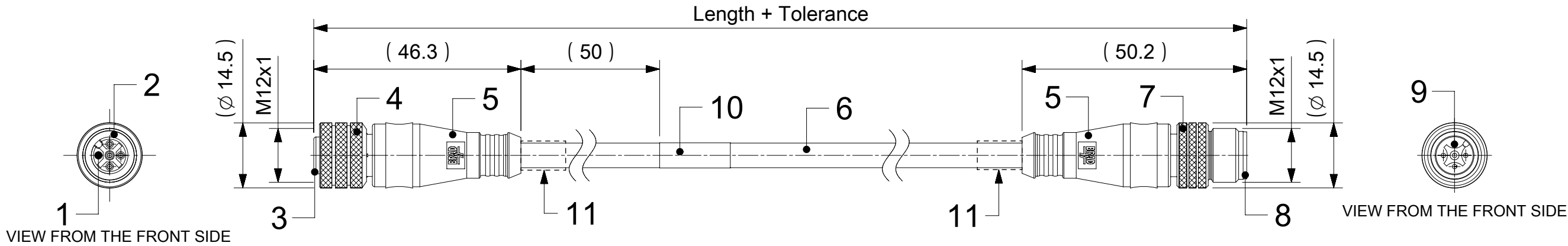


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



NOTES:

RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
5 contacts 60V per IEC 60664
5 contacts 250V per UL 2238
8 contacts 30V per IEC 60664

RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A

PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +85°C

CONTACTS POSITION FRONT VIEW:

	3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
FEMALE								
MALE								
CONNECTIONS	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	GREY	5	GREY
							6	PINK
							7	BLUE
CODING REQUIRED TO IEC 61076-2-101								

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

11	SEE SHEET 2	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	-
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	-
7	1	COUPLING NUT MALE	-	-
6	-	CABLE	SEE SHEET 2	-
5	-	OVERMOULDING BLACK	TPU	-
4	1	COUPLING NUT FEMALE	-	-
3	1	INSERT FEMALE BLACK	PUR	-
2	1	O-RING RED	FPM	-
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL
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															
FUNCTIONAL SYMBOLS E A = 0 E = 0 E = 0 DIVISIONAL SYMBOLS	DIMENSION UNITS		SCALE		CURRENT REV DESC: NEW P/N'S ADDED TO THE DRAWING 12335										
	mm		1:1		molex CSE M12 XP AC FE STR MA STR XM DE PRODUCT CUSTOMER DRAWING										
	GENERAL TOLERANCES (UNLESS SPECIFIED)														
	ANGULAR TOL ± 1.0 °														
	4 PLACES		±												
	3 PLACES		±												
	2 PLACES		± 0.05		EC NO: 769491 DRWN: VHANDI 2023/10/30 CHK'D: RSILLER 2023/11/21 APPR: RSILLER 2023/11/21										
	1 PLACE		± 0.3		INITIAL REVISION: DRWN: JMARSZALEK 2016/09/16 APPR: RSILLER 2016/12/08										
	0 PLACES		± 0.5		DOCUMENT NUMBER 1200668084										
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		DOC TYPE PSD		DOC PART 000		REVISION A17
						A3-SIZE		120066		MATERIAL NUMBER SEE SHEET 3-4		CUSTOMER GENERAL MARKET		SHEET NUMBER 1 OF 4	

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

OPTIONS

COUPLING NUTS
FEMALE MALE

8	8	X	0	3	0	X	X	X	X	X	X	X	X
---	---	---	---	---	---	---	---	---	---	---	---	---	---

88=Micro-Change
M12x1
Double ended

Contacts:
3=3 Contacts
4=4 Contacts
5=5 Contacts
8=8 Contacts

Heads style:	030=Plug Female Straight to Plug Male Straight
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Cable type: See Table

