

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

80X000XXXXXX

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

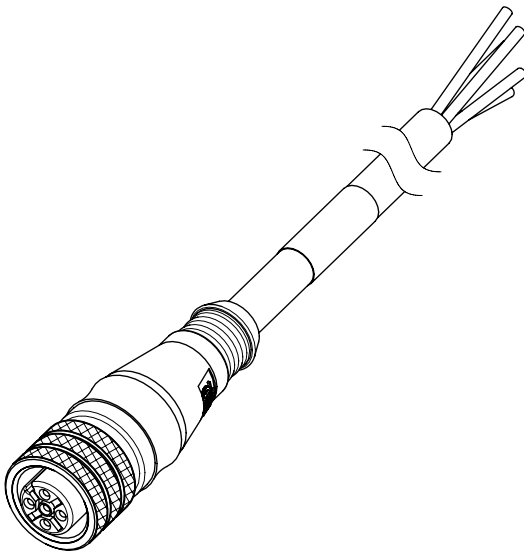
COUPLING NUTS

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

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: NEW PN ADD TO DRAWING

EC NO: 726420
DRWN: RSILLER
CHK'D: THAERDT
APPR: THAERDT

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING A3-SIZE

SERIES 120065

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

GENERAL MARKET

2 OF 4

10	9	8	7	6	5	4	3	2	1		
PART LIST											
No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length	No.	Part No.	Engineering No.	Cable Length
1	1200060001	803000E03M020	2m	36	1200060458	804000P03M0501	5m	71	1200063673	803000P03M1001	10m
2	1200060002	803000E03M050	5m	37	1200060461	804000P03M200	20m	72	1200063779	805000E03M300	30m
3	1200060003	803000E03M100	10m	38	1200060634	805000E03M020	2m	73	1200063940	804000P03M0051	0.5m
4	1200060004	803000P03M020	2m	39	1200060638	805000E03M100	10m	74	1200064033	804000P03M120	12m
5	1200060005	803000P03M050	5m	40	1200060646	805000P03M003	0.3m	75	1200064093	803000P03M032	3.2m
6	1200060006	803000P03M100	10m	41	1200060647	805000P03M020	2m	76	1200064292	805000P03M200	20m
7	1200060014	804000E03M020	2m	42	1200060649	805000P03M100	10m	79	1200064422	804000E03M120	12m
8	1200060015	804000E03M050	5m	43	1200061337	804000E03M0205	2m	80	1200064434	804000H09M050G	5m
9	1200060016	804000E03M100	10m	44	1200061431	805000P03M150	15m	81	1200065004	805000P03M0201	2m
10	1200060018	804000P03M020	2m	45	1200061528	804000E03M250	25m	82	1200065006	804000H09M250G	25m
11	1200060019	804000P03M050	5m	46	1200061765	803000P03M002	0.2m	83	1200065012	803000P03M030G	3m
12	1200060027	803000E03M006	0.6m	47	1200061785	804000P03M006	0.6m	84	1200650951	808000P02M020	2m
13	1200060032	804000E03M005	0.5m	48	1200061913	804000E03M300	30m	85	1200650952	808000P02M040	4m
14	1200060034	804000P03M025	2.5m	49	1200061958	803000E03M021	2.1m	86	1200650953	808000P02M050	5m
15	1200060107	803000E03M003	0.3m	50	1200062071	803000E03M060	6m	87	1200650954	808000P02M060	6m
16	1200060113	803000E03M030	3m	51	1200062098	803000P03M006	0.6m	88	1200650955	808000P02M080	8m
18	1200060116	803000E03M0505	5m	52	1200062130	804000E03M050H	5m	89	1200650956	808000P02M0801	8m
19	1200060117	803000E03M1005	10m	53	1200062167	804000P03M100H	10m	90	1200650957	808000P02M100	10m
20	1200060119	803000E03M150	15m	54	1200062264	804000E03M1505	15m	91	1200651769	803000P03M050G	5m
21	1200060121	803000E03M200	20m	55	1200062347	804000P03M050H	5m	92	1200651780	804000P03M050G	5m
22	1200060124	803000E03M2505	25m	56	1200062521	805000P03M030	3m	93	1200651782	804000P03M100	10m
23	1200060152	803000P03M010	1m	57	1200062772	803000P03M250	25m	94	1200651792	805000P03M050	5m
24	1200060153	803000P03M030	3m	58	1200062811	803000P03M100H	10m	95	1200651794	808000P02M010	1m
25	1200060157	803000P03M150	15m	59	1200062853	804000P03M150	15m	96	1200651795	808000P02M070	7m
26	1200060158	803000P03M200	20m	60	1200062866	804000E03M020H	2m	97	1200651817	808000P02M200	20m
27	1200060426	804000E03M010	1m	61	1200062992	804000E03M200H	20m	98	1200651818	808000P02M250	25m
28	1200060427	804000E03M0201	**	62	1200063121	804000P03M0053	0.5m	99	1200651820	808000P02M300	30m
29	1200060428	804000E03M030		63	1200063224	804000E03M003	0.3m	100	1200651978	805000E03M050	5m
30	1200060429	804000E03M0501	*	65	1200063314	805000E03M010	1m	101	1200652143	804000P03M040	4m
31	1200060430	804000E03M0505	5m	66	1200063402	804000P03M003	0.3m	102	1200652144	804000P03M060	6m
32	1200060431	804000E03M150	15m	67	1200063407	804000E03M1001	*	103	1200652154	805000P03M060	6m
33	1200060432	804000E03M200	20m	68	1200063415	803000P03M0707	7m	104	1200655073	808000P02M003	0.3m
34	1200060456	804000P03M0201	2m	69	1200063443	804000E03M030H	3m	105	1200655081	805000E03M150	15m
35	1200060457	804000P03M030	3m	70	1200063647	804000E03M2001	20m				

