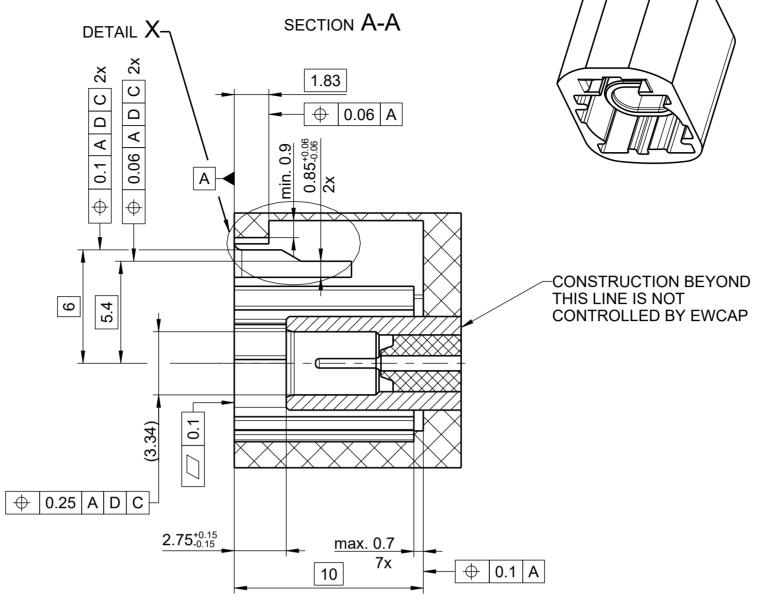


 $30^{\circ}_{-2}^{+2^{\circ}} 2x$ 



#### NOTICE:

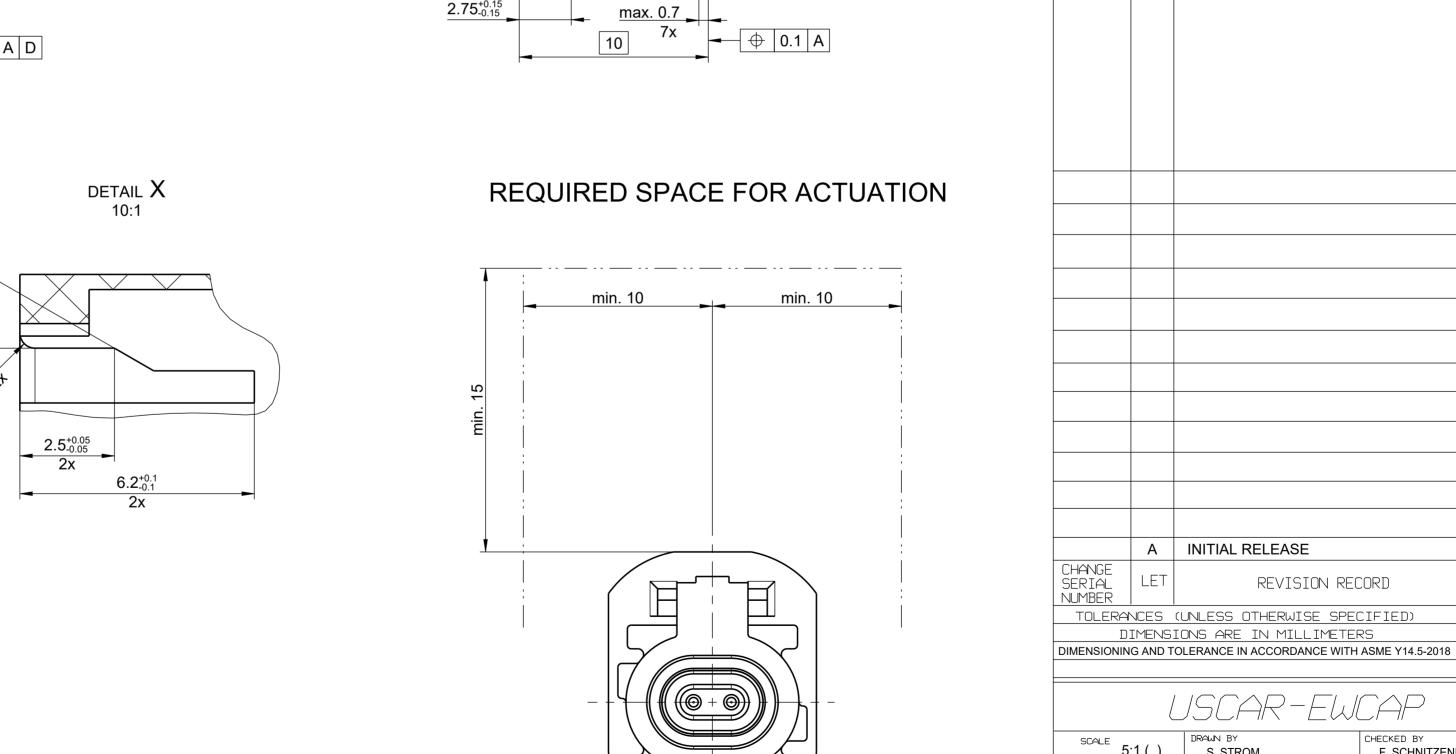
ISOMETRIC VIEW SCALE: 3:1

This drawing, or portions of it are controlled by the Electrical Wiring Components Application Partnership(EWCAP) a subgroup of the United States Council for Automotive Research LLC (USCAR LLC).

USCAR is an LLC consisting of members from FCA US LLC, Ford Motor Company and GM Corporation.

Any change to a EWCAP controlled portion of this drawing, Any change to a EWCAP controlled portion of this drawing, including a revision record change must be approved, in writing, by the responsible EWCAP representative from each USCAR member company. Each EWCAP representative authorized to sign for his or her member company is responsible for obtaining all necessary approvals within that company prior to signing for the approval of the change.

EWCAP expressly prohibits any party from changing either any EWCAP controlled portion of this drawing or any associated tooling before receiving approval, signed by the authorized representatives, of the USCAR member companies. Reference to the signed change notice must be entered in the drawing control column.



#### NOTES:

O = NUMBER FOR PINNING
 ALL NON-DIMENSIONED RADII: R0.2±0.05
 CONTACT OVERLAP OF MIN: 1.0MM HAS TO BE GUARANTEED
 MEASURE WITHIN REFERENCE SYSTEM

RECOMMENDED MATERIAL PROPERTIES

PLASTIC HOUSING

min. 6500 MPa

min. 100 MPa

min. 2 %

A D

COMPONENT

TENSILE MODULUS

**ELONGATION AT BREAK** 

TENSILE STRENGTH BREAK

Rosenberger

TITLE

D-84526 Tittmonig Germany

10GB ETHERNET CONNECTOR.

