

PN KEY ENGINEERING PN

E 4 6 2 X X X X X X X X X X X X

E - Packing without bag
W - Single Packing

Number of wires:
2 - 2 Wires + Earth

Cable type:
See Table

Head Colour:
G - Grey
N - Black
A - CSA-UL Black
B - CSA-UL Grey

Cable Length in[cm]
050 = 50cm
300 = 300cm
10K = 1000cm

Wiring Configuration:
See sheet 3

Voltage and Led Colour

Red Led:	Green Led:	Yellow Led:
1 = 12V	A = 12V	G = 12V
2 = 24V	B = 24V	H = 24V
3 = 48V	C = 48V	K = 48V
4 = 115V	D = 115V	L = 115V
5 = 230V	E = 230V	M = 230V

Earth PIN location (see insert orientation table):
2 = Earth on H12
6 = Earth on H6

Type of Gasket and Screw (see sheet 1):
1 = NBR Profile Gasket + Fixing Screw M3x25mm
2 = NBR Flat Gasket + Fixing Screw M3x25mm
3 = Silicone Profile Gasket + Fixing Screw M3x25mm
4 = Silicone Flat Gasket + Fixing Screw M3x25mm
P = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm Assembled on Connector
R = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm NOT Assembled on Connector
T = NBR Profile Gasket + Fixing Screw with Washer M3x27mm

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE O.D.	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	SHIELD
A2	3	AWG 20	5.6mm±0.2	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
A3	3	AWG 18	6.5mm±0.25	PVC BLACK	UL 2661	CSA C22.2	-30°C to +105°C, 10xO.D.	-5°C to +105°C, 15xO.D.	-
B2	3	AWG 20	5.6mm±0.2	PUR BLACK	UL 20668	CSA C22.2	-40°C to +90°C, 5xO.D.	-25°C to +90°C, 10xO.D.	-
B3	3	AWG 18	6.5mm±0.2	PUR BLACK	UL 20668	CSA C22.2	-40°C to +90°C, 5xO.D.	-25°C to +90°C, 10xO.D.	-
F4	3	1mm²	7.1mm+0.2	PVC GREY	-	-	-15°C to +70°C, 10xO.D.	-5°C to +60°C, 15xO.D.	-
I0	3	1mm²	7.6mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	YES
I2	3	0.5mm²	5.5mm+0.3	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I3	3	0.75mm²	6.0mm±0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
I4	3	1mm²	7.1mm+0.2	PVC GREY	-	-	-25°C to +70°C, 10xO.D.	-5°C to +70°C, 15xO.D.	-
N2	3	0.5mm²	5.6mm±0.7	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N3	3	0.75mm²	6.8mm±0.8	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
N4	3	1mm²	7.15mm±0.85	PVC BLACK	-	-	-20°C to +70°C, 3xO.D.	-15°C to +70°C, 5xO.D.	-
P1	3	0.34mm²	5.3mm±0.2	PUR BLACK	-	-	-25°C to +80°C, 10xO.D.	-5°C to +80°C, 15xO.D.	-
P2	3	0.5mm²	5.5mm+0.3	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-
P3	3	0.75mm²	6.5mm±0.2	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-

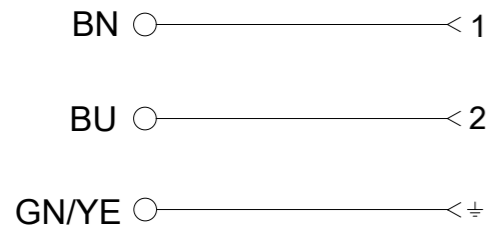
Notes:

- Please see excel sheet 1210501000_PDP for currently configured part numbers.
- Drawing is a replacement for: SD-121050-003

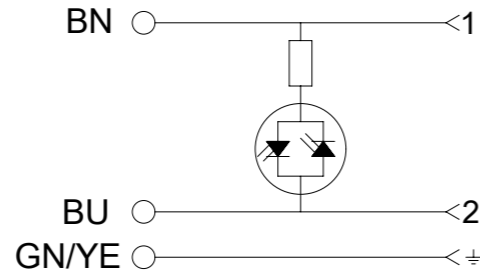
SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex				
	▽ = 0	mm	SCALE	1:1					
	▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)							
	▽ = 0	ANGULAR TOL ± °							
▽ = 0	4 PLACES	±	EC NO: 603741	2018/07/16	STANDARD E462 DIN FORM INDUSTRIAL				
▽ = 0	3 PLACES	±	DRWN: APAWLAK01	2018/08/31					
▽ = 0	2 PLACES	± 0.05	CHK'D: RSILLER	2018/08/31					
▽ = 0	1 PLACE	± 0.1	APPR: RSILLER	2018/08/31	PRODUCT CUSTOMER DRAWING				
▽ = 0	0 PLACES	±	INITIAL REVISION:	DOCUMENT NUMBER	DOC TYPE				
▽ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	REVISION	SHEET NUMBER
▽ = 0				A3-SIZE	121050	1210501000_PDP	GENERAL MARKET	000 A	2 OF 3

