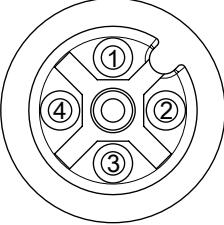


M12 FEMALE

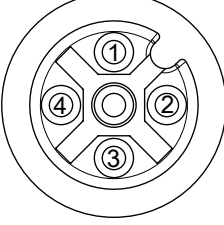
3 POLE



VIEW FROM THE FRONT SIDE

PIN	WIRE COLOR
1	BROWN
2	-
3	BLUE
4	BLACK

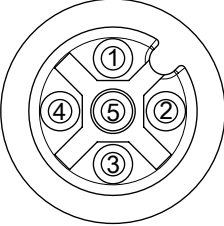
4 POLE



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

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

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/29	13:28:15
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REVISION A2 REMOVED OBSOLETE PN

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

8

8 = MICRO CHANGE

0

8 = PORTABLE

*

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

S

HEADER:
S01 = SHIELDED FEMALE 90°

0

1

*

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

M

*

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

*

*

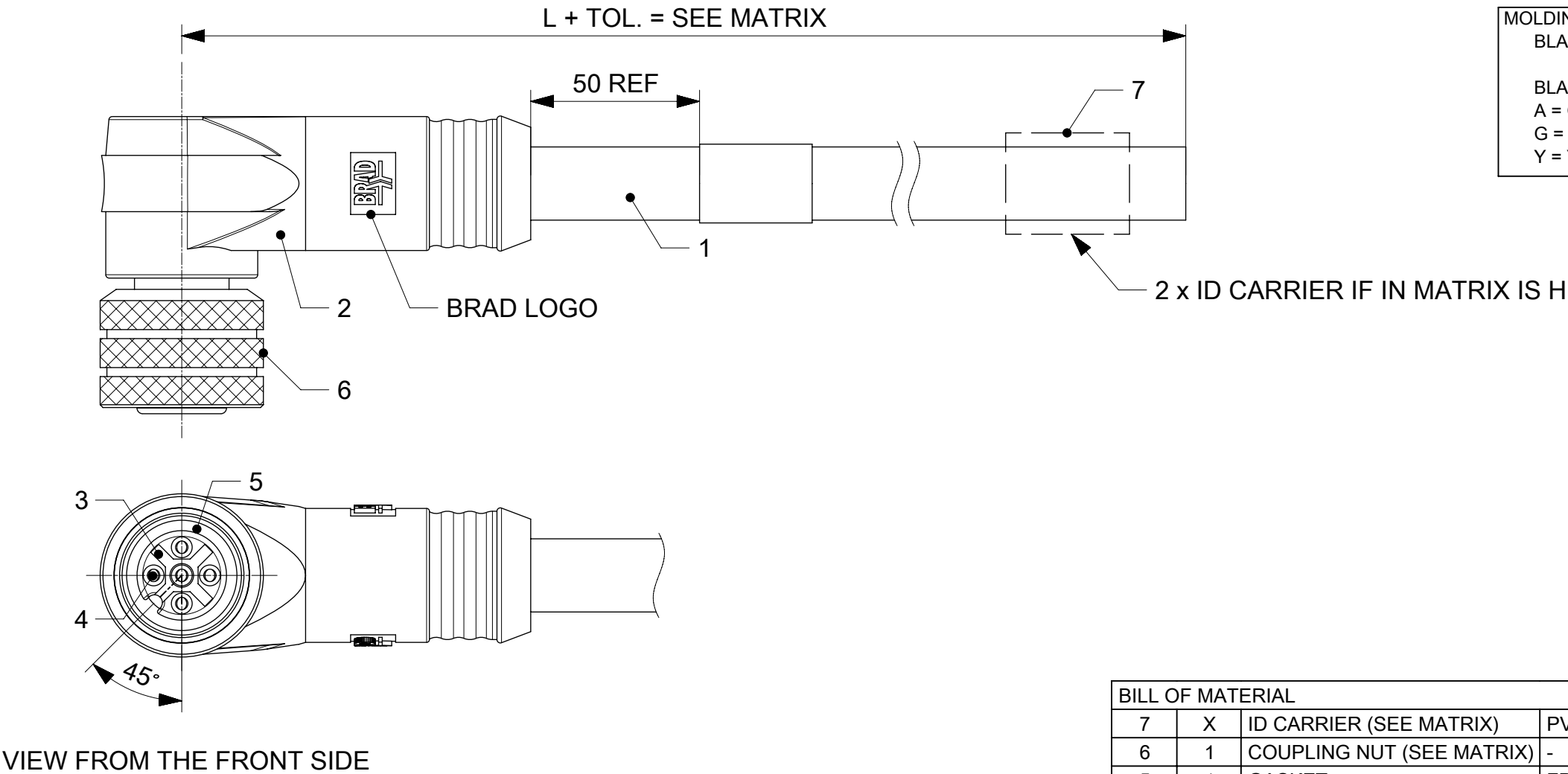
*

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



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

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

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL ± °

4 PLACES ±

3 PLACES ±

2 PLACES ±

1 PLACE ±

0 PLACES ±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#516585

EC NO: 823299
DRWN: VISHAH2
CHK'D: GGA
APPR: GGA
2025/05/15
2025/05/29
2025/05/29

INITIAL REVISION:
DRWN: MMATLA
APPR: MIWASIECZKO
2016/07/20
2016/07/22

THIRD ANGLE PROJECTION

DRAWING A3-SIZE

SERIES 120010

MATERIAL NUMBER SEE TABLE

CUSTOMER

SHEET NUMBER 1 OF 2

molex

