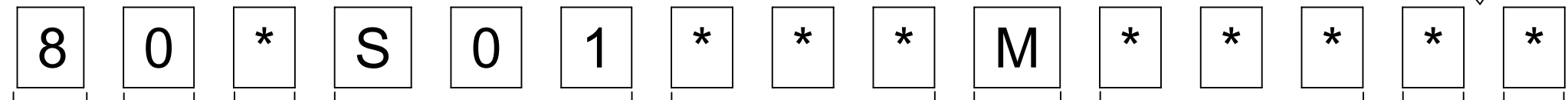


# M12 FEMALE

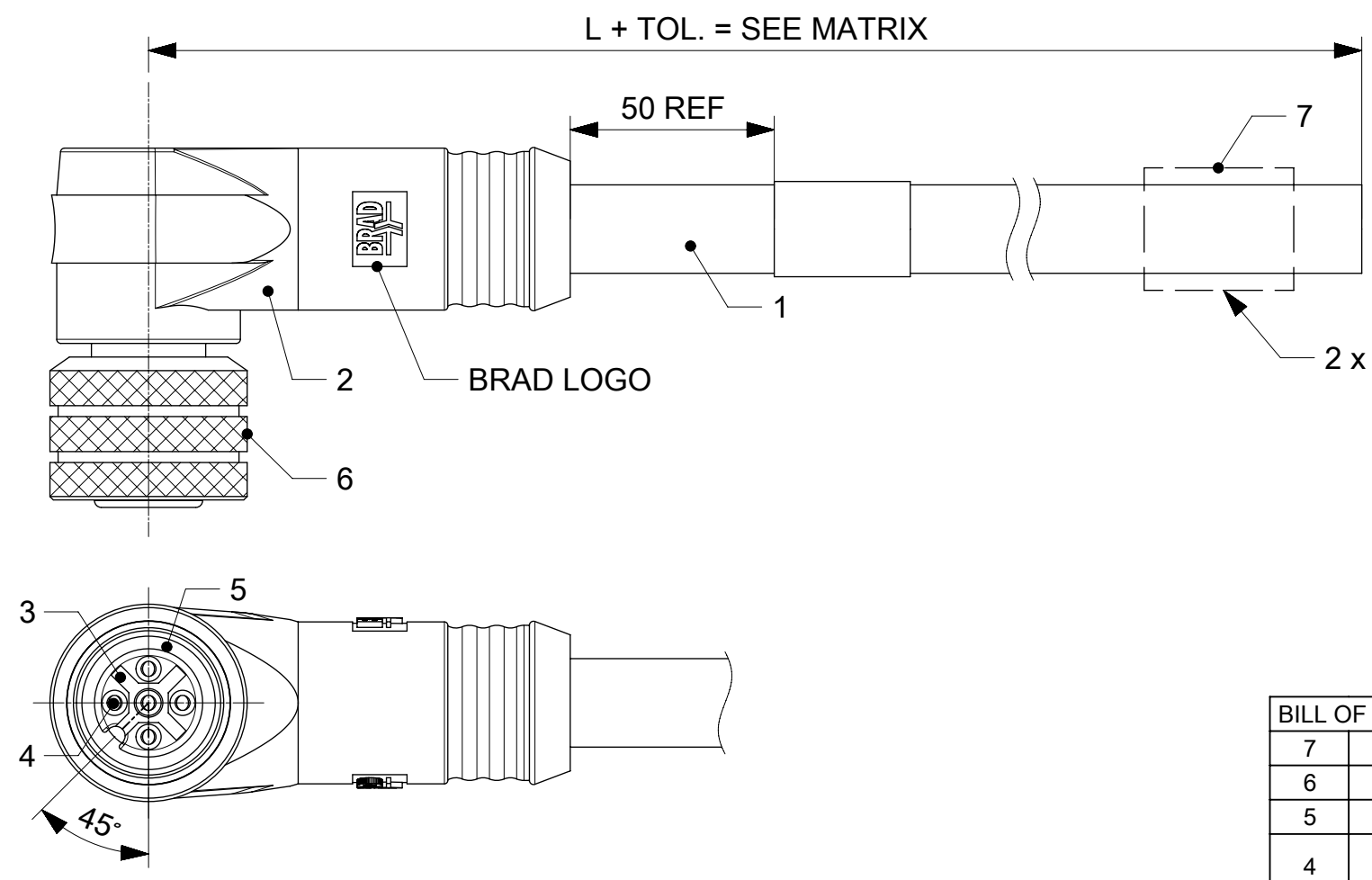
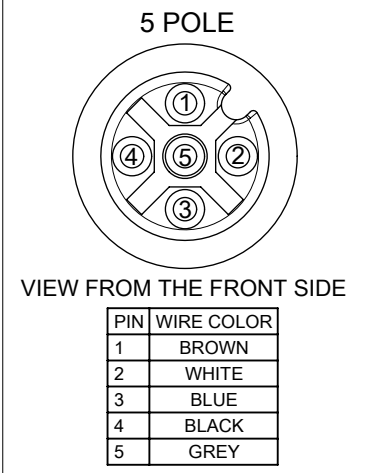
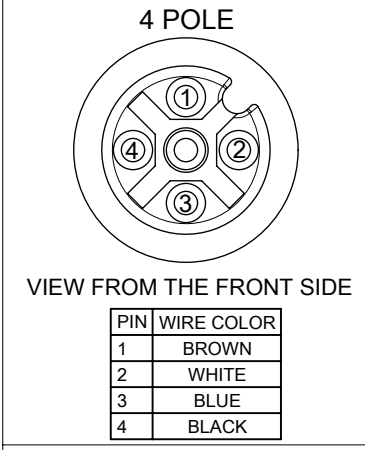
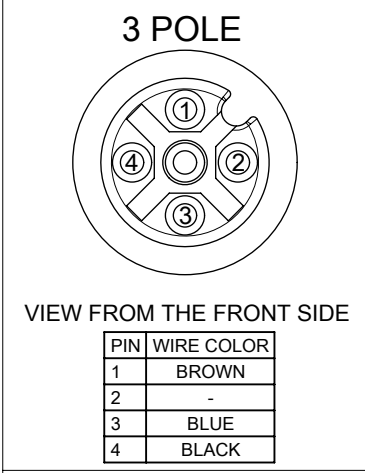
## PART No MATRIX - NUMERICAL CODE (AVAILABLE PARTS SEE PART LIST TABLE. OTHERS PARTS AVAILABLE UPON REQUEST).