WIRING DIAGRAMS

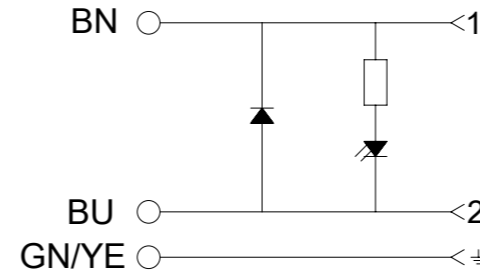
ELECTRICAL DIAGRAM 00



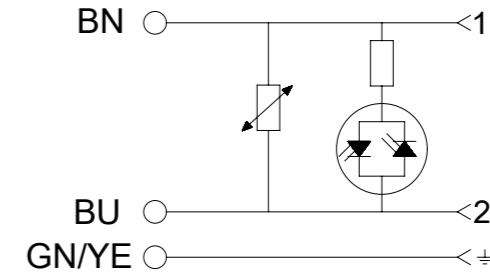
ELECTRICAL DIAGRAM A1



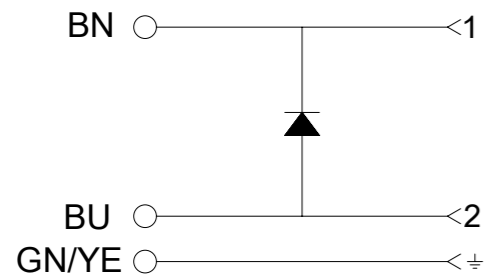
ELECTRICAL DIAGRAM C3



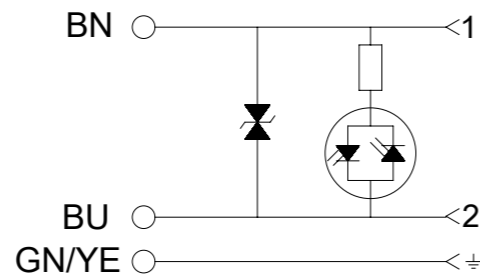
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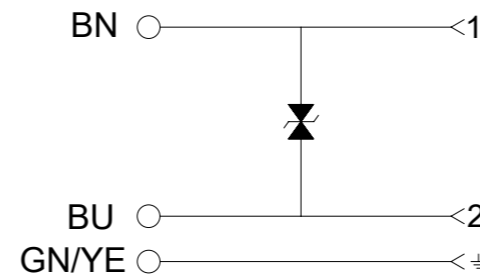
ELECTRICAL DIAGRAM E0



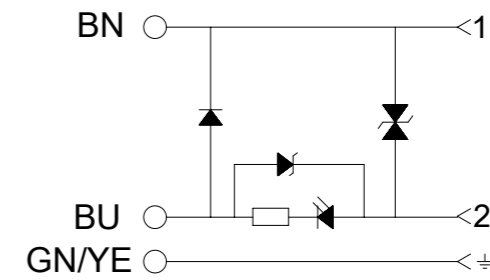
ELECTRICAL DIAGRAM S0



ELECTRICAL DIAGRAM S1



ELECTRICAL DIAGRAM NS



Technical Spec:

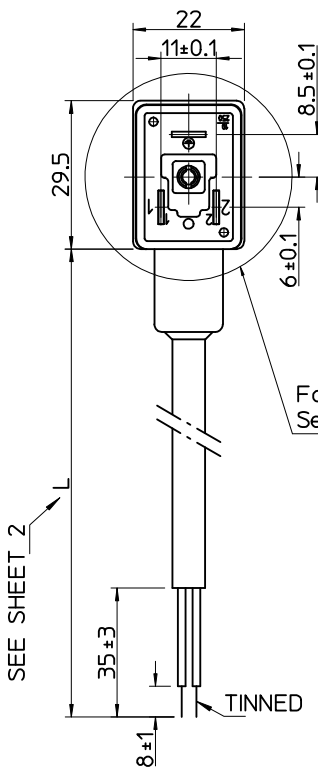
Supply Voltage: See PN KEY

Max. current: 5A; A1-C4-S0
1,5A; R2

Contact Resistance: ≤15milliohms max.

Operating Temperature:
with NBR Gasket: -40°C +90°C
with Silicone: -40°C +125°C

SYMBOLS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC:		molex	
▽ = 0	mm	SCALE	1:1	EC NO: 603741			
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DRWN: APAWLAK01		2018/07/16	PRODUCT CUSTOMER DRAWING	
▽ = 0	ANGULAR TOL ± °		CHK'D: RSILLER		2018/08/31	DOCUMENT NUMBER	
▽ = 0	4 PLACES	±	APPR: RSILLER		2018/08/31	1210501000	
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▽ = 0	2 PLACES	± 0.05	DRWN: APAWLAK01		2018/07/16	DOC PART	000
▽ = 0	1 PLACE	± 0.1	APPR: RSILLER		2018/08/31	REVISION	A
▽ = 0	0 PLACES	±	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NUMBER		SEE 1210501000_PDP
▽ = 0	THIRD ANGLE PROJECTION		DRAWING		SERIES	CUSTOMER	GENERAL MARKET
▽ = 0	A3-SIZE		121050		SHEET NUMBER		3 OF 3



