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VERTRAULICHE UNVEROEFFENTLICHTE ZEICHNUNG FREI FUER VEROEFFENTLICHUNG
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MATED WITH:
PASSEND ZU:

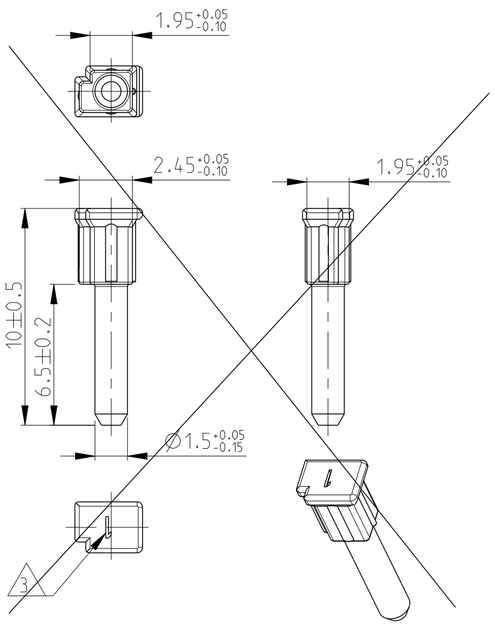
LOC	DIST
A1	-

PROJEKT NR.:

REVISIONS
AENDERUNGEN

P	LTR	DESCRIPTION BESCHREIBUNG	DATE	DWN	APVD
	B	ECR-13-011179	15JUL2013	MS	AS

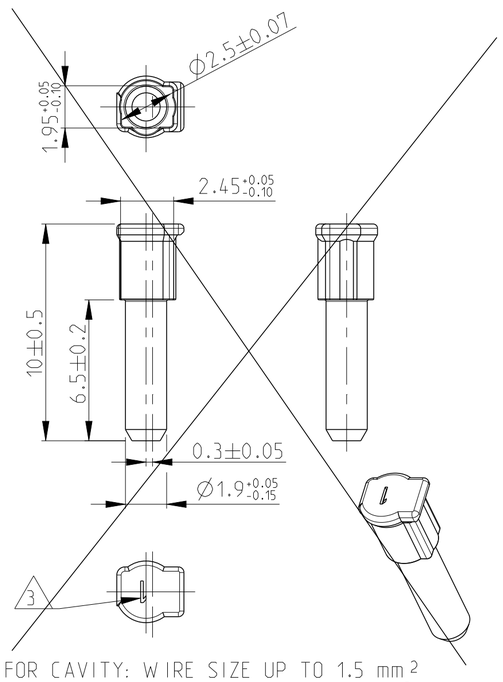
ITEM 1: 0-1452424-1



FOR CAVITY: WIRE SIZE UP TO 0.75 mm²
Fuer Kammer: Drahtgroesse bis 0.75 mm²

0-1452424-1 SUPERSEDED BY 1-1452424-1
0-1452424-1 ersetzt durch 1-1452424-1

ITEM 2: 0-1452424-2



FOR CAVITY: WIRE SIZE UP TO 1.5 mm²
Fuer Kammer: Drahtgroesse bis 1.5 mm²

0-1452424-2 SUPERSEDED BY 1-1452424-2
0-1452424-2 ersetzt durch 1-1452424-2

NOTES:
Bemerkungen:

1 ONLY THE GERMAN LANGUAGE VERSION IS AUTHORITATIVE
Massgebend ist nur der deutsche Text

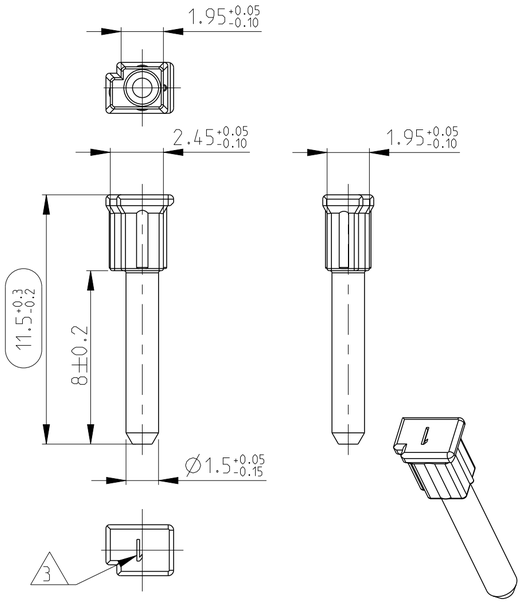
2 FUNCTIONAL MEASUREMENTS MARKED WITH ( ) ARE DOCUMENTED IN THE EMPB. NOT MARKED MEASUREMENTS ARE MEASURED, BUT NOT DOCUMENTED IN THE EMPB. DEVIATIONS HAVE TO BE CORRECTED.
Funktionsbestimmende Masse, die mit ( ) gekennzeichnet sind, werden im EMPB dokumentiert. Nicht gekennzeichnete Masse werden ebenfalls ausgemessen, aber nicht im EMPB dokumentiert. Abweichungen sind zu korrigieren.