100 OHM DIFFERENTIAL PAIR. SINGLE INTERFACE. SHEET DRAWING NUMBER 777-U-002-1-Z01 1 of 4

S. STROM

REVISION RECORD

SIZE DO NOT SCALE DRAWING A2 COMPUTER AIDED DRAWING

F. SCHNITZENBAUMER

CHECKED BY

04/19/21

DATE

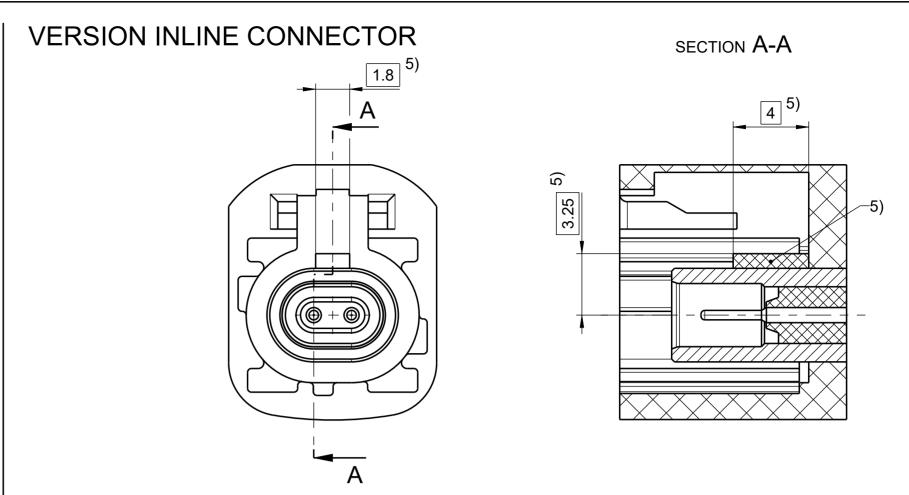


04/19/21

PA RCB

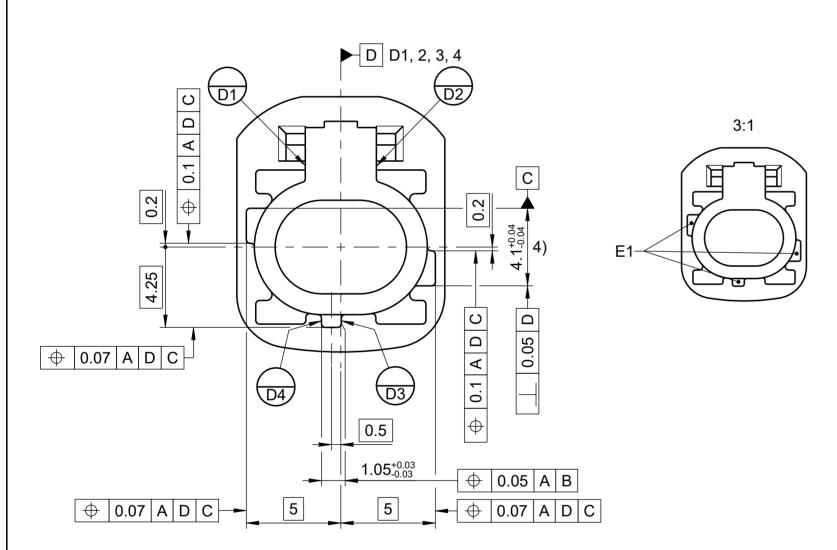
DWN CHK

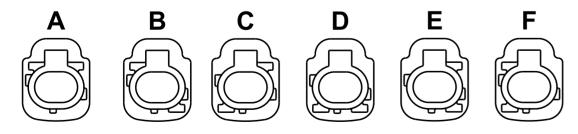
## CODING ∕-R0.3±0.05 ( 0.07 A D C 4x 3:1 KEY b KEY a--KEY c KEY d-⊕ | 0.07 | A | D | C | 0.07 A D C 1.85 1.85 2x - + 0.07 A D C 4.5 0.07 A D C 4.5



5) MARKED SPACE REPRESENTS A TPA FEATURE THAT EXISTS ON INLINE MALE CONNECTORS.
