Part Submission Warrant

Part Name	SLEEVE ASSEMBLY WIRE CONNECTOR MALE	Cust. Part Number	2L1T-14A624-PA
Shown on Drawing Number	6L3T-14A624-CA	Org. Part Number	309681100
Engineering Change Level	K	Dated	2014/03/18
Additional Engineering Changes	N/A	Dated	N/A
Safety and/or Government Regulation	☐ Yes ☑ No	Purchase Order No.	N/A
Weight (kg)	0.0051		
Checking Aid Number	N/A	Checking Aid Eng. Change Level	N/A
Dated	N/A		

ORGANIZATION MANUFACTURING INFORMATION

Molex Incorporated - Nogales DUNS: 81-222-2818
Supplier Name & Supplier/Vendor Code

Calzada Industrial Nuevo Nogales S/N, Parque Industrial Nuevo Nogales
Street Address

Nogales | Sonora | 84094 | Mexico
City | Region | Postal Code | Country

CUSTOMER SUBMITTAL INFORMATION

Nursan
Customer Name/Division

N/A
Buyer/Buyer Code

N/A
Application

MATERIALS REPORTING

Has customer-required Substances of Concern information been reported? ☑ Yes ☐ No

Submitted by IMDS or other customer format: IMDS : 5496390

Are polymeric parts identified with appropriate ISO marking codes? ☑ Yes ☐ No ☐ n/a

REASON FOR SUBMISSION (Check at least one)

- ☑ Initial submission
- ☐ Engineering Change(s)
- ☐ Tooling: Transfer, Replacement, Refurbishment, or additional
- ☐ Correction of Discrepancy
- ☐ Tooling Inactive > than 1 year
- ☐ Change to Optional Construction or Material
- ☐ Sub-Supplier or Material Source Change
- ☐ Change in Part Processing
- ☐ Parts produced at Additional Location
- ☐ Other - please specify

REQUESTED SUBMISSION LEVEL (Check one)

- ☐ Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.
- ☑ Level 2 - Warrant with product samples and limited supporting data submitted to customer.
- ☐ Level 3 - Warrant with product samples and complete supporting data submitted to customer.
- ☐ Level 4 - Warrant and other requirements as defined by customer.
- ☐ Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.

SUBMISSION RESULTS

The results for ☑ dimensional measurements ☑ material and functional tests ☐ appearance criteria ☐ statistical process package

These results meet all design record requirements: ☑ Yes ☐ NO (If "NO" - Explanation Required)

Mold / Cavity / Production Process: 309681100 / Assembly Process

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts, which were made by a process that meets all Production Part Approval Process Manual 4th Edition Requirements. I further affirm that these samples were produced at the production rate of 6,800 / 8 hours. I also certify that documented evidence of such compliance is on file and available for your review.

I have noted any deviation from this declaration below.

EXPLANATION/COMMENTS:

Is each Customer Tool properly tagged and numbered? ☐ Yes ☐ No ☑ n/a

Organization Authorized Signature: Yazmin LB Date: 12-Dec-2022

Print Name: Yazmin Lecona B. Phone No.: 52 631 3111300 Fax No.:

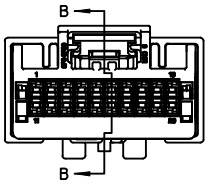
Title: Quality Control Technician E-mail: ppapeuro@molex.com

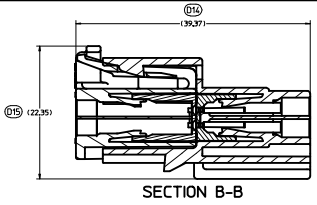
FOR CUSTOMER USE ONLY (IF APPLICABLE)

PPAP Warrant Disposition: ☐ Approved ☐ Rejected ☐ Other

Customer Signature Date

Print Name Customer Tracking Number (optional)



