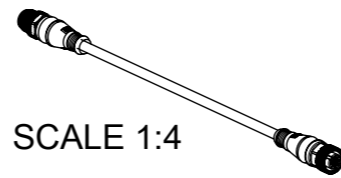


CONNECTOR SPECIFICATION / Steckverbindungs-Eigenschaften		
VOLTAGE RATING/Betriebsspannung	250V AC/DC	4 POL
	30V AC/DC	8 POL
AMPERAGE RATING/Bemessungsstrom	max. 4 AMPS (40°C)	4 POL
	max. 2 AMPS (40°C)	8 POL
PROTECTION/IP-Schutzart	IP67	4 + 8 POL
OPERATING TEMPERATURE/Temperaturbereich	max. -40°C TO +90°C	4 + 8 POL

POS.	DESCRIPTION	MATERIAL	FINISH
1	INSERT MALE	PUR	BLACK
2	CONTACT MALE	BRASS (8P)	GOLD OVER NICKEL
		COPPER ALLOY (4P)	
3	NUT MALE	BRASS	NICKEL PLATED
4	OVERMOULD	TPU	RED
5	NUT FEMALE	BRASS	NICKEL PLATED
6	INSERT FEMALE	PUR	BLACK
7	CONTACT FEMALE	BRASS (8P)	GOLD OVER NICKEL
		COPPER ALLOY (4P)	
8	GASKET	FPM	RED
9	CABLE	PUR	BLACK

TABLE 1

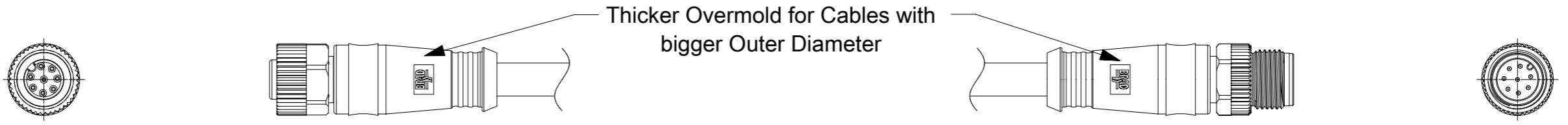
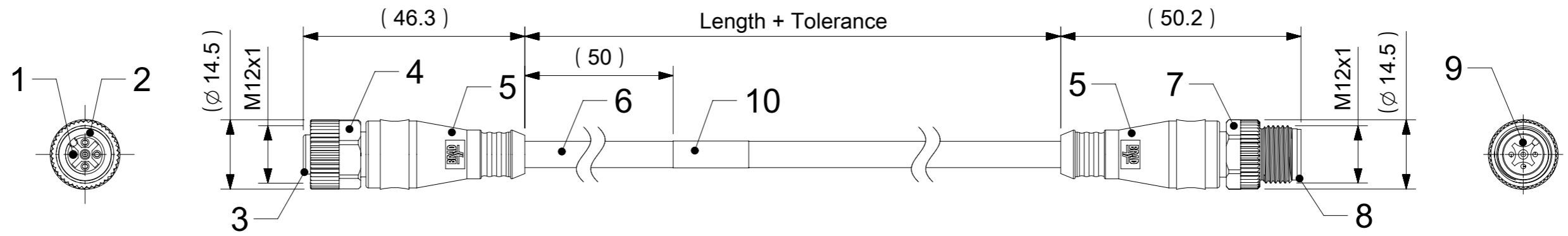
POL	MATERIAL-NO.	ENGINEERING-NR.	L [mm]	TOLERANCE [mm]
4 POL	1200665456	884030B30M010R	1000	+20mm /-10mm
	1200665457	884030B30M020R	2000	±25mm
	1200665458	884030B30M030R	3000	±25mm
	1200665459	884030B30M040R	4000	±25mm
	1200665460	884030B30M050R	5000	±25mm
8 POL	1200665461	888030B41M010R	1000	+20mm /-10mm
	1200665462	888030B41M020R	2000	±25mm
	1200665463	888030B41M030R	3000	±25mm
	1200665464	888030B41M040R	4000	±25mm
	1200665465	888030B41M050R	5000	±25mm



