

Part Name <u>2.8 System Sealed Connector Wire Seal</u>		Cust. Part Number <u>F8ZB-14603-AA</u>	
Shown on Drawing No. <u>97BG-10C930-EA</u>		Org. Part Number <u>7158-3110-40</u>	
Engineering Change Level <u>J2 / AELE-E-11784007-512</u>		Dated <u>17-07-2019</u>	
Additional Engineering Changes <u>N/A</u>		Dated <u>N/A</u>	
Safety and/or Government Regulation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Purchase Order No. <u>N/A</u> Weight (kg) <u>0,00016</u>	
Checking Aid No. <u>N/A</u> Checking Aid Engineering Change Level		<u>N/A</u> Dated <u>N/A</u>	
ORGANIZATION MANUFACTURING INFORMATION		CUSTOMER SUBMITTAL INFORMATION	
YAZAKI EUROPE LTD <u>323047696</u>		NURSAN	
Organization Name & Supplier/Vendor Code		Buyer/Buyer Code	
Robert Bosch Strasse., 43		Ford	
Street Address			
Cologne	NRW	D-50769	Germany
City	Region	Postal Code	Country
MATERIALS REPORTING			
Has customer-required Substances of Concern information been reported?		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	
Submitted by IMDS or other customer format:		IMDS	
		IMDS ID: 1008131940 / 1	
Are polymeric parts identified with appropriate ISO marking codes?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a	
REASON FOR SUBMISSION (Check at least one)			
<input type="checkbox"/> Initial submission	<input type="checkbox"/> Change to Optional Construction or Material		
<input type="checkbox"/> Engineering Change(s)	<input type="checkbox"/> Supplier or Material Source Change		
<input type="checkbox"/> Tooling: Transfer, Replacement, Refurbishment, or additional	<input type="checkbox"/> Change in Part Processing		
<input type="checkbox"/> Correction of Discrepancy	<input type="checkbox"/> Parts produced at Additional Location		
<input type="checkbox"/> Tooling Inactive > than 1 year	<input checked="" type="checkbox"/> Other - please specify below		
Customer Request			
REQUESTED SUBMISSION LEVEL (Check one)			
<input type="checkbox"/> Level 1 - Warrant only (and for designated appearance items, an Appearance Approval Report) submitted to customer.			
<input checked="" type="checkbox"/> Level 2 - Warrant with product samples and limited supporting data submitted to customer.			
<input type="checkbox"/> Level 3 - Warrant with product samples and complete supporting data submitted to customer.			
<input type="checkbox"/> Level 4 - Warrant and other requirements as defined by customer.			
<input type="checkbox"/> Level 5 - Warrant with product samples and complete supporting data reviewed at organization's manufacturing location.			
SUBMISSION RESULTS			
The results for <input checked="" type="checkbox"/> dimensional measurements <input checked="" type="checkbox"/> material and functional tests		<input type="checkbox"/> appearance criteria <input type="checkbox"/> statistical process package	
These results meet all drawing and specification requirements: <input checked="" type="checkbox"/> Yes		<input type="checkbox"/> NO (If "NO" - Explanation Required)	
Mold / Cavity / Production Process		<u>Mold 3525 / Cavities 1387 / Transfer</u>	
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 105,412 / 8 hours .			
I also certify that documented evidence of such compliance is on file and available for review. I have noted any deviations from this declaration below.			
EXPLANATION/COMMENTS: _____			
Is each Customer Tool properly tagged and numbered?		<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> n/a	
Organization Authorized Signature <u>Telmo Oliveira</u>		Date <u>15 May 2021</u>	
Print Name <u>Telmo Oliveira</u>		Phone No. <u>+351 256 246 764</u> FAX No. _____	
Title <u>QE</u>		E-mail <u>telmo.oliveira@yazaki-europe.com</u>	
FOR CUSTOMER USE ONLY (IF APPLICABLE)			
PPAP Warrant Disposition: <input type="checkbox"/> Approved <input type="checkbox"/> Rejected <input type="checkbox"/> Other _____			
Customer Signature _____		Date _____	
Print Name _____		Customer Tracking No. (optional) _____	