△3 CAVITY MARKING
Nestmarkierung

4 PACKING: LOOSE MATERIAL IN PLASTIC BAGS
Schuettgutverpackung in Plastikbeutel

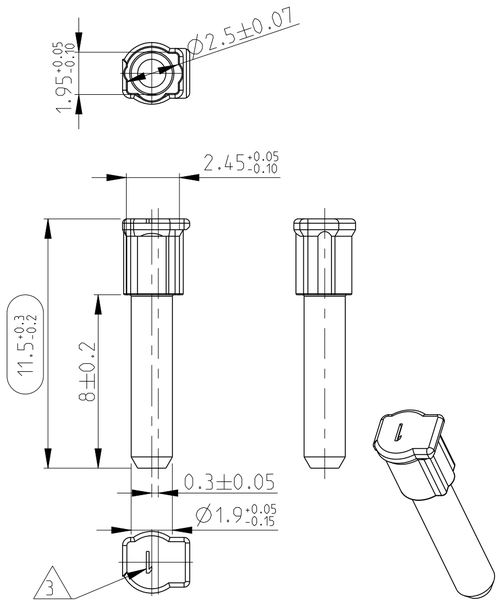
勝特力電材超市-龍山店 886-3-5773766
勝特力電材超市-光復店 886-3-5729570
胜特力电子(上海) 86-21-34970699
胜特力电子(深圳) 86-755-83298787
http://www.100y.com.tw

ITEM 3: 1-1452424-1



FOR CAVITY: WIRE SIZE UP TO 0.75 mm²
Fuer Kammer: Drahtgroesse bis 0.75 mm²

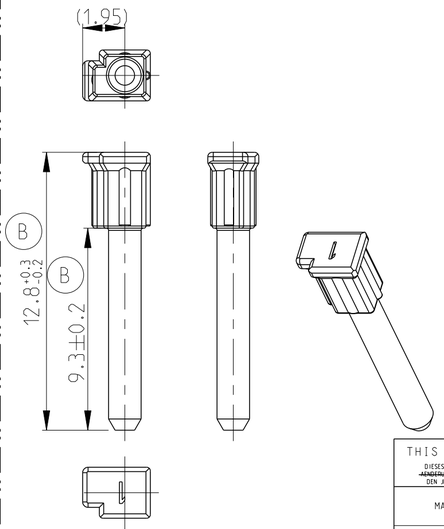
ITEM 4: 1-1452424-2



FOR CAVITY: WIRE SIZE UP TO 1.5 mm²
Fuer Kammer: Drahtgroesse bis 1.5 mm²

ITEM 5: 1-1452424-3

FOR DISTANCE BETWEEN ROWS 2.5 mm
Für Reihenabstand 2.5 mm



NOTES AND MISSING DIMENSIONS
SEE VERSION 1-1452424-1
Fehlende Masse und Anmerkungen
siehe Variante 1-1452424-1

	TYCO ELECTRONICS PART-NO Tyco Electronics Teile-Nr	REV	MATERIAL Werkstoff	DESCRIPTION Benennung	COLOUR Farbe	USEABLE MATING PART Passendes Gegenstueck	APPLICATION SPEC. Verarbeitungsspez.	ITEM NO
B	1-1452424-3	B	PA66	BLIND PLUG 0.75mm2	NATURAL	1703427 1703436	114-18831	5
	1-1452424-2	A	PA66	BLIND PLUG 1.5mm2	BLUE	1452419 1452423 1452926 1452931 1563173	114-18966	4
	1-1452424-1	A	PA66	BLIND PLUG 0.75mm2	BROWN	1452380 1452419 1452423 1452400 1452415 1563172 1563173		3
	~~0-1452424-2~~	~~A~~	~~PA66~~	~~BLIND PLUG 1.5mm2~~	~~GREEN~~	~~1452419 1452423 1452926 1452931~~	~~114-18534-1~~	~~2~~
	~~0-1452424-1~~	~~A~~	~~PA66~~	~~BLIND PLUG 0.75mm2~~	~~GREY~~	~~1452380 1452419 1452423 1452400 1452415~~		~~1~~

