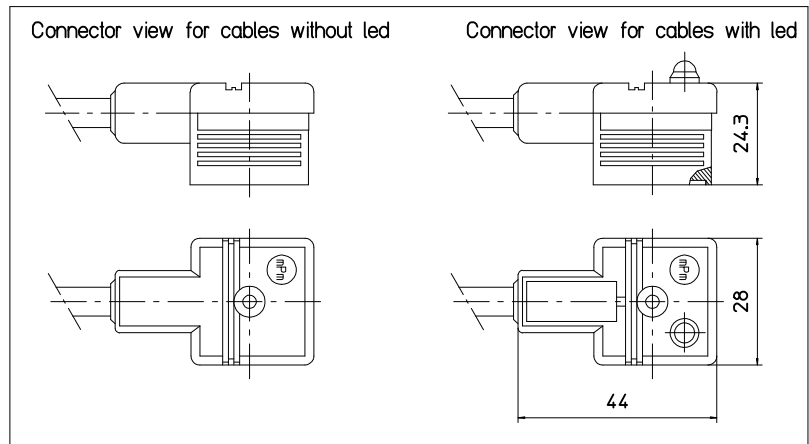
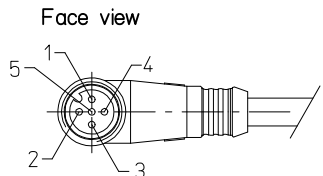
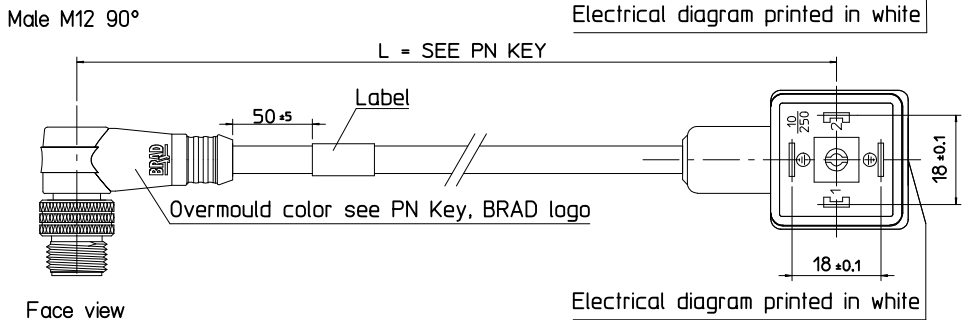
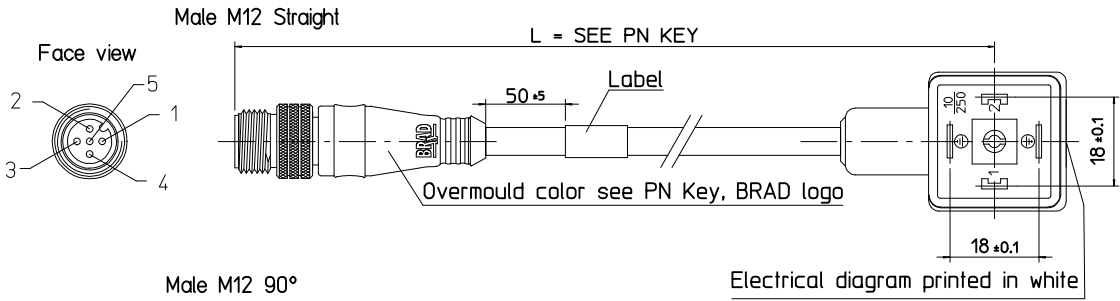
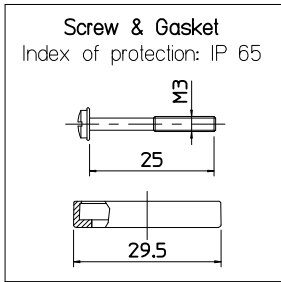
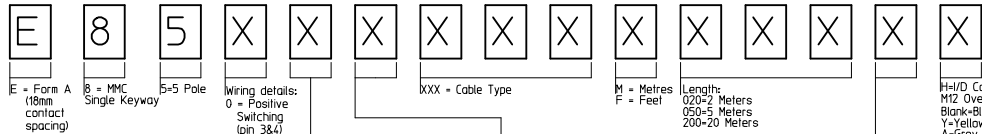


