

9 8 7 6 5 4 3 2 1

E

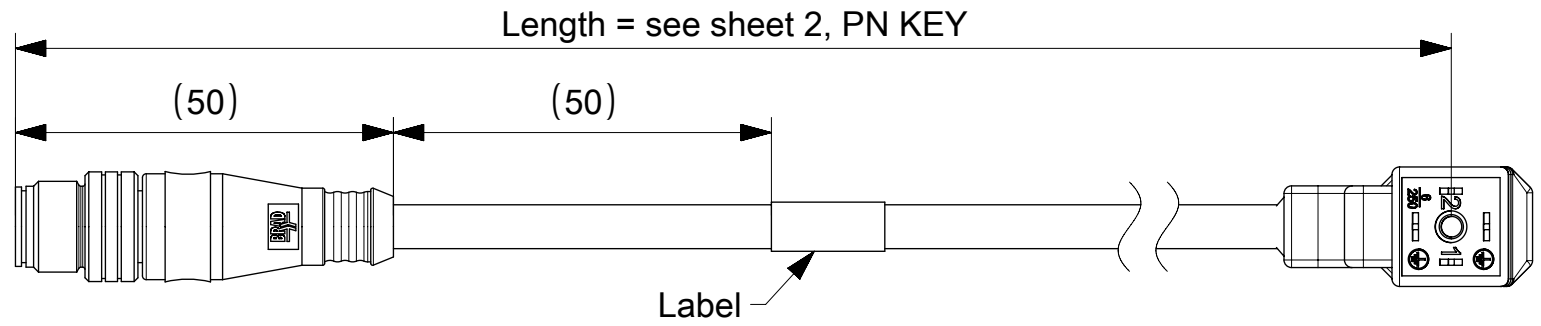
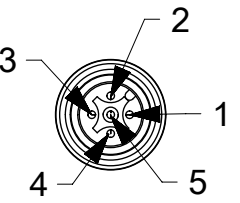
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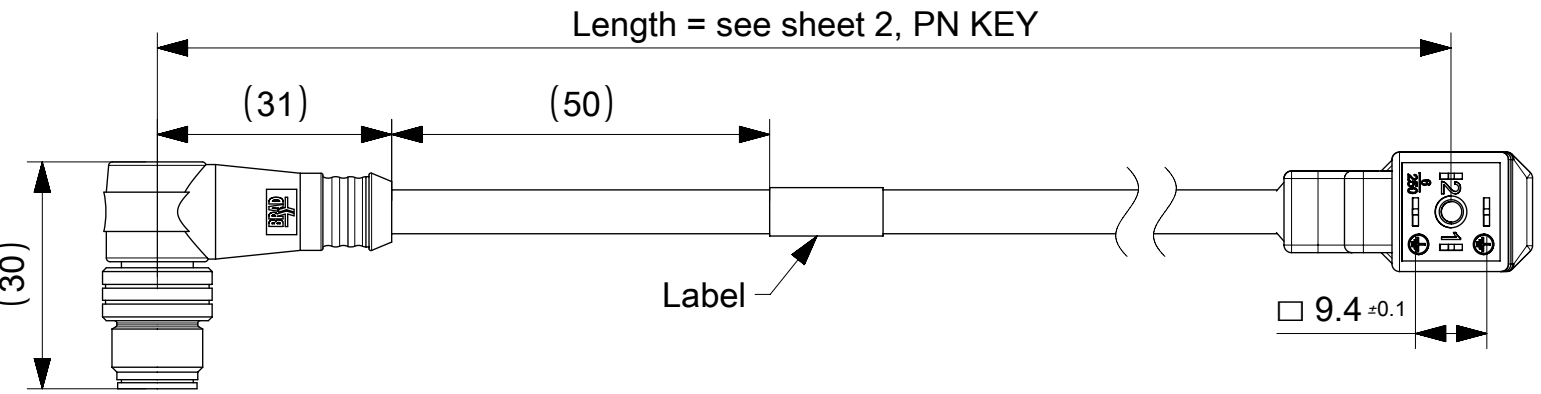
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A