THIS DRAWING IS A CONTROLLED DOCUMENT.
DIESES ZEICHNUNGSDOKUMENT WIRD DURCH AMP INCORPORATED KONTROLLIERT.
~~ANDERUNGEN, DIE DEM TECHNISCHEN FORTSCHRITT DIENEN, SIND VORBEHALTEN.~~
DEN JEWEILS LETZTGELTIGEN AENDERUNGSSTAND ERFAHREN SIE AUF ANFRAGE.

DIMENSIONS: MASSEINHEITEN: mm
TOLERANCES UNLESS OTHERWISE SPECIFIED: DIN 16901-140
0 PLC ±-
1 PLC ±-
2 PLC ±-
3 PLC ±-
4 PLC ±-
ANGLES/WINKEL ±1°
MATERIAL -
FINISH/OBERFLAECHE/FARBE -

DWN	K.ROTH	06NOV2002
CHK	S.DENTER	06NOV2002
APVD	G.MUMPER	07NOV2002
PRODUCT SPEC PRODUKTSPEZ.	-	
APPLICATION SPEC VERARBEITUNGSSPEZ.	see table	
WEIGHT GEWICHT	-	

TE Connectivity

NAME
BLIND PLUG FOR MCON1.2 CONTACT
(CLEAN BODY)
FOR WIRE SIZE 0.75mm AND 1.5 mm

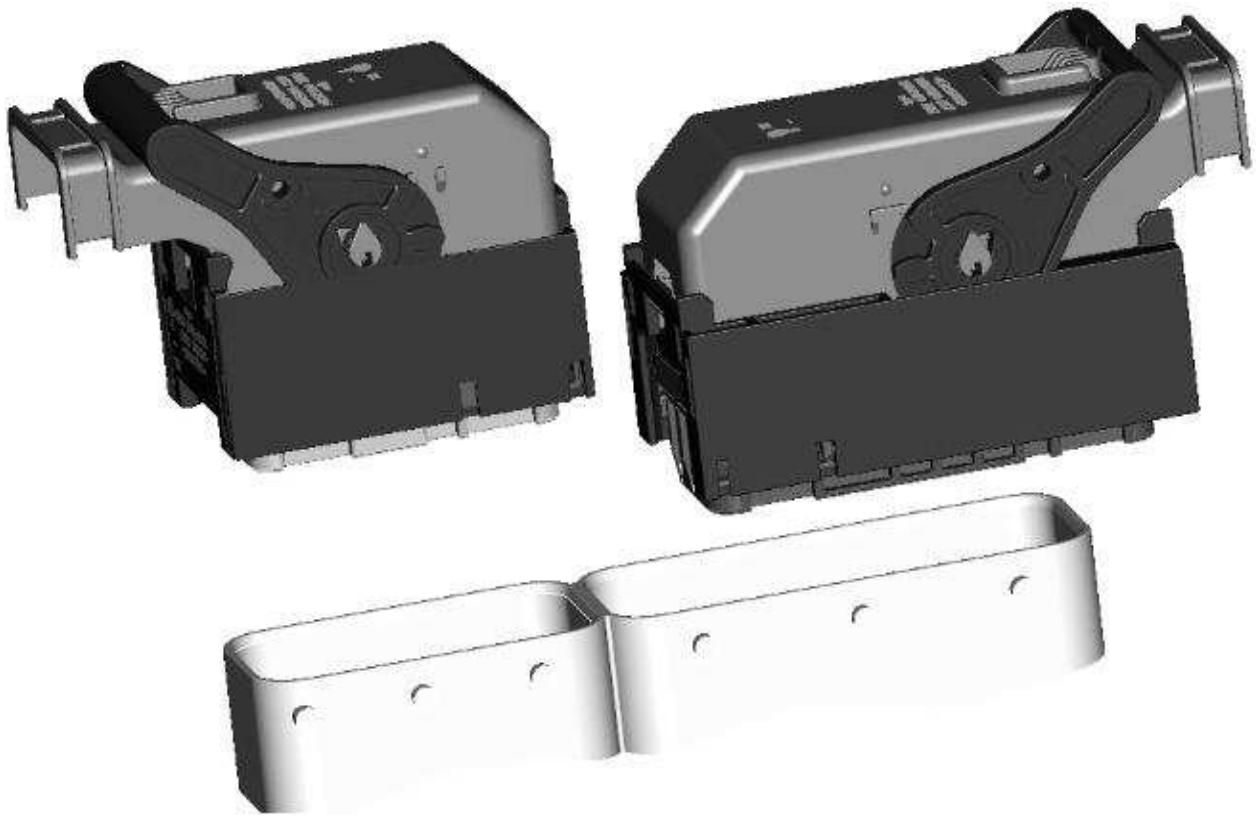
SIZE	CAGE CODE	DRAWING NO ZEICHNUNGS-NR.	RESTRICTED TO NUR FUER
A2	00779	C-1452424	-