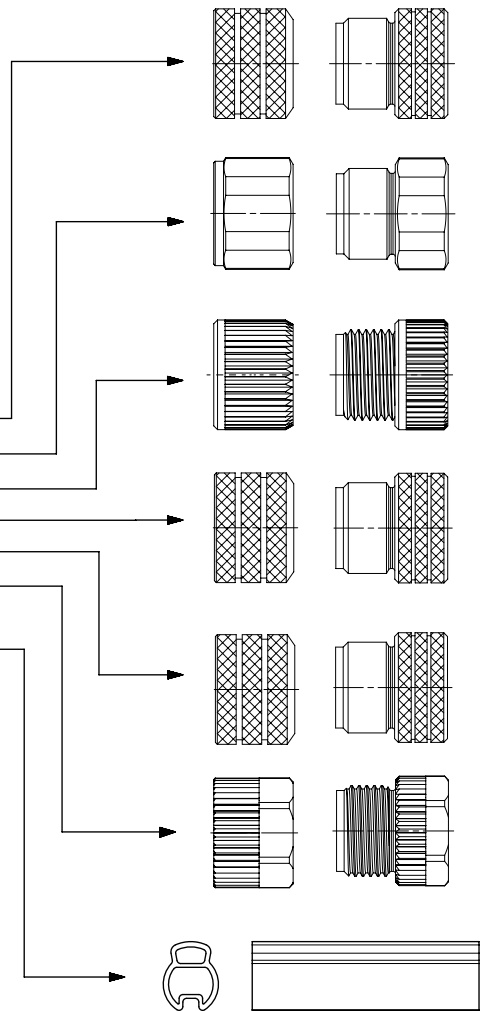
Units:
M=Meter
C=Centimeter

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

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

Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1=Hexagonal Stainless steel _____
5=Knurled Derlin _____
7=Knurled Brass Ni Plated, Teflon Coated _____
8=Type 316 stainless steel _____
9=Knurled / Hexagonal Brass Ni Plated SW13

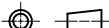
H= 2 pcs. of I/D Carrier PVC Transparent



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	SHIELD
E02	3 / 4 / 5 / 8	0.25mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E03	3 / 4 / 5	0.34mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
H08	3 / 4 / 5 / 8	0.25mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
H09	3 / 4 / 5	0.34mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
P02	3 / 4 / 5 / 8	0.25mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-

CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

FUNCTIONAL SYMBOLS F A = 0 F C = 0 F E = 0 DIVISIONAL 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: NEW P/N'S ADDED TO THE DRAWING 12335 EC NO: 769491 DRWN: VHANDI2023/10/30 CHK'D: RSILLER2023/11/21 APPR: RSILLER2023/11/21 INITIAL REVISION: DRWN: JMARSZALEK2016/09/16 APPR: RSILLER2016/12/08					molex CSE M12 XP AC FE STR MA STR XM DE					
	mm		1:1												
	GENERAL TOLERANCES (UNLESS SPECIFIED)														
	ANGULAR TOL ± 1.0°														
	4 PLACES		±							PRODUCT CUSTOMER DRAWING					
	3 PLACES		±												
	2 PLACES		± 0.05		DOCUMENT NUMBER 1200668084					DOC TYPE	DOC PART	REVISION			
	1 PLACE		± 0.3							PSD	000	A17			
	0 PLACES		± 0.5												
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		120066		SEE SHEET 3-4		GENERAL MARKET		2 OF 4	

DOCUMENT STATUS	P1	RELEASE DATE	2023/11/21	12:03:28
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PART LIST