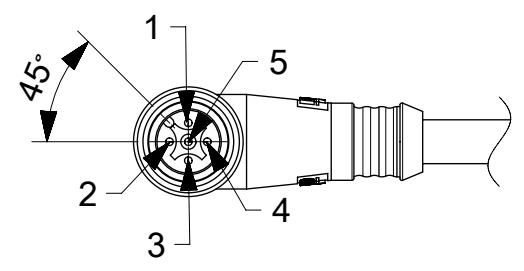
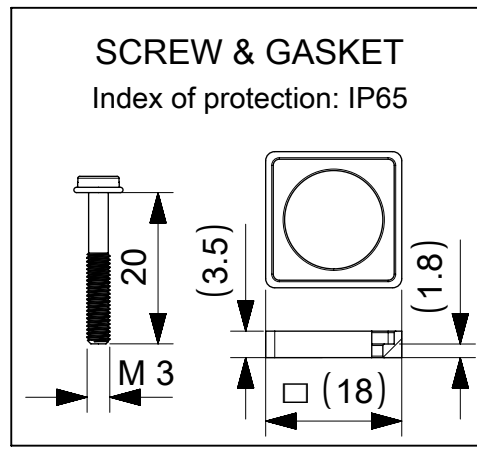
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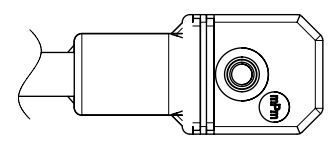
PN KEY
G850X0X...



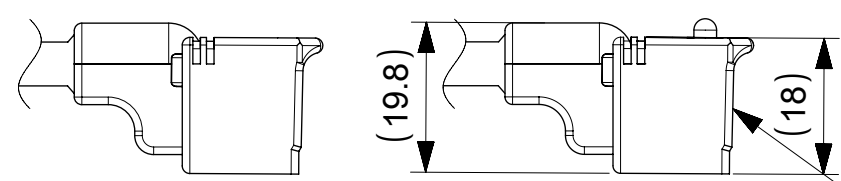
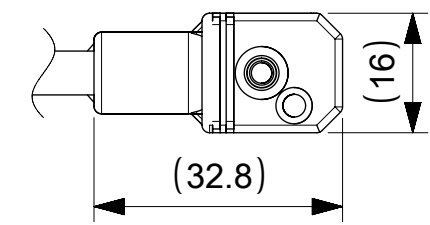
PN KEY
G850X2X...



DIN Connector views
for PNs without LED



DIN Connector views
for PNs with LED

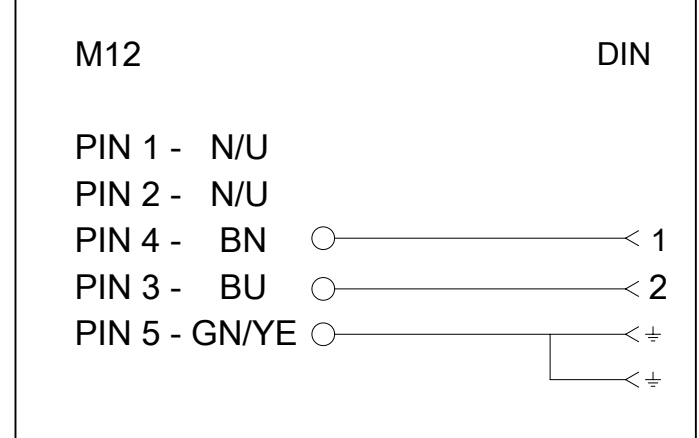
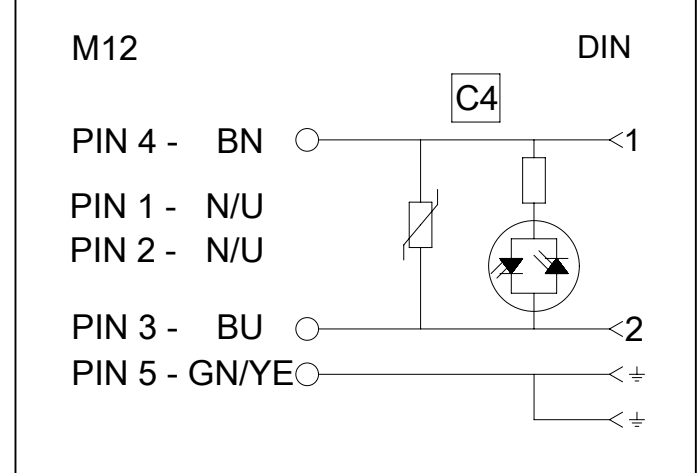
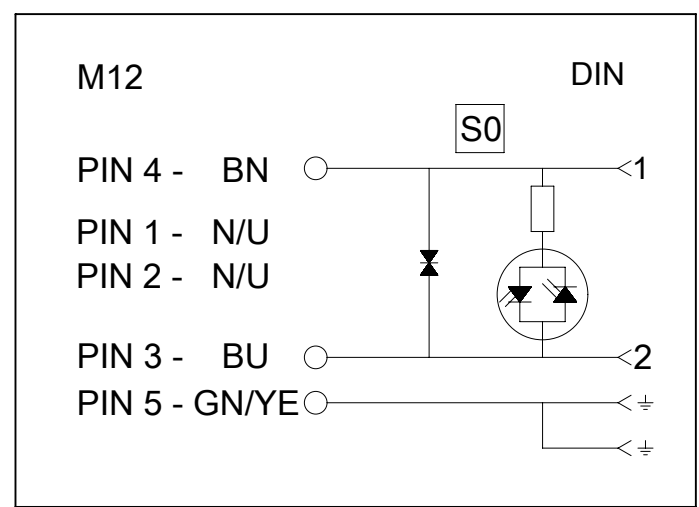


