

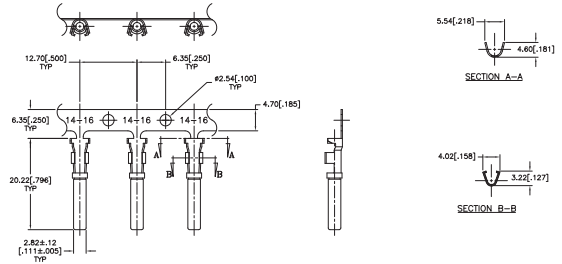
STAMPED AND FORMED CONTACTS, PG 1 of 2

Click on blue underlined part numbers to be taken to their spec sheets.

OPTIONS

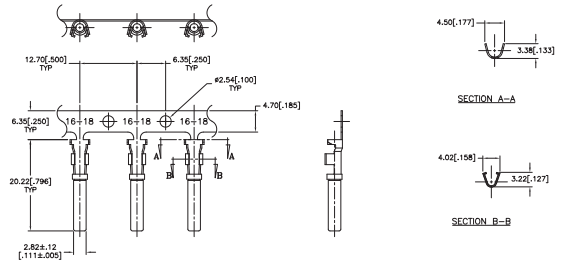
PART NUMBER: AT62-14-01XX
DESCRIPTION: CONTACT, SOCKET, STAMPED, SIZE 16

MATERIAL:
 CONTACT BODY: COPPER ALLOY
 HOOD: STAINLESS STEEL
PLATING SUFFIX CODE:
 XX=22 NICKEL PLATING
 XX=44 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: ATT-16-00, MFX-3950 & MFX-3953
CRIMPER SPECIFICATIONS: S2-15223 & S2-15224
CRIMP INFORMATION DRAWING: S2-15221 & S2-15222
CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



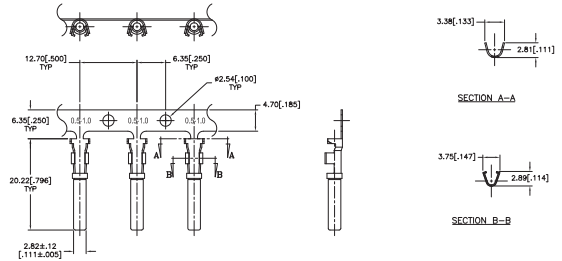
PART NUMBER: AT62-16-01XX
DESCRIPTION: CONTACT, SOCKET, STAMPED, SIZE 16

MATERIAL:
 CONTACT BODY: COPPER ALLOY
 HOOD: STAINLESS STEEL
PLATING SUFFIX CODE:
 XX=22 NICKEL PLATING
 XX=44 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: ATT-16-00, ATT-16-01, MFX-3950 & MFX-3953
CRIMPER SPECIFICATIONS: S2-15223 & S2-15224
CRIMP INFORMATION DRAWING: S2-15221 & S2-15222
CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



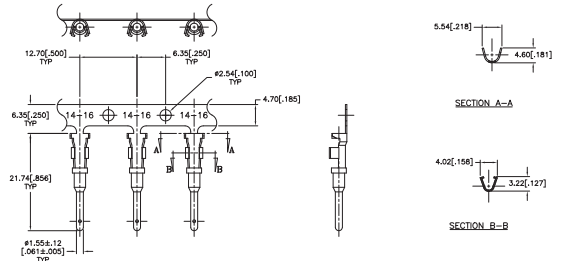
PART NUMBER: AT62-16-06XX
DESCRIPTION: CONTACT, SOCKET, STAMPED, SIZE 16

MATERIAL:
 CONTACT BODY: COPPER ALLOY
 HOOD: STAINLESS STEEL
PLATING SUFFIX CODE:
 XX=22 NICKEL PLATING
 XX=44 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: ATT-16-01, MFX-3950 & MFX-3953
CRIMPER SPECIFICATIONS: S2-15223 & S2-15224
CRIMP INFORMATION DRAWING: S2-15221 & S2-15222
CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



PART NUMBER: AT60-14-01XX
DESCRIPTION: CONTACT, PIN, STAMPED, SIZE 16

MATERIAL: COPPER ALLOY
PLATING SUFFIX CODE:
 XX=22 NICKEL PLATING
 XX=44 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: ATT-16-00, MFX-3950 & MFX-3953
CRIMPER SPECIFICATIONS: S2-15223 & S2-15224
CRIMP INFORMATION DRAWING: S2-15221 & S2-15222
CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



STAMPED AND FORMED CONTACTS, PG 2 of 2

Click on [blue underlined](#) part numbers to be taken to their spec sheets.

