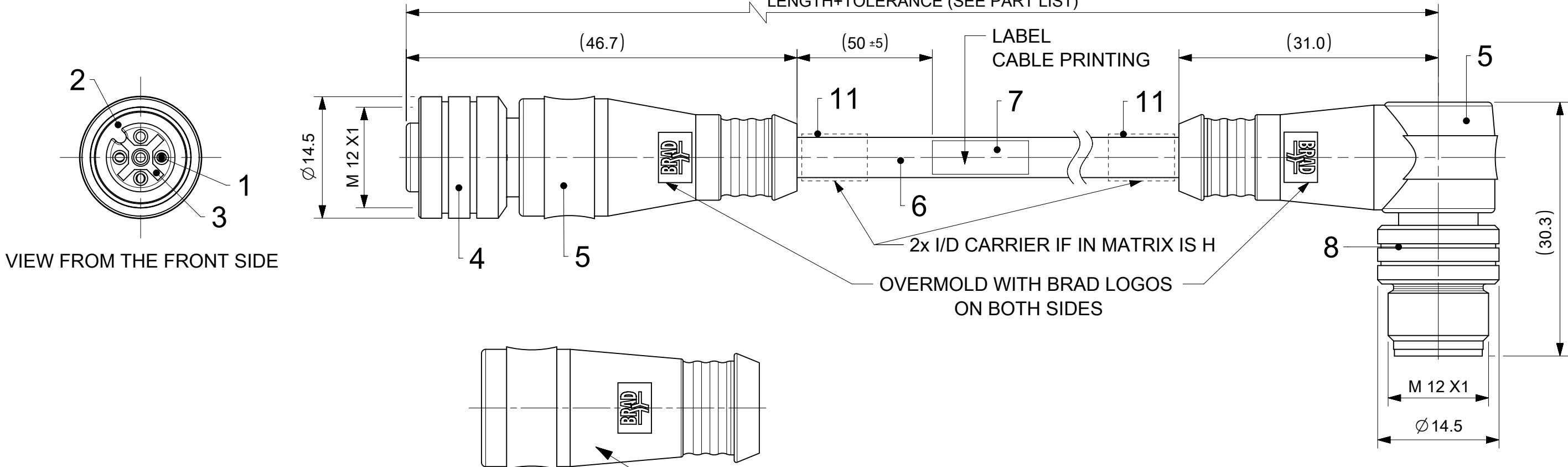


FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 90° ANGLED

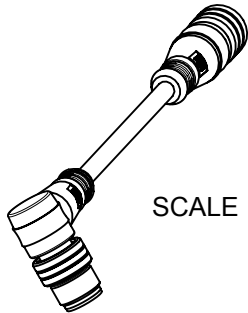


TECHNICAL SPECIFICATION:
CONTACT CURRENT RATING: 3-5 POLES 4A
8 POLES 2A
VOLTAGE RATING: 3-4 POLES 250V
5 POLES 60V DC
8 POLES 30V
PROTECTION CLASS: IP 67
TEMPERATURE: -25°C / +85°C

BILL OF MATERIAL

11	2 (SEE MATRIX)	ID CARRIER	PVC	TRANSPARENT
10	1	INSERT MALE	PUR	BLACK
9	3/4/5/8	CONTACT M12 MALE	BRASS	SELECTIVE GOLD OVER NICKEL
8	1	COUPLING NUT MALE	BRASS	NICKEL
7	1	LABEL	VINYL	YELLOW
6	-	CABLE	SEE MATRIX/ CABLE SPECIFICATION	---
5	-	OVERMOULD	TPU	SEE MATRIX
4	1	COUPLING NUT FEMALE	BRASS	NICKEL
3	1	INSERT FEMALE	PUR	BLACK
2	1	O-RING	FPM	RED
1	3/4/5/8	CONTACT M12 FEMALE	BRASS	SELECTIVE GOLD OVER NICKEL
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH/COLOR

DOCUMENT STATUS	P1	RELEASE DATE	2022/03/07	15:09:32
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SCALE 1:2

FUNCTIONAL SYMBOLS FA = 0 FE = 0 FV = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	molex					
	GENERAL TOLERANCES (UNLESS SPECIFIED)						
	DIMENSION UNITS: mm	SCALE: 2:1	CSE M12 XP AC FE STR MA RA XM				
	ANGULAR TOL ± 1.0°	4 PLACES ±	PRODUCT CUSTOMER DRAWING				
DIVISIONAL SYMBOLS	3 PLACES ±	EC NO: 698496	2022/03/07	DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
	2 PLACES ± 0.05	DRWN: MDHARMANTI	2022/03/07	1200070026	PSD	000	A6
	1 PLACE ± 0.3	CHK'D: RSILLER	2022/03/07	SHEET NUMBER			
	0 PLACES ± 0.5	APPR: RSILLER	2022/03/07	1 OF 4			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING: A3-SIZE	SERIES: 120007	MATERIAL NUMBER: SEE PART LIST	CUSTOMER: GENERAL MARKET	

ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

SPECIAL TYPES

8	8	X	0	3	2	X	X	X	X	X	X	X	X	X
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88 = M12x1
Double ended