Customer Drawing /KUNDENZEICHNUNG | SCALE MASSSTAB 5:1 | SHEET BLATT 1 OF VON 1 | REV B

MODULAR CONNECTOR

154 (58 AND 96) POS, WATERPROOF

PRODUCT SPECIFICATION



108-18965

MODULAR CONNECTOR 154 (58 AND 96) POSITION, WATERPROOF

CONTENT:

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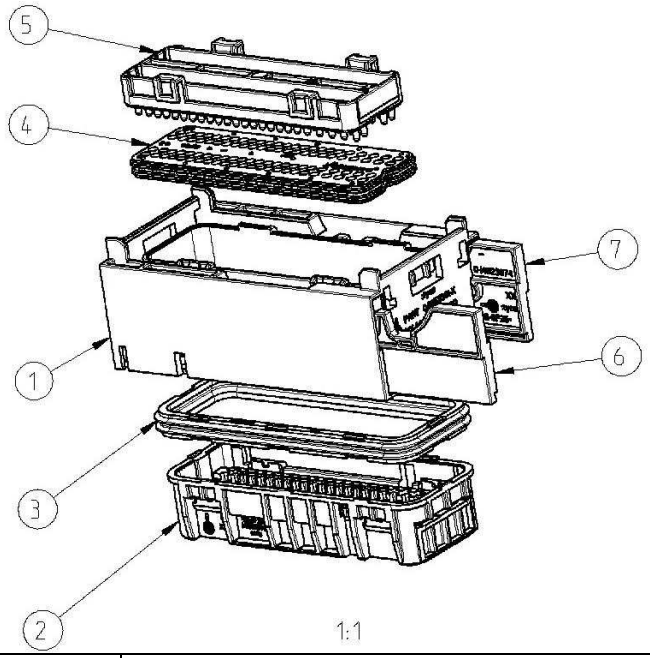
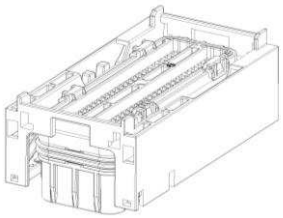
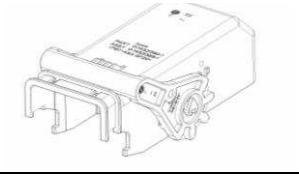
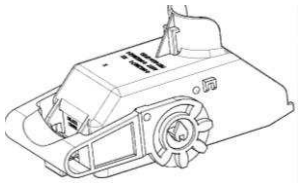
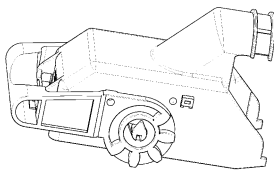
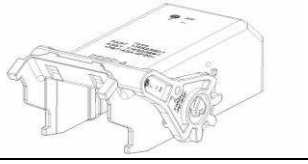
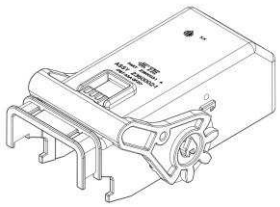
1 PRODUCT OVERVIEW
1.1 96 POS. CONNECTOR

THE 154 POS. PLUG-TYPE CONNECTOR IS USED FOR THE CONNECTION OF ENGINE CONTROL UNITS INSIDE THE VEHICLE ALSO AT VARIOUS INSTALLATIONS IN THE ENGINE COMPARTEMENT. ON THE CABLE SIDE, THE SYSTEM HAS A MODULAR DESIGN, PERMITTING THE CONNECTION OF A SEPARATE ENGINE AND/ OR VEHICLE CABLE HARNESS.