Screw and gasket, see sheet 2, PN Key
Face View See Insert Orientation

CIRCUIT PRINTOUT/WHITE

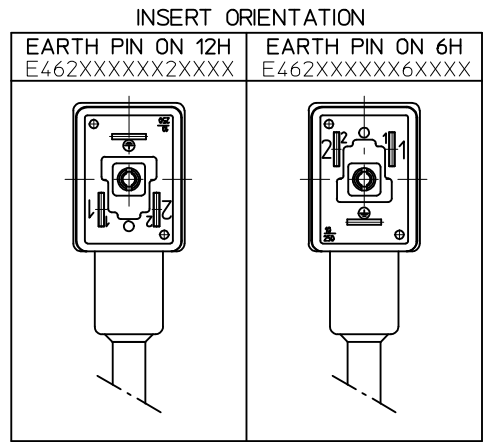
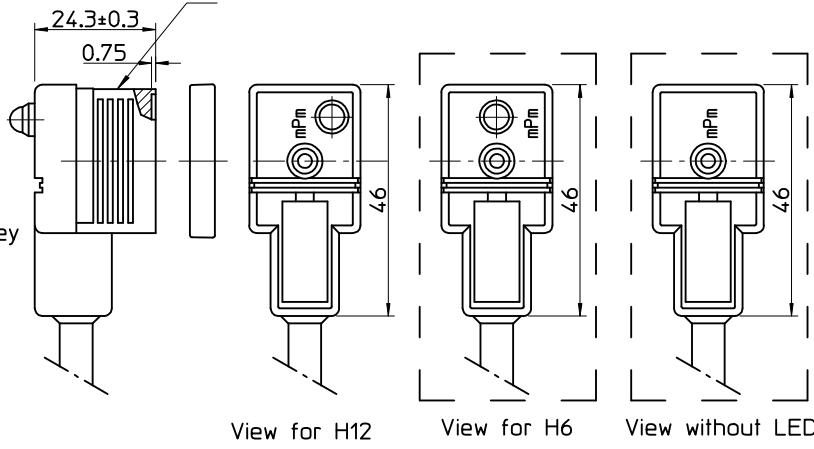
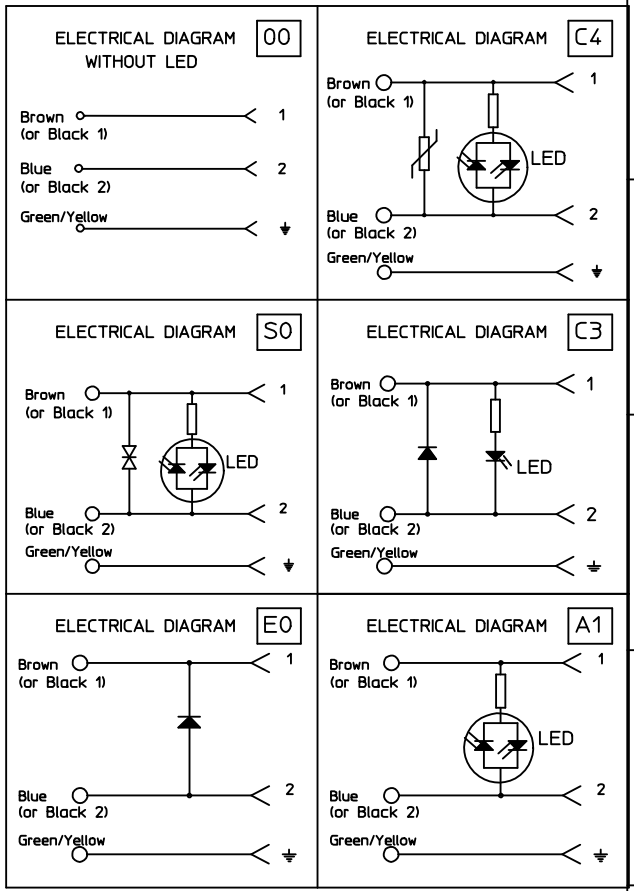


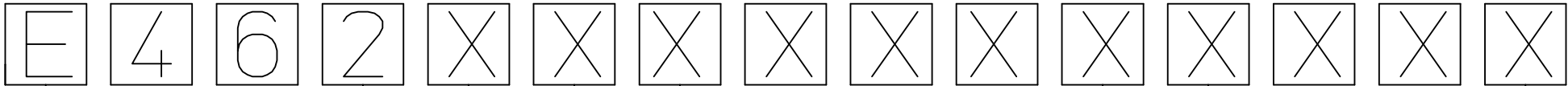
Table of length tolerances [mm]

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



<p>DRAWING UPDATED EC NO: IPG2013-1493 DRW:NDYSZEWSKA 2013/03/27 CHKD: JMARSZALEK 2013/03/27 APPR: MIWASIECZKO 2013/03/28</p>	<p>QUALITY SYMBOLS ▽ ±0 ◻ ±0</p>	<p>GENERAL TOLERANCES (UNLESS SPECIFIED)</p> <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	±---	±---	<p>DIMENSION STYLE MM ONLY</p>	<p>SCALE</p>	<p>DESIGN UNITS METRIC</p>	<p>FIRST ANGLE PROJECTION</p>
			mm	INCH																					
		4 PLACES	±---	±---																					
		3 PLACES	±---	±---																					
2 PLACES	±---	±---																							
1 PLACE	±---	±---																							
0 PLACE	±---	±---																							
<p>DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</p>		<p>MATERIAL NO.</p>	<p>TITLE</p>	<p>E462XXXXXXXXXX FORM INDUSTRIAL</p>																					
<p>ANGULAR ±---°</p>		<p>MATRIX DRAWING</p>	<p>DOCUMENT NO.</p>	<p>molex</p>																					
<p>THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</p>		<p>SIZE A3</p>	<p>SD-121050-003</p>	<p>SHEET NO. 1 OF 4</p>																					

10 9 8 7 6 5 4 3 2 1



E - Packing without bags
 W - Single packing
 Q - Quick packing

NUMBER OF WIRES:
 1=2 WIRES
 2=2 WIRES + EARTH

CABLE TYPE
 SEE TABLE 1

CABLE CROSS SECTION AREA
 SEE TABLE 2

HEAD COLOUR:
 G=GREY;
 N=BLACK;
 T=TRANSPARENT;
 A=CSA-UL BLACK;
 B=CSA-UL GREY.

