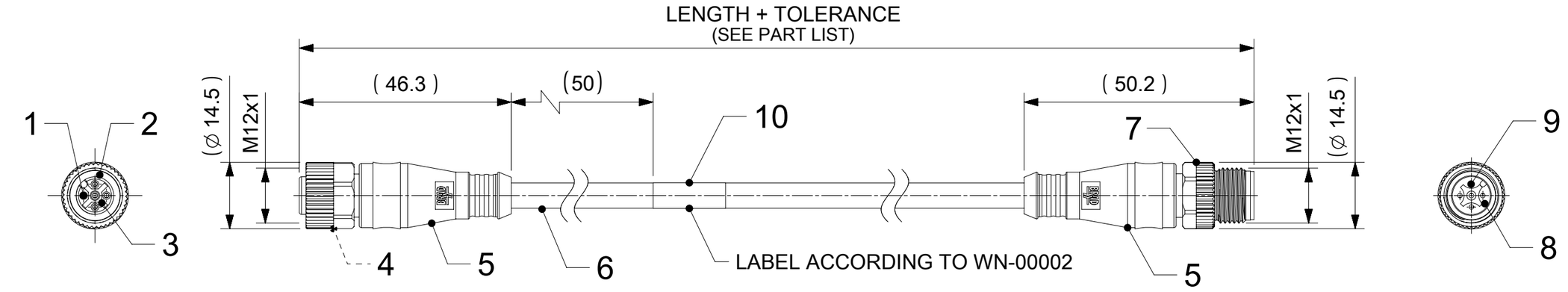
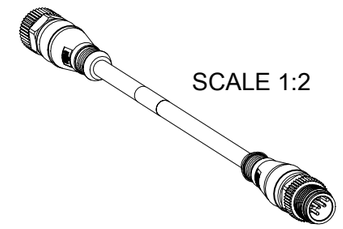
FEMALE PLUG M12 STRAIGHT TO MALE PLUG M12 STRAIGHT





NOTES:

CONTACT CURRENT RATING: 3-5 POLES 4A
8 POLES 2A

VOLTAGE RATING: 3-4 POLES 250V
5 POLES 60V DC
8 POLES 30V

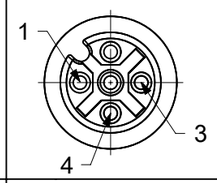
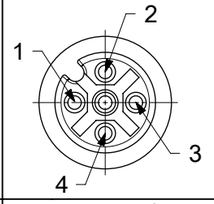
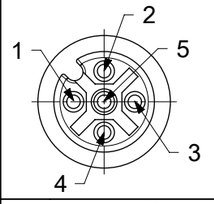
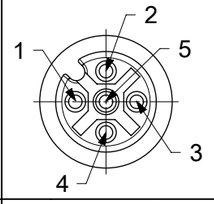
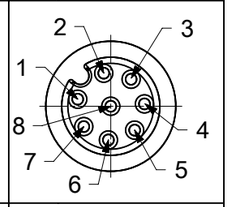
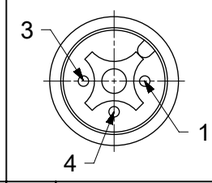
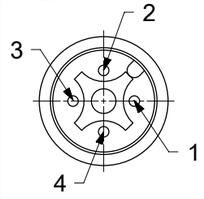
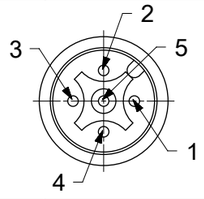
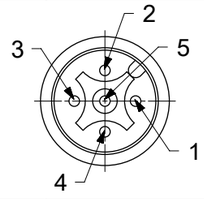
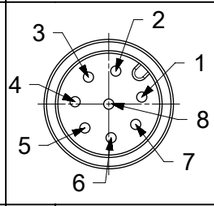
PROTECTION CLASS: IP67 IN MATED AND LOCKED POSITION

TEMPERATURE: -25°C / +85°C

INSULATION RESISTANCE: 10^8 Ω MIN.

