



Part Submission Warrant

Part Name SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE Cust. Part Number 2L1T-14A464-VA
 Shown on Drawing Number 2L1T-14A464-DA Org. Part Number 307001120
 Engineering Change Level AB2 Dated 2015/09/24
 Additional Engineering Changes N/A Dated N/A
 Safety and/or Government Regulation Yes No Purchase Order No. N/A Weight (kg) 0.0036
 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: 1548742
 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 307001120 / 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 18,240 / 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 Date 16-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) _____



Molex Initial Sample Inspection Report

Quality Control

SAMPLE DESCRIPTION: SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE	INSPECTOR: S.Graciano	DATE: 3-Mar-2022
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Drawing #: 2L1T-14A464-DA	REV: AB2 2015/09/24	VENDOR: MOLEX
Molex P/N: 30700-1120		
Ford P/N: 2L1T-14A464-VA		

No.	PRINT SPEC.				Actual Measurements						UNITS	GAGE #	LEGEND
	Nominal	Tolerance			Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6			
1	20.2	+	0.25	- 0.25	20.338	20.302	20.301	20.298	20.307	20.316	MM	I-011	1
2	2.54	+	-	- -	2.531	2.533	2.543	2.535	2.531	2.533	MM	CMM-004	1
	2.54	+	-	- -	2.544	2.540	2.534	2.532	2.540	2.540	MM	CMM-004	1
	2.54	+	-	- -	2.531	2.529	2.530	2.533	2.530	2.527	MM	CMM-004	1
	2.54	+	-	- -	2.525	2.514	2.525	2.511	2.527	2.525	MM	CMM-004	1
	2.54	+	-	- -	2.526	2.533	2.523	2.534	2.530	2.540	MM	CMM-004	1
	2.54	+	-	- -	2.528	2.536	2.533	2.532	2.528	2.529	MM	CMM-004	1
	2.54	+	-	- -	2.535	2.530	2.547	2.529	2.540	2.535	MM	CMM-004	1
	2.54	+	-	- -	2.526	2.521	2.523	2.527	2.514	2.526	MM	CMM-004	1
	2.54	+	-	- -	2.528	2.529	2.522	2.525	2.530	2.521	MM	CMM-004	1
	2.54	+	-	- -	2.528	2.520	2.516	2.522	2.503	2.525	MM	CMM-004	1
3	2.54	+	-	- -	2.564	2.550	2.549	2.546	2.530	2.535	MM	CMM-004	1
	2.54	+	-	- -	2.547	2.542	2.539	2.530	2.540	2.542	MM	CMM-004	1
	2.54	+	-	- -	2.545	2.538	2.534	2.542	2.545	2.538	MM	CMM-004	1
	2.54	+	-	- -	2.557	2.548	2.529	2.541	2.549	2.527	MM	CMM-004	1
	2.54	+	-	- -	2.544	2.548	2.526	2.540	2.550	2.542	MM	CMM-004	1
	2.54	+	-	- -	2.558	2.553	2.537	2.547	2.559	2.542	MM	CMM-004	1
4	3.00	+	0.13	- 0.13	3.002	3.007	2.993	2.998	3.008	3.008	MM	I-011	1
5	9.8	+	0.25	- 0.25	9.924	9.863	9.914	9.886	9.922	9.926	MM	I-011	1
6	24.22	+	0.90	- 0.90	24.027	24.003	24.015	23.994	24.001	24.007	MM	I-011	1
7	Housing Color " GRAY "				OK	OK	OK	OK	OK	OK			VISUAL
8	TPA Color " RED "				OK	OK	OK	OK	OK	OK			VISUAL
9	Circuit Size " 12 "				OK	OK	OK	OK	OK	OK			VISUAL
10	Weight (kg)				0.0036								
11	Notes: 4,5,6,7,8,9,11,13,14				OK	OK	OK	OK	OK	OK			
12	Notes: 1,2,3,10,12,15,16,17				REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED	REVIEWED			

DIMENSION "OUT OF TOLERANCE" MARKED THUS "X"	LEGEND: 1 Accepted 2 Rejected 3 Conditional 4 Tool life QCC.
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Control Plan