CABLE LENGHT IN CM
 Eg.:050=50 CM, 300=300 CM, 10K=1000 CM.

EARTH PIN LOCATION:
 2=EARTH ON 12H,
 6=EARTH ON 6H.

GASKET SCREWS:

- 1=NBR PROFILE GASKET+FIXING SCREWS (M3x25 mm).
- 2=NBR FLAT GASKET+SCREW (M3x25 mm).
- 3=SILICONE PROFILE GASKET+SCREW (M3x25 mm).
- 4=SILICON FLAT GASKET+SCREW (M3x25 mm).
- P=INTEGRATED GASKET+FIXING SCREW+GROMMET (M3x27 mm).
- R=INTAGRATED GASKET+SCREW+GROMMET (M3x27 mm).
- T=PROFILE GASKET+SCREW+GROMMET (M3x27 mm).

INTERNAL CIRCUIT
 WIREING CONFIGURATION

VOLTAGE AND LED COLOUR:

1= 12V	A= 12V	G= 12V
2= 24V	B= 24V	H= 24V
3= 48V	C= 48V	K= 48V
4= 115V	D= 115V	L= 115V
5= 230V	E= 230V	M= 230V

RED LED GREEN LED YELLOW LED

DRAWING UPDATED EC NO: IPG2013-1493 DRWING: MYSZEWSKA 2013/03/27 CHKD: JMARSZALEK 2013/03/27 APPR: MIWASIECZKO 2013/03/28	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION
	▽=0	mm INCH	DRAWN BY DATE	TITLE		
	∇=0	4 PLACES ± --- ± ---	JMARSZALEK 2012/10/31	E462XXXXXXXXXX FORM INDUSTRIAL		
		3 PLACES ± --- ± ---	CHECKED BY DATE			
		2 PLACES ± --- ± ---	MSZWAJKOWSKI 2012/10/31			
	1 PLACE ± --- ± ---	APPROVED BY DATE				
	0 PLACE ± --- ± ---	MIWASIECZKO 2012/11/09				
	ANGULAR ± --- °	MATERIAL NO.	DOCUMENT NO.		SHEET NO.	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATRIX DRAWING	SD-121050-003		2 OF 4	
		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

9 8 7 6 5 4 3 2 1

TABLE 2 - CABLES


Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180080	I	0	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5,5+/-0,2 mm	OK.	OK.
-	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5,6+/-0,2 mm	OK.	OK.
1210180394	A	2	4	20 AWG	PVC CSA/UL 2661	Black	6,2+/-0,2 mm	OK.	OK.
-	A	2	5	20 AWG	PVC CSA/UL 2661	Black	7+/-0,2 mm	OK.	-
1210180297	B	2	2	20 AWG	PUR CSA/UL 20668	Black	5,5+/-0,2 mm	OK.	OK.
1210180126	B	2	3	20 AWG	PUR CSA/UL 20668	Black	5,6+/-0,2 mm	OK.	OK.
1210180367	B	2	4	20 AWG	PUR CSA/UL 20668	Black	6,2+/-0,2 mm	OK.	OK.
-	B	2	5	20 AWG	PUR CSA/UL 20668	Black	7+/-0,2 mm	OK.	-
1210180122	D	2	3	0,5 mm2	PVC T12 CEI 20-20	Grey	-	-	-
-	F	2	3	0,5 mm2	CNOMO	Grey RAL7000	5,5+/-0,2 mm	OK.	OK.
1210180047	I	2	2	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,5+/-0,2 mm	OK.	OK.
-	I	2	3	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,5+/-0,2 mm	OK.	OK.
1210180146	I	2	4	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	6,5+/-0,2 mm	OK.	-
1210180177	I	2	5	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7+/-0,2 mm	OK.	-
1210180022	N	2	2	0,5 mm2	PVCH03	Black	5,1+ 0,2-0 mm	OK.	OK.
1210180064	N	2	3	0,5 mm2	PVCH03	Black	5,4+ 0,2-0 mm	OK.	OK.
1210180153	N	2	4	0,5 mm2	PVCH03	Black	5,75+0,2-0 mm	OK.	OK.
1210180046	P	2	2	0,5 mm2	PUR - BLEND	Black	5,5+/-0,2 mm	OK.	OK.
-	P	2	3	0,5 mm2	PUR - BLEND	Black	5,5+/-0,2 mm	OK.	OK.
1210180302	P	2	4	0,5 mm2	PUR - BLEND	Black	-	-	-
-	P	2	5	0,5 mm2	PUR - BLEND	Black	7+/-0,2 mm	OK.	OK.
1210180409	A	3	2	18 AWG	PVC CSA/UL 2661	Black	6,5+/-0,2 mm	OK.	-
1210180129	A	3	3	18 AWG	PVC CSA/UL 2661	Black	6,5+/-0,2 mm	OK.	-
1210180169	A	3	4	18 AWG	PVC CSA/UL 2661	Black	7+/-0,2 mm	OK.	-
-	A	3	5	18 AWG	PVC CSA/UL 2661	Black	7,8+/-0,2 mm	OK.	-
1210180351	B	3	2	18 AWG	PUR CSA/UL 20668	Black	6,5+/-0,2 mm	OK.	-
1210180127	B	3	3	18 AWG	PUR CSA/UL 20668	Black	6,5+/-0,2 mm	OK.	-
1210180127	B	3	4	18 AWG	PUR CSA/UL 20668	Black	7+/-0,2 mm	OK.	-
-	B	3	5	18 AWG	PUR CSA/UL 20668	Black	7,8+/-0,2 mm	OK.	-
1210180073	D	3	3	0,75 mm2	PVC T12 CEI 20-20	Grey	-	-	-
1210180145	D	3	4	0,75 mm2	PVC T12 CEI 20-20	Grey	-	-	-
1210180120	I	3	3	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180143	I	3	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180032	N	3	2	0,75 mm2	PVCH05	Black	6,2+ 0,2-0 mm	OK.	-
1210180069	N	3	3	0,75 mm2	PVCH05	Black	6,6+0,2-0 mm	OK.	-
-	N	3	4	0,75 mm2	PVCH05	Black	7,15+0,2-0 mm	OK.	-
1210180174	N	3	5	0,75 mm2	PVCH05	Black	8,0+0,2-0 mm	OK.	-
-	P	3	2	0,75 mm2	PUR - BLEND	Black	6,5+/-0,2 mm	OK.	-