Quality Synthetic Rubber
Computer Controlled Analysis of Tooling
4/13/2021

Mold Number: 3525

Page 1

Part Number: 7158-3110-40

Inspector : Jeff Cooper

Drawing/Rev Level: 97BG-10C930-EA / J2

Dim #	Specifications	+/-	Cav# 1	Cav# 2	Cav# 3	Cav# 4	Cav# 5
1	Ø 6.70	0.05	6.718	6.735	6.744	6.730	6.743
2	Ø 5.10	0.20	5.068	5.078	5.081	5.082	5.059
3	Ø 4.30	+0.1/-0.0	4.303	4.313	4.307	4.326	4.332
4	Ø 2.80	0.05	2.816	2.782	2.795	2.825	2.786
5	7.75	0.20	7.738	7.750	7.779	7.748	7.756
6	Ø 5.10	0.20	4.954	5.047	5.002	5.019	5.009
7	0.30	+0.0/-0.10	0.229	0.258	0.268	0.274	0.245
8	4.60	0.20	4.582	4.564	4.615	4.615	4.597
9	1.00	0.20	0.953	0.949	0.959	0.967	0.980
10	Die & Cavity No.		OK	OK	OK	OK	OK
11	Yazaki Mark		OK	OK	OK	OK	OK
12	NOTES				IN COMPLIANCE		

ANNUAL TESTING

LABORATORY MATERIAL TEST REPORT serial no.: 04132118

CUSTOMER : YAZAKI	COMPOUND : A6101GR
PART NO. : 7158-3110-40	LOT NO. : 10481956
PART NAME : WIRE SEAL	MATR'L. : SILICONE
TEST DATE : 03-11-21	SPEC. NO.: ESB-M2D280-A3

TYPE OF TEST

/ SPECIFICATION / TEST RESULTS

ORIGINAL PROPERTIES, ASTM D2240, D412, D624,

HARDNESS, SHORE A,	58 to 65	61
TENSILE STRENGTH, DIE-C, PSI	987 MIN.	1070
ELONGATION, %	250 MIN.	375
TEAR RESISTANCE, DIE-B PSI	69 MIN.	116

HEAT AGING, ASTM D865, 70h @ 150°C

HARDNESS CHANGE, pts.	+-5 MAX.	+3
TENSILE STRENGTH CHANGE, %	- 5 MAX.	-3
ELONGATION CHANGE, %	- 10 MAX.	-10

HEAT AGING, ASTM D865, 1000h @ 150°C

HARDNESS CHANGE, pts.	+12 MAX.	+4
TENSILE STRENGTH CHANGE, %	- 25 MAX.	-12
ELONGATION CHANGE, %	- 35 MAX.	-30

COMPRESSION SET, ASTM D395, 70h @ 150°C

COMPRESSION SET, %	15 MAX.	14
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COMPRESSION SET, ASTM D395, 1000h @ 150°C

COMPRESSION SET, %	35 MAX.	32
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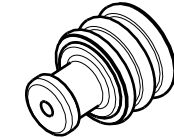
Approved by Richard Rybka
Richard Rybka, Technical Manager

Date: April 13, 2021

QUALITY SYNTHETIC RUBBER, INC. CERTIFIES THAT THIS MATERIAL HAS BEEN TESTED IN ACCORDANCE WITH ALL NOTED TEST METHODS AND THAT THE RESULTS OBTAINED MEET SPECIFICATION REQUIREMENTS UNLESS OTHERWISE NOTED ON THIS REPORT. THE INFORMATION CONTAINED HEREIN APPLIES TO THE SPECIFIC LOT OF MATERIAL NOTED ABOVE. NO WARRANTY OF ANY KIND IS HEREIN CONSTRUED OR IMPLIED. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF QUALITY SYNTHETIC RUBBER, INC.

