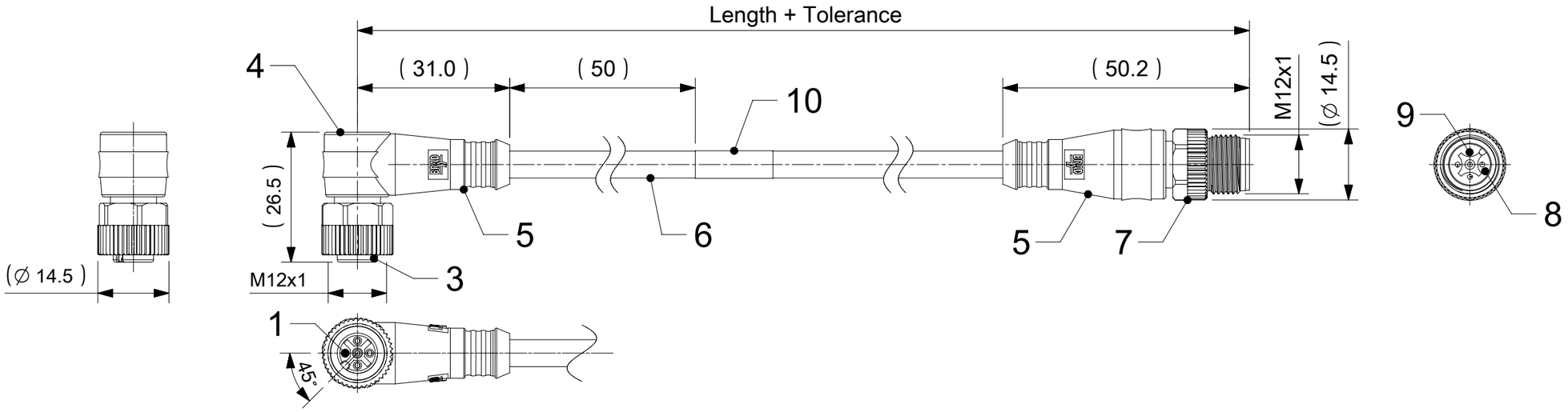
FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



NOTES:

CONTACT CURRENT RATING: 3-5 POLES 4A
8 POLES 2A

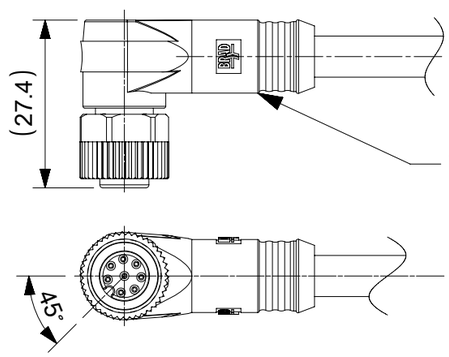
VOLTAGE RATING: 3-4 POLES 250V
5 POLES 60V
8 POLES 30V

PROTECTION CLASS: IP67 IN MATED & LOCKED POSITION

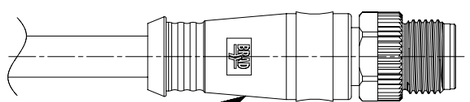
TEMPERATURE: -25°C / +85°C

INSULATION RESISTANCE: 10^8 Ω MIN.

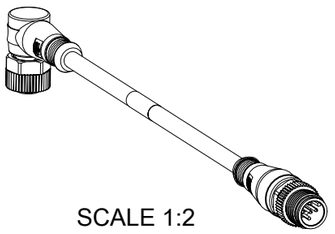
MATING CYCLES: MIN. 100



Thicker Overmold for Cables with bigger Outer Diameter

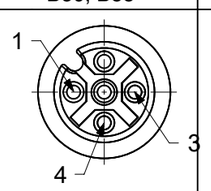
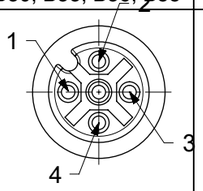
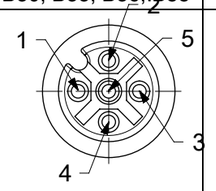
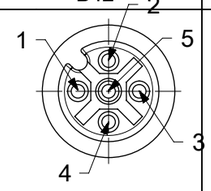
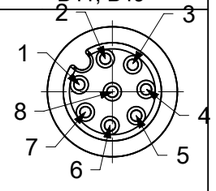
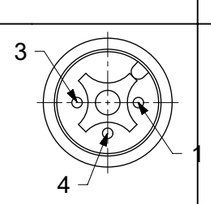
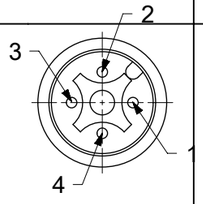
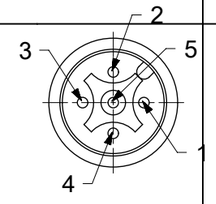
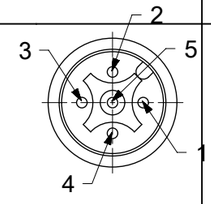
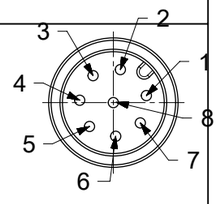