1.- HOUSING
2.- CAVITY INSERT
3.- PERIPHERAL SEAL
4.- MAT SEAL
5.- COVER FOR FAMILY SEAL
6.- SLIDE LEFT
7.- SLIDE RIGHT



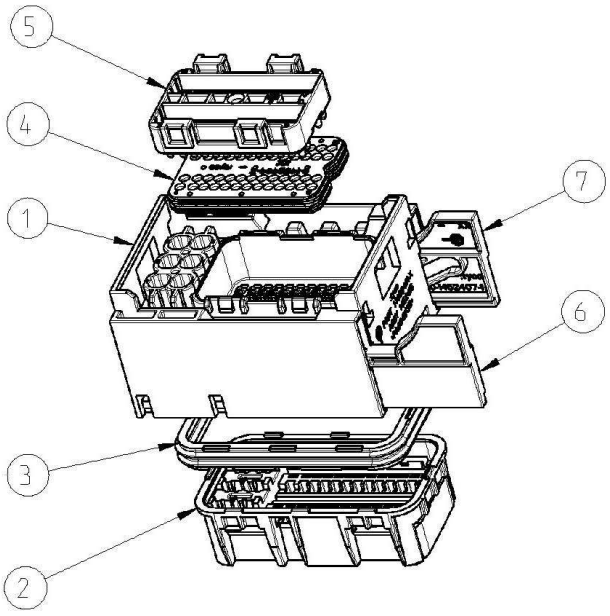
ASSY 96 POS. CONNECTOR (applicable cable OD, shown on specific customer drawings)	PN 1452380 PN 2141628 PN 1418360 96 x (0.5 - 0.75 mm² FLR) PN 1452423 72 x (0.5 - 0.75 mm² FLR) 24x (1 - 1.5 mm² FLR) PN 1452419 86 x (0.5 - 0.75 mm² FLR) 10x (1 - 1.5 mm² FLR) PN 1563173 PN 1564284 (0.35 -0.75 mm² FLR) (0.5 - 1.5 mm² FLR)	
96 POS. TPA FOR TYCO 1.2 mm TERMINAL	PN 0-1452388-1 PN 0-1452388-2	
ASSY 96 POS. COVER 90° CABLE EXIT	PN 0-1452389-1	

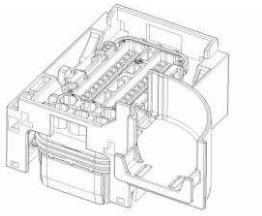
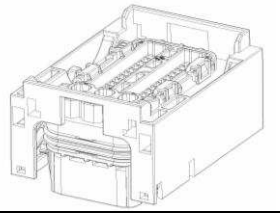
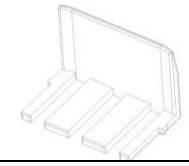
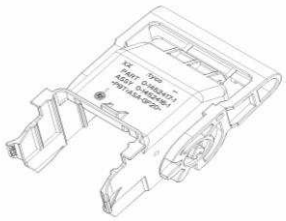
ASSY 96 POS. COVER 180° CABLE EXIT	PN 0-1452862-1	
ASSY 96 POS. COVER 90° CABLE EXIT	PN 0-1452988-1	
ASSY 96 POS. COVER 150° CABLE EXIT	PN 1-1452389-1	
ASSY 96 POS. COVER 90° CABLE EXIT (with lever locking latch overstress protection)	PN 0-2360002-1	

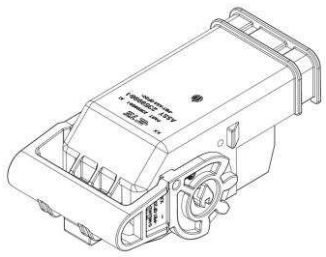
1.2 58 POS. CONNECTOR

THE 154 POS. PLUG-TYPE CONNECTOR IS USED FOR THE CONNECTION OF ENGINE CONTROL UNITS INSIDE THE VEHICLE AND ALSO AT VARIOUS INSTALLATIONS IN THE ENGINE COMPARTEMENT. ON THE CABLE SIDE, THE SYSTEM HAS A MODULAR DESIGN, PERMITTING THE CONNECTION OF A SEPARATE ENGINE AND/ OR VEHICLE CABLE HARNESS.

