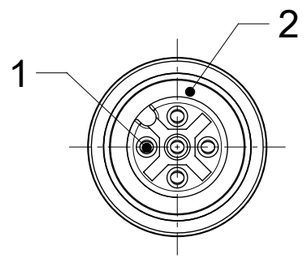
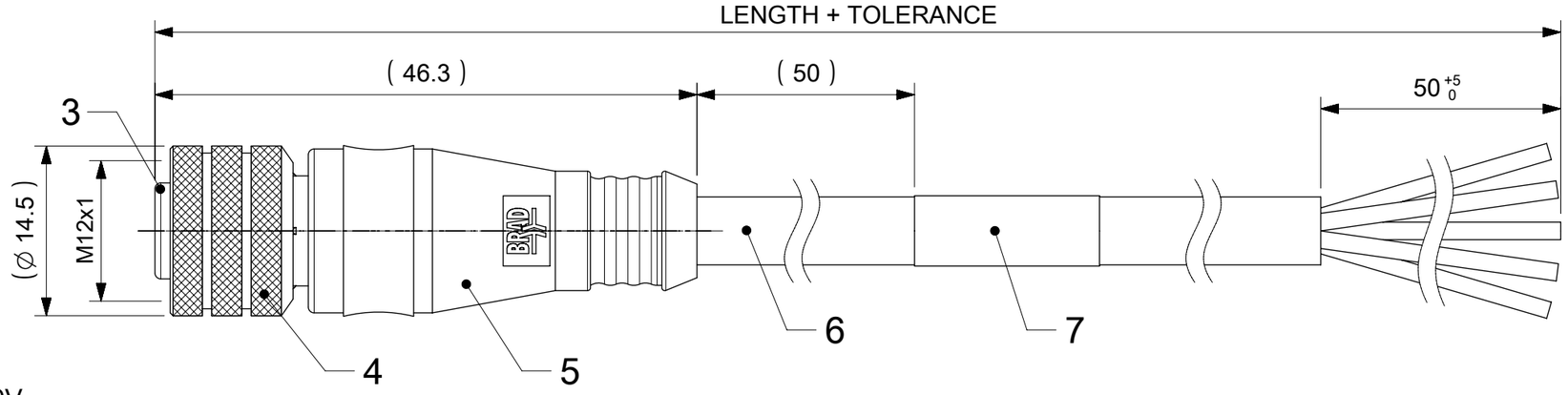
FEMALE PLUG M12 STRAIGHT





NOTES:

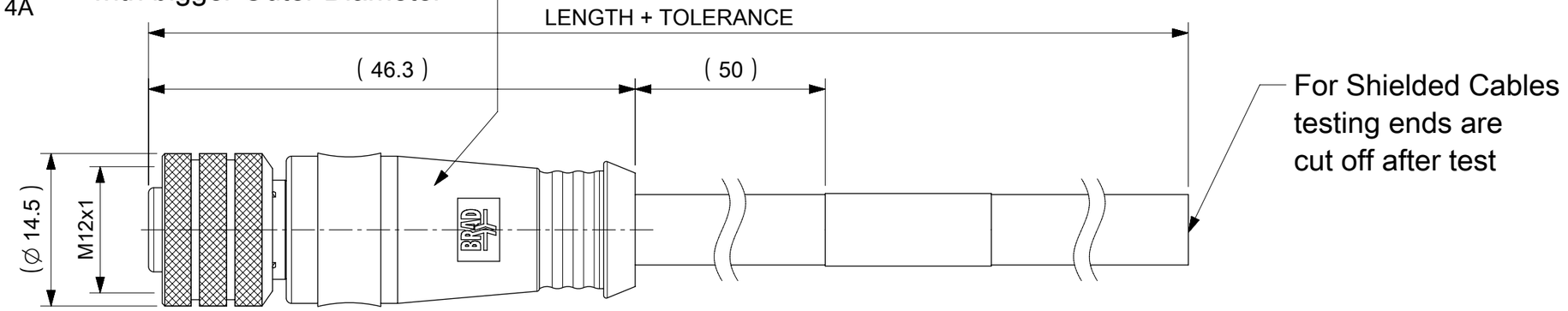
RATED VOLTAGE: 3, 4 contacts 250V
5 contacts 60V
8 contacts 30V