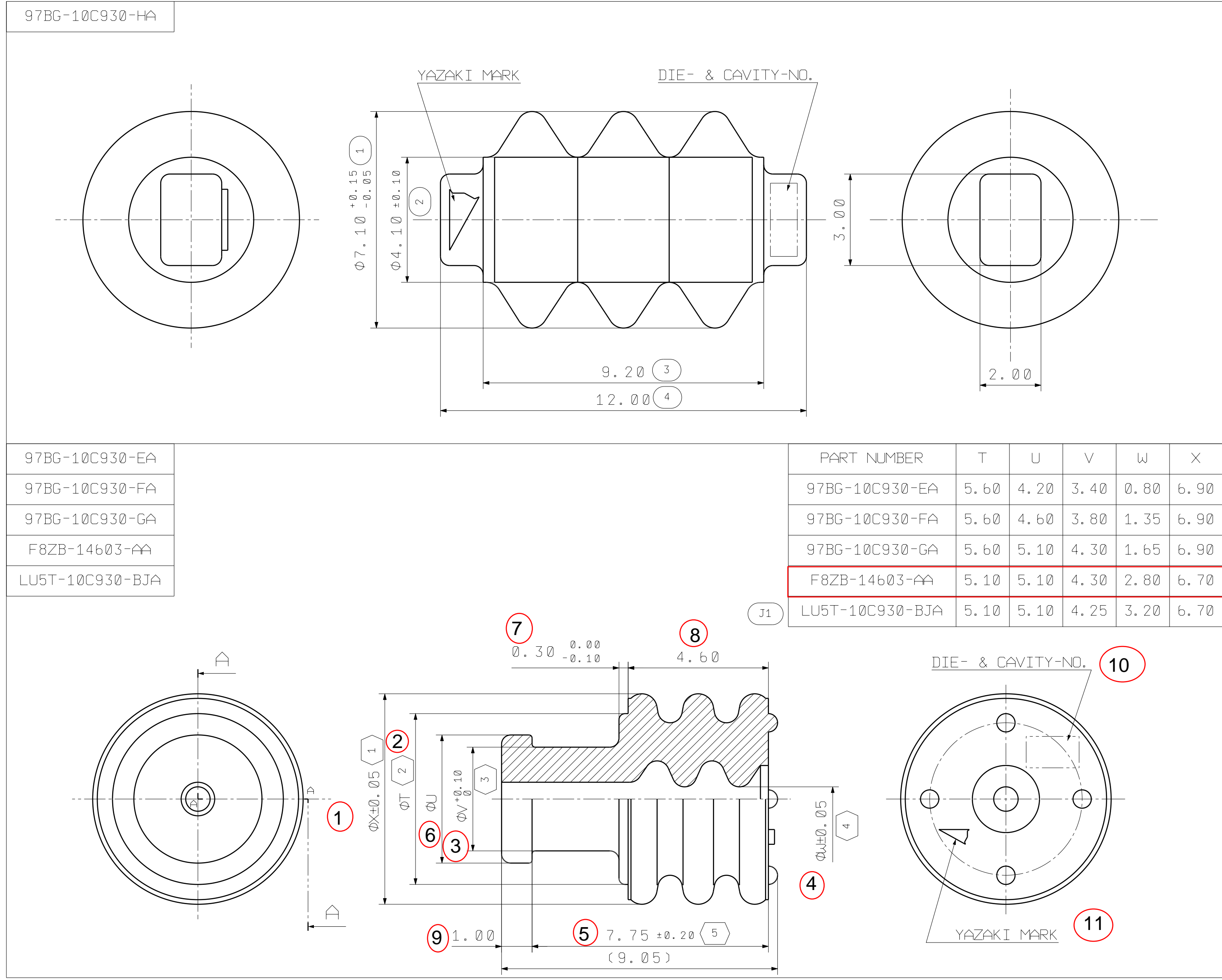
FORD PART NO.	YAZAKI PART NO.	PART NAME	WEIGHT [g]	MATERIAL	WIRE INSULATION OUTER DIAMETER [mm]	COLOUR
97BG-10C930-EA	7158-3111-b0	2.8 mm WIRE SEAL (S)	0.21g	SILICONE RUBBER	1.20-1.90	GREEN
97BG-10C930-FA	7158-3112-70	2.8 mm WIRE SEAL (M)	0.21g		1.80-2.30	YELLOW
97BG-10C930-GA	7158-3113-40	2.8 mm WIRE SEAL (L)	0.20g		2.10-3.00	WHITE
F8ZB-14603-AA	7158-3110-40	2.8 mm WIRE SEAL	0.18g		3.10-3.40 (H1)	LIGHT GREY
LU5T-10C930-BJA	7172-5734-B0	2.8 mm WIRE SEAL	0.12g		3.40-3.70 (J2)	BROWN
97BG-10C930-HA	7158-3114-90	2.8 mm BLIND PLUG	0.53g		N/A	BLUE