Table of length tolerances [mm]

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



PART No MATRIX - PN Key

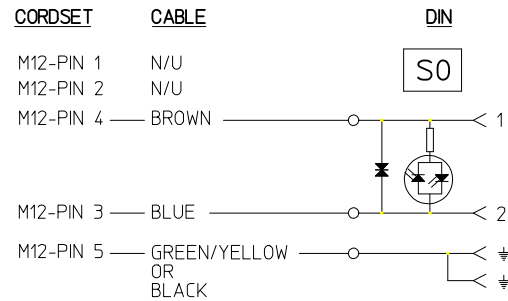


- E = Form A (18mm contact spacing)
- 8 = MMC Single Keyway
- 5=5 Pole
- Wiring details: 0 = Positive Switching (pin 3&4) 1 = Negative Switching (pin 1&4)
- XXX = Cable Type
- M = Metres F = Feet
- Length: 020-2 Meters 050-5 Meters 200-20 Meters
- H/D Carrier H12 Overmoulding color: Blank-Black Standard Y=Yellow A=Grey
- Coupling Nut Material: Blank-Standard 1=Stainless Steel 5=Delrin 7=Teflon coat
- 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
- DN Earth Position - o'clock & M12 connector body: 0 = Earth H6/H12, MALE Straight 2 = Earth H6/H12, MALE 90°

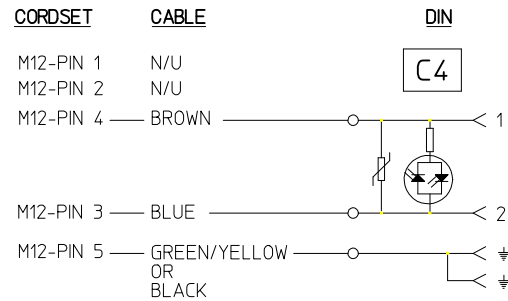
ADD CABLE B31 EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/06/20 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
						METRIC		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---		DRAWN BY DATE JMARSZALEK 2012/11/08 CHECKED BY DATE MSZWAJKOWSKI 2012/11/08 APPROVED BY DATE MIWASIECZKO 2012/11/09		TITLE E85XXXXXXXXXX DIN A + CORDSETS M12		
		ANGULAR ± --- ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE SHEET 3		DOCUMENT NO. SD-121036-001		
		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
A23	PVC	Black	0.75mm ²	no
A58	PVC	Black	20AWG	no
B08	PUR	Yellow	18AWG	no
E03	PVC	Black	0.34mm ²	no
E12	PVC	Black	0.5mm ²	no
I12	CEI PVC	Grey	0.5mm ²	no
P12	PUR	Black	0.5mm ²	no
P82	PUR IRR	Orange	0.34mm ²	no
S26	PVC	Yellow	0.34mm ²	yes
B31	PUR	Black	0.5mm ²	no