OPTIONS



- 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



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)	-	-

SHIELD CONNECTED TO THE HOUSING

VIEW FROM THE FRONT SIDE

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

2016/07/20	2016/07/22	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION UNITS	SCALE	<p>MMC-XP-FE-90-XXX-PUR-SHIELDED</p> <p>PRODUCT CUSTOMER DRAWING</p>
EC NO: 106875 DRWN: MMATLA CHK'D: APPR: MIWASIECZKO	REV: A APPR: MIWASIECZKO	ANGULAR TOL ± °	MM	2:1	
		4 PLACES ±	DRWN BY	DATE	
		3 PLACES ±	MMATLA	2016/07/20	
		2 PLACES ±	CHK'D BY	DATE	
		1 PLACE ±	MIWASIECZKO	2016/07/22	
		0 PLACES ±	APPR BY	DATE	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE	THIRD ANGLE PROJECTION		
		A3			
RELEASE STATUS		P1	RELEASE DATE	22.07.2016 09:50:12	SERIES: 120010 MATERIAL NUMBER: SEE MATRIX CUSTOMER:
					DOCUMENT NUMBER: 1200100247 DOC TYPE: PSD DOC PART: 00P SHEET NUMBER: 1 OF 2


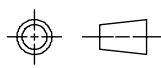
**CABLE INFORMATION** ( FOR MORE INFORMATION SEE CABLE DATA SHEET.)