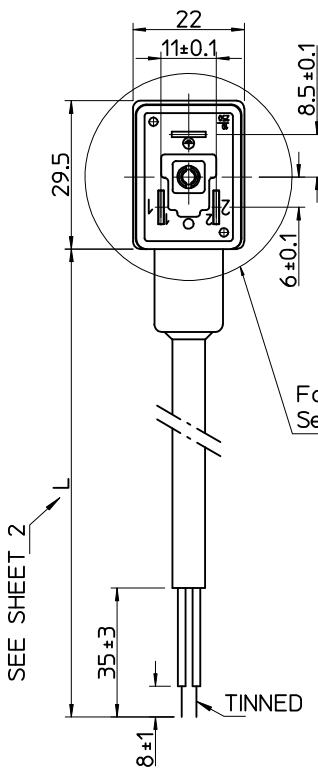
TABLE 2 - CABLES

Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180071	P	3	3	0,75 mm2	PUR - BLEND	Black	6,5+/-0,2 mm	OK.	-
1210180152	P	3	4	0,75 mm2	PUR - BLEND	Black	7+/-0,2 mm	OK.	-
1210180384	R	3	3	0,75 mm2	TPR HAL. FREE	Black	6,5+/-0,2 mm	OK.	-
1210180094	T	3	3	0,75 mm2	PUR CSA/UL	Yellow	-	-	-
1210180309	Y	3	3	0,75 mm2	SIL/0300	Red	6,5+/-0,2 mm	-	-
1210180081	F	4	3	1 mm2	CNOMO	Grey RAL7000	-	-	-
-	F	4	4	1 mm2	CNOMO	Grey RAL7000	7,1+0,2-0 mm	OK.	-
1210180042	I	4	2	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2-0 mm	OK.	-
1210180079	I	4	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2-0 mm	OK.	-
1210180036	N	4	2	1 mm2	PVCH05	Black	6,5+0,2-0 mm	OK.	-
1210180082	N	4	3	1 mm2	PVCH05	Black	6,9+0,2-0 mm	OK.	-
1210180117	R	4	3	1 mm2	TPR HAL. FREE	Black	-	-	-
1210180085	N	5	3	1,5 mm2	PVCH05	Black	8,3+0,2-0 mm	OK.	-
1210180313	I	6	2	0,35 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
-	A	7	3	20 AWG	PVC CSA/UL 2661	Yellow	5,6+/-0,2 mm	OK.	OK.
1210180149	I	9	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-

TABLE 1 - CABLES TYPE

Code	Cable types	Features	Stranding
N	PVC	Application general purpose cable which has good resistance to water, but usually poor oil resistance.	0,5 mm2 = 15 x 0,20 0,75 mm2 = 21 x 0,20 1 mm2 = 28 x 0,20
I	CEI	Approved to IEC 332-2A, flame retardant and self extinguishing. Limited resistant to mineral oils.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
P	PUR	Offer good resistance to oil and chemicals. Can swell when constantly immersed in water.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
A	PVC CSA-UL	Approved to CSA-UL 2661, application general purpose cable which has good resistance to water, but usually poor oil resistance.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15
B	PUR CSA-UL	Approved to CSA-UL 20668, very good resistance to oil and chemicals.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15

