

# M12 FEMALE

REVISION A2 REMOVED OBSOLETE PN

## PART No MATRIX - NUMERICAL CODE (AVAILABLE PARTS SEE PART LIST TABLE. OTHERS PARTS AVAILABLE UPON REQUEST).

OPTIONS

8 0 \* S 0 1 \* \* \* M \* \* \* \*

8 = MICRO CHANGE

8 = PORTABLE

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

HEADER:  
S01 = SHIELDED FEMALE 90°

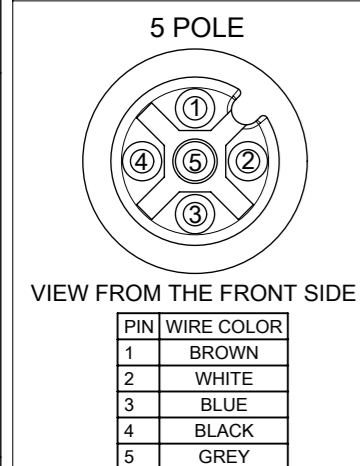
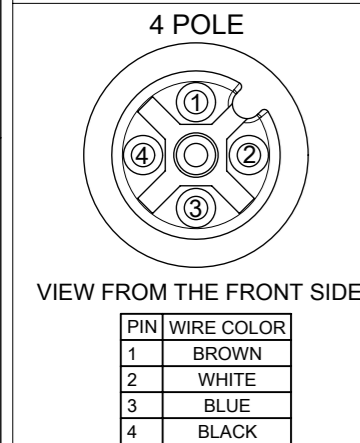
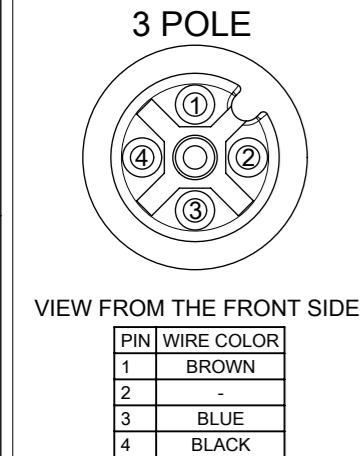
CABLE TYPE:  
S19 = PVC, 0,25mm<sup>2</sup>, YELLOW  
S20 = PVC, 0,34mm<sup>2</sup>, YELLOW  
S26 = PVC, 0,34mm<sup>2</sup>, YELLOW  
P19 = PUR, 0,34mm<sup>2</sup>, BLACK  
P20 = PUR, 0,34mm<sup>2</sup>, BLACK

