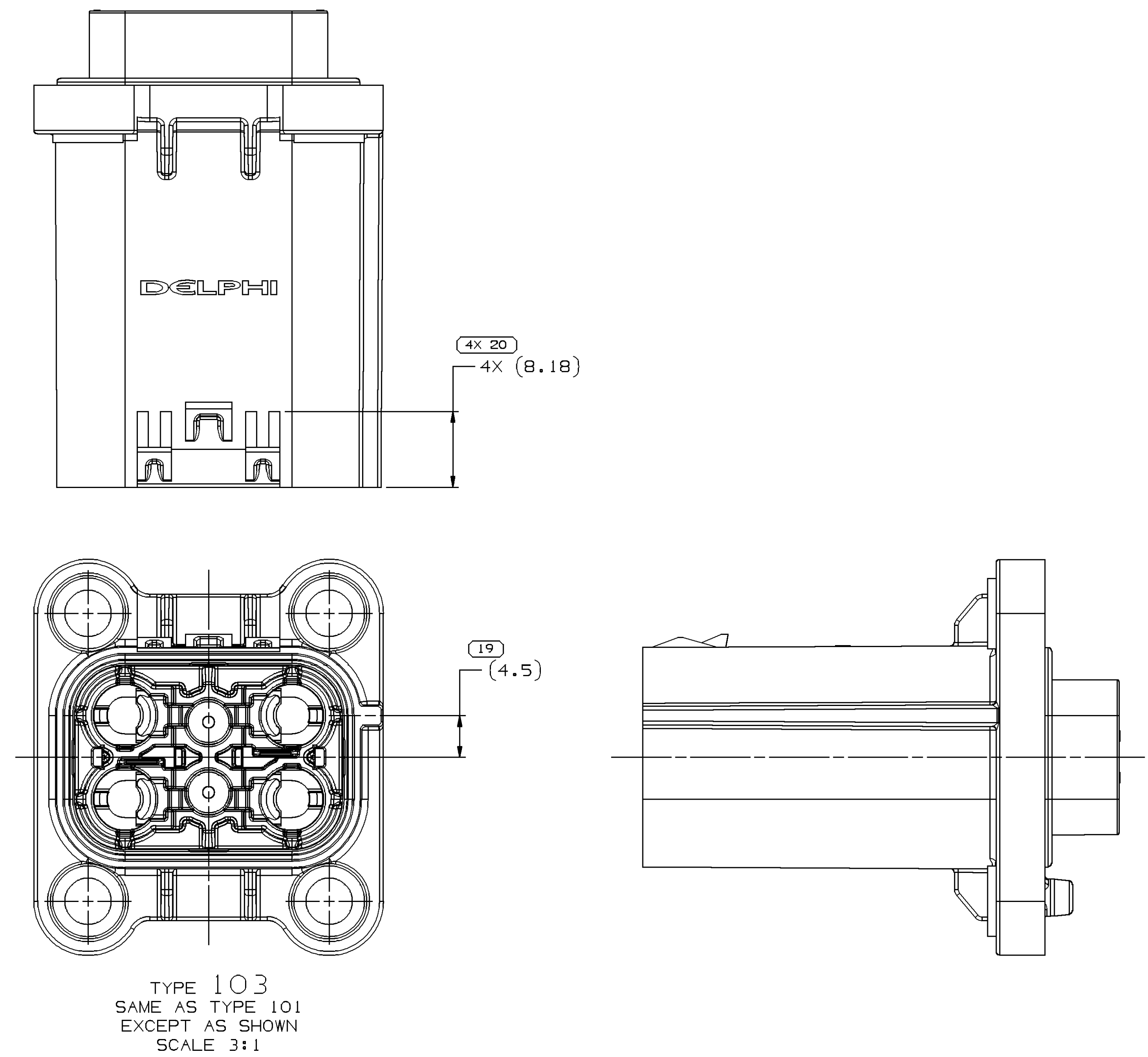
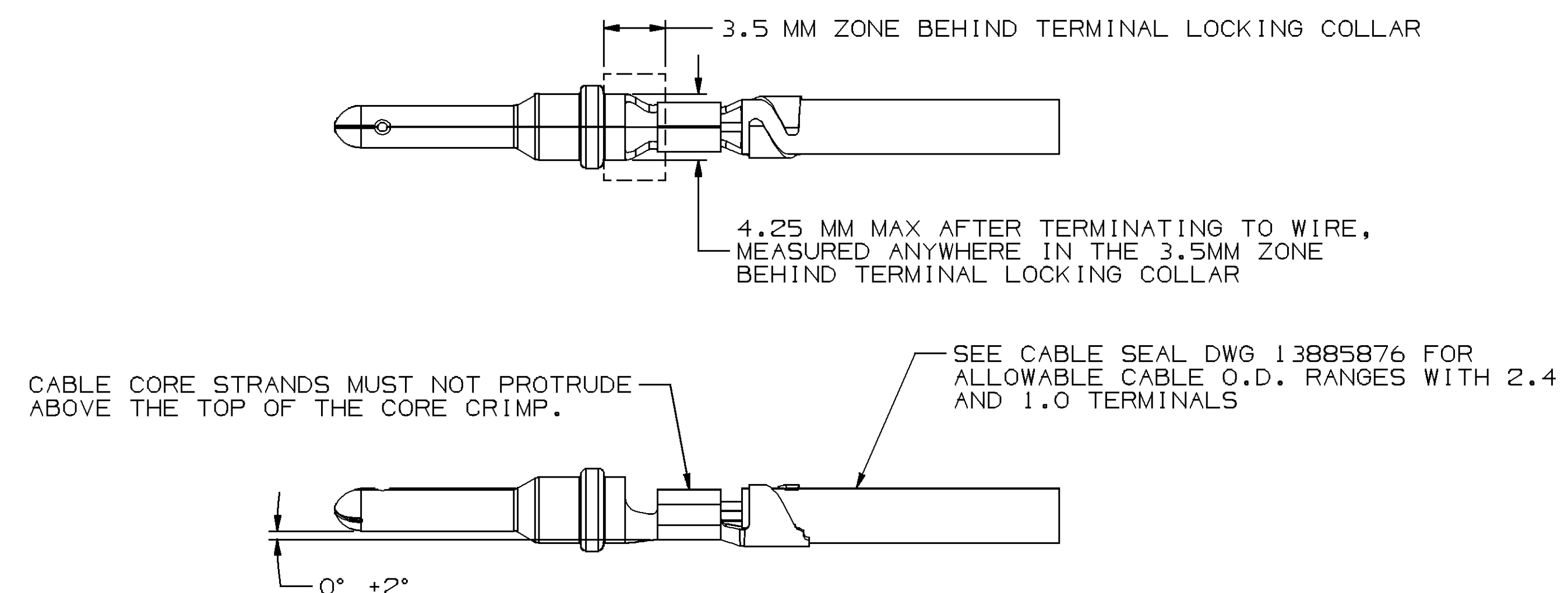


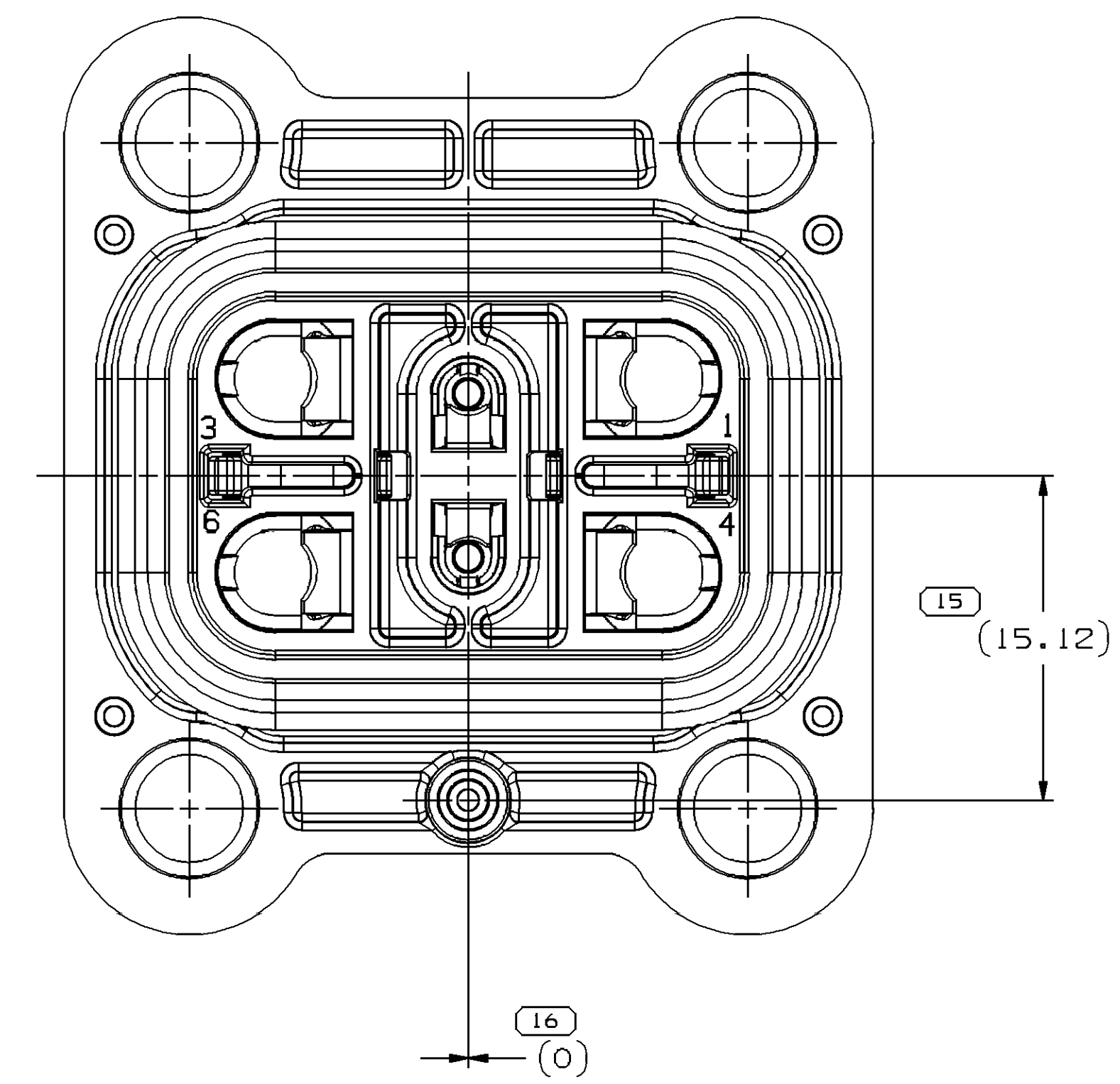
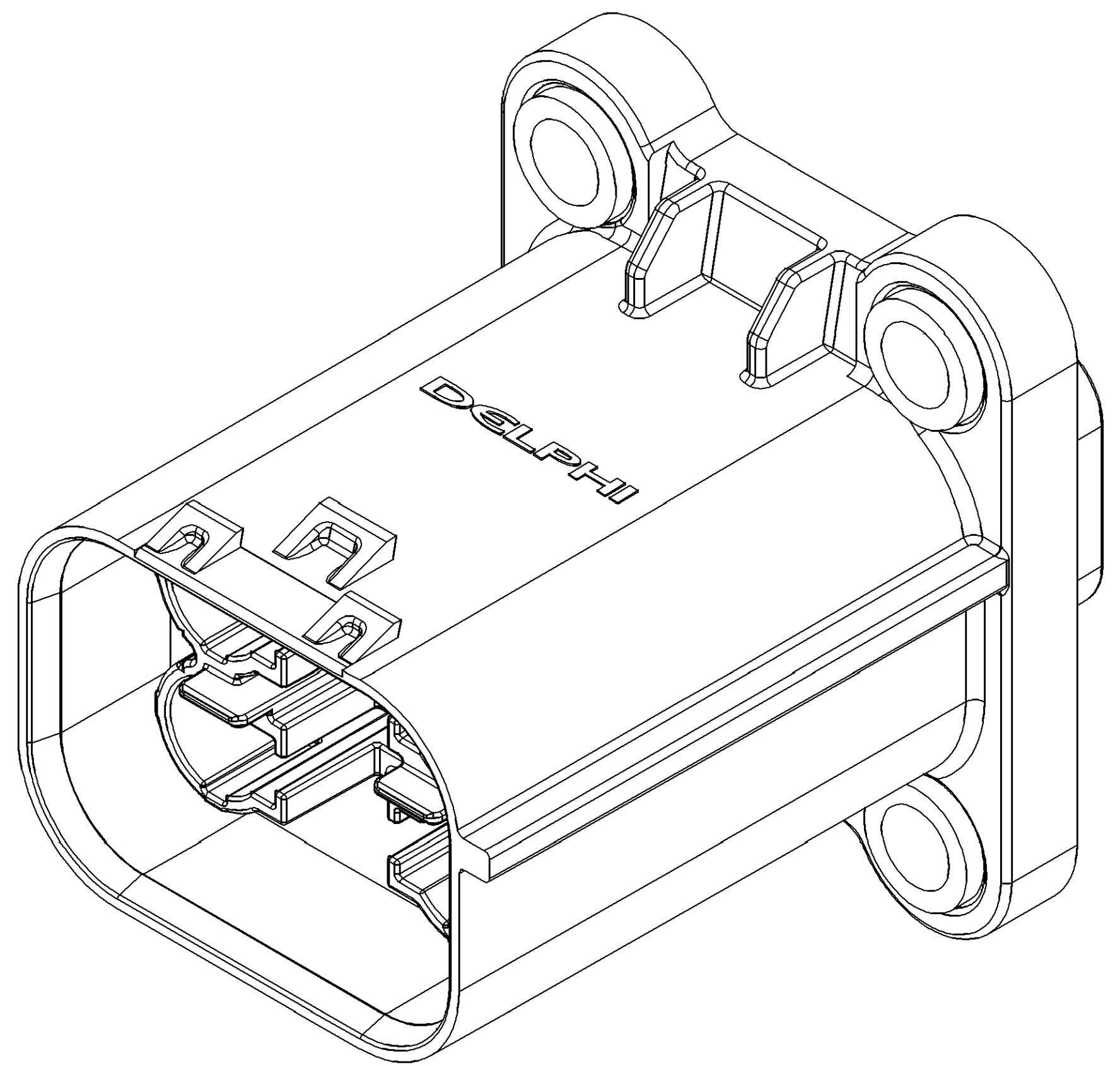