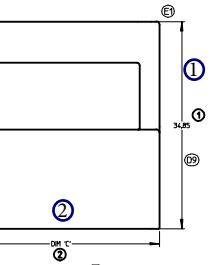


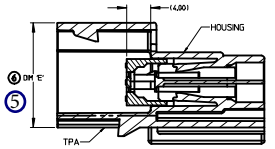
SECTION B-B

MATED IN-LINE CONNECTOR ASSEMBLY
FOR REFERENCE ONLY

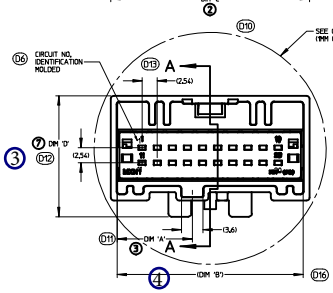
	D7				E4	E3 D4		E1	E2	G1			D2	
	FORD MALE IN-LINE ASSEMBLY PART NUMBER	MOLEX MALE IN-LINE ASSEMBLY PART NUMBER	POLARIZATION	CKT. SIZE	DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'	DIM. 'E'	RETAINER CLIP TYPE	MATING HARNESS ASSEMBLY FORD ASSEMBLY PART NUMBER	COLOR	MINIMUM PASS THRU DIAMETER	MAXIMUM MATING FORCE (NEWTONS)	
	2L1T-14A624-TA	30968-1060	POLARIZATION OPTION '1'	6	3,76	13,51	15,61	19,78	17,58	N/A	2L1T-14A664-KA	GRAY			
(K)	GU5T-14A459-BA	30968-1061	POLARIZATION OPTION '2'	6	4,76	13,51	15,61	19,78	17,58	N/A	3F2T-14A664-KA	BLACK	26,0	31,7	
	TBD	30968-1062	POLARIZATION OPTION '3'	6	9,76	13,51	15,61	19,78	17,58	N/A	TBD	NATURAL (CREAM)			
	2L1T-14A624-SA	30968-1080	POLARIZATION OPTION '1'	8	5,03	16,05	18,05	19,78	17,58	N/A	2L1T-14A664-JA	GRAY			
(J1)	CU5T-14A459-GA	30968-1081	POLARIZATION OPTION '2'	8	8,03	16,05	18,05	19,78	17,58	N/A	4W1T-14A664-FA	BLACK	26,0	40,6	(J2)
	TBD	30968-1082	POLARIZATION OPTION '3'	8	11,03	16,05	18,05	19,78	17,58	N/A	TBD	NATURAL (CREAM)			
	2L1T-14A624-PA	30968-1100	POLARIZATION OPTION '1'	10	6,30	18,59	20,69	19,78	17,58	N/A	2L1T-14A664-GA	GRAY			
	2L1T-14A624-RA	30968-1101	POLARIZATION OPTION '2'	10	9,30	18,59	20,69	19,78	17,58	N/A	2L1T-14A664-HA	BLACK	27,0	49,6	
	TBD	30968-1102	POLARIZATION OPTION '3'	10	12,30	18,59	20,69	19,78	17,58	N/A	TBD	NATURAL (CREAM)			
	5C3T-14A624-AAA	30968-1127	POLARIZATION OPTION '1'	12	7,57	21,28	23,23	20,34	17,64	N/A	2L1T-14A664-VA	GRAY			
	5C3T-14A594-DA	30968-1123	POLARIZATION OPTION '1' WITH CHRISTMAS TREE ATTACHMENT	12	7,57	20,98	23,23	20,34	17,64	RETAINER CLIP (FORD DWG # E0VB-13A506-BB) (FORD P/N E0VB-13A506-BB, SUPPLIER P/N 6475293801)	2L1T-14A664-YA	GRAY			
	5C3T-14A624-MA	30968-1128	POLARIZATION OPTION '2'	12	10,57	21,28	23,23	20,34	17,64	N/A	4L3T-14A664-BA	BLACK	28,5	54,9	
	5C3T-14A594-EA	30968-1126	POLARIZATION OPTION '2' WITH CHRISTMAS TREE ATTACHMENT	12	10,57	20,98	23,23	20,34	17,64	RETAINER CLIP (FORD DWG # E6TB-14A301-AA) (FORD P/N E6OB-14A363-CA, SUPPLIER P/N 6475973801)	4L3T-14A664-RA	BLACK			
