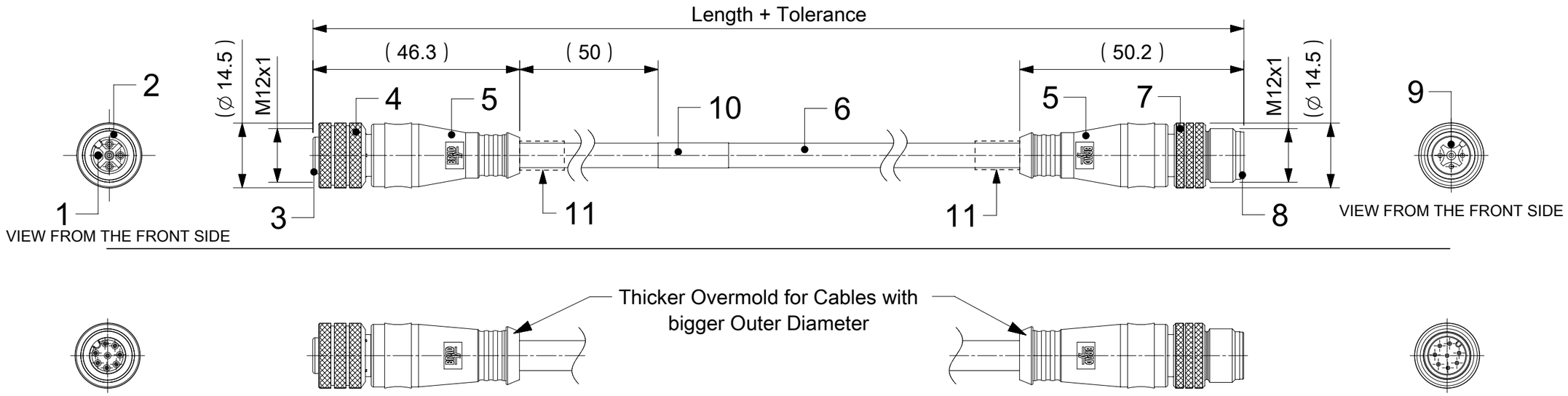
FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT



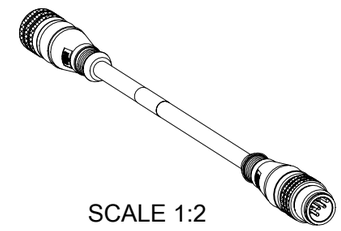
NOTES:

RATED VOLTAGE: 3, 4 contacts 250V per IEC 60664
5 contacts 60V per IEC 60664
5 contacts 250V per UL 2238
8 contacts 30V per IEC 60664

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

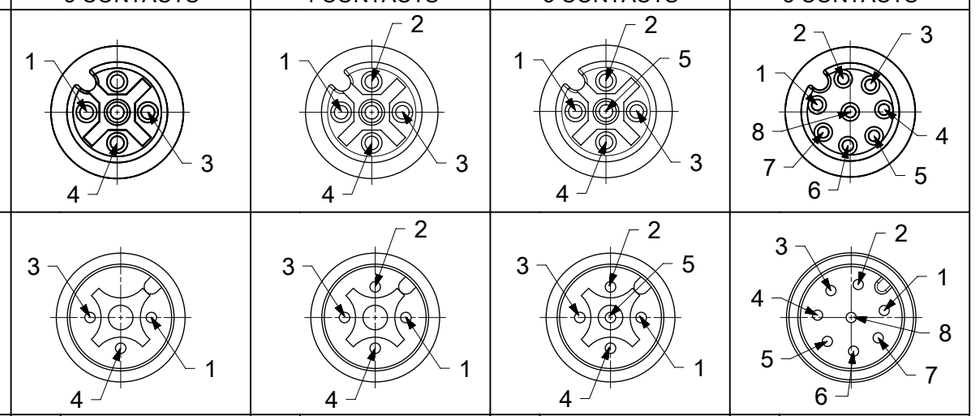
PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C



SCALE 1:2

CONTACTS POSITION FRONT VIEW:



CONNECTIONS

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	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
11	SEE SHEET 2	ID CARRIER	PVC	TRANSPARENT
10	1	LABEL YELLOW	VINYL	-
9	3 / 4 / 5 / 8	CONTACT MALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	-
7	1	COUPLING NUT MALE	-	-
6	-	CABLE	SEE SHEET 2	-
5	-	OVERMOULDING BLACK	TPU	-
4	1	COUPLING NUT FEMALE	-	-
3	1	INSERT FEMALE BLACK	PUR	-
2	1	O-RING RED	FPM	-
1	3 / 4 / 5 / 8	CONTACT FEMALE	SEE PART LIST	SELECTIVE GOLD OVER NICKEL

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

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 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: REMOVED P/N 1200669957 FROM THE PARTS LIST AND ADDED A NEW PN 1200669972

EC NO: 835143
DRWN: VHANDI 2023/12/15
CHK'D: HKNEELAND 2025/09/22
APPR: HKNEELAND 2025/09/22

INITIAL REVISION:
DRWN: JMARSZALEK 2016/09/16
APPR: RSILLER 2016/12/08

molex

CSE M12 XP AC FE STR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668084	PSD	000	A18

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE SHEET 3-4	GENERAL MARKET	1 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/22	23:13:17

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ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Other parts available upon request).

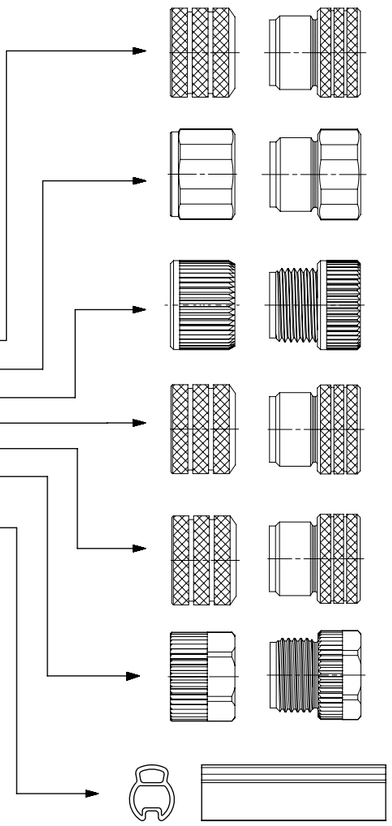
OPTIONS

8	8	X	0	3	0	X	X	X	X	X	X	X	X

- 88=Micro-Change M12x1 Double ended
- Contacts: 3=3 Contacts, 4=4 Contacts, 5=5 Contacts, 8=8 Contacts
- Heads style: 030=Plug Female Straight to Plug Male Straight
- 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)=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, 8=Type 316 stainless steel, 9=Knurled / Hexagonal Brass Ni Plated SW13
- H= 2 pcs. of I/D Carrier PVC Transparent

COUPLING NUTS

FEMALE MALE



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 [mm]	UP TO AND INCLUDING [mm]	TOLERANCES [mm]
0	305	+19
305	915	+45
915	1830	+56
1830	3660	+89
3660	7320	+165
7320	14640	+317
14640	30500	+610
30500	>	+2% OF FINISHED LENGTH

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

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm | SCALE: 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: REMOVED P/N 1200669957 FROM THE PARTS LIST AND ADDED A NEW PN 1200669972

EC NO: 835143
DRWN: VHANDI 2023/12/15
CHK'D: HKNEELAND 2025/09/22
APPR: HKNEELAND 2025/09/22

INITIAL REVISION:
DRWN: JMARSZALEK 2016/09/16
APPR: RSILLER 2016/12/08

molex

CSE M12 XP AC FE STR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668084	PSD	000	A18

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE SHEET 3-4	GENERAL MARKET	2 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/22 23:13:17

