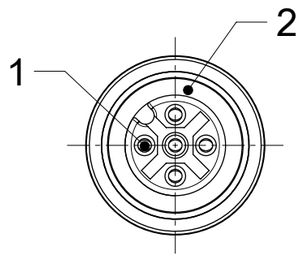
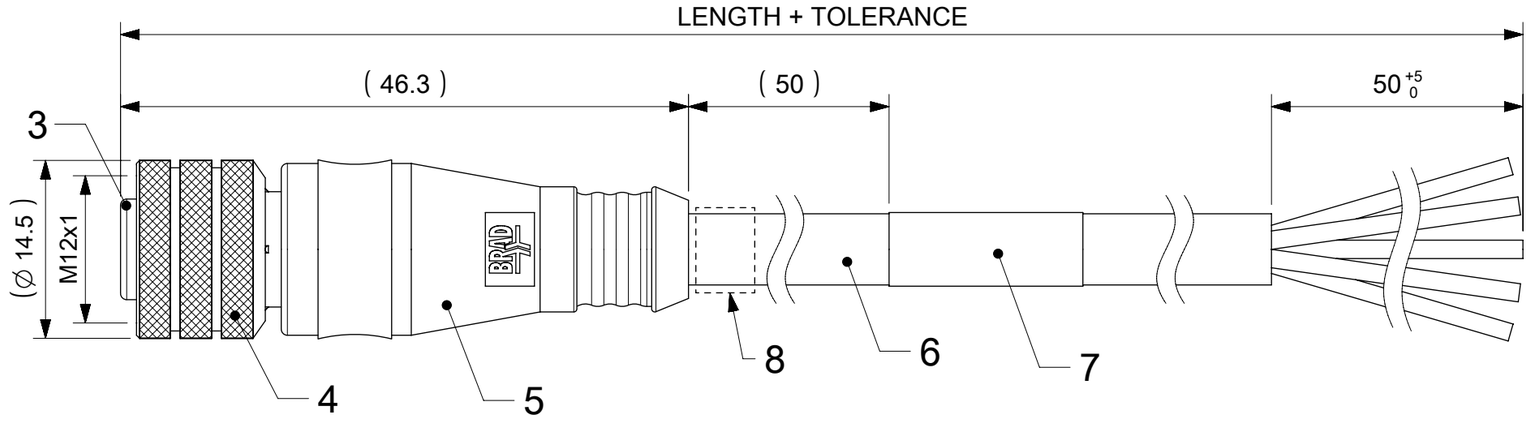
FEMALE PLUG M12 STRAIGHT





NOTES:

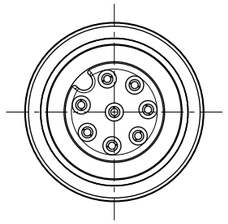
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

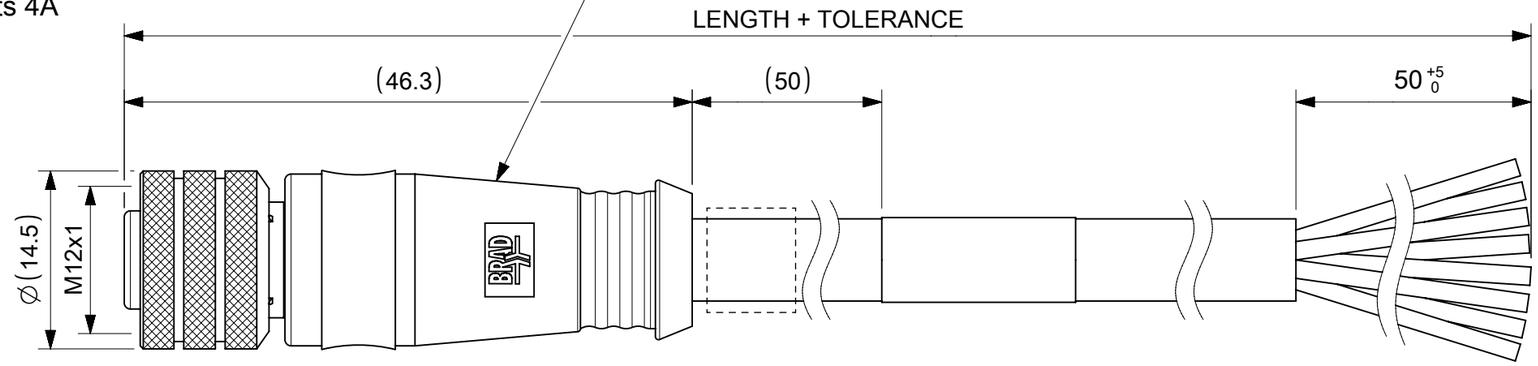
RATED CURRENT: 3, 4, 5 contacts 4A
8 contacts 2A