BILL OF MATERIALS

12	0/2	I/D CARRIER
11	0/1	PCB
10	1	GASKET
9	1	SCREW
8	4	CONTACT DIN
7	1	INSERT DIN MICRO
6	-	MOULDING MATERIAL PP
5	5	CONTACT MALE
4	1	M12 COUPLING NUT MALE
3	1	M12 INSERT 5P MALE
2	-	MOULDING MATERIAL TPU
1	-	CABLE
ITEM	QTY.	DESCRIPTION

RELEASE STATUS	P1	RELEASE DATE	31.10.2017	07:50:26
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ELECTRICAL DIAGRAMS



Electrical diagram & mPm logo printed in white

QUALITY SYMBOLS A = 0 E = 0 F = 0 P = 0 V = 0 C = 0 X = 0 ■ = 0 ▽ = 0	EC NO: 167233 DRWN: APAWLAK01 CHK'D: MIWASIECZKO APPR: MIWASIECZKO	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION UNITS mm	SCALE 1:1	molex® G850 DIN MICRO / MMC 5P MM			
				DRWN BY APAWLAK01	DATE 2017/10/18				
				CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING			
				APPR BY MIWASIECZKO	DATE 2017/10/31				
DRAWING SIZE A3		THIRD ANGLE PROJECTION		SERIES 121036	MATERIAL NUMBER SEE 1210360510 PDP	CUSTOMER GENERAL MARKET			
REV		A		DOCUMENT NUMBER 1210360510		DOC TYPE PSD	DOC PART 000	SHEET NUMBER 1 OF 2	

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

OPTIONS

G 8 5 0 X X X X X X X X X X

G=Form Micro (9.4mm contact spacing)

8=MMC M12 Connector

5=5 Poles

0=Default Standard Wiring

Electrical configuration:
0 = Without circuit
A = S0 24V Yellow LED
B = C4 24V Yellow LED
C = S0 110V Yellow LED
D = C4 110V Yellow LED
E = S0 24V Green LED
F = C4 24V Green LED
G = S0 110V Green LED
H = C4 110V Green LED
J = S0 24V Red LED
K = C4 24V Red LED
L = S0 110V Red LED
M = C4 110V Red LED
S = C4 230V Yellow LED

DIN Earth Position - o'clock & M12 connector body:
0 = Earth H6/H12, Male Straight
2 = Earth H6/H12, Male Right Angle

Cable type: See Table

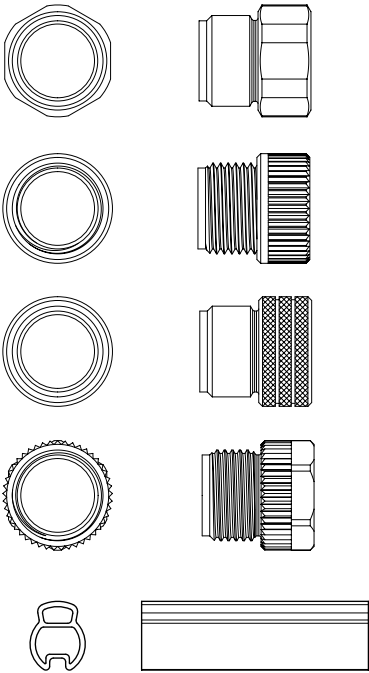
Units: M=Meter

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

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

Coupling Nut:
Blank (Standard)=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
9=Knurled / Hexagonal Brass Ni Plated