DRAWING UPDATED EC NO: IPG2013-1493 DRWING: MYSZEWKA 2013/03/27 CHKD: JMARSZALEK 2013/03/27 APPR: MIWASIECZKO 2013/03/28	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION	
			mm	INCH	DRAWN BY JMARSZALEK	DATE 2012/10/31	TITLE E462XXXXXXXXXX FORM INDUSTRIAL		
			± ---	± ---	CHECKED BY MSZWAJKOWSKI	DATE 2012/10/31			
			± ---	± ---	APPROVED BY MIWASIECZKO	DATE 2012/11/09			
	ANGULAR ± --- °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MARTRIX DRAWING		SD-121050-003		3 OF 4		
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								



Screw and gasket, see sheet 2, PN Key
Face View See Insert Orientation

CIRCUIT PRINTOUT/WHITE

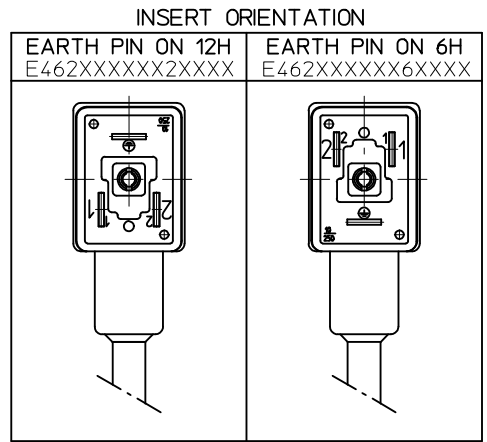
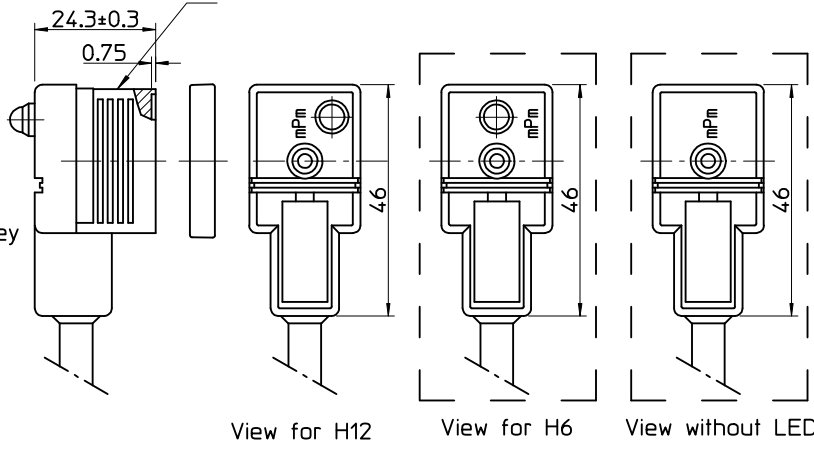
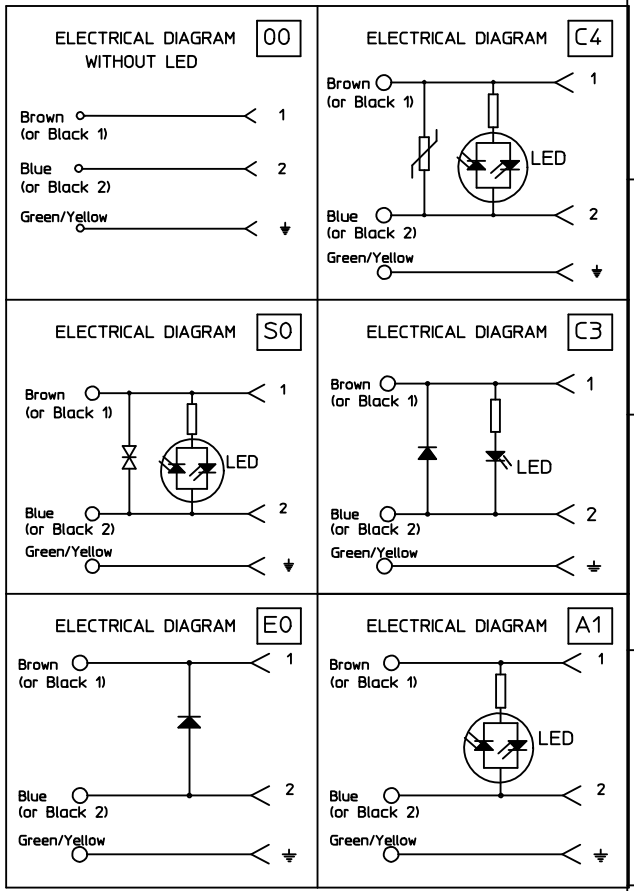


Table of length tolerances [mm]

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



DRAWING UPDATED
EC NO: IPG2013-1493
DRW:NDYSZEWSKA 2013/03/27
CHKD: JMARSZALEK 2013/03/27
APPR: MIWASIECZKO 2013/03/28

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: JMARSZALEK
DATE: 2012/10/31