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

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER 1200100247

DOC TYPE PSD

DOC PART 00P

REVISION A3

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 ²	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 ²	PVC YELLOW	UL 2661/1731	C22.2 II A 105°C/300V	-30°C TO +105°C	-	-	YES
S26	5	0.34mm ²	PVC YELLOW	UL 2661/1731		-30°C TO +105°C	-	-	YES
P19	8	0.25mm ²	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 ²	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
1200698005	804S01P20M250	25000
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

mm

SCALE

1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL

±

°

4 PLACES

±

3 PLACES

±

2 PLACES

±

1 PLACE

±

0 PLACES

±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

120010

MATERIAL NUMBER

SEE TABLE

CUSTOMER

SHEET NUMBER

2 OF 2

CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#516585

EC NO: 823299

DRWN: VISHAH2

CHK'D: GGA

APPR: GGA

2025/05/15

2025/05/29

2025/05/29

2025/05/29

INITIAL REVISION:

DRWN: MMATLA

APPR: MIWASIECZKO

2016/07/20

2016/07/22

DOCUMENT NUMBER

1200100247

DOC TYPE

PSD

DOC PART

00P

REVISION

A3

mo

lex

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

PRODUCT CUSTOMER DRAWING

DOCUMENT STATUS

P1

RELEASE DATE

2025/05/29

13:28:15

FORMAT: master-b-prod-A3

REVISION: J1

DATE: 2021/05/01

9

8

7

6

5

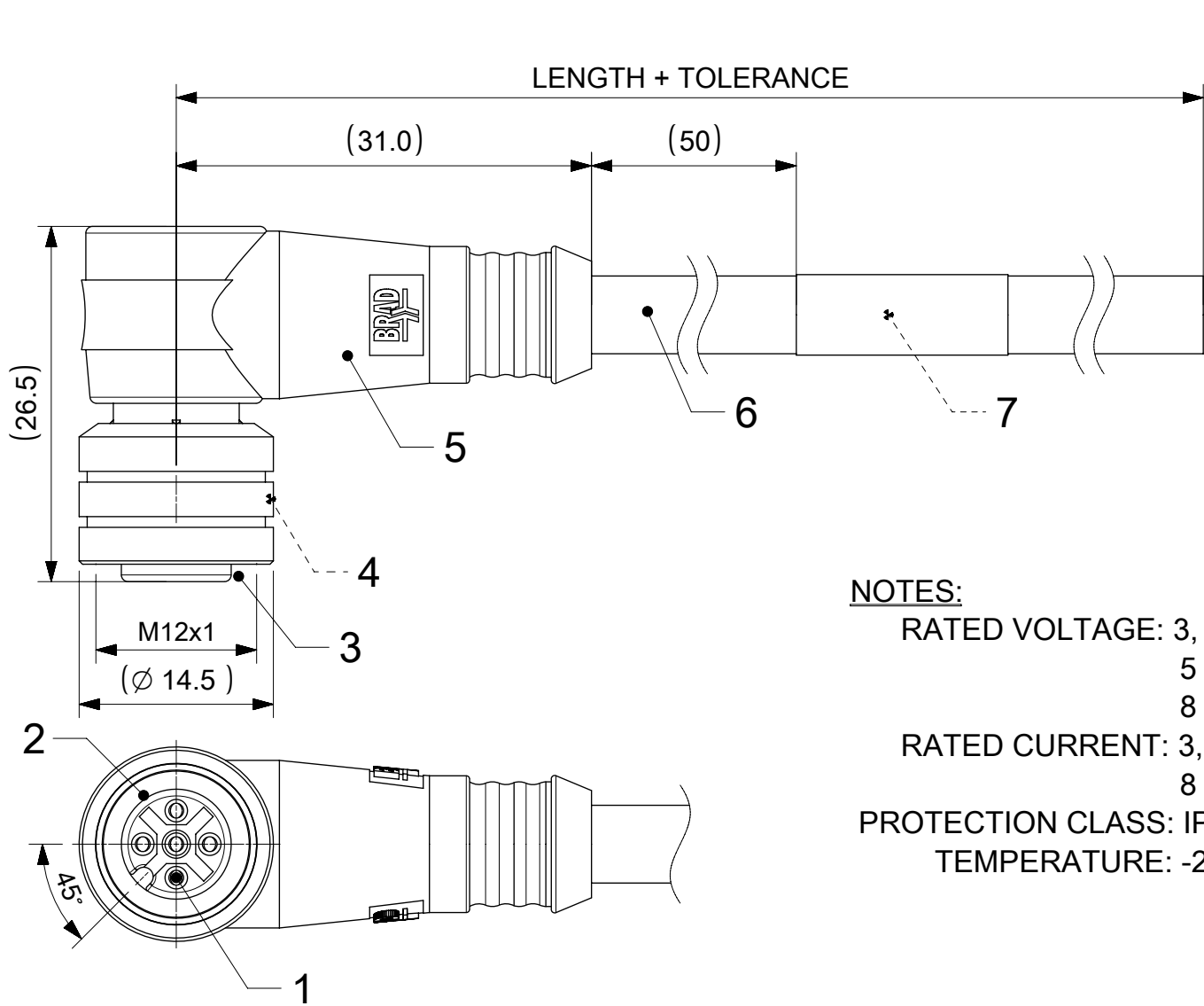
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3

