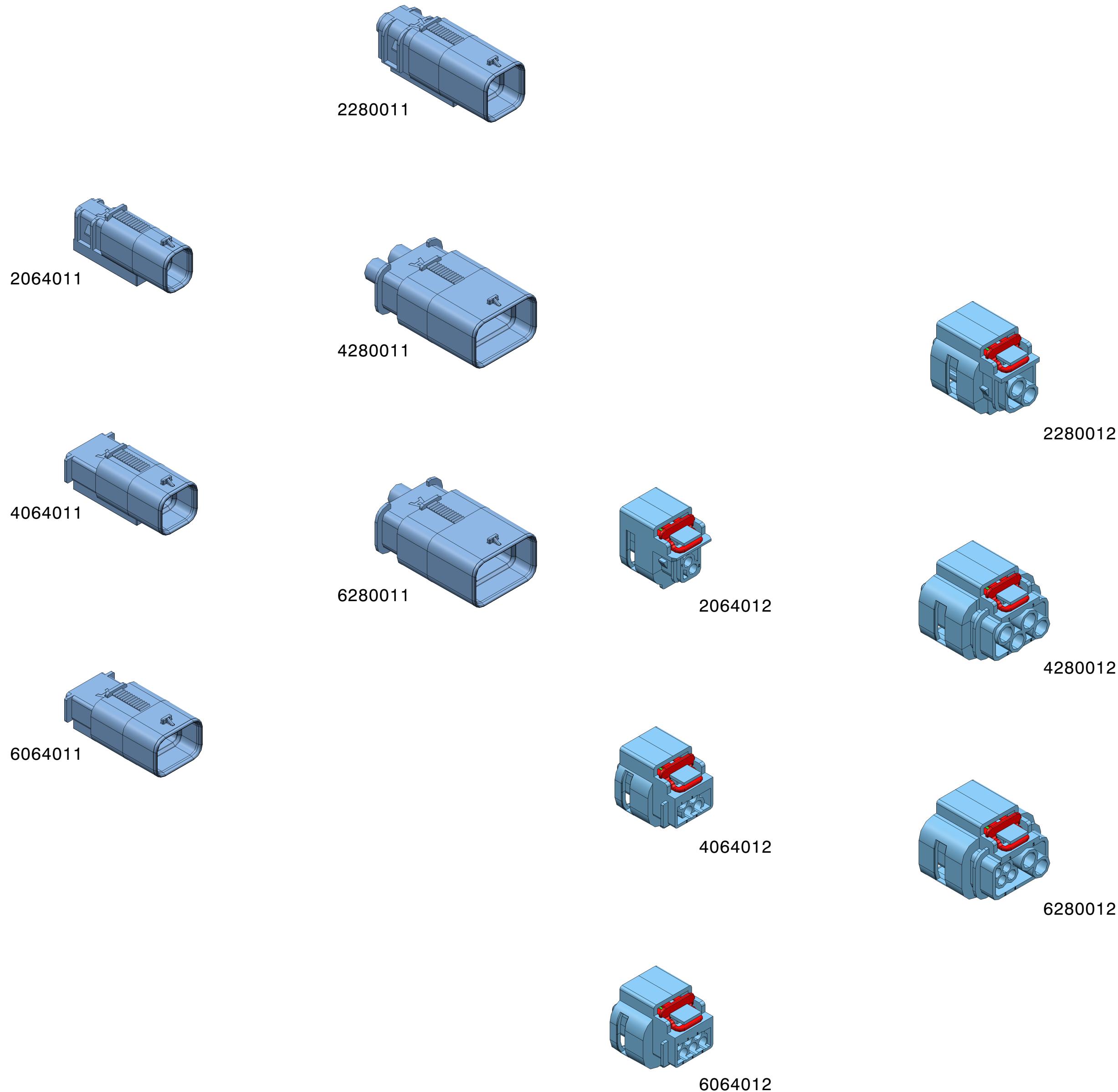


LOW VOLTAGE CONNECTOR STANDARD

Project: VARIOUS

CA	DATE	REV	DESCRIPTION	DRWN
CA-00243183	04JUN2025	01	MASS PRODUCTION CONNECTOR RELEASE	J.PANG
CA-00248585	28JUN2025	02	MINOR DRAWING CORRECTIONS	J.PANG
CA-00252280	18AUG2025	03	2LP KEY C SYMMETRICAL KEY REMOVAL	J.PANG
CA-00258413	18SEP2025	04	TPA LOCK DIRECTION ADDED. VIBRATION CLASS TO V3. 280 MALE TERMINAL TABLE CORRECTION.	J.PANG



CATEGORY	PART NUMBER FEMALE CONNECTOR	PART NUMBER MALE CONNECTOR	STYLE CODE 1 (COLOR)	STYLE CODE 2 (KEY)	PEDIGREE	INTERFACE SPECIFICATION	PEDIGREE	TAB QUANTITY 0.64X0.64MM	TAB QUANTITY 2.8X0.8MM
LOW POWER (LP)	2064012	2064011	0 - BLUE 1 - BLACK	C A B C D	C	2064000-TS	B	2	0
	4064012	4064011			C	4064000-TS	B	4	0
	6064012	6064011			C	6064000-TS	B	6	0
HIGH POWER (HP)	2280012	2280011	C D	C D	C	2280000-TS	B	0	2
	4280012	4280011			C	4280000-TS	B	0	4
	6280012	6280011			C	6280000-TS	B	4	2

LICENSING
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REGULATORY COMPLIANCES
R1. ALL MATERIALS AND COATINGS MUST COMPLY WITH ALL APPLICABLE INTERNATIONAL ENVIRONMENTAL RELATED REGULATIONS, INCLUDING BUT NOT LIMITED TO EU DIRECTIVES WYTA, ELV, RRR, RoHS, WEEE, REACH AND BATTERY DIRECTIVE 2006/66/EC, WHICH ARE DESCRIBED IN DETAIL AT THE GADS LIST IN ITS LATEST VERSION AT THE TIME OF USE. (http://www.gads1.org). REFER TO TESLA INC. PART NUMBER 00000000 FOR DETAILS.
R2. ALL MATERIALS AND COATINGS MUST COMPLY WITH EU DIRECTIVE 2000/53/EC (ELV DIRECTIVE).
R3. COMPONENT TO CONFORM TO EU DIRECTIVE 2003/138/EC (MATERIAL CODING DIRECTIVE).
R4. TOOL TO USE REMOVABLE MOLD INSERT(S) AT INDICATED AREA(S) WILL CONTAIN PART DATA INDICATING THE MOLD NUMBER, MANUFACTURE DATE, MANUFACTURED DATE, RECYCLING MARK, TESLA LOGO AND CONTRACT MANUFACTURER ID.
R5. MATERIAL MUST COMPLY WITH FMVSS 303 OR BETTER

GENERAL NOTES
G1. THE MASTER SOURCE OF INFORMATION FOR THIS DOCUMENT IS A COMPUTER DATABASE.
G2. 3D CAD DATA SUPPLIED IS TO BE USED TO PRODUCE PRODUCTION TOOLING AND FOR INSPECTION.
G3. PRINTED DOCUMENT IS UNCONTROLLED - DOCUMENT OBSOLETE WHEN PRINTED.
G4. THIS ASSEMBLY SHALL COMPLY WITH GRADE B BATCH TRACEABILITY REQUIREMENTS PER TESLA INC SPECIFICATION BMS-000015.
G5. PART NUMBER AND REV. MUST BE MARKED ON PART NUMBER IN THE AREA SHOWN PER TESLA PART LABELING SPECIFICATION BMS-000007.
G6. THIS COMPONENT MUST BE PACKAGED IN ACCORDANCE WITH TESLA INC SPECIFICATION BMS-000000.
G7. COMPONENTS MUST BE PLACED IN POLY BAG. BAG TO BE MARKED WITH PART NUMBER, REVISION, QUANTITY, P.O. NUMBER, MANUFACTURING DATE AND VENDOR.
G8. COMPONENTS TO BE PLACED IN CARTON MARKED FOR SHIPPING IN ACCORDANCE WITH TESLA INC. SPECIFICATION BMS-0000093.
G9. ANY PARTS THAT ARE CONSTRUCTED TO MANUFACTURE THIS COMPONENT SHALL BE PROPERTY OF TESLA MOTORS, INC., AND SHALL BE PERMANENTLY MARKED WITH "TESLA INC.", TOOLING PART NUMBER AND DATE.
G10. IN ADDITION TO THE DRAWINGS, ALL PARTS SUBJECT TO TESLA SHALL MEET ALL REQUIREMENTS OF: TESLA INC. PART NUMBER 0002948 - LOW VOLTAGE CONNECTOR STANDARD PERMANENT SPECIFICATION TESLA RS-3690003 - 48V CONNECTOR RELIABILITY TEST INSPECTION.
G11. A FULL SHROUD ON THE MATING CONNECTOR AS SHOWN IS REQUIRED TO PREVENT SCREW DAMAGE TO THE HEADER PINS.
G12. CPA TO BE SHIPPED IN DISENGAGED POSITION.

DIMENSIONAL NOTES

D1. INTERPRET SPECIFICATIONS PER GEOMETRIC DIMENSIONING & TOLERANCING ASME Y14.5-2009.
D2. CAD UNITS ARE MILLIMETERS AT 1:1. TOOLING SUPPLIER TO ALLOW FOR MATERIAL SHRINKAGE.
D3. LENGTH DIMENSIONS SPECIFIED IN THE DRAWING VIEWS OF THIS DOCUMENT SUPERSEDE DIMENSIONS PROVIDED IN OTHER DOCUMENTS.
D4. HARDCOPY IS NOT SCALE. DO NOT SCALE IMAGES.
D5. DIMENSIONS ARE THEORETICAL SIZE CORRECTED.
D6. THIS PART HAS BEEN CAD DESIGNED AND TOOLED WITH THE DATUM REFERENCES AS SHOWN. THE DATUM REFERENCES USED ON THIS DRAWING TAKES PRIORITY OVER THE EWP DRAWING GUIDELINE DATUM REFERENCE REQUIREMENT.
D7. SETTING DIMENSIONS INDICATED IN LIGHT BLUE AND MUST BE FREE OF PARTING LINES AND DEFECTS. SURFACE Rz < 2.5μm
D8. PARTING LINE MISMATCH NOT TO EXCEED 0.05mm FLASH NOT TO EXCEED 0.05mm.
D9. ALL RADII 0.25 ±0.25 ±0.25 UNLESS OTHERWISE NOTED.
D10. ALL SURFACES TO BE FREE OF DEFECTS.
D11. TOLERANCES UNLESS OTHERWISE NOTED:

DSIZE +0.250/-0.250
SURFACES WITH ALL TRIM EDGES CIRCULAR FEATURES NON-CIRCULAR FEATURES
BLENDED UNIFORMITY

MATERIAL SPECIFICATIONS

M1. MANUFACTURING PROCESS: INJECTION MOLDING.
M2. REGRIND IS PERMITTED. IF REGRIND IS USED IN PRODUCTION, SAMPLES MADE FROM MAXIMUM INTENDED AMOUNT OF REGRIND MUST BE VALIDATED TO PERFORMANCE REQUIREMENTS SPECIFIED IN THIS DOCUMENT.
M3. CLEANLINESS: PART TO BE FREE OF MOLD RELEASE ON ALL SURFACES.
M4. APPROPRIATE PLASTICIZER, FILLER, COLORANT, AND STABILIZER ADDITIVE, BUT NOT LIMITED TO, SPLASH, INCLUDED PARTICLES, BURNED PLASTIC MARKS AND SIMILAR IMPERFECTIONS.
M5. EJECTOR PIN, PARTING LINE AND GATE LOCATION MUST BE APPROVED BY TESLA INC. DESIGN ENGINEER PRIOR TO MOLD FABRICATION.
M6. NO REGRINDS, REWORKED MATERIALS OR ASSOCIATED PROCESSING MATERIALS WITHOUT THE PRIOR WRITTEN CONSENT OF TESLA INC.

TERMINAL NOTES

T1. RECOMMENDED MATERIAL: COPPER OR CUNISI ALLOY (50% IACS MIN)
T2. RECOMMENDED FINISH: 100% LEAD FREE TIN + NICKEL UNDERPLATING (>20 CYCLES), SILVER + NICKEL UNDERPLATING (<10 CYCLES)
T3. TOL. TO FREE OF BURRS IN EXCESS OF 10% OF MATERIAL THICKNESS UNLESS OTHERWISE SPECIFIED.
T4. LOOSE BURRS OR SLIVERS ARE NOT PERMISSIBLE
T5. PARTS ARE TO BE FREE OF DUST AND CONTAMINANTS TO THE REQUIREMENT OF TESLA INC.
T6. TOTAL TWIST ALONG LENGTH OF TERMINAL NOT TO EXCEED 5° IN EITHER DIRECTION
T8. NO CHANGES SHALL BE MADE TO TERMINAL MATERIAL OR PLATING WITHOUT THE PRIOR WRITTEN CONSENT OF TESLA INC.
T9. MATERIAL AND PLATING SPECIFICATIONS DEPENDENT ON MANUFACTURING AND ASSEMBLY PROCESS
T10. 0.64 TERMINAL MUST FOLLOW ECWAP-001: 064-T002 A BEAM APPLICATION UNLESS OTHERWISE NOTED
T11. 2.8 TERMINAL MUST FOLLOW ECWAP-001: 280-T001 UNLESS OTHERWISE NOTED
T12. 6.3 TERMINAL MUST FOLLOW ECWAP-001: 630-T001 UNLESS OTHERWISE NOTED

CAD FILE NAME	TRACEABILITY GRADE
3SH-07710087	B

DRAWN BY J. Pang DATE 2025-08-18

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MATERIAL	N/A	EST. MASS (g)	N/A
FINISH	N/A	EST. MASS (g)	N/A
THIRD ANGLE PROJECTION DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.			
ITEM NAME	LOW VOLTAGE CONNECTOR STANDARD	SCALE	C
ITEM NUMBER	DRW-00456412	REVISION	C.4
		SHEET	1 of 12

LOW POWER (LP) INTERFACE DIMENSIONS

6064000-TS SHOWN FOR ILLUSTRATION PURPOSES. ALL KEYS SHOWN SUPERIMPOSED.
DIMENSIONS W,X,Y,Z USED TO ESTABLISH MAIN PROFILE. KEYS AND RIBS IGNORED.

DIMENSION W

INTERFACE	PLANE 1	PLANE 2	PLANE 4
2064000-TS			
4064000-TS	13.91	*14.30	14.42
6064000-TS			

* DENOTES NEUTRAL DRAFT PLANE

DIMENSION Y

INTERFACE	PLANE 1	PLANE 2	PLANE 4
2064000-TS	11.21	*11.60	11.72
4064000-TS	15.21	*15.60	15.72
6064000-TS	19.21	*19.60	19.72

* DENOTES NEUTRAL DRAFT PLANE

DIMENSION X

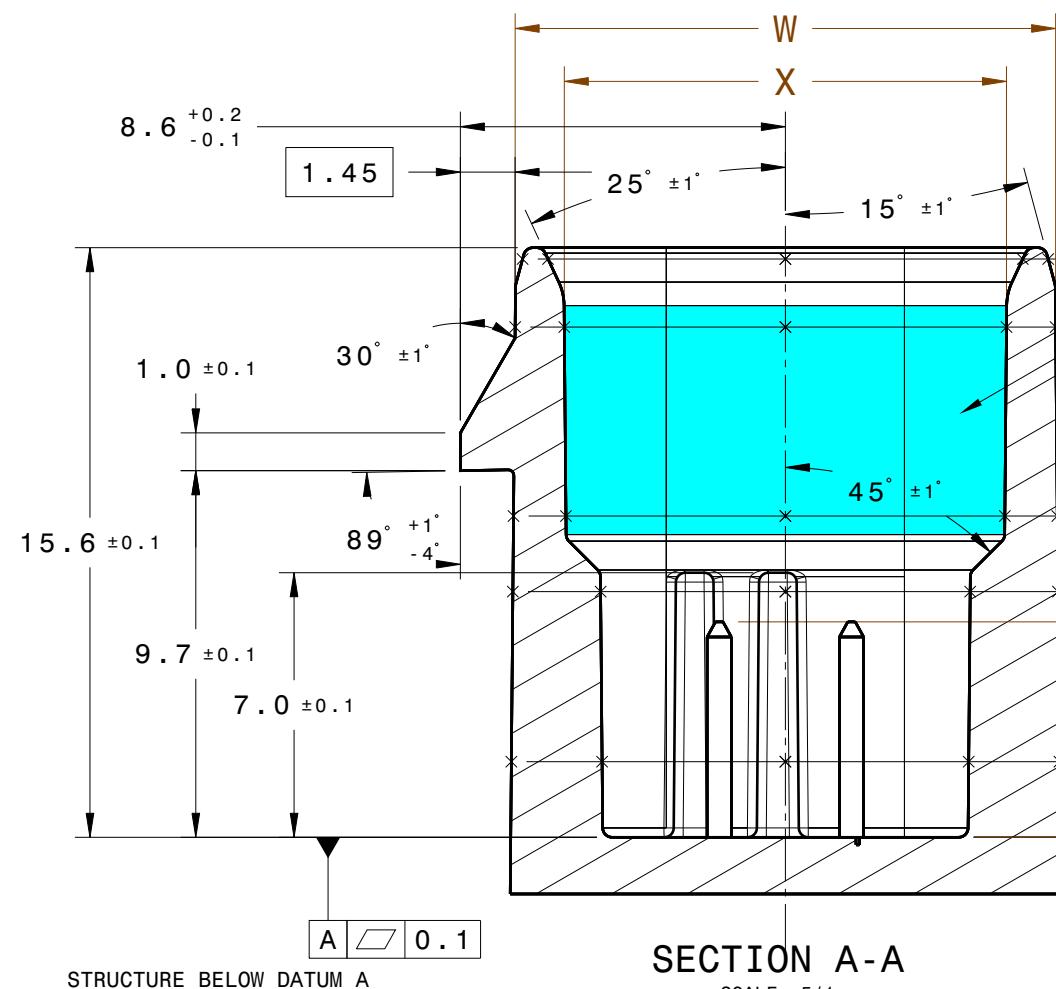
INTERFACE	PLANE 1	PLANE 2	PLANE 3	PLANE 4	PLANE 5
2064000-TS					
4064000-TS	12.56	*11.7	11.61	9.78	*9.70
6064000-TS					

