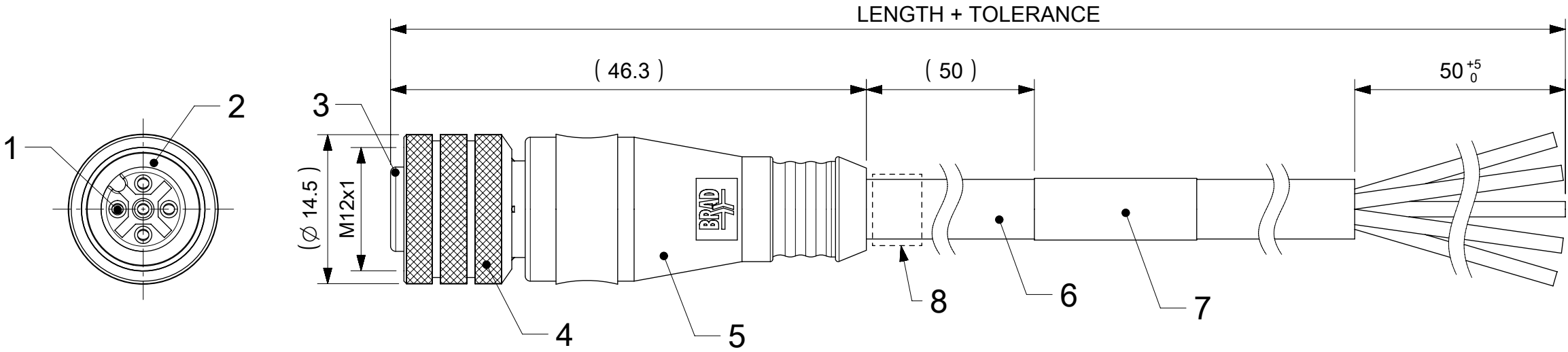


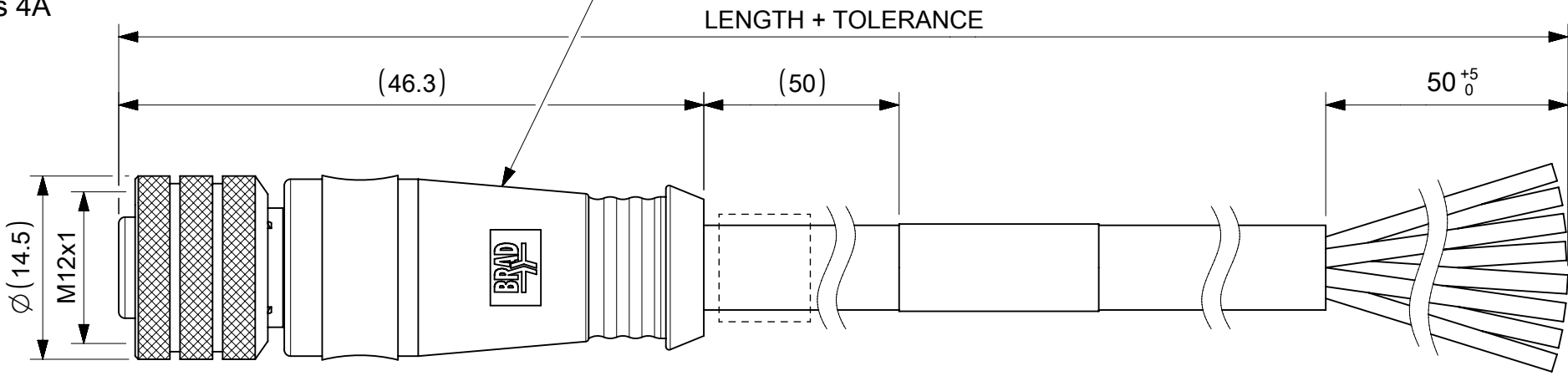
FEMALE PLUG M12 STRAIGHT



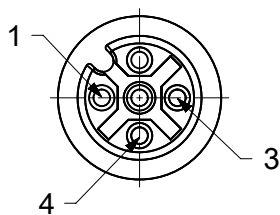
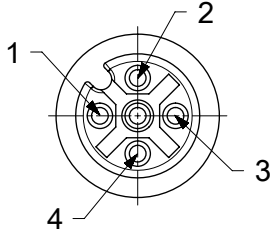
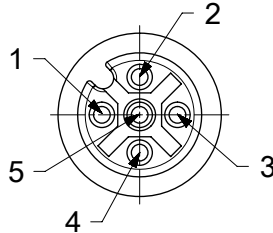
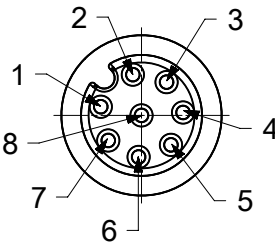
NOTES:

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

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
ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH

FUNCTIONAL SYMBOLS

0

mm

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

DIVISIONAL SYMBOLS

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

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

CURRENT REV DESC: NEW PN ADDED

EC NO: 682469
DRWN: RSILLER
CHK'D: THAERDT
APPR: THAERDT

2021/10/22
2021/10/26
2021/10/26

INITIAL REVISION:
DRWN: JMARSZALEK
APPR: RSILLER

2016/01/11
2016/04/08

molex

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A8

120065

SEE SHEET 3-4

GENERAL MARKET

1 OF 4

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

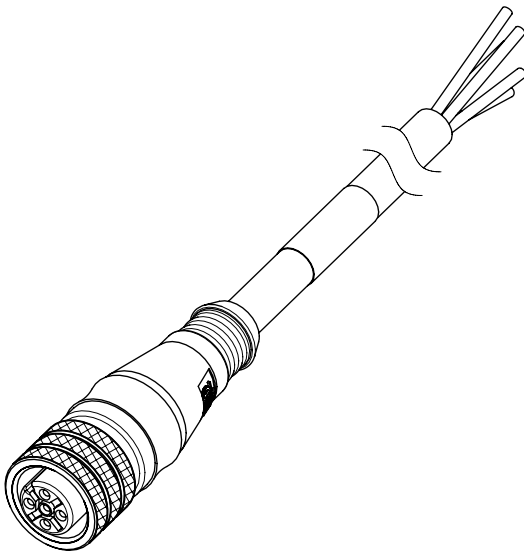
COUPLING NUTS

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

FUNCTIONAL SYMBOLS