MATING CYCLES: MIN. 100

CONTACT POSITION FRONT VIEW:

	3 POLES	4 POLES	5 POLES	5 POLES	8 POLES
CABLE	B30, B55	B30, B33, B36, B55	B30, B33, B36, B55	B42	B41, B49
FEMALE					
MALE					

CONNECTIONS	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE	PIN	WIRE
	1	BROWN	1	BROWN	1	BROWN	1	WHITE	1	WHITE
	2	---	2	WHITE	2	WHITE	2	BLUE	2	BROWN
	3	BLUE	3	BLUE	3	BLUE	3	BLACK	3	GREEN
	4	BLACK	4	BLACK	4	BLACK	4	GREEN/ YELLOW	4	YELLOW
	5	---	5	---	5	GREY	5		5	GREY
									6	PINK
									7	BLUE
									8	RED

CODING REQUIRED TO IEC 61076-2-101

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/15 22:07:19

FOR OPTIONS SEE - NUMERICAL CODE - ON SHEET 2

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
10	1	LABEL OR PRINTING	VINYL / ---	---
9	3 / 4 / 5	CONTACT M12 MALE	COPPER	SELECTIVE GOLD OVER NICKEL
	8		BRASS	SELECTIVE GOLD OVER NICKEL
8	1	INSERT MALE BLACK	TPU	---
7	1	COUPLING NUT MALE	SEE SHEET 2	SEE SHEET 2
6	-	CABLE	SEE SHEET 2	---
5	-	OVERMOULDING	TPU	SEE SHEET 2
4	1	COUPLING NUT FEMALE	SEE SHEET 2	SEE SHEET 2
3	1	INSERT FEMALE BLACK	PUR	---
2	1	O-RING RED	FPM	---
1	3 / 4 / 5	CONTACT M12 FEMALE	BRONZE	SELECTIVE GOLD OVER NICKEL
	8		BRASS	SELECTIVE GOLD OVER NICKEL

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, 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: ADDED NEW PN 1200669974 & 1200669975 TO THE TABLE

EC NO: 834260
DRWN: VBASUTHKARP 2025/09/10
CHK'D: APAWLAK01 2025/09/11
APPR: HKNEELAND 2025/09/15

INITIAL REVISION:
DRWN: JMARSZALEK 2016/07/22
APPR: RSILLER 2016/08/29

molex

CSE M12 XP AC FE STR WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668993	PSD	000	B1

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

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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=M12x1
Double ended

Poles:
3=3 Poles
4=4 Poles
5=5 Poles
8=8 Poles

Heads style:
030=Plug Female Straight
to Plug Male Straight

Cable type: See Table

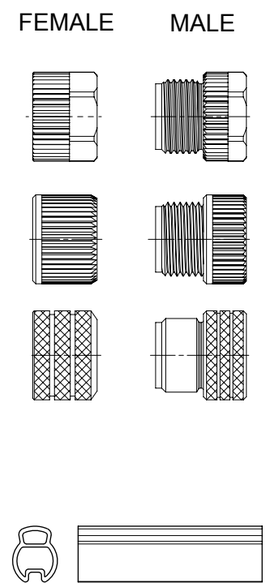
Units:
M=Meter
C=Centimeter
T=10x Meter

Length
Examples:
005=0.5 units
010=1 units
020=1 units
050=5 units
100=10 units
150=15 units
200=20 units

Overmold color:
Blank (Standard)=Black
A=Grey / G=Black / Y=Yellow / R=Red

Coupling Nut:
Blank (Standard)=Knurled/Hex Brass, Ni Plated
5=Knurled Derlin
7=Knurled Brass Ni Plated, Teflon Coated

H= 2 pcs. of I/D Carrier PVC Transparent
(Cable B36 always with
2 pcs. I/D Carrier)