	TBD	30968-1129	POLARIZATION OPTION '3'	12	13,57	21,28	23,23	20,34	17,64	N/A	TBD	NATURAL (CREAM)			
(G2)	AE5T-14A666-BA	30968-1130	POLARIZATION OPTION '1' WITH CHRISTMAS TREE ATTACHMENT	12	7,57	20,98	23,23	20,34	17,64	RETAINER CLIP (FORD DWG # E6TB-14A301-AA) (FORD P/N E6OB-14A363-CA, SUPPLIER P/N 6475973801)	TBD	GRAY			
	2C5T-14A624-HA (NOT FOR NEW APPLICATIONS)	30968-1140	POLARIZATION OPTION '1'	14	8,84	23,67	25,77	19,78	17,58	N/A	2C5T-14A664-BA	GRAY	33,0	65,6	
	(NOT FOR NEW APPLICATIONS)	30968-1141	POLARIZATION OPTION '2'	14	11,84	23,67	25,77	19,78	17,58	N/A	TBD	BLACK			
	(NOT FOR NEW APPLICATIONS)	30968-1142	POLARIZATION OPTION '3'	14	14,84	23,67	25,77	19,78	17,58	N/A	TBD	NATURAL (CREAM)			
	6L3T-14A624-CA	30968-1167	POLARIZATION OPTION '1'	16	10,11	26,36	28,31	20,34	17,64	N/A	2L1T-14A664-EA	GRAY			
	6L3T-14A594-AB	30968-1164	POLARIZATION OPTION '1' WITH CHRISTMAS TREE ATTACHMENT	16	10,11	26,06	28,31	20,34	17,64	RETAINER CLIP (FORD DWG # E0VB-13A506-BB) (FORD P/N E0VB-13A506-BB, SUPPLIER P/N 6475293801)	2L1T-14A664-EA	GRAY			
(H1)	2L1T-14A624-MA (NOT FOR NEW APPLICATIONS)	30968-1160	POLARIZATION OPTION '1'	16	10,11	26,06	28,31	19,78	17,58	N/A	2L1T-14A664-EA	GRAY	35,0	68,9	
	2L1T-14A624-NA	30968-1168	POLARIZATION OPTION '2'	16	13,11	26,36	28,31	20,34	17,64	N/A	2L1T-14A664-FA	BLACK			
	TBD	30968-1169	POLARIZATION OPTION '3'	16	16,11	26,36	28,31	20,34	17,64	N/A	TBD	NATURAL (CREAM)			
(C3) (R2)	2C5T-14A624-BA (NOT FOR NEW APPLICATIONS)	30968-1187	POLARIZATION OPTION '1'	18	11,38	28,90	30,85	20,34	17,64	N/A	2C5T-14A664-CA	GRAY	37,0	TBD	
	(NOT FOR NEW APPLICATIONS)	30968-1188	POLARIZATION OPTION '2'	18	14,38	28,90	30,85	20,34	17,64	N/A	TBD	BLACK			
	(NOT FOR NEW APPLICATIONS)	30968-1189	POLARIZATION OPTION '3'	18	17,38	28,90	30,85	20,34	17,64	N/A	TBD	NATURAL (CREAM)			
(B1)	7L2T-14A624-AA	30968-1207	POLARIZATION OPTION '1'	20	12,65	31,44	33,39	20,34	17,64	N/A	2L1T-14A664-DA	GRAY			
(H1)	2L1T-14A624-LA (NOT FOR NEW APPLICATIONS)	30968-1200	POLARIZATION OPTION '1'	20	12,65	31,14	33,39	19,78	17,58	N/A	2L1T-14A664-DA	GRAY	39,0	82,6	
	3W4T-14A624-SA	30968-1208	POLARIZATION OPTION '2'	20	15,65	31,44	33,39	20,34	17,64	N/A	3W4T-14A664-FA	BLACK			
	3W4T-14A624-TA	30968-1209	POLARIZATION OPTION '3'	20	18,65	31,44	33,39	20,34	17,64	N/A	3W4T-14A664-GA	NATURAL (CREAM)			