Prototype			Pre-launch			Production X			Key Contact/Phone				Date(Orig.)		Date (Rev.)	
Control Plan Number									Carlos O. Ibarra González 631 980 0169				February 9, 2001		July 5, 2021 Rev: "AG"	
Part Number / Latest Change Level						Core Team						Customer Engineering Approval/Date (If Req'd)				
30700-1 & 31389-1X						G. Tolano (group leader), C. Martinez (manuf. Eng), C. Ibarra (Sr. QE)						N/A				
New automatic assembly process												GCN# 10723266				
Part Name / Description						Supplier/Plant Approval/Date						Customer Quality Approval/Date(If Req'd)				
SLEEVE ASSEMBLY WIRE CONNECTOR FEMALE						N/A						N/A				
Supplier / Plant				Supplier Code		Other Approval Date (If Req'd)				Other Approval Date (If Req'd)						
Molex Nogales, Mexico				N/A		N/A				N/A						
Part / Process Number	Process Name / Operation Description	Machine, Device Jig, Tools For Mfg.	Characteristics			Special Char. Class.	Methods					Reaction Plan				
			No.	Product	Process		Product/Process Specification/ Tolerance	Evaluation Measurement Technique	Sample		Control Method					
								Size	Freq.							
1.0	Incoming inspection	N/A	1	Housing (30700-2XXX)		None	Correct circuit size (6 to 20 Ckts) Polarization 1, 2 & 3 color Gray, Black & Natural	Visual	AQL	Each lot received	Inspection plan / Drawing	Reject parts and report to supplier , follow Procedure O20				
			2	TPA (30700-3XXX)		None	Correct Ckt Size / Red Color	Visual	AQL	Each lot received	Inspection plan / Drawing	Reject parts and report to supplier , follow Procedure O20				
2.0	Set-Up assembly Line	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	Correct circuit size	Load correct program P/N in machine screen (circuit size, polarization)	None	Load correct components in production area	Visual	According inspection plan	Each Set-Up	Inspection plan / Drawing / Golden Samples	Stop Set-Up and notify to group leader				
2.1	QC set-up inspection	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Check the correct program was loaded, validating all detection devices are working correctly according Part number is assembled in machine.	None	None	Visual	According inspection plan	Each Set-Up	Inspection plan / Drawing / golden samples.	Reject Set-Up				
			2	None	Part height 24.22 mm	None	+/-0.090 mm	Caliper / digital indicator	5 PCs,	Each Set-up and shift	Inspection plan / Drawing.	Reject Set-Up				

			3	None	Part width (Dimension B on drawing)	None	+/- 0.13 mm	Caliber / Digital indicator	5 PCs,	Each Set-up and shift	Inspection plan / Drawing.	Reject Set-Up
3.0	Manually Place TPA into the hopper	3105-30700-01 & 3105-30700-02	1	None	Correct TPA part number / Circuit size is used	None	None	Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Set-Up validation / inspection plan / Drawing	Stop process, report it to Q.C. and segregate suspect parts according procedure O20.
3.1	TPA hopper	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.2	TPA bowl feeder	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.3	Feeder track from bowl	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.4	Manually place TPA into the feeder track	3105-HDAC-1	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.5	Escapement	3105-30700-01 & 3105-30700-03	5	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Inspection plan	
3.6	Transfer TPA to vision inspection (if apply)	3105-30700-01 & 3105-30700-02	6	None				Visual	According inspection plan	During assembly process	Inspection plan / golden samples	
3.7	Automatic vision system inspection (TPA) (if apply)	3105-30700-01 & 3105-30700-02	7	Correct TPA part number (according circuit size)	Reject TPA's blocked holes.	None	TPA free of blocked holes	Automatic inspection system	100%	During assembly process	Golden Samples with blocked holes pass through vision system system every set- up and each start shift	Stop process and segregate suspect parts according procedure O20.
4.0	manually place housing in to the hopper	3105-30700-01 & 3105-30700-02	1	None	Correct hosing color.			Visual	According inspection plan	Each time HOUSING is loaded in to the Hopper	Inspection plan / Drawing / vision system inspection.	
4.1	Housing hopper	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time HOUSING is loaded in to the Hopper	Visual inspection during process	
4.2	Housing bowl feeder	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	

4.3	Feeder track	3105-30700-01 & 3105-30700-02	1	None	polarization and circuit size loaded in machine.	None	Correct part number, color and circuit size	Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	Stop process and segregate suspect parts according procedure O20.
4.4	Manually place housing into the feeder track	3105-HDAC-1	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.5	Escapement	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.6	Transfer housing to vision inspection (if apply)	3105-30700-01 & 3105-30700-02	1	None				Visual	According inspection plan	Each time TPA is loaded in to the Hopper	Visual inspection during process	
4.7	Automatic vision system (HOUSING) (if apply)	3105-30700-01 & 3105-30700-02	1	None	Reject housing with wrong polarization rib.			Automatic inspection system	100%	During assembly process	Golden Samples with wrong polarization housing pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
5.0	Reject shuttle (COMPONENTS)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	Reject defectives parts	Segregate rejected parts automatically	None	None	Automatic inspection system	100%	During assembly process	Golden Samples with wrong housing pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
6.0	Assembly TPA into HOUSING (PRE-LOCK)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	TPA in prelock position (33.80 mm Reference FORD drawing)	None	+/- 0.90 mm Reference FORD drawing)	Automatic inspection system	100%	During assembly process	TPA / HOUSING assembly area tooling design. VISION SYSTEM VERIFICATION WITH GOLDEN SAMPLES. (TPA FULL SEATED / TPA MISALIGNED) pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
7.0	Verify TPA in Pre-lock	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	TPA in prelock position (33.80 mm Reference FORD drawing)	None	+/- 0.90 mm Reference FORD drawing)	Automatic inspection system	100%	During assembly process	VISION SYSTEM VERIFICATION WITH GOLDEN SAMPLES. (TPA FULL SEATED / TPA MISALIGNED) pass through vision system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.