OPTIONS

PART NUMBER: AT60-16-01XX

DESCRIPTION: CONTACT, PIN, STAMPED, SIZE 16

MATERIAL: COPPER ALLOY

PLATING SUFFIX CODE:

XX=22 NICKEL PLATING

XX=44 GOLD PLATING

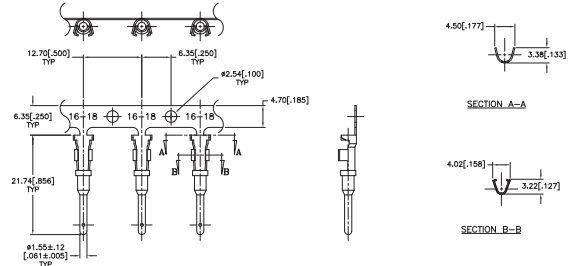
CONTACT GENERAL DATA SPECIFICATION: S2-15217

AVAILABLE CRIMPERS: ATT-16-00, ATT-16-01, MFX-3950 & MFX-3953

CRIMPER SPECIFICATIONS: S2-15223 & S2-15224

CRIMP INFORMATION DRAWING: S2-15221 & S2-15222

CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



PART NUMBER: AT60-16-06XX

DESCRIPTION: CONTACT, PIN, STAMPED, SIZE 16

MATERIAL: COPPER ALLOY

PLATING SUFFIX CODE:

XX=22 NICKEL PLATING

XX=44 GOLD PLATING

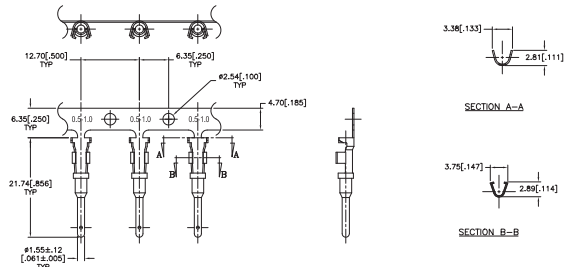
CONTACT GENERAL DATA SPECIFICATION: S2-15217

AVAILABLE CRIMPERS: ATT-16-01, MFX-3950 & MFX-3953

CRIMPER SPECIFICATIONS: S2-15223 & S2-15224

CRIMP INFORMATION DRAWING: S2-15221 & S2-15222

CONTACTS PER REEL: APPROX. 4000 (PARTIAL REELS AVAILABLE)



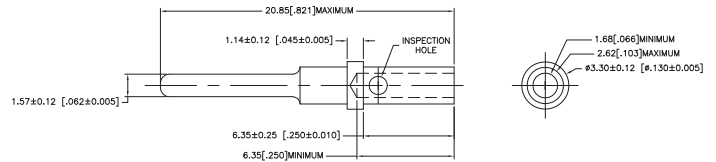
SOLID/MACHINED CONTACTS

Click on [blue underlined](#) part numbers to be taken to their spec sheets.

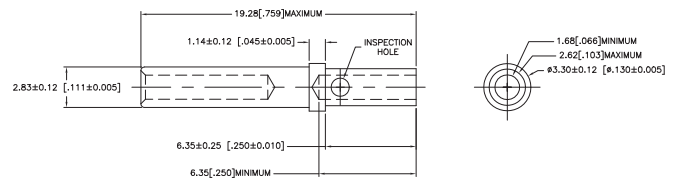
OPTIONS

MILITARY-STYLE

PART NUMBER: [AT60-202-16XX](#)
DESCRIPTION: CONTACT, PIN, SOLID MACHINED, SIZE 16
MATERIAL: COPPER ALLOY
PLATING SUFFIX CODE:
 XX=141 NICKEL PLATING
 XX=31 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: CA-5D12 & CA-5E12
CRIMPER SPECIFICATIONS: S2-15219 & S2-15220
CRIMP INFORMATION DRAWING: S2-15218

