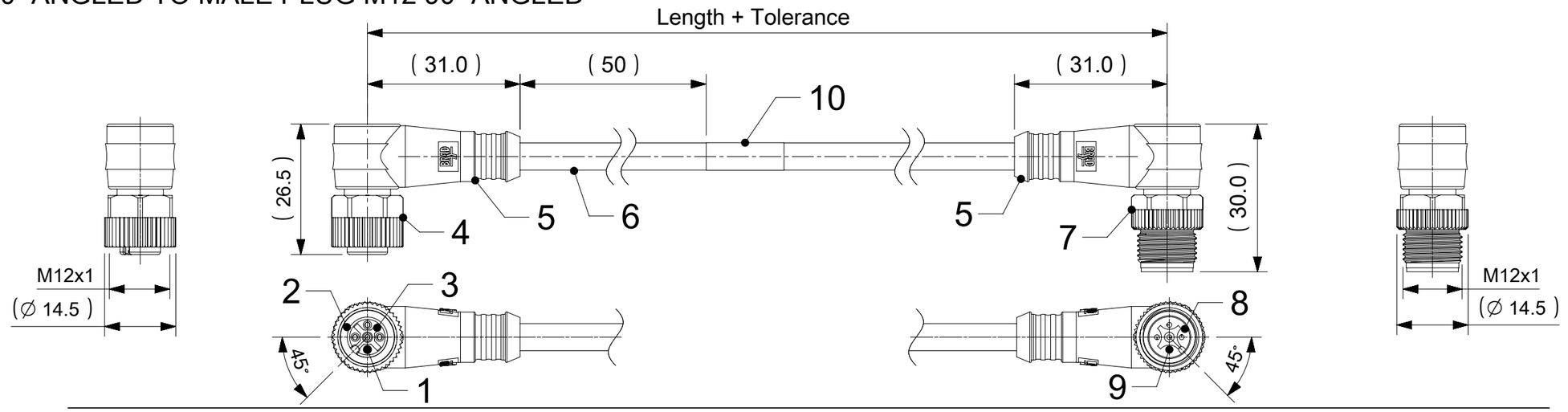
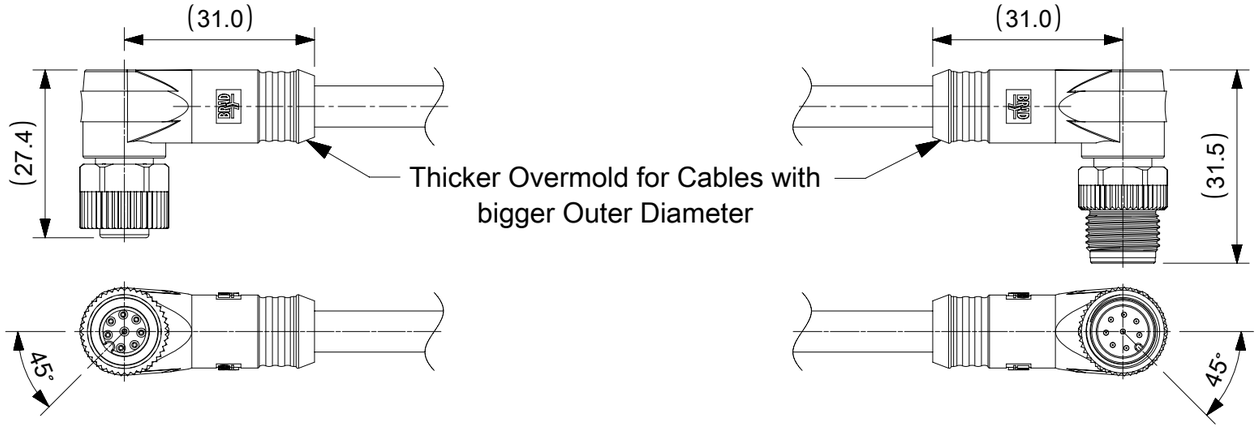
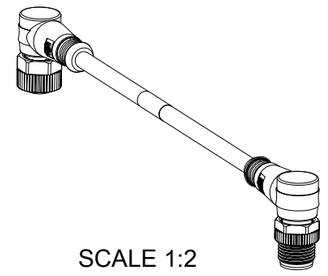
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 90° ANGLED







