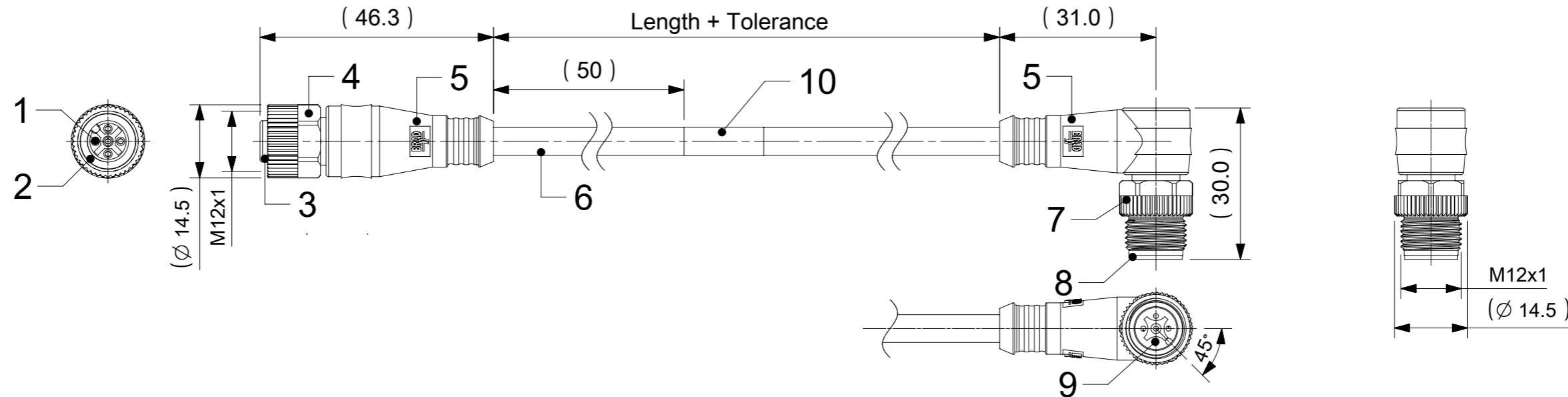
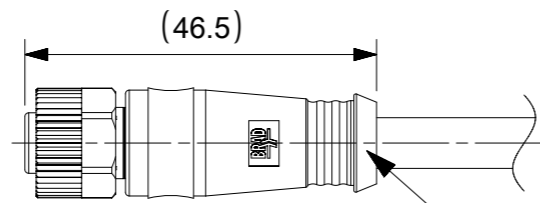


# FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 90° ANGLED

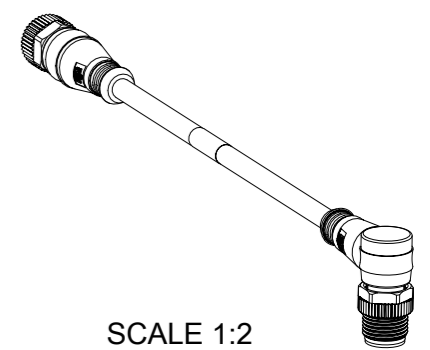
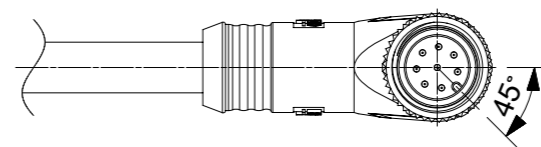
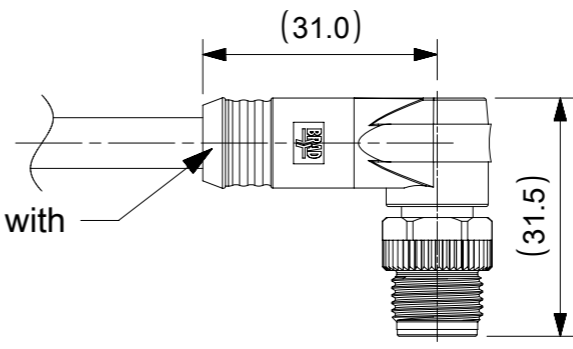


**NOTES:**

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: -25°C / +85°C



Thicker Overmold for Cables with bigger Outer Diameter



**CONTACTS POSITION FRONT VIEW:**

CABLE	3 CONTACTS	4 CONTACTS	5 CONTACTS	5 CONTACTS	8 CONTACTS					
	B30, B55	B30, B33, B36, B55	B30, B33, B36, B55	B42	B41, B49					
FEMALE										
MALE										
CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	WHITE
	2	---	2	WHITE	2	WHITE	2	WHITE	2	BROWN
	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	GREEN
	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	YELLOW
			5	---	5	GREY	5	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**