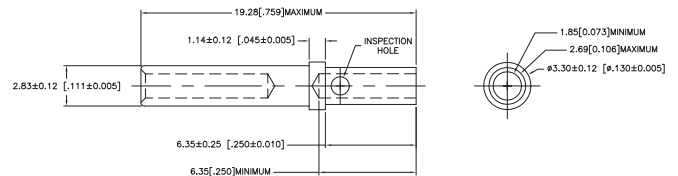


PART NUMBER: [AT62-201-16XX](#)
DESCRIPTION: CONTACT, SOCKET, SOLID MACHINED, SIZE 16
MATERIAL:
 CONTACT BODY: COPPER ALLOY
 HOOD: STAINLESS STEEL
PLATING SUFFIX CODE:
 XX=141 NICKEL PLATING
 XX=31 GOLD PLATING
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: CA-5D12 & CA-5E12
CRIMPER SPECIFICATIONS: S2-15219 & S2-15220
CRIMP INFORMATION DRAWING: S2-15218

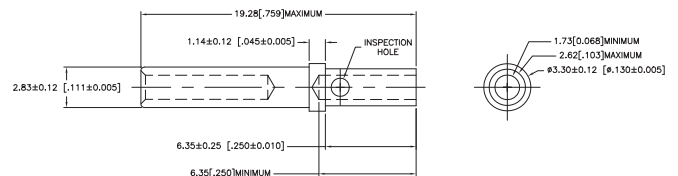


ROCKSOLID™ CONTACTS

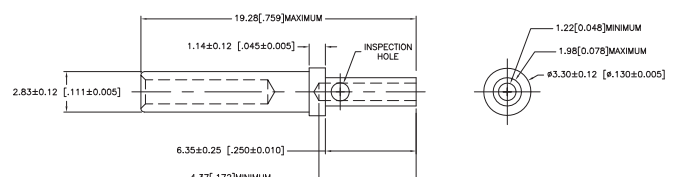
PART NUMBER: [65-54942-14](#)
DESCRIPTION: CONTACT, SOCKET, ROCKSOLID, SIZE 16
AWG RANGE: 14AWG
MATERIAL: COPPER ALLOY
PLATING: GOLD
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: CA-5D12 & CA-5E12
CRIMPER SPECIFICATIONS: S2-15219 & S2-15220
CRIMP INFORMATION DRAWING: S2-15218



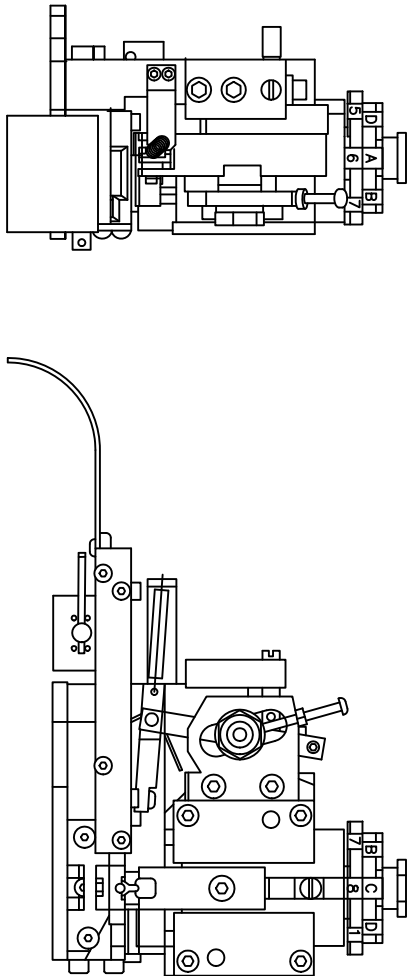
PART NUMBER: [65-54942-16](#)
DESCRIPTION: CONTACT, SOCKET, ROCKSOLID, SIZE 16
AWG RANGE: 16AWG
MATERIAL: COPPER ALLOY
PLATING: GOLD
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: CA-5D12 & CA-5E12
CRIMPER SPECIFICATIONS: S2-15219 & S2-15220
CRIMP INFORMATION DRAWING: S2-15218