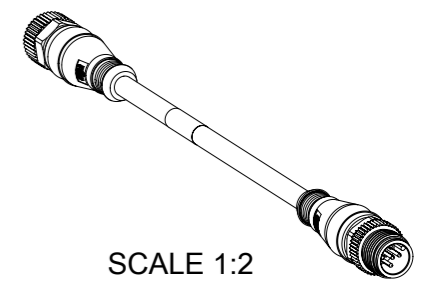
SCALE 1:4

QUALITY SYMBOLS A = 0 E = 0 F = 0 G = 0 H = 0 I = 0 J = 0 K = 0 L = 0 M = 0 N = 0 O = 0	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			
	EC NO: 104087 DRWN: CBURGER CHK'D: APPR: CBRUNS	2016/04/06 2016/04/07	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5		DRWN BY: EJESKE DATE: 2015/11/02	CHK'D BY: DATE:		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A3 THIRD ANGLE PROJECTION	APPR BY: RSILLER DATE: 2015/12/02		PRODUCT CUSTOMER DRAWING			
EC NO: 104087 DRWN: CBURGER CHK'D: APPR: CBRUNS		EC NO: 104087 DRWN: CBURGER CHK'D: APPR: CBRUNS		SERIES: 120066 MATERIAL NUMBER: SEE TABLE 1 CUSTOMER: GENERAL MARKET	DOCUMENT NUMBER: 1200665456 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 1			

FEMALE PLUG M12 STRAIGHT 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: IP 67
 TEMPERATURE: -25°C / +85°C
 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	PIN	PIN	PIN	PIN
	WIRE	WIRE	WIRE	WIRE	WIRE
	1	1	1	1	1
	2	2	2	2	2
	3	3	3	3	3
	4	4	4	4	4
	5	5	5	5	5

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
10	1	LABEL OR PRINTING	VINYL / ---	---
9	3 / 4 / 5 / 8	CONTACT M12 MALE	BRASS	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE	BRASS	NICKEL
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING 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 GOLD OVER NICKEL

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

QUALITY SYMBOLS:
 FA = 0
 FE = 0
 FB = 0
 FC = 0
 FD = 0
 FE = 0
 FF = 0
 FG = 0
 FH = 0
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 FP = 0
 FQ = 0
 FR = 0
 FS = 0
 FT = 0
 FU = 0
 FV = 0
 FW = 0
 FX = 0
 FY = 0
 FZ = 0

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

EC NO: 107467
 DRWN: JMARSZALEK
 CHK'D:
 APPR:

2016/07/22

MM 1:1
 DRWN BY: JMARSZALEK
 DATE: 2016/07/22
 CHK'D BY:
 DATE:
 APPR BY:
 DATE:

DRAWING SIZE: A3
 THIRD ANGLE PROJECTION

molex
 CSE M12 XP AC FE STR WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

SERIES	MATERIAL NUMBER	CUSTOMER
120066	SEE SHEET 3	GENERAL MARKET

DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
1200668993	PSD	000	1 OF 3

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

OPTIONS

8 8 X 0 3 0 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:
030=Plug Female Straight to Plug Male Straight

Cable type: See Table

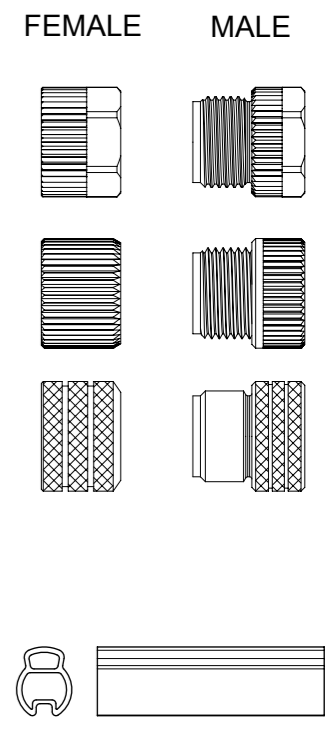
Units:
M=Meter
C=Centimeter
T=10x Meter

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 (Cables lxx & P82 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 ²	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 ²	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm ²	TPU Orange								SD-120209-001
B41	8	0.25mm ²	TPU Black								SD-120209-006
B42	5	0.34mm ²	TPU Black								SD-120209-001
B49	8	0.25mm ²	TPU Orange								SD-120209-006
B55	3 / 4 / 5	0.34mm ²	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