* DENOTES NEUTRAL DRAFT PLANE

DIMENSION Z

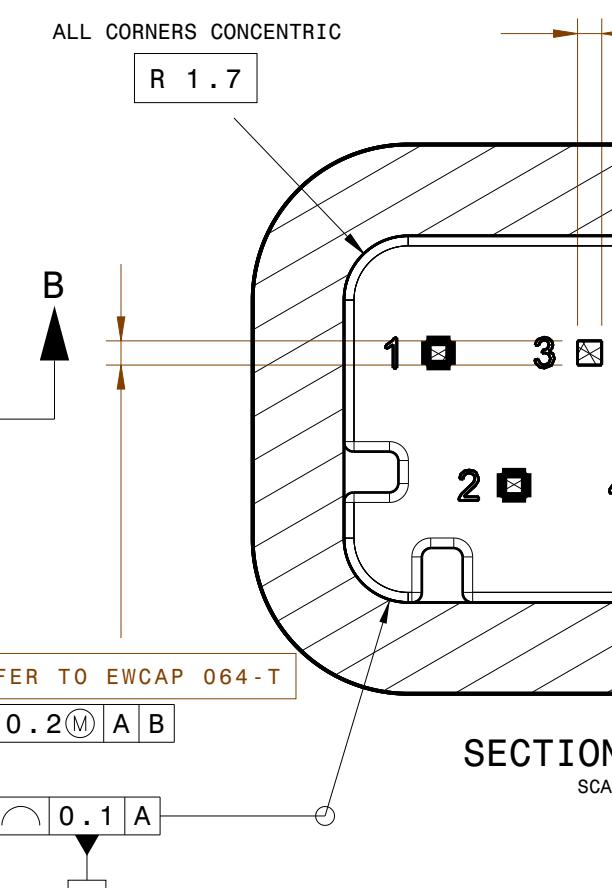
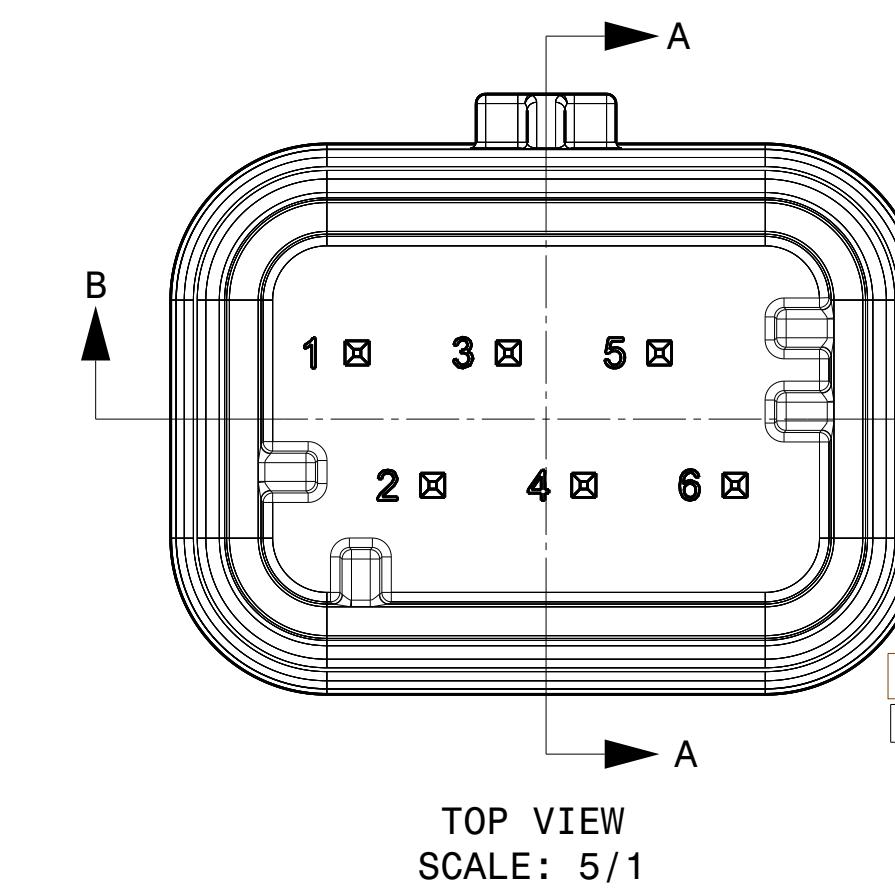
INTERFACE	PLANE 1	PLANE 2	PLANE 3	PLANE 4	PLANE 5
2064000-TS	9.86	*9.00	8.91	7.08	*7.00
4064000-TS	13.86	*13.00	12.91	11.08	*11.00
6064000-TS	17.86	*17.00	16.91	15.08	*15.00

* DENOTES NEUTRAL DRAFT PLANE

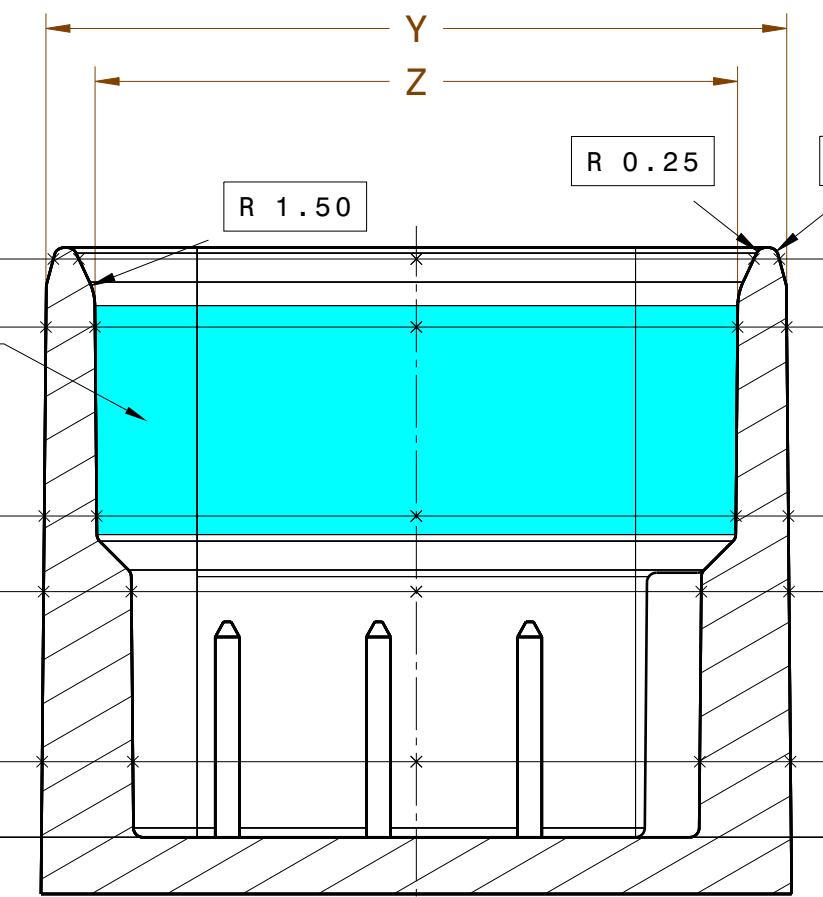


SECTION A-A

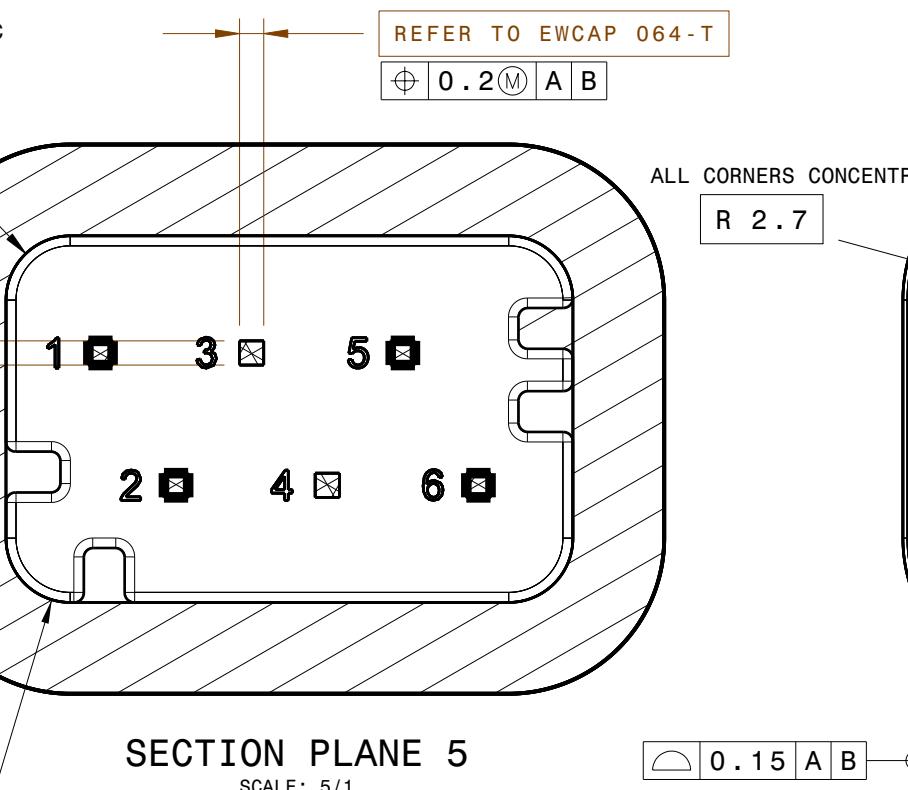
SCALE: 5/1



RIBS IGNORED IN PROFILE MEASUREMENT



2.0
PLANE 5
6.5
PLANE 4
8.5
PLANE 3
13.5
PLANE 2
15.3
PLANE 1



TRUE MEASURED AT TOP OF TERMINAL

TRUE MEASURED AT TOP OF TERMINAL

TYP. 14.7 (LP ONLY) MIN.
TYP. 11.6 (LP ONLY) MIN.

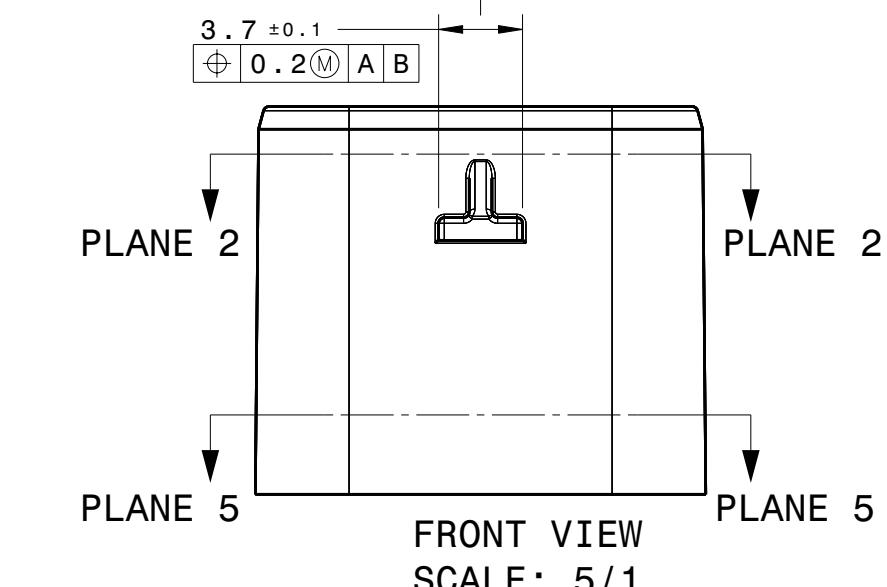
TYP. 3.0 MAX.

3.0 +Y (PLANE 2) MIN.

3.0 +Y (PLANE 2) MIN.

SURROUNDING STRUCTURE

HEADER KEEP OUT ZONE
SCALE: 3/1



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ITEM NAME: LOW VOLTAGE CONNECTOR STANDARD
ITEM NUMBER: DRW-00456412
REVISION: C.4
SHEET: 3 of 12

SHEET SIZE: C

A

HIGH POWER (HP) INTERFACE DIMENSIONS

6280000-TS SHOWN FOR ILLUSTRATION PURPOSES. ALL KEYS SHOWN SUPERIMPOSED.
DIMENSIONS W,X,Y,Z USED TO ESTABLISH MAIN PROFILE. KEYS AND RIBS IGNORED.

DIMENSION W

INTERFACE	PLANE 1	PLANE 2	PLANE 4
2280000-TS			
4280000-TS	16.11	*16.50	16.62
6280000-TS			

* DENOTES NEUTRAL DRAFT PLANE

DIMENSION Y

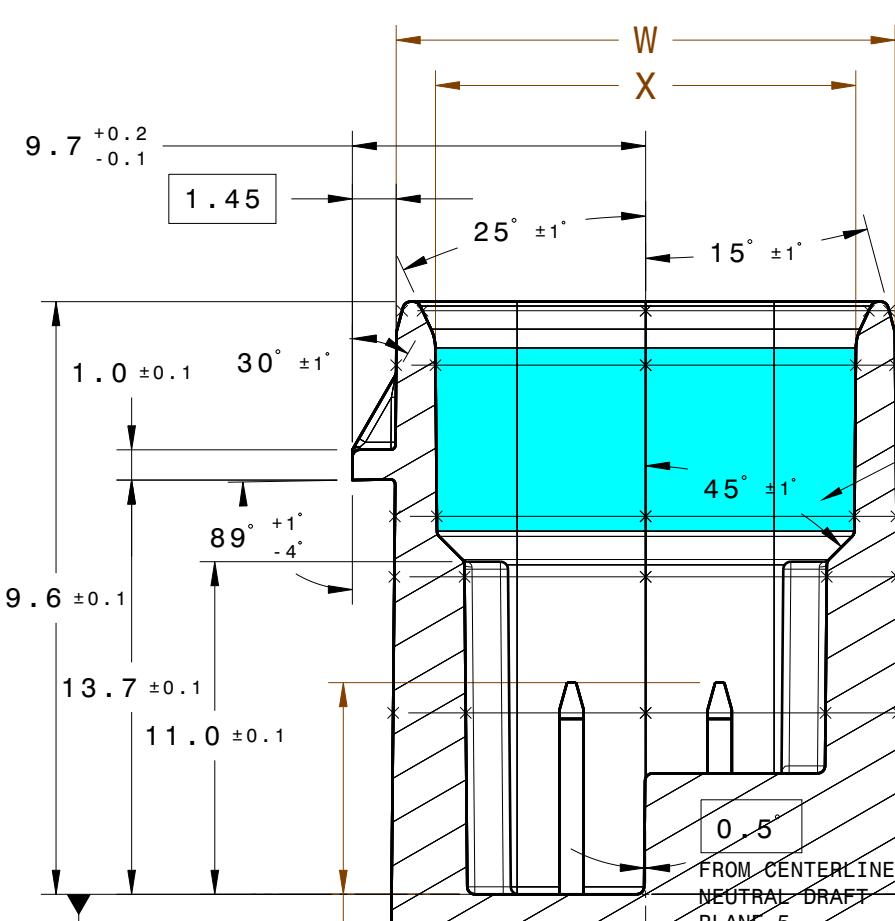
INTERFACE	PLANE 1	PLANE 2	PLANE 4
2280000-TS	16.01	*16.40	16.52
4280000-TS	25.61	*26.00	26.12
6280000-TS			