SCALE 1:2

CONTACT POSITION FRONT VIEW:

	3 POLES	4 POLES	5 POLES	5 POLES	8 POLES
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

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:56

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
10	1	LABEL OR PRINTING	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	SEE SHEET 2	SEE SHEET 2
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	SEE SHEET 2	SEE SHEET 2
3	1	INSERT FEMALE BLACK	PUR	---
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

FUNCTIONAL SYMBOLS: FA = 0, FC = 0, FP = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0 °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.05
1 PLACE	± 0.1
0 PLACES	± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: CHANGED DIMENSIONING STYLE OF OVERALL LENGTH TO END TO END. UPDATED NOTES AND PART LIST SORTED USING CABLE TYPES IN SHEET 3

EC NO: 789428
DRWN: AKABADI 2023/03/10
CHK'D: RSILLER 2024/07/02
APPR: RSILLER 2024/07/02

INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

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

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	B

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

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

OPTIONS

8	8	X	0	3	1	X	X	X	X	X	X	X	X

88=M12x1
Double ended

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

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

Cable type: See Table

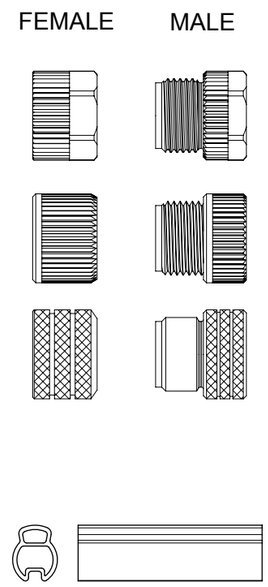
Units:
M=Meter
C=Centimeter
T=10x Meter

Length
Examples:
005=0.5 units
010=1 units
020=1 units
050=5 units
100=10 units
150=15 units
200=20 units

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
(Cable 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	0.34mm²	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 / 5	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	
shorter 1m	+40 mm	-0 mm
1m-5m	+60 mm	-0 mm
5m-10m	+80 mm	-0 mm
10m-20m	+140 mm	-0 mm
20m-30m	+160 mm	-0 mm
longer 30m	+1%	-0 mm

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DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.1
0 PLACES	±	0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
APPR: RSILLER 2016/08/29

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

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	B

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3	GENERAL MARKET	2 OF 3

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:56

FORMAT: master-tb-mod-A3
REVISION: J1
DATE: 2021/05/01

PART LIST

MOLEX PN	ENGINEERING No	L [mm]
3P CABLE B30		
1200668877	883031B30M006	600
1200668878	883031B30M010	1000
1200668879	883031B30M020	2000
1200668880	883031B30M030	3000
1200668881	883031B30M050	5000
1200668882	883031B30M100	10000
4P CABLE B30		
1200669949	884031B30M003	300
1200668829	884031B30M006	600
1200668830	884031B30M010	1000
1200669520	884031B30M015	1500
1200668831	884031B30M020	2000
1200668832	884031B30M030	3000
1200668833	884031B30M050	5000
1200669744	884031B30M080	8000
1200668834	884031B30M100	10000
1200669285	884031B30M150	15000
1200669566	884031B30M200	20000
5P CABLE B30		
1200668997	885031B30M006	600
1200669241	885031B30M0067	600
1200668998	885031B30M010	1000
1200669371	885031B30M010H	1000
1200668999	885031B30M020	2000
1200669243	885031B30M0207	2000
1200669000	885031B30M030	3000
1200669001	885031B30M050	5000
1200669002	885031B30M100	10000
1200669677	885031B30M150	15000
1200669678	885031B30M200	20000

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B33		
1200669569	884031B33M005	500
1200669581	884031B33M005A	500
1200669570	884031B33M010	1000
1200669582	884031B33M010A	1000
1200669571	884031B33M020	2000
1200669621	884031B33M020A	2000
1200669572	884031B33M030	3000
1200669622	884031B33M030A	3000
1200669573	884031B33M050	5000
1200669623	884031B33M050A	5000