PROTECTION CLASS: IP 67

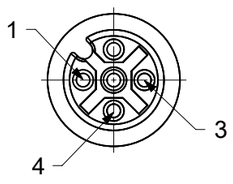
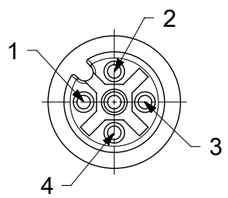
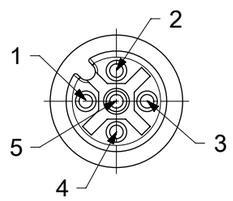
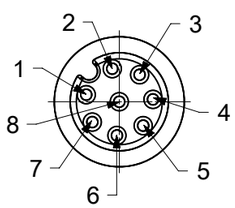
TEMPERATURE: -25°C / +85°C

Thicker Overmold for Cables
with bigger Outer Diameter





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
CODING REQUIRED TO IEC 61076-2-101							

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

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

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FUNCTIONAL SYMBOLS: FA = 0, FC = 0, FF = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 2:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0 °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.05
1 PLACE	± 0.3
0 PLACES	± 0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: NEW LENGTH ADDED

EC NO: 817713
DRWN: RSCHIEBER 2025/04/02
CHK'D: RSILLER 2025/04/03
APPR: RSILLER 2025/04/03

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/11
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200651978	PSD	000	A12

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3-4	GENERAL MARKET	1 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/04/03 06:35:51

FORMAT: master-Sheet-A3
REVISION: J1
DATE: 2021/05/07

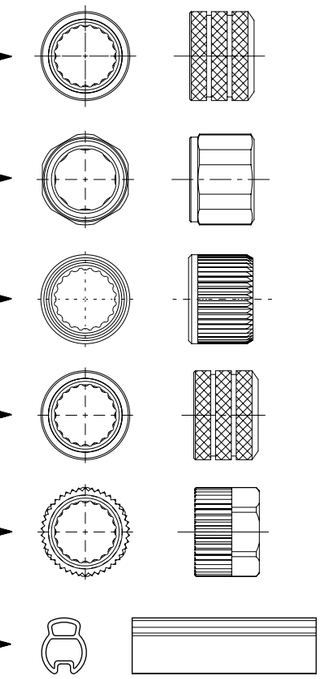
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

OPTIONS

8	0	X	0	0	0	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: 000=Plug Female Straight
- Cable type: See Table
- Units: M=Meter
- Length Examples: 005=0.5 unit, 010=1 unit, 100=10 units
- Overmold color: Blank (Standard)=Black, 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, 9=Knurled / Hexagonal Brass Ni Plated
- H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

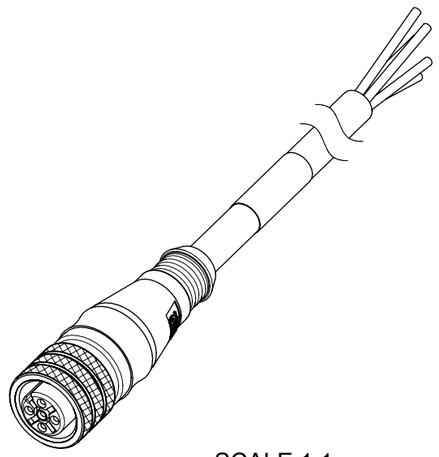


CABLE INFORMATION (for more information see Cable Data Sheet).

