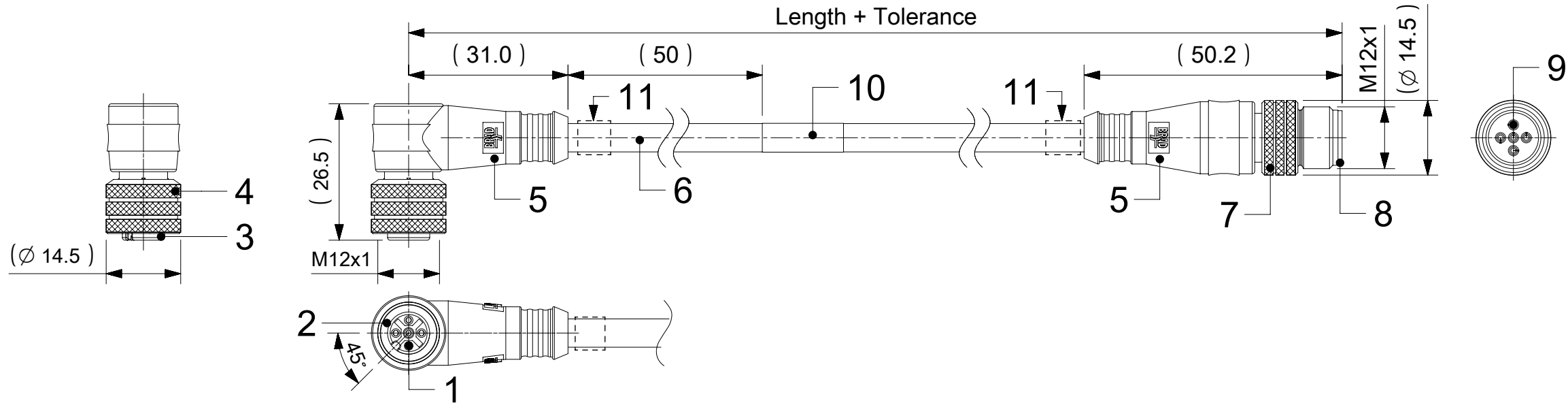


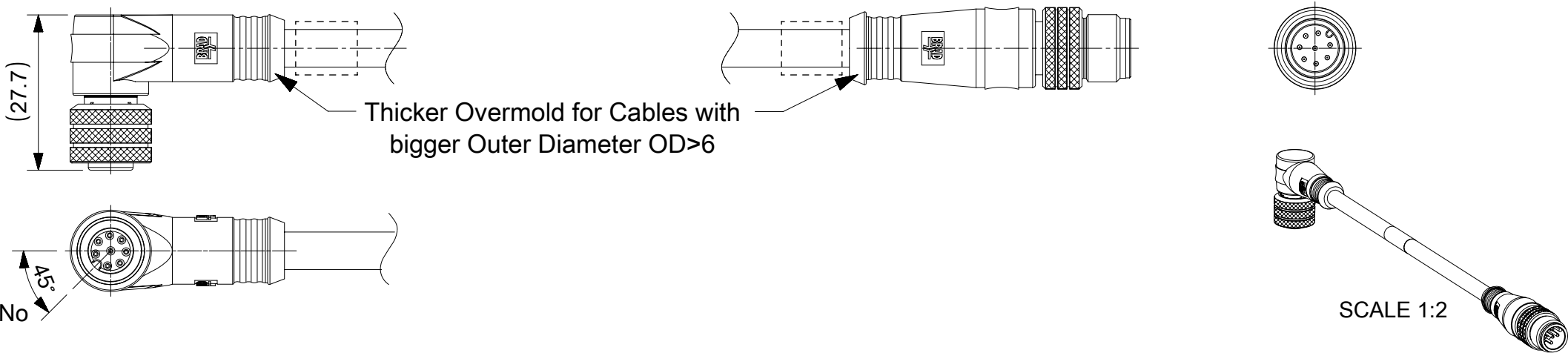
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



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	
FEMALE								
MALE								
CONNECTIONS	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
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				
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			DOCUMENT NUMBER				
0 PLACES		± 0.5		INITIAL REVISION:						1200660973	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DRWN: JMARSZALEK 2016/10/06			DOC TYPE				
				APPR: RSILLER 2016/12/08						DOC PART	
THIRD ANGLE PROJECTION			DRAWING			SHEET NUMBER					
			A3-SIZE			120066			GENERAL MARKET		
									1 OF 4		

ENGINEERING NO. - NUMERICAL CODE

(Available parts see PART LIST table. Other parts available upon request).