* DENOTES NEUTRAL DRAFT PLANE

DIMENSION X

INTERFACE	PLANE 1	PLANE 2	PLANE 3	PLANE 4	PLANE 5
2280000-TS					
4280000-TS	14.76	*13.90	13.81	11.98	*11.90
6280000-TS					

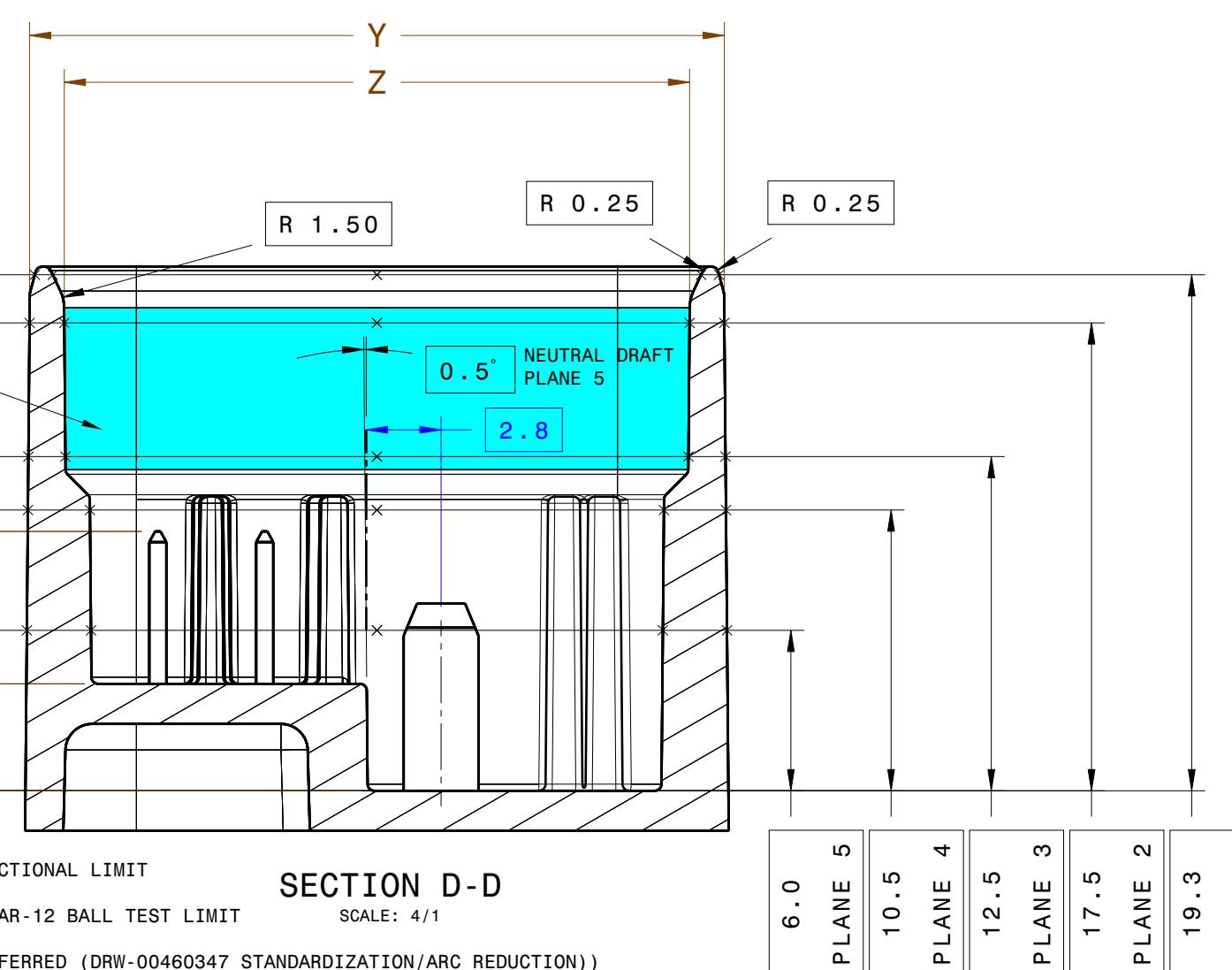
* DENOTES NEUTRAL DRAFT PLANE



SECTION C-C

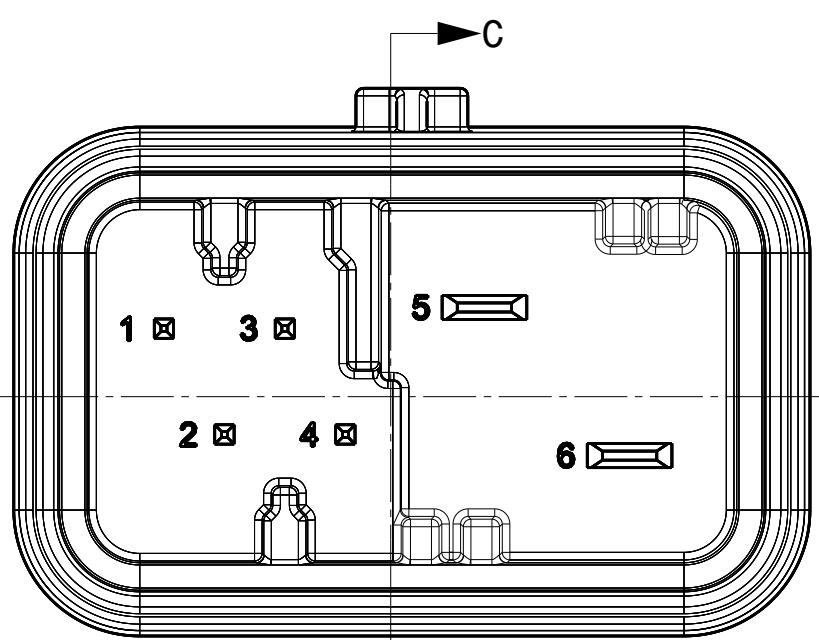
STRUCTURE BELOW DATUM A
IS UNCONTROLLED
10.1⁺⁰_{-3.8} FUNCTIONAL LIMIT
10.1⁺⁰_{-2.0} PREFERRED (DRW-00460347 STANDARDIZATION)

10.1⁺⁰_{-3.8} FUNCTIONAL LIMIT
10.1⁺⁰_{-2.0} PREFERRED (DRW-00460347 STANDARDIZATION)



SECTION D-D

+2.6
-0 FUNCTIONAL LIMIT
8.7^{+1.1}₋₀ USCAR-12 BALL TEST LIMIT
+0.8 PREFERRED (DRW-00460347 STANDARDIZATION/ARC REDUCTION)
-0

TOP VIEW
SCALE: 4/1

ALL CORNERS CONCENTRIC

R 1.7

REFER TO EWCAP 064-T (HYBRID ONLY)

⊕ 0.2M A B

REFER TO EWCAP 064-T (HYBRID ONLY)

⊕ 0.2M A B

MEASURED AT DATUM A

TYP. REFER TO EWCAP 280-T001

⊕ 0.2M A B

B

0.1 A

C

D

E

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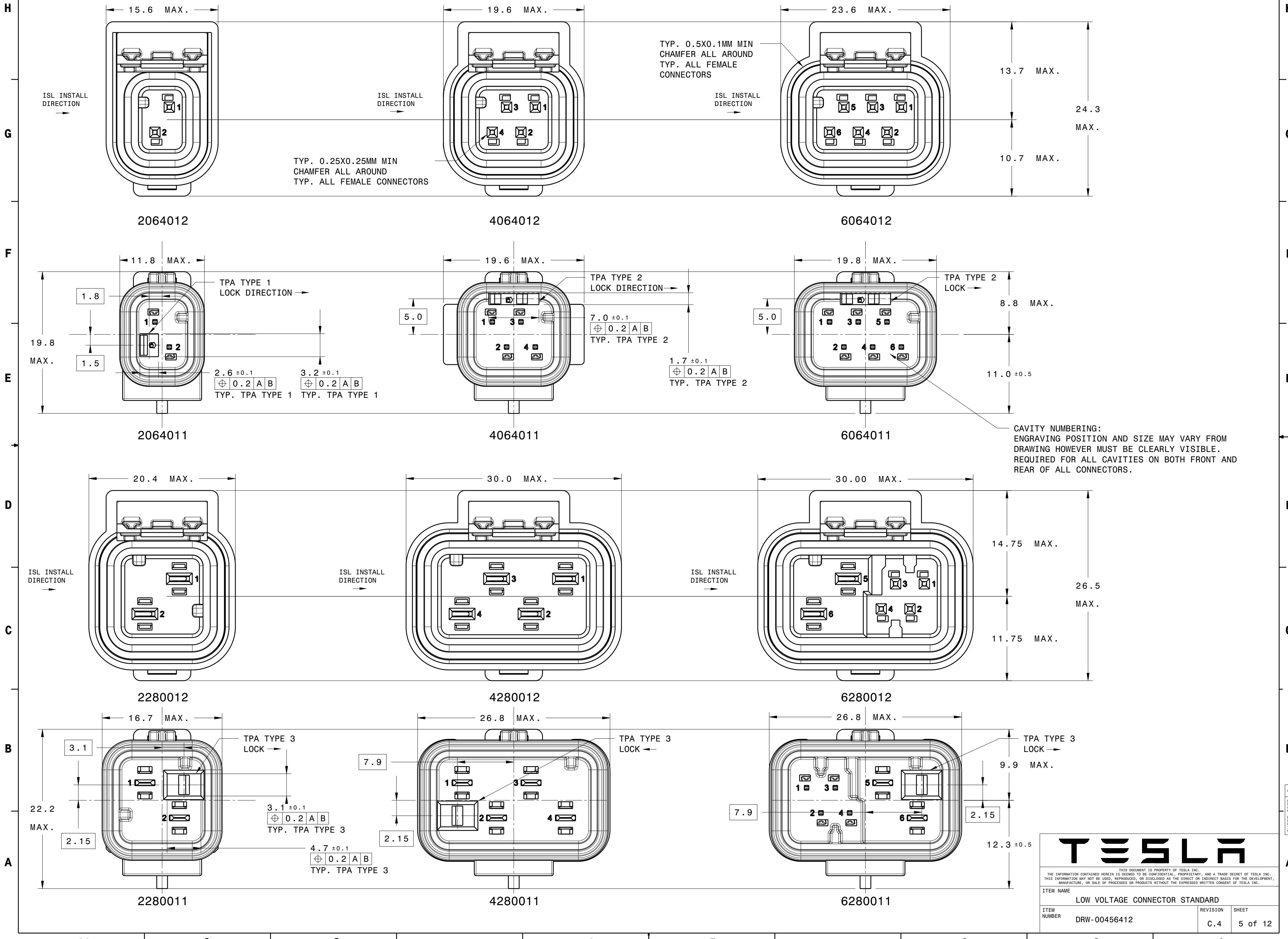
Y

Z

A

FRONT CONNECTOR VIEW

MAXIMUM EXTERNAL DIMENSIONS SHOWN TO ENSURE PACKAGING. ANY TEST OR ASSEMBLY FIXTURES MUST LOCATE TO CONTROLLED INTERFACE, NOT EXTERNAL DIMENSIONS.



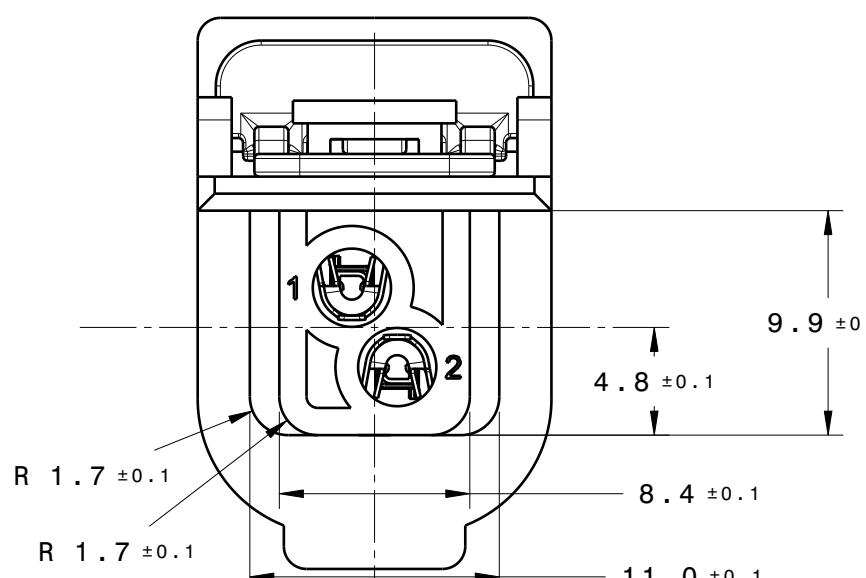
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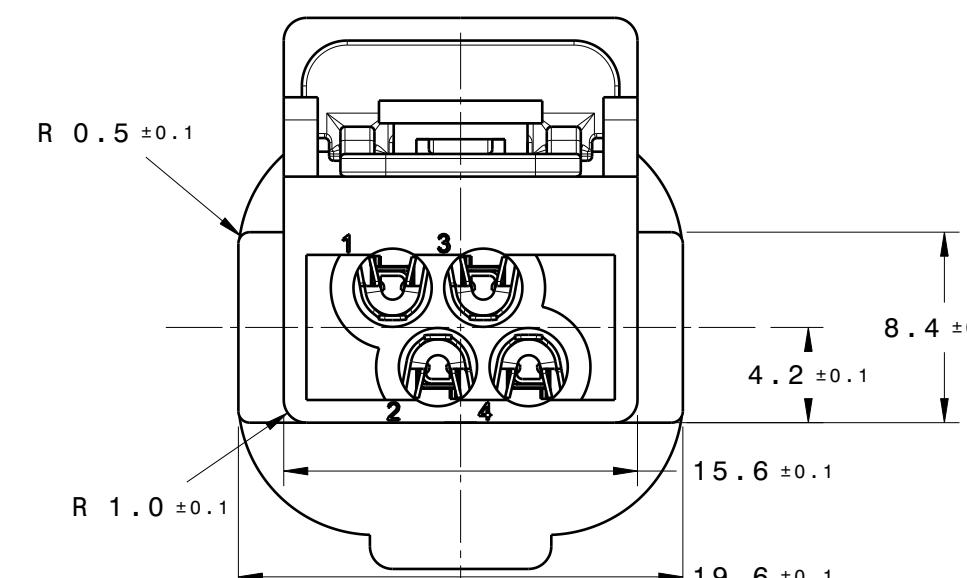
ITEM NAME	LOW VOLTAGE CONNECTOR STANDARD		
ITEM NUMBER	DRW-00456412	REVISION	SHEET
	C.4	5	of 12