CABLE TYPE	NO. OF WIRES	CROSS SECTION	CABLE JACKET	UL	CSA	STATIC: TEMP. / BENDING RADIUS	DYNAMIC: TEMP. / BENDING RADIUS	DRAG CHAIN	SHIELD
E02	3 / 4 / 5 / 8	0.25mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
E03	3 / 4 / 5	0.34mm²	PVC BLACK	UL 2464/1729	C22.2 I/II A/B 80°C/300V	-30°C to +80°C, 10xO.D.	-10°C to +80°C, 15xO.D.	-	-
H08	3 / 4 / 5 / 8	0.25mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
H09	3 / 4 / 5	0.34mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-40°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000 cycles at 20°C, Temp. range +5°C to +60°C	-
P02	3 / 4 / 5 / 8	0.25mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-
P03	3 / 4 / 5	0.34mm²	PUR / PVC BLACK	-	-	-30°C to +80°C, 7xO.D.	-5°C to +80°C, 15xO.D.	-	-

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



SCALE 1:1

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DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.3
0 PLACES	±	0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: NEW LENGTH ADDED

EC NO: 817713
DRWN: RSCHIEBER 2025/04/02
CHK'D: RSILLER 2025/04/03
APPR: RSILLER 2025/04/03

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/11
APPR: RSILLER 2016/04/08

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200651978	PSD	000	A12

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3-4	GENERAL MARKET	2 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/04/03 06:35:51

FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

PART LIST

Part No.	Engineering No.	Cable Length
3P E03 CABLE		
1200060107	803000E03M003	0.3m
1200657197	803000E03M005	0.5m
1200060027	803000E03M006	0.6m
1200658562	803000E03M010	1m
1200657198	803000E03M015	1.5m
1200060001	803000E03M020	2m
1200658219	803000E03M0201	2m *
1200658887	803000E03M020H	2m
1200061958	803000E03M021	2.1m
1200060113	803000E03M030	3m
1200658563	803000E03M040	4m
1200060002	803000E03M050	5m
1200060116	803000E03M0505	5m
1200658889	803000E03M050H	5m
1200062071	803000E03M060	6m
1. 1200060003	803000E03M100	10m
1200658350	803000E03M1001	10m *
1200060117	803000E03M1005	10m
1200060119	803000E03M150	15m
1200060121	803000E03M200	20m
1200060124	803000E03M2505	25m
4P E03 CABLE		
1200658983	804000E03M002	0.2m
1200063224	804000E03M003	0.3m
1200060032	804000E03M005	0.5m
1200657131	804000E03M006	0.6m
1200657132	804000E03M008	0.8m
1200060426	804000E03M010	1m
1200657133	804000E03M015	1.5m
1200060014	804000E03M020	2m
1200060427	804000E03M0201	2m **
1200061337	804000E03M0205	2m
1200658894	804000E03M020G	2m
1200062866	804000E03M020H	2m

Part No.	Engineering No.	Cable Length
1200657134	804000E03M024	2.4m
1200060428	804000E03M030	3m
1200063443	804000E03M030H	3m
1200658570	804000E03M040	4m
1200060015	804000E03M050	5m
1200060429	804000E03M0501	5m *
1200060430	804000E03M0505	5m
1200658288	804000E03M050G	5m
1200062130	804000E03M050H	5m
1200658782	804000E03M060	6m
1200658896	804000E03M075	7.5m
1200657135	804000E03M070	7m
1200657136	804000E03M080	8m
1200657137	804000E03M090	9m
1200060016	804000E03M100	10m
1200063407	804000E03M1001	10m *
1200658882	804000E03M100H	10m
1200064422	804000E03M120	12m
1200060431	804000E03M150	15m
1200062264	804000E03M1505	15m
1200657138	804000E03M180	18m
1200060432	804000E03M200	20m
1200063647	804000E03M2001	20m
1200062992	804000E03M200H	20m
1200061528	804000E03M250	25m
1200061913	804000E03M300	30m
1200658228	804000E03M3001	30m *
1200657139	804000E03M350	35m
1200657140	804000E03M400	40m
1200657141	804000E03M450	45m
1200657142	804000E03M500	50m
1200657143	804000E03M550	55m
5P E03 CABLE		
1200659207	805000E03C230	0.23m
1200658502	805000E03M005	0.5m

