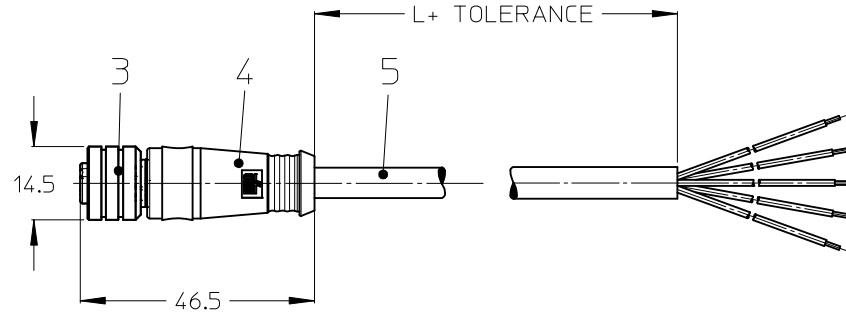
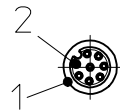


STRAIGHT PLUG FEMALE



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

CABLE TOLERANCES

≤ 1m	+20/-10mm
1m - 5m	± 25mm
5m - 10m	± 30mm
> 10m	± 30mm
> 20m	± 50mm

3 WIRE	4 WIRE	5 WIRE	8 WIRE
PIN # WIRE	PIN # WIRE	PIN # WIRE	PIN # WIRE
1 BROWN	1 BROWN	1 BROWN	1 WHITE
2 -	2 WHITE	2 WHITE	2 BROWN
3 BLUE	3 BLUE	3 BLUE	3 GREEN
4 BLACK	4 BLACK	4 BLACK	4 YELLOW
5 -	5 -	5 GREY	5 GREY
			6 PINK
			7 BLUE
			8 RED
REQUIRED TO IEC 60947-5-2			REQUIRED TO DIN 47100

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

ENTER DESCRIPTION EC NO: IPG2014-0812 DRWN:PMERUNKA 2012/04/23 CHKD:APOHL 2013/11/15 APPR:APOHL 2013/11/18	DESCRIPTION	QUALITY SYMBOLS ▽=0 C=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION 								
				mm	INCH	DRAWN BY PMERUNKA	DATE 2012/04/23	TITLE CSE M12 XP AC FE STR XM SE UNSH									
			4 PLACES	± ---	± ---	CHECKED BY APOHL	DATE 2013/11/15										
			3 PLACES	± ---	± ---	APPROVED BY APOHL 2013/11/18		molex									
			2 PLACES	± 0.05	± ---												
			1 PLACE	± 0.10	± ---												
			0 PLACE	± ---	± ---	MATERIAL NO.							DOCUMENT NO.				SHEET NO.
			DRAFT WHERE APPLICABLE		SEE TABLE		SD-120065-050						1 OF 5				
			MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												

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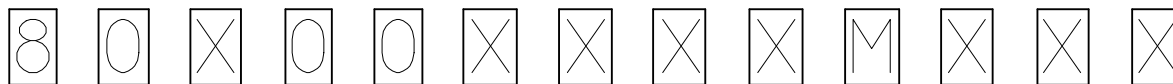
4

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1

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



80 = M12x1
single ended

poles:

3 = 3 poles
4 = 4 poles
5 = 5 poles
8 = 8 poles

header:

000 = plug female straight
001 = plug female 90° right
006 = plug male straight
007 = plug male 90° right

Cable:

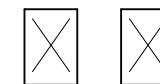
E02 = 0,25mm², PVC black
E03 = 0,34mm², PVC black
H08 = 0,25mm², PUR black LS0H
H09 = 0,34mm², PUR black LS0H
I03 = 0,34mm², PVC grey
K05 = 0,34mm², TPE yellow
P02 = 0,25mm², PUR/PVC black
P03 = 0,34mm², PUR/PVC black
P82 = 0,34mm², PUR black irradiated
B30 = 0,34mm², TPE black

M = meter

length:

Example
020 = 2 m

Special Types:



G = Brad in black
H = Std with ID tag
1 = Stainless Steel
7 = Teflon coat

y = yellow overmoulding
empty for black

CABLE TYPE	WIRE GAUGE	CABLE JACKET	UL	CSA	static	flexing	drag chain tested	other
E02	0.25mm²	PVC black	STYLE 2464	I/II A/B 80°/300V	-30°C to +80°C 5xD	-5°C to +80°C 9xD	---	---
E03	0.34mm²	PVC black	STYLE 2464	I/II A/B 80°/300V	-30°C to +80°C 5xD	-5°C to +80°C 9xD	---	---
H08	0.25mm²	PUR black LS0H	AWM STYLE 21198/10493	APPROVED	-50°C to +80°C 5xD	-25°C to +80°C 10xD	2000000 cycles	---
H09	0.34mm²	PUR black LS0H	AWM STYLE 21198/10493	APPROVED	-50°C to +80°C 5xD	-25°C to +80°C 10xD	drag chain 60°C	---
I03	0.34mm²	PVC grey	---	---	-30°C to +70°C	-5°C to +70°C	---	---
K05	0.34mm²	TPE yellow	ITC E195601 or PLTC	AWM I/II A/B FT4 LL54185	---	---	---	CSA-US: ITC LL54185-02
P02	0.25mm²	PUR/PVC black	not applicable	not applicable	-30°C to +80°C 7xD	-5°C to +80°C 15xD	---	---
P03	0.34mm²	PUR/PVC black	not applicable	not applicable	-30°C to +80°C 7xD	-5°C to +80°C 15xD	---	---
P82	0.34mm²	irrad. PUR orange	---	---	-50°C to +105°C 5xD	-40°C to +105°C 7.5xD	---	---
B30	0.34mm²	PUR black	STYLE 21215	Yes	-40°C to +90°C 5xD	-25°C to +80°C 7.5xD	---	---

ENTER DESCRIPTION EC NO: IPG2014-0812 DRWN:PMERUNKA 2012/04/23 CHKD:APOHL 2013/11/15 APPR:APOHL 2013/11/18			DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION	
						mm	INCH	DRAWN BY DATE	TITLE			
1	REV				4 PLACES	± ---	± ---	PMERUNKA	2012/04/23	CSE M12 XP AC FE STR XM SE UNSH		
					3 PLACES	± ---	± ---	CHECKED BY DATE				
					2 PLACES	± 0.05	± ---	APOHL	2013/11/15	molex		
					1 PLACE	± 0.10	± ---	APPROVED BY DATE				
					0 PLACE	± ---	± ---	APOHL	2013/11/18			
					ANGULAR ± .5 °		MATERIAL NO.		DOCUMENT NO.			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-120065-050		2 OF 5						
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												