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PART LIST

MOLEX PN	Engineering No.	Length	
3P CABLE E03			
1200070081	883030E03M006	0.6m	
1200669153	883030E03M0101	1m	
1200070083	883030E03M010	1m	
1200071006	883030E03M020H	2m	
1200070086	883030E03M0205	2m	
1200070085	883030E03M020	2m	
1200070088	883030E03M030	3m	
1200668370	883030E03M040	4m	
1200070092	883030E03M0505	5m	
1200070091	883030E03M050	5m	
1200669511	883030E03M060	6m	
1200669499	883030E03M080	8m	
1200070093	883030E03M100	10m	
1200669500	883030E03M120	12m	
1200669501	883030E03M140	14m	
1200669502	883030E03M160	16m	
1200669510	884030E03M160	16m	
1200669503	883030E03M180	18m	
1200669522	883030E03M200	20m	
1200669523	883030E03M250	25m	
4P CABLE E03			
1200669878	884030E03M002H	0.2m	
1200070470	884030E03M003	0.3m	
1200669879	884030E03M004H	0.4m	
1200668672	884030E03M0051	0.5m	*
1200665009	884030E03M005	0.5m	
1200070472	884030E03M006	0.6m	
1200669880	884030E03M009H	0.9m	
1200668062	884030E03M010H	1m	
1200070473	884030E03M010	1m	
1200669881	884030E03M013H	1.3m	
1200071594	884030E03M015	1.5m	
1200669882	884030E03M016H	1.6m	
1200071774	884030E03M020H	2m	
1200071703	884030E03M0205	2m	
1200070474	884030E03M020	2m	

MOLEX PN	Engineering No.	Length	
1200669423	884030E03M025	2.5m	
1200070475	884030E03M030	3m	
1200669424	884030E03M035	3.5m	
1200072092	884030E03M040	4m	
1200072172	884030E03M050H	5m	
1200071707	884030E03M0505	5m	
1200072744	884030E03M0501	5m	*
1200060049	884030E03M050	5m	
1200071596	884030E03M060	6m	
1200668786	884030E03M070	7m	
1200669508	884030E03M080	8m	
1200071881	884030E03M1005	10m	
1200070476	884030E03M100	10m	
1200072544	884030E03M120	12m	
1200669509	884030E03M140	14m	
1200071793	884030E03M1501	15m	*
1200071715	884030E03M150	15m	
1200669883	884030E03M180H	18m	
1200071199	884030E03M200	20m	
1200668718	884030E03M250	25m	
1200668719	884030E03M300	30m	
1200668770	884030E03M350	35m	
1200668771	884030E03M400	40m	
1200669884	884030E03M800H	80m	
5P CABLE E03			
1200668972	885030E03M003	0.3m	
1200071500	885030E03M005	0.5m	
1200668338	885030E03M006	0.6m	
1200668530	885030E03M010H	1m	
1200070906	885030E03M010	1m	
1200668528	885030E03M020H	2m	
1200070970	885030E03M020	2m	
1200668973	885030E03M025	2.5m	
1200668985	885030E03M030H	3m	
1200070586	885030E03M030	3m	
1200072081	885030E03M035	3.5m	

MOLEX PN	Engineering No.	Length	
1200668981	885030E03M040H	4m	
1200071948	885030E03M040	4m	
1200070969	885030E03M050	5m	
1200668982	885030E03M060H	6m	
1200072697	885030E03M060	6m	
1200668652	885030E03M070	7m	
1200668980	885030E03M080H	8m	
1200071583	885030E03M080	8m	
1200669905	885030E03M085H	8.5m	
1200669906	885030E03M090H	9m	
1200668347	885030E03M100	10m	
1200669907	885030E03M110H	11m	
1200668674	885030E03M150	15m	
1200668487	885030E03M200	20m	
1200668521	885030E03M250	25m	
1200668784	885030E03M300	30m	
1200668785	885030E03M350	35m	
3P CABLE E02			
1200668662	883030E02M006	0.6m	
1200669609	883030E02M0201	2m	
1200669561	883030E02M050	5m	
4P CABLE E02			
1200668661	884030E02M0031	0.3m	*
5P CABLE E02			
1200668664	885030E02M010	1m	
1200668657	885030E02M020	2m	
1200668609	885030E02M050	5m	
1200668656	885030E02M100	10m	
8P CABLE E02			
1200668399	888030E02M003	0.3m	
1200668777	888030E02M020	2m	
1200668288	888030E02M025	2.5m	
1200668778	888030E02M030	3m	
1200668779	888030E02M050	5m	
1200668780	888030E02M100	13m	
1200669477	888030E02M300	30m	
1200669478	888030E02M400	40m	
1200669479	888030E02M500	50m	