H= 2 pcs. of I/D Carrier PVC Transparent (Cables lxx & P82 always with 2 pcs. I/D Carrier)



CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	SHIELD
A58	3	20AWG	PVC BLACK	UL 2661	C22.2 II A 105°C/300V	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
B31	3	0.50mm²	WSOR BLACK	UL 21215	-	-	-25°C to +80°C, 7.5xO.D.	-
E03	3	0.34mm²	PVC BLACK	UL 2464	CSA C22.2	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-
E12	3	0.50mm²	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
I12	3	0.50mm²	CEI PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
P12	3	0.50mm²	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-

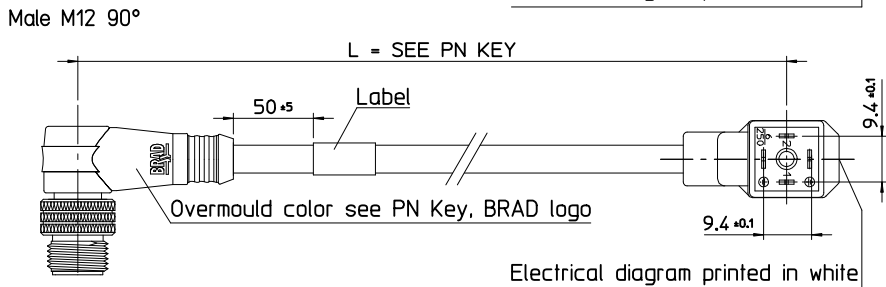
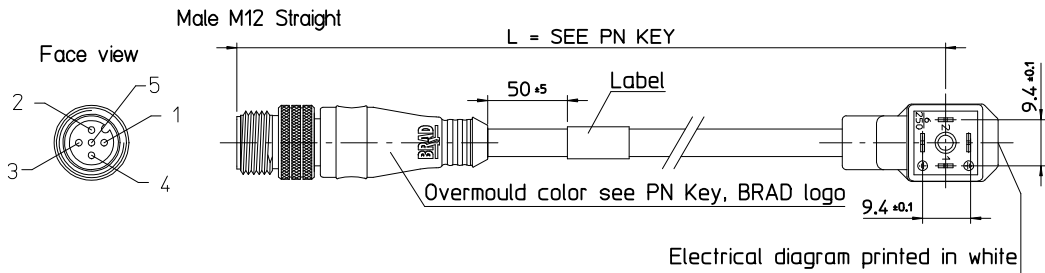
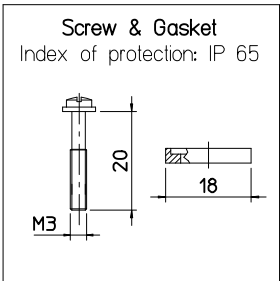
Table of length tolerances [mm]		
Over	Up to and including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

- Notes:
- Please see excel sheet 1210360510_PDP for currently configured part numbers.
 - Drawing is a replacement for SD-121036-003

RELEASE STATUS	P1	RELEASE DATE	31.10.2017	07:50:26
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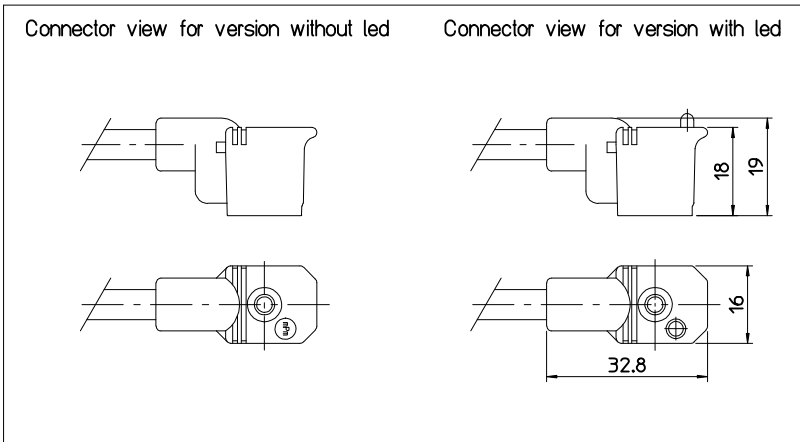
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																			
QUALITY SYMBOLS	2017/10/18 2017/10/31 EC NO: 167233 DRWN: APAWLAK01 CHK'D: MIWASIECZKO APPR: MIWASIECZKO	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS		SCALE		molex® G850 DIN MICRO / MMC 5P MM PRODUCT CUSTOMER DRAWING												
			mm		1:1														
			DRWN BY		DATE														
			APAWLAK01		2017/10/18														
			CHK'D BY		DATE														
			APPR BY		DATE		SERIES									MATERIAL NUMBER		CUSTOMER	
			MIWASIECZKO		2017/10/31														
			DRAWING SIZE		THIRD ANGLE PROJECTION		121036									SEE 1210360510 PDP		GENERAL MARKET	
			A3																
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				DOCUMENT NUMBER									DOC TYPE		DOC PART	
A		REV		1210360510									PSD		000		2 OF 2		