REAR CONNECTOR VIEW

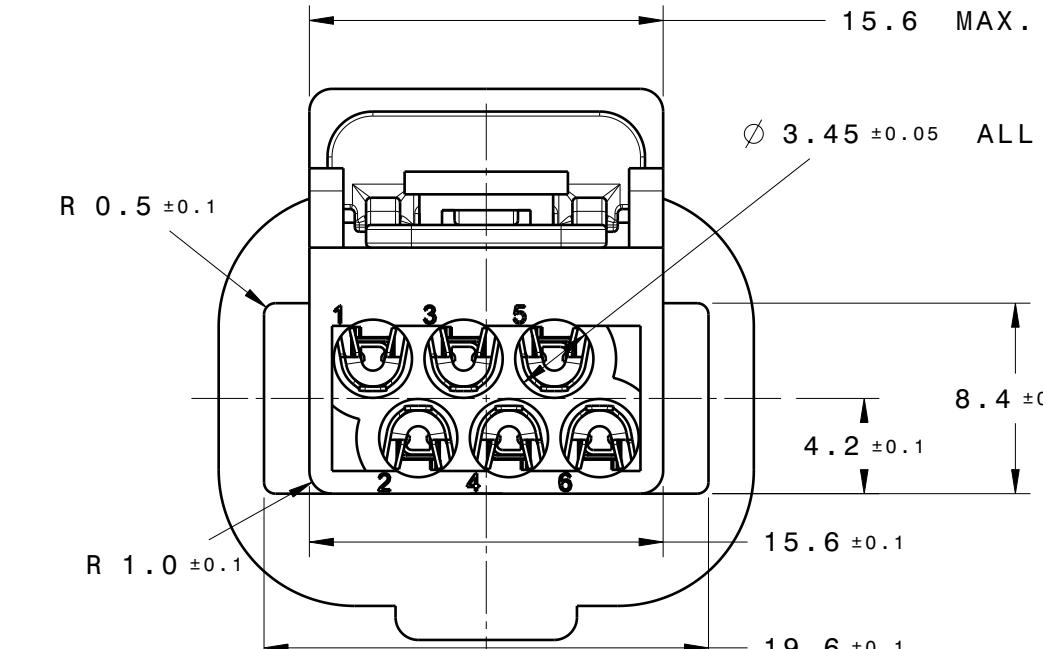
CABLE EXIT AND ACCESSORY RIB FEATURE PRECISION TO ENSURE COMPATIBILITY



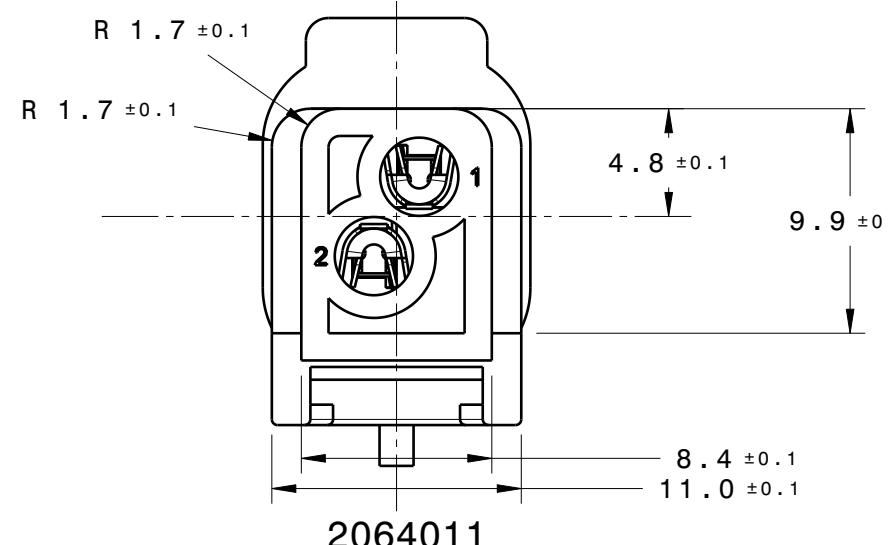
2064012



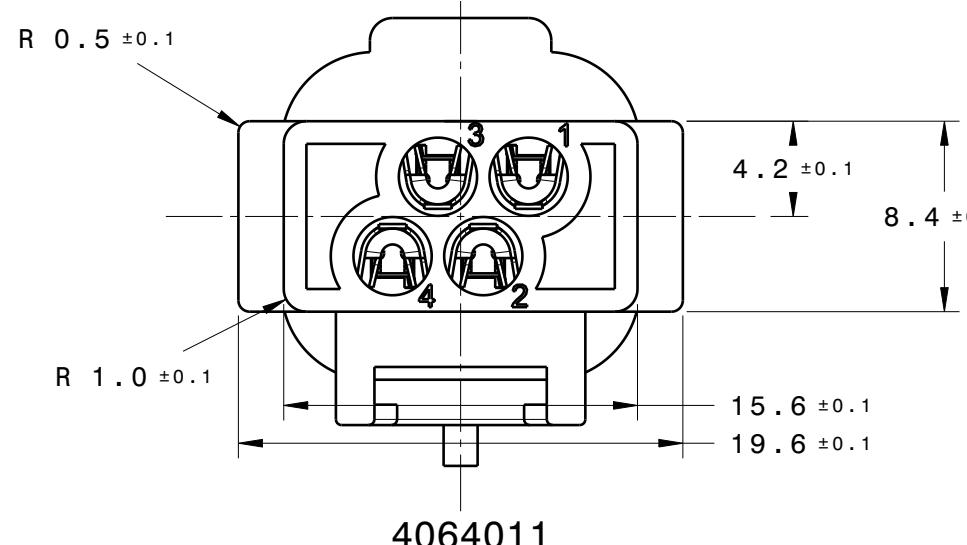
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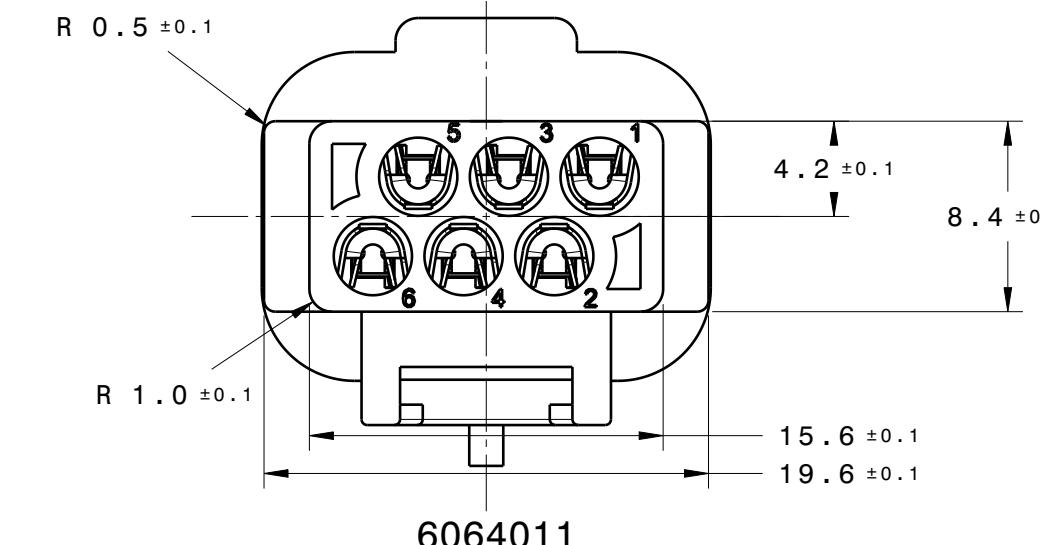
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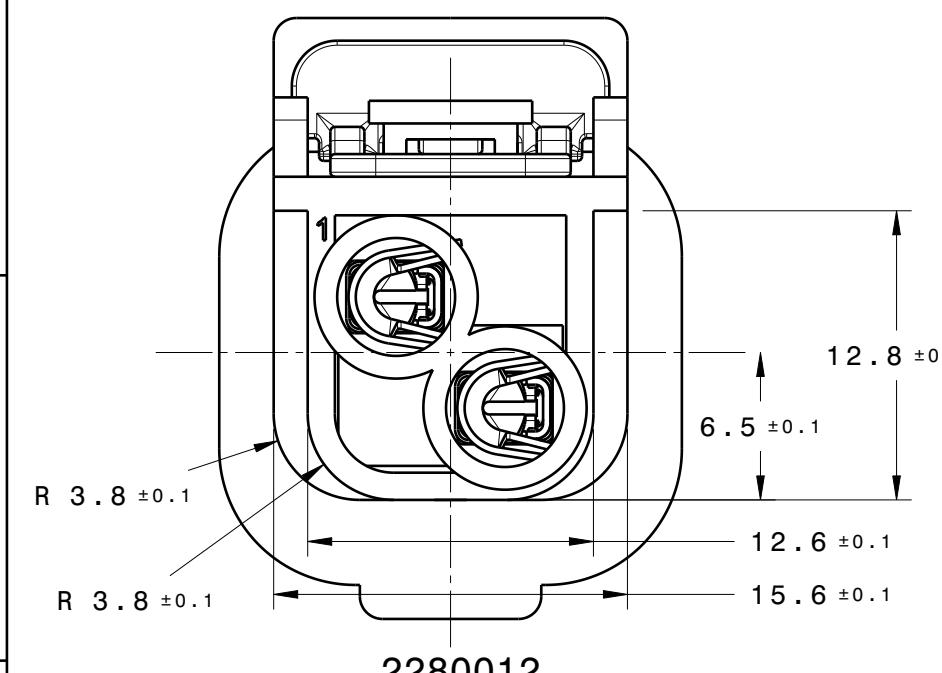
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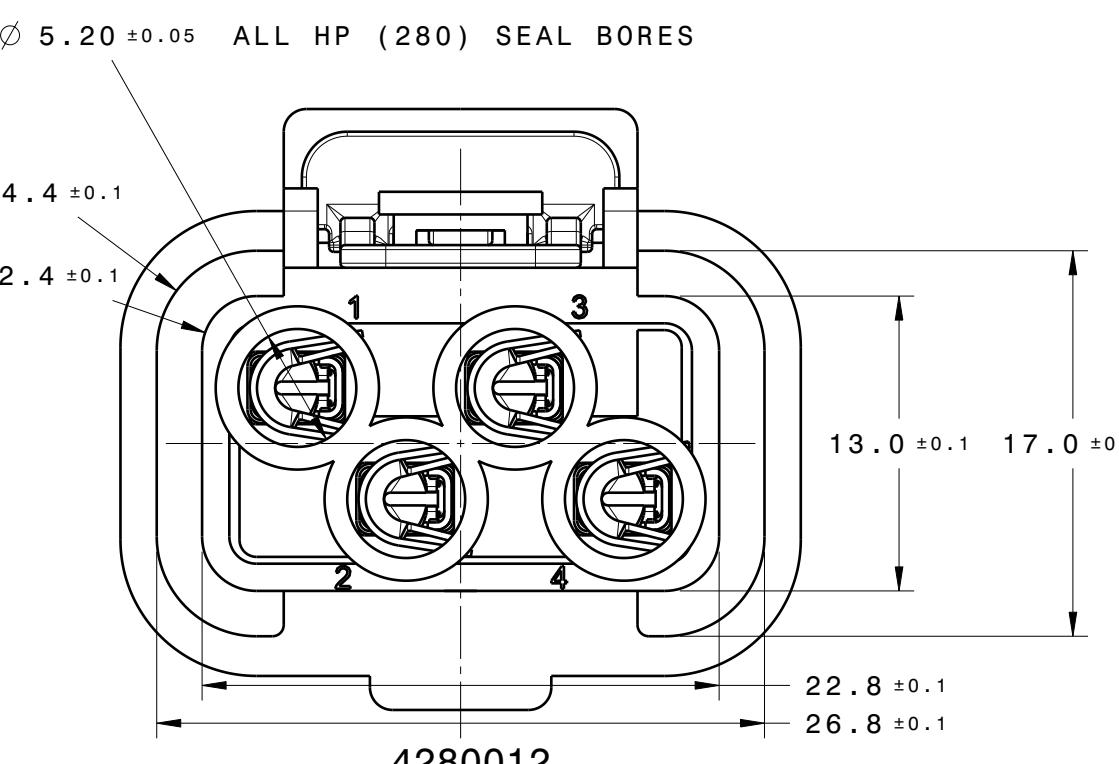
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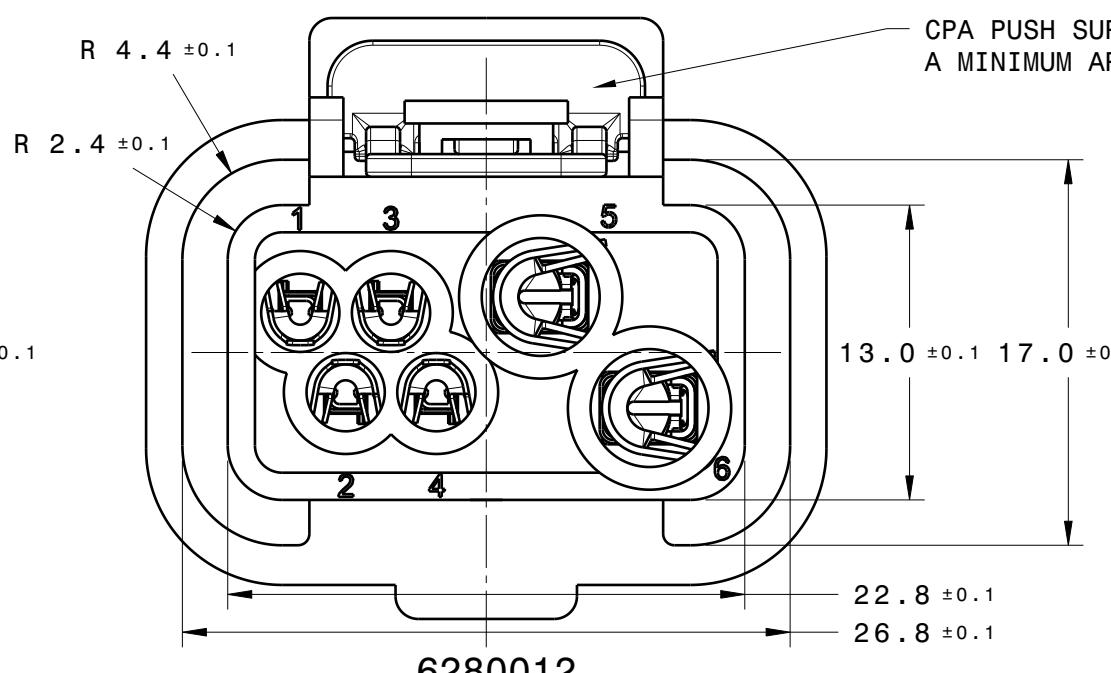
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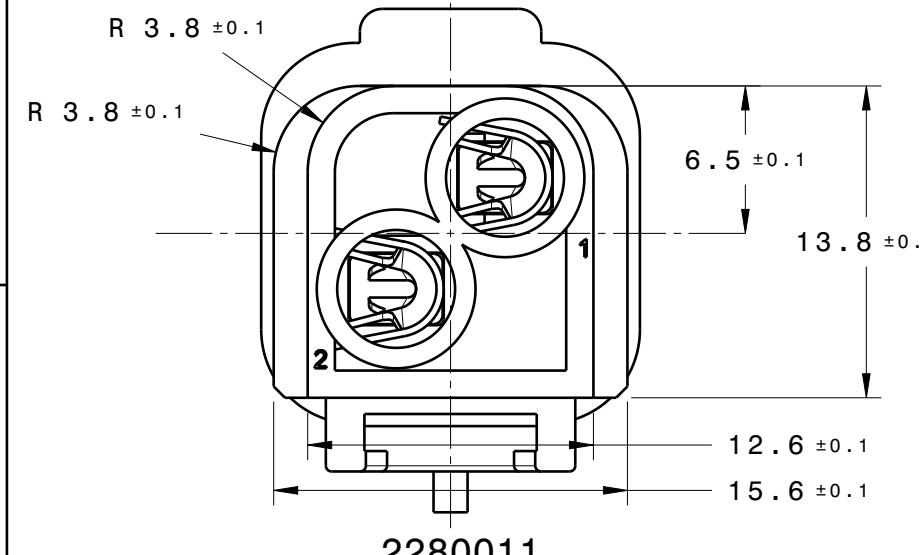
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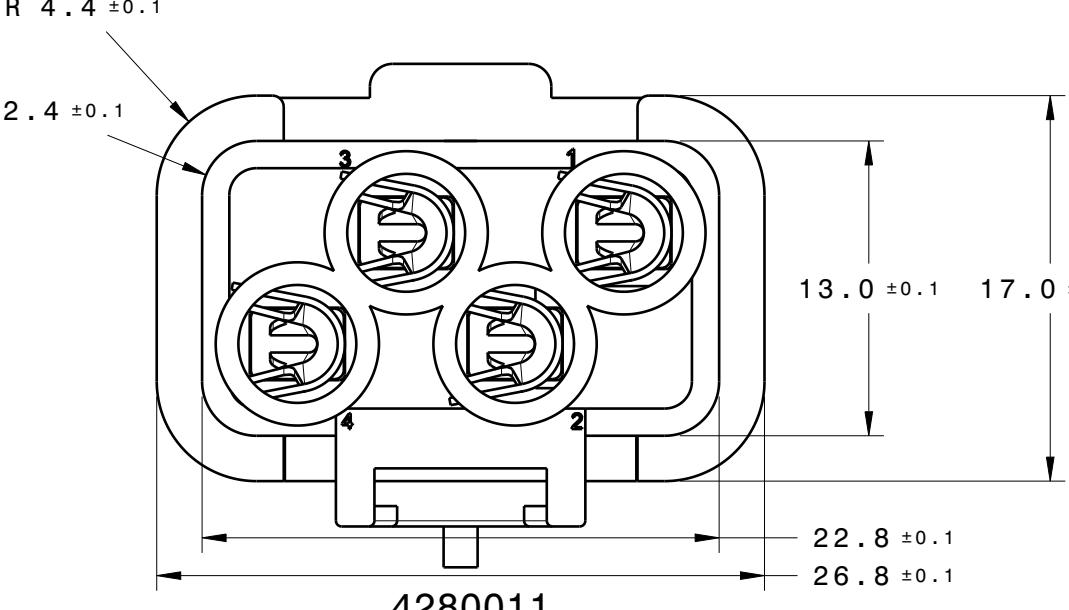
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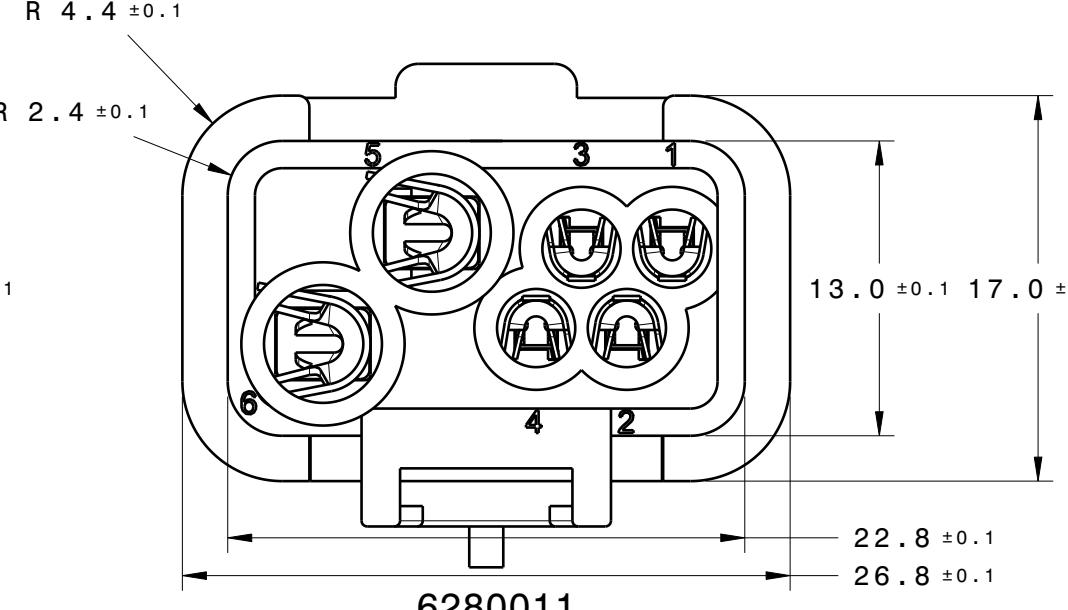
6280012



2280011



4280011



6280011

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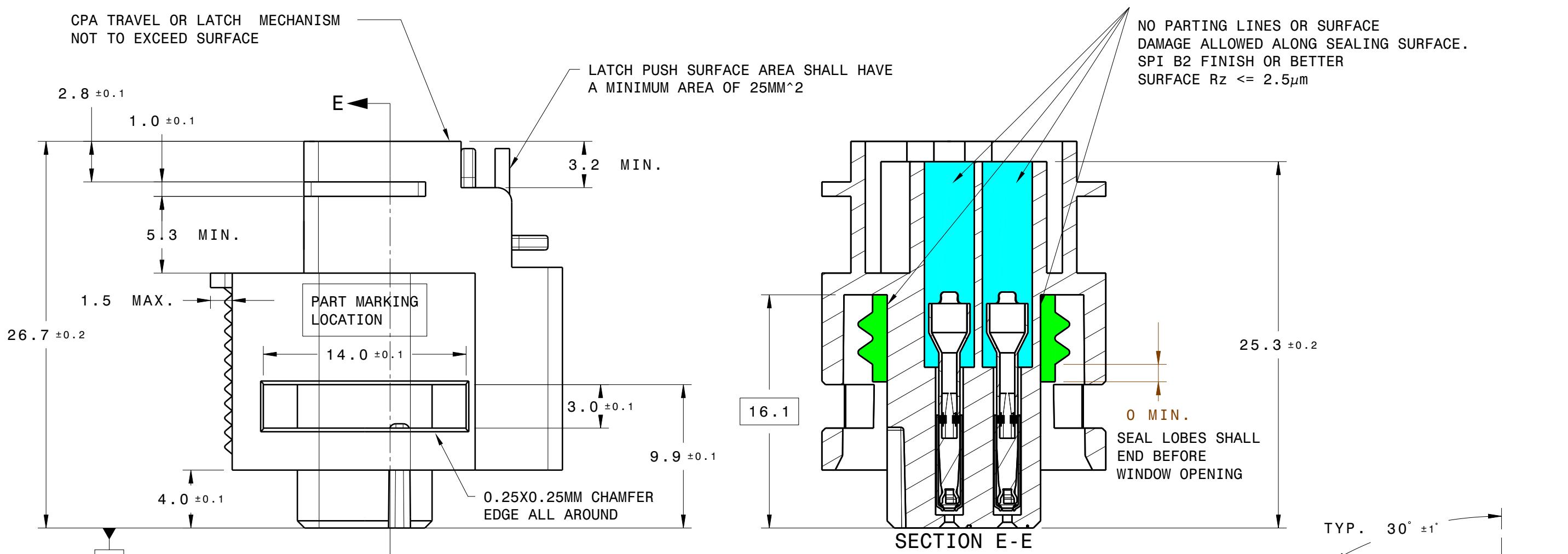
ITEM NAME: LOW VOLTAGE CONNECTOR STANDARD