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	10	9	8	7	6	5	4	3	2	1																																				
F											F																																			
E											E																																			
D											D																																			
C											C																																			
B											B																																			
A											A																																			
<table><tr><td rowspan="10">ENTER DESCRIPTION EC NO: PG2014-0812 1 DRAWN:PMERUNKA CHKD:APOHL APPR:APOHL</td><td rowspan="10">DESCRIPTION REV</td><td rowspan="10">QUALITY SYMBOLS ▽=0 ◻=0</td><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="2">DIMENSION STYLE MM ONLY</td><td>SCALE 1:1</td><td>DESIGN UNITS METRIC</td><td colspan="2">THIRD ANGLE PROJECTION</td></tr><tr><td rowspan="5">4 PLACES 3 PLACES 2 PLACES 1 PLACE 0 PLACE</td><td rowspan="5">± --- ± --- ± 0.05 ± 0.10 ± ---</td><td rowspan="5">± --- ± --- ± --- ± --- ± ---</td><td>DRAWN BY PMERUNKA</td><td>DATE 2012/04/23</td><td rowspan="5">TITLE CSE M12 XP AC FE STR XM SE UNSH</td><td rowspan="5">DOCUMENT NO. SD-120065-050</td><td rowspan="5">SHEET NO. 3 OF 5</td></tr><tr><td>CHECKED BY APOHL</td><td>DATE 2013/11/15</td></tr><tr><td>APPROVED BY APOHL</td><td>DATE 2013/11/18</td></tr><tr><td colspan="2">MATERIAL NO.</td></tr><tr><td colspan="2">SEE TABLE</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td>SIZE A3</td><td colspan="5">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr></table>												ENTER DESCRIPTION EC NO: PG2014-0812 1 DRAWN:PMERUNKA CHKD:APOHL APPR:APOHL	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		4 PLACES 3 PLACES 2 PLACES 1 PLACE 0 PLACE	± --- ± --- ± 0.05 ± 0.10 ± ---	± --- ± --- ± --- ± --- ± ---	DRAWN BY PMERUNKA	DATE 2012/04/23	TITLE CSE M12 XP AC FE STR XM SE UNSH	DOCUMENT NO. SD-120065-050	SHEET NO. 3 OF 5	CHECKED BY APOHL	DATE 2013/11/15	APPROVED BY APOHL	DATE 2013/11/18	MATERIAL NO.		SEE TABLE		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				
ENTER DESCRIPTION EC NO: PG2014-0812 1 DRAWN:PMERUNKA CHKD:APOHL APPR:APOHL	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																																					
			4 PLACES 3 PLACES 2 PLACES 1 PLACE 0 PLACE	± --- ± --- ± 0.05 ± 0.10 ± ---	± --- ± --- ± --- ± --- ± ---	DRAWN BY PMERUNKA	DATE 2012/04/23	TITLE CSE M12 XP AC FE STR XM SE UNSH	DOCUMENT NO. SD-120065-050	SHEET NO. 3 OF 5																																				
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			1b_frame_A3_P_AM_T Rev E1 2012/01/25	9	8	7	6	5	4	3	2				1																															

ENTER DESCRIPTION		EC NO: IPG2014-0812		DRWN:PMERUNKA 2012/04/23		CHKD:APOHL 2013/11/15		APPR:APOHL 2013/11/18		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION	
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								4 PLACES		± ---		± ---		PMERUNKA							
								3 PLACES		± ---		± ---		CHECKED BY		DATE		molex			
								2 PLACES		± 0.05		± ---		APOHL		2013/11/15					
								1 PLACE		± 0.10		± ---		APPROVED BY		DATE					
0 PLACE		± ---		± ---		APOHL		2013/11/18		MATERIAL NO.		DOCUMENT NO.		SD-120065-050		SHEET NO. 3 OF 5					
ANGULAR ± .5 °		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													

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1200650955	808000P02M080
1200650956	808000P02M0801
1200650957	808000P02M100
1200658021	808000P02M150
1200651817	808000P02M200
1200651818	808000P02M250
1200651820	808000P02M300
1200658103	808000P19M005
1200062765	808000P19M020
1200062675	808000P19M030
1200651796	808000P19M040
1200062676	808000P19M050
1200655074	808000P19M060
1200652019	808000P19M100
1200658104	808000P19M150
1200655040	80C000H45M020
1200655041	80C000H45M040
1200655042	80C000H45M050
1200655044	80C000H45M100
1200659119	803000I03M020Y
1200678393	8030P0I03M050Y
1200659054	803000E03M050Y
1200659055	803000E03M100Y
1200659064	803000I03M050Y
1200659073	803000I03M100Y
1200659123	804000P03M100HY
1200678387	8040P0I03M050Y
1200659058	804000E03M050Y
1200659059	804000E03M100Y
1200659060	804000I03M050Y
1200659065	804000I03M100Y
1200659066	804000P82M0507Y
1200659067	804000P82M1007Y
1200659075	804000I03M020Y