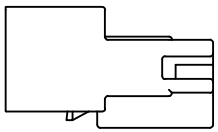
FRAME 2 OF 2

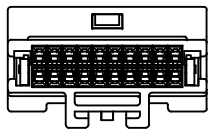


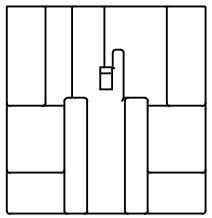


SECTION A-A









NOTES:

1. PART MUST CONFORM TO THE ELECTRICAL CONNECTION SYSTEM DESIGN SPECIFICATION (SDS) VERSION 15, WITH THE FOLLOWING EXCEPTIONS: 12 AND 16 CIRCUIT PAL PER EL-0036.
2. PART MUST CONFORM TO LATEST USCAR-2, REVISION 4:
   A. ADDITIONAL PERFORMANCE CRITERIA:
      "MISCELLANEOUS COMPONENT ENGAGE/DISENGAGE FORCE (TPA's)
      "TPA INSERTION FORCE WITHOUT TERMINALS" >= 16 NEWTONS
      "TPA REMOVAL FORCE WITHOUT TERMINALS" >= 15 NEWTONS
      "TPA 1ST DISENGAGEMENT FORCE <= 67 NEWTONS
      "TPA 2ND DISENGAGEMENT FORCE >= 13 NEWTONS
   B. EXCEPTIONS:
      "UNMATE FORCE":
      14 CIRCUIT UNMATE FORCE <= 77,3N, 16 CIRCUIT UNMATE FORCE <= 84,9N
      18 CIRCUIT UNMATE FORCE = TBD, 20 CIRCUIT UNMATE FORCE = <89,4N
      "MATE FORCE":
      REFER TO CHART: "MAXIMUM MATING FORCE"
3. MALE INLINE HARNESS HOUSING BASE MATERIAL: WSS-M4D658-A4
   MALE INLINE TPA BASE MATERIAL: ESF-M2D354-A7
   MALE INLINE RETAINER CLIP BASE MATERIAL: SAE J1939 PA0701
4. ENGINEERING APPROVAL REQUIRED FOR ALL SOURCING AND TOOLING OF THIS PART.
5. FOR ENGINEERING APPROVED SOURCE SEE ENGINEERING RELEASE.
6. ENGINEERING APPROVAL OF SAMPLE FROM EACH SUPPLIER IS REQUIRED PRIOR TO AUTHORIZATION OF PART PRODUCTION.
7. CHANGES IN DESIGN COMPOSITION OR PROCESSING FROM THE PART PREVIOUSLY APPROVED FOR PART PRODUCTION REQUIRES PRIOR ENGINEERING APPROVAL.
8. ALL DIMENSIONS SHOWN IN mm. GENERAL TOLERANCES: ±0,25 ALL ONE PLACE DIMENSIONS, ±0,13 ALL TWO PLACE DIMENSIONS, ±0,5° 60' ALL ANGULAR DIMENSIONS.
9. PART MUST MATE WITH FORD HARNESS PART NUMBERS: SEE CHART
10. (R) DENOTES GAGE DESIGN, GAGE DESIGNS MUST HAVE SIGNED ENGINEERING APPROVAL PRIOR TO CONSTRUCTION AND WILL BE A CONDITION OF FINAL PART APPROVAL.
11. SOURCE IDENTIFICATION MARK MUST BE PERMANENTLY APPLIED ON THE PART WITH 1.5mm LETTER SIZE FROM THE BOTTOM TO THE TOP OF THE CHARACTER AND LEGIBLE WHEREVER PACKAGE SIZE PERMITS OR OTHER AGREEMENTS ARE MADE.
12. SYSTEM CONFORMS TO AVP-1T401T4061-001 REVISION A DATED 02/16/99.
13. 20% REGRIND ALLOWABLE IN PLASTIC COMPONENTS.
14. PACKAGING SPECIFICATION: DRAWING PK-30907-760
15. PACKAGING: PLEASE REFERENCE MOLEX SPECIFICATION PS-34646-001, AVAILABLE AT WWW.MOLEX.COM. (REFERENCE) TPA'S THAT ARE FOUND IN SEATED (FINAL LOCK) POSITION.
16. CONNECTOR IS DESIGNED FOR USE WITH FORD TERMINAL PART NUMBERS 7L2T-14A271-BA FOR 22-24 AWG WIRE SIZES AND 7L2T-14A271-AA FOR 18-20 AWG WIRE SIZES
17. WHEN A TIN OR GOLD TERMINAL IS USED ON THE FEMALE SIDE THEN THE CORRESPONDING PLATING (i.e. TIN OR GOLD) MUST BE USED ON THE MALE SIDE.

(K)	GU5T-14A459-BA
(J3)	CU5T-14A459-GA
(G3)	AE5T-14A666-BA
	7L2T-14A624-AA
	5C3T-14A594-EA
	5C3T-14A624-MA
	5C3T-14A594-DA
	5C3T-14A624-AAA
	3W4T-14A624-SA
	6L3T-14A594-AB
	3W4T-14A624-TA
	2C5T-14A624-BA
	2L1T-14A624-NA