ITEM NUMBER: DRW-00456412

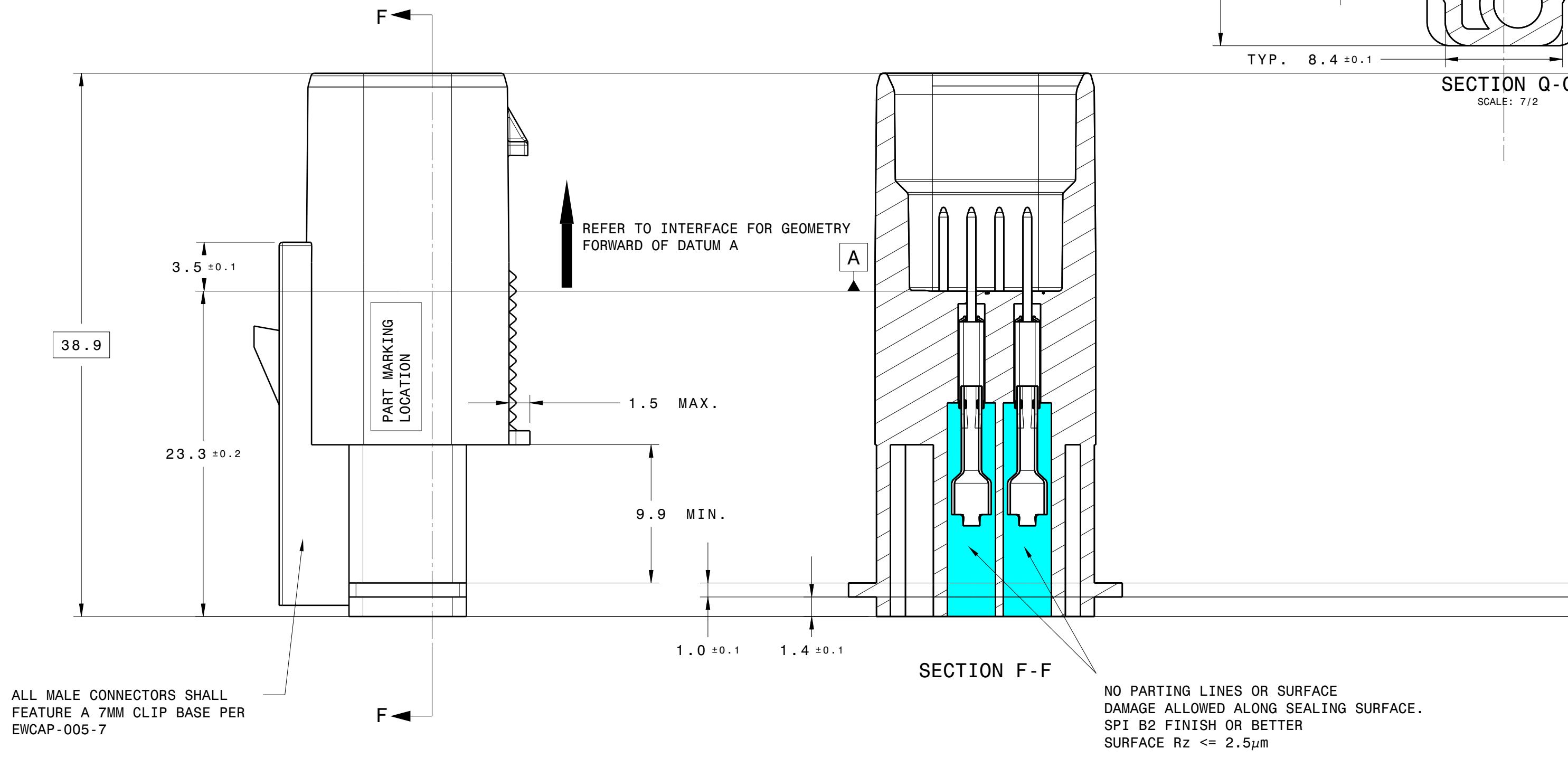
REVISION: C.4

SHEET: 6 of 12

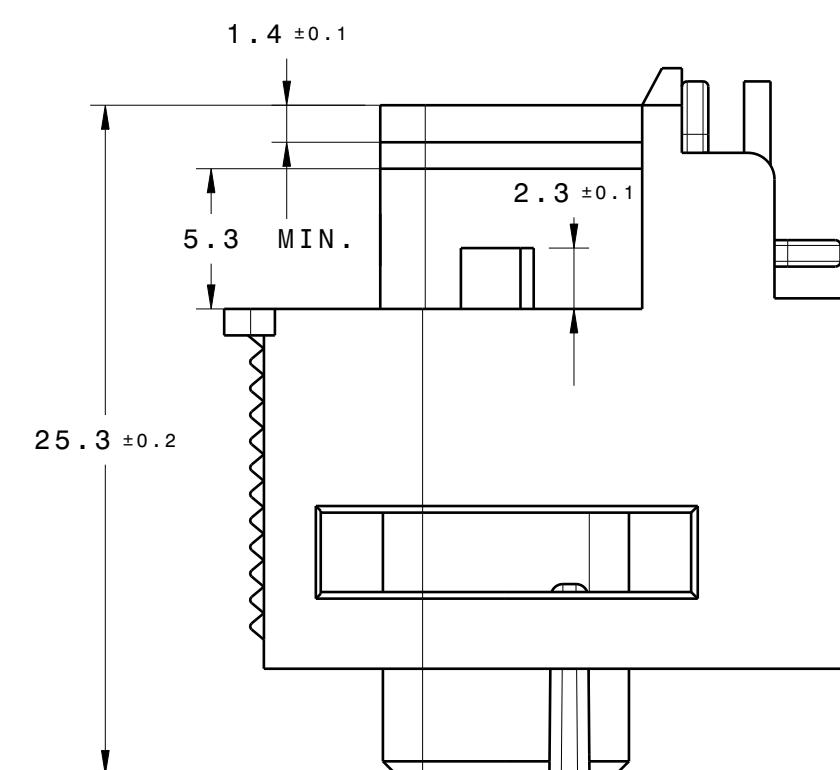
LOW POWER (LP) FEMALE CONNECTOR TYPICAL DIMENSIONS



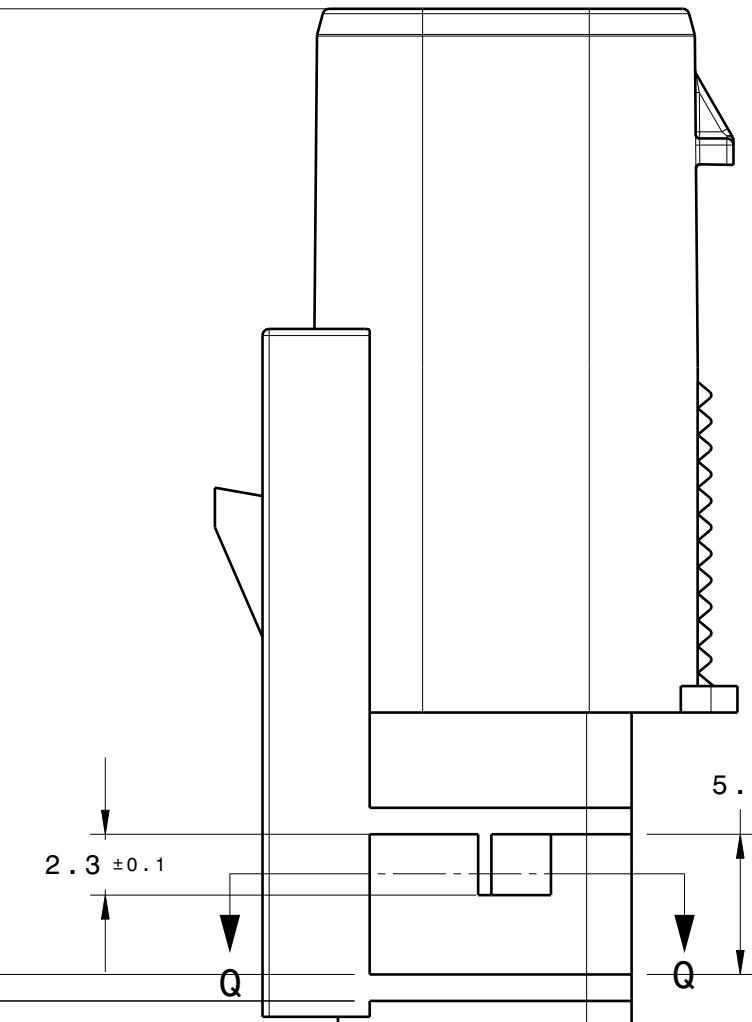
LOW POWER (LP) MALE CONNECTOR TYPICAL DIMENSIONS



2P LP UNIQUE ACCESSORY ATTACHMENT - FEMALE



2P LP UNIQUE ACCESSORY ATTACHMENT - MALE

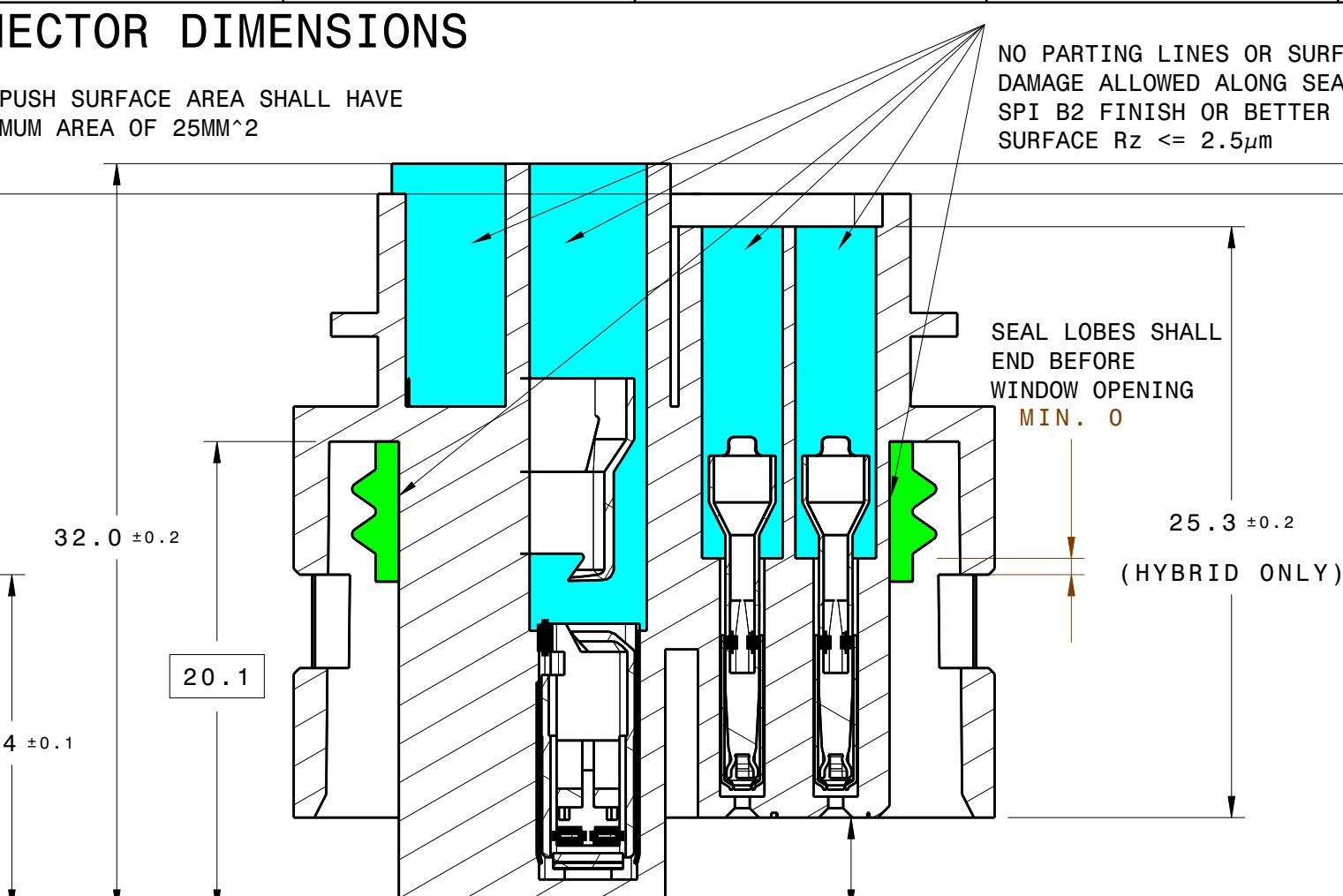
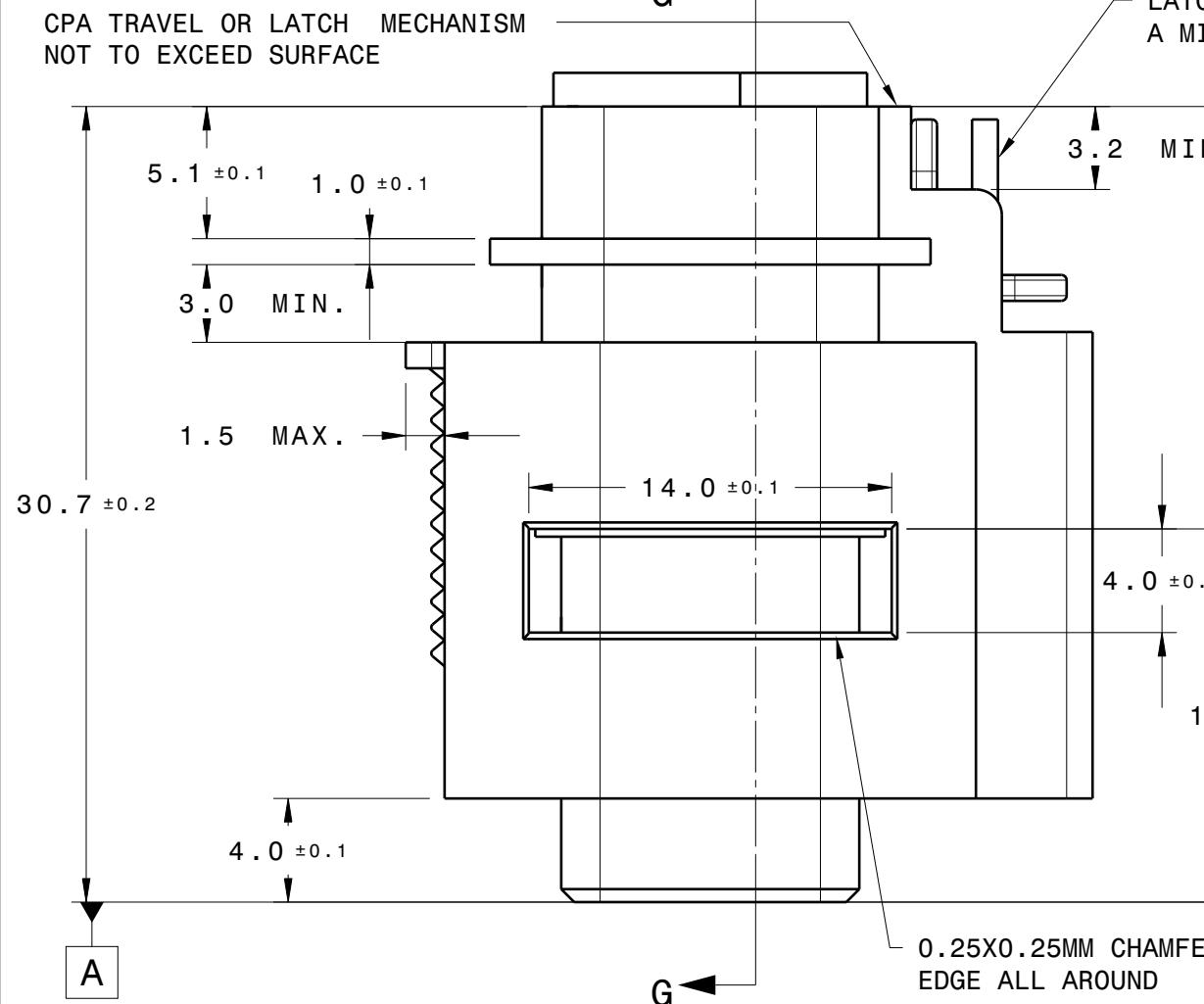