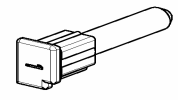
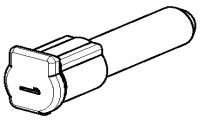
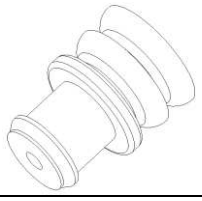
1.- HOUSING
2.- CAVITY INSERT
3.- PERIPHERAL SEAL
4.- MAT SEAL
5.- COVER FOR FAMILY SEAL
6.- SLIDE LEFT
7.- SLIDE RIGHT



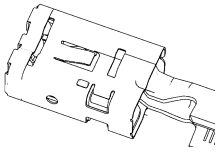
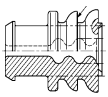
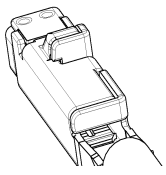
ASSY 58 POS. CONNECTOR CABLE EXIT „L“ (applicable cable OD, shown on specific customer drawings)	PN 1452400 52x (0.5 - 0.75 mm^2 FLR)	
ASSY 58 POS. CONNECTOR (applicable cable OD, shown on specific customer drawings)	PN 1452415 PN 1418361 PN 1823127 52x (0.5 - 0.75 mm^2 FLR) PN 1563172 PN 1564285 (0.35 - 0.75 mm^2 FLR)	
58 POS. TPA FOR MCP 2.8 mm TERMINAL	PN 0-1452408-1 PN 0-1452408-2	
58 POS. TPA FOR TYCO 1.2 mm TERMINAL	PN 0-1452409-1 PN 0-1452409-2	
ASSY 58 POS. COVER CABLE EXIT „L “	PN 0-1452410-1	
ASSY 58 POS. COVER CABLE EXIT 180 °	PN 0-1452416-1	
ASSY 58 POS. COVER CABLE EXIT 90 °	PN 0-1452421-1	

ASSY 58 POS. COVER CABLE EXIT 90 °	PN 0-2359998-1	

1.3 BLIND PLUGS FOR 96 POS. AND 58 POS. CONNECTOR

BLIND PLUG **0,5-0,75 mm²** FOR 96 POS. AND 58 POS. CONNECTOR	PN 0-1452424-1 COLOUR: GREY (0,5-0,75mm2 FLR) PN 1-1452424-1 COLOUR: BROWN (0,5-0,75mm2 FLR)	
BLIND PLUG **1,0-1,5 mm²** FOR 96 POS. CONNECTOR	PN 0-1452424-2 COLOUR: GREEN (1 - 1,5mm2 FLR) PN 1-1452424-2 COLOUR: BLUE (1 - 1,5mm2 FLR)	
CAVITY PLUG FOR 2.8AMP MCP, 58POS. CONNECTOR	PN: 0-828906-2 COLOUR: BROWN	

1.4 TERMINALS AND SWS FOR 96 POS. AND 58 POS. CONNECTOR

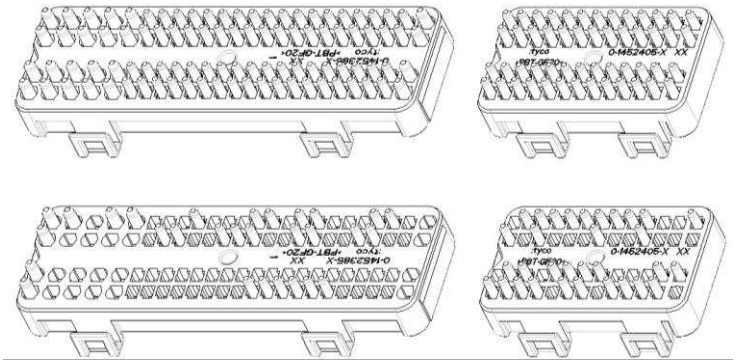
APLICABLE AMP MCP 2,8 TERM. **0.5-2,5mm²** FOR 58 POS. CONNECTOR	PARTNUMBERS: 1-968882-x 1-968855-x 1-968857-x PROD SPEC 108-18513 APPL SPEC: 114-18148	
APLICABLE SWS FOR AMP MCP 2,8 TERMINAL	828904-x 828905-x	
AMP MCP 1.2 CB TERMINAL **0,35-1,5mm²** FOR 58 POS. CON.	1394897-x 1452503-x 1534594-x 1670144-x PROD SPEC 108-18782 APPL SPEC: 114-18464	

1.5 WATERPROOFED APPLICATION

PERIPHERAL, THE CONNECTOR IS SEALED BY A PERIPHERAL SEAL.

THE CABLE EXIT OF THE CONNECTOR IS SEALED BY A MAT SEAL. THE SEALING HOLES IN THE MAT SEAL CAN BE CLOSED (SEALED) BY A WIRE WITH CONTACT OR BY A PLUG MOLDED ON THE COVER FOR FAMILY SEAL.

