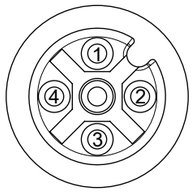
REVISION A2	REMOVED OBSOLETE PN

M12 FEMALE

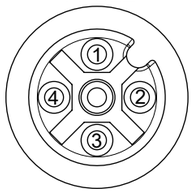
3 POLE



VIEW FROM THE FRONT SIDE

PIN	WIRE COLOR
1	BROWN
2	-
3	BLUE
4	BLACK

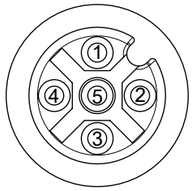
4 POLE



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

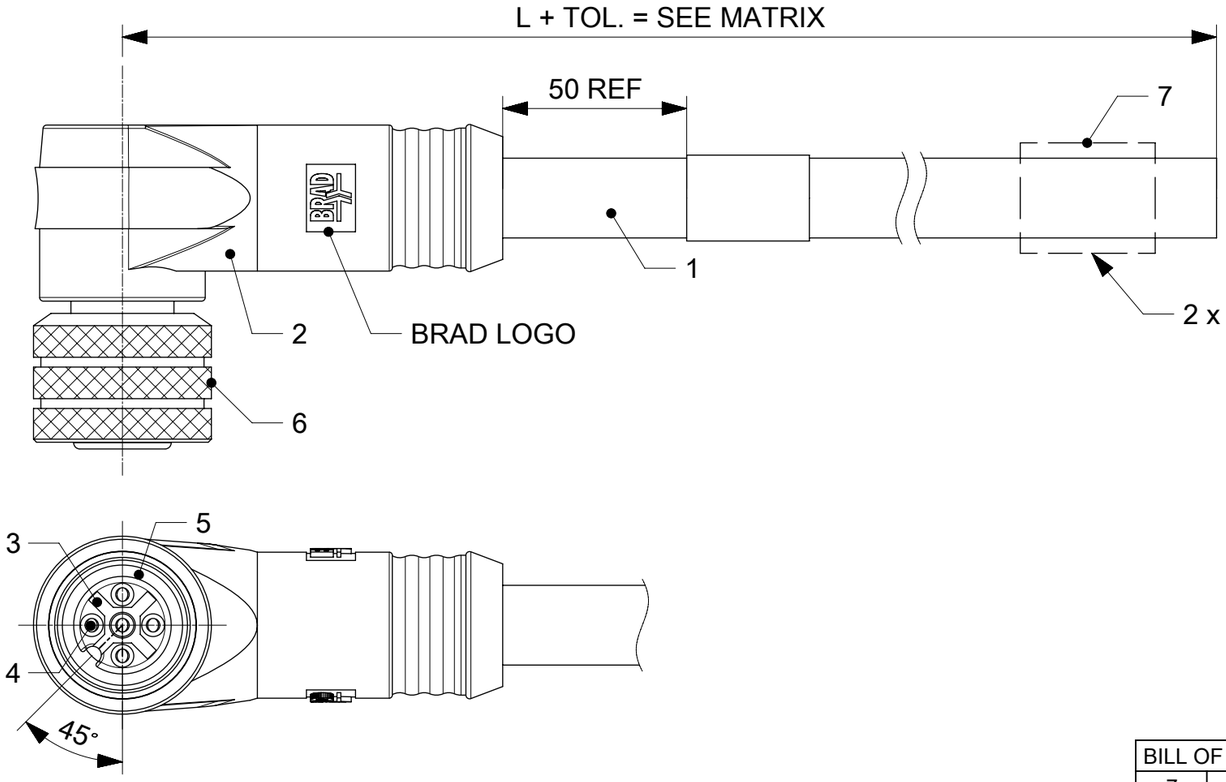
SHIELD CONNECTED TO THE HOUSING

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, 0,25mm², 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
- MOLDING COLOR: BLANK = YELLOW PUR FOR CABLE S26, S20 I S19; BLANK = BLACK PUR (STANDARD); A = GREY; G = BLACK; Y = YELLOW



VIEW FROM THE FRONT SIDE

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

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/29 13:28:15

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DIMENSION UNITS	SCALE
mm	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 OBSOLETED PART NUMBERS AS PER PCN#516585

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

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

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120010

molex

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

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200100247	PSD	00P	A3

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE		1 OF 2

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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	0.25mm²	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	0.34mm²	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		-30°C TO +105°C	-	-	YES
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	-	-	-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	