FRAME 1 OF 2

FRAMES 1 &	LTR	REVISIONS			
	ORIGINATOR	CHECKER	ENGR.APP.	MKTG.APP.	
	RELEASE 6L3T-14A624-CA, 6L3T-14A594-AB ARCHIVED DATE: 02/04/05 AE00-E-11759375-000				CAD: Y
	DEVITO	MEYER			
	A1 RELEASE 5C3T-14A624-AAA,5C3T-14A594-DA,5C3T-14A624-MA, 5C3T-14A594-EA ARCHIVED DATE: 2/10/05 AE00-E-11715968-000				CAD: Y
	DEVITO	MEYER			
	B1 RELEASE 7L2T-14A624-AA B2 CORRECTED FORD P/N FROM -HA TO -BA ARCHIVED DATE: 7/11/05 AE00-E-11739710-000				CAD: Y
	DEVITO	MEYER	JHALING		
	C1 ADDED "NOT TO BE USED FOR NEW APPLICATIONS" TO 2C5T-14A624-BA. ARCHIVED DATE: AELE E 11776560 044				CAD: Y
	MEYER	MEYER			
	D1 ADDED FRONT VIEWS FOR ALL CIRCUIT COUNTS D2 ADDED MATE FORCE COLUMN IN CHART D3 UNMATE FORCE VALUES WERE UPDATED IN NOTES SECTION D4 BILL OF MATERIALS WAS TAKEN OFF OF THE CHART D5 ADDED BASE MATERIAL TO NOTES SECTION D6 CIRCUIT ID NUMBERS WERE ADDED TO TPA D7 CHART HAS BEEN UPDATED TO SHOW WHAT IS AVAILABLE AND APPLICABLE AS OF 7/12/06 D8 ADDED PACKAGING SPECIFICATION TO NOTES D9 CHANGED DIMENSION: 34,85 WAS (34,85) D10 CHANGED DIMENSION: DIM'C' WAS (DIM'C') D11 CHANGED DIMENSION: DIM'A' WAS (DIM'A') D12 CHANGED DIMENSION: 20,34 WAS (20,34) D13 CHANGED DIMENSION: (2,54) WAS BASIC 2,54 D14 ADDED DIMENSION: (39,37) D15 ADDED DIMENSION: (22,35) D16 ADDED DIMENSION: (DIM'B') D17 CHANGED REGRIND FROM 25% TO 20% ARCHIVED DATE: 5/2/2007 AELE-E-11795560-135				CAD: Y
	BICK	BAILEY	LEECE		
	E1 CHARTED DIMENSION 'D' E2 CHARTED DIMENSION 'E' E3 CORRECTED DIMENSIONS E4 CORRECTED DIMENSIONS E5 ADDED TPA DISENGAGE FORCE NOTE ARCHIVED DATE: AELE-E-11776560-136				CAD: Y
	BICK	DILLON	LEECE		
	F1 ADDED BALLOON NUMBERS TO MAIN VIEW DIMENSIONS F2 UPDATED TPA ENGAGE/DISENGAGE & MATE FORCE NOTES ARCHIVED DATE: AELE E 11776560 173				CAD: Y
	BICK	DILLON	LEECE		
	G1 ADDED RETAINER CLIP TYPE COLUMN G2 ADDED PART NUMBER AE5T-14A666-BA G3 ADDED PART NUMBER AE5T-14A666-BA G4 DELETED NOTE 19 ARCHIVE DATE: 20080617 AELE-E-11776560-231				CAD: Y
	WACHUSA	BICK	LEECE		
	H1 CORRECTED DIMENSIONS B,D,E FOR PART NUMBERS: 2L1T-14A624-MA 2L1T-14A624-LA ARCHIVE DATE: 20090814 AELE E 11776560 308				CAD: Y
	STILL	BICK	LEECE		
	J1 RELEASED PART NUMBER CU5T-14A459-GA J2 ADDED PART NUMBER 4W1T-14A664-FA J3 ADDED PART NUMBER CU5T-14A459-GA ARCHIVE DATE: 20110217 AELE-E-11776560-459				CAD: Y
	CJCU	HERFURTH	LEECE		
	K RELEASED P/N GU5T-14A459-BA AELE-E-11776560-812 20140318				
	FISCHER	BAUMAN	ASANKOVI		

REFERENCE FOR INFORMATION CONTACT MOLEX INCORPORATED

PART MUST COMPLY WITH MATERIAL SPECIFICATION WSS-M99P9999-A1
TO HELP SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT.

DRAFTED IN ACCORDANCE WITH FAO ENGINEER ING DRAFTING STANDARD CURRENT AT INITIAL RELEASE

3 RD ANGLE PROJ
DIMENSIONS IN MILLIMETERS

CAD TYPE	CAD LOC.	CAD FILE	
			3D MASTER
OPER. NO.	UNIT	DRAWING	6L3T-14A624-CA
DESIGN (PROCHRM)	DETAIL	TITLE	SLEEVE ASSEMBLY WIRE CONNECTOR MALE
CHECKED RBAUMAN	SAFETY		SHT 1 OF 1
SCALE 4/1	DATE 20MAY2015	DIVISION PLANT	

Molex Initial Sample Inspection Report
Quality Control

SAMPLE DESCRIPTION:	INSPECTOR:	DATE:
SLEEVE ASSEMBLY WIRE CONNECTOR MALE	S.Graciano	24-Mar-2022

Drawing #: 6L3T-14A624-CA	**REV: K** 2014/03/18	**VENDOR:** MOLEX
Molex P/N: 30968-1100		
Ford P/N: 2L1T-14A624-PA		