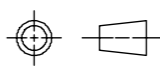
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QUALITY SYMBOLS FA = 0 FE = 0 FB = 0 FV = 0 FC = 0 FX = 0 FS = 0 FT = 0	2016/07/22 EC NO: 107467 DRWN: JMARSZALEK CHK'D: APPR:	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 °		DIMENSION UNITS MM	SCALE 1:1		
		4 PLACES ±	DRWN BY JMARSZALEK	DATE 2016/07/22	PRODUCT CUSTOMER DRAWING CSE M12 XP AC FE STR WSOR MA STR XM DE		
		3 PLACES ±	CHK'D BY	DATE			
		2 PLACES ± 0.05	APPR BY	DATE			
1 PLACE ± 0.1	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE A3	THIRD ANGLE PROJECTION	SERIES 120066	MATERIAL NUMBER SEE SHEET 3	CUSTOMER GENERAL MARKET
0 PLACES ± 0.2	A	REV	APPR	DOCUMENT NUMBER 1200668993	DOC TYPE PSD	DOC PART 000	SHEET NUMBER 2 OF 3

PART LIST

Pos.	Part No.	Engineering No.	Cable Length	Pos.	Part No.	Engineering No.	Cable Length	Pos.	Part No.	Engineering No.	Cable Length	Pos.	Part No.	Engineering No.	Cable Length
1	1200659548	885030B42M150	15m	36	1200668914	884030B30M200	20m	71	1200669044	885030B36M2007Y	20m	106	1200669267	884030B55M060	6m
2	1200659549	885030B42M200	20m	37	1200668915	884030B30M250	25m	72	1200669045	885030B36M2507Y	25m	107	1200669268	884030B55M100	10m
3	1200659666	885030B30M005	0.5m	38	1200668916	884030B30M300	30m	73	1200669046	885030B36M3007Y	30m	108	1200669269	884030B55M120	12m
4	1200659667	885030B30M025	2.5m	39	1200668991	885030B30M006	0.6m	74	1200669112	888030B49M038Y	3.8m	109	1200669270	884030B55M150	15m
5	1200665456	884030B30M010R	1m	40	1200668992	885030B30M010	1m	75	1200669140	885030B36M8507Y	85m	110	1200669271	884030B55M200	20m
6	1200665461	888030B41M010R	1m	41	1200668993	885030B30M020	2m	76	1200669142	884030B30M0105	1m	111			
7	1200668817	884030B30M006	0.6m	42	1200668994	885030B30M030	3m	77	1200669143	884030B30M0505	5m	112			
8	1200668818	884030B30M010	1m	43	1200668995	885030B30M050	5m	78	1200669144	884030B30M025	2.5m	113			
9	1200668819	884030B30M020	2m	44	1200668996	885030B30M100	10m	79	1200669145	885030B30M015	1.5m	114			
10	1200668820	884030B30M030	3m	45	1200669017	888030B49M015Y	1.5m	80	1200669157	884030B30M002	0.2m	115			
11	1200668821	884030B30M050	5m	46	1200669019	884030B36M0057Y	0.5m	81	1200669158	884030B30M030R	3m	116			
12	1200668822	884030B30M100	10m	47	1200669020	884030B36M0107Y	1m	82	1200669177	888030B41M090	9m	117			
13	1200668823	885030B42M006	0.6m	48	1200669021	884030B36M0157Y	1.5m	83	1200669181	884030B30M040	4m	118			
14	1200668824	885030B42M010	1m	49	1200669022	884030B36M0207Y	2m	84	1200669182	884030B30M060	6m	119			
15	1200668825	885030B42M020	2m	50	1200669023	884030B36M0307Y	3m	85	1200669223	884030B33M010	1m	120			
16	1200668826	885030B42M030	3m	51	1200669024	884030B36M0407Y	4m	86	1200669224	884030B33M020	2m	121			
