

NOTES:  
 RATED VOLTAGE:  
 3, 4 contacts 250V  
 5 contacts 60V  
 8 contacts 30V  
 RATED CURRENT:  
 3, 4, 5 contacts 4A  
 8 contacts 2A  
 PROTECTION CLASS: IP 67

CONTACTS POSITION FRONT VIEW:

	3 CONTACTS	4 CONTACTS	5 CONTACTS	8 CONTACTS																																																
MALE																																																				
CONNECTIONS	<table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table>	PIN	WIRE	1	BROWN	3	BLUE	4	BLACK	<table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> </table>	PIN	WIRE	1	BROWN	2	WHITE	3	BLUE	4	BLACK	<table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>BROWN</td></tr> <tr><td>2</td><td>WHITE</td></tr> <tr><td>3</td><td>BLUE</td></tr> <tr><td>4</td><td>BLACK</td></tr> <tr><td>5</td><td>GREY OR GREEN/YELLOW</td></tr> </table>	PIN	WIRE	1	BROWN	2	WHITE	3	BLUE	4	BLACK	5	GREY OR GREEN/YELLOW	<table border="1"> <tr><th>PIN</th><th>WIRE</th></tr> <tr><td>1</td><td>WHITE</td></tr> <tr><td>2</td><td>BROWN</td></tr> <tr><td>3</td><td>GREEN</td></tr> <tr><td>4</td><td>YELLOW</td></tr> <tr><td>5</td><td>GREY</td></tr> <tr><td>6</td><td>PINK</td></tr> <tr><td>7</td><td>BLUE</td></tr> <tr><td>8</td><td>RED</td></tr> </table>	PIN	WIRE	1	WHITE	2	BROWN	3	GREEN	4	YELLOW	5	GREY	6	PINK	7	BLUE	8	RED
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FOR OPTION SEE - NUMERICAL CODE - ON SHEET 2

6	1	LABEL YE	VINYL	-
5	3/4/5/8	CONTACT MA	BRASS	GOLD OVER Ni-PLATED
4	1	INSERT M12 MA XP BK	PUR	-
3	1	COUPLING NUT M12 MA	SEE SHEET 2	SEE SHEET 2
2	-	OVERMOULDING BK	TPU	-
1	-	CABLE	SEE SHEET 2	-
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

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

SYMBOLS	DIMENSION UNITS	SCALE	CURRENT REV DESC: ADD PN	
▽ = 0	mm	1:1	 CSE M12 XP AC MA STR WSOR XM SE UNSH PRODUCT CUSTOMER DRAWING	
▽ = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)			
▽ = 0	ANGULAR TOL ± °			
▽ = 0	4 PLACES ±			
▽ = 0	3 PLACES ±		EC NO: 601375 DRWN: FDAFERNER 2018/07/12 CHK'D: RSILLER 2018/07/13 APPR: RSILLER 2018/07/13	
▽ = 0	2 PLACES ±		INITIAL REVISION: DRWN: AKONDRACIUK 2016/11/28 APPR: MIWASIECZKO 2016/12/06	
▽ = 0	1 PLACE ±		DOCUMENT NUMBER: 1200659964 DOC TYPE: PSD DOC PART: 00P REVISION: A2	
▽ = 0	0 PLACES ±		MATERIAL NUMBER: SEE SHEET 3 CUSTOMER:	
■ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	SHEET NUMBER: 1 OF 3
▽ = 0			DRAWING: A3-SIZE	SERIES: 120065