CHECKED BY: MSZWAJKOWSKI
DATE: 2012/10/31

APPROVED BY: MIWASIECZKO
DATE: 2012/11/09

MATERIAL NO.
MATRIX DRAWING

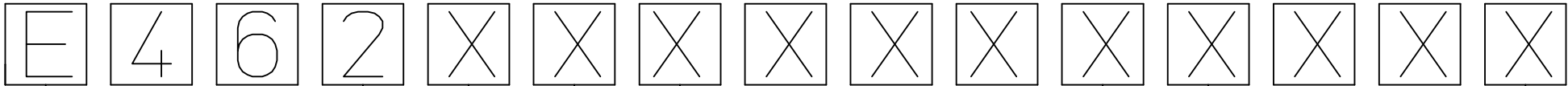
SCALE: METRIC
DESIGN UNITS: METRIC
FIRST ANGLE PROJECTION

TITLE: E462XXXXXXXXXX FORM INDUSTRIAL

DOCUMENT NO.: SD-121050-003
SHEET NO.: 1 OF 4

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10 9 8 7 6 5 4 3 2 1



E - Packing without bags
W - Single packing
Q - Quick packing

NUMBER OF WIRES:
1=2 WIRES
2=2 WIRES + EARTH

CABLE TYPE
SEE TABLE 1

CABLE CROSS SECTION AREA
SEE TABLE 2

HEAD COLOUR:
G=GREY;
N=BLACK;
T=TRANSPARENT;
A=CSA-UL BLACK;
B=CSA-UL GREY.

CABLE LENGHT IN CM
Eg.:050=50 CM, 300=300 CM, 10K=1000 CM.

EARTH PIN LOCATION:
2=EARTH ON 12H,
6=EARTH ON 6H.

GASKET SCREWS:

- 1=NBR PROFILE GASKET+FIXING SCREWS (M3x25 mm).
- 2=NBR FLAT GASKET+SCREW (M3x25 mm).
- 3=SILICONE PROFILE GASKET+SCREW (M3x25 mm).
- 4=SILICON FLAT GASKET+SCREW (M3x25 mm).
- P=INTEGRATED GASKET+FIXING SCREW+GROMMET (M3x27 mm).
- R=INTAGRATED GASKET+SCREW+GROMMET (M3x27 mm).
- T=PROFILE GASKET+SCREW+GROMMET (M3x27 mm).

INTERNAL CIRCUIT WIREING CONFIGURATION

VOLTAGE AND LED COLOUR:

1= 12V	A= 12V	G= 12V
2= 24V	B= 24V	H= 24V
3= 48V	C= 48V	K= 48V
4= 115V	D= 115V	L= 115V
5= 230V	E= 230V	M= 230V

RED LED GREEN LED YELLOW LED

DRAWING UPDATED EC NO: IPG2013-1493 DRWING: MYSZEWSKA 2013/03/27 CHKD: JMARSZALEK 2013/03/27 APPR: MIWASIECZKO 2013/03/28	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	FIRST ANGLE PROJECTION	
	▼=0 □=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- 0 PLACE ± --- ± ---	DRAWN BY: JMARSZALEK DATE: 2012/10/31 CHECKED BY: DATE: MSZWAJKOWSKI 2012/10/31 APPROVED BY: DATE: MIWASIECZKO 2012/11/09	TITLE	E462XXXXXXXXXX FORM INDUSTRIAL		
	ANGULAR ± --- °	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO.	DOCUMENT NO. SD-121050-003			
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
				SHEET NO. 2 OF 4			

9 8 7 6 5 4 3 2 1

TABLE 2 - CABLES


Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180080	I	0	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180467	A	2	2	20 AWG	PVC CSA/UL 2661	Black	5,5+/-0,2 mm	OK.	OK.
-	A	2	3	20 AWG	PVC CSA/UL 2661	Black	5,6+/-0,2 mm	OK.	OK.
1210180394	A	2	4	20 AWG	PVC CSA/UL 2661	Black	6,2+/-0,2 mm	OK.	OK.
-	A	2	5	20 AWG	PVC CSA/UL 2661	Black	7+/-0,2 mm	OK.	-
1210180297	B	2	2	20 AWG	PUR CSA/UL 20668	Black	5,5+/-0,2 mm	OK.	OK.
1210180126	B	2	3	20 AWG	PUR CSA/UL 20668	Black	5,6+/-0,2 mm	OK.	OK.
1210180367	B	2	4	20 AWG	PUR CSA/UL 20668	Black	6,2+/-0,2 mm	OK.	OK.
-	B	2	5	20 AWG	PUR CSA/UL 20668	Black	7+/-0,2 mm	OK.	-
1210180122	D	2	3	0,5 mm2	PVC T12 CEI 20-20	Grey	-	-	-
-	F	2	3	0,5 mm2	CNOMO	Grey RAL7000	5,5+/-0,2 mm	OK.	OK.
1210180047	I	2	2	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,5+/-0,2 mm	OK.	OK.
-	I	2	3	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	5,5+/-0,2 mm	OK.	OK.
1210180146	I	2	4	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	6,5+/-0,2 mm	OK.	-
1210180177	I	2	5	0,5 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7+/-0,2 mm	OK.	-
1210180022	N	2	2	0,5 mm2	PVCH03	Black	5,1+ 0,2-0 mm	OK.	OK.
1210180064	N	2	3	0,5 mm2	PVCH03	Black	5,4+ 0,2-0 mm	OK.	OK.
1210180153	N	2	4	0,5 mm2	PVCH03	Black	5,75+0,2-0 mm	OK.	OK.
1210180046	P	2	2	0,5 mm2	PUR - BLEND	Black	5,5+/-0,2 mm	OK.	OK.
-	P	2	3	0,5 mm2	PUR - BLEND	Black	5,5+/-0,2 mm	OK.	OK.
1210180302	P	2	4	0,5 mm2	PUR - BLEND	Black	-	-	-
-	P	2	5	0,5 mm2	PUR - BLEND	Black	7+/-0,2 mm	OK.	OK.
1210180409	A	3	2	18 AWG	PVC CSA/UL 2661	Black	6,5+/-0,2 mm	OK.	-
1210180129	A	3	3	18 AWG	PVC CSA/UL 2661	Black	6,5+/-0,2 mm	OK.	-
1210180169	A	3	4	18 AWG	PVC CSA/UL 2661	Black	7+/-0,2 mm	OK.	-
-	A	3	5	18 AWG	PVC CSA/UL 2661	Black	7,8+/-0,2 mm	OK.	-
1210180351	B	3	2	18 AWG	PUR CSA/UL 20668	Black	6,5+/-0,2 mm	OK.	-
1210180127	B	3	3	18 AWG	PUR CSA/UL 20668	Black	6,5+/-0,2 mm	OK.	-
1210180127	B	3	4	18 AWG	PUR CSA/UL 20668	Black	7+/-0,2 mm	OK.	-
-	B	3	5	18 AWG	PUR CSA/UL 20668	Black	7,8+/-0,2 mm	OK.	-
1210180073	D	3	3	0,75 mm2	PVC T12 CEI 20-20	Grey	-	-	-
1210180145	D	3	4	0,75 mm2	PVC T12 CEI 20-20	Grey	-	-	-
1210180120	I	3	3	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180143	I	3	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
1210180032	N	3	2	0,75 mm2	PVCH05	Black	6,2+ 0,2-0 mm	OK.	-
1210180069	N	3	3	0,75 mm2	PVCH05	Black	6,6+0,2-0 mm	OK.	-
-	N	3	4	0,75 mm2	PVCH05	Black	7,15+0,2-0 mm	OK.	-
1210180174	N	3	5	0,75 mm2	PVCH05	Black	8,0+0,2-0 mm	OK.	-
-	P	3	2	0,75 mm2	PUR - BLEND	Black	6,5+/-0,2 mm	OK.	-