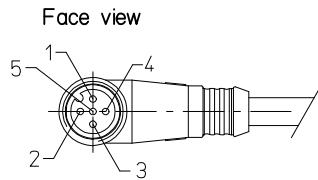
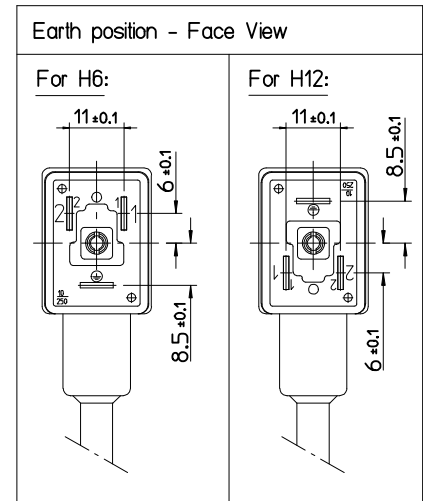
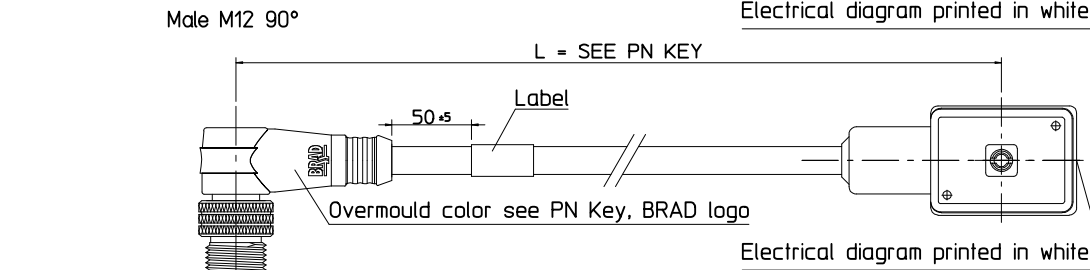
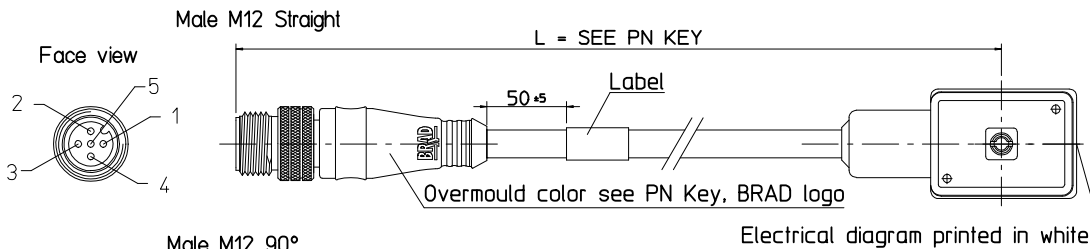
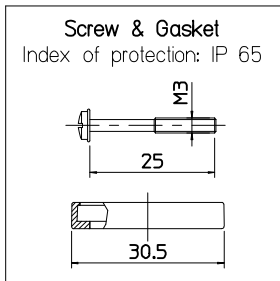
ADD CABLE B31 EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/06/20 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION	
	=0 =0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	1:1	METRIC		
	DESCRIPTION	ANGULAR ± --- °	DRAWN BY	DATE	TITLE		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	JMARSZALEK	2012/11/08	E85XXXXXXXXXX DIN A + CORDSETS M12		
			CHECKED BY	DATE			
		MSZWAJKOWSKI	2012/11/08	DOCUMENT NO.			
		APPROVED BY	DATE	SD-121036-001			
		MIWASIECZKO	2012/11/09	SHEET NO.			
		MATERIAL NO.	SEE SHEET 3	2 OF 3			
		SIZE	A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