MOLEX PN	Engineering No.	Length
1200668174	884030H09M030	3m
1200668380	884030H09M040	4m
1200668244	884030H09M050	5m
1200668550	884030H09M050H	5m
1200668737	884030H09M055	5.5m
1200669926	884030H09M065H	6.5m
1200669927	884030H09M070H	7m
1200669931	884030H09M075H	7.5m
1200669932	884030H09M080H	8m
1200668381	884030H09M100	10m
5P CABLE H09		
1200668509	885030H09M006	0.6m
1200668497	885030H09M010	1m
1200669756	885030H09M015H	1.5m
1200668500	885030H09M020	2m
1200669762	885030H09M020H	2m
1200669757	885030H09M025H	2.5m
1200668510	885030H09M030	3m
1200669763	885030H09M030H	3m
1200668853	885030H09M040	4m
1200668501	885030H09M050	5m
1200668854	885030H09M060	6m
1200668502	885030H09M092	9.2m
1200668511	885030H09M100	10m
1200668683	885030H09M150	15m
1200668684	885030H09M200	20m
8P CABLE P02		
1200661455	888030P02M005	0.5m
1200660579	888030P02M010	1m
1200668803	888030P02M010H	1m
1200660585	888030P02M100	10m
1200668807	888030P02M100H	10m
1200669353	888030P02M130	13m
1200660586	888030P02M150	15m
1200668808	888030P02M150H	15m
1200668327	888030P02M200	20m
1200668809	888030P02M200H	20m

MOLEX PN	Engineering No.	Length
1200660580	888030P02M020	2m
1200668804	888030P02M020H	2m
1200660581	888030P02M030	3m
1200660582	888030P02M040	4m
1200660583	888030P02M050	5m
1200668806	888030P02M050H	5m
1200660584	888030P02M060	6m
1200668352	888030P02M250	25m
1200669133	888030P02M3008	30m
1200668810	888030P02M350H	35m
1200668544	888030P02M500	50m
3P CABLE P03		
1200070102	883030P03M003	0.3m
1200070104	883030P03M006	0.6m
1200660498	883030P03M010	1m
1200071123	883030P03M010H	1m
1200668691	883030P03M010YH	1m
1200660500	883030P03M020	2m
1200071131	883030P03M0201	2m
1200071114	883030P03M020H	2m
1200668690	883030P03M020YH	2m
1200660501	883030P03M030	3m
1200071122	883030P03M030H	3m
1200668646	883030P03M030HY	3m
1200072104	883030P03M040	4m
1200660502	883030P03M050	5m
1200071047	883030P03M050H	5m
1200668713	883030P03M050HY	5m
1200071288	883030P03M060	6m
1200070105	883030P03M100	10m
1200071273	883030P03M100H	10m
1200668712	883030P03M100HY	10m
1200072658	883030P03M120	12m
1200071053	883030P03M150	15m

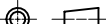
MOLEX PN	Engineering No.	Length
4P CABLE P03		
1200070486	884030P03M003	0.3m
1200668687	884030P03M005	0.5m
1200070487	884030P03M006	0.6m
1200070488	884030P03M010	1m
1200072762	884030P03M0101	1m
1200072649	884030P03M0105	1m
1200060050	884030P03M015	1.5m
1200070489	884030P03M020	2m
1200072763	884030P03M0201	2m
1200668754	884030P03M020H	2m
1200060051	884030P03M030	3m
1200072764	884030P03M0301	3m
1200072803	884030P03M040	4m
1200070490	884030P03M050	5m
1200072650	884030P03M0505	5m
1200072010	884030P03M050H	5m
1200072804	884030P03M060	6m
1200669717	884030P03M080	8m
1200668815	884030P03M0805	8m
1200071029	884030P03M100	10m
1200665031	884030P03M100H	10m
1200668720	884030P03M150	15m
1200072105	884030P03M200	20m
1200668721	884030P03M250	25m
1200668722	884030P03M300	30m
1200668723	884030P03M350	35m
1200668724	884030P03M400	40m
5P CABLE P03		
1200668903	885030P03C130	0.13m
1200073083	885030P03M006	0.6m
1200668794	885030P03M006H	0.6m
1200071947	885030P03M007	0.7m
1200668084	885030P03M010	1m
1200668795	885030P03M010H	1m
1200668765	885030P03M015	1.5m
1200070596	885030P03M020	2m
1200668602	885030P03M020G	2m

