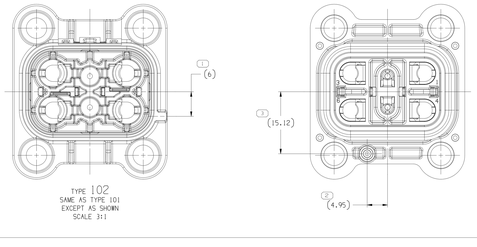
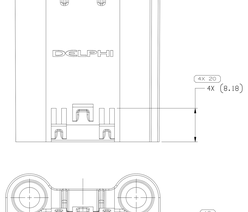
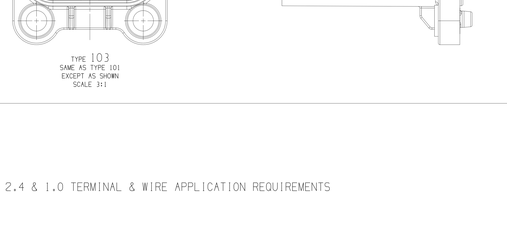


TYPE 102
SAME AS TYPE 101
EXCEPT AS SHOWN
SCALE 3:1



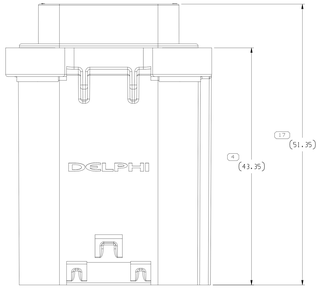


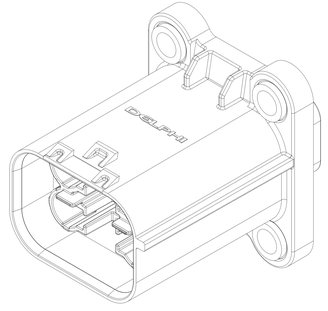
TYPE 103
SAME AS TYPE 101
EXCEPT AS SHOWN
SCALE 3:1

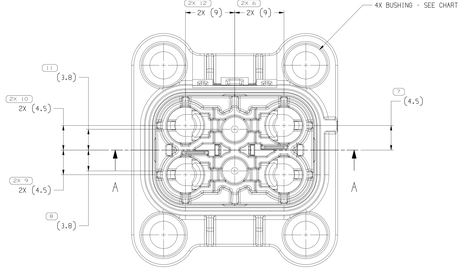
2.4 & 1.0 TERMINAL & WIRE APPLICATION REQUIREMENTS

DELPHI HES 2.4 TERMINAL - 13783284 OR EQUIVALENT WITH GOLD PLATED INTERFACE FOR POWER CIRCUITS.
DELPHI HES 1.0 TERMINAL - 13711549 OR EQUIVALENT WITH GOLD PLATED INTERFACE FOR SIGNAL CIRCUITS.

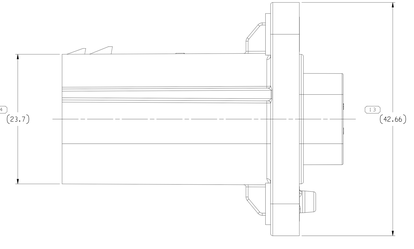
1. >25A CONTINUOUS CURRENT APPLICATIONS REQUIRE 5.0 - 6.0 mm² COPPER CONDUCTORS ON THE 2.4 TERMINALS.
2. GOLD PLATED TERMINAL INTERFACES ARE REQUIRED TO MEET USCAR-2 CONNECTOR ELECTRICAL CRITERIA.
3. TERMINAL TEMPERATURES NEED TO BE MEASURED IN THE APPLICATION TO INSURE THE FOLLOWING:
   - TERMINAL TEMPERATURE RISE OVER AMBIENT IS ≤30° C AT MAXIMUM CONTINUOUS CURRENT.
   - TERMINAL TEMPERATURE (AMBIENT + RISE) IS ≤125° 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.

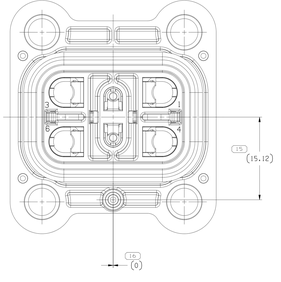


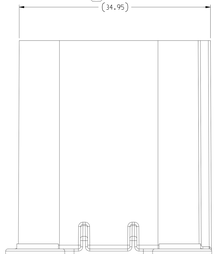


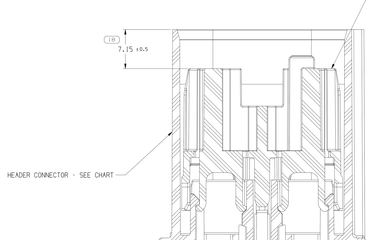


TYPE 101









SECTION A-A

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 TOOL 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 DPNP-4.7-CS-01.