NOTES:

*

 - Part No. with Yellow PVC overmolding

**

 - Part No. with Black PVC overmolding

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DIMENSION UNITS

SCALE

mm

1:1

GENERAL TOLERANCES
(UNLESS SPECIFIED)

ANGULAR TOL

4 PLACES

3 PLACES

2 PLACES

1 PLACE

0 PLACES

±

1.0 °

±

±

0.05

±

0.3

±

0.5

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

THIRD ANGLE PROJECTION

DRAWING

A3-SIZE

SERIES

120065

CURRENT REV DESC: NEW PN ADD TO DRAWING

EC NO: 726420

DRWN: RSILLER

CHK'D: THAERDT

APPR: THAERDT

2022/10/28

2022/10/28

2022/10/28

INITIAL REVISION:

DRWN: JMARSZALEK

APPR: RSILLER

2016/01/11

2016/04/08

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A11

MATERIAL NUMBER

CUSTOMER

3 OF 4

DOCUMENT STATUS

P1

RELEASE DATE

2022/10/28

12:26:20

9

8

7

6

5

4

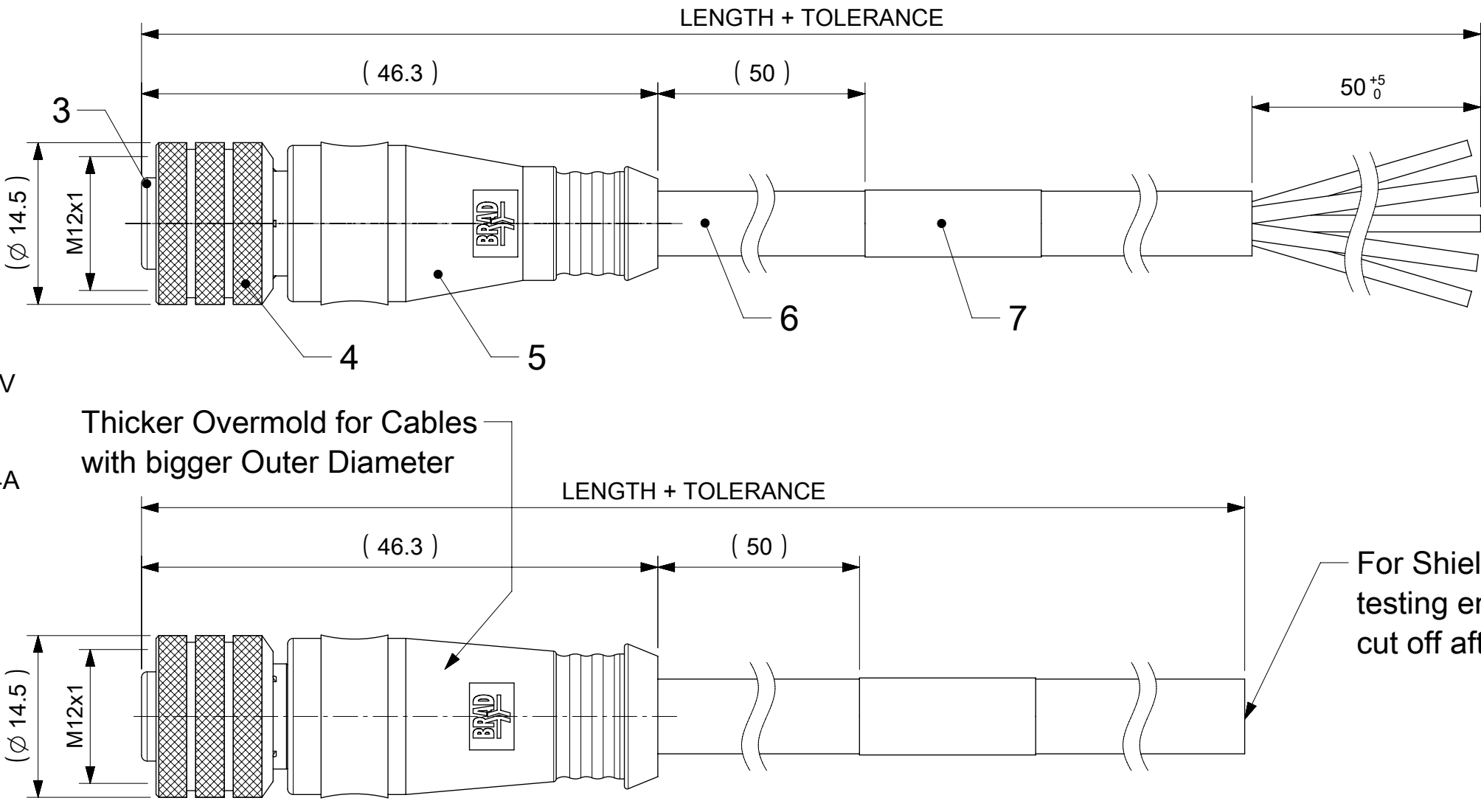
3

2

1

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



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

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

7	1	LABEL YELLOW	VINYL	---		
	-	PRINTING FOR CABLES lxx	---	---		
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		CURRENT REV DESC: REMOVED OBSOLETE PART NUMBER AS PER PCN#510807.				
SCALE						
mm		molex				
2:1						
GENERAL TOLERANCES (UNLESS SPECIFIED)		CSE M12 XP AC FE STR XM SE UNSH				
ANGULAR TOL ± 1.0 °						
4 PLACES ±		EC NO: 726454 DRWN: LIKITV 2022/09/28 CHK'D: GGA 2022/11/30 APPR: GGA 2022/11/30				
3 PLACES ±						
2 PLACES ± 0.05		PRODUCT CUSTOMER DRAWING				
1 PLACE ± 0.3						