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
11	SEE PN MATRIX	I/D CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	---
9	8	CONTACT M12 MALE	BRASS	SELECTIVE GOLD
	3 / 4 / 5		COPPER	OVER NICKEL
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE SW13	BRASS	NICKEL
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING BLACK	TPU	---
4	1	COUPLING NUT FEMALE SW13	BRASS	NICKEL
3	1	INSERT FEMALE BLACK	TPU	---
2	1	ORING RED	FPM	---
			---	---
1	8	CONTACT M12 FEMALE	BRASS	SELECTIVE GOLD
			BRONZE	OVER NICKEL

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

FUNCTIONAL SYMBOLS: DIMENSION UNITS: mm SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED): ANGULAR TOL ± 1.0°

DIVISIONAL SYMBOLS: 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: 120066

MATERIAL NUMBER: SEE PART LIST

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 3

EC NO: 684766

DRWN: SSM 2021/11/03

CHK'D: RSILLER 2021/11/10

APPR: RSILLER 2021/11/10

INITIAL REVISION: DRWN: JMARSZALEK 2016/10/17

APPR: RSILLER 2016/10/18

DOCUMENT NUMBER: 1200668920

DOC TYPE: PSD

DOC PART: 000

REVISION: A2

**molex**

CSE M12 XP AC FE RA WSOR MA RA XM DE

PRODUCT CUSTOMER DRAWING

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

OPTIONS

8 8 X 0 3 2 X X X X X X X X

88=M12x1  
Double ended

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

Heads style:  
032=Plug Female Straight  
to Plug Male 90°

Cable type: See Table

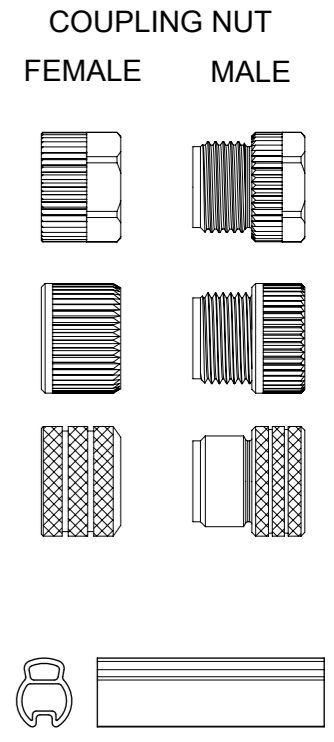
Units:  
M=Meter  
C=Centimeter

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

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

Coupling Nut:  
Blank (Standard)=Knurled/Hex Brass, Ni Plated  
5=Knurled Derlin  
7=Knurled Brass Ni Plated, Teflon Coated

H= 2 pcs. of I/D Carrier PVC Transparent  
(Cables B36 always with 2 pcs. I/D Carrier)



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: TEMP. / BENDING RADIUS	DRAG CHAIN	CABLE PRODUCT SPECIFICATION	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm <sup>2</sup>	TPU Black	UL 21215/758	C22.2 I/II A/B 80°/600V	-40°C to +90°C >5xO.D.	-25°C to +80°C >7.5xO.D.	-5°C to +60°C >7.5xO.D.	up to 5 000 000 cycles at temp 20°C	1552200001	SD-120209-001
B33	4 / 5	0.34mm <sup>2</sup>	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm <sup>2</sup>	TPU Orange								SD-120209-001
B41	8	0.25mm <sup>2</sup>	TPU Black								SD-120209-006
B42	5	0.34mm <sup>2</sup>	TPU Black								SD-120209-001
B49	8	0.25mm <sup>2</sup>	TPU Orange								SD-120209-006
B55	3 / 4 / 5	0.34mm <sup>2</sup>	TPU Yellow								n/a

CABLE LENGTH TOLERANCES

LENGTH	TOLERANCE
0m-1m	+40 mm
>1m-5m	+60 mm
>5m-10m	+80 mm
>10m-20m	+140 mm
>20m-30m	+160 mm
>30m	+1% length

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

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	SCALE	CURRENT REV DESC:				
	mm	1:1					
DIVISIONAL SYMBOLS	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	SEE PART LIST	GENERAL MARKET	2 OF 3

EC NO: 684766  
DRWN: SSM 2021/11/03  
CHK'D: RSILLER 2021/11/10  
APPR: RSILLER 2021/11/10

INITIAL REVISION:  
DRWN: JMARSZALEK 2016/10/17  
APPR: RSILLER 2016/10/18

**molex**

CSE M12 XP AC FE RA WSOR MA RA XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER: 1200668920  
DOC TYPE: PSD  
DOC PART: 000  
REVISION: A2