$\sqrt{A}$

$\sqrt{E}$

$\sqrt{E}$

DIVISIONAL SYMBOLS

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

DIMENSION UNITS

SCALE

1:1

mm

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 ADDED

EC NO: 682469

DRWN: RSILLER

CHK'D: THAERDT

APPR: THAERDT

INITIAL REVISION:

DRWN: JMARSZALEK

APPR: RSILLER

THIRD ANGLE PROJECTION

DRAWING

SERIES

MATERIAL NUMBER

CUSTOMER

SHEET NUMBER

2021/10/22

2021/10/26

2021/10/26

2016/01/11

2016/04/08

2021/10/22

2021/10/26

2021/10/26

2016/01/11

2016/04/08

A3-SIZE

120065

SEE SHEET 3-4

GENERAL MARKET

2 OF 4

moLEX

CSE M12 XP AC FE STR XM SE UNSH

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER

1200651978

DOC TYPE

PSD

DOC PART

000

REVISION

A8

PART LIST

No.	Part No.	Engineering No.	Cable Length
1	1200060001	803000E03M020	2m
2	1200060002	803000E03M050	5m
3	1200060003	803000E03M100	10m
4	1200060004	803000P03M020	2m
5	1200060005	803000P03M050	5m

No.	Part No.	Engineering No.	Cable Length
36	1200060458	804000P03M0501	5m
37	1200060461	804000P03M200	20m
38	1200060634	805000E03M020	2m
39	1200060638	805000E03M100	10m
40	1200060646	805000P03M020	2.2m