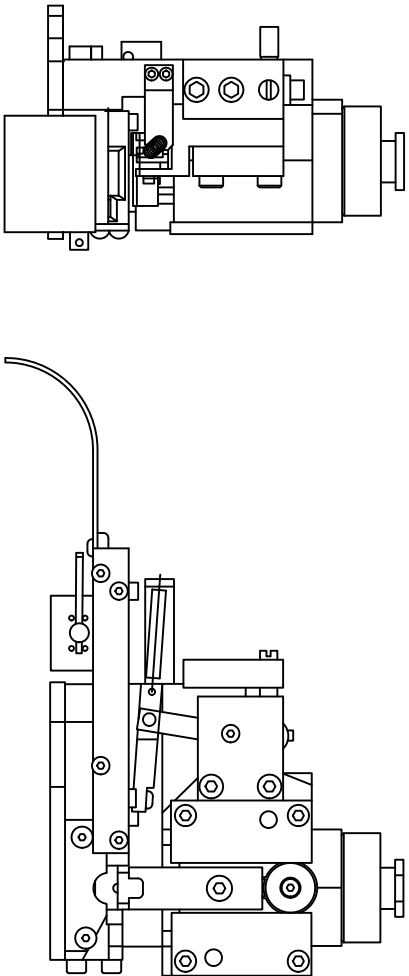
PART NUMBER: [65-54942-20](#)
DESCRIPTION: CONTACT, SOCKET, ROCKSOLID, SIZE 16
AWG RANGE: 20AWG
MATERIAL: COPPER ALLOY
PLATING: GOLD
CONTACT GENERAL DATA SPECIFICATION: S2-15217
AVAILABLE CRIMPERS: CA-5D12 & CA-5E12
CRIMPER SPECIFICATIONS: S2-15219 & S2-15220
CRIMP INFORMATION DRAWING: S2-15218



REVISIONS			
REV	ZONE	ECO	DESCRIPTION
A1	-	-	RELEASE NUMBER 016571
DATE	BY	APPR	
6/12/09	B.D.B.	M.R.F.	



SINE PART NUMBER	MFX-3950
DEUTSCH PART NUMBER	DCT16-02-00
TYCO PART NUMBER	1-3-1385344-1, 2, 3, 4, 5 & 7



SINE PART NUMBER	MFX-3953
DEUTSCH PART NUMBER	DCT1620-02-00

ALL REFERENCES TO DEUTSCH PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO DEUTSCH INDUSTRIAL PRODUCTS.

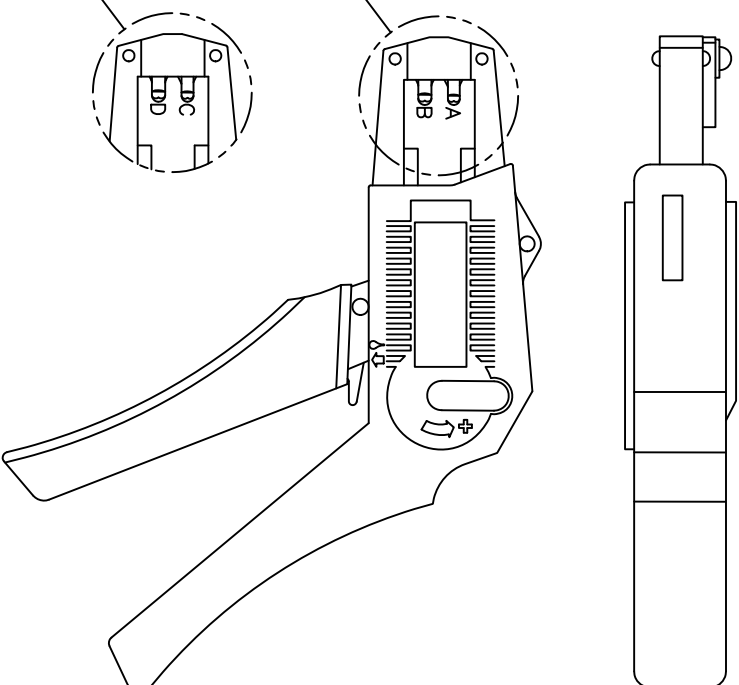
ALL REFERENCES TO TYCO PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO TYCO ELECTRONICS.