UNIT:  
M = METER  
F = FEET  
A = INCHES  
C = CENTIMETERS

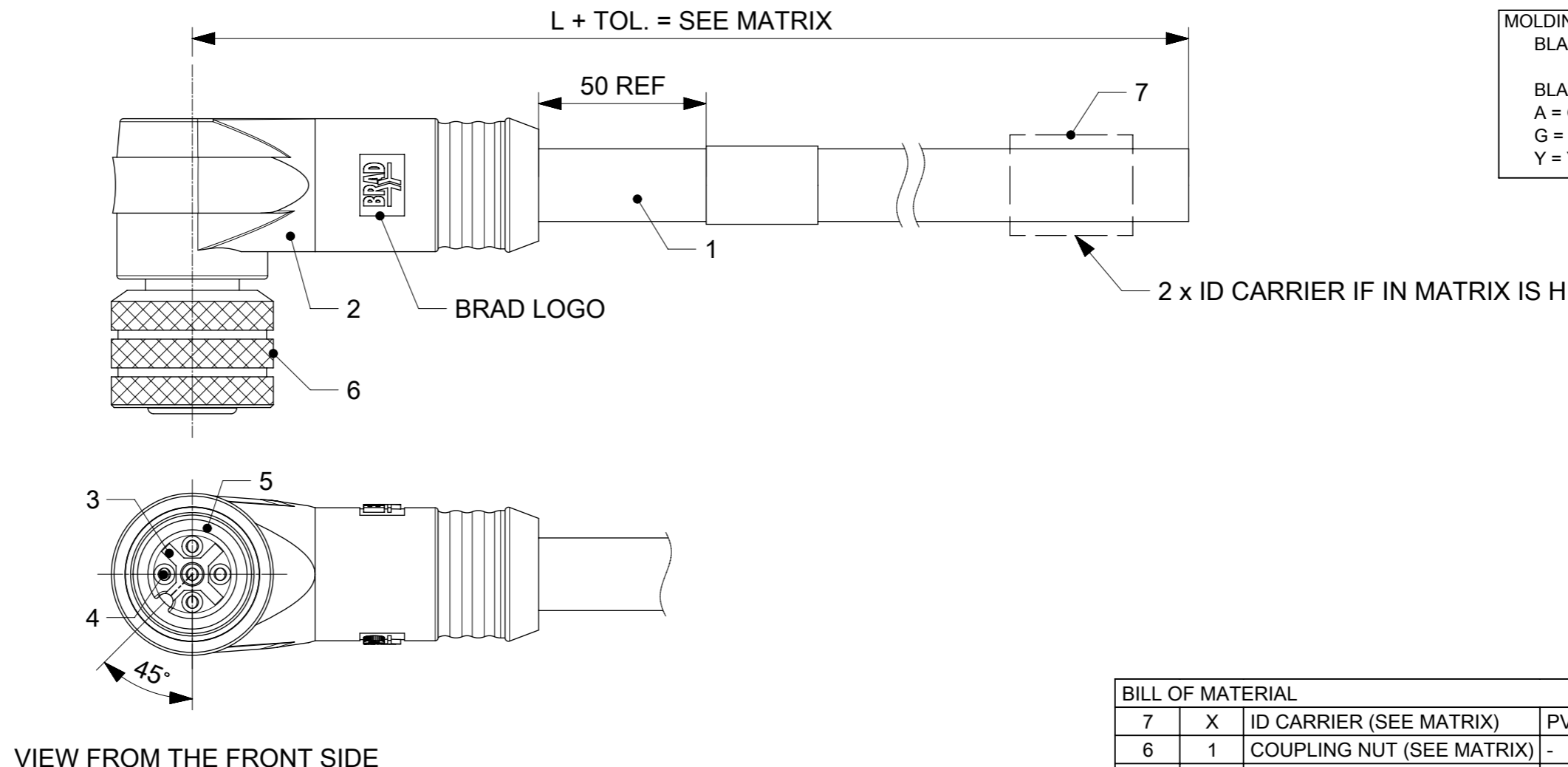
LENGTH:  
EXAMPLE:  
010 = 1 m  
050 = 5 m  
100 = 10 m

COUPLIN NUT MATERIAL:  
BLANK = KNU  
1 = STAINLESS STEEL  
5 = DERLIN  
7 = TEFLON COATED  
9 = KNU/HEX  
H = 2 PCS. OF I/D CARIERR

MOLDING COLOR:  
BLANK = YELLOW PUR FOR CABLE  
S26, S20 I S19  
BLANK = BLACK PUR (STANDARD)  
A = GREY  
G = BLACK  
Y = YELLOW



SHIELD CONNECTED TO THE HOUSING



ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
7	X	ID CARRIER (SEE MATRIX)	PVC	-
6	1	COUPLING NUT (SEE MATRIX)	-	-
5	1	GASKET	FPM	RED
4	X	CONTACT FE	BRONZE	GOLD OVER NICKEL PLATED
3	1	INSERT XP FE	ELASTOLLAN	BLACK
2	-	MOULDING MATERIAL	TPU	-
1	-	CABLE (SEE MATRIX)	-	-