No.	Part No.	Engineering No.	Cable Length
71	1200063673	803000P03M1001	10m
72	1200063779	805000E03M300	30m
73	1200063940	804000P03M0051	0.5m
74	1200064033	804000P03M120	12m
75	1200064032	803000P03M020	2.2m

No.	Part No.	Engineering No.	Cable Length
106	1200658008	804000H09M050H	5m
107	1200658009	804000H09M100H	10m
108	1200658020	805000P03M040	4m
109	1200658021	808000P02M150	15m
110	1200658022	808000P02M030	3m

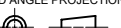
5	1200060005	803000P03M050		5m
6	1200060006	803000P03M100		10m
7	1200060014	804000E03M020		2m
8	1200060015	804000E03M050		5m
9	1200060016	804000E03M100		10m
10	1200060018	804000P03M020		2m
11	1200060019	804000P03M050		5m
12	1200060027	803000E03M006		0.6m
13	1200060032	804000E03M005		0.5m
14	1200060034	804000P03M025		2.5m
15	1200060107	803000E03M003		0.3m
16	1200060113	803000E03M030		3m
17	1200060116	803000E03M0505		5m
18	1200060117	803000E03M1005		10m
19	1200060119	803000E03M150		15m
20	1200060121	803000E03M200		20m
21	1200060124	803000E03M2505		25m
22	1200060152	803000P03M010		1m
23	1200060153	803000P03M030		3m
24	1200060157	803000P03M150		15m
25	1200060158	803000P03M200		20m
26	1200060426	804000E03M010		1m
27	1200060427	804000E03M0201	**	2m
28	1200060428	804000E03M030		3m
29	1200060429	804000E03M0501	*	5m
30	1200060430	804000E03M0505		5m
31	1200060431	804000E03M150		15m
32	1200060432	804000E03M200		20m
33	1200060456	804000P03M0201		2m
34	1200060457	804000P03M030		3m

40	1200060646	805000P03M003	0.3m
41	1200060647	805000P03M020	2m
42	1200060649	805000P03M100	10m
43	1200061337	804000E03M0205	2m
44	1200061431	805000P03M150	15m
45	1200061528	804000E03M250	25m
46	1200061765	803000P03M002	0.2m
47	1200061785	804000P03M006	0.6m
48	1200061913	804000E03M300	30m
49	1200061958	803000E03M021	2.1m
50	1200062071	803000E03M060	6m
51	1200062098	803000P03M006	0.6m
52	1200062130	804000E03M050H	5m
53	1200062167	804000P03M100H	10m
54	1200062264	804000E03M1505	15m
55	1200062347	804000P03M050H	5m
56	1200062521	805000P03M030	3m
57	1200062772	803000P03M250	25m
58	1200062811	803000P03M100H	10m
59	1200062853	804000P03M150	15m
60	1200062866	804000E03M020H	2m
61	1200062992	804000E03M200H	20m
62	1200063121	804000P03M0053	0.5m
63	1200063224	804000E03M003	0.3m
65	1200063314	805000E03M010	1m
66	1200063402	804000P03M003	0.3m
67	1200063407	804000E03M1001	* 10m
68	1200063415	803000P03M0707	7m
69	1200063443	804000E03M030H	3m
70	1200063647	804000E03M2001	20m

75	1200064093	803000P03M032	3.2m
76	1200064292	805000P03M200	20m
79	1200064422	804000E03M120	12m
80	1200064434	804000H09M050G	5m
81	1200065004	805000P03M0201	2m
82	1200065006	804000H09M250G	25m
83	1200065012	803000P03M030G	3m
84	1200650951	808000P02M020	2m
85	1200650952	808000P02M040	4m
86	1200650953	808000P02M050	5m
87	1200650954	808000P02M060	6m
88	1200650955	808000P02M080	8m
89	1200650956	808000P02M0801	8m
90	1200650957	808000P02M100	10m
91	1200651769	803000P03M050G	5m
92	1200651780	804000P03M050G	5m
93	1200651782	804000P03M100	10m
94	1200651792	805000P03M050	5m
95	1200651794	808000P02M010	1m
96	1200651795	808000P02M070	7m
97	1200651817	808000P02M200	20m
98	1200651818	808000P02M250	25m
99	1200651820	808000P02M300	30m
100	1200651978	805000E03M050	5m
101	1200652143	804000P03M040	4m
102	1200652144	804000P03M060	6m
103	1200652154	805000P03M060	6m
104	1200655073	808000P02M003	0.3m
105	1200655081	805000E03M150	15m