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

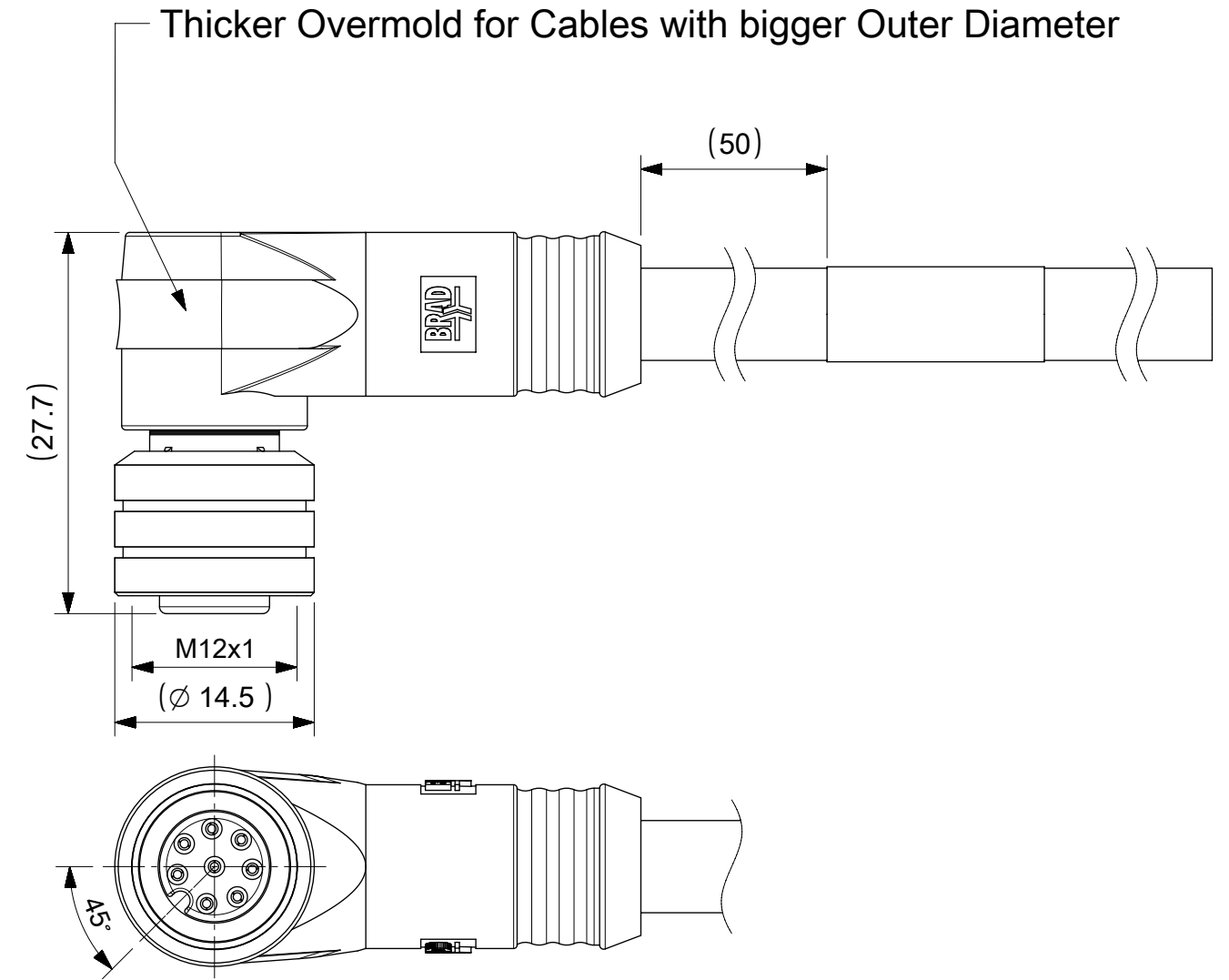
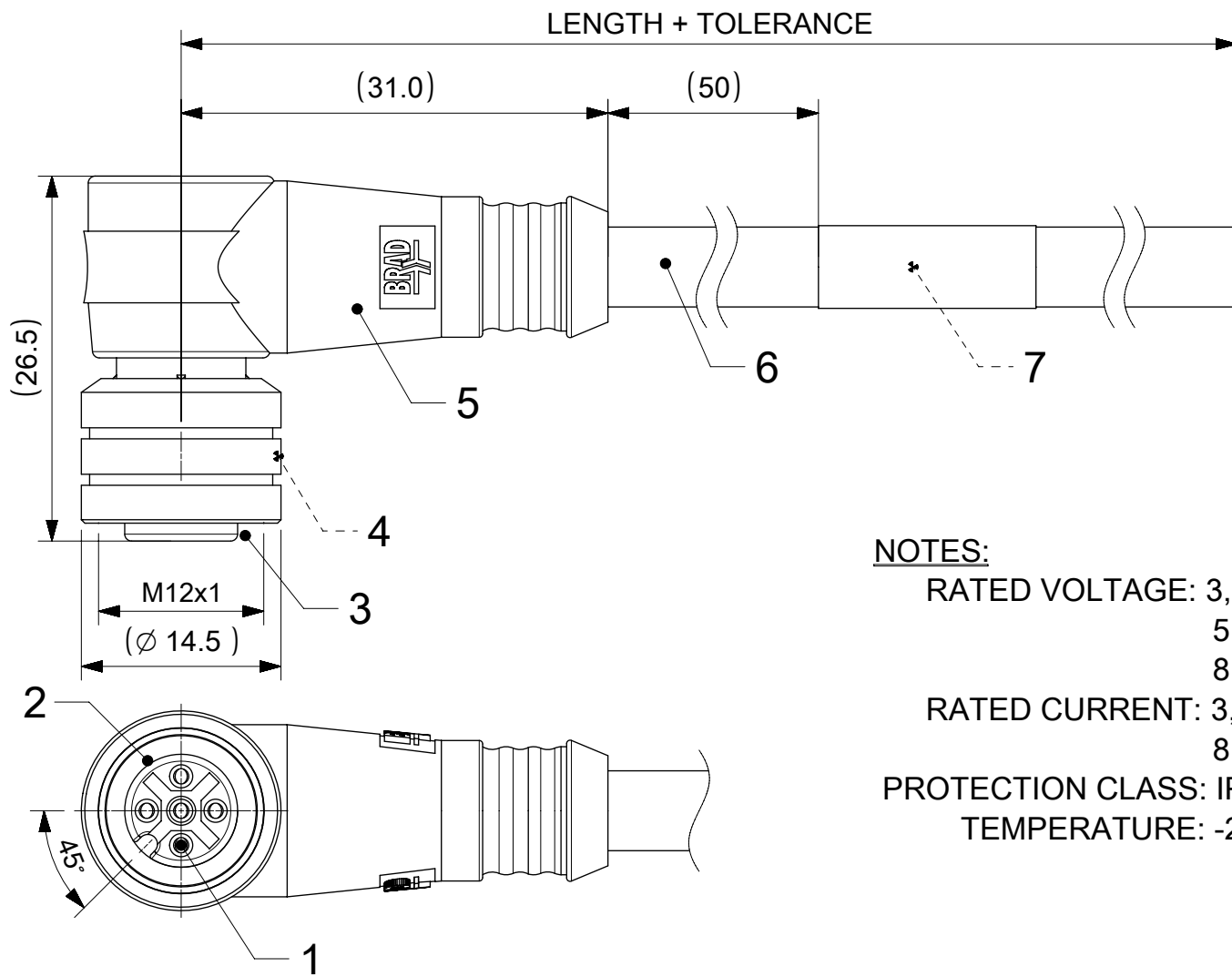
**TABLE 1**