No.	PRINT SPEC.					Actual Measurements						UNITS	GAGE #	LEGEND
	Nominal	Tolerance				Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6			
1	34.85	+	0.13	-	0.13	34.900	34.934	34.900	34.947	34.912	34.908	MM	I-011	1
2	20.69	+	0.13	-	0.13	20.663	20.679	20.667	20.674	20.674	20.667	MM	I-011	1
3	19.78	+	0.13	-	0.13	19.781	19.765	19.875	19.871	19.795	19.826	MM	I-011	1
4	6.30	+	0.13	-	0.13	6.385	6.402	6.412	6.396	6.386	6.384	MM	CMM-004	1
5	17.58	+	0.13	-	0.13	17.684	17.677	17.678	17.709	17.681	17.703	MM	I-011	1
6	Housing Color **" GRAY "**					OK	OK	OK	OK	OK	OK			VISUAL
7	TPA Color **" RED "**					OK	OK	OK	OK	OK	OK			VISUAL
8	Circuit Size **" 10 "**					OK	OK	OK	OK	OK	OK			VISUAL
9	Weight (kg)					0.0051								
10	Notes: 4,6,7,8,9,11,13,14,16					OK	OK	OK	OK	OK	OK			
11	Notes: 1,2,3,5,10,12,17,18					REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED			

DIMENSION "OUT OF TOLERANCE"

MARKED THUS "X"

LEGEND:

1 Accepted
2 Rejected
3 Conditional
4 Tool life QCC.

Molex
Automotive

Control Plan

☐ Prototype ☐ Pre-launch ☒ Production **Control Plan Number**	**Key Contact/Phone** Carlos O. Ibarra. 631 980 0169	**Date(Orig.)** 5/2/2003	**Date (Rev.)** July 10, 2021 Rev: P
Part Number / Latest Change Level E-30968-XXXX (6-20CKTS) Rev: See MIDAS	**Core Team** Carlos Ibarra, Guadalupe Tolano, Christian Martinez	**Customer Engineering Approval/Date (If Req'd)** N/A	
2L1T-14A624-*, 4C3T-14A594-*, 2C5T-14A624-* 3W4T-14A624-* & 5L8T-14A624-* **Ford Drawing Number:** 6L3T-14A624-CA			
Part Name / Description Sleeve Assembly Wire Connector Male	**Supplier/Plant Approval/Date**	**Customer Quality Approval/Date(If Req'd)** N/A	
Supplier / Plant Molex Nogales, Mexico	**Supplier Code**	**Other Approval Date (If Req'd)** N/A	**Other Approval Date (If Req'd)** N/A

Part / Process Number	Process Name / Operation Description	Machine, Jig, Tools For Mfg.	Characteristics No.	Characteristics Product	Characteristics Process	Special Char. Class.	Methods: Product/Process Specification/ Tolerance	Methods: Evaluation Measurement Technique	Methods: Sample Size	Methods: Sample Freq.	Control Method	Reaction Plan
5	Incoming Inspection of components	N/A	1	Harness Housing 30968-2*		None	See Housing print for Color/ No Visual Damage and correct circuit number. Free of flash	Visual Inspection & damage	According inspection plan.	Each lot received	Inspection Plan & Drawing	Supplier QN, Material is rejected in the SAP and is located to MRB, Follow non-conforming product procedure O20
		N/A	2	TPA 30968-3*		None	See housing print for Color / No Visual Damage/ Correct Circuit Number, blocked Holes and Free of flash	Visual Inspection & damage	According inspection plan.	Each lot received		
		N/a	3	Xmas Tree 3330190107 & 799450196		None	See Xmas Tree print for Color / No Visual Damage pegs.	Visual Inspection & damage	According inspection plan.	Each lot received		
10	Component stage at assembly line	Housing	1		Verify correct part# on component bin	None	Correct Part number according to BOM of Work Order.	Visual	According inspection plan.	Set Up	Work Order	Inform Production Leader and material handler. Replace with correct components.
		TPA	2		Verify correct part# on component bin	None	Correct Part number according to BOM of Work Order.	Visual	According inspection plan.	Set Up	Work Order	
15	Set -up , Assembly Line	None	3		Assure correct components part numbers are in production line.	None	Part numbers must match work order, product print and or inspection plan	Visual Verification	According inspection plan.	Set Up	Work Order & Drawing	Reject Set-Up
20	Set -up Inspection (QC)	Manual	1		Insert Calibration label	None	Calibration date is valid	Visual Verification	Every Work Order	Set Up	Calibration label on Insert	Inform production leader and reject the Insert.
			2		Go No-go Gage verification (electronic sensor and go-no go gage)	None	Detect missing TPA and TPA full assembly	Golden samples	Every Work Order	Set Up	golden sampples	Reject Gage
			3		TPA Must Be Correctly Orientated, No damaged or Molding Problems.& plastic burr before assembly process.	None	Part numbers must match work order, product print and or inspection plan	visual Inspection	According inspection plan.	Set Up	Compare to work order, production prints and inspection plans	Inform production leader and Reject Set-Up.
			4		TPA height 4.0 mm	None	Verify for TPA in correct position per drawing spec. +/- 0.90 mm (3.10 / 4.90 mm)	Drop indicator.	5pcs	Set Up	Per drawing spec. and inspection plan.	Reject Set-Up, Inform production leader & Adjust the process