EXAMPLE: UNSTAMPED COVER FOR FAMILY SEAL



EXAMPLE: COVER FOR FAMILY SEAL STAMPED TO INDIVIDUAL PINOUT CONFIGURATIONS.

1.5 VALID TE SPECIFICATIONS

a) THIS PROD. SPEC. IS BASED ON THE LATEST VALID CUSTOMER DRAWING.

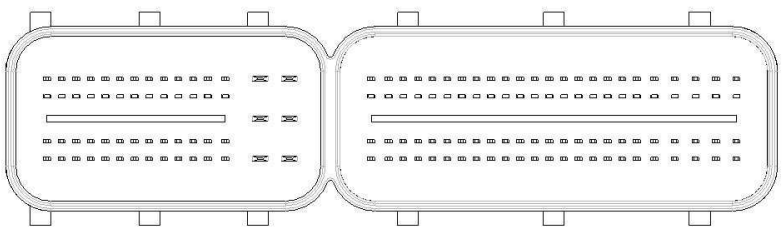
C1452380	ASSY 96 POS. CONNECTOR, (0.5 - 0.75 mm^2)
C2141628	ASSY 96 POS. CONNECTOR, (0.5 - 0.75 mm^2)
C1418360	ASSY 96 POS. CONNECTOR, (0.5 - 0.75 mm^2)
C1563173	ASSY 96 POS. CONNECTOR, (0.35 - 1.5 mm^2)
C1564284	ASSY 96 POS. CONNECTOR, (0.35 - 1.5 mm^2)
C1452419	ASSY 58 POS. CONNECTOR, (> 0.75 – 1.50 mm^2)
C1452423	ASSY 58 POS. CONNECTOR, (> 0.75 – 1.50 mm^2)
C1452388	96 POS. TPA (2-NDARY LOCK), TYCO 1.2 MM
C1452389	ASSY 96 POS. COVER, CABLE EXIT 90 / 150 ANGLE
C1452862	ASSY 96 POS. COVER, CABLE EXIT 180 ANGLE
C1452988	ASSY 96 POS. COVER, CABLE EXIT 90 ANGLE
C2360002	ASSY 96 POS. COVER, CABLE EXIT 90 ANGLE (with lever locking latch overstress protection)
C1452400	ASSY 58 POS. CONNECTOR, CABLE EXIT LEFT
C1452415	ASSY 58 POS. CONNECTOR
C1418361	ASSY 58 POS. CONNECTOR
C1823127	ASSY 58 POS. CONNECTOR
C1563172	ASSY 58 POS. CONNECTOR
C1564285	ASSY 58 POS. CONNECTOR
C1452408	58 POS. TPA (2-NDARY LOCK), MCP 2.8 MM
C1452409	58 POS. TPA (2-NDARY LOCK), TYCO 1.2 MM
C1452410	ASSY 58 POS. COVER, CABLE EXIT LEFT „L “
C1452416	ASSY 58 POS. COVER, CABLE EXIT 180 ANGLE
C1452421	ASSY 58 POS. COVER, CABLE EXIT 90 ANGLE
C2359998	ASSY 58 POS. COVER, CABLE EXIT 90 ANGLE
C1452424	BLINDPLUGS

b) LATEST VALID APPLICATION SPECIFICATION

114-18576-	INSTRUCTION SHEET FOR 154 Pos. CONNECTOR
114-18534-1	APPLICATION SPEC. FOR THE MODULAR CONNECTOR, 154 POS.
114-18966	APPLICATION SPEC. FOR THE MODULAR CONNECTOR, 154 POS.

c) LATEST VALID INTERFACE SPECIFICATION.

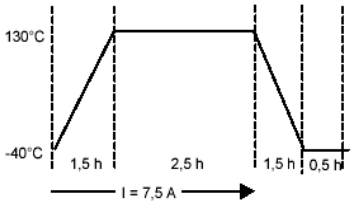
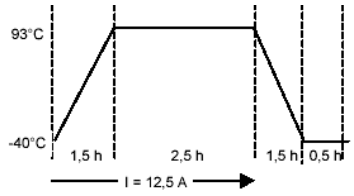
MUST BE ACORDING TO THE INTERFACE SPEC: 114-18615.