MOLEX PN	ENGINEERING No	L [mm]
1200100247	805S01S26M020	2000
1200100248	805S01S26M010	1000
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
1200698023	805S01S26M080	8000
1200698064	804S01S20M2501	25000
1200698079	804S01P20M020	2000
1200698082	804S01P20M1001	10000
1200698098	804S01P20M0501G	5000
1200698122	805S01S20M100	10000
1200698142	805S01S26M040	4000
1200698188	805S01P20M050	5000
1200698189	805S01P20M100	10000
1200698190	805S01P20M020	2000
1200698320	804S01P20M050Y	5000
1200698364	805S01P20M050H	5000
1200698366	805S01P20M150H	15000
1200698430	804S01P20M150	15000
1200698755	805S01P20M1501	15000

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

EC NO: 106875 DRWN: MMATLA CHK'D: APPR: MIWASIECZKO	2016/07/20	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 1 PLACE ± 0 PLACES ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION UNITS	SCALE	  MMC-XP-FE-90-XXX-PUR-SHIELDED  PRODUCT CUSTOMER DRAWING
	MM		1:1		
	DRWN BY		DATE		
	MMATLA		2016/07/20		
	CHK'D BY		DATE		
	MIWASIECZKO		2016/07/22		
	APPR BY		DATE		
	MIWASIECZKO		2016/07/22		
	DRAWING SIZE		THIRD ANGLE PROJECTION		
	A3				
SERIES	MATERIAL NUMBER	CUSTOMER			
120010	SEE MATRIX (SH 1)				
DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER		
1200100247	PSD	00P	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

QUALITY SYMBOLS FA = 0 FE = 0 FB = 0 FC = 0 FD = 0 FE = 0 FF = 0 FG = 0 FH = 0 FI = 0 FJ = 0 FK = 0 FL = 0 FM = 0 FN = 0 FO = 0 FP = 0 FQ = 0 FR = 0 FS = 0 FT = 0 FU = 0 FV = 0 FW = 0 FX = 0 FY = 0 FZ = 0	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIMENSION UNITS: MM SCALE: 2:1				
	EC NO: 116393 DRWN: AKONDRACIUK CHK'D: MIWASIECZKO	2017/04/29 2017/05/04	GENERAL TOLERANCES (UNLESS SPECIFIED) ANGULAR TOL ± 1.0 ° 4 PLACES ± 3 PLACES ± 2 PLACES ± 0.05 1 PLACE ± 0.1 0 PLACES ± 0.2			DRWN BY: AKONDRACIUK DATE: 2017/04/29 CHK'D BY: MIWASIECZKO DATE: 2017/05/04	CSE M12 XP AC FE RA XM SE SH PRODUCT CUSTOMER DRAWING
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE: A3 THIRD ANGLE PROJECTION	APPR BY: MIWASIECZKO DATE: 2017/05/04		SERIES: 120069 MATERIAL NUMBER: SEE SHEET 3 CUSTOMER: GENERAL MARKET	
	RELEASE STATUS: P1 RELEASE DATE: 04.05.2017 06:31:28		DOCUMENT NUMBER: 1200698017 DOC TYPE: PSD DOC PART: 000 SHEET NUMBER: 1 OF 3				