OPTIONS

88X0X1XXXXXX

88=Micro-Change
M12x1
Double ended

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

Heads style:
031=Plug Female 90°
to Plug Male Straight
021=Plug Female 90°
to Plug Male Straight
with Female
Coupling Nut

Cable type: See Table

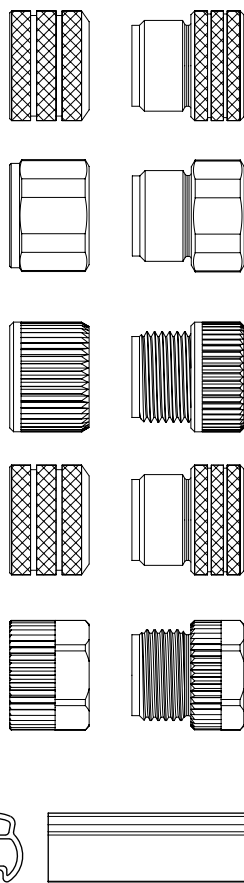
Units:
M=Meter
C=Centimeter

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

Coupling Nut:
Blank (Standard)=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

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.)

COUPLING NUT
FEMALE MALE



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
I03	3 / 4 / 5	0.34mm²	PVC CEI GREY	-	-	-30°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	-	YES
K03	4	18AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
K05	3 / 4 / 5	22AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
P82	3 / 4 / 5	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S20	3 / 4 / 5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
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.	-	-
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	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
H08	8	0.25mm²	PUR BLACK LS0H	UL 21198/10493	UL 21198/10493	-40°C to +80°C, >5xO.D.	-25°C to +80°C, >10xO.D.	2 000 000 cycles, Temp max 60°C	-
P02	8	0.25mm²	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

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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