PART LIST

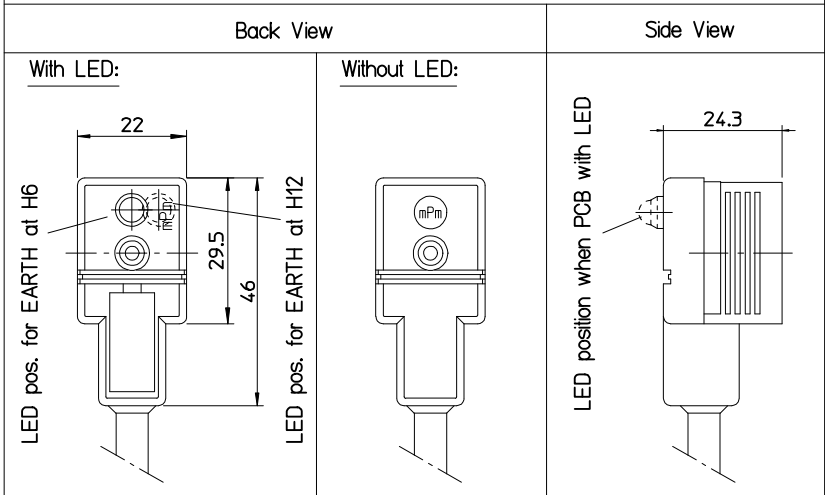
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2	1210350148	E85000P12M020	42	1210360399	E850B0P12M003	82	1210360686	E850A2A58M010	122	1210360894	E850B0B31M010	162		
3	1210350156	E85000P12M010	43	1210360453	E850B0P12M012	83	1210360694	E850A0A58M006	123	1210360895	E850B0B31M015	163		
4	1210350157	E85000P12M030	44	1210360454	E850B0P12M013	84	1210360696	E85002E12M003	124	1210360896	E850B0B31M030	164		
5	1210350201	E85000E12M010	45	1210360455	E850B0P12M014	85	1210360708	E850B0A23M030	125	1210360897	E850B2B31M006	165		
6	1210350202	E85002P12M015	46	1210360456	E850B0P12M017	86	1210360719	E850B2A23M017	126	1210360898	E850B2B31M010	166		
7	1210350207	E85000E12M003	47	1210360457	E850B2P12M005	87	1210360725	E850D0A23M030	127	1210360899	E850B2B31M015	167		
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9	1210350209	E85000P12M003	49	1210360491	E850A0A58M010	89	1210360745	E850B0I12M006	129	1210361900	E850B0A23M015	169		
10	1210350210	E85000P82M030	50	1210360492	E850A0A58M015	90	1210360754	E850A0A58M005	130			170		
11	1210350242	E85002E12M006	51	1210360493	E850A0A58M030	91	1210360756	E85002E12M030	131			171		
12	1210350290	E85000E12M030	52	1210360494	E850A0A58M050	92	1210360771	E850A0P12M030	132			172		
13	1210350291	E85000E12M050	53	1210360495	E850A0A58M100	93	1210360772	E850A0P12M040	133			173		
14	1210350292	E85000P12M100	54	1210360496	E850B2B08M030	94	1210360773	E850A0P12M100	134			174		
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17	1210350311	E85002A23M040	57	1210360557	E850B0E12M006	97	1210360776	E850A2P12M020	137			177		
18	1210350313	E85000P12M017	58	1210360558	E850B0E12M030	98	1210360788	E850D0P12M006	138			178		
19	1210350326	E85000P12M050	59	1210360559	E850B0E12M050	99	1210360789	E850D0P12M020	139			179		
20	1210350339	E85002P12M020	60	1210360560	E850B0P12M0201	100	1210360795	E850A0P12M006	140			180		
21	1210350348	E85000P12M015	61	1210360574	E850B0E12M020	101	1210360796	E850C0P12M006	141			181		
22	1210350349	E85000P12M009	62	1210360576	E850B2E12M010	102	1210360797	E850A0P12M010	142			182		
23	1210360178	E850A0P12M020	63	1210360585	E850A0A58M020	103	1210360798	E850C0P12M010	143			183		
24	1210360184	E850B0I12M010	64	1210360586	E850B0A58M020	104	1210360799	E850C0P12M020	144			184		
25	1210360186	E850B0I12M020	65	1210360588	E850B0B08M003	105	1210360813	E850A0A58M007	145			185		
26	1210360187	E850B0I12M030	66	1210360589	E850B0B08M010	106	1210360815	E850B0I12M010Y	146			186		
27	1210360192	E850B0P12M006	67	1210360590	E850B0B08M020	107	1210360816	E850B0I12M020Y	147			187		
28	1210360193	E850B0P12M010	68	1210360593	E850B0P12M040	108	1210360817	E850B0I12M030Y	148			188		
29	1210360194	E850B0P12M015	69	1210360594	E850B0P12M100	109	1210360819	E850B0I12M006Y	149			189		
30	1210360195	E850B0P12M020	70	1210360595	E850B0S26M010H	110	1210360821	E850B2P12M015	150			190		
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37	1210360209	E850B2P12M010	77	1210360658	E850B0A58M006	117	1210360850	E850B0P12M090	157			197		
38	1210360210	E850B2P12M020	78	1210360659	E850B0A58M015	118	1210360853	E850B2P12M003	158			198		
39	1210360211	E850B2P12M030	79	1210360667	E850A0A58M070	119	1210360857	E850B0P12M010H	159			199		
40	1210360212	E850B2P12M050	80	1210360675	E850C0A58M100	120	1210360858	E850B0P12M020H	160			200		