MOLEX PN	Engineering No.	Length	
4P CABLE H08			
1200668689	884030H08M030	3m	
8P CABLE H08			
1200669314	888030H08C250	0.25m	
1200669972	888030H08M004	0.4m	A18
1200669310	888030H08M005	0.5m	
1200669311	888030H08M008	0.8m	
1200668491	888030H08M010	1m	
1200669312	888030H08M012	1.2m	
1200669313	888030H08M015	1.5m	
1200669117	888030H08M040	4m	
1200669212	888030H08M050	5m	
1200669958	888030H08M070	7.0m	
1200668774	888030H08M100	10m	
1200669161	888030H08M150	15m	
1200669437	888030H08M200	20m	
1200669955	888030H08M300	30m	
3P CABLE H09			
1200668373	883030H09M006	0.6m	
1200668374	883030H09M010	1m	
1200669134	883030H09M015	1.5m	
1200668375	883030H09M030	3m	
1200669350	883030H09M030H	3m	
1200668376	883030H09M040	4m	
1200668377	883030H09M100	10m	
1200669135	883030H09M200	20m	
4P CABLE H09			
1200668715	884030H09M003	0.3m	
1200668378	884030H09M006	0.6m	
1200668548	884030H09M006H	0.6m	
1200668379	884030H09M010	1m	
1200668549	884030H09M010H	1m	
1200669752	884030H09M015H	1.5m	
1200669759	884030H09M020H	2m	
1200668234	884030H09M020	2m	
1200668714	884030H09M0209	2m	
1200668486	884030H09M023	2.3m	
1200669753	884030H09M025H	2.5m	
1200669758	884030H09M030H	3m	

NOTES:

* - Part No. with Yellow PVC overmolding

FUNCTIONAL SYMBOLS	FA = 0	FC = 0	FP = 0	DIVISIONAL SYMBOLS	

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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	± 0.3
0 PLACES	± 0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED P/N 1200669957 FROM THE PARTS LIST AND ADDED A NEW PN 1200669972

EC NO: 835143

DRWN:	VHANDI	2023/12/15
CHK'D:	HKNEELAND	2025/09/22
APPR:	HKNEELAND	2025/09/22

INITIAL REVISION:

DRWN:	JMARSZALEK	2016/09/16
APPR:	RSILLER	2016/12/08

molex

CSE M12 XP AC FE STR MA STR XM DE

PRODUCT CUSTOMER DRAWING

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE PART LIST	GENERAL MARKET	3 OF 4

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668084	PSD	000	A18

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/22 23:13:17

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PART LIST

MOLEX PN	Engineering No.	Length
1200668174	884030H09M030	3m
1200668380	884030H09M040	4m
1200668244	884030H09M050	5m
1200668550	884030H09M050H	5m
1200668737	884030H09M055	5.5m
1200669926	884030H09M065H	6.5m
1200669927	884030H09M070H	7m
1200669931	884030H09M075H	7.5m
1200669932	884030H09M080H	8m
1200668381	884030H09M100	10m
5P CABLE H09		
1200668509	885030H09M006	0.6m
1200668497	885030H09M010	1m
1200669756	885030H09M015H	1.5m
1200668500	885030H09M020	2m
1200669762	885030H09M020H	2m
1200669757	885030H09M025H	2.5m
1200668510	885030H09M030	3m
1200669763	885030H09M030H	3m
1200668853	885030H09M040	4m
1200668501	885030H09M050	5m
1200668854	885030H09M060	6m
1200668502	885030H09M092	9.2m
1200668511	885030H09M100	10m
1200668683	885030H09M150	15m
1200668684	885030H09M200	20m
8P CABLE P02		
1200661455	888030P02M005	0.5m
1200660579	888030P02M010	1m
1200668803	888030P02M010H	1m
1200660585	888030P02M100	10m
1200668807	888030P02M100H	10m
1200669353	888030P02M130	13m
1200660586	888030P02M150	15m
1200668808	888030P02M150H	15m
1200668327	888030P02M200	20m
1200668809	888030P02M200H	20m