APPLICABLE COMPONENTS						
ITEM	DESCRIPTION	MANDATORY (YES/NO)	TERMINAL CAVITY MIN/MAX ØD	PLATING / MATERIAL	FORD COMPONENT PART NO.	YAZAKI COMPONENT PART NO.
1	2.8 mm WP MALE TERMINAL (S)	NO	-	TIN	97BG-14421-BDA	7114-4150-02
2	2.8 mm WP MALE TERMINAL (M)	NO	-	TIN	97BG-14421-BEA	7114-4151-02
3	2.8 mm WP MALE TERMINAL (L)	NO	-	TIN	97BG-14421-BFA	7114-4152-02
4	2.8 mm WP FEMALE TERMINAL (S)	NO	-	TIN	97BG-14474-BDA	7116-4150-02
5	2.8 mm WP FEMALE TERMINAL (M)	NO	-	TIN	97BG-14474-BEA	7116-4151-02
6	2.8 mm WP FEMALE TERMINAL (L)	NO	-	TIN	97BG-14474-BFA	7116-4152-02
7	2.8 mm WP FEMALE TERMINAL (L)	NO	-	TIN	F8ZB-14474-AA	7116-4153-02



ISOMETRIC VIEW
SCALE 2:1

LTRS		REVISIONS	
ORIGINATOR	CHECKER	ENGR APP	MATL APP
RELEASED EE00-I-10594609-000 (P) DATE: 96/03/15 CAD: N			
M. POWER		F. SENYUEZ	
REDRAWN TO LATEST DRAWING STANDARDS AFTER REVISION G H1 3.10-3.40 WAS 3.10-3.30 AELE-E-11784007-427 20170718			
YAZAKI	WPCZEWS	JPITTENI	
RELEASED LU5T-10C930-BJA J1 REMOVED LU5T-10C930-AA AND ADDED LU5T-10C930-BJA J2 CHANGED 3.40~3.80 TO 3.40~3.70 AELE-E-11784007-512 20190717			
YAZAKI	WPCZEWS	JPITTENI	



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NOTES:

- N/A
- FOR CURRENT RELEASE STATUS, SEE THE WERS ENGINEERING NOTICE.
- CHANGES TO DESIGN, COMPOSITION OR PROCESING OF THE PART PREVIOUSLY APPROVED FOR PRODUCTION REQUIRE PRIOR APPROVAL FROM FORD PRODUCT ENGINEERING.
- PART MUST BE FREE OF BURRS, FLASH AND SHARP EDGES THAT MAY AFFECT THE FUNCTION, SAFE HANDLING, INSTALLATION OR REMOVAL OF THE PART.
- PART MUST BE PACKED IN A MANNER WHICH PREVENTS DISTORTING DURING SHIPPING AND STORAGE.
- CAVITY NUMBER AND/OR DATE CODE (MIN. LETTERMING SIZE 3mm) TO BE ENGRAVED ON THE CLASS "C" SURFACE. LATTER RAISED 0.3mm ABOVE THE SURFACE AT A LOCATION APPROVED BY FORD PRODUCT ENGINEERING.
- SOURCES FOR MATERIALS DEFINED BY FORD MATERIAL SPECIFICATIONS SHALL BE SELECTED FROM THE FORD MOTOR COMPANY ENGINEERING MATERIAL APPROVED SOURCE LIST.
- N/A
- N/A
- A SIZE OF FLASH MUST BE LESS THEN 0.15 x 0.10.
- MATERIAL AND COLOUR: SEE TABLE.
- MATERIAL FOR WIRE SEAL AND BLIND PLUG IS ACCORDING E58-M2D280-A2 EXCEPT DENSITY (1.12 g/cm3)
- PART TO COMPLY WITH YPES-31-038 REQUIREMENTS