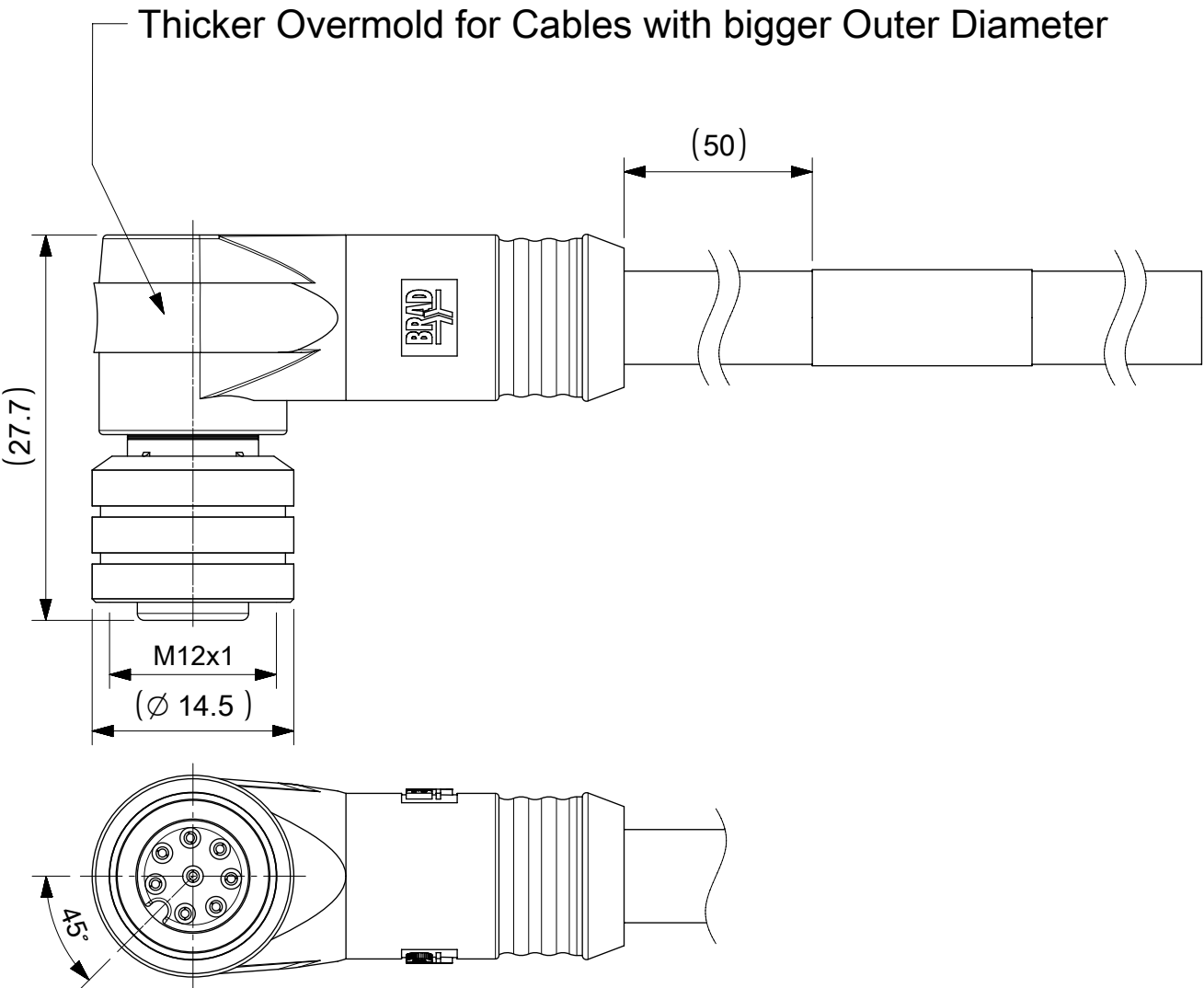
2

1

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



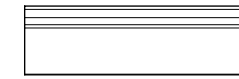
CONTACTS POSITION FRONT VIEW:

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							
DOCUMENT STATUS	P1	RELEASE DATE	2025/05/29	13:28:18			

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
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: REMOVED OBSOLETE PART NUMBERS AS PER PCN#516585		
mm	2:1			
GENERAL TOLERANCES (UNLESS SPECIFIED)		 CSE M12 XP AC FE RA XM SE SH PRODUCT CUSTOMER DRAWING		
ANGULAR TOL	± 1.0 °			
4 PLACES	±			
3 PLACES	±			
2 PLACES	± 0.05			
1 PLACE	± 0.1	INITIAL REVISION: DRWN: AKONDRACIUK 2017/04/29 APPR: MIWASIECZKO 2017/05/04		
0 PLACES	± 0.2			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER
		A3-SIZE	120069	SEE TABLE
		CUSTOMER	SHEET NUMBER	
		GENERAL MARKET	1 OF 3	
		DOCUMENT NUMBER	1200698017	DOC TYPE DOC PART REVISION
		PSD	000	A2

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



OPTIONS

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

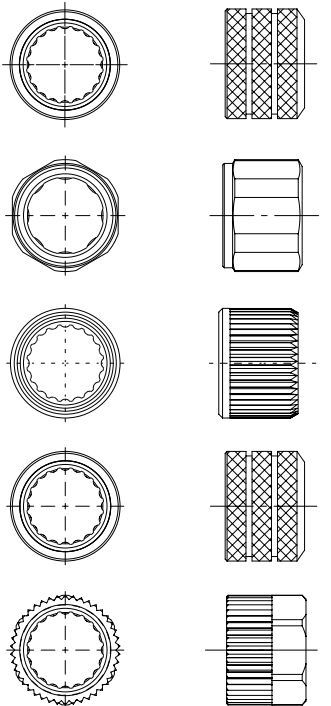
Units:
M=Meter
C=Centimeter

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

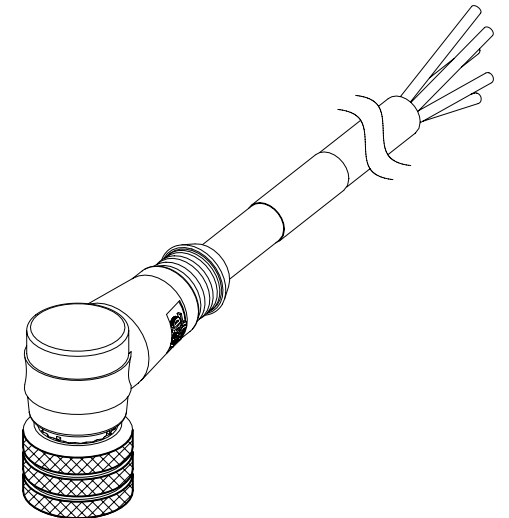
Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
9=Knurled / Hexagonal Brass Ni Plated SW13

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	DRAW 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



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

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/29	13:28:18
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DIMENSION UNITS		SCALE		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBERS AS PER PCN#516585			molex								
mm		1:1													
GENERAL TOLERANCES (UNLESS SPECIFIED)				CSE M12 XP AC FE RA XM SE SH											
ANGULAR TOL ± 1.0°															
4 PLACES ±				EC NO: 823299		DRWN: VISHAH2		2025/05/16							
3 PLACES ±				CHK'D: GGA		2025/05/29		2025/05/29							
2 PLACES ± 0.05				APPR: GGA		2025/05/29									
INITIAL REVISION:				DOCUMENT NUMBER		DOC TYPE		DOC PART		REVISION					
1 PLACE ± 0.1				DRWN: AKONDRACIUK		2017/05/29		1200698017		PSD		000		A2	
0 PLACES ± 0.2				APPR: MIWASIECZKO		2017/04/04									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				THIRD ANGLE PROJECTION		DRAWING		SERIES		MATERIAL NUMBER		CUSTOMER		SHEET NUMBER	
						A3-SIZE		120069		SEE TABLE		GENERAL MARKET		2 OF 3	