ADD NEW PN EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/06/20 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION
	▼ = 0 ◻ = 0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	1:1	METRIC	DRAWN BY: JMARSZALEK DATE: 2012/11/08 CHECKED BY: MSZWAJKOWSKI DATE: 2012/11/08 APPROVED BY: MIWASIECZKO DATE: 2012/11/09
		ANGULAR ± --- °	TITLE	E85XXXXXXXXXX DIN A + CORDSETS M12		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 3	molex DOCUMENT NO. SD-121036-001 SHEET NO. 3 OF 3		

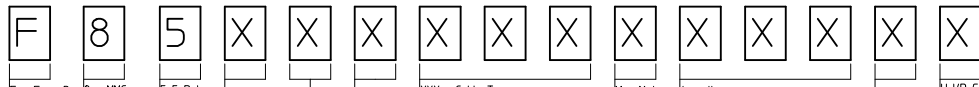
Over	Up to and including	Tolerance
0	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100



Connector Views

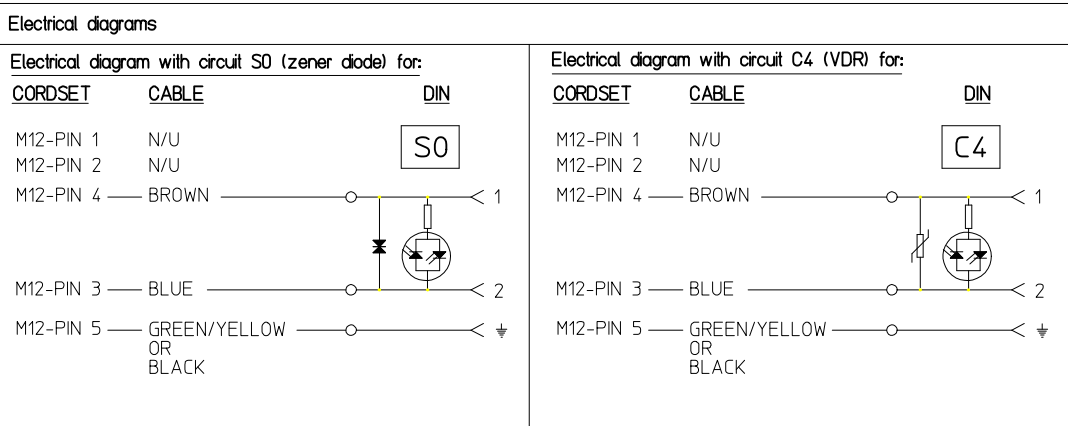


PART No MATRIX - PN Key



- F** = Form B Industrial Standard (11mm contact spacing)
- 8** = MMC Single Keyway
- 5** = 5-5 Pole
- Wiring details:**
 - 0 = Positive Switching (pin 3&4)
 - 1 = Negative Switching (pin 1&4)
- Electrical configurations:**
 - 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
- XXX** = Cable Type
- M** = Metres
- F** = Feet
- Lengths:**
 - 020-2 Meters
 - 050-5 Meters
 - 200-20 Meters
- Options:**
 - H/D Carrier:**
 - M12 Overmoulding color:
 - Blank-Black Standard
 - Y=Yellow
 - A=Grey
 - Coupling Nut Material:**
 - Blank-Standard
 - 1=Stainless Steel
 - 5-Delrin
 - 7-Teflon coat
- DIN Earth Position - o'clock & M12 connector body:**
 - 0 = EARTH H6, MALE Straight
 - 1 = EARTH H12, MALE Straight
 - 2 = EARTH H6, MALE 90°
 - 3 = EARTH H12, MALE 90°