Table of lenght tolerances [mm]		
Over	Up to and including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100



PART No MATRIX - PN KEY

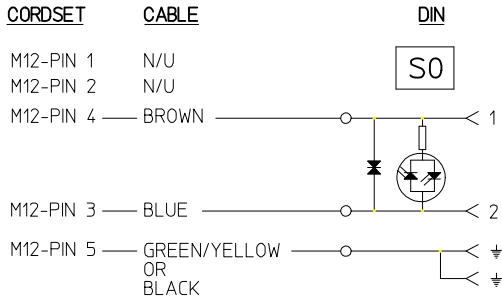
G	8	5	X	X	X	X	X	X	X	X	X	X	X	X										
G = Form Micro (9,4mm contact spacing)	8 = MMC Single Keyway	5=5 Pole	Wiring details: 0 = Positive Switching (pin 3&4) 1 = Negative Switching (pin 1&4)		XXX = Cable Type		M = Metres F = Feet		Lengths: 020-2 Meters 050-5 Meters 200-20 Meters		H/D Carrier M12 Overmoulding color: Blank-Black Standard Y=Yellow A=Grey													
Electrical configuration: 0 = Without LED/Without circuit A = S0 24V Yellow LED B = C4 24V Yellow LED C = S0 110V Yellow LED D = C4 110V Yellow LED E = S0 24V Green LED F = C4 24V Green LED G = S0 110V Green LED H = C4 110V Green LED J = S0 24V Red LED K = C4 24V Red LED L = S0 110V Red LED M = C4 110V Red LED S = C4 230V Yellow LED																								
DIN Earth Position - o'clock & M12 connector body: 0 = Earth H6/H12, MALE Straight 2 = Earth H6/H12, MALE 90°																								
														1/07		1/07		1/08		QUALITY		GENERAL T		



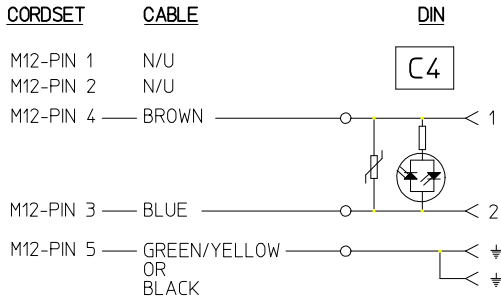
ADD CABLE B31 EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/11/07 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08		DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS METRIC	 FIRST ANGLE PROJECTION	
					mm	INCH	DRAWN BY DATE		TITLE G85XXXXXXXXXX DIN MICRO + CORDSETS M12		
				4 PLACES	+---	+---	JMARSZALEK 2012/11/20				
				3 PLACES	+---	+---	CHECKED BY DATE	molex			
				2 PLACES	+---	+---	MSZWAJKOWSKI 2012/11/20				
1 PLACE	+---	+---	APPROVED BY DATE	DOCUMENT NO.		SHEET NO.					
				0 PLACE	+---	+---	MIWASIECZKO 2013/11/08	SD-121036-003		1 OF 3	
				ANGULAR ±---°		MATERIAL NO.					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3					
						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

Electrical diagrams

Electrical diagram with circuit S0 (zener diode) for:



Electrical diagram with circuit C4 (VDR) for:



Cable type

Cable Type	Jacket Material	Jacket Color	Wire cross section	Braid
A58	PVC	Black	20AWG	no
E03	PVC	Black	0.34mm²	no
E12	PVC	Black	0.5mm²	no
I12	CEI PVC	Grey	0.5mm²	no
P12	PUR	Black	0.5mm²	no
B31	PUR	Black	0.5mm²	no