SCALE 1:2

NOTES:

RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A

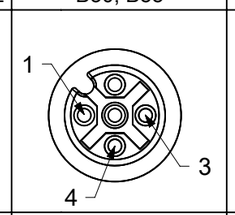
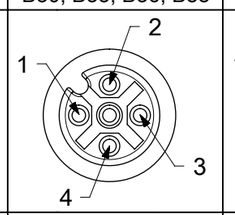
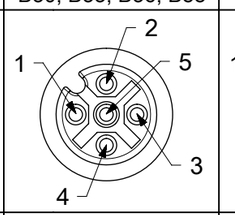
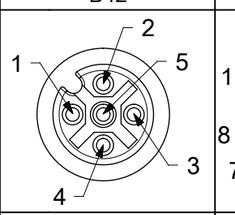
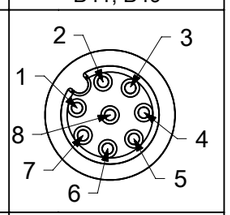
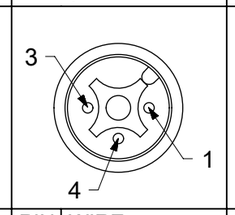
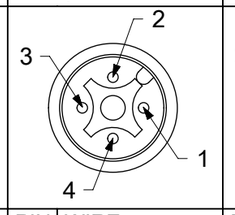
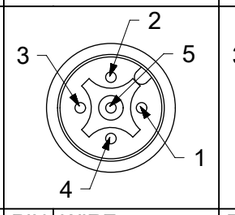
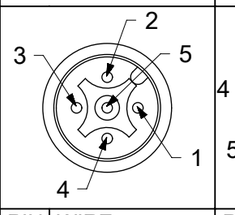
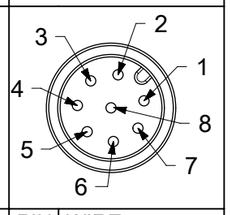
PROTECTION CLASS: IP67 IN MATED AND LOCKED POSITION

TEMPERATURE: -25°C / +85°C

INSULATION RESISTANCE: 10^8 Ω MIN.

MATING CYCLES: MIN. 100

CONTACTS POSITION FRONT VIEW:

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

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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO "END TO END" ADDED NOTES. SORTED PART LIST USING CABLE TYPES ON SHEET 3

EC NO: 789428
DRWN: AKABADI 2023/03/11
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/10/12
APPR: RSILLER 2016/10/18

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE RA WSOR MA RA XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200669011	PSD	000	B

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3	GENERAL MARKET	1 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:58

FORMAT: mastergrp-a3
REVISION: J1
DATE: 2021/05/06

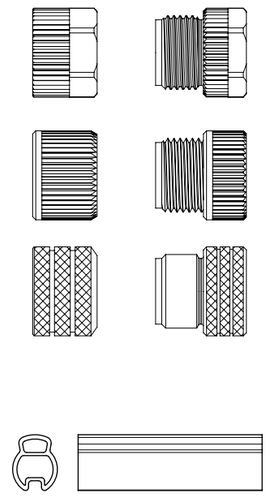
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

8	8	X	0	3	3	X	X	X	X	X	X	X	X
													OPTIONS

- 88=M12x1 Double ended
- Poles: 3=3 Contacts, 4=4 Contacts, 5=5 Contacts, 8=8 Contacts
- Heads style: 033=Plug Female 90° 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)