ADD CABLE B31 EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/11/07 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>0 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± ---	± ---	1 PLACE	± ---	± ---	0 PLACE	± ---	± ---	DIMENSION STYLE MM ONLY DRAWN BY: JMARSZALEK DATE: 2012/11/08 CHECKED BY: MSZWAJKOWSKI DATE: 2012/11/08 APPROVED BY: MIWASIECZKO DATE: 2013/11/08 MATERIAL NO.	SCALE: METRIC DESIGN UNITS: METRIC FIRST ANGLE PROJECTION	TITLE: F85XXXXXXXXXX DIN B IND + CORDSETS M12	molex	DOCUMENT NO.: SD-121036-002 SHEET NO.: 1 OF 3
				mm	INCH																				
4 PLACES	± ---	± ---																							
3 PLACES	± ---	± ---																							
2 PLACES	± ---	± ---																							
1 PLACE	± ---	± ---																							
0 PLACE	± ---	± ---																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE SHEET 3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																							





Cable type

Cable Type	Jacket Material	Jacket Color	Wire cross section	Braid
A23	PVC	Black	0.75mm ²	no
A58	PVC	Black	20AWG	no
B08	PUR	Yellow	18AWG	no
E03	PVC	Black	0.34mm ²	no
E12	PVC	Black	0.5mm ²	no
I12	CEI PVC	Grey	0.5mm ²	no
P12	PUR	Black	0.5mm ²	no
P82	PUR IRR	Orange	0.34mm ²	no
S26	PVC	Yellow	0.34mm ²	yes
B31	PUR	Black	0.5mm ²	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	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	FIRST ANGLE PROJECTION	
	=0 =0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	MM ONLY	1:1	METRIC		
	DESCRIPTION	ANGULAR ± --- °	DRAWN BY	DATE	TITLE		
	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	JMARSZALEK	2012/11/08	F85XXXXXXXXXX DIN B IND + CORDSETS M12		
			CHECKED BY	DATE			
		MSZWAJKOWSKI	2012/11/08	DOCUMENT NO. SD-121036-002			
		APPROVED BY	DATE	SHEET NO. 2 OF 3			
		MIWASIECZKO	2013/11/08	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