110	1200658022	808000P02M030		3m
111	1200658064	804000P03M010		1m
112	1200658081	805000E03M200		20m
113	1200658165	805000E03M030		3m
114	1200658172	805000H09M020		2m
115	1200658173	805000H09M050		5m
116	1200658174	805000H09M100		10m
117	1200658175	803000H09M020		2m
118	1200658176	803000H09M050		5m
119	1200658177	803000H09M100		10m
120	1200658178	804000H09M020		2m
121	1200658179	804000H09M050		5m
122	1200658190	804000H09M100		10m
124	1200658197	805000P03M010		1m
125	1200658208	805000E03M0061	*	0.6m
126	1200658210	805000E03M0501	*	5m
127	1200658219	803000E03M0201	*	2m
128	1200658224	808000E02M050		5m
129	1200658228	804000E03M3001	*	30m
130	1200658244	808000H08M050		5m
131	1200658264	808000H08M100		10m
133	1200658277	808000E02M020		2m
134	1200658278	808000E02M100		10m
135	1200658288	804000E03M050G		5m
136	1200658309	808000E02M0501		5m
137	1200658321	804000P03M005		0.5m
138	1200658331	805000E03M050H		5m
139	1200658350	803000E03M1001	*	10m

<u>NOTES:</u> * - Part No. with Yellow PVC overmolding ** - Part No. with Black PVC overmolding	<table border="1"> <tr> <td data-bbox="1825 1587 1902 1591">FUNCTIONAL SYMBOLS</td><td colspan="3" data-bbox="1902 1587 2878 1591">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr> <tr> <td data-bbox="1825 1591 1902 1598">VEZ</td><td data-bbox="1902 1591 2018 1598">DIMENSION UNITS</td><td data-bbox="2018 1591 2074 1598">SCALE</td><td data-bbox="2074 1591 2878 1598">CURRENT REV DESC: NEW PN ADDED</td></tr> <tr> <td data-bbox="1825 1598 1902 1602"></td><td data-bbox="1902 1598 2018 1602">mm</td><td data-bbox="2018 1598 2074 1602">1:1</td><td data-bbox="2074 1598 2878 1602"> </td></tr> </table>	FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			VEZ	DIMENSION UNITS	SCALE	CURRENT REV DESC: NEW PN ADDED		mm	1:1	
FUNCTIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
VEZ	DIMENSION UNITS	SCALE	CURRENT REV DESC: NEW PN ADDED										
	mm	1:1											

FUNCTIONAL SYMBOLS  = 0  = 0  = 0 DIVISIONAL SYMBOLS	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						
	DIMENSION UNITS			SCALE			CURRENT REV DESC: NEW PN ADDED						molex CSE M12 XP AC FE STR XM SE UNSH										
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	GENERAL TOLERANCES (UNLESS SPECIFIED)																						
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	4 PLACES						EC NO: 682469						PRODUCT CUSTOMER DRAWING										
	3 PLACES			±			DRWN: RSILLER 2021/10/22																
	2 PLACES			± 0.05			CHK'D: THAERDT 2021/10/26																
	1 PLACE			± 0.3			APPR: THAERDT 2021/10/26						DOCUMENT NUMBER 1200651978										
	0 PLACES			± 0.5			INITIAL REVISION: DRWN: JMARSZALEK 2016/01/11 APPR: RSILLER 2016/04/08												DOC TYPE PSD		DOC PART 000		REVISION A8
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						THIRD ANGLE PROJECTION 			DRAWING A3-SIZE			SERIES 120065			MATERIAL NUMBER SEE SHEET 3-4			CUSTOMER GENERAL MARKET			SHEET NUMBER 3 OF 4		