8.0	Reject Shuttle (FG)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Segregate rejected parts automatically	None	None	Automatic inspection system	100%	During assembly process	Golden Samples with defects pass through vision system system every set-up and each start shift	Stop process and segregate suspect parts according procedure O20.
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9.0	Shuttel Finish Goods to the auto packing system	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Pass accepted parts to packaging area	None	Quantity according circuit size and PK drawing	Automatic operation	100%	During assembly process	Sensor to count parts are drop to the box. / PK-30907-417	Stop process and report it to Q.C.
10.0	Manually stick the label over the box.	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Place correct identification label in box.	None	Correct part number and traceability should be printed on label.	Visual	100%	During assembly process	Inspection plan / Drawing / Set-Up verification	Stop process and segregate suspect parts according procedure O20.
10.1	Place the bag & partition in to the box	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Place plastic bag and partions according PK drawing	None	None	Visual	100%	Each box	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
10.2	Place the box over the input conveyor	3105-30700-01 & 3105-30700-02	1	None	Box with identification label	None	None	Visual	100%	Each box	Operator training	Stop process and report ir to group leader.
10.3	Auto-Shuttle empty box to packing location	3105-30700-01 & 3105-30700-02	1	None	Keep enough boxes ready to filled out with parts.	None	None	Automatic detection	100%	During assembly process	Automatic detection if auto_shuttle is empty, Machine will stop	Stop process and report ir to group leader.
11.0	Verify the box in position	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Boxes should be in correct position to assure they will be filled correctly	None	None	Automatic counter	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
12.0	Place FG into box (see packaging drawing)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Pack quantity according PK drawing	None	None	Automatic counter	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
12.1	Turn packing servo to next partition (3 times)	3105-30700-01 & 3105-30700-02	2									
12.2	Eject / pull fully loaded box	3105-HDAC-1 3105-30700-01 & 3105-30700-02	3									

13.0	Manually remove box from the outlet conveyor	3105-30700-01 & 3105-30700-02	1	None	Move boxes to Q./C. inspection area	None	None	Visual	100%	During assembly process	Automatic detection if outlet conveyor is full, Machine will stop	Stop process and report it to group leader.
14.0	Part count verification (thru weight scale)	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Quantity according PK drawing	None	None	Weight count	100%	During assembly process	PK-30907-417	Stop process and segregate suspect parts according procedure O20.
15.0	Q. C. Audit	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Free of damaged and no missing components	None	Audit 10% from each box	Visual inspection (just TPA position and cosmetic)	10%	During assembly process	inspection plan / INSP100	Stop process and segregate suspect parts according procedure O20. / Send back to production to be 100% sorted
16.0	100% visual inspection	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Free of damaged and no missing components	None	Inspect 100%	Visual inspection	100%	Just parts rejected by quality	Inspection plan / O20 procedure	Segregate parts and inspect 100% after that inspection notify Q.C. (step #15)
17.0	Send parts to warehouse	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	All accepted parts be confirmed in SAP and send to warehouse	None	None	Visual	100%	Just accepted parts	SAP confirmation process / production program	In case accepted parts are not confirmed notify group leader.
18.0	Ship parts to the customer	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1	None	Send correct parts and quantity on time to customers	None	None	RF guns / SAP program	100%	Each shipment	SAP program / Delivery Notes / Shipping area procedures	Stop shipping process and notify warehouse supervisor
19.0	Product Periodic Verification.	3105-HDAC-1 3105-30700-01 & 3105-30700-02	1		Dimensional and functional verification	None	Annual dimensional periodic verification	Full dimensional according customer drawing	6 Pieces	Annual	DOC103	Communicate to quality engineer.
							Functional special validation	According product specification	Determinate by engineering	Each change it could affect the product functionality	PCN process	Communicate to customer

Assy part 307001120

0307002120 HOUSING HARNESS GRAY 12 CKT
(0899921436)

0307003120 12 CKT TPA
(0899920273)



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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/m ²	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.