0 PLACES ± 0.5		DOCUMENT NUMBER 1200658605				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						
THIRD ANGLE PROJECTION		DRAWING	SERIES	DOC TYPE	DOC PART	REVISION
		A3-SIZE	120065	PSD	000	A6
				SHEET NUMBER		
				1 OF 4		
				GENERAL MARKET		

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

80X000XX

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

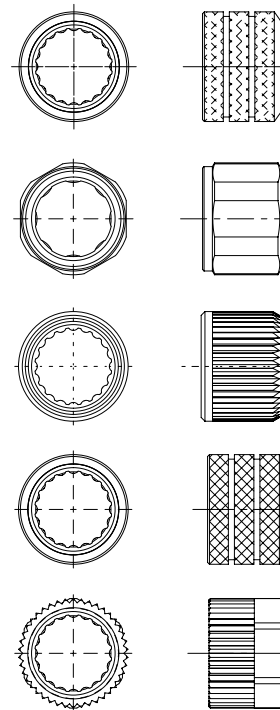
OPTIONS

H= 2 pcs. of I/D Carrier
PVC Transparent
(Cables lxx & P82 always
with 2 pcs. of I/D Carrier
even if no H in
Engineering No.)

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

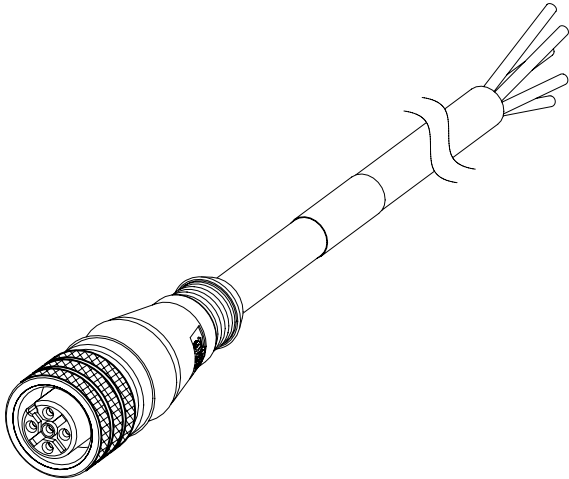
Coupling Nut:
Blank (Standard) & 3=Knurled Brass Ni Plated
1=Hexagonal Stainless steel
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated
Blank=7 for cables I20, I26, K03, K05, P82, S26
9=Knurled / Hexagonal Brass Ni Plated SW13

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	0.34mm²	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



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

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DIMENSION UNITS

SCALE

mm1:1

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 OBSOLETE PART NUMBER AS PER PCN#510807.

EC NO: 726454
DRWN: LIKITV
CHK'D: GGA
APPR: GGA

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

2022/09/28
2022/11/30
2022/11/30
2016/01/12
2016/04/08

DOCUMENT NUMBER
1200658605

DOC TYPE
PSD

DOC PART
000

REVISION
A6

MATERIAL NUMBER
SEE PART LIST

CUSTOMER
GENERAL MARKET

SHEET NUMBER
2 OF 4

F

EDCB

A

1

A

1