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

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

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

molex

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

PRODUCT CUSTOMER DRAWING

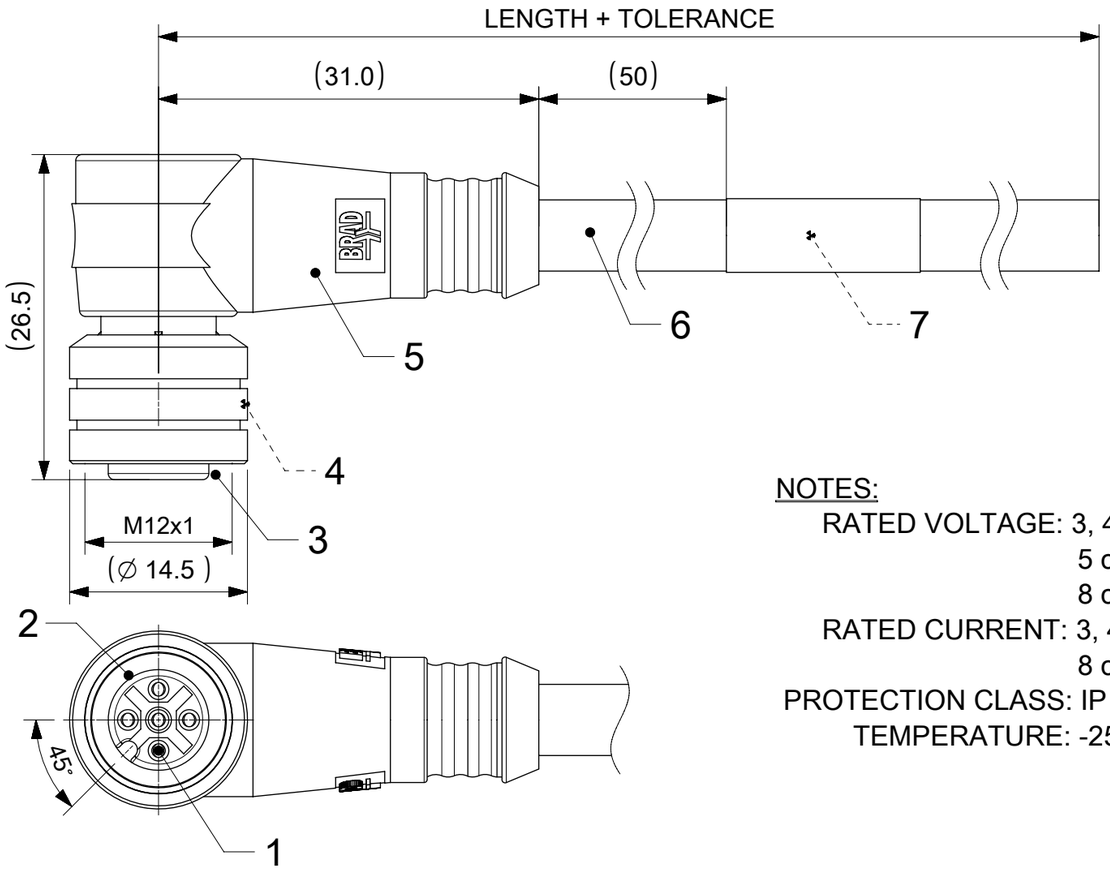
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200100247	PSD	00P	A3

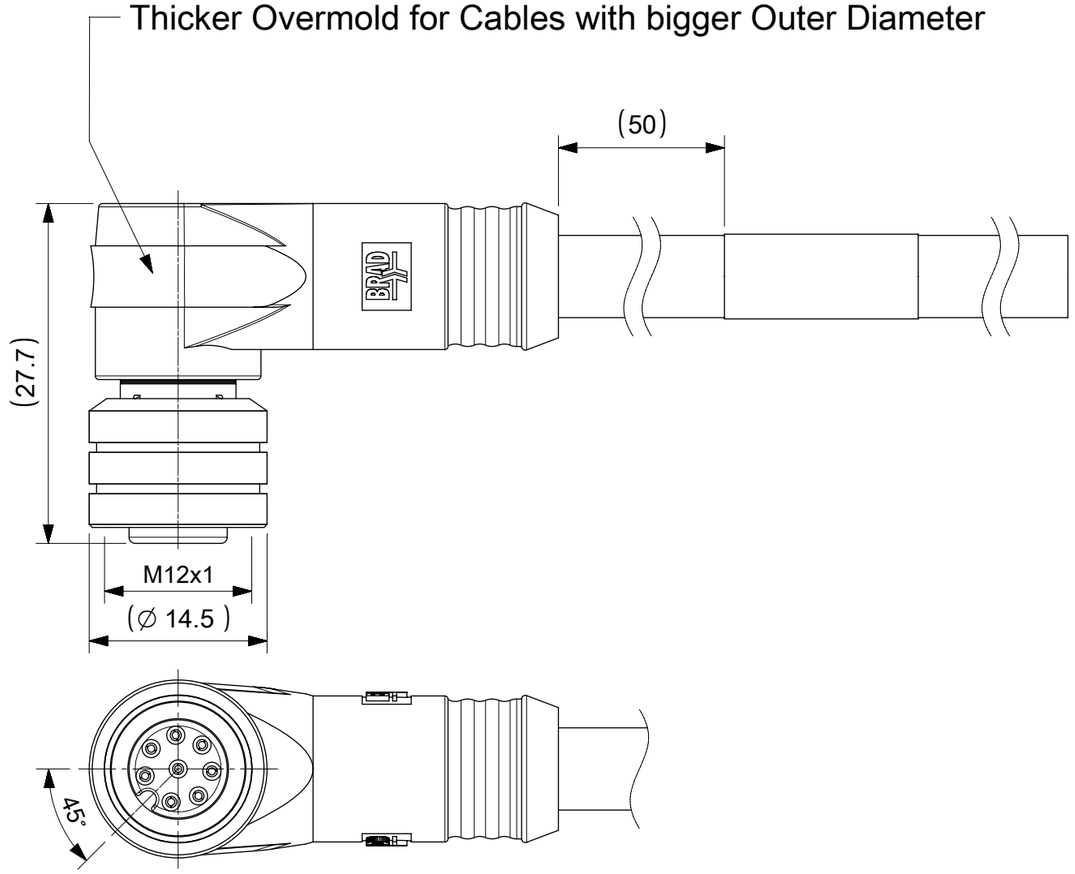
THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120010	SEE TABLE		2 OF 2

