPE YELLOW	PLTC 105C E470965	I/II A/B 90°C/300V	-	-	-	-
K05	3 / 4 / 5	0.34mm <sup>2</sup>	TPE YELLOW	UL ITC E195601 or PLC	I/II A/B 90°C/300V	-	-	-	-
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.	-	-
P12	3 / 5	0.50mm <sup>2</sup>	PUR BLACK	-	-	-30°C to +90°C	-5°C to +90°C	-	-
P19	8	0.25mm <sup>2</sup>	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 <sup>2</sup>	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
P82	3 / 4 / 5	0.34mm <sup>2</sup>	PUR IRR ORANGE	-	-	-50°C to +105°C, 5xO.D.	-40°C to +105°C, 7.5xO.D.	-	-
S19	8	0.25mm <sup>2</sup>	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 <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm <sup>2</sup>	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

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DIMENSION UNITS: mm SCALE: 1:1

CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#510807.

**molex**

CSE M12 XP AC FE RA XM SE UNSH

PRODUCT CUSTOMER DRAWING

1200658471

PSD 000 A12

2022/09/27

2022/11/30

2022/11/30

2016/01/11

2016/04/08

A3-SIZE 120065

SEE PART LIST GENERAL MARKET

2 OF 5





# PART LIST

No.	Part No.	Engineering No.	Cable Length
281	1200651949	804001A09M0602	6m
282	1200651983	805001A09M030	3m
283	1200651985	803001A09M0202	2m
284	1200652078	804001A09M0302	3m
285	1200652079	805001A09M300	30m
286	1200652111	805001A09M150	15m
287	1200652122	805001A09M0502	5m
288	1200652170	804001A09C2508	0.25m
289	1200652197	805001A09M1508	15m
290	1200652216	804001A09M0708	7m
291	1200652419	804001A09M2008	20m
292	1200652439	804001A09M0108	1m
293	1200659215	805001A09M010	1m
294	1200659216	805001A09M200	20m
295	1202010010	804001A09M250	25m
296	1200060221	803001S20M020	2m
297	1200060222	803001S20M030	3m
298	1200060224	803001S20M050	5m
299	1200659374	804001S20M350	35m
300	1200659774	808001S19M150	15m
301	1200659810	805001S26M200	20m
302	1200060225	803001S20M100	10m
303	1200060527	804001S20M010	1m
304	1200060528	804001S20M020	2m
305	1200060529	804001S20M030	3m
306	1200060531	804001S20M050	5m
307	1200061612	804001S20M030H	3m
308	1200062121	804001S20M060	6m
309	1200062148	804001I20M160	16m
310	1200062160	804001S20M100H	10m
311	1200062374	804001S20M020H	2m
312	1200062502	804001S20M050H	5m
313	1200062589	804001S20M010H	1m
314	1200062919	804001P20M100	10m
315	1200062922	804001P20M050	5m

No.	Part No.	Engineering No.	Cable Length
316	1200063109	804001S20M1001	10m
317	1200063165	805001P20M050	5m
318	1200064184	804001P20M250	25m
319	1200064268	808001S19M100	10m
320	1200064380	804001S20M0201	2m
321	1200064381	804001S20M0501	5m
322	1200064452	804001S20M3001	30m
323	1200064457	803001S20M0501	5m
324	1200650910	804001S20M100	10m
325	1200655008	808001P19M050	5m
326	1200658090	805001S26M100	10m
327	1200658187	804001S20M200	20m
328	1200658203	805001S26M1001	10m
329	1200658276	804001I20M100	10m
330	1200658287	803001I20M100	10m
331	1200658324	804001P20M030	3m
332	1200658328	808001P19M100	10m
333	1200658510	804001S20M2001	20m
334	1200658544	808001P19M250	25m
335	1200658547	803001P20M150	15m
336	1200658875	803001S20M0201G	2m
337	1200659029	804001S20M150	15m
338	1200659114	805001S26M050	5m
339	1200659156	805001S26M2001	20m
340	1200659240	803001P20M100HY	10m
341	1200657238	805001E03M250	25m
342	1200657145	804001P03M006	0.6m
343	1200657146	804001P03M070	7m
344	1200657147	804001P03M080	8m
345	1200657148	804001E03M003	0.3m
346	1200657149	804001E03M006	0.6m
347	1200657150	804001E03M080	8m
348	1200657185	805001E03M015	1.5m
349	1200658573	805001E03M010	1m
350	1200657265	805001H09M500	50m

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DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#510807.							
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)									
ANGULAR TOL	± 1.0 °	EC NO: 726454 DRWN: LIKITV 2022/09/27 CHK'D: GGA 2022/11/30 APPR: GGA 2022/11/30							
4 PLACES	±								
3 PLACES	±	PRODUCT CUSTOMER DRAWING							
2 PLACES	± 0.05								
1 PLACE	± 0.1	INITIAL REVISION:				DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
0 PLACES	± 0.2	DRWN: JMARSZALEK 2016/01/11	2016/04/08	1200658471		PSD	000	A12	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER	
			A3-SIZE	120065	SEE PART LIST	GENERAL MARKET		5 OF 5	