# PART LIST

No.	Part No.	Engineering No.	Cable Length
1	1200668918	883032B30M006	0.6m
2	1200668919	883032B30M010	1m
3	1200668920	883032B30M020	2m
4	1200668921	883032B30M030	3m
5	1200668922	883032B30M050	5m
6	1200668923	883032B30M100	10m
7	1200668924	884032B30M006	0.6m
8	1200668925	884032B30M010	1m
9	1200668926	884032B30M020	2m
10	1200668927	884032B30M030	3m
11	1200668928	884032B30M050	5m
12	1200668929	884032B30M100	10m
13	1200668930	885032B42M006	0.6m
14	1200668931	885032B42M010	1m
15	1200668932	885032B42M020	2m
16	1200668933	885032B42M030	3m
17	1200668934	885032B42M050	5m
18	1200668935	885032B42M100	10m
19	1200668936	888032B41M006	0.6m
20	1200668937	888032B41M010	1m
21	1200668938	888032B41M020	2m
22	1200668939	888032B41M030	3m
23	1200668940	888032B41M050	5m
24	1200668941	888032B41M100	10m
25	1200669003	885032B30M006	0.6m
26	1200669004	885032B30M010	1m
27	1200669005	885032B30M020	2m
28	1200669006	885032B30M030	3m
29	1200669007	885032B30M050	5m
30	1200669008	885032B30M100	10m
31	1200669075	884032B36M0057Y	0.5m
32	1200669076	884032B36M0107Y	1m
33	1200669077	884032B36M0157Y	1.5m
34	1200669078	884032B36M0207Y	2m
35	1200669079	884032B36M0307Y	3m

No.	Part No.	Engineering No.	Cable Length
36	1200669080	884032B36M0407Y	4m
37	1200669081	884032B36M0507Y	5m
38	1200669082	884032B36M0607Y	6m
39	1200669083	884032B36M0807Y	8m
40	1200669084	884032B36M1007Y	10m
41	1200669085	884032B36M1207Y	12m
42	1200669086	884032B36M1507Y	15m
43	1200669087	884032B36M2007Y	20m
44	1200669088	884032B36M2507Y	25m
45	1200669089	884032B36M3007Y	30m
46	1200669090	885032B36M0057Y	0.5m
47	1200669091	885032B36M0107Y	1m
48	1200669092	885032B36M0207Y	2m
49	1200669093	885032B36M0307Y	3m
50	1200669094	885032B36M0407Y	4m
51	1200669095	885032B36M0507Y	5m
52	1200669096	885032B36M0607Y	6m
53	1200669097	885032B36M0807Y	8m
54	1200669098	885032B36M1007Y	10m
55	1200669099	885032B36M1207Y	12m
56	1200669100	885032B36M1507Y	15m
57	1200669101	885032B36M1807Y	18m
58	1200669102	885032B36M2007Y	20m
59	1200669103	885032B36M2507Y	25m
60	1200669104	885032B36M3007Y	30m
61	1200669627	884032B33M010A	1m
62	1200669628	884032B33M020A	2m
63	1200669629	884032B33M030A	3m
64	1200669630	884032B33M050A	5m
65	1200669631	884032B33M100A	10m
66	1200669632	884032B33M150A	15m
67	1200669633	884032B33M200A	20m
68	1200669686	885032B33M010A	10m
69	1200669687	885032B33M020A	20m
70	1200669688	885032B33M030A	30m

No.	Part No.	Engineering No.	Cable Length
71	1200669689	885032B33M050A	5m
72	1200669690	885032B33M100A	10m
73	1200669691	885032B33M150A	15m
74	1200669692	885032B33M200A	20m
75	1200669634	884032B30M150	15m
76	1200669635	884032B30M200	20m
77	1200669693	885032B30M150	15m
78	1200669694	885032B30M200	20m
79	1200669636	884032B55M010Y	10m
80	1200669637	884032B55M020Y	2m
81	1200669638	884032B55M030Y	3m
82	1200669639	884032B55M050Y	5m
83	1200669640	884032B55M100Y	10m
84	1200669641	884032B55M150Y	15m
85	1200669642	884032B55M200Y	20m
86	1200669695	885032B55M010Y	1m
87	1200669696	885032B55M020Y	2m
88	1200669697	885032B55M030Y	3m
89	1200669698	885032B55M050Y	5m
90	1200669699	885032B55M100Y	10m
91	1200669700	885032B55M150Y	15m
92	1200669701	885032B55M200Y	20m
93	1200669889	884032B33M005A	0.5m
94	1200669912	885032B33M005A	0.5m
95	1200669913	885032B33M300A	30m
96	1200669914	885032B33M400A	40m
97	1200669915	885032B33M500A	50m
98			
99			
100			
101			
102			
103			
104			
105			

No.	Part No.	Engineering No.	Cable Length
106			
107			
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<b>FUNCTIONAL SYMBOLS</b> = 0 = 0 = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS: <b>mm</b>   SCALE: <b>1:1</b>		CURRENT REV DESC:  EC NO: 684766 DRWN: SSM CHK'D: RSILLER APPR: RSILLER	  CSE M12 XP AC FE RA WSOR MA RA XM DE		
	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5		INITIAL REVISION: DRWN: JMARSZALEK APPR: RSILLER					
<b>DIVISIONAL SYMBOLS</b>	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: <b>A3-SIZE</b>	SERIES: <b>120066</b>	MATERIAL NUMBER: <b>SEE PART LIST</b>	CUSTOMER: <b>GENERAL MARKET</b>	SHEET NUMBER: <b>3 OF 3</b>