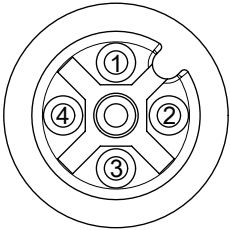


M12 FEMALE

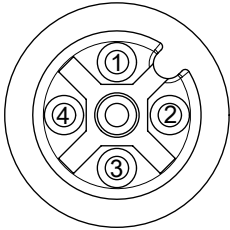
3 POLE



VIEW FROM THE FRONT SIDE

PIN	WIRE COLOR
1	BROWN
2	-
3	BLUE
4	BLACK

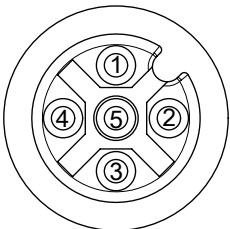
4 POLE



VIEW FROM THE FRONT SIDE

PIN	WIRE COLOR
1	BROWN
2	WHITE
3	BLUE
4	BLACK

5 POLE

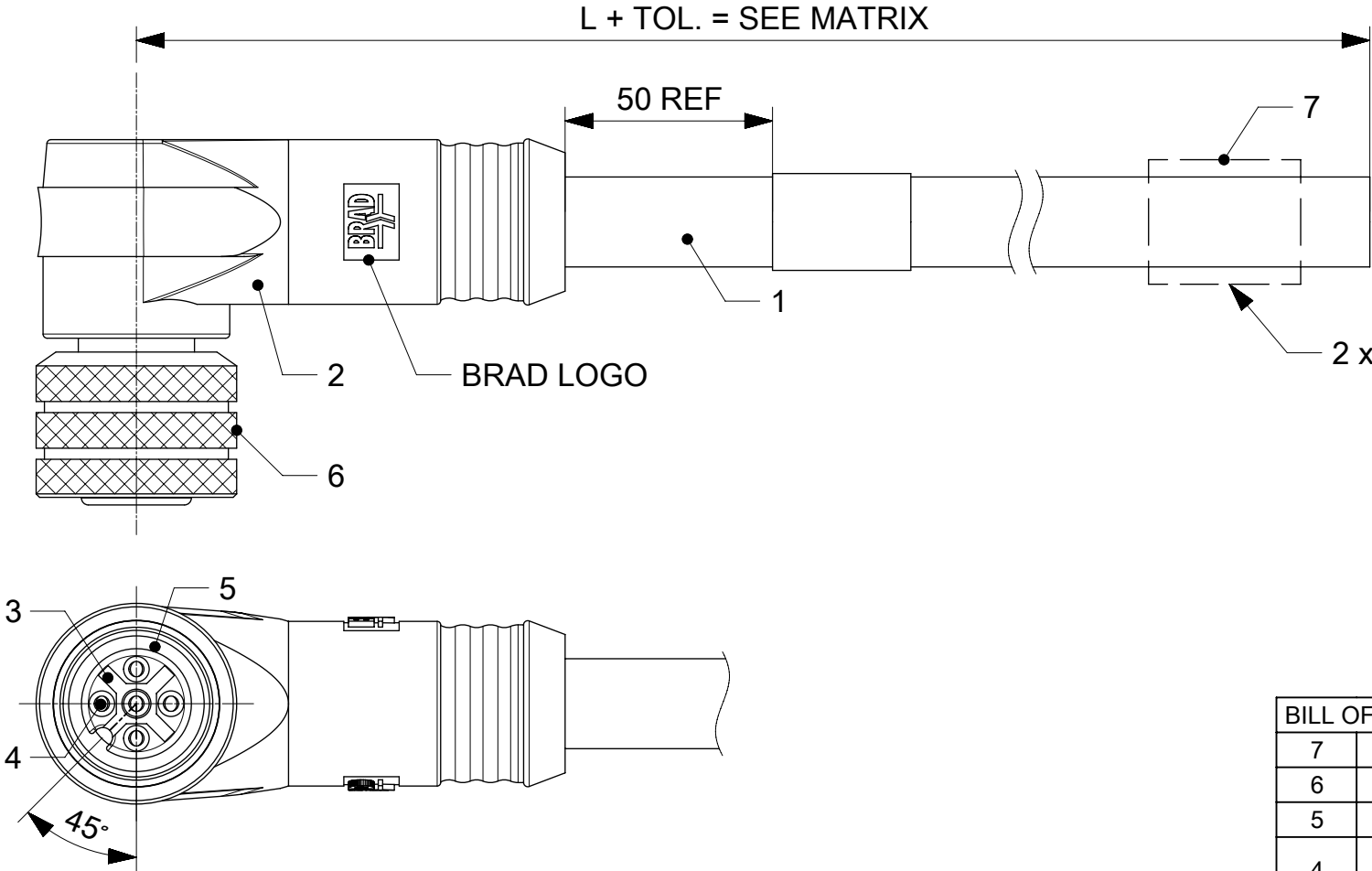


VIEW FROM THE FRONT SIDE

PIN	WIRE COLOR
1	BROWN
2	WHITE
3	BLUE
4	BLACK
5	GREY

SHIELD CONNECTED TO THE HOUSING

VIEW FROM THE FRONT SIDE



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

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, 0,25mm², YELLOW
S20 = PVC, 0,34mm², YELLOW
S26 = PVC, 0,34mm², YELLOW
P19 = PUR, 0,34mm², BLACK
P20 = PUR, 0,34mm², 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

OPTIONS

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

BILL OF MATERIAL				
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)	-	-
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