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.:
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2	1210350197	F85000E12M060	42	1210360607	F850B1P12M003	82	1210360902	F850B0B31M010	122			162		
3	1210350216	F85001E12M003	43	1210360608	F850B1P12M008	83	1210360903	F850B0B31M015	123			163		
4	1210350217	F85001E12M030	44	1210360609	F850B1P12M070	84	1210360904	F850B0B31M030	124			164		
5	1210350286	F85000P12M006	45	1210360660	F850B0A58M006	85	1210360905	F850B2B31M006	125			165		
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7	1210350288	F85000P12M020	47	1210360670	F850B3B08M050	87	1210360907	F850B2B31M015	127			167		
8	1210350303	F85000E12M006	48	1210360671	F850A0A58M100	88	1210360908	F850B2B31M030	128			168		
9	1210350312	F85000E12M030	49	1210360673	F850B0P82M015	89			129			169		
10	1210350325	F85000E12M003	50	1210360674	F850B0E12M050	90			130			170		
11	1210350344	F85000P12M011	51	1210360690	F850A0A58M005	91			131			171		
12	1210350345	F85000P12M009	52	1210360691	F850B0A58M010	92			132			172		
13	1210350346	F85000P12M012	53	1210360693	F850B0A58M030	93			133			173		
14	1210350347	F85000P12M013	54	1210360728	F850B0A23M010	94			134			174		
15	1210360247	F850A3P12M010	55	1210360740	F850A3A58M050	95			135			175		
16	1210360248	F850A3P12M040	56	1210360741	F850B1A58M100	96			136			176		
17	1210360251	F850B0I12M006	57	1210360759	F850B0P82M005	97			137			177		
18	1210360252	F850B0I12M010	58	1210360763	F850A0A58M070	98			138			178		
19	1210360255	F850B0P12M010	59	1210360790	F850D0P12M006	99			139			179		
20	1210360256	F850B0P12M020	60	1210360791	F850D0P12M020	100			140			180		
21	1210360257	F850B0P12M030	61	1210360800	F850A0P12M006	101			141			181		
22	1210360352	F850B0P12M006	62	1210360801	F850C0P12M006	102			142			182		
23	1210360398	F850B1P12M020	63	1210360802	F850A0P12M010	103			143			183		
24	1210360437	F850B1E03M010	64	1210360803	F850C0P12M010	104			144			184		
25	1210360461	F850B0P12M050	65	1210360804	F850A0P12M020	105			145			185		
26	1210360462	F850B1P12M006	66	1210360805	F850C0P12M020	106			146			186		
27	1210360463	F850B1P12M010	67	1210360806	F850B1P12M0087	107			147			187		
28	1210360464	F850D0P12M010	68	1210360809	F850B0I12M020	108			148			188		
29	1210360499	F850B1P82M010	69	1210360810	F850B1P82M0087	109			149			189		
30	1210360502	F850A0A58M030	70	1210360811	F850B1P82M0067	110			150			190		
31	1210360503	F850A0A58M050	71	1210360818	F850B0I12M010Y	111			151			191		
32	1210360504	F850B0A58M100	72	1210360820	F850B0I12M020Y	112			152			192		
33	1210360505	F850B2P12M006	73	1210360822	F850B0P12M015	113			153			193		
34	1210360506	F850B2P12M010	74	1210360823	F850B2P12M015	114			154			194		
35	1210360545	F850B0E12M010	75	1210360824	F850B2P12M030	115			155			195		
36	1210360548	F850B1E12M006	76	1210360839	F850B0P82M0067	116			156			196		
37	1210360561	F850B2E12M010	77	1210360840	F850B0P82M0067Y	117			157			197		
38	1210360571	F850B0P82M0107	78	1210360860	F850B0P12M010H	118			158			198		
39	1210360603	F850B0A58M020	79	1210360863	F850B1P12M015	119			159			199		
40	1210360605	F850B0E12M020	80	1210360865	F850B0P12M020H	120			160			200		

<p>ADD NEW PN'S EC NO: IPG2014-0850 DRWN: JMARSZALEK 2013/11/07 CHKD: MSZWAJKOWSKI 2013/11/07 APPR: MIWASIECZKO 2013/11/08</p>	<p>QUALITY SYMBOLS  = 0  = 0</p>	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p>		<p>DIMENSION STYLE MM ONLY</p>	<p>SCALE 1:1</p>	<p>DESIGN UNITS METRIC</p>	<p>FIRST ANGLE PROJECTION</p>		
		<p>4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---</p>	<p>mm INCH ± --- ± --- ± --- ± --- ± --- ± --- ± --- ± ---</p>	<p>DRAWN BY DATE JMARSZALEK 2012/11/08</p>	<p>CHECKED BY DATE MSZWAJKOWSKI 2012/11/08</p>	<p>TITLE F85XXXXXXXXXX DIN B IND + CORDSETS M12</p>			
		<p>ANGULAR ± --- °</p>		<p>MATERIAL NO.</p>	<p>DOCUMENT NO. SD-121036-002</p>				
		<p>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</p>		<p>SIZE A3</p>	<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>				