Part No.	Engineering No.	Cable Length
1200658208	805000E03M0061	0.6m *
1200659279	805000E03M007	0.7m
1200063314	805000E03M010	1m
1200659368	805000E03M015	1.5m
1200060634	805000E03M020	2m
1200658503	805000E03M0201	2m
1200658165	805000E03M030	3m
1200658592	805000E03M040	4m
1200651978	805000E03M050	5m
1200658210	805000E03M0501	5m *
1200658331	805000E03M050H	5m
1200656303	805000E03M050Y	5m
1200657180	805000E03M070	7m
1200060638	805000E03M100	10m
1200655081	805000E03M150	15m
1200658081	805000E03M200	20m
1200063779	805000E03M300	30m
1200659280	805000E03M350	35m
1200659509	805000E03M600	60m
3P E02 CABLE		
1200656061	803000E02M010	1m
4P E02 CABLE		
1200659790	804000E02M020	2m
1200659786	804000E02M041	4.1m
1200659040	804000E02M050	5m
1200659038	804000E02M100	10m
8P E02 CABLE		
1200658511	808000E02M010	1m
1200658277	808000E02M020	2m
1200658590	808000E02M030	3m
1200658591	808000E02M040	4m
1200658224	808000E02M050	5m
1200658309	808000E02M0501	5m
1200658278	808000E02M100	10m
1200659538	808000E02M100	10m

Part No.	Engineering No.	Cable Length
1200658551	808000E02M1001	10m
1200658812	808000E02M150	15m
1200659256	808000E02M200	20m
1200659052	808000E02M2001	20m
1200658984	808000E02M2501	25m
1200659200	808000E02M250H	25m
1200659613	808000E02M300	30m
1200659053	808000E02M3001	30m
1200659187	808000E02M4001	40m
1200659387	808000E02M500	50m
8P H08 CABLE		
1200658642	808000H08M010	1m
1200658643	808000H08M015	1.5m
1200658644	808000H08M020	2m
1200658813	808000H08M025	2.5m
1200658645	808000H08M030	3m
1200658646	808000H08M040	4m
1200658244	808000H08M050	5m
1200658264	808000H08M100	10m
1200658930	808000H08M150	15m
1200658899	808000H08M250	25m
3P H09 CABLE		
1200659584	803000H09M003	0.3m
1200658637	803000H09M015	1.5m
1200658177	803000H09M100	10m
1200658636	803000H09M010	1m
1200658175	803000H09M020	2m
1200658638	803000H09M030	3m
1200658639	803000H09M040	4m
1200658176	803000H09M050	5m
4P H09 CABLE		
1200658891	804000H09M003	0.3m
1200658640	804000H09M010	1m
1200657395	804000H09M012	1.2m
1200658550	804000H09M015	1.5m
1200658178	804000H09M020	2m

NOTES:

* - Part No. with Yellow PVC overmolding

** - Part No. with Black PVC overmolding

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GENERAL TOLERANCES (UNLESS SPECIFIED)

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INITIAL REVISION:
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THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200651978	PSD	000	A12

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3-4	GENERAL MARKET	3 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/04/03 06:35:51

FORMAT: master_format-A3
REVISION: J1
DATE: 2021/05/06

PART LIST

Part No.	Engineering No.	Cable Length
1200658641	804000H09M040	4m
1200658179	804000H09M050	5m
1200064434	804000H09M050G	5m
1200658008	804000H09M050H	5m
1200658190	804000H09M100	10m
1200658009	804000H09M100H	10m
1200658880	804000H09M200	20m
1200065006	804000H09M250G	25m
5P H09 CABLE		
1200658632	805000H09M010	1m
1200658633	805000H09M015	1.5m
1200658172	805000H09M020	2m
1200658634	805000H09M030	3m
1200658635	805000H09M040	4m
1200658173	805000H09M050	5m
1200658174	805000H09M100	10m
1200657306	805000H09M100H	10m
1200658780	805000H09M200	20m
1200659144	805000H09M300	30m
1200657264	805000H09M500	50m
4P P02 CABLE		
1200658609	804000P02M020	2m
1200658927	804000P02M050	5m
8P P02 CABLE		
1200655073	808000P02M003	0.3m
1200658525	808000P02C350	0.35m
1200651794	808000P02M010	1m
1200659399	808000P02M015	1.5m
1200650951	808000P02M020	2m
1200658022	808000P02M030	3m
1200650952	808000P02M040	4m
1200650953	808000P02M050	5m
1200659552	808000P02M050H	5m
1200659092	808000P02M050Y	5m
1200650954	808000P02M060	6m