ENGINE MODULE

(HEADER)

2. RATING DATA

	Test Description	Requirement	Procedure
	Examination of product.	**Meets requirements of product drawing.**	**Visual, dimensional and functional per Applicable quality inspection plan.**
	Connector Electrical Tests		
1	**Termination resistance**	10 milliohms maximum initial. Maximum / minimum ΔR 10 milliohms	Max. 10 miliohms initial. 0.75 mm2 FLR - 7.5 A  1.5 mm2 FLR - 12.5 A 60 cycles =360h 
2	**Insulation resistance**	R >20 megohms / 500V DC	Test between adjacent contacts of unmated samples.
	Connector – Mechanical Tests		
3	**Terminal-Connector retention force for signal terminals.** Temporary terminal retention without 2-dary lock Terminal retention wit primary and 2-dary lock. Terminal retention wit primary and 2-dary lock after high temperature exposure. Temperature class 3 acc. USCAR-2 (125°C).	Min. 50 N Min. 90 N Min. 48 N	V= 50 mm/min

4	**Terminal-Connector retention force for power terminals.** Temporary terminal re-tention without 2-dary lock Terminal retention wit primary and 2-dary lock. Terminal retention with primary and 2-dary lock after high temperature exposure. Temperature class 3 acc. USCAR-2 (125°C).	Min. 60 N Min. 100 N Min. 100 N	V= 50 mm/min
5	**Connector-Connector Mating Force** 96 pos. 58 pos.	Max. 90N Max. 90N	Fully populated with silver plated terminals.
6	**Connector-Connector Unmating Force** with the Lock disengaged 96 pos. 58 pos.	Max. 75N Max. 75N	Fully populated with silver plated terminals.
7	**Cover Retention Force** Cover for 58 pos. Con-nector: Cover for 96 pos. Connector:	Min.150 N Min.150 N	V= 50 mm/min
Connector Environmental Test			
8	**Thermal Shock** Qualification acc. To USCAR-2 §5.6.1 Rev. 3	Signal terminal: $\Delta R \leq 10\ m\Omega$ Power terminal: $\Delta R < 5\ m\Omega$	-100 cycles (100h) – 30 min. (-40°C) and 30 min. (+125°C) transfer in less than 5 min. -12 V DC at 100 mA -For Ag plated terminals.

9	**Temperature/Humidity Cycling** Temperature class 3, acc. to USCAR-2 Rev.3	Signal terminal: ΔR < 10 mΩ Power terminal: ΔR < 5 mΩ	40 cycles (320h) betweenT1= -25 °C / T2=+85°C / T3= +145°C at 85% RH. For Ag, plated terminals.
10	**High Temperature Exposure** Qualification acc. To USCAR-2 §5.6.3 Rev. 3 Temperature class 3 (125°C).	Signal terminal: ΔR < 10 mΩ Power terminal: ΔR < 5 mΩ	1008h heat soak at 125° C For Ag, plated terminals.
11	**Random vibration** Grms 8,4	-Electrical resistance does not exceed 7Ohms during a period of 1 microsecond.	Vibration after temperature cycling as follows: -40°C dwell time 1,0h -40°C -> +125°C 1,5h +125°C dwell time 1,0h +125°C -> -40°C 1,5h Duration of each cycle: 5h, 50 cycles, total time:250h Vibration must be realized at the end of temperature cycling. 16 h each axis; total time: 48h each sample
	Sealing Tests		
12	**Submersion after high temperature exposure** Qualification acc. To USCAR-2 §5.6.5 Rev. 3	No water ingress Isolation Resistance > 20 MOhm	-10 mating cycles -Dry heat storage at 125°C / 1008h -Submerse the samples within 30s after removing from the heat chamber in 5% salt water with liquid washing soap (22°C) to a depth of 30 – 40 cm for 30 minutes. -After 30min remove samples from salt water solution and perform the Isolation Resistance Test at 500V, DC (min. 20 MOhm acceptance criteria).
13	**Pressure/Vacuum Leakage after high temperature exposure** Qualification acc. To USCAR-2 §5.6.6 Rev. 3	No water ingress	-10 mating cycles -Submerse the samples in salt water solution (22°C) -Air Pressure Test up to 48 KPa (0,5 bar) Observe samples for 15 seconds and verify that there are no air bubbles -Vacuum Test 48 Kpa (7psi) / 15s -Isolation Resistance Test -Visual Inspection after disconnection -Dry heat storage at 125°C / 1008h -After heat soak perform immediately Pressure Leak Test up to 28 KPa. (4psi) -Vacuum Test 28 Kpa (4psi) / 15s -Isolation Resistance Test -Visual Inspection after disconnection