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

RELEASE STATUS	P1	RELEASE DATE	22.07.2016	09:50:12
----------------	----	--------------	------------	----------

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

EC NO: 106875

DRWN: MMATLA

CHK'D: MIWASIECZKO

APPR: MIWASIECZKO

REV

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

MM

DRWN BY

MMATLA

CHK'D BY

DATE

APPR BY

MIWASIECZKO

DRAWING SIZE

A3

THIRD ANGLE PROJECTION

SCALE

2:1

DATE

2016/07/20

DATE

2016/07/22

molex®

MMC-XP-FE-90-XXX-PUR-SHIELDED

PRODUCT CUSTOMER DRAWING

SERIES

120010

MATERIAL NUMBER

SEE MATRIX

CUSTOMER

DOCUMENT NUMBER

1200100247

DOC TYPE

PSD

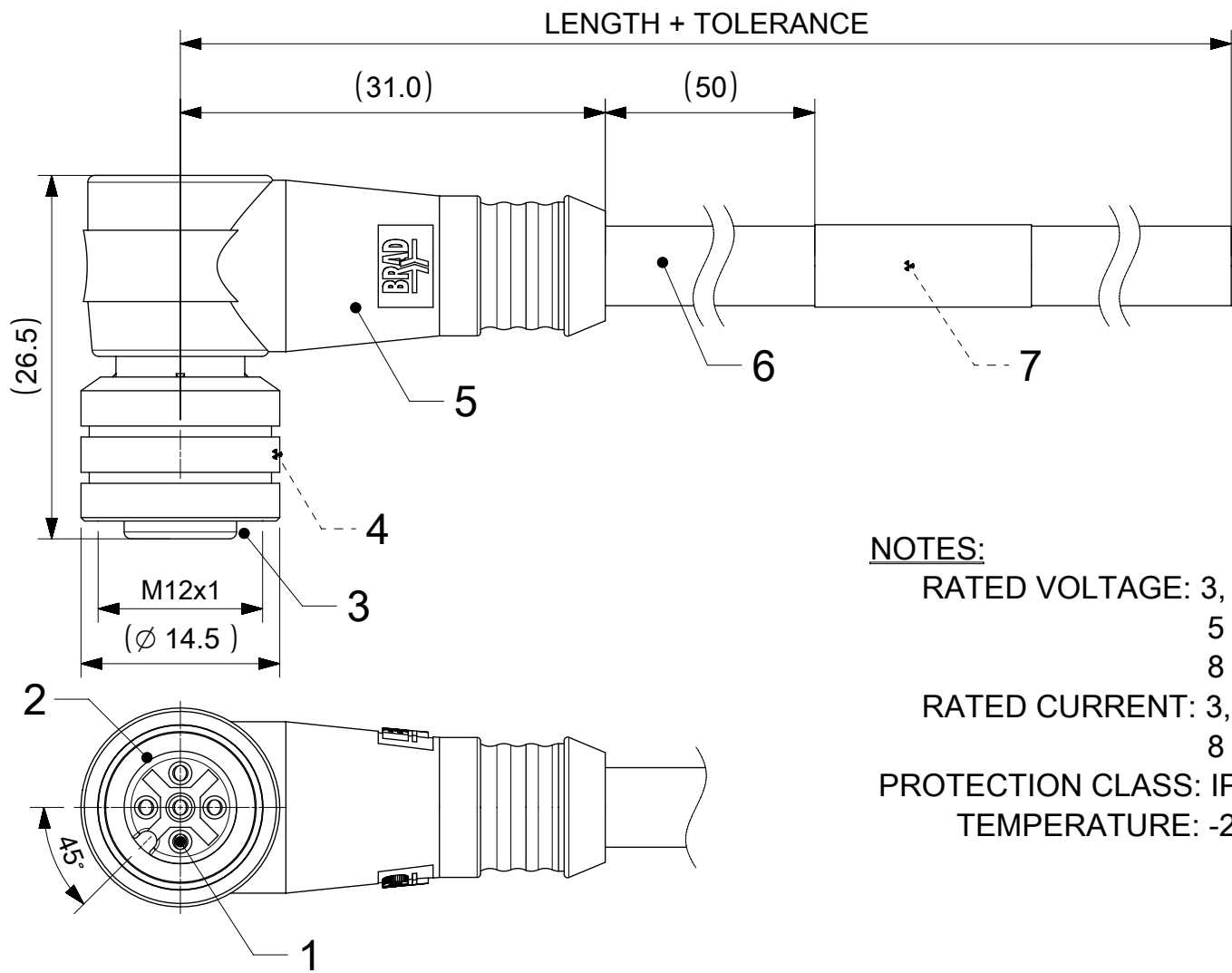
DOC PART

00P

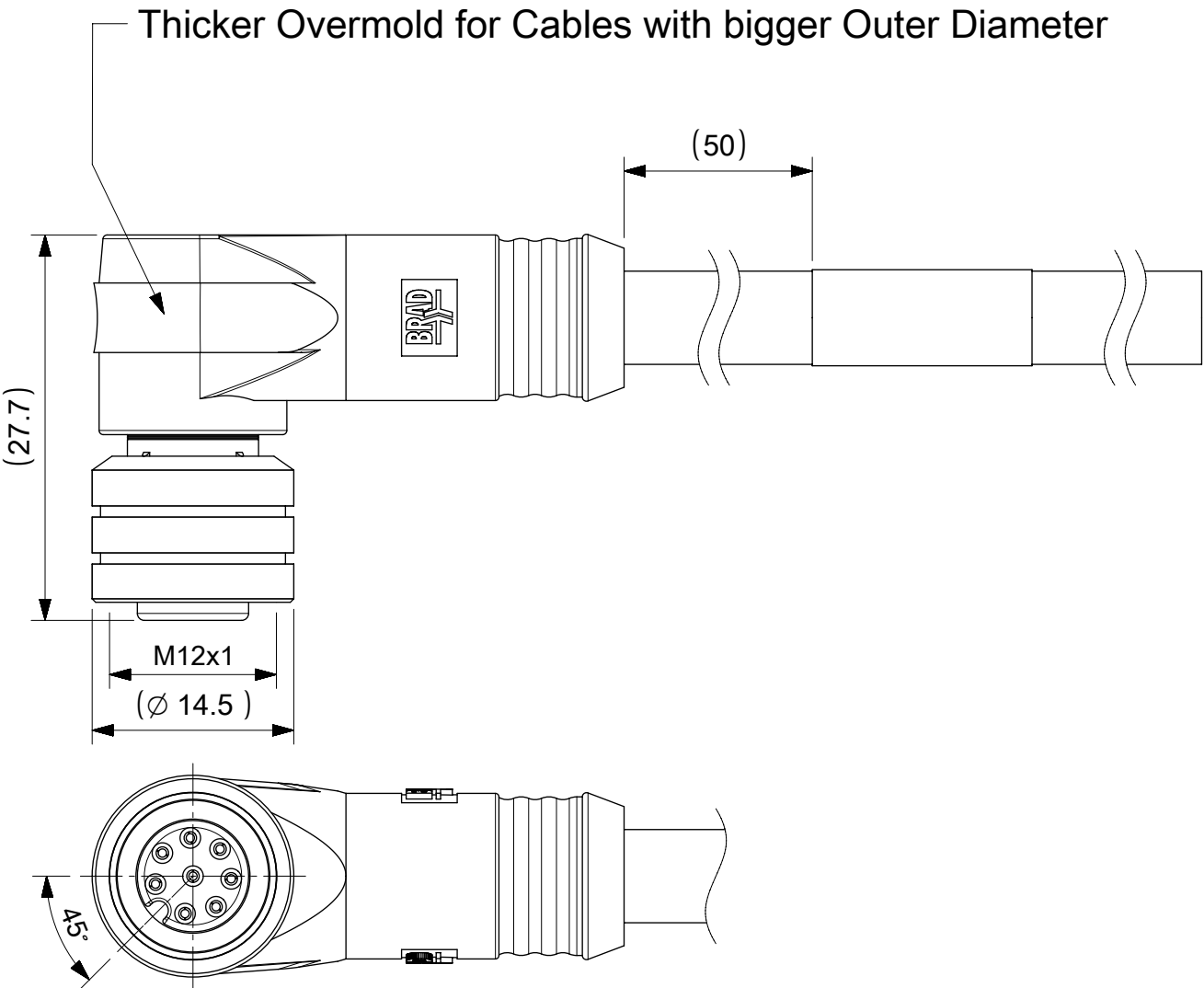
SHEET NUMBER

1 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

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
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

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

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

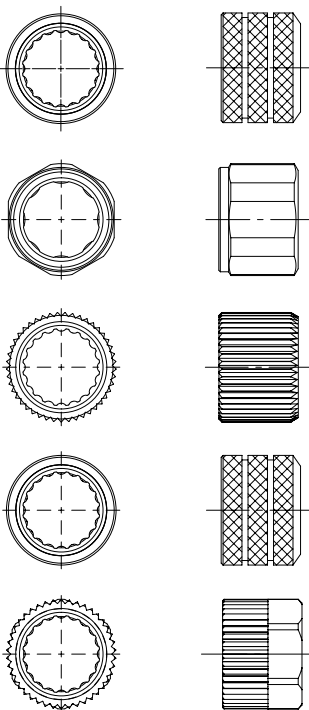
OPTIONS

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

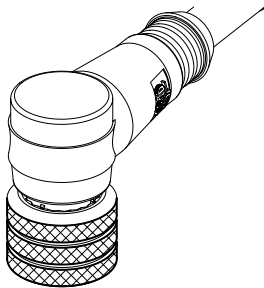
H= 2 pcs. of I/D Carrier
PVC Transparent

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	0.25mm²	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	0.34mm²	PUR BLACK LS0H	-	-	-30°C to +80°C	-	-	YES
S20	3 / 4 / 5	0.34mm²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES
S26	5	0.34mm²	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

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

9	8	7	6	5	4	3	2	1
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								

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

RELEASE STATUS	P1	RELEASE DATE	04.05.2017	06:31:28	7	6	5	4	3	2	1
----------------	----	--------------	------------	----------	---	---	---	---	---	---	---

FORMAT: master-B-prod-A3
REVISION: G
DATE: 2015/12/14

9

8

7

6

5

4

3

2

1