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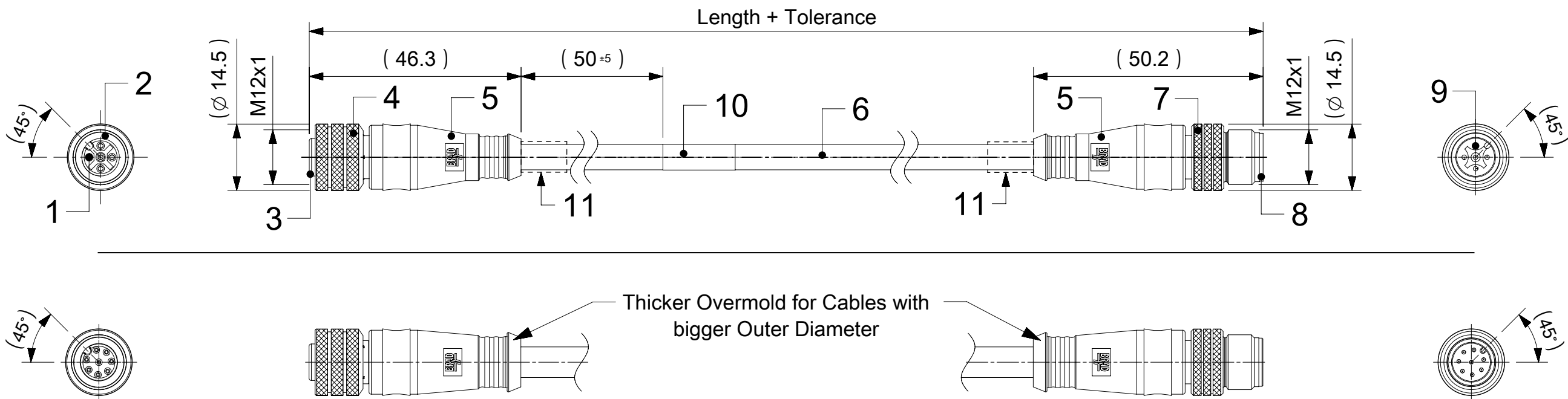
NOTES:

* - Part No. with Yellow PVC overmolding

DOCUMENT STATUS	P1	RELEASE DATE	2023/11/21	12:03:28
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FUNCTIONAL 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: NEW P/N'S ADDED TO THE DRAWING 12335			molex					
	mm		1:1										
	GENERAL TOLERANCES (UNLESS SPECIFIED)		ANGULAR TOL ± 1.0 °					CSE M12 XP AC FE STR MA STR XM DE					
4 PLACES ±													
DIVISIONAL SYMBOLS	3 PLACES ±				EC NO: 769491			PRODUCT CUSTOMER DRAWING					
	2 PLACES ± 0.05				DRWN: VHANDI 2023/10/30								
	1 PLACE ± 0.3				CHK'D: RSILLER 2023/11/21								
	0 PLACES ± 0.5				APPR: RSILLER 2023/11/21								
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		DOCUMENT NUMBER		DOC TYPE	DOC PART	REVISION
					A3-SIZE		120066		1200668084		PSD	000	A17
								MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
								SEE PART LIST		GENERAL MARKET		4 OF 4	

FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



NOTES:
RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
5 contacts 60V per IEC 60664
5 contacts 250V per UL 2238
8 contacts 30V per IEC 60664
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A
PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +85°C
CONTACTS POSITION FRONT VIEW:

	3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
FEMALE								
MALE								
CONNECTIONS	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 OR GREEN/YELLOW	5	GREY
							6	PINK
							7	BLUE
						8	RED	
CODING REQUIRED TO IEC 61076-2-101								