TO MAINTAIN COMPATIBILITY WITH INLINE CONNECTORS, MATING CONNECTOR MUST NOT ENTER THIS SPACE.

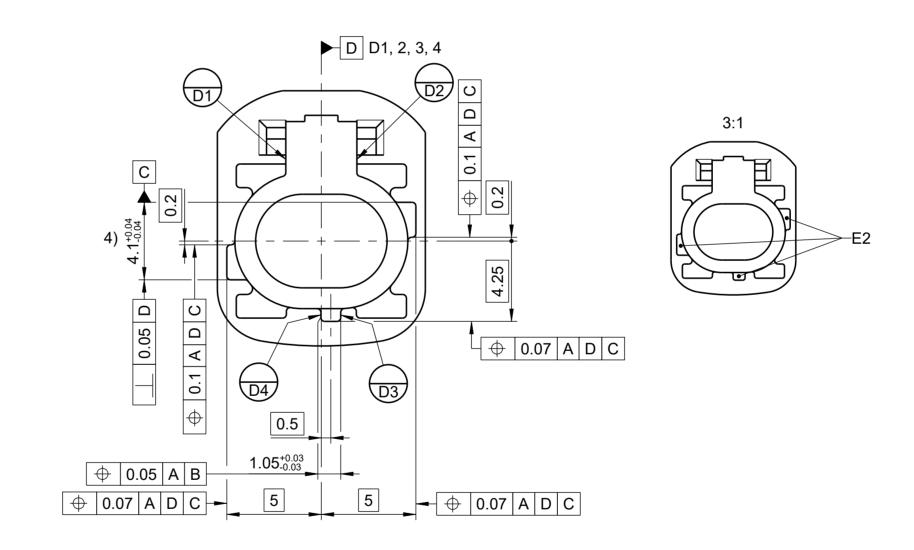
### **GUIDANCE E1**

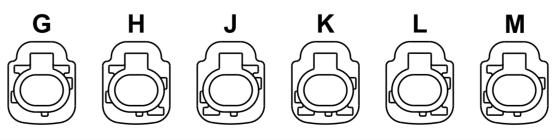




EWCAP REF #	CODE	KEY	Farbe <i>color</i>	SIMILAR RAL-NO
777-U-002-1-A01	Α	a-b-E1	JET BLACK	9005
777-U-002-1-B01	В	a-c-E1	PURE WHITE	9010
777-U-002-1-C01	С	b-d-E1	LIGHT BLUE	5012
777-U-002-1-D01	D	c-d-E1	CLARET VIOLET	4004
777-U-002-1-E01	E	b-c-E1	MAY GREEN	6017
777-U-002-1-F01	F	a-d-E1	NUT BROWN	8011