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/29 13:28:15

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FEMALE PLUG M12 90° ANGLED





NOTES:

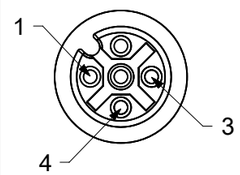
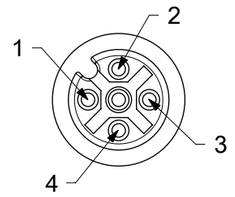
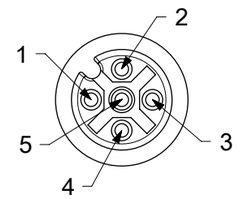
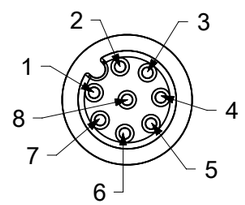
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

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

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	SCALE
mm	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

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

EC NO: 823299
DRWN: VISHAH2 2025/05/16
CHK'D: GGA 2025/05/29
APPR: GGA 2025/05/29

INITIAL REVISION:
DRWN: AKONDRACIUK 2017/04/29
APPR: MIWASIECZKO 2017/05/04

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120069

molex

CSE M12 XP AC FE RA XM SE SH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200698017	PSD	000	A2

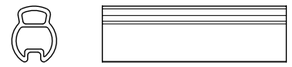
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	1 OF 3

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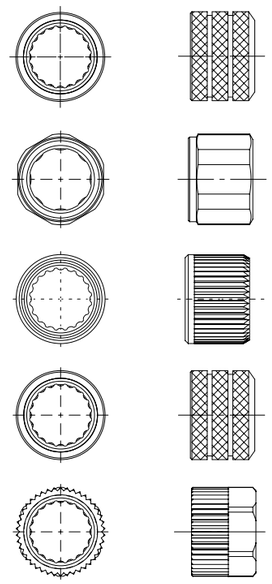
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

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

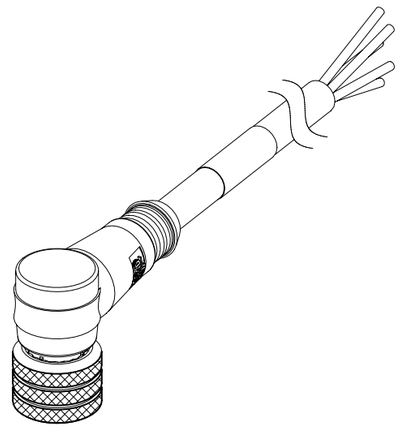


COUPLING NUTS



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

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

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DIMENSION UNITS	SCALE
mm	1:1

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

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

EC NO: 823299

DRWN:	VISHAH2	2025/05/16
CHK'D:	GGA	2025/05/29
APPR:	GGA	2025/05/29

INITIAL REVISION:

DRWN:	AKONDRACIUK	2017/04/29
APPR:	MIWASIECZKO	2017/05/04

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120069

molex

CSE M12 XP AC FE RA XM SE SH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200698017	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	2 OF 3

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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	1200698005	804S01P20M250	25
15	1200698016	804S01P20M100	10
16	1200698079	804S01P20M020	2
17	1200698098	804S01P20M0501G	5
18	1200698188	805S01P20M050	5
19	1200698189	805S01P20M100	10
20	1200698190	805S01P20M020	2
21	1200698364	805S01P20M050H	5
22	1200698366	805S01P20M150H	15
23	1200698430	804S01P20M150	15
24	1200698755	805S01P20M1501	15
25	1200699398	805S01P20M200	20
26	1200699399	805S01P20M150	15
27	1200699417	805S01P20M030	3

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DIMENSION UNITS	SCALE
mm	1:1

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

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

EC NO: 823299

DRWN:	VISHAH2	2025/05/16
CHK'D:	GGA	2025/05/29
APPR:	GGA	2025/05/29

INITIAL REVISION:

DRWN:	AKONDRACIUK	2017/04/29
APPR:	MIWASIECZKO	2017/05/04

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120069

molex

CSE M12 XP AC FE RA XM SE SH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200698017	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE	GENERAL MARKET	3 OF 3

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

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