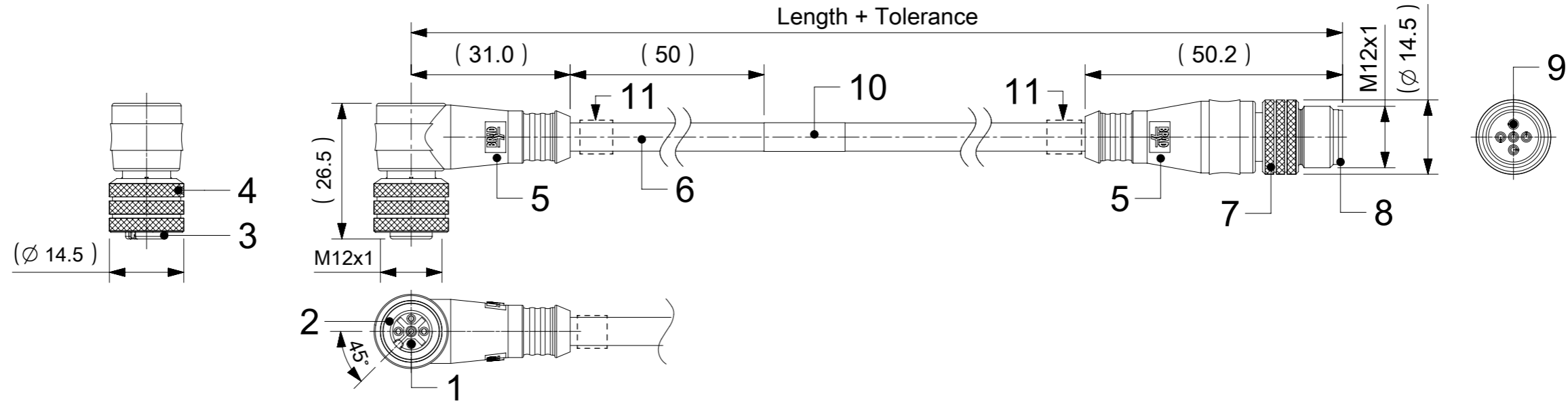


FEMALE PLUG M12 90° ANGLED TO MALE PLUG M12 STRAIGHT



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

* FOR CABLES Ixx USE PRINTING ON THE CABLE IN THE SAME MEASUREMENT LIKE FOR LABEL - ENGINEERING No



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

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
11	SEE PART LIST	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES Ixx	---	---
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE Au OVER Ni
8	1	INSERT MALE BLACK	SEE PART LIST	---
7	1	COUPLING NUT MALE	SEE PART LIST	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING BLACK	SEE PART LIST	---
4	1	COUPLING NUT FEMALE	SEE PART LIST	---
3	1	INSERT FEMALE BLACK	SEE PART LIST	---
2	1	O-RING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE Au OVER Ni

FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807.	
FUNCTIONAL SYMBOLS	mm	SCALE	1:1	
FUNCTIONAL SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)			
FUNCTIONAL SYMBOLS	ANGULAR TOL ± 1.0°			
DIVISIONAL SYMBOLS	4 PLACES	±	EC NO: 726454	
DIVISIONAL SYMBOLS	3 PLACES	±	DRWN: LIKITV 2022/11/30	
DIVISIONAL SYMBOLS	2 PLACES	± 0.05	CHK'D: GGA 2022/11/30	
DIVISIONAL SYMBOLS	1 PLACE	± 0.3	APPR: GGA 2022/11/30	
DIVISIONAL SYMBOLS	0 PLACES	± 0.5	INITIAL REVISION:	
DIVISIONAL SYMBOLS	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWN: JMARSZALEK 2016/10/06	2016/12/08
DIVISIONAL SYMBOLS	THIRD ANGLE PROJECTION		DRAWING	SERIES
DIVISIONAL SYMBOLS	DRAWING		A3-SIZE	120066
DIVISIONAL SYMBOLS	MATERIAL NUMBER		CUSTOMER	SHEET NUMBER
DIVISIONAL SYMBOLS	SEE SHEET 3, 4		GENERAL MARKET	1 OF 4

DOCUMENT STATUS		P1	RELEASE DATE	2022/11/30	11:33:47
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molex

CSE M12 XP AC FE RA MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER
1200660973

DOC TYPE
PSD

DOC PART
000

REVISION
A10

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

8 8 X 0 X 1 X X X X X X X X

OPTIONS

88=Micro-Change
M12x1
Double ended

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

Heads style:
031=Plug Female 90°
to Plug Male Straight
021=Plug Female 90°
to Plug Male Straight
with Female
Coupling Nut

Cable type: See Table

Units:
M=Meter
C=Centimeter

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

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
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.)