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

8 0 X 0 0 6 B X X M X X X X

88 = M12x1 SINGLE ENDED

POLES:  
3 = 3 POLES  
4 = 4 POLES  
5 = 5 POLES  
8 = 8 POLES

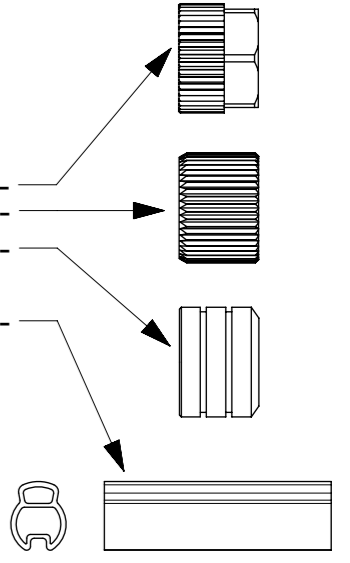
HEADER:  
006 = PLUG MALE STRARIGHT

CABLE TYPE:  
SEE TABLE

UNIT:  
M = METER

LENGTH:  
EXAMPLE:  
010 = 1 m  
050 = 5 m  
100 = 10 m

**OPTIONS**  
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 <sup>2</sup>	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 <sup>2</sup>	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm <sup>2</sup>	TPU Orange								SD-120209-001
B41	8	0.25mm <sup>2</sup>	TPU Black								SD-120209-006
B42	5	0.34mm <sup>2</sup>	TPU Black								SD-120209-001
B49	8	0.25mm <sup>2</sup>	TPU Orange								SD-120209-006
B55	3 / 4 / 5	0.34mm <sup>2</sup>	TPU Yellow								n/a

OVER	UP TO AND INCLUDING	TOLERANCE
0	1000	+40 0
1000	5000	+60 0
5000	10000	+80 0
10000	20000	+140 0
20000	30000	+160 0
30000	>	+1% OF LENGTH

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
	DIMENSION UNITS	SCALE
	mm	1:1
CURRENT REV DESC: ADD PN		<b>molex</b>
GENERAL TOLERANCES (UNLESS SPECIFIED)		
ANGULAR TOL ± °		CSE M12 XP AC MA STR WSOR XM SE UNSH
▽ = 0	4 PLACES ±	EC NO: 601375
▽ = 0	3 PLACES ±	DRWN: FDAFERNER 2018/07/12
▽ = 0	2 PLACES ±	CHK'D: RSILLER 2018/07/13
▽ = 0	1 PLACE ±	APPR: RSILLER 2018/07/13
▽ = 0	0 PLACES ±	INITIAL REVISION:
☒ = 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRWN: AKONDRACIUK 2016/11/28
☒ = 0	THIRD ANGLE PROJECTION	APPR: MIWASIECZKO 2016/12/06
☒ = 0	DRAWING	SERIES
	A3-SIZE	120065
	MATERIAL NUMBER	CUSTOMER
	SEE SHEET 3	
	DOCUMENT NUMBER	DOC TYPE   DOC PART   REVISION
	1200659964	PSD   00P   A2
	SHEET NUMBER	
	2 OF 3	

# PART LIST

## 3 POLE - CABLE B30

MOLEX PN	ENGINEERING No	L [mm]
1200652271	803006B30M010	1000
1200652272	803006B30M020	2000
1200652273	803006B30M050	5000
1200652274	803006B30M100	10000

## 5 POLE - CABLE B30

MOLEX PN	ENGINEERING No	L [mm]
1200659964	805006B30M006	600
1200659526	805006B30M010	1000
1200659527	805006B30M020	2000
1200659528	805006B30M050	5000
1200659529	805006B30M100	10000

## 8 POLE - CABLE B41

MOLEX PN	ENGINEERING No	L [mm]
1200659680	808006B41M003	300
1200652302	808006B41M010	1000
1200659453	808006B41M020	2000
1200659776	808006B41M030	3000
1200656003	808006B41M040	4000
1200656004	808006B41M050	5000
1200652305	808006B41M100	10000

## 4 POLE - CABLE B30 A2

MOLEX PN	ENGINEERING No	L [mm]
1200652275	804006B30M010	1000
1200652276	804006B30M020	2000
1200656001	804006B30M030	3000
1200656002	804006B30M040	4000
1200652277	804006B30M050	5000
1200652278	804006B30M100	10000
1200659440	804006B30M150	15000
1200656066	804006B30M005	500
1200656296	804006B30M080	8000

## 5 POLE - CABLE B33

MOLEX PN	ENGINEERING No	L [mm]
1200659452	805006B33M020	2000

## 5 POLE - CABLE B42

MOLEX PN	ENGINEERING No	L [mm]
1200652279	805006B42M010	1000
1200652280	805006B42M020	2000
1200652281	805006B42M050	5000
1200652282	805006B42M100	10000
1200659546	805006B42M200	20000
1200659547	805006B42M300	30000

## 4 POLE - CABLE B33

MOLEX PN	ENGINEERING No	L [mm]
1200659451	804006B33M020	2000
1200659596	804006B33M020A	2000
1200659597	804006B33M050A	5000

## 5 POLE - CABLE B55

MOLEX PN	ENGINEERING No	L [mm]
1200659945	805006B55M050	5000
1200659946	805006B55M100	10000
1200659947	805006B55M150	15000