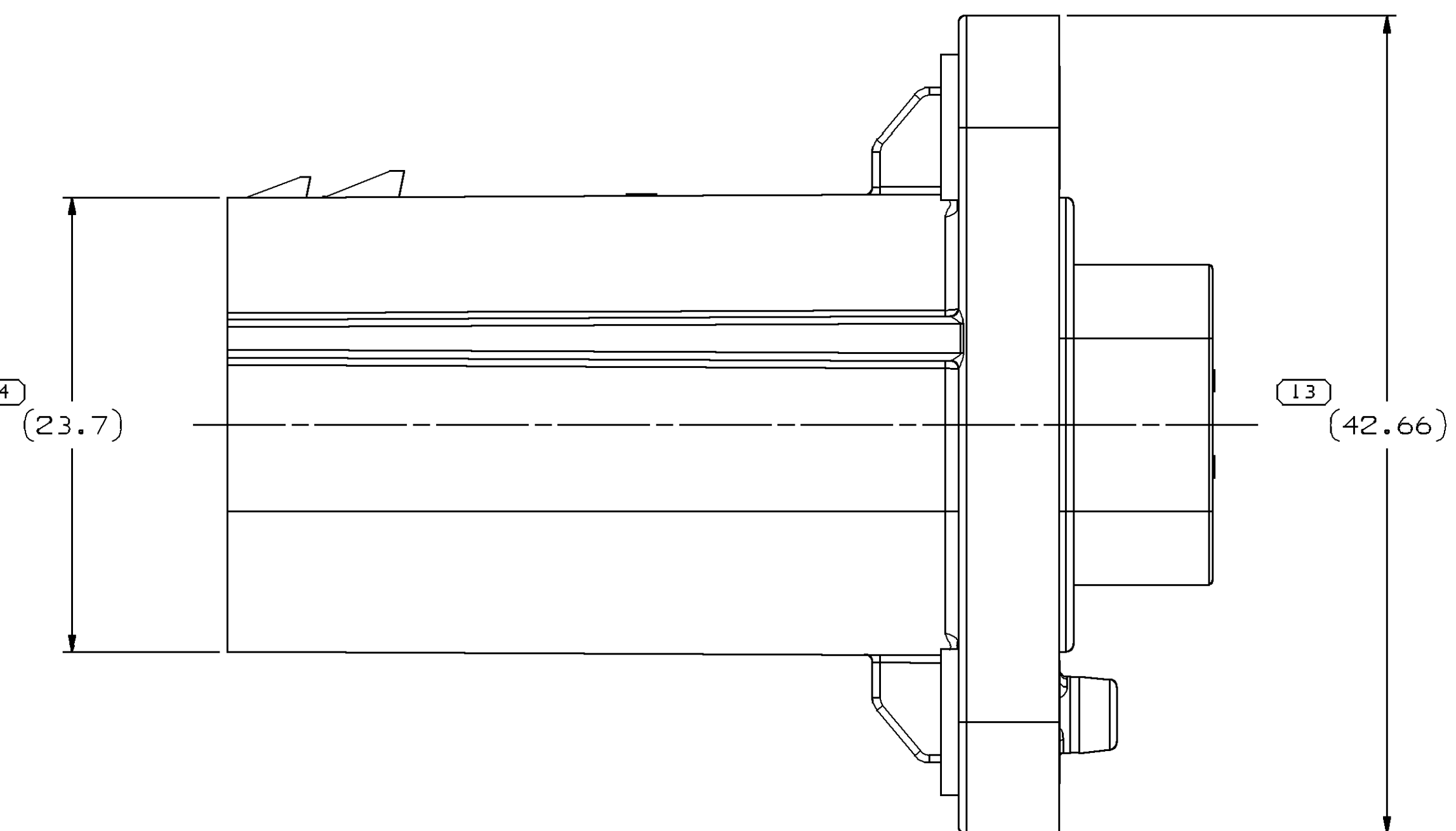
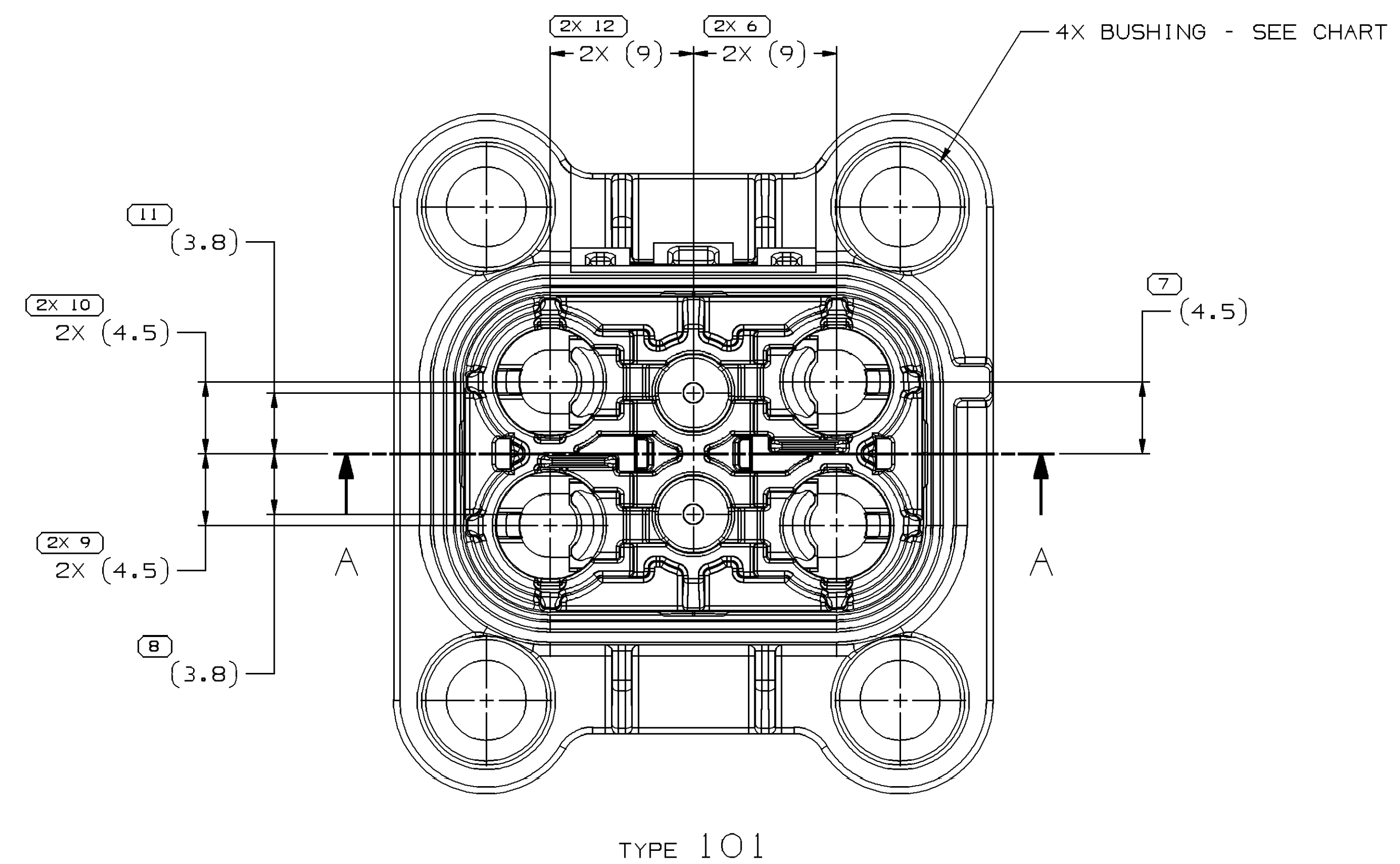
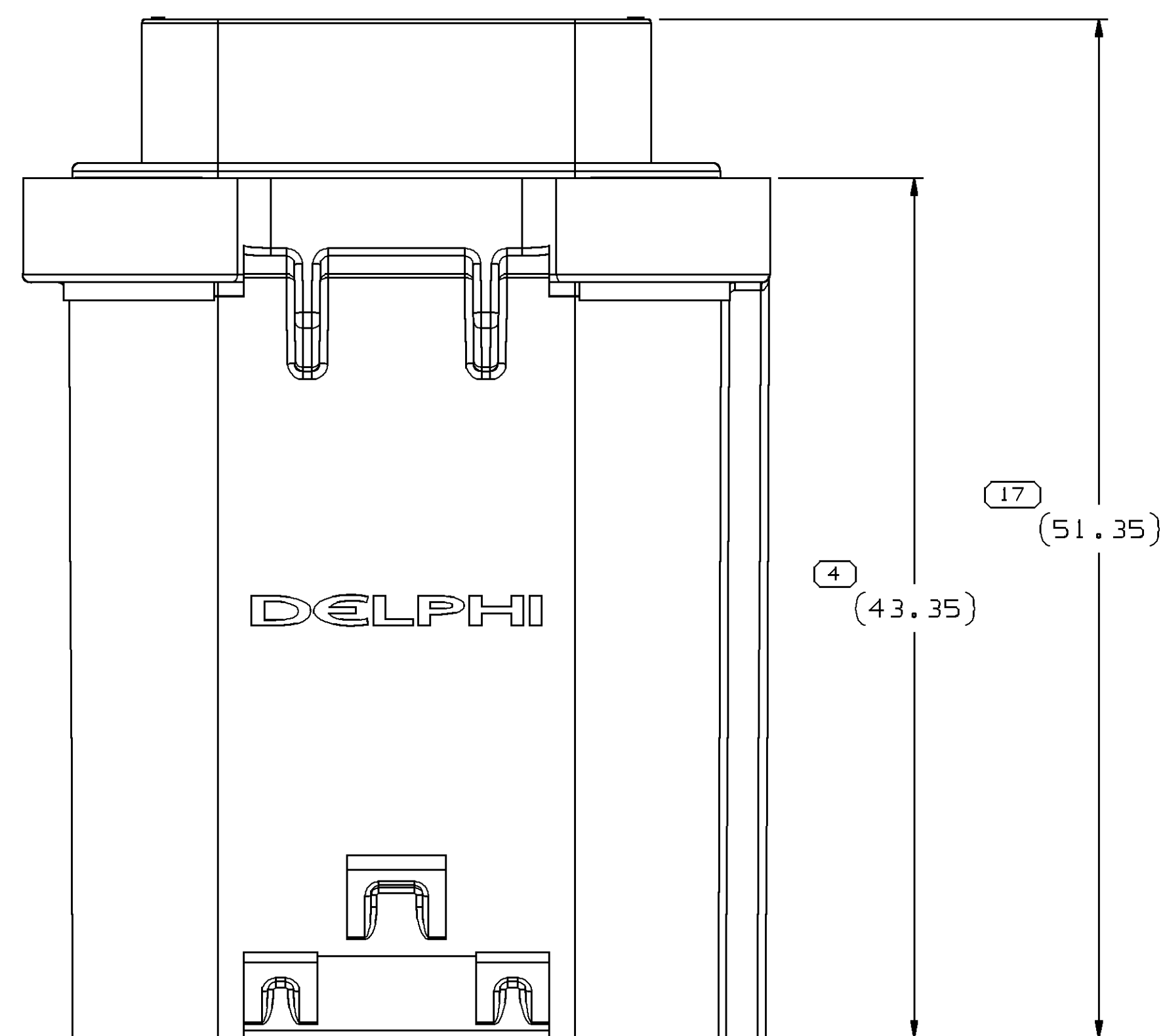


2.4 & 1.0 TERMINAL & WIRE APPLICATION REQUIREMENTS