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.			
2) Tolerances are as follows:			
1. HOLE .0005			
2. HOLE .0005			
3. HOLE .0005			
4) Finish: Standard Per: SD-20020			
5) Material: BERNUM			
6) Heat Treat: BERNUM			
7) Surface Finish: BERNUM			
8) Plating: BERNUM			
9) Coating: BERNUM			
10) Painting: BERNUM			
11) Polishing: BERNUM			
12) Bore: BERNUM			
13) Thread: BERNUM			
14) Chamfer: BERNUM			
15) Fillet: BERNUM			
16) Edge: BERNUM			
17) Corner: BERNUM			
18) Radius: BERNUM			
19) Diameter: BERNUM			
20) Length: BERNUM			
21) Width: BERNUM			
22) Height: BERNUM			
23) Thickness: BERNUM			
24) Weight: BERNUM			
25) Volume: BERNUM			
26) Surface Area: BERNUM			
27) Perimeter: BERNUM			
28) Moment of Inertia: BERNUM			
29) Section Modulus: BERNUM			
30) Polar Moment of Inertia: BERNUM			
31) Torsion Constant: BERNUM			
32) Stiffness: BERNUM			
33) Strength: BERNUM			
34) Hardness: BERNUM			
35) Toughness: BERNUM			
36) Fatigue Life: BERNUM			
37) Creep Resistance: BERNUM			
38) Thermal Expansion: BERNUM			
39) Thermal Conductivity: BERNUM			
40) Thermal Stability: BERNUM			
41) Thermal Shock Resistance: BERNUM			
42) Thermal Fatigue Resistance: BERNUM			
43) Thermal Aging Resistance: BERNUM			
44) Thermal Oxidation Resistance: BERNUM			
45) Thermal Corrosion Resistance: BERNUM			
46) Thermal Degradation Resistance: BERNUM			
47) Thermal Decomposition Resistance: BERNUM			
48) Thermal Evaporation Resistance: BERNUM			
49) Thermal Sublimation Resistance: BERNUM			
50) Thermal Ionization Resistance: BERNUM			
51) Thermal Neutron Resistance: BERNUM			
52) Thermal Gamma Radiation Resistance: BERNUM			
53) Thermal X-Ray Radiation Resistance: BERNUM			
54) Thermal Cosmic Radiation Resistance: BERNUM			
55) Thermal Solar Radiation Resistance: BERNUM			
56) Thermal Infrared Radiation Resistance: BERNUM			
57) Thermal Microwave Radiation Resistance: BERNUM			
58) Thermal Radio Frequency Radiation Resistance: BERNUM			
59) Thermal Ultrasound Resistance: BERNUM			
60) Thermal Vibration Resistance: BERNUM			
61) Thermal Shock Resistance: BERNUM			
62) Thermal Fatigue Resistance: BERNUM			
63) Thermal Aging Resistance: BERNUM			
64) Thermal Oxidation Resistance: BERNUM			
65) Thermal Corrosion Resistance: BERNUM			
66) Thermal Degradation Resistance: BERNUM			
67) Thermal Decomposition Resistance: BERNUM			
68) Thermal Evaporation Resistance: BERNUM			
69) Thermal Sublimation Resistance: BERNUM			
70) Thermal Ionization Resistance: BERNUM			
71) Thermal Neutron Resistance: BERNUM			
72) Thermal Gamma Radiation Resistance: BERNUM			
73) Thermal X-Ray Radiation Resistance: BERNUM			
74) Thermal Cosmic Radiation Resistance: BERNUM			
75) Thermal Solar Radiation Resistance: BERNUM			
76) Thermal Infrared Radiation Resistance: BERNUM			
77) Thermal Microwave Radiation Resistance: BERNUM			
78) Thermal Radio Frequency Radiation Resistance: BERNUM			
79) Thermal Ultrasound Resistance: BERNUM			
80) Thermal Vibration Resistance: BERNUM			
81) Thermal Shock Resistance: BERNUM			
82) Thermal Fatigue Resistance: BERNUM			
83) Thermal Aging Resistance: BERNUM			
84) Thermal Oxidation Resistance: BERNUM			
85) Thermal Corrosion Resistance: BERNUM			
86) Thermal Degradation Resistance: BERNUM			
87) Thermal Decomposition Resistance: BERNUM			
88) Thermal Evaporation Resistance: BERNUM			
89) Thermal Sublimation Resistance: BERNUM			
90) Thermal Ionization Resistance: BERNUM			
91) Thermal Neutron Resistance: BERNUM			
92) Thermal Gamma Radiation Resistance: BERNUM			
93) Thermal X-Ray Radiation Resistance: BERNUM			
94) Thermal Cosmic Radiation Resistance: BERNUM			
95) Thermal Solar Radiation Resistance: BERNUM			
96) Thermal Infrared Radiation Resistance: BERNUM			
97) Thermal Microwave Radiation Resistance: BERNUM			
98) Thermal Radio Frequency Radiation Resistance: BERNUM			
99) Thermal Ultrasound Resistance: BERNUM			
100) Thermal Vibration Resistance: BERNUM			