Part / Process Number	Process Name / Operation Description	Machine, Jig, Tools For Mfg.	Characteristics			Special Char. Class.	Methods					Reaction Plan
			No.	Product	Process		Product/Process Specification/ Tolerance	Evaluation Measurement Technique	Sample Size	Sample Freq.	Control Method	
25	Visual Inspection of Xmas Tree. Only if apply.	None	1		Xmas Tree correctly installed.	None	No Obvious Damage or Obvious Molding issues to Xmas Tree	visual Inspection	According inspection plan.	Set Up	Per drawing spec. and inspection plan.	Scrap If Damaged.
30	Operator Visual inspection of components for defects (Housing and TPA before assembly)	Manual	1		Components should be free of defects & plastic burr before assembly process.	None	Parts should be free of defects	Visual Inspection	100%	Every work order and shift start	Compare to work order, Visual aid.	Reject component, Scrap.
40	Orientation & Preloading TPA Into Housing (manually)	Manual	1		TPA Must Be Correctly Orientated in pre-load position	None	TPA Preloaded	Visual Inspection	100%	Every Part	Design of components prevent incorrect orientation, Per work order and visual aid.	100% Sort, Scrap If Damaged
50	Manually Seat TPA Into Housing to pre-lock position.	Insert	1		TPA Must Be Correctly Orientated in pre-load position	None	assembly TPA in Prelock position with insert to height determined.	Insert Gage	100%	Every work order	Electronic sensor or Mechanic Go- no/go gage Per work order and visual aid.	100% Sort, Scrap If Damaged
60	Poke Yoke (sensor)TPA pre-lock verification		1		Accept / reject correctly	None	TPA in Prelock position.	electronic Sensor	100%	Every work order	Electronic sensor validation with golden samples.	100% Sort, Scrap If Damaged
65	Poke Yoke rail gage TPA pre-lock verification		1		Accept / reject correctly	None	TPA in Prelock position.	Mechanical Go no-go Gage.	100%	Every work order	Mechanic Go- no/go gage validation with golden samples	100% Sort, Scrap If Damaged
70	100% Final Inspection (Mechanic Proces Only)		1		Accept / reject correctly	None	TPA Preload position & Xmas Tree Assembled if applicable. No damage or flash.	Visual Inspection	100%	Every work order	Inspection Plan or Drawing , Operator training.	100% Sort, Scrap If Damaged
80	Install Xmas Tree to the housing (if apply)		1		Xmas Tree correctly installed	None	Correct part number.	Visual Inspection	100%	Every work order	Per work order and visual aid. Operator training. Unique part number	100% Sort, Scrap If Damaged
90	Packaging		1		Manual bulk Pack	None	Correct part number, label and qty.	Visual/ use the plastic box to weight the material to meet quantity requirements	every box for correct label and qty and 1pcs for correct part.	Every box and correct label and quantity.	Uses packaging drawing PK-30907-760.	Follow non-conforming product procedure (O20).
			2		Manual bulk Pack	None	Correct part packed inside of the box	Visual, compare part with drawing or visual aid.	every box for check 1pcs for correct part.	Every box for correct part packed.	Uses packaging drawing PK-30907-760.	Follow non-conforming product procedure (O20).
100	Weigth station to verify correct box qty.	Manual	1		Parts are weight count using a scale	None	Box should have correct qty	Box weight	100%	Every work order	visual Aid	100% Sort and repack.
110	Inspection Q.C.	None	1			None	correct quantity of ctks. No visual damage in any of the components, color, black spot,or Free of plastic burr in housing or TPA (blocked holes). & packing Metod.	Visual Inspection	10%	Every box	Per inspection plan	Follow non-conforming product procedure (O20).
120	Send finish goods to warehouse	None	1			None	No damaged parts allowed	Visual inspection	100% of skids	Every skid received	Per Work instruction# 117	Follow non-conforming product procedure (O20).