## 4 POLE - CABLE B55

MOLEX PN	ENGINEERING No	L [mm]
1200659943	804006B55M050	5000
1200659944	804006B55M100	10000

SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
DIMENSION UNITS	SCALE	CURRENT REV DESC: ADD PN
= 0	mm	1:1
= 0	GENERAL TOLERANCES (UNLESS SPECIFIED)	
= 0	ANGULAR TOL ± °	
= 0	4 PLACES ±	
= 0	3 PLACES ±	
= 0	2 PLACES ±	
= 0	1 PLACE ±	
= 0	0 PLACES ±	
= 0	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	
= 0	THIRD ANGLE PROJECTION	DRAWING
		A3-SIZE
	SERIES	120065
	MATERIAL NUMBER	SEE PART LIST
	CUSTOMER	
	SHEET NUMBER	3 OF 3

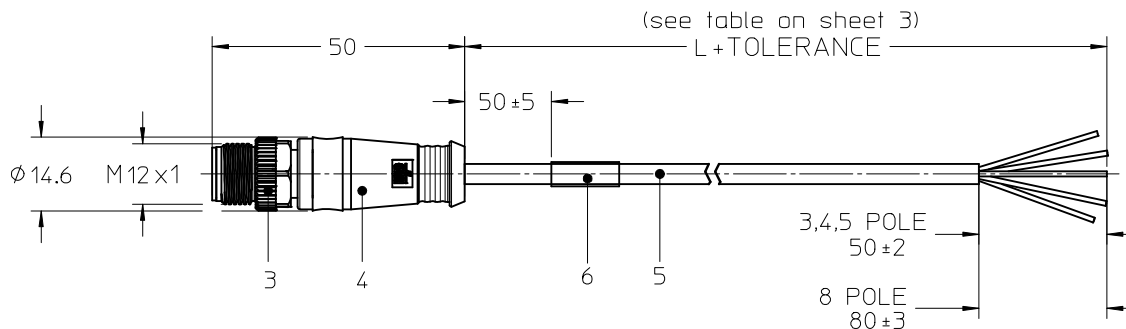
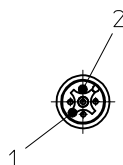
**molex**

CSE M12 XP AC MA STR WSOR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200659964	PSD	00P	A2

# STRAIGHT PLUG MALE



**NOTES:**

TEMPERATURE RANGE	SEE TABLE ON PAGE 2
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

TOLERANCES :	
≤ 1m	+40 mm
1m - 5m	+60 mm
5m - 10m	+80 mm
> 10m	+140 mm
> 20m	+160 mm
> 30m	+1%

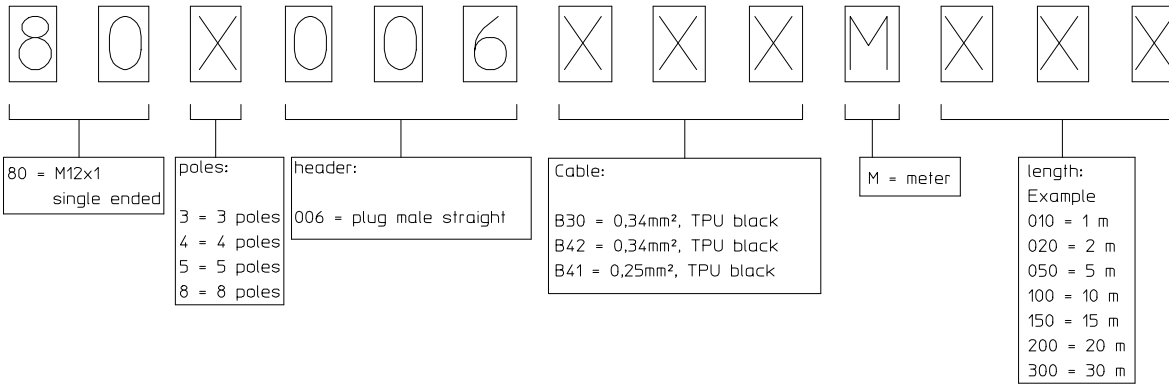
Mating face view:

3 WIRE	4 WIRE	5 WIRE	5 WIRE	8 WIRE
B30	B30	B30	B42	B41
PIN # WIRE	PIN # WIRE	PIN # WIRE	PIN # WIRE	PIN # WIRE
1 BROWN 2 - 3 BLUE 4 BLACK 5 -	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 -	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 GREY	1 BROWN 2 WHITE 3 BLUE 4 BLACK 5 GREEN/YELLOW	1 WHITE 2 BROWN 3 GREEN 4 YELLOW 5 GREY 6 PINK 7 BLUE 8 RED
CODING REQUIRED TO IEC 61076-2-101				