Poles:
3 = 3 Poles
4 = 4 Poles
5 = 5 Poles
8 = 8 Poles

Heads style:
032 = Plugs FE Straight & Male 90°

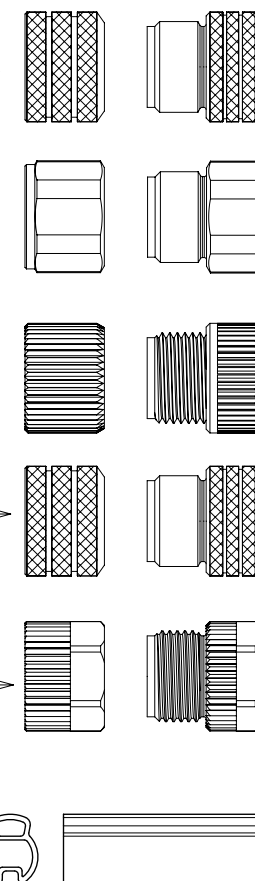
Cable types:
E02=0.25mm² PVC Black
E03=0.34mm² PVC Black
E13=0.75mm² PVC Yellow
E52=0.34mm² PVC Grey(RAL 7001)
E57=0.34mm² PVC Grey(RAL 7001)
H09=0.34mm² PUR Black
H69=0.34mm² PUR Grey LSOH SCR
I02=0.25mm² PVC Grey CEI
I03=0.34mm² PVC Grey CEI
I20=0.25mm² PVC Grey CEI SCR DC
I26=0.34mm² PVC Grey CEI SCR AC
P02=0.25mm² PUR/PVC Black
P03=0.34mm² PUR/PVC Black
P08=0.25mm² PUR Yellow HIFLEX
P20=0.34mm² PUR Grey LSOH braid
P82=0.34mm² PUR orange irradiated DC
S20=0.34mm² PVC Yellow SJTO braid

Units:
C = Centimeter
M = Meter
K = Killometer
F = Feet

Length
Examples:
020 = 2 M
060 = 6 M
100 = 10 M

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
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 SPECIFICATION

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.	-	-
E52	4	0.34mm²	PVC GRAY	-	-	- 30 to + 70°C	- 5 to + 70°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	-
H69	4	0.2mm²	PUR LSOH	-	-	-	-40°C to +80°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.	-	-
P82	4	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C,	-50°C to +105°C,	-	-
I03	4	0.34mm²	PVC GRAY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
K03	4	AWG18	TPE YELLOW	ITC E195601 OR PLTC	AWM I/II A/B FT4 LL54185	-	-40°C to +105°C	-	-
K05	4	0.34mm²	TPE YELLOW	ITC E195601 OR PLTC	AWM I/II A/B FT4 LL54185	-	-40°C to +105°C	-	-
S20	4	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 AWM II	-30°C to +105°C	-40°C to +105°C	-	-

CABLE LENGTH TOLERANCE

OVER	UPTO AND INCULDING	TOLERANCE
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF 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: ADDED PNS 1200669890 & 1200669891 EC NO: 698496 DRWN: MDHARMANTI 2022/03/07 CHK'D: RSILLER 2022/03/07 APPR: RSILLER 2022/03/07 INITIAL REVISION: DRWN: DSOPPIN 2018/09/27 APPR: RSILLER 2018/10/22				molex									
mm		1:1															
GENERAL TOLERANCES (UNLESS SPECIFIED)																	
ANGULAR TOL		± 1.0 °						CSE M12 XP AC FE STR MA RA XM									
4 PLACES		±															
3 PLACES		±															
2 PLACES		± 0.05						PRODUCT CUSTOMER DRAWING									
1 PLACE		± 0.3															
0 PLACES		± 0.5															
DIVISIONAL SYMBOLS		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION		DRAWING		SERIES		DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION	
						A3-SIZE		120007		1200070026		PSD		000		A6	
										MATERIAL NUMBER		CUSTOMER		SHEET NUMBER			
										SEE PART LIST		GENERAL MARKET		2 OF 4			

CONTACT POSITION FRONT VIEW:

3 POLES FEMALE		3 POLES MALE		4 POLES FEMALE		4 POLES MALE		5 POLES FEMALE		5 POLES MALE		8 POLES FEMALE		8 POLES MALE	
PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	BROWN	1	WHITE	1	WHITE
2	-	2	-	2	WHITE	2	WHITE	2	WHITE	2	WHITE	2	BROWN	2	BROWN
3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	BLUE	3	GREEN	3	GREEN
4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	BLACK	4	YELLOW	4	YELLOW
5	-	5	-	5	-	5	-	5	GREY OR GREEN/YELLOW	5	GREY OR GREEN/YELLOW	5	GREY	5	GREY
CODING REQUIRED TO IEC 61076-2-101				CODING REQUIRED TO IEC 61076-2-101				CODING REQUIRED TO IEC 61076-2-101				6	PINK	6	PINK
								CODING REQUIRED TO IEC 61076-2-101				7	BLUE	7	BLUE
												8	RED	8	RED
												CODING REQUIRED TO IEC 61076-2-101			

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: ADDED PNS 1200669890 & 1200669891					molex CSE M12 XP AC FE STR MA RA XM								
	mm		1:1															
	GENERAL TOLERANCES (UNLESS SPECIFIED)																	
	ANGULAR TOL ± 1.0 °																	
	4 PLACES		±															
	3 PLACES		±		EC NO: 698496 DRWN: MDHARMANTI 2022/03/07 CHK'D: RSILLER 2022/03/07 APPR: RSILLER 2022/03/07					PRODUCT CUSTOMER DRAWING								
	2 PLACES		± 0.05															
	1 PLACE		± 0.3		INITIAL REVISION: DRWN: DSOPPIN 2018/09/27 APPR: RSILLER 2018/10/22					DOCUMENT NUMBER			DOC TYPE		DOC PART		REVISION	
	0 PLACES		± 0.5							1200070026			PSD		000		A6	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION			DRAWING		SERIES		MATERIAL NUMBER			CUSTOMER			SHEET NUMBER	
							A3-SIZE		120007		SEE PART LIST			GENERAL MARKET			3 OF 4	

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