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: TEMP. / BENDING RADIUS	DRAG CHAIN	CABLE PRODUCT SPECIFICATION	CABLE SPEC. DRAWING
B30	3 / 4 / 5	0.34mm²	TPU Black	UL 21215/758	C22.2 I/II A/B 80°/600V	-40°C to +90°C 5xO.D.	-25°C to +80°C 7.5xO.D.	-5°C to +60°C 7.5xO.D.	up to 5 000 000 cycles at temp 20°C	1552200001	SD-120209-001
B33	4 / 5	0.34mm²	TPU Gray								SD-120209-001
B36	4 / 5	0.34mm²	TPU Orange								SD-120209-001
B41	8	0.25mm²	TPU Black								SD-120209-006
B42	5	0.34mm²	TPU Black								SD-120209-001
B49	8	0.25mm²	TPU Orange								SD-120209-006
B55	3 / 4 / 5	0.34mm²	TPU Yellow								n/a

CABLE LENGTH TOLERANCES

LENGTH	TOLERANCE
0m-1m	+40 mm
>1m-5m	+60 mm
>5m-10m	+80 mm
>10m-20m	+140 mm
>20m-30m	+160 mm
>30m	+1% length

FUNCTIONAL SYMBOLS: A = 0, C = 0, P = 0
DIVISIONAL SYMBOLS

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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: ADDED NEW PN 1200669974 & 1200669975 TO THE TABLE

EC NO: 834260
DRWN: VBASUTHKARP 2025/09/10
CHK'D: APAWLAK01 2025/09/11
APPR: HKNEELAND 2025/09/15

INITIAL REVISION:
DRWN: JMARSZALEK 2016/07/22
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE STR WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668993	PSD	000	B1

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

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/15 22:07:19

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PART LIST

MOLEX PN	ENGINEERING No	L [mm]
3P CABLE B30		
1200668889	883030B30M006	600
1200668890	883030B30M010	1000
1200668891	883030B30M020	2000
1200668892	883030B30M030	3000
1200668893	883030B30M050	5000
1200668894	883030B30M100	10000
1200669718	883030B30M150	15000
1200669719	883030B30M200	20000
1200669720	883030B30M250	25000
4P CABLE B30		
1200669157	884030B30M002	200
1200669923	884030B30M003	300
1200669480	884030B30M005	500
1200668817	884030B30M006	600
1200668818	884030B30M010	1000
1200665456	884030B30M010R	1000
1200669521	884030B30M015	1500
1200668819	884030B30M020	2000
1200665457	884030B30M020R	2000
1200669144	884030B30M025	2500
1200668820	884030B30M030	3000
1200665458	884030B30M030R	3000
1200669158	884030B30M030R	3000
1200669181	884030B30M040	4000
1200665459	884030B30M040R	4000
1200668821	884030B30M050	5000
1200665460	884030B30M050R	5000
1200669182	884030B30M060	6000
1200668863	884030B30M070	7000
1200669481	884030B30M080	8000
1200668822	884030B30M100	10000
1200669504	884030B30M120	12000
1200669505	884030B30M140	14000
1200668913	884030B30M150	15000
1200669506	884030B30M160	16000
1200668914	884030B30M200	20000
1200668915	884030B30M250	25000
1200668916	884030B30M300	30000
1200669513	884030B30M400	40000
1200669512	884030B30M550	55000