6	LABEL	---	---
5	CABLE	SEE TABLE (SHEET 2)	---
4	OVERMOULDING	TPU	BLACK
3	COUPLING NUT MALE SW13	BRASS	NI PLATED
2	PIN CONTACT	BRASS	GOLD PLATED
1	INSERT	PA	BLACK
ITEM	DESCRIPTION	MATERIAL	FINISH

<b>ENTER DESCRIPTION</b> EC NO: IPG2015-0861 DRW:FSCHAFHAUSER 2014/11/06 CHK:DRSILLER 2014/11/07 APPR:CBURGER 2014/11/14	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
				MM ONLY	1:1	METRIC		
				DRAWN BY DATE	TITLE			
				CHECKED BY DATE	CSE M12 XP AC MA STR XM SE UNSH			
		APPROVED BY DATE						
		C BURGER 2014/05/07						
		ANGULAR ± 1 °		MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE	SD-120065-073	1 OF 3		
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

**NUMERICAL CODE** (Available parts see table page 3 ff others on request.)







CABLE TYPE	WIRE GAUGE	CABLE JACKET	UL	CSA	static	flexing	drag chain tested	other
B30 3P, 4P, 5P	0.34mm <sup>2</sup>	TPU black	STYLE 21215	yes	-40°C to +90°C 5xD	-25°C to +80°C 7.5xD	5 mio cycles	WELD SLAG RESISTANCE
B42 5P								
B41 8P	0.25mm <sup>2</sup>	TPU black	STYLE 21215	yes	-40°C to +90°C 5xD	-25°C to +80°C 7.5xD	5 mio cycles	WELD SLAG RESISTANCE

For cable specification see on drawing SD-120209-001 (B30;B42) and SD-120209-006 (B41)

ENTER DESCRIPTION EC NO: IPG2015-0861 DRW: FSCHAFHAUSER 2014/11/06 CHK: RSILLER 2014/11/07 APPR: CBURGER 2014/11/14	DESCRIPTION REV 4	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.30 ± --- 0 PLACE ± 0.50 ± --- ANGULAR ± 1 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	TITLE CSE M12 XP AC MA STR XM SE UNSH <b>molex</b> DOCUMENT NO. SD-120065-073 SHEET NO. 2 OF 3
		MM ONLY		1:1	METRIC	DRAWN BY DATE FSCHAFHAUSER 2014/01/07 CHECKED BY DATE PMERUNKA 2014/03/06 APPROVED BY DATE CBURGER 2014/05/07		
		SEE TABLE				MATERIAL NO.		
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

PART LIST

PART NUMBER	NUMERICAL CODE	CABLE LENGTH "L" IN M
1200652271	803006B30M010	1M
1200652272	803006B30M020	2M
1200652273	803006B30M050	5M
1200652274	803006B30M100	10M
1200652275	804006B30M010	1M
1200652276	804006B30M020	2M
1200652277	804006B30M050	5M
1200652278	804006B30M100	10M
1200659440	804006B30M150	15M
1200659526	805006B30M010	1M
1200659527	805006B30M020	2M
1200659528	805006B30M050	5M
1200659529	805006B30M100	10M
1200652279	805006B42M010	1M
1200652280	805006B42M020	2M
1200652281	805006B42M050	5M
1200652282	805006B42M100	10M
1200659546	805006B42M200	20M
1200659547	805006B42M300	30M
1200652302	808006B41M010	1M
1200659453	808006B41M020	2M
1200652304	808006B41M050	5M
1200652305	808006B41M100	10M

ENTER DESCRIPTION EC NO: IPG2015-0861 DRWN:FSCHAFHAUSER 2014/11/06 CHKD:RSILLER 2014/11/07 APPR:CBURGER 2014/11/14	DESCRIPTION REV 4	QUALITY SYMBOLS  =0  =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE <b>MM ONLY</b>		SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
				mm      INCH	DRAWN BY FSCHAFHAUSER	DATE 2014/01/07	TITLE CSE M12 XP AC MA STR XM SE UNSH				
				4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.05 ± --- 1 PLACE ± 0.30 ± --- 0 PLACE ± 0.50 ± ---	CHECKED BY PMERUNKA	DATE 2014/03/06					
				ANGULAR ± 1 °	APPROVED BY CBURGER	DATE 2014/05/07					
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								