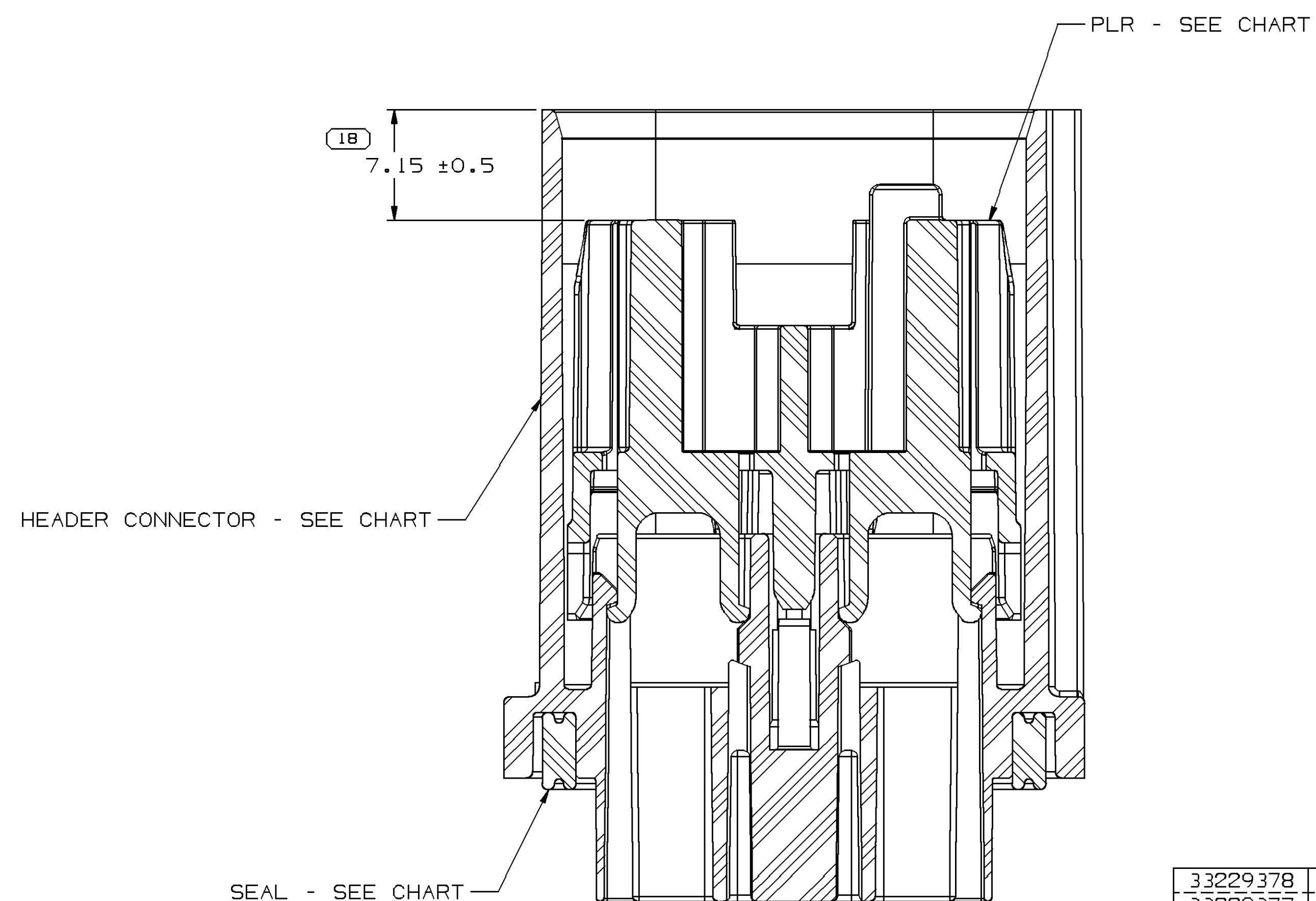
DELPHI HES 2.4 TERMINAL - 13783284 OR EQUIVALENT WITH GOLD PLATED INTERFACE FOR POWER CIRCUITS.
DELPHI HES 1.0 TERMINAL - 13711545 OR EQUIVALENT WITH GOLD PLATED INTERFACE FOR SIGNAL CIRCUITS.

1. 252A CONTINUOUS CURRENT APPLICATIONS REQUIRE 5.0 - 6.0 mm² COPPER CONDUCTORS ON THE 2,4 TERMINALS.
2. GOLD PLATED TERMINAL INTERFACES ARE REQUIRED TO MEET USCAR-2 CONNECTOR ELECTRICAL CRITERIA.
3. TERMINAL TEMPERATURES NEED TO BE MEASURED IN THE APPLICATION TO INSURE THE FOLLOWING:
 - TERMINAL TEMPERATURE RISE OVER AMBIENT IS $\leq 30^{\circ}\text{C}$ AT MAXIMUM CONTINUOUS CURRENT.
 - TERMINAL TEMPERATURE (AMBIENT + RISE) IS $\leq 125^{\circ}\text{C}$ AT MAXIMUM CONTINUOUS CURRENT AND MAXIMUM AMBIENT.
4. ELECTRIC VEHICLE CHARGING APPLICATIONS REQUIRE WIRE TO TERMINAL INTERFACE RESISTANCE ≤ 0.2 mOhms.
 - SOLDERED CRIMPS ARE RECOMMENDED.