TESLA

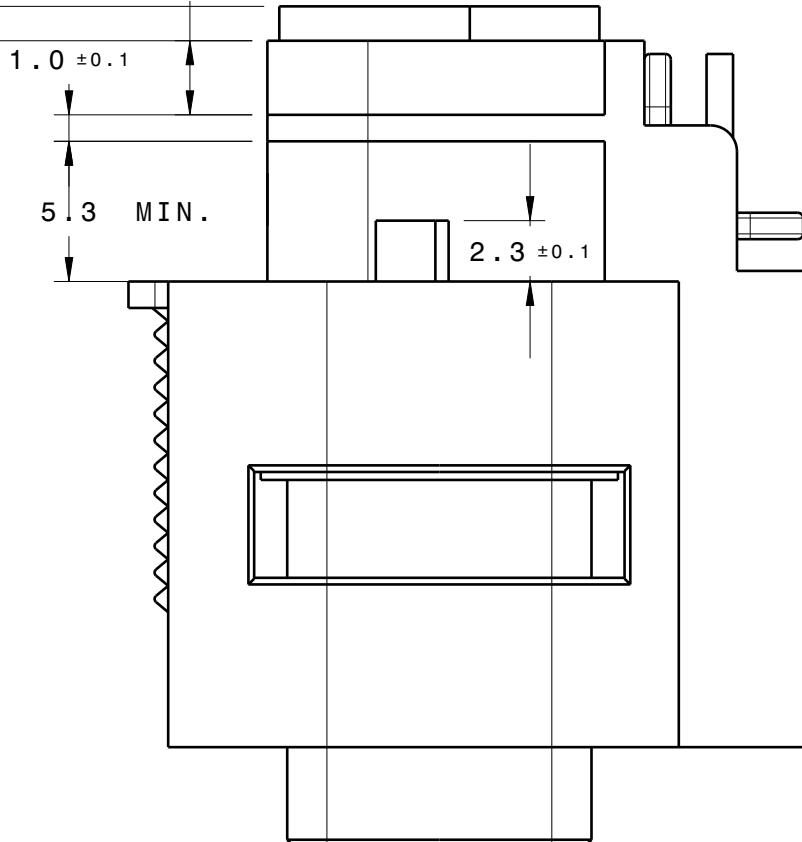
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ITEM NAME	LOW VOLTAGE CONNECTOR STANDARD		
ITEM NUMBER	DRW-00456412	REVISION	SHEET
		C.4	7 of 12

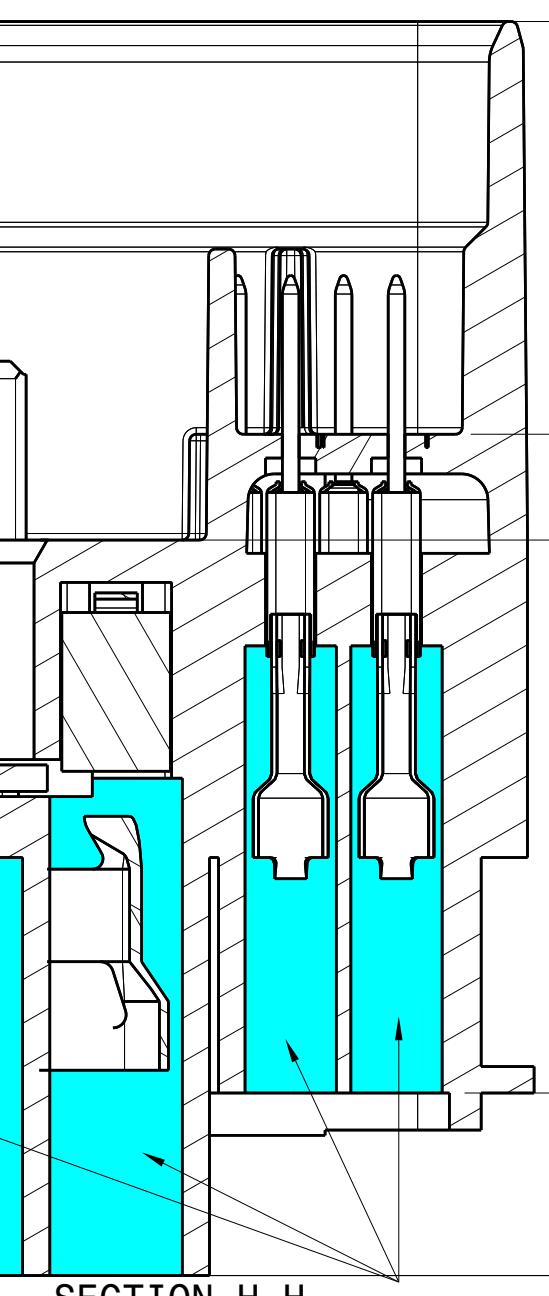
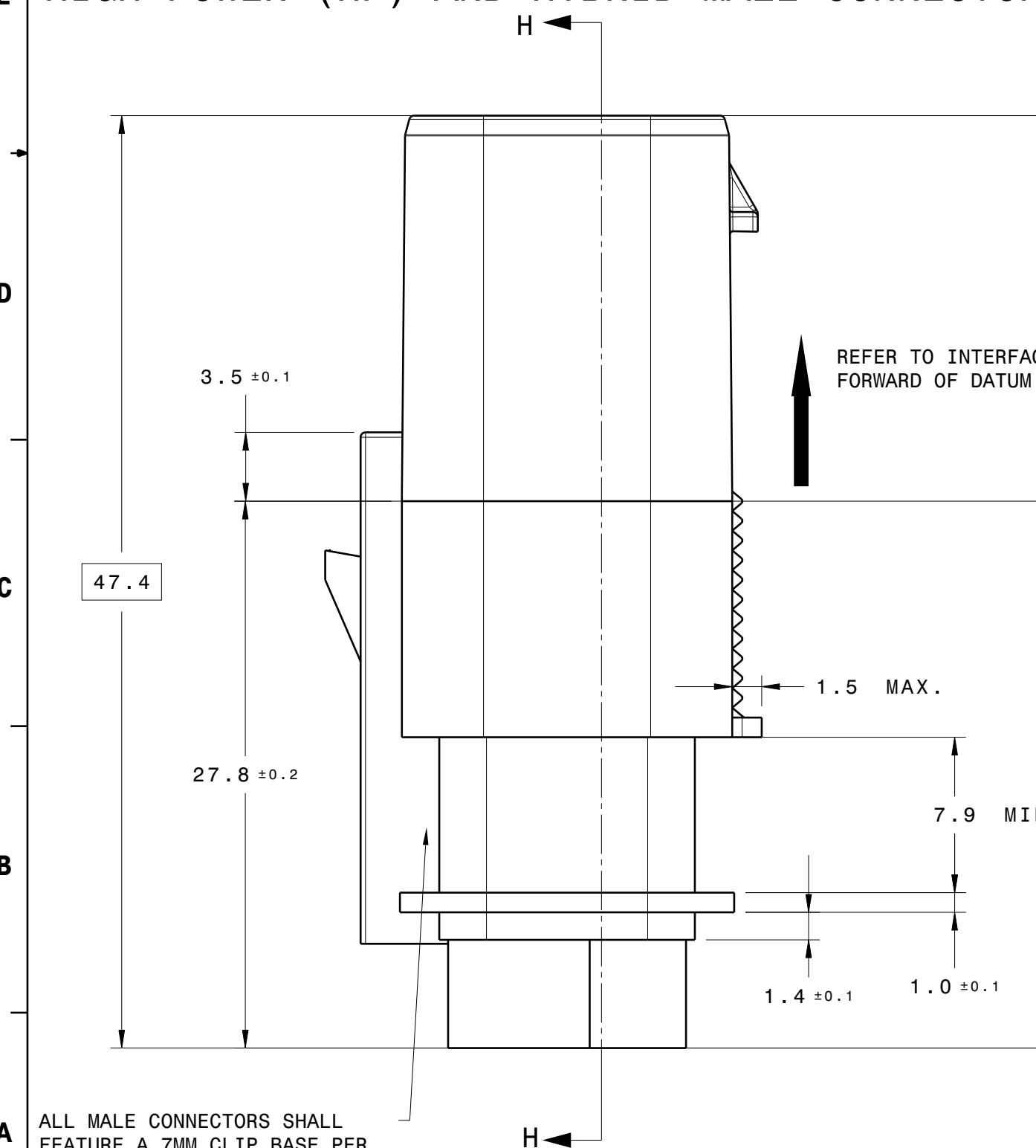
HIGH POWER (HP) AND HYBRID FEMALE CONNECTOR DIMENSIONS



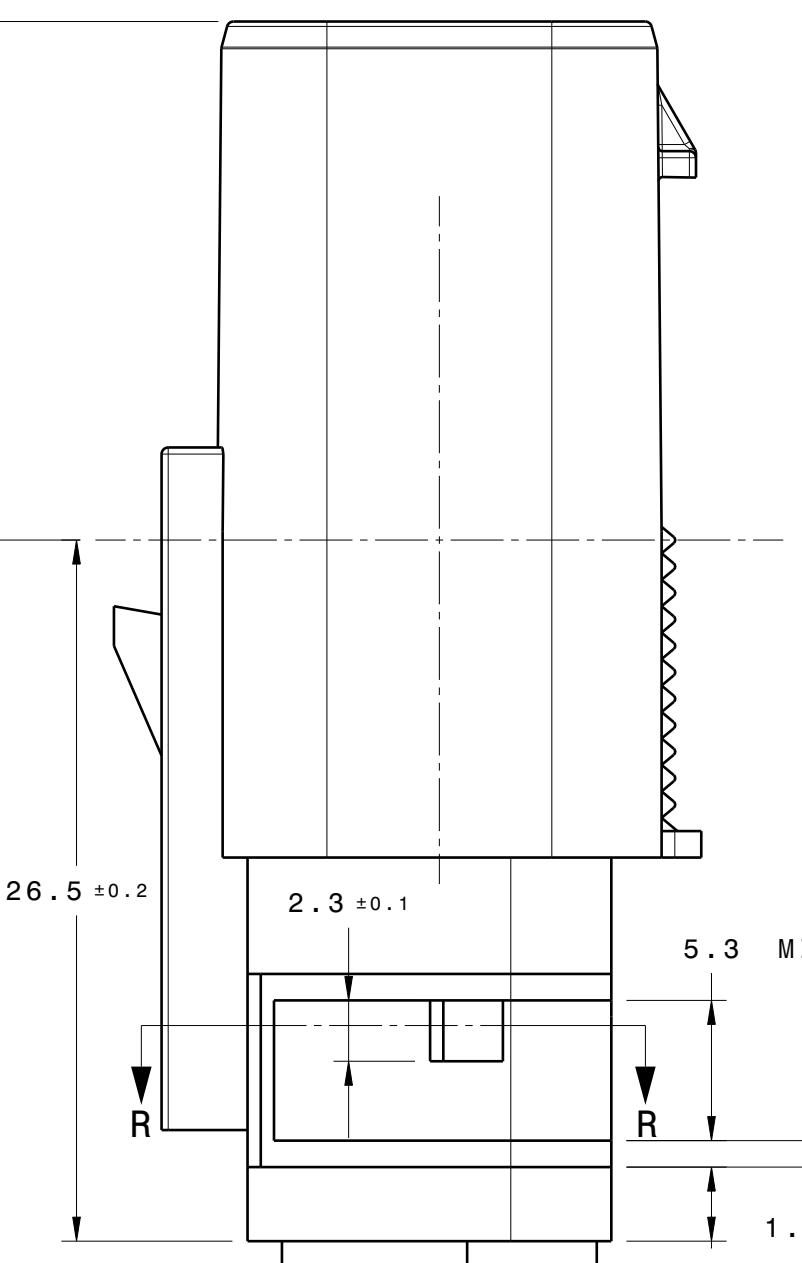
2P HP UNIQUE ACCESSORY ATTACHMENT - FEMALE



HIGH POWER (HP) AND HYBRID MALE CONNECTOR DIMENSIONS



2P HP UNIQUE ACCESSORY ATTACHMENT - MALE



ALL MALE CONNECTORS SHALL FEATURE A 7MM CLIP BASE PER
EWCAP-005-7

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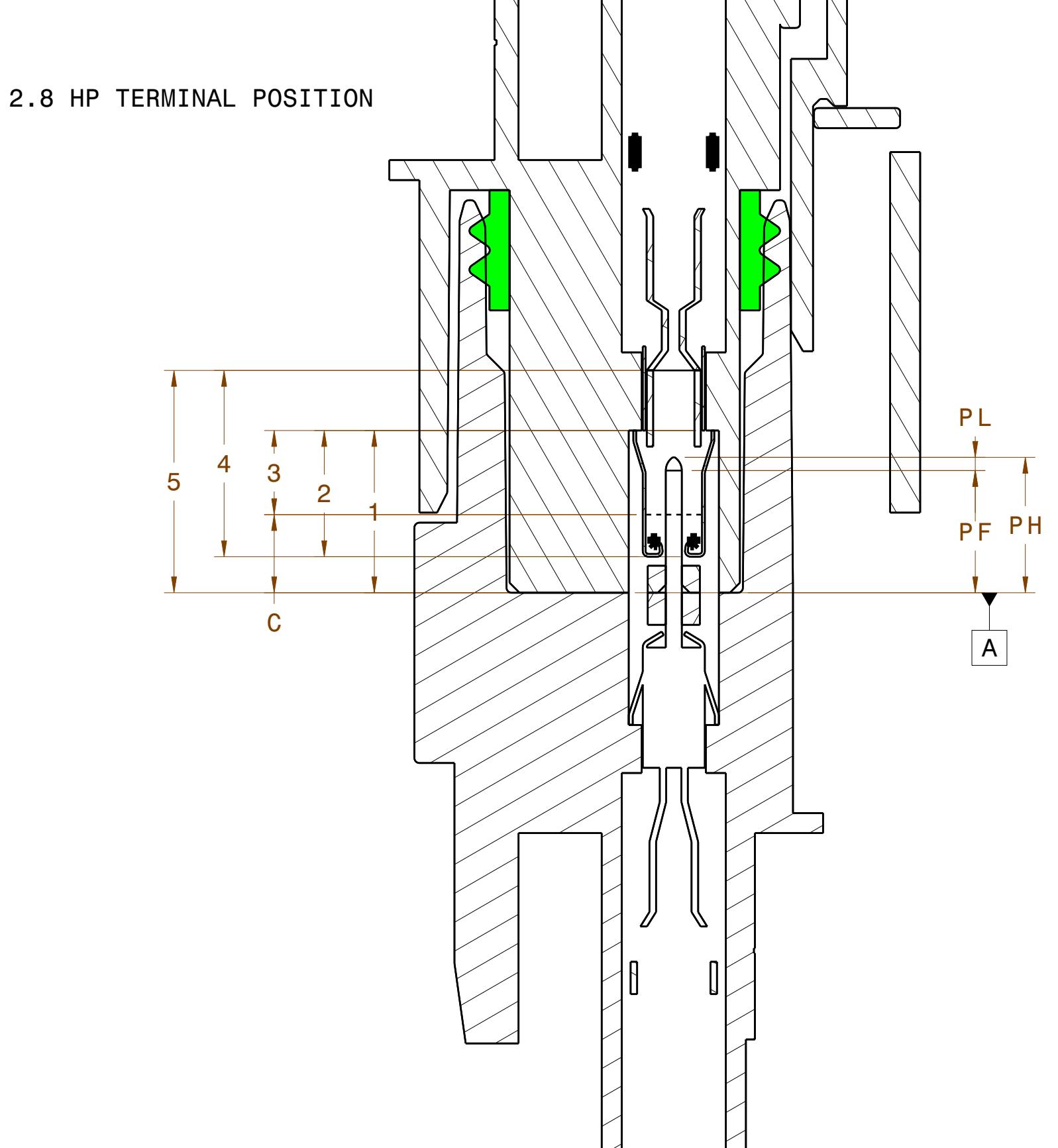
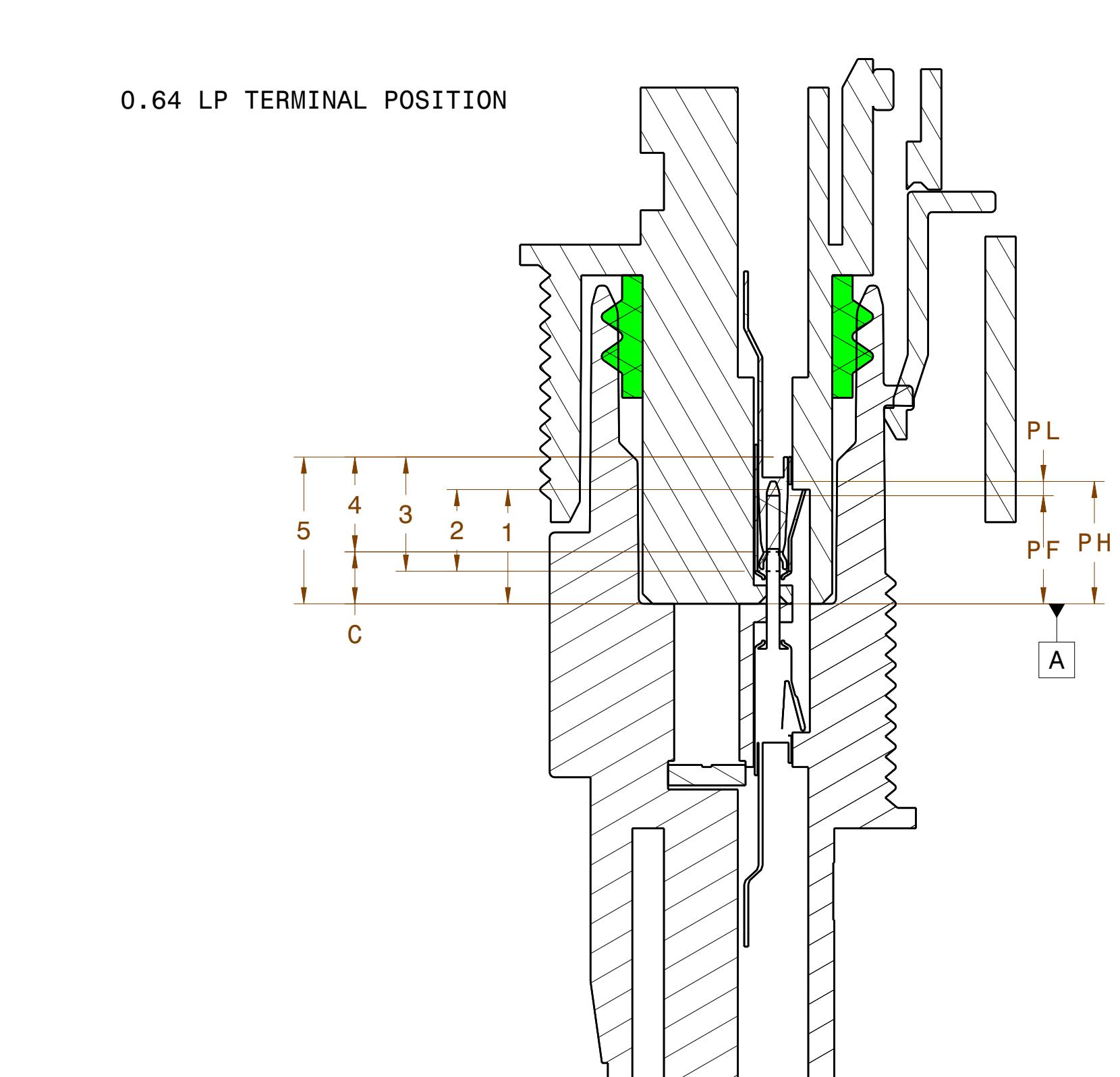
ITEM NAME: LOW VOLTAGE CONNECTOR STANDARD