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

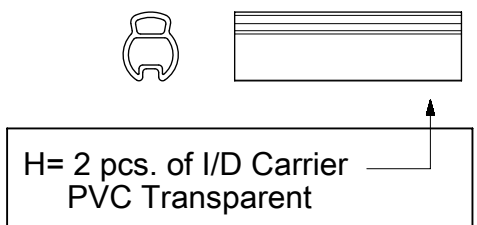
Units:  
M=Meter  
C=Centimeter

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

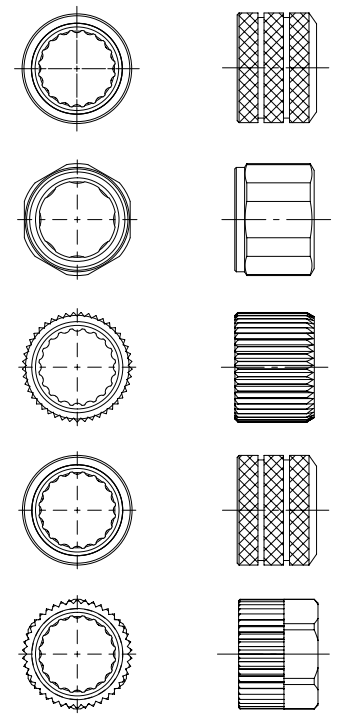
OPTIONS

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

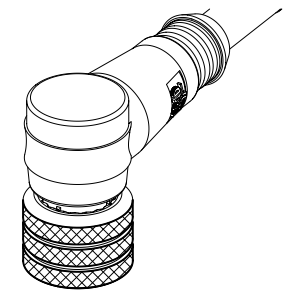


COUPLING NUTS



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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QUALITY SYMBOLS FA = 0 FE = 0 FB = 0 ▼ = 0 C = 0 ⊗ = 0 ■ = 0 ∇ = 0	EC NO: 116393 DRWN: AKONDRACIUK CHK'D: MIWASIECZKO APPR: MIWASIECZKO	2017/04/29 2017/05/04	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE	
			ANGULAR TOL ± 1.0 °		MM	1:1	
			4 PLACES ±		DRWN BY	DATE	
			3 PLACES ±		AKONDRACIUK	2017/04/29	
2 PLACES ± 0.05		CHK'D BY	DATE				
1 PLACE ± 0.1		MIWASIECZKO	2017/05/04				
0 PLACES ± 0.2		APPR BY	DATE				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MIWASIECZKO	2017/05/04				
		DRAWING SIZE	THIRD ANGLE PROJECTION				
		A3					

PRODUCT CUSTOMER DRAWING			
SERIES	MATERIAL NUMBER	CUSTOMER	
120069	SEE SHEET 3	GENERAL MARKET	
DOCUMENT NUMBER	DOC TYPE	DOC PART	SHEET NUMBER
1200698017	PSD	000	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	1200698191	808S01P19M0501A	5
10	1200698078	808S01P19M020	2
11	1200698119	808S01P19M0501G	5
12	1200698214	808S01P19M100	10
13	1200698446	808S01P19M200	20
14	1200100249	804S01P20M080	8
15	1200690187	804S01P20M050	5
16	1200695042	803S01P20M050	5
17	1200698003	803S01P20M020	2
18	1200698005	804S01P20M250	25
19	1200698010	803S01P20M100	10
20	1200698016	804S01P20M100	10
21	1200698079	804S01P20M020	2
22	1200698098	804S01P20M0501G	5
23	1200698188	805S01P20M050	5
24	1200698189	805S01P20M100	10
25	1200698190	805S01P20M020	2
26	1200698320	804S01P20M050Y	5
27	1200698364	805S01P20M050H	5
28	1200698366	805S01P20M150H	15
29	1200698430	804S01P20M150	15
30	1200698755	805S01P20M1501	15
31	1200699398	805S01P20M200	20
32	1200699399	805S01P20M150	15
33	1200699417	805S01P20M030	3
34	1200698082	804S01P20M1001	10
35			

<b>QUALITY SYMBOLS</b> 	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									
	EC NO: 116393 DRWN: AKONDRACIUK CHK'D: MIWASIECZKO	2017/04/29 2017/05/04	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION UNITS	SCALE				
			ANGULAR TOL ± 1.0 °		MM	1:1				
			4 PLACES ±		DRWN BY	DATE	CSE M12 XP AC FE RA XM SE SH			
			3 PLACES ±		AKONDRACIUK	2017/04/29				
			2 PLACES ± 0.05		CHK'D BY	DATE	PRODUCT CUSTOMER DRAWING			
	1 PLACE ± 0.1		MIWASIECZKO	2017/05/04						
	0 PLACES ± 0.2		APPR BY	DATE	SERIES	MATERIAL NUMBER	CUSTOMER			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWING SIZE	THIRD ANGLE PROJECTION	120069	SEE PART LIST	GENERAL MARKET			
			A3		DOCUMENT NUMBER		DOC TYPE	DOC PART	SHEET NUMBER	
				1200698017		PSD	000	3 OF 3		