Part No.	Engineering No.	Cable Length
1200651795	808000P02M070	7m
1200650955	808000P02M080	8m
1200650956	808000P02M0801	8m
1200650957	808000P02M100	10m
1200659553	808000P02M100H	10m
1200659397	808000P02M100Y	10m
1200658021	808000P02M150	15m
1200659554	808000P02M150H	15m
1200651817	808000P02M200	20m
1200659334	808000P02M200H	20m
1200651818	808000P02M250	25m
1200651820	808000P02M300	30m
1200656766	808000P02M350	35m
1200656767	808000P02M400	40m
3P P03 CABLE		
1200061765	803000P03M002	0.2m
1200062098	803000P03M006	0.6m
1200060152	803000P03M010	1m
1200060004	803000P03M020	2m
1200060153	803000P03M030	3m
1200065012	803000P03M030G	3m
1200064093	803000P03M032	3.2m
1200658610	803000P03M040	4m
1200060005	803000P03M050	5m
1200651769	803000P03M050G	5m
1200063415	803000P03M0707	7m
1200060006	803000P03M100	10m
1200063673	803000P03M1001	10m
1200062811	803000P03M100H	10m
1200060157	803000P03M150	15m
1200060158	803000P03M200	20m
1200062772	803000P03M250	25m

Part No.	Engineering No.	Cable Length
4P P03 CABLE		
1200063402	804000P03M003	0.3m
1200658321	804000P03M005	0.5m
1200063940	804000P03M0051	0.5m
1200063121	804000P03M0053	0.5m
1200061785	804000P03M006	0.6m
1200658064	804000P03M010	1m
1200659388	804000P03M012	1.2m
1200658545	804000P03M015	1.5m
1200060018	804000P03M020	2m
1200060456	804000P03M0201	2m
1200659370	804000P03M020Y	2m
1200060034	804000P03M025	2.5m
1200060457	804000P03M030	3m
1200652143	804000P03M040	4m
1200060019	804000P03M050	5m
1200060458	804000P03M0501	5m
1200651780	804000P03M050G	5m
1200062347	804000P03M050H	5m
1200659088	804000P03M050HY	5m
1200652144	804000P03M060	6m
1200656436	804000P03M0601	6m
1200651782	804000P03M100	10m
1200659302	804000P03M1005	10m
1200658492	804000P03M100G	10m
1200062167	804000P03M100H	10m
1200659123	804000P03M100HY	10m
1200064033	804000P03M120	12m
1200062853	804000P03M150	15m
1200659340	804000P03M1501	15m
1200060461	804000P03M200	20m

Part No.	Engineering No.	Cable Length
1200659474	804000P03M250	25m
1200659341	804000P03M2501	25m
1200659475	804000P03M300	30m
1200657129	804000P03M400	40m
1200657130	804000P03M500	50m
5P P03 CABLE		
1200060646	805000P03M003	0.3m
1200659282	805000P03M005	0.5m
1200659283	805000P03M007	0.7m
1200658197	805000P03M010	1m
1200060647	805000P03M020	2m
1200065004	805000P03M0201	2m
1200659326	805000P03M020H	2m
1200062521	805000P03M030	3m
1200658020	805000P03M040	4m
1200651792	805000P03M050	5m
1200652154	805000P03M060	6m
1200060649	805000P03M100	10m
1200658991	805000P03M100H	10m
1200061431	805000P03M150	15m
1200659329	805000P03M150H	15m
1200064292	805000P03M200	20m
1200659330	805000P03M200H	20m
1200659214	805000P03M300	30m
1200659594	805000P03M300H	30m
1200659595	805000P03M350H	35m

NOTES:

* - Part No. with Yellow PVC overmolding

** - Part No. with Black PVC overmolding

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

FUNCTIONAL SYMBOLS: FA = 0, FC = 0, FD = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± 1.0 °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.05
1 PLACE	± 0.3
0 PLACES	± 0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: NEW LENGTH ADDED

EC NO: 817713

DRWN:	RSCHIEBER	2025/04/02
CHK'D:	RSILLER	2025/04/03
APPR:	RSILLER	2025/04/03

INITIAL REVISION:

DRWN:	JMARSZALEK	2016/01/11
APPR:	RSILLER	2016/04/08

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200651978	PSD	000	A12

THIRD ANGLE PROJECTION	DRAWING	SERIES
	A3-SIZE	120065

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 3-4	GENERAL MARKET	4 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/04/03 06:35:51

FORMAT: master-B-std-A3
REVISION: J1
DATE: 2021/05/03