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

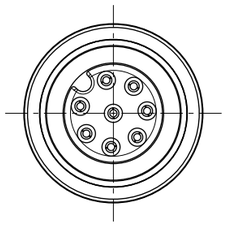
PROTECTION CLASS: IP 67

TEMPERATURE: -25°C / +85°C

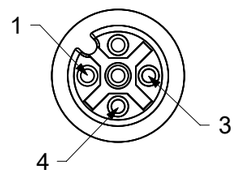
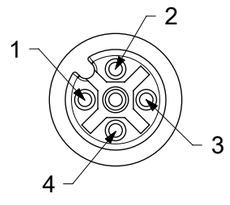
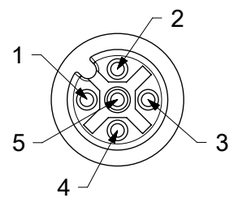
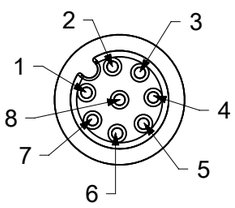
Thicker Overmold for Cables with bigger Outer Diameter



For Shielded Cables testing ends are cut off after test



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 OR YELLOW/GREEN	4	BLACK	4	BLACK	4	YELLOW
5	---	5	---	5	GREY OR YELLOW/GREEN	5	GREY
						6	PINK
						7	BLUE
						8	RED

CODING REQUIRED TO IEC 61076-2-101

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/16 14:46:25

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
7	1	LABEL YELLOW	VINYL	---
	-	PRINTING FOR CABLES Ixx	---	---
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

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	±	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: THE CROSS SECTION VALUE OF K03 CABLE IS UPDATED

EC NO: 822303
DRWN: VHANDI 2025/05/15
CHK'D: RSILLER 2025/05/16
APPR: RSILLER 2025/05/16

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
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
1200658605	PSD	000	A8

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	1 OF 4

Downloaded from Arrow.com.

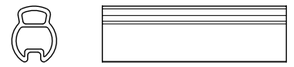
ENGINEERING NO. - NUMERICAL CODE (Available parts see PART LIST table. Others on request).

8	0	X	0	0	0	X	X	X	X	X	X	X	X

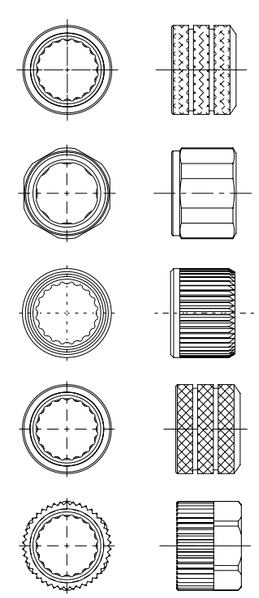
- 80=M12x1 Single ended
- Contacts: 3=3 Contacts, 4=4 Contacts, 5=5 Contacts, 8=8 Contacts
- Heads style: 000=Plug Female Straight
- Cable type: See Table
- Units: M=Meter, C=Centimeter
- Length Examples: 005=0.5 unit, 010=1 unit, 100=10 units

OPTIONS

- Overmold color: Blank (Standard)=Black TPU; Blank=Yellow TPU for cables A09,S19,S20,S26; Blank=Yellow TPE-E for cables K03,K05; 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 (Cables Ixx & P82 always with 2 pcs. of I/D Carrier even if no H in Engineering No.)



