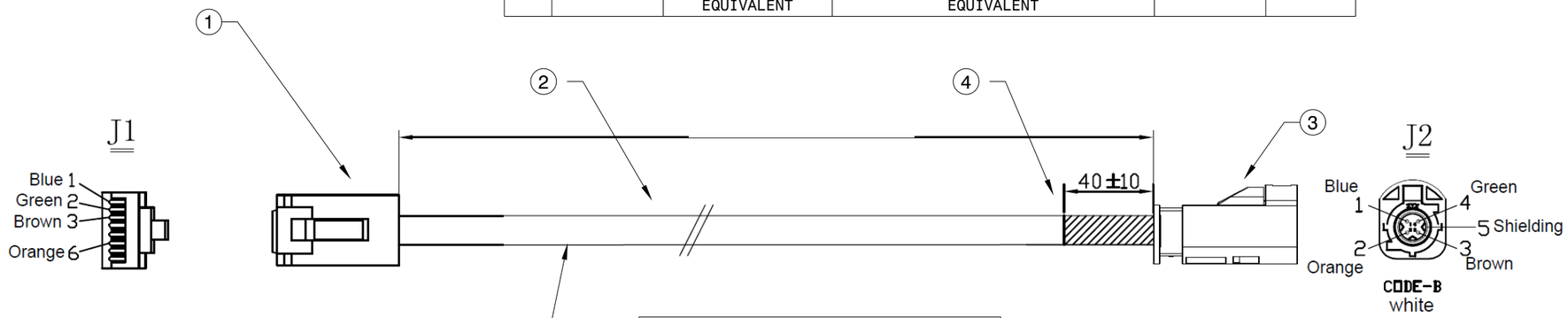
Project: SERVICE TOOLING ENGINEERING

FOR BILL OF MATERIALS, REFER TO ITEM IN TESLA INC PLM TOOL.
THE ITEM LIST ON THIS DRAWING IS PROVIDED FOR REFERENCE ONLY.

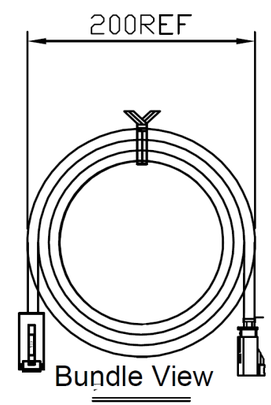
ITEM	QTY	PART NUMBER	DESCRIPTION	SUPPLIER	MATERIAL
1	1	N/A	MALE RJ-45-8P OR EQUIVALENT	GENERIC	N/A
2	1	LD5-881-3045 OR EQUIVALENT	HIGH SPEED DATE CABLE	ROSENBERGER	N/A
3	1	HD1-638-T13	HSD, CODE B WHALE WHITE	ROSENBERGER	N/A
4	AS REQUIRED	EPS300 OR EQUIVALENT	HEAT SHRINK TUBING 1/4 OR EQUIVALENT	3M	N/A

CA	DATE	REV	DESCRIPTION	APPD	APPD
	14-DEC-2011	1	INITIAL RELEASE	--	
	15-AUG-2014	2	IMPORTED DESIGN INTO CATIA. ADDED ITEM 4	--	
	08-JUN-2023	3	UPDATED FOR EXTERNAL USE	--	



LABEL LOCATED 70MM FROM RJ45 CONNECTOR
LABEL TO INCLUDE:
PART NAME, PART NUMBER, AND MANUFACTURED DATE

WIRE DIAGRAM		
J1	COLOR (SIGNAL)	J2
1	BLUE (TXP)	1
6	ORANGE (RXN)	2
3	BROWN (RXP)	3
2	GREEN (TXN)	4
	SHIELDING	5



NOTE:
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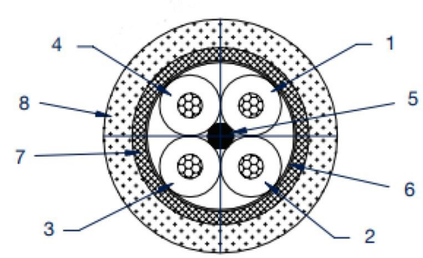
CABLE SPECIFICATIONS	
Number of Conductors	4
Nominal Impedance(Ω)	100±15%
Nominal Capacitance(pF/m@1KHz)	≤50
Attenuation(dB/100m@100MHz)	≤33
Skew conductor pairs(ps/m)	≤25
Crosstalk(dB@1GHz)	-40
Differential Shielding Effectiveness	
(dB @ ≤1GHz)	≥75
(dB @ ≤2GHz)	≥65
Cable Thickness (mm)	5
Single Bend Radius (x cable diam.)	3
Multiple Bend Rdaius (x cable diam.) (16k cycles min)	5
Operating Temperature(℃)	-40 to +105

DESIGN CHARACTERISTICS	
1-4	CONDUCTOR
5	STRANDING
6	FOIL
7	SHIELD
8	SHEATH



CONNECTOR SPECIFICATIONS	
IMPEDANCE(Ω)	100±15%
Insertion Loss(dV Max DC-1GHz)	-0.3
Near End Crosstalk (dB Max)	-30
Far End Crosstalk (dB Max)	-35
Contact Resistance (mΩMax)	50
Temperature Range (℃)	-40 to +85

CAD FILE NAME		TRACEABILITY GRADE	A
DRAWN BY	--	DATE	08-JUN-2023

TESLA

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MATERIAL	N/A		
FINISH	N/A	EST. MASS (g)	MASS
THIRD ANGLE PROJECTION	DIMENSIONS ARE IN MILLIMETERS. ANGLES ARE IN DEGREES.	SCALE 1:1	SHEET SIZE B
ITEM NAME	HARNESS, DIAGNOSTIC, HSD TO RJ45		
ITEM NUMBER	1013230-00-A	REVISION 03	SHEET 1 of 1

B HARNESS, DIAGNOSTIC, HSD TO ETHERNET REV 03 DRAWING VERSION 03