3. CONNECTOR ASSEMBLIES ARE VALIDATED TO SAE/USCAR-37 REV.01 - AUG.'08 TEMPERATURE CLASS TI, SEALING CLASS S3, VIBRATION CLASS VI, AND MATING 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 INTACT AND 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 4 TO 6 : 16.84
   - CAVITIES 1 TO 6 OR 4 TO 3 : 19.09

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	NO MISSING SYMBOL NUMBER
	LAST NO. USED: 20	

DWG STATUS DATE	STS	REL	N/P	CHG	ZONE	REVISION HISTORY	AUTH	DR APVD	APVD
09FE17	R	01	-	-	-	RELEASED	435623	DGR	NZ 5BH
21DE17	R	01	AA	-	-	DELETED DPN: 35048136/35048137/35048138	483655	DGR	NZ 5BH
01AP20	R	02	-	-	-	MATERIAL OF CONN WAS M46290018M2378019.	445310		CZ AM

PART NO	REV	N/P	TYPE	HEADER CONNECTOR	PLR	BUSHING	SEAL	
35048141	02	-	103	35457937	13833742	3321175 1	35048142	-
35048140	02	-	102	35457935	13833742	3321175 1	35048142	-
35048139	02	-	101	35457934	13833742	3321175 1	35048142	-
35048138	02	-	103	35457937	13833742	1382496 7	35048142	-
35048137	02	-	102	35457935	13833742	1382496 7	35048142	-
35048136	02	-	101	35457934	13833742	1382496 7	35048142	-

(14) PROCESS SENSITIVE DIMENSION

DIMENSIONS ENCLOSED IN ( ) INDICATE REFERENCE DIMENSIONS AND NO TOLERANCE APPLIES UNLESS OTHERWISE SPECIFIED.

DIMENSIONAL RANGE (MM)

	0.5 TO 6	>6 TO 30	>30 TO 120	>120 TO 315	>315 TO 1000	>1000 TO 2000	>2000 TO 4000	>4000 TO 8000
TOLERANCE UNLESS OTHERWISE SPECIFIED	±0.05	±0.1	±0.15	±0.2	±0.3	±0.4	±0.5	±0.6

ANGULAR TOLERANCE ±2°

THIRD ANGLE PROJECTION

DO NOT SCALE — USE MATH DATA

NX

DRAWING NUMBER	SIZE	SCALE	FRAME NO	SHEET NO	TYS	REV	NOT
35050771	A1x3	4:1	2 OF 2	1 OF 1	R	02	-

DRAWING NUMBER	SIZE	SCALE	FRAME NO	SHEET NO	TYS	REV	NOT
35050771	A1x3	4:1	1 OF 2	1 OF 1	R	02	-

A "—" LINE DRAWN THROUGH A PART NUMBER INDICATES THAT PHYSICAL PARTS ARE NOT AVAILABLE FOR ORDERING.

PART NUMBERS THAT DO NOT HAVE A LINE PRESENT INDICATE THAT PHYSICAL PARTS ARE AVAILABLE FOR ORDERING.

CONTACT APTIV SALES TO ASSURE AVAILABILITY OF PARTS.

DWG TYPE: PART DRAWING

STYLE:

VOLUME (CM³):

SYSTEM UNIT:

UNLESS OTHERWISE SPECIFIED
THIS DOCUMENT IS IN ACCORDANCE WITH ASME Y14.5M-1994 UNLESS OTHERWISE SPECIFIED. GENERAL TOLERANCING PER ASME Y14.5M-1994. SEPARATE PATTERNS OF FEATURES MAY BE SHOWN SEPARATELY REGARDLESS OF DATUM REFERENCES.

ALL DIMENSIONS ARE IN MILLIMETERS

REFERENCE:

DR	
APVD1	CHERRY ZHAO — 21AP20
APVD2	ARTHUR MA — 21AP20
APVD3	CHERRY ZHAO — 21AP20
APVD4	
APVD5	

SUBSTANCES OF CONCERN AND RECYCLED CONTENT PER APTIV STANDARD

SIZE: SEE CHART

DRAWING NAME: TAXI ASM CONN HES 1.0 2.4

DRAWING NUMBER: 35050771

•APTIV•
CONNECTION SYSTEMS
Anting, China
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3 2 0 2 0 A I 1

Plotted: 13/11/2020 08:10:08 Date: 13-Nov-20 Time: 13:11:26
Path: C:\APTIV\35050771_02.dft
User: ZHAOC1