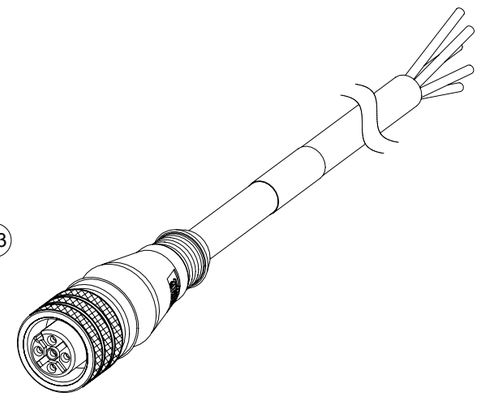
COUPLING NUTS



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
E13	3	18AWG	PVC YELLOW	UL 2661/1731	I/II A/B 80°C/300V	-	-	-	-
E52	3 / 4 / 8	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
E63	5	0.34mm²	PVC GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
H12	4	0.50mm²	PUR BLACK LS0H	UL 21198/10493	C22.2 I/II A/B 80°C/300V	-50°C to +80°C, 5xO.D.	-25°C to +80°C, 10xO.D.	2 000 000, Temp max 60°C	-
H69	4	0.20mm²	PUR GREY LS0H	-	-	-	-	-	-
I02	3 / 4 / 8	0.25mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I03	3 / 4 / 5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
I04	4	0.50mm²	PVC CEI GREY	-	-	-25°C to +70°C	-5°C to +70°C	-	-
I20	3 / 4	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	YES
I26	5	0.34mm²	PVC CEI GREY	-	-	-30°C to +70°C	-5°C to +70°C	-	-
K03	4 / 5	0.75mm²	TPE YELLOW	UL JEC 60332-1 or PLCT	I/II 90°C/300V	-	-	-	-
K05	3 / 4 / 5	0.34mm²	TPE YELLOW	UL ITC E195601 or PLC	I/II A/B 90°C/300V	-	-	-	-
P04	4	0.50mm²	PUR BLACK	-	-	-40°C to +90°C, 7.5xO.D.	-15°C to +90°C, 12.5xO.D.	-	-
P12	3 / 5	0.50mm²	PUR BLACK	-	-	-30°C to +90°C	-5°C to +90°C	-	-
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
P82	3 / 4 / 5	0.34mm²	PUR IRR ORANGE	-	-	-50°C to +105°C, 5xO.D.	-40°C to +105°C, 7.5xO.D.	-	-
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	C22.2 II A 105°C/300V	-30°C to +105°C	-	-	YES

A3



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	2025/05/16 14:46:25

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

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: THE CROSS SECTION VALUE OF K03 CABLE IS UPDATED

EC NO: 822303
DRWN: VHANDI 2025/05/15
CHK'D: RSILLER 2025/05/16
APPR: RSILLER 2025/05/16

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
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
1200658605	PSD	000	A8

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120065	SEE PART LIST	GENERAL MARKET	2 OF 4

Downloaded from Arrow.com.

PART LIST

MOLEX P/N	ENGINEERING No.	L [mm]
3P CABLE E13		
1200658524	803000E13M030	3000
3P CABLE E52		
1200651767	803000E52M050A	5000
1200658293	803000E52M3001A	30000
4P CABLE E52		
1200064254	804000E52M010A	1000
1200651778	804000E52M050A	5000
1200651857	804000E52M100A	10000
1200060436	804000E52M200A	20000
1200061620	804000E52M3001A	30000
1200063819	804000E52K0011A	100000
8P CABLE E52		
1200657335	808000E52M005	500
1200658236	808000E52M020	2000
1200062049	808000E52M050	5000
1200659997	808000E52M100	10000
5P CABLE E63		
1200658015	805000E63M020A	2000
1200061936	805000E63M050A	5000
4P CABLE H12		
1200659593	804000H12M020	2000
1200659767	804000H12M0209	2000
1200659768	804000H12M0309	3000
1200659113	804000H12M050	5000
1200659769	804000H12M0509	5000
1200659271	804000H12M100	10000
1200659770	804000H12M1009	10000
3P CABLE H69		
1200062094	803000H69M050	5000
4P CABLE H69		
1200061680	804000H69M050	5000
1200658242	804000H69M300	30000
8P CABLE I02		
1200658677	808000I02M010	1000
1200658678	808000I02M020	2000
1200658679	808000I02M030	3000
1200658680	808000I02M040	4000
1200658681	808000I02M050	5000
1200658682	808000I02M100	10000