### **GUIDANCE E2**





EWCAP REF#	CODE	KEY	Farbe color	SIMILAR RAL-NO
777-U-002-1-G01	G	a-b-E2	PLATINUM GREY	7036
777-U-002-1-H01	Н	a-c-E2	LIGHT PINK	3015
777-U-002-1-J01	J	b-d-E2	BEIGE	1001
777-U-002-1-K01	K	c-d-E2	CURRY	1027
777-U-002-1-L01	L	b-c-E2	YELLOW GREEN	6018
777-U-002-1-M01	М	a-d-E2	PASTEL ORANGE 2003	

TOLERANCES (I	UNLESS OTHERWISE SPE	CIFIED)	THIRD 6	NGLE PROJECTION
DIMENSIONS ARE IN MILLIMETERS				<b>†</b>
DIMENSIONING AND TO	LERANCE IN ACCORDANCE WITH	ASME Y14.5-2018	(	<del>() [                                   </del>
				$\downarrow$
USCAR-EWCAP				
SCALE _ , , ,	DRAWN BY	CHECKED BY		DATE
5:1 ( )	S. STROM	F. SCHNITZENBA	AUMER	04/19/21
TITLE	•			

10GB ETHERNET CONNECTOR.

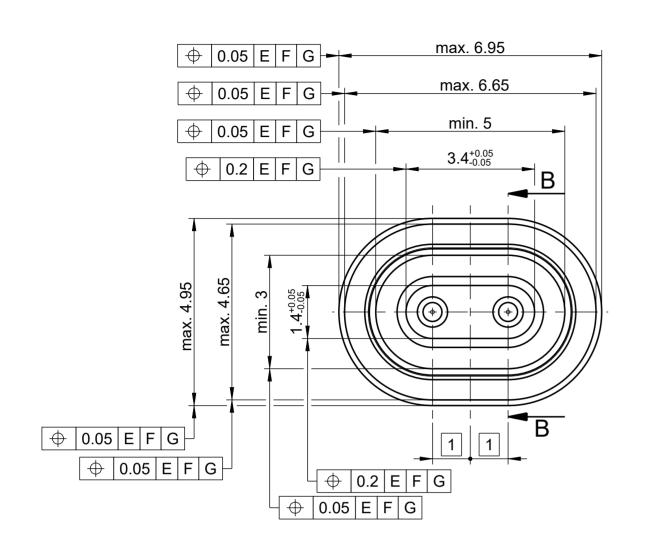
100 OHM DIFFERENTIAL PAIR. SINGLE INTERFACE.