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: TEMP. / BENDING RADIUS	DRAG CHAIN	CABLE PRODUCT SPECIFICATION	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	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	0.34mm²	TPU Gray								SD-120209-001
B36	4	0.34mm²	TPU Orange								SD-120209-001
B41	8	0.25mm²	TPU Black								SD-120209-006
B42	5	0.34mm²	TPU Black								SD-120209-001
B55	4 / 5	0.34mm²	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

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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO "END TO END". ADDED NOTES. SORTED PART LIST USING CABLE TYPES ON SHEET 3

EC NO: 789428

DRWN: AKABADI 2023/03/11

CHK'D: RSILLER 2024/07/02

APPR: RSILLER 2024/07/02

INITIAL REVISION:

DRWN: JMARSZALEK 2016/10/12

APPR: RSILLER 2016/10/18

molex

CSE M12 XP AC FE RA WSOR MA RA XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200669011	PSD	000	B

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE SHEET 3	GENERAL MARKET	2 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:58

FORMAT: master_B_sd-A3
REVISION: J1
DATE: 2021/05/05

PART LIST

MOLEX PN	ENGINEERING No	L [mm]
3P CABLE B30		
1200669246	883033B30C210	210
1200669279	883033B30C260	260
1200669259	883033B30M004	400
1200668942	883033B30M006	600
1200668943	883033B30M010	1000
1200668944	883033B30M020	2000
1200668945	883033B30M030	3000
1200668946	883033B30M050	5000
1200668947	883033B30M100	10000
4P CABLE B30		
1200668948	884033B30M006	600
1200668949	884033B30M010	1000
1200668950	884033B30M020	2000
1200668951	884033B30M030	3000
1200668952	884033B30M050	5000
1200668953	884033B30M100	10000
1200669649	884033B30M150	15000
5P CABLE B30		
1200669009	885033B30M006	600
1200669010	885033B30M010	1000
1200669011	885033B30M020	2000
1200669012	885033B30M030	3000
1200669013	885033B30M050	5000
1200669014	885033B30M100	10000
4P CABLE B33		
1200669898	884033B33M005A	500
1200669643	884033B33M010A	1000
1200669644	884033B33M020A	2000
1200669645	884033B33M030A	3000
1200669646	884033B33M050A	5000
1200669647	884033B33M100A	10000
1200669648	884033B33M150A	15000
1200669899	884033B33M200A	20000
5P CABLE B33		
1200669916	885033B33M005A	500
1200669702	885033B33M010A	1000
1200669703	885033B33M020A	2000
1200669704	885033B33M030A	3000
1200669705	885033B33M050A	5000
1200669706	885033B33M100A	10000
1200669917	885033B33M200A	20000
1200669918	885033B33M300A	30000
1200669919	885033B33M400A	40000
1200669920	885033B33M500A	50000

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B36		
1200669565	884033B36M0067Y	600
5P CABLE B42		
1200668954	885033B42M006	600
1200668955	885033B42M010	1000
1200668956	885033B42M020	2000
1200669416	885033B42M020H	2000
1200668957	885033B42M030	3000
1200668958	885033B42M050	5000
1200668959	885033B42M100	10000
4P CABLE B55		
1200669650	884033B55M010Y	1000
1200669651	884033B55M020Y	2000
1200669652	884033B55M030Y	3000
1200669653	884033B55M050Y	5000
1200669654	884033B55M100Y	10000
1200669655	884033B55M150Y	15000
5P CABLE B55		
1200669707	885033B55M010Y	1000
1200669708	885033B55M020Y	2000
1200669709	885033B55M030Y	3000
1200669710	885033B55M050Y	5000
1200669711	885033B55M100Y	10000

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:58

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: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO "END TO END". ADDED NOTES. SORTED PART LIST USING CABLE TYPES ON SHEET 3

EC NO: 789428
DRWN: AKABADI 2023/03/11
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/10/12
APPR: RSILLER 2016/10/18

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE RA WSOR MA RA XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200669011	PSD	000	B

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	3 OF 3

FORMAT: molex_portrait-A3
REVISION: J1
DATE: 2021/05/06