TABLE OF LENGTH TOLERANCES		
OVER	UP TO AND INCLUDING	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

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: OBSOLETE PART NUMBERS AS PER PCN#506884	<b>molex</b>		
mm	2:1				
GENERAL TOLERANCES (UNLESS SPECIFIED)			MMC-XP-FE-90-XXX-PUR-SHIELDED		
ANGULAR TOL	±	°	PRODUCT CUSTOMER DRAWING		
4 PLACES	±		DOCUMENT NUMBER		
3 PLACES	±		1200100247		
2 PLACES	±		DOC TYPE	DOC PART	REVISION
1 PLACE	±		PSD	00P	A2
0 PLACES	±		SHEET NUMBER		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			THIRD ANGLE PROJECTION	DRAWING	SERIES
				A3-SIZE	120010
			MATERIAL NUMBER	CUSTOMER	
			SEE TABLE		1 OF 2

DOCUMENT STATUS | P1 | RELEASE DATE | 2021/06/02 | 05:45:11

**CABLE INFORMATION** ( FOR MORE INFORMATION SEE CABLE DATA SHEET.)

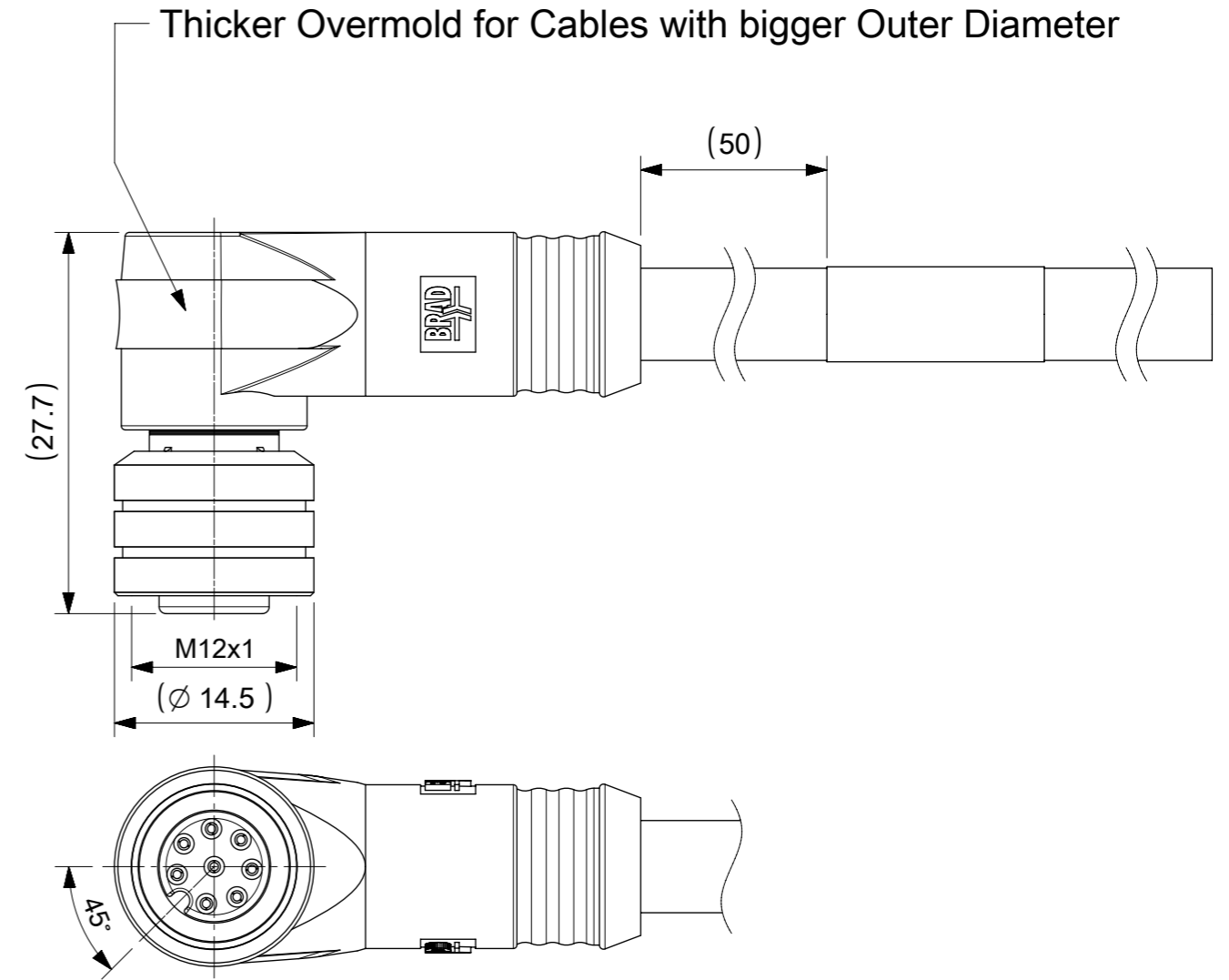
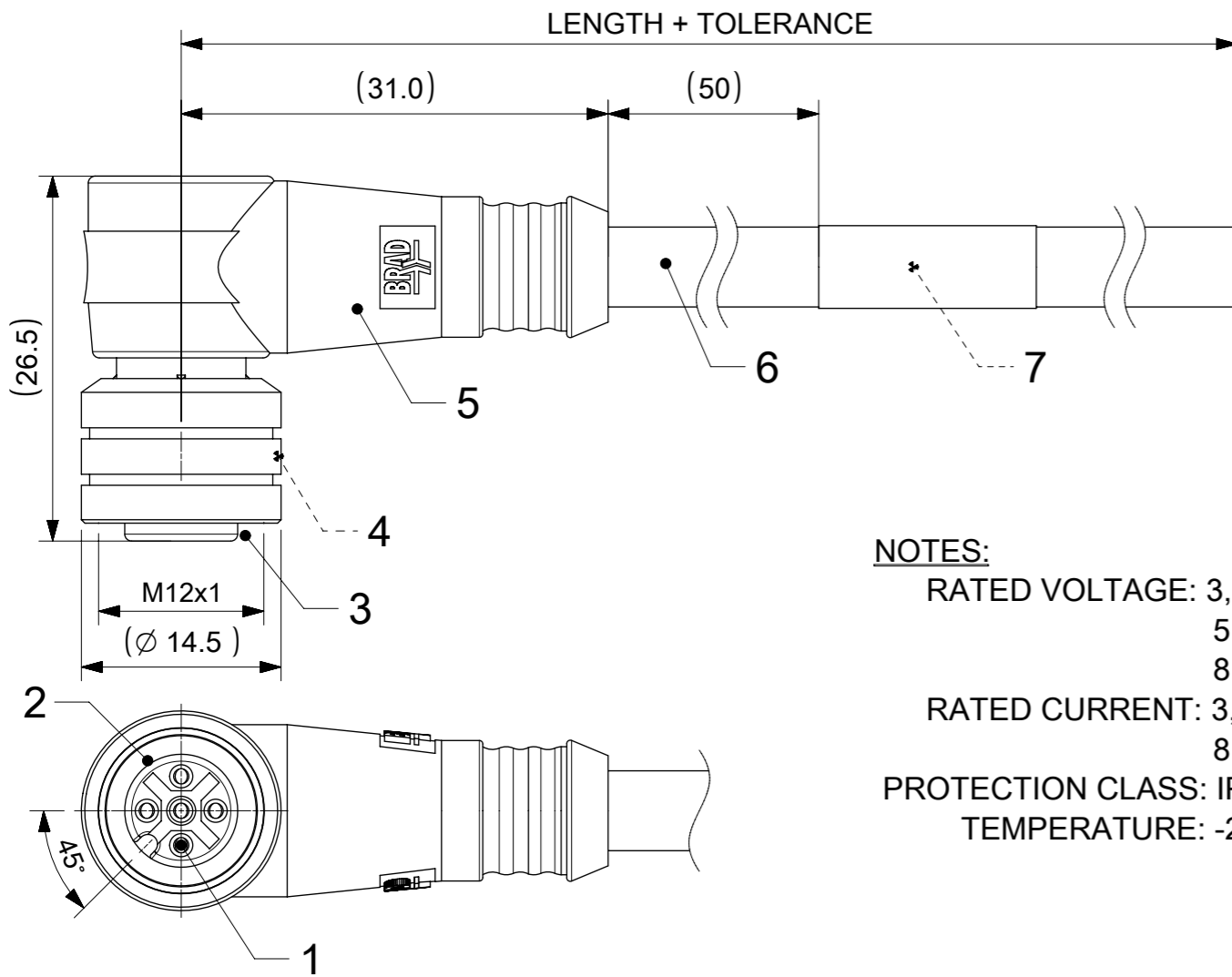
CABLE TYPE	No OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
S19	8	0.25mm <sup>2</sup>	PVC YELLOW	UL 2661/1569	C22.2 II A 105°C/300V	-30°C TO +105°C, 10xO.D.	-15°C TO +105°C, 15xO.D.	-	YES
S20	3 / 4 / 5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C TO +105°C	-	-	YES
S26	5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731		-30°C TO +105°C	-	-	YES
P19	8	0.25mm <sup>2</sup>	PUR BLACK	-	-	-40°C TO +90°C, 7.5xO.D.	-15°C TO +90°C, 12.5xO.D.	2 000 000 CYCLES, 15xO.D.	YES
P20	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK	-	-	-30°C TO +80°C	-	-	YES