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

11	SEE SHEET 2	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES lxx	---	---
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE Au OVER Ni
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE	---	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING BLACK	TPU	---
4	1	COUPLING NUT FEMALE	---	---
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE Au OVER Ni
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											
FUNCTIONAL SYMBOLS		DIMENSION UNITS		SCALE		CURRENT REV DESC: PART LIST REVISED					
FA = 0		mm		1:1		molex CSE M12 XP AC FE STR MA STR XM DE PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER 1200668165 DOC TYPE PSD DOC PART 000 REVISION A7 MATERIAL NUMBER SEE PART LIST CUSTOMER GENERAL MARKET SHEET NUMBER 1 OF 5					
FE = 0		GENERAL TOLERANCES (UNLESS SPECIFIED)									
FD = 0		ANGULAR TOL ± 1.0 °									
DIVISIONAL SYMBOLS		4 PLACES		±							
		3 PLACES		±							
		2 PLACES		± 0.05							
		1 PLACE		± 0.3							
		0 PLACES		± 0.5							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						THIRD ANGLE PROJECTION					
								DRAWING A3-SIZE		SERIES 120066	

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

88X030XXXXXX

88=Micro-Change
M12x1
Double ended

Contacts:
3=3 Contacts
4=4 Contacts
5=5 Contacts
8=8 Contacts

Heads style:
030=Plug Female Straight
to Plug Male Straight

Cable type: See Table

Units:
M=Meter

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

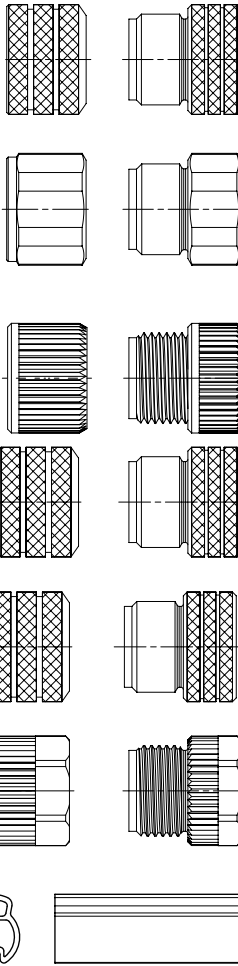
OPTIONS

Overmold color:
Blank (Standard)=Black TPU
Blank=Yellow PVC for cables
A09, S19, S20, S26
Blank=Yellow TPE-E for cables
K03, K05
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
Blank=7 for cables I20, I26, K03, K05, P82, S26
8=Type 316 stainless steel
9=Knurled / Hexagonal Brass Ni Plated SW13

H= 2 pcs. of I/D Carrier PVC Transparent
(Cables Ixx & P82 always with 2 pcs. of
I/D Carrier even if no H in Engineering No.)

COUPLING NUT
FEMALE MALE



CABLE LENGTH TOLERANCES		
OVER [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

FUNCTIONAL 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: PART LIST REVISED			molex					
	mm		1:1										
	GENERAL TOLERANCES (UNLESS SPECIFIED)							CSE M12 XP AC FE STR MA STR XM DE					
ANGULAR TOL ± 1.0 °													
4 PLACES		±		EC NO: 784475 DRWN: RSCHIEBER 2024/04/16 CHK'D: RSILLER 2024/04/26 APPR: RSILLER 2024/04/26									
3 PLACES		±											
2 PLACES		± 0.05											
DIVISIONAL SYMBOLS	1 PLACE		± 0.3		INITIAL REVISION: DRWN: JMARSZALEK 2016/09/19 APPR: RSILLER 2016/12/08			DOCUMENT NUMBER		DOC TYPE		DOC PART	REVISION
	0 PLACES		± 0.5					1200668165		PSD		000	A7
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING	SERIES	MATERIAL NUMBER		CUSTOMER		SHEET NUMBER
						A3-SIZE	120066	SEE PART LIST		GENERAL MARKET		2 OF 5	