MOLEX P/N	ENGINEERING No.	L [mm]
3P CABLE I03		
1200060145	803000I03M020	2000
1200659119	803000I03M020Y	2000
1200658593	803000I03M040	4000
1200060030	803000I03M050	5000
1200659064	803000I03M050Y	5000
1200060148	803000I03M100	10000
4P CABLE I03		
1200658599	804000I03M010	1000
1200658701	804000I03M010G	1000
1200060452	804000I03M020	2000
1200658702	804000I03M020G	2000
1200659075	804000I03M020Y	2000
1200060454	804000I03M030	3000
1200658703	804000I03M030G	3000
1200659177	804000I03M030Y	3000
1200658600	804000I03M040	4000
1200658704	804000I03M040G	4000
1200060017	804000I03M050	5000
1200658705	804000I03M050G	5000
1200659060	804000I03M050Y	5000
1200063205	804000I03M060	6000
1200064230	804000I03M080	8000
1200060033	804000I03M100	10000
1200061970	804000I03M100A	10000
1200658706	804000I03M100G	10000
1200659065	804000I03M100Y	10000
1200061955	804000I03M200A	20000
1200061956	804000I03M300A	30000
1200061957	804000I03M400A	40000
5P CABLE I03		
1200658605	805000I03M010	1000
1200658283	805000I03M020	2000
1200060644	805000I03M030	3000
1200658606	805000I03M040	4000
1200062003	805000I03M050	5000
1200063824	805000I03M050G	5000
1200659085	805000I03M050Y	5000
1200060645	805000I03M100	10000
1200655025	805000I03M100G	10000
1200659371	805000I03M100Y	10000

MOLEX P/N	ENGINEERING No.	L [mm]
4P CABLE I04		
1200063562	804000I04M030	3000
1200659621	804000I04M050	5000
3P CABLE I20		
1200061559	803000I20M100	10000
1200659558	803000I20M100Y	10000
4P CABLE I20		
1200064164	804000I20M020	2000
1200658221	804000I20M050	5000
1200064161	804000I20M100	10000
1200658543	804000I20M150	15000
5P CABLE I26		
1200658817	805000I26M010	1000
1200061727	805000I26M050	5000
1200659116	805000I26M050Y	5000
1200062969	805000I26M100	10000
1200659090	805000I26M100Y	10000
4P CABLE K03		
1200652022	804000K03M006	600
1200651287	804000K03M010	1000
1200651293	804000K03M050	5000
1200651300	804000K03M100	10000
5P CABLE K03		
1200651367	805000K03M020	2000
1200651370	805000K03M050	5000
1200651373	805000K03M100	10000
3P CABLE K05		
1200651108	803000K05M020	2000
1200651110	803000K05M050	5000
4P CABLE K05		
1200651121	804000K05M020	2000
1200651122	804000K05M030	3000
1200651124	804000K05M050	5000
1200651126	804000K05M100	10000

NOTES:

✱ - Part No. with Yellow PVC overmolding

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

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: THE CROSS SECTION VALUE OF K03 CABLE IS UPDATED

EC NO: 822303
DRWN: VHANDI 2025/05/15
CHK'D: RSILLER 2025/05/16
APPR: RSILLER 2025/05/16

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
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
1200658605	PSD	000	A8

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE PART LIST	GENERAL MARKET	3 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/16 14:46:25

Downloaded from Arrow.com.