ATT-16-00 WITH CAVITY A & B

CONTACT P/N:	INSULATION ϕ	CAVITY	WIRE SIZE
AT60-16-01**	PIN .075 - .140	B	1.5mm ²
AT62-16-01**	SOC [1.91 - 3.56]	A	16AWG
		A	1.0mm ²
AT60-14-01**	PIN .095 - .150	B	14AWG
AT62-14-01**	SOC [2.41 - 3.81]	B	2.0mm ²
		B	1.5mm ²
		A	1.5mm ²
		A	16AWG
		A	1.0mm ²
AT60-16-06**	PIN .055 - .100	A	16AWG
AT62-16-06**	SOC [1.40 - 2.54]	A	1.0mm ²

CAVITY VIEW OF
CRIMPER NUMBER
ATT-16-00



CAVITY VIEW OF
CRIMPER NUMBER
ATT-16-01

USE CRIMPER NUMBER:
ATT-16-01 WITH CAVITY C & D

CONTACT P/N:	INSULATION ϕ	CAVITY	WIRE SIZE
AT60-16-01**	.075 - .140	D	18AWG
AT62-16-01**	[.1.91 - 3.56]	D	.75mm ²
AT60-16-06**	.055 - .100	D	18AWG
AT62-16-06**	[1.40 - 2.54]	D	.75mm ²
		C	.50mm ²

NOTES (UNLESS OTHERWISE SPECIFIED):

1. ALL DIMENSIONS IN INCHES [MILLIMETERS]
2. FOR PLATING CODES ** SEE CONTACT DATA DRAWINGS.
3. THIS TOOL IS FOR CRIMPING SIZE 16 CONTACTS ONLY TO WIRES LISTED IN THE CHARTS.
4. DEUTSCH IPD CROSS REFERENCE PART NUMBERS ARE DTT-16-00 AND DTT-16-01.

REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NUMBER 016571	6/12/09	B.D.B.	M.R.F.

QUANTITY		PART NUMBER	DESCRIPTION	UNIT
MATERIALS LIST				
UNLESS OTHERWISE SPECIFIED				
1) All dimensions are in inches. 2) Tolerances are as follows: 1/2 in. DEC. ±0.005 finished ±1/64 3/4 in. DEC. ±0.005 finished ±1/32 4) Finish: S-20020 5) Note: See -20020				
MATERIAL SPECIFICATIONS:		CUSTOMER: SINE Systems Corporation A Subsidiary of Amphenol Corporation 47474 Midway Drive Chilton Township, MI 48036		
N/A		INSTRUCTIONS, ATT-16-00 & 01 CRIMPER, HAND, STAMPED CONTACTS		
PROCESS SPECIFICATIONS:				
THE USE OF THIS DOCUMENT IS UNLIMITED. DESIGN FEATURES SHOWN ARE NOT TO BE DATA SHOWN HEREON ARE THE PROPERTY OF AMPHENOL CORP. ALL RIGHTS ARE RESERVED. NO OTHER MANUFACTURING OR REVISION DOCUMENTS REFERRED TO HEREON MAY BE USED WITHOUT PERMISSION.				
NEXT ASST:		SIZE (FROM NO. 100): B 10644 S2-15223 SCALE: NONE S2-15223 SHEET 1 OF 1 REASON: A		

ALL REFERENCES TO DEUTSCH PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO DEUTSCH INDUSTRIAL PRODUCTS.

REVISIONS				
REV	ZONE	ECO	DESCRIPTION	DATE
A1	-	-	RELEASE NUMBER 016571	6/12/09
BY	APP			
B.D.B.	M.F.F.			