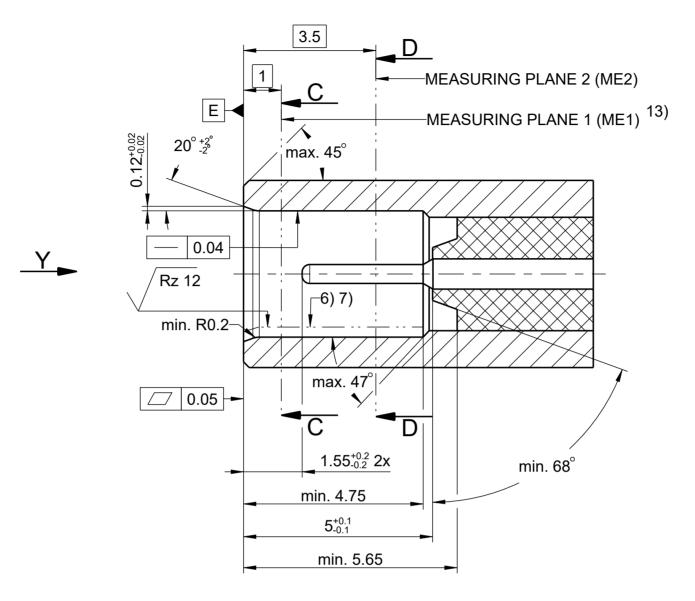
2 of 4 PRAWING NUMBER 7777-U-002-1-Z01

SIZE DO NOT SCALE DRAWING A2 COMPUTER AIDED DRAWING



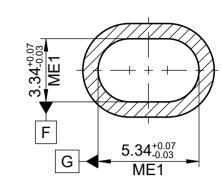
# **GENERAL**



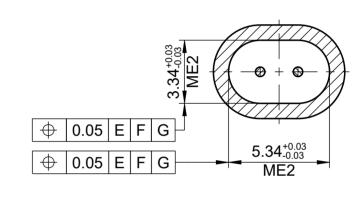


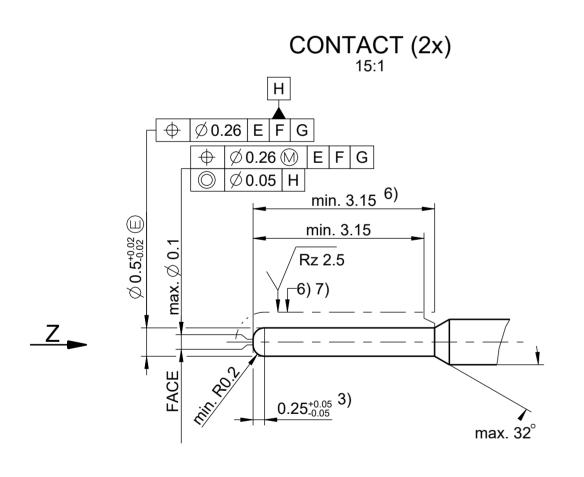
SECTION B-B

SECTION C-C 5:1



SECTION D-D 5:1



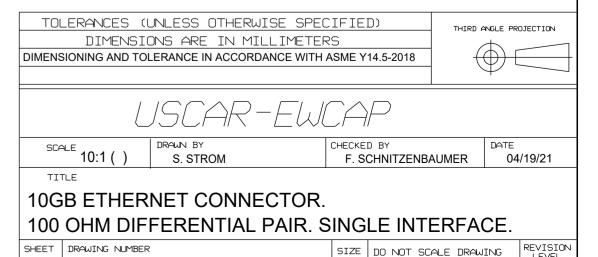


6) 12)			
	BASE MATERIAL	PLATING OF CONTACT AREA	
OUTER CONTACT	ZINC ALLOY	min. 2 μm Sn over min. 0.2 μm Ni and min. 8 μm Cu	
	COPPER ALLOY	min. 1.5µm Sn (HOT DIP TIN PLATING)	
		ALTERNATIVE: min. 2 μm Sn over min. 0.2 μm Ni and optional min. 0.5 μm Cu	
INNER CONTACT	COPPER ALLOY	min. 0.12 μm Au over min. 2 μm Ni and optional min. 0.5 μm Cu	

SCHEMATIC REPRESENTATION				
INNER CONTACT		OUTER CONTACT		
VIEW Z 50 30:1 × ©	VIEV. 5:	• •	0.03	
FACE	-(Ø 0.5) ···	2x		
EXECUTION EXAMPLE				
20:1		3:1		

## NOTES:

- 6) CONTACT AREA:
  - PLATING REQUIRED
  - NO BURR PERMITTED
- BLANK CUT AREA PERMITTED
- DEVIATION CAUSED BY PRODUCTION PERMITTED
   a) FRONTAL DISRUPTION ONLY WITHIN THE FACE PERMITTED
- 8) ALL DIMENSIONS APPLY TO THE FINISHED PART INCLUDING SURFACE COATING
- 9) INTERFACE IS SYMMETRIC
- 10) DEVICE MANUFACTURER IS RESPONSIBLE FOR EMC-SCREENING
- BEHIND THE INTERFACE, THE RESPECTIVE OEM-STANDARDS MUST BE ADHERED TO
- 11) INTERFACE IS DESIGNED FOR A CONNECTION SYSTEM WITH 100 $\Omega$  IMPEDANCE
- 12) PLATING THICKNESSES DEPEND ON BASE MATERIAL AND PRODUCTION PROCESSES
- 13) REFERENCES CAN BE PROJECTED FOR SERIAL INSPECTION AS LONG AS INTERFACE DIMENSIONS ARE ENSURED.