17	1200668827	885030B42M050	5m	52	1200669025	884030B36M0607Y	6m	87	1200669225	884030B33M030	3m	122			
18	1200668828	885030B42M100	10m	53	1200669026	884030B36M0807Y	8m	88	1200669226	884030B33M050	5m	123			
19	1200668859	884030B36M0507Y	5m	54	1200669027	884030B36M1207Y	12m	89	1200669242	885030B30M0107	1m	124			
20	1200668860	884030B36M1007Y	10m	55	1200669028	884030B36M1507Y	15m	90	1200669247	885030B33M020	2m	125			
21	1200668863	884030B30M070	7m	56	1200669029	884030B36M2007Y	20m	91	1200669248	885030B33M100	10m	126			
22	1200668870	888030B41M038	3.8m	57	1200669030	884030B36M2507Y	25m	92	1200669249	885030B33M200	20m	127			
23	1200668889	883030B30M006	0.6m	58	1200669031	884030B36M3007Y	30m	93	1200669250	884030B33M005	0.5m	128			
24	1200668890	883030B30M010	1m	59	1200669032	885030B36M0057Y	0.5m	94	1200669251	884030B33M100	10m	129			
25	1200668891	883030B30M020	2m	60	1200669033	885030B36M0107Y	1m	95	1200669252	884030B33M200	20m	130			
26	1200668892	883030B30M030	3m	61	1200669034	885030B36M0207Y	2m	96	1200669253	885030B33M030	3m	131			
27	1200668893	883030B30M050	5m	62	1200669035	885030B36M0307Y	3m	97	1200669254	885030B33M050	5m	132			
28	1200668894	883030B30M100	10m	63	1200669036	885030B36M0407Y	4m	98	1200669255	885030B33M300	30m	133			
29	1200668895	888030B41M006	0.6m	64	1200669037	885030B36M0507Y	5m	99	1200669256	884030B33M300	30m	134			
30	1200668896	888030B41M010	1m	65	1200669038	885030B36M0607Y	6m	100	1200669257	885030B33M005	0.5m	135			
31	1200668897	888030B41M020	2m	66	1200669039	885030B36M0807Y	8m	101	1200669258	885030B33M010	1m	136			
32	1200668898	888030B41M030	3m	67	1200669040	885030B36M1007Y	10m	102	1200669263	884030B55M020	2m	137			
33	1200668899	888030B41M050	5m	68	1200669041	885030B36M1207Y	12m	103	1200669264	884030B55M030	3m	138			
34	1200668900	888030B41M100	10m	69	1200669042	885030B36M1507Y	15m	104	1200669265	884030B55M040	4m	139			
35	1200668913	884030B30M150	15m	70	1200669043	885030B36M1807Y	18m	105	1200669266	884030B55M050	5m	140			

PRE-RELEASE
 REFERENCE
 USE ONLY

QUALITY SYMBOLS F _A = 0 F _E = 0 F _B = 0 ▼ = 0 C = 0 ⊗ = 0 ■ = 0 ∇ = 0												THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
2016/07/22 EC NO: 107467 DRWN: JMARSZALEK CHK'D: APPR:			GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2			DIMENSION UNITS MM		SCALE 1:1		 CSE M12 XP AC FE STR WSOR MA STR XM DE													
DRWN BY: JMARSZALEK DATE: 2016/07/22			DRIFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWING SIZE A3		THIRD ANGLE PROJECTION 								PRODUCT CUSTOMER DRAWING SERIES: 120066 MATERIAL NUMBER: SEE PART LIST CUSTOMER: GENERAL MARKET							
RELEASE STATUS: RQ RELEASE DATE: 12.08.2016 15:12:33						DOCUMENT NUMBER: 1200668993 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 3 OF 3																	