ITEM NUMBER: DRW-00456412 REVISION C.4 SHEET 8 of 12

SHEET SIZE C

A

TERMINAL HEIGHT AND PIN WIPE



0.64x0.64 - LP				0.64x0.64 - HYBRID					
DESCRIPTION	ITEM	FUNCTIONAL RANGE FOR OPERATION		PREFERRED USCAR 12 BALL TEST*		FUNCTIONAL RANGE FOR OPERATION		PREFERRED USCAR 12 BALL TEST*	
		MIN. (MM)	MAX. (MM)	MIN. (MM)	MAX. (MM)	MIN. (MM)	MAX. (MM)	MIN. (MM)	MAX. (MM)
HOUSING CAVITY LOCK HEIGHT (DATUM A)	1	5.6	5.4	"	"	9.8	9.4	"	"
TERMINAL FRONT STOP (LANCE LOCK)	2	4.1	3.8	"	"	"	"	"	"
TERMINAL BOX REAR (FRONT STOP)	3	5.8	5.5	"	"	"	"	"	"
TERMINAL CONTACT POINT (BOX REAR)	4	4.6	4.8	"	"	"	"	"	"
CONTACT POINT TO DATUM A (1-2+3-4)	C	2.7	2.3	"	"	"	"	"	"
PIN HEIGHT MIN: (PF + PL) MAX: (5)	PH	4.5	7.3**	4.5	5.7*	8.7	11.3**	8.7	9.7*
PIN LEAD IN	PL	0.8	0.5	"	"	"	"	"	"
PIN FUNCTIONAL HEIGHT TO DATUM A (PH-PL)	PF	3.7	6.6	3.7	5.2	7.9	10.6	7.9	9.2
TERMINAL MAX INSERTION DEPTH (1-2+3)	5	7.3	7.1	"	"	11.5	11.1	"	"
TERMINAL WIPE (PF-C)	W	1	4.3	1	2.9	1	4.3	1	2.9
PIN PROTECTION RIB HEIGHT	R	7.1	6.9	"	"	11.1	10.9	"	"
TRANSLATION TOTAL DISENGAGEMENT (PH-1-2)	D	3	5.5	3	4.1	3	5.5	3	4.1

2.8x0.8 - HYBRID				
FUNCTIONAL		PREFERRED		
DESCRIPTION	ITEM	MIN. (MM)	MAX. (MM)	MIN. (MM)
HOUSING CAVITY LOCK HEIGHT (DATUM A)	1	7.75	7.55	"
TERMINAL FRONT STOP (LANCE LOCK)	2	6.35	6.15	"
TERMINAL CONTACT POINT (LANCE LOCK)	3	3.8	4.5	"
TERMINAL BOX REAR (FRONT STOP)	4	10.15	8.7	"
CONTACT POINT TO DATUM A (1-3)	C	3.95	3.05	"
PIN HEIGHT MIN: (PF + PL) MAX: (5)	PH	6.3	10.1	8.1
PIN LEAD IN	PL	1.3	1.1	"
PIN FUNCTIONAL HEIGHT TO DATUM A (PH-PL)	PF	5	9	6.8
TERMINAL MAX INSERTION DEPTH (1-2+4)	5	11.55	10.1	"
TERMINAL WIPE (PF-C)	W	1.05	5.95	2.85
PIN PROTECTION RIB HEIGHT	R	11.1	10.9	"
TRANSLATION TOTAL DISENGAGEMENT (PH-1-3)	D	2.35	7.05	6.7

* USCAR BALL TEST ONLY APPLICABLE FOR LARGE FORMAT CONTROLLER CONNECTORS DETAILED ON DRW-00460347 DUE TO INCREASED WIDTH. APPLIED TO DRW-00456412 CONNECTORS FOR STANDARDIZATION ONLY

** MAX. PIN HEIGHT EXCEEDS THEORETICAL TERMINAL MAX INSERTION DEPTH (ITEM 5) TO ACCEPT CURRENT TE MQS 064 TERMINALS. ALL NEW 064 MALE TERMINAL DESIGN SHOULD TARGET MINIMUM ACCEPTABLE HEIGHT (ITEM PH)

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ITEM NAME: LOW VOLTAGE CONNECTOR STANDARD

ITEM NUMBER: DRW-00456412

REVISION: C.4

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TERMINAL AND SEAL USAGE

064 TERMINALS SHALL BE TE MQS PART NUMBERS SPECIFIED BELOW OR A CAVITY COMPATIBLE EQUIVALENT MEETING ALL SPECIFIED DIMENSIONS IN THIS DOCUMENT AND DEMONSTRATED TO EQUAL OR EXCEED ELECTRICAL AND THERMAL PERFORMANCE. DETAILED INTERNAL CAVITY DIMENSIONS SHALL BE SPECIFIED BY THE TERMINAL SUPPLIER.

280 TERMINALS SHALL BE TE MCP PART NUMBERS SPECIFIED BELOW OR A CAVITY COMPATIBLE EQUIVALENT MEETING ALL SPECIFIED DIMENSIONS IN THIS DOCUMENT AND DEMONSTRATED TO EQUAL OR EXCEED ELECTRICAL AND THERMAL PERFORMANCE. DETAILED INTERNAL CAVITY DIMENSIONS SHALL BE SPECIFIED BY THE TERMINAL SUPPLIER.

COMPATIBLE SEALS AND PLUGS SHALL BE PART NUMBERS SPECIFIED BELOW OR AN EQUIVALENT DEMONSTRATED TO MEET ALL PERFORMANCE REQUIREMENTS SPECIFIED IN THIS DOCUMENT.

064 FEMALE 4 BEAM TERMINALS					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
064	0.13-0.17	Sn	2141826-1	967067-2 967067-1 967067-2 967067-1 967067-2 967067-1 967067-2 967067-1	967056-1
064	0.25-0.35	Sn	5-962885-1		
064	0.5-0.75	Sn	5-965906-1		
064	0.13-0.17	Ag	2141826-6		
064	0.25-0.35	Ag	5-962885-6		
064	0.5-0.75	Ag	5-965906-6		
064	0.13-0.17	Au	2141826-5		
064	0.25-0.35	Au	5-962885-5		
064	0.5-0.75	Au	5-965906-5		

064 FEMALE 2 BEAM TERMINALS					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
064	0.13-0.17	Sn	2479123-1	967067-2 967067-1 967067-2 967067-1 967067-2 967067-1	967056-1
064	0.25-0.35	Sn	2479013-1		
064	0.5-0.75	Sn	2479014-1		
064	0.13-0.17	Ag	2479123-6		
064	0.25-0.35	Ag	2479013-6		
064	0.5-0.75	Ag	2479014-6		

064 MALE TERMINALS					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
064	0.13-0.17	Sn	2141830-1	967067-2 967067-1 967067-2 967067-1 967067-2 967067-1 967067-2 967067-1	967056-1
064	0.25-0.35	Sn	5-962886-1		
064	0.5-0.75	Sn	5-965908-1		
064	0.13-0.17	Ag	2141830-3		
064	0.25-0.35	Ag	5-962886-3		
064	0.5-0.75	Ag	5-965908-3		
064	0.13-0.17	Au	2141830-2		
064	0.25-0.35	Au	5-962886-2		
064	0.5-0.75	Au	5-965908-2		

280 FEMALE TERMINALS - CuNiSi					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
280	0.2-0.5	Sn	1-2141859-1	828904-1 828905-1 282536-1 TBD 828904-1 828905-1 282536-1 TBD 828904-1 828905-1 282536-1 TBD	828922-1
280	0.5-1	Sn	1-968855-1		
280	1.5-2.5	Sn	1-968857-1		
280	12 AWG	Sn	1-1719506-1		
280	4	Sn	1-968859-1		
280	0.2-0.5	Ag	1-2141859-3		
280	0.5-1	Ag	1-968855-3		
280	1.5-2.5	Ag	1-968857-3		
280	12 AWG	Ag	1-1719506-3		
280	4	Ag	1-968859-3		
280	0.2-0.5	Au	1-2141859-2		
280	0.5-1	Au	1-968855-2		
280	1.5-2.5	Au	1-968857-2		

280 MALE TERMINALS - CuSn (Default)					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
280	0.2-0.5	Sn	1-965982-1	828904-1 828905-1 282536-1 TBD 828904-1 828905-1 282536-1 TBD 828904-1 828905-1 282536-1 TBD	828922-1
280	0.5-1	Sn	1-962915-1		
280	1-2.5	Sn	1-962916-1		
280	12 AWG	Sn	1-1719504-1		
280	2.5-4	Sn	1-968947-1		
280	0.5-1	Ag	1-962915-2		
280	1-2.5	Ag	1-962916-2		
280	12 AWG	Ag	1-1719504-2		
280	2.5-4	Ag	1-968947-2		
280	0.2-0.5	Au	1-965982-3		
280	0.5-1	Au	1-962915-3		
280	1-2.5	Au	1-962916-3		

280 MALE TERMINALS - CuFe (Option)					
Size	Wire (mm²)	Plating	TE TERMINAL	TE SEAL	TE CAV. PLUG
280	0.5-1	Sn	2-962915-1	828904-1 828905-1 282536-1 TBD 828904-1 828905-1 282536-1 TBD	828922-1
280	1-2.5	Sn	2-962916-1		
280	2.5-4	Sn	2-968947-1		
280	0.5-1	Ag	2-962915-2		
280	1-2.5	Ag	2-962916-2		
280	2.5-4	Ag	2-968947-2		
280	0.5-1	Au	2-962915-3		
280	1-2.5	Au	2-962916-3		

PERFORMANCE REQUIREMENTS

AT A MINIMUM, ALL CONNECTORS ARE EXPECTED TO MEET APPLICABLE PERFORMANCE REQUIREMENTS OF USCAR-2

THE FOLLOWING CLASSIFICATIONS ARE TO BE USED:

TEMPERATURE CLASS: T2
 SEALING CLASS: S2
 VIBRATION CLASS: S3 WHEN BACKSHELL ACCESSORY FITTED
 ERGONOMIC CLASS: V3 IN SEALED CONFIGURATION
 V1 IN UNSEALED CONFIGURATION
 SEALED CONNECTOR MATING FORCE SHALL BE EQUAL TO OR BELOW 75N

PARTS SUPPLIED TO TESLA MUST MEET ALL ADDITIONAL PERFORMANCE REQUIREMENTS LISTED IN THE GENERAL NOTES OF THIS DOCUMENT.

GENERAL REQUIREMENTS

SEALING:
 WIRE SEALS AND HOUSING RADIAL SEAL SHALL BE AN OPTIONAL PART. CONNECTOR SHALL BE FUNCTIONAL WITHOUT SEALS INSTALLED

CODING:
 FOUR KEY CODES (A,B,C,D) PLUS UNIVERSAL CODE (0) OPTIONS SHALL BE AVAILABLE

CONNECTOR POSITION ASSURANCE (CPA):
 CPA SHALL BE AVAILABLE AS AN OPTIONAL PART

MALE ISL (INDEPENDANT SECONDARY LOCK)