SYMBOL DEFINITION		MISSING SYMBOLS
A DIMENSION WITHOUT AN INSPECTION REPORT SYMBOL () DOES NOT REQUIRE INSPECTION. IT MAY BE CONTROLLED ON THE INDIVIDUAL COMPONENT DRAWING.	TOTAL NO. OF INSPECTIONS REQUIRED	27
	LAST NO. USED	20

DND STATUS				CORE	REVISION HISTORY	AUTH	DND	APPROV	1	2
DATE	STRT	REV	N/P							
09WV11	R	01	-	-	WAS PE204840 AND RELEASED	414025	TAI	TAI	TAI	TAI
26JUL11	R	02	-	-	ALL PARTS: ADDED DIM 18; NO REV REQUIRED	414934	CN	TAI	CN	TAI
31JUL12	R	03	-	-	ALL PARTS: ADDED APPLICATION INFO. AND NOTES #3, 4, 5, 6, 8 7	416901	TAI	TAI	TAI	TAI
06MAY13	R	04	-	-	ALL PARTS - ADDED "TERMINAL & WIRE" INFORMATION - "REFERENCE WATUNG" NOTE	422393	ASD	CN	JM	EMDA
10MAY13	R	05	-	-	CORRECTED ISOMETRIC VIEW	425513	ASD	CN	JM	EMDA
03JUN13	R	06	-	-	15543396 - REVISE SEPARATE DRAWING: ALL PARTS - ADDED "TERMINAL & WIRE" VIEW	426294	CN	JM	EMDA	AMS
18JUL13	R	07	-	-	15543396 - UPDATED PART AVAILABILITY	423324	AMS	JM	EMDA	AMS
08NOV13	R	08	-	-	REVISED TERMINAL & WIRE APPLICATION REQUIREMENTS NOTE	424547	AMS	JM	EMDA	AMS
04AUG14	R	09	-	-	ALL PARTS - ADDED CREEPAGE INFORMATION NOTE	427118	AMH	YH	YH	YH
01FEB15	R	10	-	-	33229376 - 77 & 78 - RELEASED	428028	AMH	YH	YH	YH
10OCT16	R	11	-	-	33229376-79 - UPDATED PART AVAILABILITY	433501	AMH	YH	YH	YH
25AUG16	R	12	-	-	139780-29 - 39, 15543396 - OBSOLETE AND REPLACED BY INFO	434006	JM	JM	YH	YH



SECTION A - A

33229378	01	AA	103	1552642	13833742	33211751	13885972	-	-
33229377	01	AA	102	13885859	13833742	33211751	13885972	-	-
33229376	01	AA	101	13833745	13833742	33211751	13885972	-	-
15543346	01	AD	103	1552642	13833742	13824967	13885972	33229378	
13879639	01	A6	102	13885859	13833742	13824967	13885972	33229377	
13879638	01	A6	101	13833745	13833742	13824967	13885972	33229376	
PART NO	REV	P	TYPE	HEADER	CONNECTOR	PLR	BUSHING	SEAL	REPLACED BY

- NOTES
1. UNLESS OTHERWISE SPECIFIED AND/OR INDICATED:

DIMENSIONS ARE TO FACE OF VIEW SHOWN AND AUTOMATICALLY ROUNDED BY COMPUTER FOR INSPECTION (SEE MATH MODEL FOR PRECISE DIMENSIONS). FOR ALL OTHER DIMENSIONS NOT SHOWN BUT REQUIRED FOR TOOLING BUILD, SEE MATH MODEL FOR PRECISE TOOL PATH DATA.
 2. THIS PRODUCT IS NOT CATEGORIZED AS AN APPEARANCE ITEM, MINOR IMPERFECTIONS INCLUDING, BUT NOT LIMITED TO, FLOW MARKS, COLOR BLEMISHES, GATE VESTIGE, AND SOFT FLASH THAT DO NOT AFFECT THE FIT, FORM, OR FUNCTION OF THE PART ARE PERMISSIBLE PER DRP-4.7-CS-01.
 3. CONNECTOR ASSEMBLIES ARE VALIDATED TO SAE/USCAR-37 REV.01 - AUS-'08 TEMPERATURE CLASS T1, SEALING CLASS S3, VIBRATION CLASS V1, AND HATCH CYCLES M1.
 4. SEAL MAY BECOME DISLODGED DURING SHIPPING AND HANDLING. BEFORE ATTACHING TO THE MATING DEVICE OR COVER, THE OPERATOR MUST INSURE THE SEAL IS IN PROPERLY ASSEMBLED AS SHOWN.
 5. RECOMMENDED FASTENER TIGHTENING TORQUE IS 3.5 +/- 0.5 NEWTON-METERS.
 6. HARNESS MANUFACTURER IS RESPONSIBLE FOR VALIDATING THE CONNECTION AS APPLIED ON CABLE TO THE REQUIREMENTS OF SPECIFIC APPLICATIONS.
 7. REFERENCE MATING COMPONENTS OR EQUIVALENT:

MODULE CASE DETAIL - 13943505
 8. FOR APPLICATION DATA SEE THE INDIVIDUAL APPLICATION DRAWINGS.
 9. CONNECTOR DESIGNS PROVIDE THE FOLLOWING MINIMUM CREEPAGE DISTANCES WHEN MATED, AS ASSESSED PER IEC60664 WITH POLLUTION DEGREE 2 OR 3:
- CAVITIES 1 TO 4 OR 3 TO 6 = 10.36
- CAVITIES 1 TO 3 OR 2 TO 6 = 10.64
- CAVITIES 1 TO 6 OR 4 TO 6 = 19.09

[illegible]

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