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

EC NO: 791338
DRWN: RSILLER
CHK'D: THAERDT
APPR: THAERDT

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING A3-SIZE

SERIES 120066

2024/07/03
2024/07/03
2024/07/03

2016/10/06
2016/12/08

DOCUMENT NUMBER 1200660973

DOC TYPE PSD

DOC PART 000

REVISION A11

MATERIAL NUMBER

CUSTOMER GENERAL MARKET

SHEET NUMBER 2 OF 4

molex

CSE M12 XP AC FE RA MA STR XM DE

PRODUCT CUSTOMER DRAWING

	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																							
	PART LIST																																																																																																																																																																																
F	<table> <tr><th>No.</th><th>Part No.</th><th>Engineering No.</th><th>Cable Length</th></tr> <tr><td>1</td><td>1200060052</td><td>884031I20M005</td><td>0.5m</td></tr> <tr><td>2</td><td>1200060053</td><td>884031I20M010</td><td>1m</td></tr> <tr><td>3</td><td>1200060054</td><td>884031I20M015</td><td>1.5m</td></tr> <tr><td>4</td><td>1200060055</td><td>884031I20M020</td><td>2m</td></tr> </table>				No.	Part No.	Engineering No.	Cable Length	1	1200060052	884031I20M005	0.5m	2	1200060053	884031I20M010	1m	3	1200060054	884031I20M015	1.5m	4	1200060055	884031I20M020	2m	<table> <tr><th>No.</th><th>Part No.</th><th>Engineering No.</th><th>Cable Length</th></tr> <tr><td>36</td><td>1200072725</td><td>885031I26M005</td><td>0.5m</td></tr> <tr><td>37</td><td>1200072726</td><td>885031I26M010</td><td>1m</td></tr> <tr><td>38</td><td>1200659070</td><td>884031I20M010Y</td><td>1m</td></tr> <tr><td>39</td><td>1200659071</td><td>884031I20M015Y</td><td>1.5m</td></tr> </table>				No.	Part No.	Engineering No.	Cable Length	36	1200072725	885031I26M005	0.5m	37	1200072726	885031I26M010	1m	38	1200659070	884031I20M010Y	1m	39	1200659071	884031I20M015Y	1.5m	<table> <tr><th>No.</th><th>Part No.</th><th>Engineering No.</th><th>Cable Length</th></tr> <tr><td>71</td><td>1200665039</td><td>884031S20M003</td><td>0.3m</td></tr> <tr><td>72</td><td>1200665053</td><td>884031S20M060H</td><td>6m</td></tr> <tr><td>73</td><td>1200665074</td><td>884031K05M080</td><td>8m</td></tr> <tr><td>74</td><td>1200668052</td><td>883031S20M006</td><td>0.6m</td></tr> </table>				No.	Part No.	Engineering No.	Cable Length	71	1200665039	884031S20M003	0.3m	72	1200665053	884031S20M060H	6m	73	1200665074	884031K05M080	8m	74	1200668052	883031S20M006	0.6m	<table> <tr><th>Pos.</th><th>Part No.</th><th>Engineering No.</th><th>Cable Length</th></tr> <tr><td>106</td><td>1200668912</td><td>883031E03M050H</td><td>5m</td></tr> <tr><td>107</td><td>1200668175</td><td>883031E03M060</td><td>6m</td></tr> <tr><td>108</td><td>1200070127</td><td>883031E03M100</td><td>10m</td></tr> <tr><td>109</td><td>1200658762</td><td>883031H09M006</td><td>0.6m</td></tr> </table>				Pos.	Part No.	Engineering No.	Cable Length	106	1200668912	883031E03M050H	5m	107	1200668175	883031E03M060	6m	108	1200070127	883031E03M100	10m	109	1200658762	883031H09M006	0.6m	F																																																																																
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42	1200660375	884031K05M006	0.6m																																																																																																																																																																														
43	1200660376	884031K05M010	1m																																																																																																																																																																														
44	1200660377	884031K05M015	1.5m																																																																																																																																																																														
45	1200660378	884031K05M020	2m																																																																																																																																																																														
46	1200660379	884031K05M030	3m																																																																																																																																																																														
47	1200660380	884031K05M040	4m																																																																																																																																																																														
48	1200660381	884031K05M050	5m																																																																																																																																																																														
49	1200660382	884031K05M060	6m																																																																																																																																																																														
75	1200668071	884031S20M020	2m																																																																																																																																																																														
76	1200668191	883031S20M030	3m																																																																																																																																																																														
77	1200668237	883031S20M100	10m																																																																																																																																																																														
78	1200668258	883031I03M080	8m																																																																																																																																																																														
79	1200668287	884031I20M025	2.5m																																																																																																																																																																														
80	1200668667	884031I20M030Y	3m																																																																																																																																																																														
81	1200070443	884021S20M003	0.3m																																																																																																																																																																														
82	1200070444	884021S20M006	0.6m																																																																																																																																																																														
83	1200070445	884021S20M010	1m																																																																																																																																																																														
84	1200070446	884021S20M020	2m																																																																																																																																																																														
110	1200658763	883031H09M010	1m																																																																																																																																																																														
111	1200658764	883031H09M020	2m																																																																																																																																																																														
112	1200658765	883031H09M030	3m																																																																																																																																																																														
113	1200669349	883031H09M030H	3m																																																																																																																																																																														
114	1200658766	883031H09M040	4m																																																																																																																																																																														
115	1200658767	883031H09M050	5m																																																																																																																																																																														
116	1200658768	883031H09M100	10m																																																																																																																																																																														
117	1200070140	883031P03M003	0.3m																																																																																																																																																																														
118	1200070141	883031P03M006	0.6m																																																																																																																																																																														
119	1200070142	883031P03M010	1m																																																																																																																																																																														
D	<table> <tr><td>15</td><td>1200070523</td><td>884031I03M030</td><td>3m</td></tr> <tr><td>16</td><td>1200070534</td><td>884031S20M030</td><td>3m</td></tr> <tr><td>17</td><td>1200070651</td><td>884031I03M006</td><td>0.6m</td></tr> <tr><td>18</td><td>1200070768</td><td>884031S20M050</td><td>5m</td></tr> <tr><td>19</td><td>1200070783</td><td>884031S20M100H</td><td>10m</td></tr> <tr><td>20</td><td>1200071138</td><td>884031S20M010H</td><td>1m</td></tr> <tr><td>21</td><td>1200071139</td><td>884031S20M020H</td><td>2m</td></tr></table>	15	1200070523	884031I03M030	3m	16	1200070534	884031S20M030	3m	17	1200070651	884031I03M006	0.6m	18	1200070768	884031S20M050	5m	19	1200070783	884031S20M100H	10m	20	1200071138	884031S20M010H	1m	21	1200071139	884031S20M020H	2m																																																																																																																																																				
15	1200070523	884031I03M030	3m																																																																																																																																																																														
16	1200070534	884031S20M030	3m																																																																																																																																																																														
17	1200070651	884031I03M006	0.6m																																																																																																																																																																														
18	1200070768	884031S20M050	5m																																																																																																																																																																														
19	1200070783	884031S20M100H	10m																																																																																																																																																																														
20	1200071138	884031S20M010H	1m																																																																																																																																																																														
21	1200071139	884031S20M020H	2m																																																																																																																																																																														

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