MOLEX PN	ENGINEERING No	L [mm]
5P CABLE B30		
1200659666	885030B30M005	500
1200656067	885030B30M005H	500
1200668991	885030B30M006	600
1200668992	885030B30M010	1000
1200669242	885030B30M0107	1000
1200669145	885030B30M015	1500
1200668993	885030B30M020	2000
1200659667	885030B30M025	2500
1200668994	885030B30M030	3000
1200669482	885030B30M040	4000
1200668995	885030B30M050	5000
1200669484	885030B30M060	6000
1200669485	885030B30M080	8000
1200668996	885030B30M100	10000
1200669486	885030B30M150	15000
1200669487	885030B30M180	18000
1200669488	885030B30M200	20000
1200669489	885030B30M250	25000
1200669483	885030B30M300	30000
4P CABLE B33		
1200669876	884030B33M003A	300
1200669250	884030B33M005	500
1200669575	884030B33M005A	500
1200669223	884030B33M010	1000
1200669576	884030B33M010A	1000
1200669714	884030B33M015A	1500
1200669224	884030B33M020	2000
1200669577	884030B33M020A	2000
1200669225	884030B33M030	3000
1200669578	884030B33M030A	3000
1200669280	884030B33M040	4000
1200669715	884030B33M040A	4000
1200669226	884030B33M050	5000
1200669579	884030B33M050A	5000
1200669716	884030B33M070A	7000
1200669251	884030B33M100	10000
1200669580	884030B33M100A	10000
1200669619	884030B33M150A	15000
1200669252	884030B33M200	20000
1200669620	884030B33M200A	20000
1200669877	884030B33M250A	25000
1200669256	884030B33M300	30000
1200669874	884030B33M300A	30000
1200669875	884030B33M700A	70000

MOLEX PN	ENGINEERING No	L [mm]
5P CABLE B33		
1200669257	885030B33M005	500
1200669901	885030B33M005A	500
1200669258	885030B33M010	1000
1200669656	885030B33M010A	1000
1200669247	885030B33M020	2000
1200669657	885030B33M020A	2000
1200669253	885030B33M030	3000
1200669658	885030B33M030A	3000
1200669254	885030B33M050	5000
1200669659	885030B33M050A	5000
1200669248	885030B33M100	10000
1200669660	885030B33M100A	10000
1200669661	885030B33M150A	15000
1200669249	885030B33M200	20000
1200669662	885030B33M200A	20000
1200669255	885030B33M300	30000
1200669902	885030B33M300A	30000
1200669903	885030B33M400A	40000
1200669904	885030B33M500A	50000
4P CABLE B36		
1200669524	884030B36M0057H	500
1200669019	884030B36M0057Y	500
1200669562	884030B36M0067Y	600
1200669530	884030B36M0107H	1000
1200669020	884030B36M0107Y	1000
1200669531	884030B36M0157H	1500
1200669021	884030B36M0157Y	1500
1200669525	884030B36M0207H	2000
1200669022	884030B36M0207Y	2000
1200669526	884030B36M0307H	3000
1200669023	884030B36M0307Y	3000
1200669024	884030B36M0407Y	4000
1200669532	884030B36M0507H	5000
1200668859	884030B36M0507Y	5000
1200669025	884030B36M0607Y	6000

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B36		
1200669563	884030B36M0707Y	7000
1200669026	884030B36M0807Y	8000
1200669533	884030B36M1007H	10000
1200668860	884030B36M1007Y	10000
1200669027	884030B36M1207Y	12000
1200669028	884030B36M1507Y	15000
1200669029	884030B36M2007Y	20000
1200669030	884030B36M2507Y	25000
1200669031	884030B36M3007Y	30000
5P CABLE B36		
1200669542	885030B36M0057H	500
1200669032	885030B36M0057Y	500
1200669543	885030B36M0107H	1000
1200669033	885030B36M0107Y	1000
1200669544	885030B36M0157H	1500
1200669545	885030B36M0207H	2000
1200669034	885030B36M0207Y	2000
1200669546	885030B36M0307H	3000
1200669035	885030B36M0307Y	3000
1200669036	885030B36M0407Y	4000
1200669547	885030B36M0507H	5000
1200669037	885030B36M0507Y	5000
1200669038	885030B36M0607Y	6000
1200669039	885030B36M0807Y	8000
1200669548	885030B36M1007H	10000
1200669040	885030B36M1007Y	10000
1200669041	885030B36M1207Y	12000
1200669042	885030B36M1507Y	15000
1200669043	885030B36M1807Y	18000
1200669044	885030B36M2007Y	20000
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1200669046	885030B36M3007Y	30000
1200669140	885030B36M8507Y	85000