Part / Process Number	Process Name / Operation Description	Machine, Jig, Tools For Mfg.	Characteristics			Special Char. Class.	Methods				Control Method	Reaction Plan
			No.	Product	Process		Product/Process Specification/ Tolerance	Evaluation Measurement Technique	Sample Size	Sample Freq.		
130	Customer	None	1			None	Send parts to correct customer	SAP system	100%	each shipment	W101, W118, W120, W123 & W124	Stop the process and notify warehouse supervisor.
140	Product Periodic verification	None	1		Dimensional and functional verification	None	Annual dimensional periodic verification	Full dimensional according customer drawing	6 Pieces	Annual	DOC103	Communicate to quality engineer.
			2				Functional special validation	According product specification	Determinate by engineering	Each change it could affect the product functionallity	PCN process	Communicate to customer

Assy part 309681100

0309682100 HDAC64 DR MALE HSNG 10 CKT GRY POL 1
(0899921436)

0309683100 HDAC64 DR MALE TPA 10 CKT
(0899920273)

Idemitsu Chemicals U.S.A. Corporation

3000 Town Center, Suite 2820,,Southfield,MI 48075 USA,
TEL: 248-355-9590 FAX: 248-355-9330

Certificate of Analysis

To whom it may concern
We hereby certify that the following commodity has been tested by us and its quality corresponds to the description as mentioned below.

Product Name/Grade/Color No./Package	Xarec WA 212 CD780916 Gray 740 KG CARTON		
Lot No.	KH0101QCJ1	**Lot Size**	2,960.000 kg
Customer Part No.		**Delivery Date**	03/01/2022
PO No.	1008765843	**Sales Order**	1100015263
Customer Name	Molex		

Properties	Testing Method	Unit	Specification	Test Result
Ash Content	ISO 3451-1A	%	28.00 - 32.00	29.78
Tensile Strength, Break	ISO 527,	MPa	> 95.00	113.40
Tensile Elongation,Break	ISO 527,	%	> 1.60	1.91
Melt Viscosity T5 , 400sec-1	DOWN 101821	Pascal sec	165.00 - 369.00	259.16
Melt Viscosity T10 , 400sec-1	DOWN 101821	Pascal sec	158.00 - 374.00	251.43
Melt Viscosity T5 , 1000sec-1	DOWN 101821	Pascal sec	105.00 - 207.00	173.26
Melt Viscosity T10 , 1000sec-1	DOWN 101821	Pascal sec	98.00 - 205.00	159.75
Granulation per 100 pellets	DOWN 101403	g	2.00 - 3.00	2.19

Idemitsu Chemicals U.S.A. Corporation
Date: 02/24/2022

Authorized Signature(s)

Celanese

MOLEX INC.
700 UPLAND
LINCOLN NE 68521
USA

CRISTI NYMAN
Phone: 402-458-8918
Fax: 630-813-8518

The Verst Group
Ticona Polymers
1100 Burlington Pike
FLORENCE KY 41042
USA

Type 4 Certificate of Analysis

CELANEX 3300-2 ES3144 RED M0

Customer Part No.:	0899920273	**Cert Issue Date**:	31 May 2022
Formula No.:	3300-2	**Qty Shipped**:	2,000.000 KG
Catalog:	20000804	**Order Item /date**:	2490533 10 / 25 May 2021
Color No.:	ES3144	**Delivery item/date**:	87511552 900001 / 25 Apr 2022
Produced at:	Florence, KY, USA	**Account #**:	2066402
		Customer PO No.:	1007394092
		Rail car:	53551 / 53551

Batch 0001603060

In reference to the above, this is to advise you that this is a standard product and meets the following requirements:

SPECIFICATIONS: CELANEX 3300-2 RED

BATCH RELEASE DATA	UoM	Value	Limit
Date when Batch Was Produced		20211112	
Ash Content	%(m)	29.91	28.00 - 32.00
Melt Visc. (scanning)@1000/s	Pascal sec	232.6	160.0 - 350.0
Melt Visc. (scanning)@400/s	Pascal sec	324.3	260.0 - 430.0

ANNUAL TESTS (REVISED ON)	UoM	Value	Limit
Flexural modulus (20 Nov 2021)	MPa	9757	min. 8000
Flexural Stress (20 Nov 2021)	MPa	221.1	min. 180.0
Izod Notched Impact Strength (20 Nov 2021)	kJ/m²	9.85	min. 5.00
Tensile Stress at break (20 Nov 2021)	MPa	144.0	min. 100.0

COMMENTS

These test data are determined based on standard ISO and/or ASTM testing procedures.

Polyester Global Business Line

If you have questions regarding this letter, please call your Customer Service Team at 800-526-4960.