A2 COMPUTER AIDED DRAWING

777-U-002-1-Z01

3 of 4

#### NOTICE

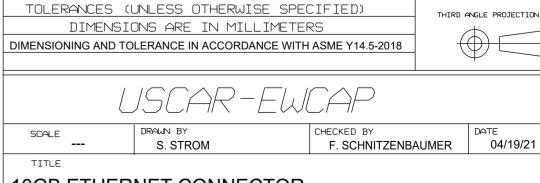
EWCAP HAS SELECTED COMMON DIMENSIONS FOR THE CONNECTOR(S) DEPICTED AND DESCRIBED HEREIN (LISTED BELOW). FURTHER, EWCAP HAS SELECTED FOR PUBLICATION THIS DRAWING (AND ITS COMPANION ELECTRONIC MODEL) PREPARED BY ROSENBERGER AS REPRESENTATIVE OF A CONNECTOR HAVING THESE DIMENSIONS. IN EXCHANGE FOR THE CONSIDERATION OF THE SELECTION OF THIS DRAWING FOR PUBLICATION (INCLUDING POSTING ON EWCAP'S WEB SITE) AND OTHER GOOD AND VALUABLE CONSIDERATION FLOWING FROM THIS SECTION, ROSENBERGER HEREBY AGREES ON BEHALF OF ITSELF AND ITS SUCCESSORS AND ASSIGNS, WITH RESPECT TO ANY COPYRIGHTS IT MAY HAVE IN THIS DRAWING AS WELL AS ANY PATENT RIGHTS IT MAY HAVE IN THE CONNECTOR ILLUSTRATED IN THIS DRAWING, NOT TO ENFORCE SUCH COPYRIGHTS AND PATENTS AGAINST ANY PERSON OR ENTITY ON ACCOUNT OF THEIR ACTIVITIES TO MAKE, HAVE MADE, USE AND SELL THE CONNECTOR ILLUSTRATED IN THIS DRAWING FOR VEHICULAR APPLICATIONS. THE TERM "CONNECTOR" AS USED IN THIS PARAGRAPH IS LIMITED SOLELY TO THE STRUCTURE SPECIFICALLY ILLUSTRATED IN THIS DRAWING.

SIGNED M. ZEBHAUSER FOR ROSENBERGER, DATE: 04/19/21 NAME AND TITLE OF SIGNER: M. ZEBHAUSER

THE PERSON SIGNING THIS AGREEMENT REPRESENTS AND WARRANTS THAT (1) HE OR SHE IS DULY AUTHORIZED AND HAS LEGAL CAPACITY TO EXECUTE AND DELIVER AGREEMENT ON BEHALF OF ROSENBERGÉR, (2) THE EXECUTION AND DELIVERY OF THIS AGREEMENT AND THE PERFORMANCE OF ROSENBERGER PURSUANT TO THE TERMS OUTLINED ABOVE HAVE BEEN DULY AUTHORIZED AND THAT THIS AGREEMENT IS A VALID AND LEGAL AGREEMENT BINDING ON APRIL 19, 2021 AND ENFORCEMENT IN ACCORDANCE WITH ITS TERMS.

NO WARRANTIES OR INDEMNITIES OF ANY KIND ARE MADE OR IMPLIED BY ROSENBERGER OR EWCAP. IN PARTICULAR THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, NON-INFRINGEMENT OR ANY OTHER WARRANTY OF ANY KIND. IN ADDITION, THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OR INDEMNITIES OF ANY KIND RELATING TO THIRD PARTY CLAIMS ARISING UNDER THE INTELLECTUAL PROPERTY LAWS OF ANY COUNTRY. ANYONE USING THE INFORMATION IN THIS DRAWING DOES SO AT THEIR OWN RISK.

APPLICABLE EWCAP DRAWING NUMBERS: 777-U-002-1-Z01



Rosenberger

D-84526 Tittmonia

10GB ETHERNET CONNECTOR. 100 OHM DIFFERENTIAL PAIR. SINGLE INTERFACE.

SHEET DRAWING NUMBER

4 of 4

SIZE DO NOT SCALE DRAWING 777-U-002-1-Z01

A2 COMPUTER AIDED DRAWING