**TABLE 1**

MOLEX PN	ENGINEERING No	L [mm]
1200100341	804S01S20M010	1000
1200100342	804S01S20M020	2000
1200100249	804S01P20M080	8000
1200100291	804S01S20M0501	5000
1200690187	804S01P20M050	5000
1200695042	803S01P20M050	5000
1200698003	803S01P20M020	2000
1200698005	804S01P20M250	25000
1200698010	803S01P20M100	10000
1200698016	804S01P20M100	10000
1200698017	804S01S20M100	10000
1200698021	805S01S26M050	5000
1200698022	805S01S26M060	6000
1200698064	804S01S20M2501	25000
1200698079	804S01P20M020	2000
1200698098	804S01P20M0501G	5000
1200698122	805S01S20M100	10000
1200698142	805S01S26M040	4000
1200698188	805S01P20M050	5000
1200698189	805S01P20M100	10000
1200698190	805S01P20M020	2000
1200698364	805S01P20M050H	5000
1200698366	805S01P20M150H	15000
1200698430	804S01P20M150	15000
1200698755	805S01P20M1501	15000

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DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#506884			<b>molex</b>				
mm	1:1								
GENERAL TOLERANCES (UNLESS SPECIFIED)					MMC-XP-FE-90-XXX-PUR-SHIELDED				
ANGULAR TOL	± °				PRODUCT CUSTOMER DRAWING				
4 PLACES	±	EC NO: 662770			DOCUMENT NUMBER				
3 PLACES	±	DRWN: SUGEEB 2021/02/24			1200100247				
2 PLACES	±	CHK'D: GGA 2021/06/02			DOC TYPE DOC PART REVISION				
1 PLACE	±	APPR: GGA 2021/06/02			PSD 00P A2				
0 PLACES	±	INITIAL REVISION:							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER		
			A3-SIZE	120010	SEE TABLE		2 OF 2		

# FEMALE PLUG M12 90° ANGLED



- 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
  - TEMPERATURE: -25°C / +85°C

## CONTACTS POSITION FRONT VIEW:

3 CONTACTS		4 CONTACTS		5 CONTACTS		8 CONTACTS	
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
SHIELD CONNECTED TO THE COUPLING NUT							
CODING REQUIRED TO IEC 61076-2-101							

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
7	1	LABEL YELLOW	VINYL	---
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOLDING BLACK	TPU	---
4	1	COUPLING NUT FEMALE	BRASS	NICKEL
3	1	INSERT FEMALE BLACK	PUR	---
2	1	ORING RED	FPM	---
1	3 / 4 / 5 / 8	CONTACT M12 FEMALE	BRASS	SELECTIVE Au OVER Ni