ADD CABLE B31 EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/11/07 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08	QUALITY SYMBOLS ▽=0 ◻=0	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION	
				mm	INCH	DRAWN BY JMARSZALEK	DATE 2012/11/20	TITLE G85XXXXXXXXXX DIN MICRO + CORDSETS M12		
			4 PLACES	± ---	± ---	CHECKED BY	DATE			
			3 PLACES	± ---	± ---	MSZWAJKOWSKI	2012/11/20	molex	DOCUMENT NO. SD-121036-003	SHEET NO. 2 OF 3
			2 PLACES	± ---	± ---	APPROVED BY	DATE			
			1 PLACE	± ---	± ---	MIWASIECZKO	2013/11/08			
			0 PLACE	± ---	± ---	MATERIAL NO.				
			ANGULAR ± --- °		SEE SHEET 3					
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			REV							

PART LIST

Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:	Pos.	Molex PN:	Engineering No.:
1	1210350160	G85000E12M006	41	1210360915	G850B2B31M015	81			121			161		
2	1210350163	G85000E12M050	42	1210360916	G850B2B31M030	82			122			162		
3	1210350168	G85000P12M006	43			83			123			163		
4	1210350220	G85000E12M030	44			84			124			164		
5	1210350221	G85002E12M003	45			85			125			165		
6	1210350270	G850B2P12M030	46			86			126			166		
7	1210360271	G850B0I12M003	47			87			127			167		
8	1210360272	G850B0I12M006	48			88			128			168		
9	1210360273	G850B0I12M010	49			89			129			169		
10	1210360277	G850B0P12M010	50			90			130			170		
11	1210360406	G850B0P12M006	51			91			131			171		
12	1210360439	G850B0E03M005	52			92			132			172		
13	1210360473	G850B0E12M003	53			93			133			173		
14	1210360475	G850B0E12M010	54			94			134			174		
15	1210360476	G850B0E12M020	55			95			135			175		
16	1210360477	G850B0E12M030	56			96			136			176		
17	1210360478	G850B0E12M040	57			97			137			177		
18	1210360480	G850B0E12M050G	58			98			138			178		
19	1210360481	G850B0P12M030	59			99			139			179		
20	1210360482	G850B2E12M003	60			100			140			180		
21	1210360508	G850A0A58M020	61			101			141			181		
22	1210360509	G850B0E12M006	62			102			142			182		
23	1210360510	G850B2A58M003	63			103			143			183		
24	1210360511	G850B2A58M006	64			104			144			184		
25	1210360573	G850A0A58M050	65			105			145			185		
26	1210360621	G850B2P12M010	66			106			146			186		
27	1210360649	G850B0P12M020	67			107			147			187		
28	1210360695	G850A0A58M010	68			108			148			188		
29	1210360752	G850B0A58M010	69			109			149			189		
30	1210360766	G850B0E03M020H	70			110			150			190		
31	1210360808	G850A0A58M006	71			111			151			191		
32	1210360835	G850B0P12M015	72			112			152			192		
33	1210360836	G850B2P12M006	73			113			153			193		
34	1210360837	G850B2P12M015	74			114			154			194		
35	1210360909	G850B0B31M006	75			115			155			195		
36	1210360910	G850B0B31M010	76			116			156			196		
37	1210360911	G850B0B31M015	77			117			157			197		
38	1210360912	G850B0B31M030	78			118			158			198		
39	1210360913	G850B2B31M006	79			119			159			199		
40	1210360914	G850B2B31M010	80			120			160			200		

ADD NEW PN'S

EC NO: IPG2014-0850

DRWN: JMARSZALEK 2013/11/07

CHKD: MSZWAJKOWSKI 2013/11/07

APPR: MIWASIECZKO 2013/11/08

B

QUALITY SYMBOLS

▽=0

▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± ---	± ---
1 PLACE	± ---	± ---
0 PLACE	± ---	± ---

ANGULAR ±---°

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE

MM ONLY

DRAWN BY	DATE
JMARSZALEK	2012/11/20
CHECKED BY	DATE
MSZWAJKOWSKI	2012/11/20
APPROVED BY	DATE
MIWASIECZKO	2013/11/08

MATERIAL NO.

SEE TABLE

SIZE

A3

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SCALE

1:1

DESIGN UNITS

METRIC

FIRST ANGLE PROJECTION

TITLE

G85XXXXXXXXXX
DIN MICRO + CORDSETS M12

DOCUMENT NO.

SD-121036-003

SHEET NO.

3 OF 3

molex