TABLE 2 - CABLES

Molex PN	mPm	Code	Wires	Cross Section	Material	Color	Diameter Ø	DIN A-B	DIN C
1210180071	P	3	3	0,75 mm2	PUR - BLEND	Black	6,5+/-0,2 mm	OK.	-
1210180152	P	3	4	0,75 mm2	PUR - BLEND	Black	7+/-0,2 mm	OK.	-
1210180384	R	3	3	0,75 mm2	TPR HAL. FREE	Black	6,5+/-0,2 mm	OK.	-
1210180094	T	3	3	0,75 mm2	PUR CSA/UL	Yellow	-	-	-
1210180309	Y	3	3	0,75 mm2	SIL/0300	Red	6,5+/-0,2 mm	-	-
1210180081	F	4	3	1 mm2	CNOMO	Grey RAL7000	-	-	-
-	F	4	4	1 mm2	CNOMO	Grey RAL7000	7,1+0,2-0 mm	OK.	-
1210180042	I	4	2	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2-0 mm	OK.	-
1210180079	I	4	3	1 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	7,1+0,2-0 mm	OK.	-
1210180036	N	4	2	1 mm2	PVCH05	Black	6,5+0,2-0 mm	OK.	-
1210180082	N	4	3	1 mm2	PVCH05	Black	6,9+0,2-0 mm	OK.	-
1210180117	R	4	3	1 mm2	TPR HAL. FREE	Black	-	-	-
1210180085	N	5	3	1,5 mm2	PVCH05	Black	8,3+0,2-0 mm	OK.	-
1210180313	I	6	2	0,35 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-
-	A	7	3	20 AWG	PVC CSA/UL 2661	Yellow	5,6+/-0,2 mm	OK.	OK.
1210180149	I	9	4	0,75 mm2	PVC CEI 2022 II O.R.	Grey RAL7035	-	-	-

TABLE 1 - CABLES TYPE

Code	Cable types	Features	Stranding
N	PVC	Application general purpose cable which has good resistance to water, but usually poor oil resistance.	0,5 mm2 = 15 x 0,20 0,75 mm2 = 21 x 0,20 1 mm2 = 28 x 0,20
I	CEI	Approved to IEC 332-2A, flame retardant and self extinguishing. Limited resistant to mineral oils.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
P	PUR	Offer good resistance to oil and chemicals. Can swell when constantly immersed in water.	0,5 mm2 = 28 x 0,15 0,75 mm2 = 42 x 0,15 1 mm2 = 32 x 0,20
A	PVC CSA-UL	Approved to CSA-UL 2661, application general purpose cable which has good resistance to water, but usually poor oil resistance.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15
B	PUR CSA-UL	Approved to CSA-UL 20668, very good resistance to oil and chemicals.	20 AWG = 32 x 0,15 18 AWG = 52 x 0,15

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			mm	INCH	DRAWN BY JMARSZALEK	DATE 2012/10/31	TITLE E462XXXXXXXXXX FORM INDUSTRIAL		
		4 PLACES	± ---	± ---	CHECKED BY MSZWAJKOWSKI	DATE 2012/10/31			
		3 PLACES	± ---	± ---	APPROVED BY MIWASIECZKO	DATE 2012/11/09			
2 PLACES	± ---	± ---	ANGULAR ± --- °		DOCUMENT NO. SD-121050-003		SHEET NO. 3 OF 4		
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
0 PLACE	± ---	± ---							