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DIMENSION UNITS: mm SCALE: 2:1

GENERAL TOLERANCES (UNLESS SPECIFIED):

ANGULAR TOL ± 1.0°

4 PLACES ±

3 PLACES ±

2 PLACES ± 0.05

1 PLACE ± 0.1

0 PLACES ± 0.2

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING: A3-SIZE

SERIES: 120069

MATERIAL NUMBER: SEE TABLE

CUSTOMER: GENERAL MARKET

SHEET NUMBER: 1 OF 3

EC NO: 662770  
DRWN: SUGEEB  
CHK'D: GGA  
APPR: GGA

2021/02/26  
2021/06/02  
2021/06/02

INITIAL REVISION:  
DRWN: AKONDRACIUK  
APPR: MIWASIECZKO

2017/04/29  
2017/05/04

DOCUMENT NUMBER: 1200698017

DOC TYPE: PSD

DOC PART: 000

REVISION: A1

**molex**

CSE M12 XP AC FE RA XM SE SH

PRODUCT CUSTOMER DRAWING

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

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

80=M12x1  
Single ended

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

Heads style:  
S01=Plug Shield Female  
90° Angled

Cable type: See Table

Units:  
M=Meter  
C=Centimeter

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

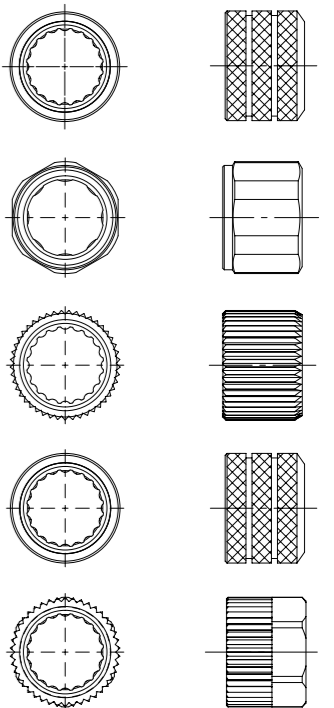
Overmold color:  
Blank (Standard)=Yellow TPU  
Blank=Yellow TPU for cables S20,S26  
Blank=Black TPU for cables P19,P20  
A=Grey / G=Black / Y=Yellow

Coupling Nut:  
Blank (Standard) & 3=Knurled Brass Ni Plated  
1=Hexagonal Stainless steel  
5=Knurled Derlin  
7=Knurled Brass Ni Plated, Teflon Coated  
Blank=7 for cables I20, I26, K03, K05, P82, S26  
9=Knurled / Hexagonal Brass Ni Plated SW13



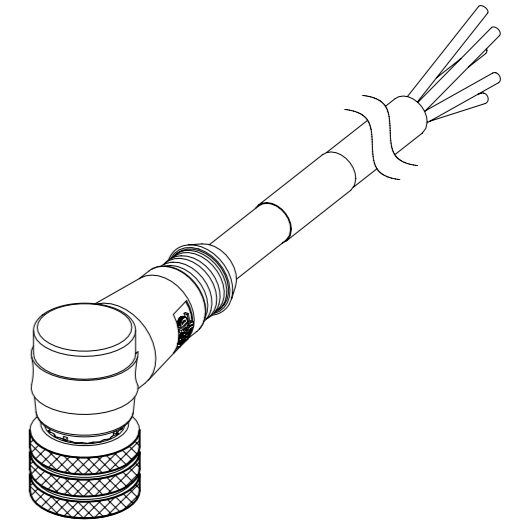
H= 2 pcs. of I/D Carrier  
PVC Transparent

COUPLING NUTS



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
P19	8	0.25mm <sup>2</sup>	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	2 000 000 cycles, 15xO.D.	YES
P20	3 / 4 / 5	0.34mm <sup>2</sup>	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
S20	3 / 4 / 5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm <sup>2</sup>	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES



SCALE 1:1

CABLE LENGTH TOLERANCES


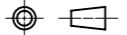
OVER	UP TO AND INCLUDING	TOLERANCES
0	305mm	+19mm
305mm	915mm	+45mm
915mm	1830mm	+56mm
1830mm	3660mm	+89mm
3660mm	7320mm	+165mm
7320mm	14640mm	+317mm
14640mm	30500mm	+610mm
30500mm	>	+2% of finished length

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DIMENSION UNITS <b>mm</b>	SCALE <b>1:1</b>	CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#506884	<b>molex</b>		
GENERAL TOLERANCES (UNLESS SPECIFIED)					
ANGULAR TOL ± 1.0 °	4 PLACES ±	EC NO: 662770	PRODUCT CUSTOMER DRAWING		
3 PLACES ±	3 PLACES ±	DRWN: SUGEEB 2021/02/26	DOCUMENT NUMBER		
2 PLACES ± 0.05	2 PLACES ±	CHK'D: GGA 2021/06/02	1200698017		
1 PLACE ± 0.1	1 PLACE ±	APPR: GGA 2021/06/02	DOC TYPE DOC PART REVISION		
0 PLACES ± 0.2	0 PLACES ±	INITIAL REVISION:	PSD 000 A1		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRWN: AKONDRACIUK 2017/04/29	MATERIAL NUMBER		
		APPR: MIWASIECZKO 2017/05/04	CUSTOMER		
			SEE TABLE GENERAL MARKET		
			SHEET NUMBER		
			2 OF 3		

# PART LIST

No	Part No	Engineering No	Cable Length [m]
1	1200100291	804S01S20M0501	5
2	1200698017	804S01S20M100	10
3	1200698064	804S01S20M2501	25
4	1200698122	805S01S20M100	10
5	1200699461	804S01S20M025	2.5
6	1200698021	805S01S26M050	5
7	1200698022	805S01S26M060	6
8	1200698142	805S01S26M040	4
9	1200698078	808S01P19M020	2
10	1200698214	808S01P19M100	10
11	1200698446	808S01P19M200	20
12	1200100249	804S01P20M080	8
13	1200690187	804S01P20M050	5
14	1200695042	803S01P20M050	5
15	1200698003	803S01P20M020	2
16	1200698005	804S01P20M250	25
17	1200698010	803S01P20M100	10
18	1200698016	804S01P20M100	10
19	1200698079	804S01P20M020	2
20	1200698098	804S01P20M0501G	5
21	1200698188	805S01P20M050	5
22	1200698189	805S01P20M100	10
23	1200698190	805S01P20M020	2
24	1200698364	805S01P20M050H	5
25	1200698366	805S01P20M150H	15
26	1200698430	804S01P20M150	15
27	1200698755	805S01P20M1501	15
28	1200699398	805S01P20M200	20
29	1200699399	805S01P20M150	15
30	1200699417	805S01P20M030	3

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DIMENSION UNITS	SCALE	CURRENT REV DESC: OBSOLETE PART NUMBERS AS PER PCN#506884								
mm	1:1									
GENERAL TOLERANCES (UNLESS SPECIFIED)		EC NO: 662770			CSE M12 XP AC FE RA XM SE SH					
ANGULAR TOL ± 1.0 °		DRWN: SUGEEB 2021/02/26			PRODUCT CUSTOMER DRAWING					
4 PLACES ±		CHK'D: GGA 2021/06/02			DOCUMENT NUMBER					
3 PLACES ±		APPR: GGA 2021/06/02			1200698017			DOC TYPE	DOC PART	REVISION
2 PLACES ± 0.05		INITIAL REVISION:								
1 PLACE ± 0.1		DRWN: AKONDRACIUK 2017/04/29								
0 PLACES ± 0.2		APPR: MIWASIECZKO 2017/05/04								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER		SHEET NUMBER		
			A3-SIZE	120069	SEE TABLE	GENERAL MARKET		3 OF 3		

DOCUMENT STATUS	P1	RELEASE DATE	2021/06/02	05:45:48
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# Mouser Electronics

Authorized Distributor

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