1200659076	804000S20M100Y
1200659087	804000P82M0207Y
1200659088	804000P03M050HY
1200698319	804S00P20M050Y
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1200678365	8040P0E03M100Y
1200659116	805000I26M050Y
1200659082	805000E03M100Y
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1200659106	808000E02M150Y
1200659107	808000H08M150Y
1200659214	805000P03M300
1200659224	805006P03M200
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1200659230	805007P03M010
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1200652247	803000B30M010
1200652248	803000B30M020
1200652249	803000B30M050
1200652250	803000B30M100
1200652251	804000B30M010
1200652252	804000B30M020
1200652253	804000B30M050
1200652254	804000B30M100
1200652255	805000B30M010
1200652256	805000B30M020
1200652257	805000B30M050
1200652258	805000B30M100

ENTER DESCRIPTION EC NO: IPG2014-0812 DRWN:PMERUNKA 2012/04/23 CHKD:APOHL 2013/11/15 APPR:APOHL 2013/11/18	DESCRIPTION	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	TITLE CSE M12 XP AC FE STR XM SE UNSH			
					DRAWN BY PMERUNKA	DATE 2012/04/23							
					CHECKED BY APOHL	DATE 2013/11/15							
					APPROVED BY APOHL	DATE 2013/11/18							
					ANGULAR ± .5 °		MATERIAL NO.				DOCUMENT NO.		SHEET NO.
					DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE				SD-120065-050		5 OF 5
							SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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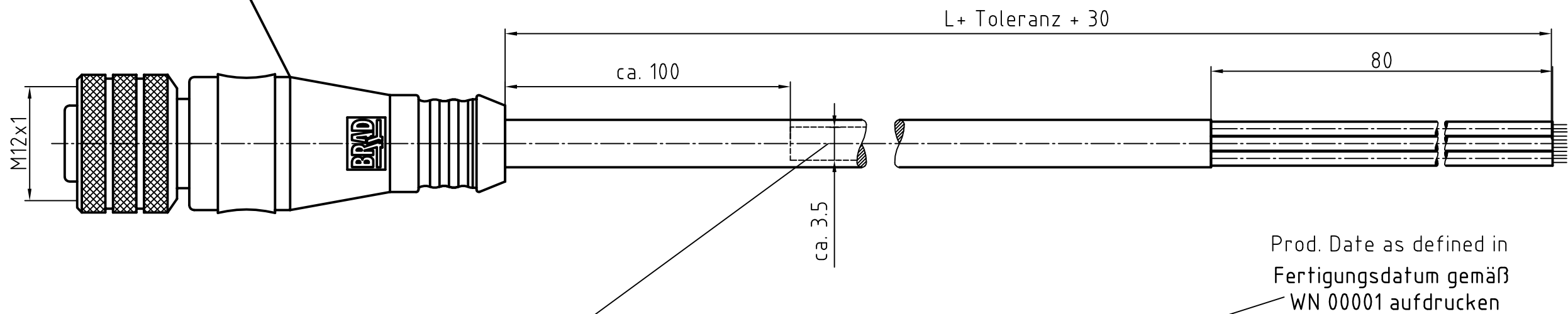
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3

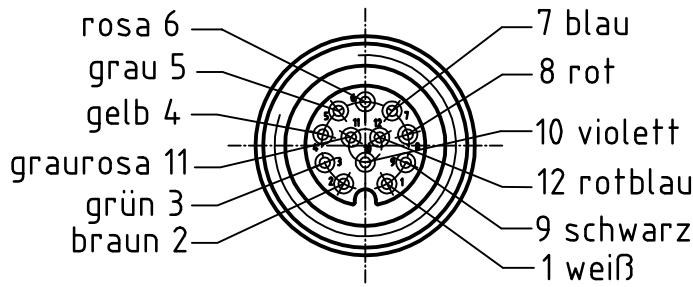
2

1

Overmold PUR see Table
Umspritzung PUR siehe Tabelle



Mating Side
Female Cable Connector/
Steckseite
Kabeldose
12-Pol



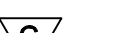
Kabelbedruckung: Woodhead Connectivity GmbH 80C000H45MXXX X..
Cable printing:

Allgemeine Kennwerte General Characteristics			Norm Standard	
Polzahl Kontaktanordnung		Number of contacts Contact configuration	IEC 947-5-2	12
Bemessungsspannung		Rated Voltage	IEC 664	30V AC / DC
Verschmutzungsgrad		Pollution Degree	IEC 664	3
Betriebsstrom		Current carrying capacity	IEC 512-3 Test 5 b	1,5A
Durchgangswiderstand		Contact Resistance	IEC 512-2 Test 2 a	< 5mOhm
Bemessungsstoßspannung		Rated Impulse Withstand Voltage	IEC 664	0,8 kV
Prüfspannung		Test Voltage	IEC 60512-2 Test 4 A	0,5 kV / 60 sec
Isolationswiderstand		Insulation Resistance	IEC 512-2 Test 3 A	> 10 GOhm
IP-Schutzart		IP Degree of Protection	IEC 529	IP 67
Stiftdurchmesser		Pin Diameter		0,6 mm
Werkstoffe	Kontakte	Materials	Contacts	Kupferlegierung / copper alloy
	Kontaktoberfläche		Contacts Plating	Au/Ni
	Kontaktträger		Dielectric Material	PUR
	Gehäuse (Umspritzung)		Housing (Overmold)	PUR
	Dichtung (O-Ring)		Gaskets (O-Ring)	VITON
	Schraubhülse		Screw Sleeve	CuZn (brass) mit Ni-Oberfläche Nickel Plated
Anschlussart		Termination		Crimp
Brennbarkeit	Kontaktträger	Flammfähigkeit	Inserts	UL 94 HB HB DIN EN265-2-1/UL1581-VW1-Page 95A
	Gehäuse (Umspritzung)		Housing (Overmold)	
	Leitung / Kabel		Cable	
Mechanische Lebensdauer		Mechanical Operation		100 Steckzyklen/Mating Cycles
Temperaturbereich		Temperature Range		IEC 60668-1 -25°C / +90°C

SAP-Nummer	Engineering Nr.:	Umspritzungsfarbe	Länge
SAP-Nummer		Overmold Color	Length
1200655040	80C000H45M020	yellow	2M
1200655041	80C000H45M040	yellow	4M
1200655042	80C000H45M050	yellow	5M
1200655043	80C000H45M060	yellow	6M
1200655044	80C000H45M100	yellow	10M
1200655052	80C000H45M020G	black	2M
1200655053	80C000H45M040G	black	4M
1200655054	80C000H45M050G	black	5M
1200655055	80C000H45M060G	black	6M
1200655056	80C000H45M100G	black	10M

Toleranzen Maß L: sichtbare Kabellänge bei M8 , M12 und M12U	
von 0 bis 0.6 m:	±10 mm
über 0.6 bis 1 m:	+30 / -10 mm
über 1 bis 5 m:	±25 mm
über 5 bis 20 m:	±30 mm
über 20 m:	±50 mm

BU/ BLUE WH/WHITE GN/ GREEN GY/ GREY PK/ PINK YE/ YELLOW RD/ RED BK/ BLACK VT/ VIOLET BN/ BROWN	bl/blau ws/weiß gn/ grün gr/ grau rs/ rosa ge/ gelb rt/ rot sw/schwarz vi/ violett bn/ braun
--	---

DESCRIPTION EC NO: WEU2009-0137 DRWN: LSTEMMLE 2008/07/22 CHKD: LS 2008/11/06 APPR: USAEUFFE 2008/11/26	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE		SCALE	DESIGN UNITS	 FIRST ANGLE PROJECTION		
					MM		2:1	METRIC			
			 = 0  = 0		mm	INCH	DRAWN BY	DATE		M12-12P-BU-Z-PUR-XM ----- -----	
				4 PLACES	±----	±----	LS	2008/07/22			
				3 PLACES	±----	±----	CHECKED BY	DATE			
				2 PLACES	±0.05	±----	US	2008/11/06		 MOLEX INCORPORATED	
				1 PLACE	±0.1	±----	APPROVED BY	DATE			
			ANGULAR ± --- °				-----	-----			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.			SHEET NO.	
					see table		SD-80C000H45MXXX			1 OF 1	
SIZE A2	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

(...) Dim. for information
(...) Informationsmaß