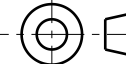

① TO ④ ISIR DIMENSIONS FOR PLUG

① TO ⑤ ISIR DIMENSIONS FOR SEALS



YAZAKI NORTH AMERICA
734-983-1000
6801 HAGGERTY RD.
CANTON, MI 48107, USA

ENG APP	SEE APPROVAL BOX	APP DATE	SEE APPROVAL BOX
GDSB CODE	SUPPLIER PART NUMBER		
Y230	7158-3111-b0; ETC.		

REFERENCE: 2.8 SYSTEM SEALED CONNECTOR WIRE SEAL					
MUST CONFORM TO: RESTRICTED SUBSTANCE MANAGEMENT STANDARD WSS-M98P9999-A1 TO SAFEGUARD HEALTH, SAFETY AND THE ENVIRONMENT					
DRAFTED IN ACCORDANCE WITH FORD MOTOR COMPANY ENGINEERING CAD AND DRAFTING STANDARDS VERSION 30				 3RD ANGLE PROJ DIMENSIONS ARE IN MILLIMETERS	
CAD TYPE	CAD LOC.	CAD FILE		DTMC	
K-CAT1A6	TC	97BG-10C930-EA-UF		15 MASTER	
PLANT CODE	LINE CODE	OPER. NO.	BT.NO.	STATION	SIZE
N/A	N/A	N/A	N/A	N/A	A0
PLANT NAME	DEPT NO.	DESIGN	SCALE	SHT	OF
N/A	N/A	YAZAKI	10:1	1	1
TITLE / PART NAME: BT WIR CONN SLV					
DRAWING / PART NO.		97BG-10C930-EA			N/A
		FORD MOTOR COMPANY			

RUBBER PART GENERAL TOLERANCE			
PART DIM.	①	2	3
0 TO 3	±0.2	±0.3	±0.4
3 TO 6	±0.2	±0.4	±0.5
6 TO 10	±0.3	±0.5	±0.6
10 TO 18	±0.3	±0.6	±0.8
18 TO 30	±0.4	±0.8	±1.0
30 TO 50	±0.5	±1.0	±1.5
50 TO 80	±0.6	±1.2	±2.0
80 TO 120	±0.7	±1.4	±2.5
120 TO 180	±0.8	±1.6	±3.0
180 TO 250	±1.0	±2.0	±4.0
250 TO 315	±1.2	±2.5	±5.0
315 TO 400	±1.5	±3.0	±6.0
400 TO 500	±1.6	±3.5	±7.0
500 OVER	±0.4 %	±0.8 %	±1.5 %

THE MASTER SOURCE OF INFORMATION FOR THIS DRAWING IS IN A PE COMPUTER DATABASE. CHANGES ARE NOT PERMITTED WITHOUT PRIOR CONSENT OF THE RELEVANT ENGINEERING CAD ACTIVITY.

WIRE SEAL	2.8 SYSTEM CONNECTOR WIRE SEAL	F8ZB-14603-AA
		97BG-10C930-HA
		97BG-10C930-GA
		97BG-10C930-FA
DESCRIPTION	PART NAME	① LU5T-10C930-BJA
		PART NUMBER