MOLEX PN	Engineering No.	Length
1200660580	888030P02M020	2m
1200668804	888030P02M020H	2m
1200660581	888030P02M030	3m
1200660582	888030P02M040	4m
1200660583	888030P02M050	5m
1200668806	888030P02M050H	5m
1200660584	888030P02M060	6m
1200668352	888030P02M250	25m
1200669133	888030P02M3008	30m
1200668810	888030P02M350H	35m
1200668544	888030P02M500	50m
3P CABLE P03		
1200070102	883030P03M003	0.3m
1200070104	883030P03M006	0.6m
1200660498	883030P03M010	1m
1200071123	883030P03M010H	1m
1200668691	883030P03M010YH	1m
1200660500	883030P03M020	2m
1200071131	883030P03M0201	2m
1200071114	883030P03M020H	2m
1200668690	883030P03M020YH	2m
1200660501	883030P03M030	3m
1200071122	883030P03M030H	3m
1200668646	883030P03M030HY	3m
1200072104	883030P03M040	4m
1200660502	883030P03M050	5m
1200071047	883030P03M050H	5m
1200668713	883030P03M050HY	5m
1200071288	883030P03M060	6m
1200070105	883030P03M100	10m
1200071273	883030P03M100H	10m
1200668712	883030P03M100HY	10m
1200072658	883030P03M120	12m
1200071053	883030P03M150	15m

MOLEX PN	Engineering No.	Length
4P CABLE P03		
1200070486	884030P03M003	0.3m
1200668687	884030P03M005	0.5m
1200070487	884030P03M006	0.6m
1200070488	884030P03M010	1m
1200072762	884030P03M0101	1m
1200072649	884030P03M0105	1m
1200060050	884030P03M015	1.5m
1200070489	884030P03M020	2m
1200072763	884030P03M0201	2m
1200668754	884030P03M020H	2m
1200060051	884030P03M030	3m
1200072764	884030P03M0301	3m
1200072803	884030P03M040	4m
1200070490	884030P03M050	5m
1200072650	884030P03M0505	5m
1200072010	884030P03M050H	5m
1200072804	884030P03M060	6m
1200669717	884030P03M080	8m
1200668815	884030P03M0805	8m
1200071029	884030P03M100	10m
1200665031	884030P03M100H	10m
1200668720	884030P03M150	15m
1200072105	884030P03M200	20m
1200668721	884030P03M250	25m
1200668722	884030P03M300	30m
1200668723	884030P03M350	35m
1200668724	884030P03M400	40m
5P CABLE P03		
1200668903	885030P03C130	0.13m
1200073083	885030P03M006	0.6m
1200668794	885030P03M006H	0.6m
1200071947	885030P03M007	0.7m
1200668084	885030P03M010	1m
1200668795	885030P03M010H	1m
1200668765	885030P03M015	1.5m
1200070596	885030P03M020	2m
1200668602	885030P03M020G	2m

MOLEX PN	Engineering No.	Length
1200668086	885030P03M0283	2.8m
1200071408	885030P03M030	3m
1200668796	885030P03M030H	3m
1200668163	885030P03M040	4m
1200071049	885030P03M050	5m
1200073049	885030P03M0501	5m
1200668797	885030P03M050H	5m
1200668088	885030P03M070	7m
1200071284	885030P03M100	10m
1200668798	885030P03M100H	10m
1200072656	885030P03M120	12m
1200073084	885030P03M150	15m
1200669111	885030P03M150H	15m
1200668238	885030P03M200	20m
1200668800	885030P03M200H	20m
1200668775	885030P03M300	30m
1200668801	885030P03M300H	30m
1200668802	885030P03M350H	35m

NOTES:

✱ - Part No. with Yellow PVC overmolding

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/22 23:13:17

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FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 0

DIVISIONAL SYMBOLS

DIMENSION UNITS: mm
SCALE: 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: REMOVED P/N 1200669957 FROM THE PARTS LIST AND ADDED A NEW PN 1200669972

EC NO: 835143
DRWN: VHANDI 2023/12/15
CHK'D: HKNEELAND 2025/09/22
APPR: HKNEELAND 2025/09/22

INITIAL REVISION:
DRWN: JMARSZALEK 2016/09/16
APPR: RSILLER 2016/12/08

molex

CSE M12 XP AC FE STR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668084	PSD	000	A18

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120066	SEE PART LIST	GENERAL MARKET	4 OF 4

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