Overmold color:
Blank (Standard)=Black TPU
Blank=Yellow TPU for cables
A09, S19, S20, S26
Blank=Yellow TPE-E for cables
K03, K05
A=Grey / G=Black / Y=Yellow

**COUPLING NUT
FEMALE MALE**



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
I03	3 / 4 / 5	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm ²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
K03	4	18AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
K05	3 / 4 / 5	22AWG	TPE YELLOW	UL ITC or PLC	I/II A/B 90°C/300V	max 105°C	-	-	-
P82	3 / 4 / 5	0.34mm ²	PUR IRR ORANGE	-	-	-50°C to +105°C, >5xO.D.	-40°C to +105°C, >7.5xO.D.	-	-
S20	3 / 4 / 5	0.34mm ²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
E02	3 / 4 / 5 / 8	0.25mm ²	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	0.34mm ²	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.	-	-
H09	3 / 4 / 5	0.34mm ²	PUR BLACK LSOH	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	-
P03	3 / 4 / 5	0.34mm ²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-
H08	8	0.25mm ²	PUR BLACK LSOH	UL 21198/10493	UL 21198/10493	-40°C to +80°C, >5xO.D.	-25°C to +80°C, >10xO.D.	2 000 000 cycles, Temp max 60°C	-
P02	8	0.25mm ²	PUR / PVC BLACK	-	-	-30°C to +80°C, >7xO.D.	-5°C to +80°C, >15xO.D.	-	-

CABLE LENGTH TOLERANCES

OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+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: mm SCALE: 1:1	CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807.	
DIVISIONAL SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		PRODUCT CUSTOMER DRAWING DOCUMENT NUMBER: 1200660973 DOC TYPE: PSD DOC PART: 000 REVISION: A10
	ANGULAR TOL ± 1.0° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.3 0 PLACES ± 0.5	INITIAL REVISION: DRWN: JMARSZALEK APPR: RSILLER 2016/10/06 2016/12/08	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION 	DRAWING: A3-SIZE SERIES: 120066 MATERIAL NUMBER: SEE SHEET 3, 4 CUSTOMER: GENERAL MARKET SHEET NUMBER: 2 OF 4

Pos.	Part No.	Engineering No.	Cable Length
143	1200668210	884031H09M009	0.9m
144	1200668484	884031H09M010	1m
145	1200668848	884031H09M013	1.3m
146	1200668488	884031H09M015	1.5m
147	1200668845	884031H09M018	1.8m
148	1200668212	884031H09M020	2m
149	1200668847	884031H09M021	2.1m
150	1200668215	884031H09M030	3m
151	1200668670	884031H09M050	5m
152	1200668671	884031H09M100	10m
153	1200070526	884031P03M003	0.3m
154	1200070527	884031P03M006	0.6m
155	1200060056	884031P03M010	1m
156	1200060057	884031P03M020	2m
157	1200070529	884031P03M030	3m
158	1200071187	884031P03M050	5m
159	1200072012	884031P03M100	10m
160	1300288001	885031D12M020	2m
161	1200668658	885031E02M020	2m
162	1200668610	885031E02M050	5m
163	1200668660	885031E02M100	10m
164	1200668339	885031E03M006	0.6m
165	1200668189	885031E03M010	1m
166	1200668278	885031E03M020	2m
167	1200668340	885031E03M030	3m
168	1200668279	885031E03M050	5m
169	1200668653	885031E03M070	7m
170	1200668348	885031E03M100	10m
171	1200668761	885031E03M150	15m
172	1200669229	885031H09C250	25m
173	1200668512	885031H09M006	0.6m
174	1200668496	885031H09M010	1m
175	1200668513	885031H09M020	2m
176	1200668514	885031H09M030	3m
177	1200668515	885031H09M050	5m
178	1200668516	885031H09M100	10m
179	1200073085	885031P03M006	0.6m
180	1200668188	885031P03M010	1m
181	1200072376	885031P03M0105	1m
182	1200070917	885031P03M020	2m
183	1200668091	885031P03M025	2.5m
184	1200070919	885031P03M030	3m
185	1200668273	885031P03M050	5m
186	1200073086	885031P03M100	10m
187	1200070434	884021E03M020	2m
188	1200658319	888031H08M050	5m
189	1200668673	888031E02M0041	0.4m
190	1200668849	888031P02M150	15m

Pos.	Part No.	Engineering No.	Cable Length
191	1200656208	888031H08C250	2.5m
192	1200656209	888031H08M005	0.5m
193	1200656210	888031H08M008	0.8m
194	1200656211	888031H08M012	1.2m
195	1200656212	888031H08M015	1.5m
196	1200070057	883021E03M006	0.6m
197	1200070058	883021E03M020	2m
198	1200070439	884021P03M006	0.6m
199	1200070440	884021P03M010	1m
200	1200070441	884021P03M020	2m
201	1200070442	884021P03M030	3m
202	1200070870	883021P03M050	5m
203	1200072191	883021E03M030	3m
204	1200072198	883021E03M050	5m
205	1200665038	884021E03M050	5m
206	1200668061	884021E03M006	0.6m
207	1200668219	884021E03M030	3m
208	1200668673	888031E02M0041	0.4m
209	1200669541	884031P03M015	1.5m
210	1200669885	884031E03M004	0.4m
211	1200669886	884031E03M005	0.5m
212	1200669887	884031E03M013	1.3m
213	1200669888	884031E03M080	8m

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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#510807.						
$\nabla_A = 0$	mm	1:1	 CSE M12 XP AC FE RA MA STR XM DE						
$\nabla_E = 0$	GENERAL TOLERANCES (UNLESS SPECIFIED)								
$\nabla_F = 0$	ANGULAR TOL $\pm 1.0^\circ$		EC NO: 726454						
DIVISIONAL SYMBOLS	4 PLACES	\pm	DRWN: LIKITV 2022/11/30						
	3 PLACES	\pm	CHK'D: GGA 2022/11/30						
	2 PLACES	± 0.05	APPR: GGA 2022/11/30						
	1 PLACE	± 0.3	INITIAL REVISION:						
	0 PLACES	± 0.5	DRWN: JMARSZALEK 2016/10/06						
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	4 OF 4