PART LIST

MOLEX P/N	ENGINEERING No.	L [mm]
4P CABLE P04		
1200063017	804000P04M0083	800
1200063114	804000P04M0163	1600
1200062364	804000P04M020G	2000
3P CABLE P12		
1200063141	803000P12M0033	300
5P CABLE P12		
1200063041	805000P12M0033	300
1200658086	805000P12M020	2000
1200064445	805000P12M023	2300
1200659393	805000P12M050	5000
1200062858	805000P12M100	10000
8P CABLE P19		
1200062765	808000P19M020	2000
1200062675	808000P19M030	3000
1200062676	808000P19M050	5000
1200655074	808000P19M060	6000
1200652019	808000P19M100	10000
1200658104	808000P19M150	15000

MOLEX P/N	ENGINEERING No.	L [mm]
4P CABLE P20		
1200064490	804000P20M020	2000
1200062656	804000P20M030	3000
1200062657	804000P20M050	5000
1200062604	804000P20M100	10000
1200062869	804000P20M150	15000
1200658282	804000P20M250	25000
5P CABLE P20		
1200063913	805000P20M003	300
1200659049	805000P20M050	5000
1200063035	805000P20M100	10000
1200659635	805000P20M300	30000
3P CABLE P82		
1200062754	803000P82M0047	400
1200062454	803000P82M0067	600
1200064073	803000P82M0107	1000
1200064256	803000P82M0207	2000
1200061240	803000P82M0507	5000
5P CABLE P82		
1200065005	805000P82M0207	2000
1200060715	805000P82M050	5000
1200658299	805000P82M100	10000
1200659026	805000P82M1007	10000
8P CABLE S19		
1200658256	808000S19M006	600
1200656198	808000S19M010	1000
1200656199	808000S19M020	2000
1200656200	808000S19M030	3000
1200656201	808000S19M050	5000
1200658972	808000S19M100	10000
1200868439	808000S19M150	15000
1200659183	808000S19M150H	15000
1200659175	808000S19M200H	20000

MOLEX P/N	ENGINEERING No.	L [mm]	
3P CABLE S20			
1200063569	803000S20M003	300	
1200060166	803000S20M010	1000	
1200060167	803000S20M020	2000	
1200060168	803000S20M030	3000	
1200060170	803000S20M050	5000	
1200659390	803000S20M070	7000	
1200060171	803000S20M100	10000	
1200060173	803000S20M150	15000	
4P CABLE S20			
1200060469	804000S20M010	1000	
1200062496	804000S20M010H	1000	
1200060470	804000S20M020	2000	
1200060471	804000S20M0201	2000	*
1200062268	804000S20M020H	2000	
1200060472	804000S20M030	3000	
1200062040	804000S20M030H	3000	
1200060474	804000S20M050	5000	
1200063859	804000S20M0501	5000	*
1200063182	804000S20M0501H	5000	
1200062037	804000S20M050H	5000	
1200060476	804000S20M100	10000	
1200063409	804000S20M1001	10000	*
1200062363	804000S20M100H	10000	
1200060478	804000S20M150	15000	
1200655010	804000S20M150H	15000	
1200063993	804000S20M200	20000	
1200063684	804000S20M2001	20000	*
1200659376	804000S20M350	35000	
5P CABLE S20			
1200658474	805000S20M020	2000	
1200658230	805000S20M050	5000	
5P CABLE S26			
1200658252	805000S26M020	2000	
1200655003	805000S26M050	5000	
1200655009	805000S26M100	10000	
1200659989	805000S26M200	20000	

NOTES:

* - Part No. with Yellow PVC overmolding

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

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: THE CROSS SECTION VALUE OF K03 CABLE IS UPDATED

EC NO: 822303
DRWN: VHANDI 2025/05/15
CHK'D: RSILLER 2025/05/16
APPR: RSILLER 2025/05/16

INITIAL REVISION:
DRWN: JMARSZALEK 2016/01/12
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
1200658605	PSD	000	A8

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	120065	SEE PART LIST	GENERAL MARKET	4 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/05/16 14:46:25

FORMAT: master-ifs-prod-A3
SPEC: 404-10001
Downloaded from Arrow.com.