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B33		
1200669574	884031B33M100	10000
1200669624	884031B33M100A	10000
1200669625	884031B33M150A	15000
1200669626	884031B33M200A	20000
5P CABLE B33		
1200669908	885031B33M005A	500
1200669670	885031B33M010A	1000
1200669671	885031B33M020A	2000
1200669672	885031B33M030A	3000
1200669673	885031B33M050A	5000
1200669674	885031B33M100A	10000
1200669675	885031B33M150A	15000
1200669676	885031B33M200A	20000
1200669909	885031B33M300A	30000
1200669910	885031B33M400A	40000
1200669911	885031B33M500A	50000

MOLEX PN	ENGINEERING NO	L [mm]
4P CABLE B36		
1200669534	884031B36M0057H	500
1200669047	884031B36M0057Y	500
1200669564	884031B36M0067Y	600
1200669535	884031B36M0107H	1000
1200669048	884031B36M0107Y	1000
1200669536	884031B36M0157H	1500
1200669049	884031B36M0157Y	1500
1200669537	884031B36M0207H	2000
1200669050	884031B36M0207Y	2000
1200669538	884031B36M0307H	3000
1200669051	884031B36M0307Y	3000
1200669052	884031B36M0407Y	4000
1200669539	884031B36M0507H	5000
1200668861	884031B36M0507Y	5000
1200669053	884031B36M0607Y	6000
1200669054	884031B36M0807Y	8000
1200669540	884031B36M1007H	10000
1200668862	884031B36M1007Y	10000
1200669055	884031B36M1207Y	12000
1200669056	884031B36M1507Y	15000
1200669057	884031B36M2007Y	20000
1200669058	884031B36M2507Y	25000
1200669059	884031B36M3007Y	30000

MOLEX PN	ENGINEERING No	L [mm]
5P CABLE B36		
1200669549	885031B36M0057H	500
1200669060	885031B36M0057Y	500
1200669550	885031B36M0107H	1000
1200669061	885031B36M0107Y	1000
1200669551	885031B36M0157H	1500
1200669552	885031B36M0207H	2000
1200669062	885031B36M0207Y	2000
1200669553	885031B36M0307H	3000
1200669063	885031B36M0307Y	3000
1200669064	885031B36M0407Y	4000
1200669554	885031B36M0507H	5000
1200669065	885031B36M0507Y	5000
1200669066	885031B36M0607Y	6000
1200669067	885031B36M0807Y	8000
1200669555	885031B36M1007H	10000
1200669068	885031B36M1007Y	10000
1200669069	885031B36M1207Y	12000
1200669070	885031B36M1507Y	15000
1200669071	885031B36M1807Y	18000
1200669072	885031B36M2007Y	20000
1200669073	885031B36M2507Y	25000
1200669074	885031B36M3007Y	30000

MOLEX PN	ENGINEERING No	L [mm]
8P CABLE B41		
1200668885	888031B41M020	2000
1200668887	888031B41M050	5000
1200668888	888031B41M100	10000

MOLEX PN	ENGINEERING No	L [mm]
5P CABLE B42		
1200668835	885031B42M006	600
1200668836	885031B42M010	1000
1200668837	885031B42M020	2000
1200668838	885031B42M030	3000
1200668839	885031B42M050	5000
1200668840	885031B42M100	10000

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B55		
1200669730	884031B55M005Y	500
1200669272	884031B55M010Y	1000
1200669273	884031B55M020Y	2000
1200669274	884031B55M030Y	3000
1200669275	884031B55M050Y	5000
1200669276	884031B55M060Y	6000
1200669419	884031B55M070Y	7000
1200669277	884031B55M100Y	10000
1200669278	884031B55M150Y	15000
1200669420	884031B55M200Y	20000
5P CABLE B55		
1200669679	885031B55M010Y	1000
1200669680	885031B55M020Y	2000
1200669681	885031B55M030Y	3000
1200669682	885031B55M050Y	5000
1200669683	885031B55M100Y	10000
1200669684	885031B55M150Y	15000
1200669685	885031B55M200Y	20000

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DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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INITIAL REVISION:
DRWN: JMARSZALEK 2016/08/12
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THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE RA WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668999	PSD	000	B

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

DOCUMENT STATUS	P1	RELEASE DATE	2024/07/02 09:17:56

FORMAT: master_Borda-A3
REVISION: J1
DATE: 2021/05/07

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Global Electronic Components Distributor

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0194360214 0464363133 347072012 502584-0870 528061110 197054301 197134001 347928042 502380-0800 5023860371 502584-1060 503988100 528523070 34708-2028 351820290 355240920 194290026 348268126 0351510214 194270031 347910140 459850483 0477256010 348242245 349672001 464373005 502585-0370 194290039 528520870 357470310