TPA TYPE 3 DETAILED IN TESLA DRW-00456412

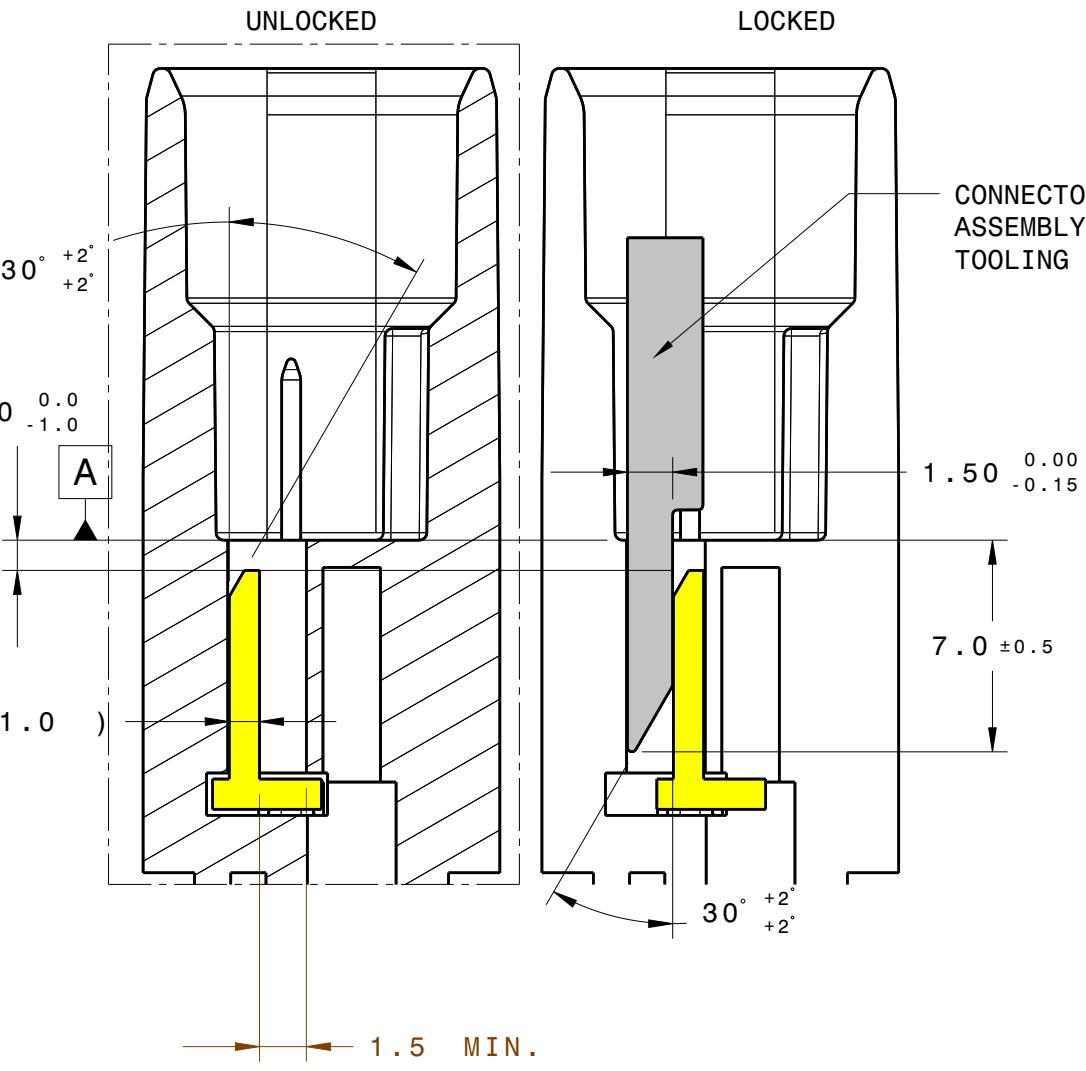
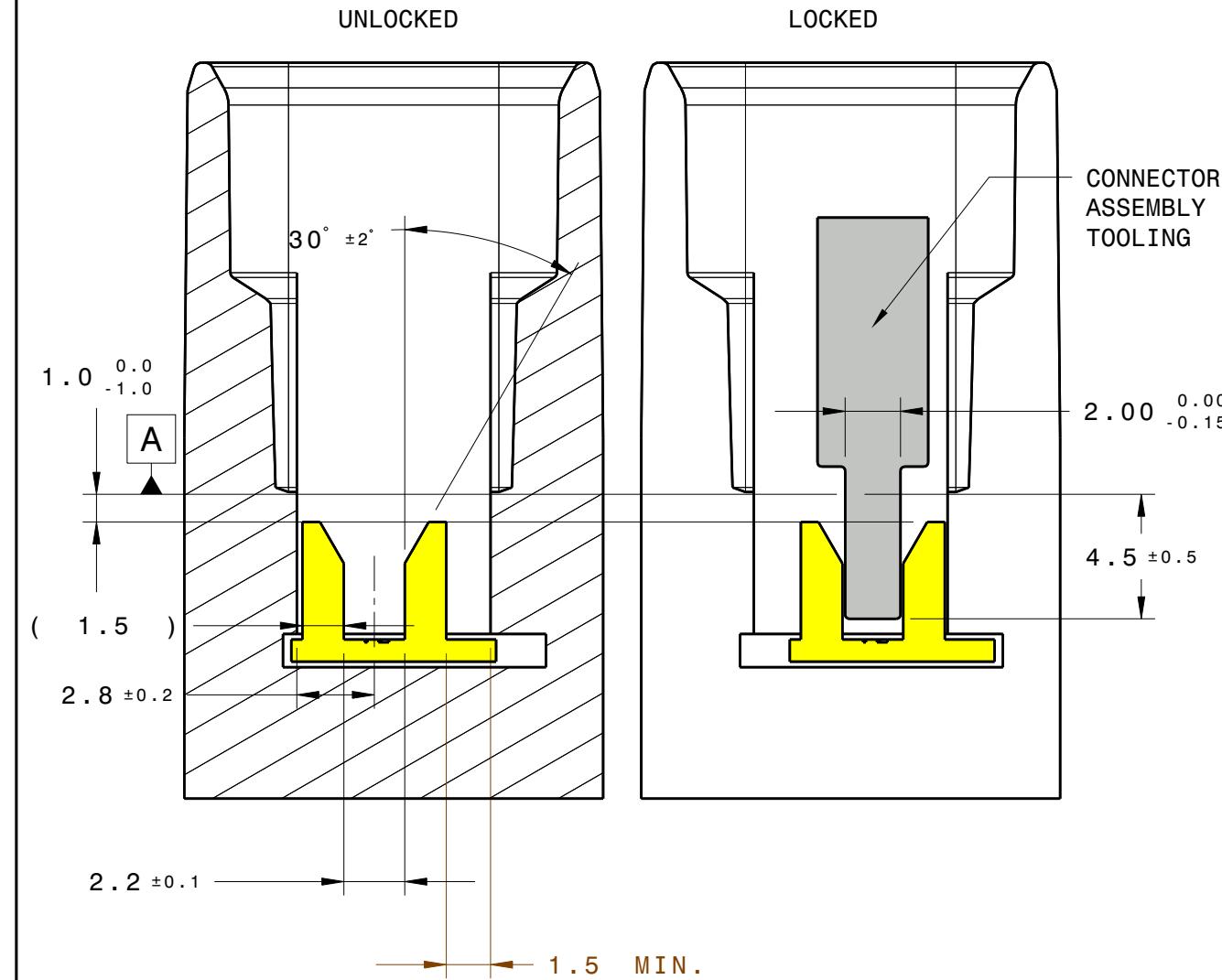
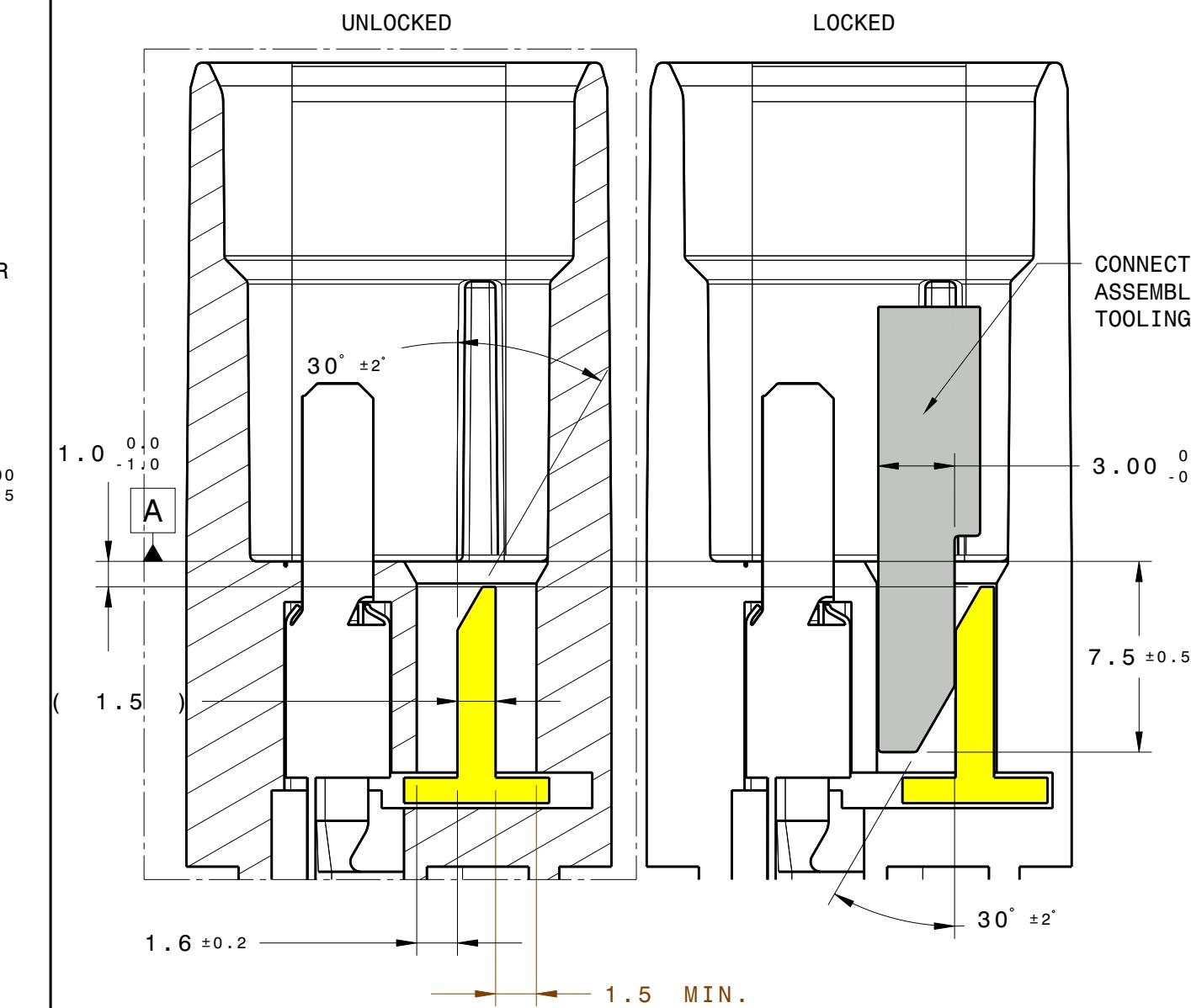
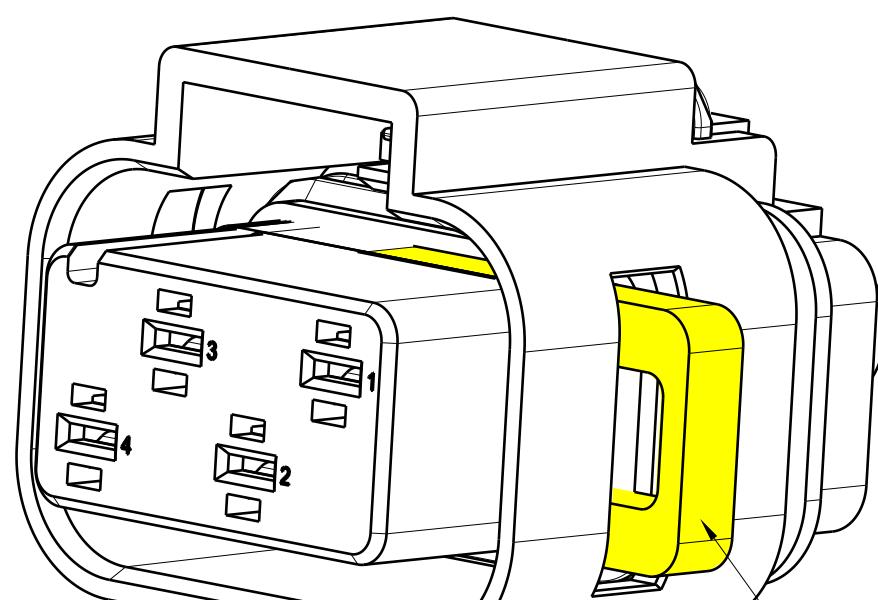
ADDITIONAL REQUIREMENTS (ALL):

TRAVEL TO LOCK: 1.5MM MIN.

CONNECTOR TPA LOCKING FORCES: PER USCAR-2

CONNECTOR/TPA OVER TRAVEL FORCE WITHSTAND: 65N

CONNECTOR ASSEMBLY TOOLING APPLIED FORCE: 60N MIN. - 65N MAX

TPA TYPE 1 DETAIL**TPA TYPE 2 DETAIL****TPA TYPE 3 DETAIL****FEMALE ISL (INDEPENDANT SECONDARY LOCK)**ISOMETRIC
SCALE: 3/1

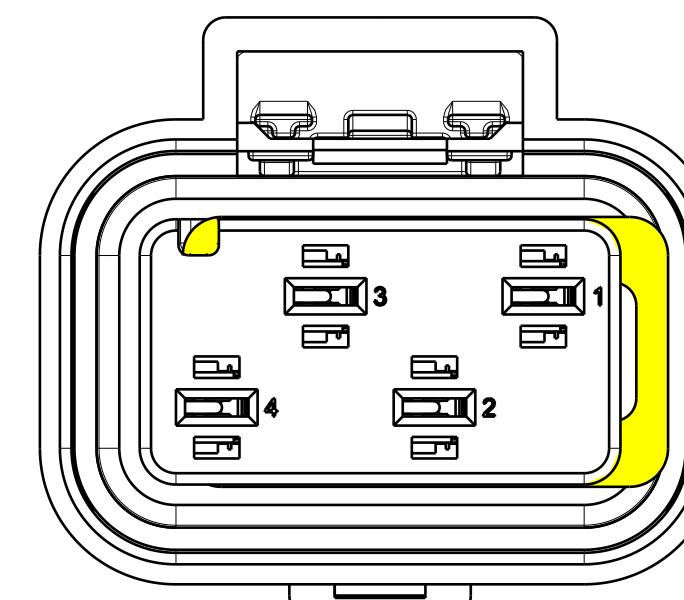
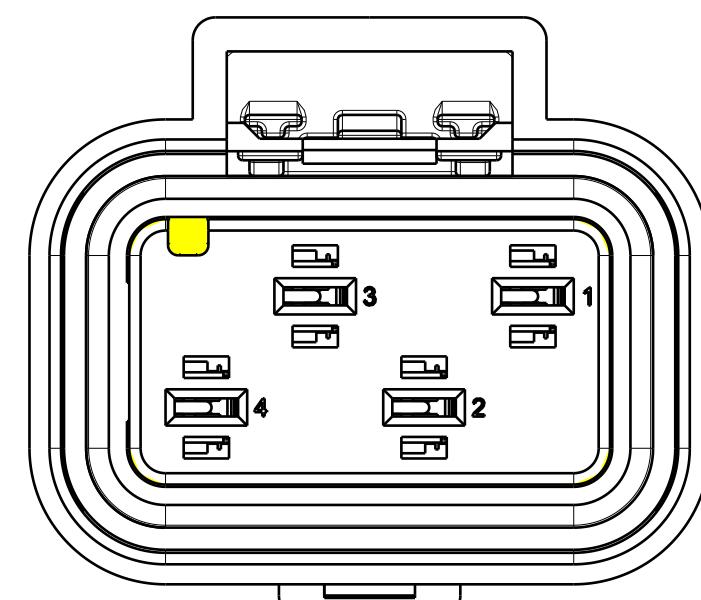
ISL INSTALLATION THROUGH WINDOW

ADDITIONAL REQUIREMENTS (ALL):

CONNECTOR TPA LOCKING FORCES: PER USCAR-2

CONNECTOR/TPA OVER TRAVEL FORCE WITHSTAND: 65N

CONNECTOR ASSEMBLY TOOLING APPLIED FORCE: 60N MIN. - 65N MAX

UNLOCKED POSITION
(EXAMPLE ONLY)
SCALE: 3/1LOCKED POSITION
(EXAMPLE ONLY)
SCALE: 3/1**TESLA**THIS DOCUMENT IS PROPERTY OF TESLA INC.
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ITEM NAME

LOW VOLTAGE CONNECTOR STANDARD

ITEM NUMBER

DRW-00456412

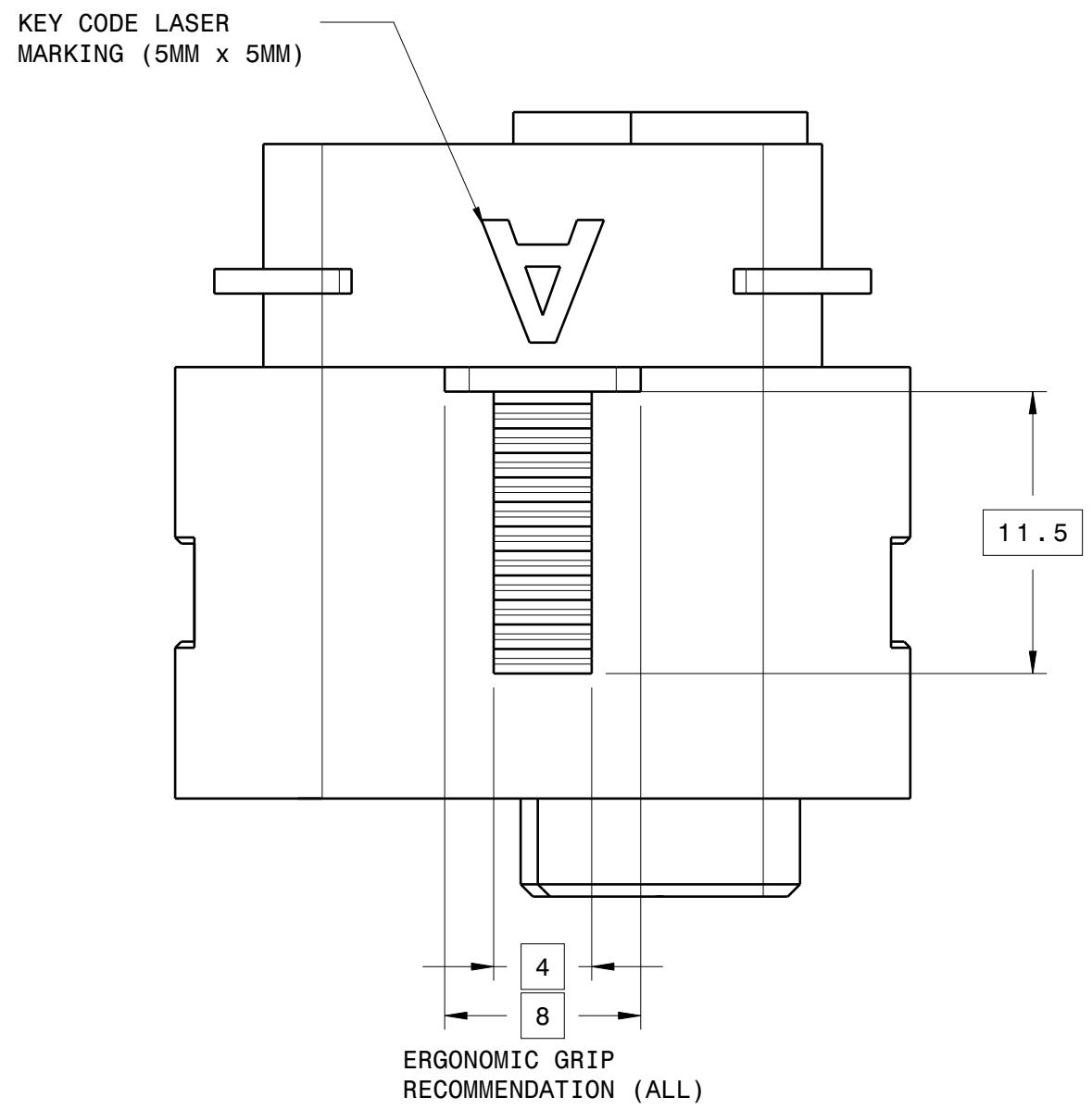
REVISION

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SHEET

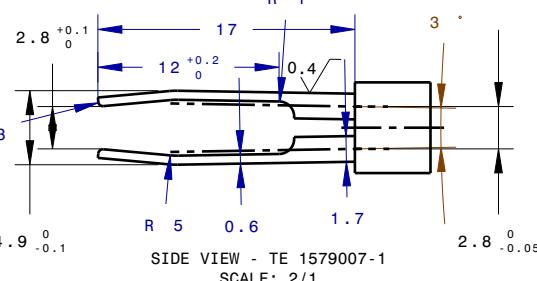
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KEY MARKING

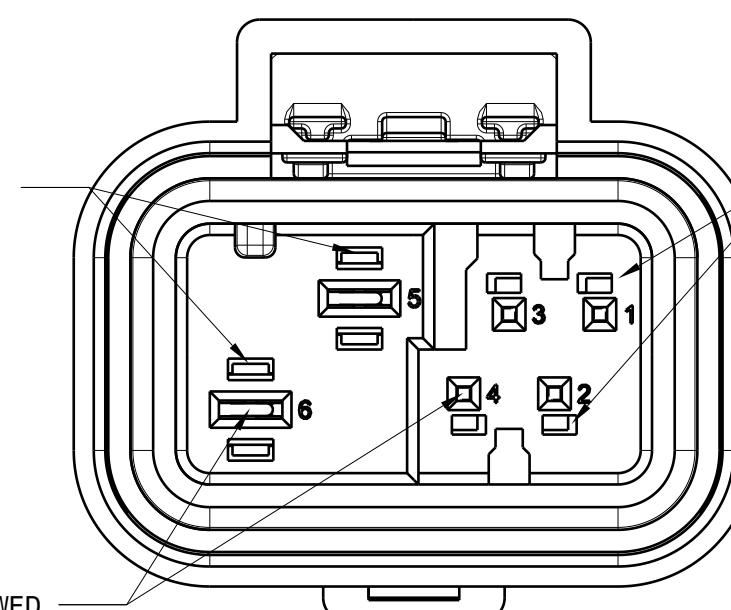
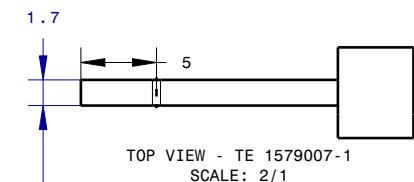


ELECTRICAL PROBING AND TERMINAL REMOVAL

POGO PIN/EXTRACTION TOOL/PROBING TOOL MUST NOT INSERT INTO TERMINAL SLIDING CONTACT



OPENING FOR TERMINAL EXTRACTION
(LOCKING LANCE) AND ELECTRICAL PROBING
OPENING MUST BE COMPATIBLE WITH TE
1579007-1 OR EQUIVALENT



**NO TOOLS ALLOW
TO AVOID DAMAGE
TO SLIDING
CONTACT**

6280012-**-B
SHOWN FOR REFERENCE
SCALE: 1/1