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/15 22:07:19

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FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FD = 0
DIVISIONAL SYMBOLS

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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: ADDED NEW PN 1200669974 & 1200669975 TO THE TABLE

EC NO: 834260
DRWN: VBASUTHKARP 2025/09/10
CHK'D: APAWLAK01 2025/09/11
APPR: HKNEELAND 2025/09/15

INITIAL REVISION:
DRWN: JMARSZALEK 2016/07/22
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION
DRAWING: A3-SIZE
SERIES: 120066

molex

CSE M12 XP AC FE STR WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668993	PSD	000	B1

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

PART LIST

MOLEX PN	ENGINEERING No	L [mm]	
8P CABLE B41			
1200669974	888030B41M003	300	B1
1200668895	888030B41M006	600	
1200668896	888030B41M010	1000	
1200665461	888030B41M010R	1000	
1200668897	888030B41M020	2000	
1200665462	888030B41M020R	2000	
1200668898	888030B41M030	3000	
1200665463	888030B41M030R	3000	
1200665464	888030B41M040R	4000	
1200668899	888030B41M050	5000	
1200665465	888030B41M050R	5000	
1200669177	888030B41M090	9000	
1200668900	888030B41M100	10000	
1200669567	888030B41M150	15000	
1200669568	888030B41M200	20000	
1200669975	888030B41M300	30000	B1
5P CABLE B42			
1200668823	885030B42M006	600	
1200668824	885030B42M010	1000	
1200668825	885030B42M020	2000	
1200668826	885030B42M030	3000	
1200668827	885030B42M050	5000	
1200668828	885030B42M100	10000	
1200659548	885030B42M150	15000	
1200659549	885030B42M200	20000	
8P CABLE B49			
1200669112	888030B49M038Y	3800	

MOLEX PN	ENGINEERING No	L [mm]
4P CABLE B55		
1200669734	884030B55M005Y	500
1200669618	884030B55M010Y	1000
1200669263	884030B55M020Y	2000
1200669264	884030B55M030Y	3000
1200669265	884030B55M040Y	4000
1200669266	884030B55M050Y	5000
1200669267	884030B55M060Y	6000
1200669418	884030B55M070Y	7000
1200657251	884030B55M080Y	8000
1200657252	884030B55M090Y	9000
1200669268	884030B55M100Y	10000
1200669269	884030B55M120Y	12000
1200669270	884030B55M150Y	15000
1200657253	884030B55M160Y	16000
1200669271	884030B55M200Y	20000
1200669742	884030B55M250Y	25000
1200669743	884030B55M300Y	30000
5P CABLE B55		
1200669663	885030B55M010Y	1000
1200669664	885030B55M020Y	2000
1200669665	885030B55M030Y	3000
1200669666	885030B55M050Y	5000
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FUNCTIONAL SYMBOLS
FA = 0
FC = 0
FP = 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
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: ADDED NEW PN 1200669974 & 1200669975 TO THE TABLE

EC NO: 834260
DRWN: VBASUTHKARP 2025/09/10
CHK'D: APAWLAK01 2025/09/11
APPR: HKNEELAND 2025/09/15

INITIAL REVISION:
DRWN: JMARSZALEK 2016/07/22
APPR: RSILLER 2016/08/29

THIRD ANGLE PROJECTION | DRAWING: A3-SIZE | SERIES: 120066

molex

CSE M12 XP AC FE STR WSOR MA STR XM DE

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1200668993	PSD	000	B1

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

DOCUMENT STATUS	P1	RELEASE DATE	2025/09/15 22:07:19

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