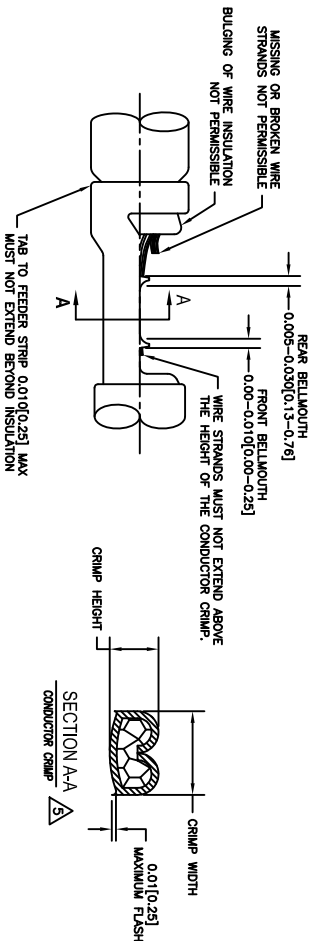
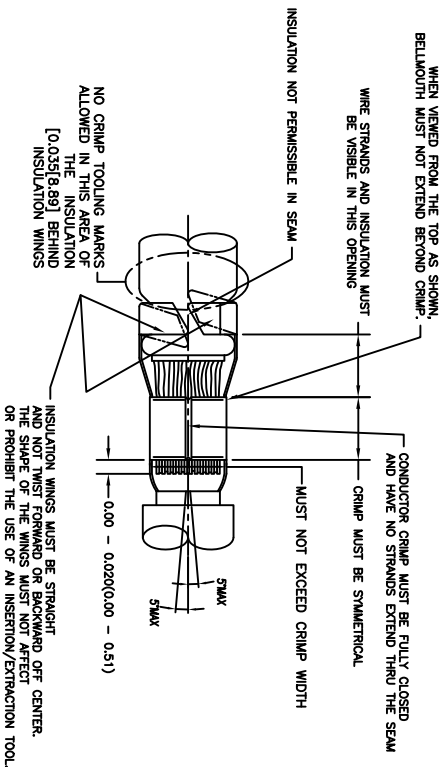
STAMPED CONTACT PART NUMBER 1005=PIN 1006=SOCKET	SIZE	CONDUCTOR WIRE SIZE	CRIMP HEIGHT	CRIMP WIDTH	CONDUCTOR PUNCH NUMBER	CONDUCTOR ANVIL NUMBER	CRIMP TENSILE REFERENCE
A780-14-011x A782-14-011x INSULATION RANGE 0.095-0.150(2.11-3.81)	16	14 AWG	0.055(1.40)	0.094(2.39)	A177-002-0200	A177-101-0200	28(111)
		2.00mm ²	0.055(1.40)	0.094(2.39)			
		1.50mm ²	0.055(1.35)	0.094(2.39)			
		16 AWG	0.050(1.27)	0.094(2.39)			
		1.00mm ²	0.050(1.27)	0.094(2.39)			
A780-16-011x A782-16-011x INSULATION RANGE 0.075-0.140(1.91-3.56)	16	18 AWG	0.048(1.24)	0.094(2.39)	A177-002-0200	A177-101-0200	28(111)
		0.75mm ²	0.048(1.22)	0.094(2.39)			
		14 AWG	0.055(1.40)	0.094(2.39)			
		2.00mm ²	0.055(1.40)	0.094(2.39)			
		1.50mm ²	0.053(1.35)	0.094(2.39)			
A780-16-060x A782-16-060x INSULATION RANGE 0.055-0.100(1.40-2.54)	16	18 AWG	0.048(1.24)	0.094(2.39)	A177-003-0200	A177-103-0200	28(111)
		1.00mm ²	0.050(1.27)	0.094(2.39)			
		16 AWG	0.050(1.27)	0.094(2.39)			
		1.00mm ²	0.050(1.27)	0.094(2.39)			
		18 AWG	0.048(1.24)	0.094(2.39)			
		16 AWG	0.050(1.27)	0.094(2.39)			
		1.00mm ²	0.050(1.27)	0.094(2.39)			
		18 AWG	0.048(1.24)	0.094(2.39)			
		1.00mm ²	0.050(1.27)	0.094(2.39)			
		20 AWG	0.048(1.22)	0.079(2.01)			
		16 AWG	0.050(1.27)	0.079(2.01)			
		1.00mm ²	0.050(1.27)	0.079(2.01)			
		18 AWG	0.048(1.24)	0.079(2.01)			
		1.00mm ²	0.048(1.22)	0.079(2.01)			
		20 AWG	0.048(1.22)	0.079(2.01)			

CROSS REFERENCE

SINE PART NUMBER	DEUTSCH PART NUMBER
MFX-3950	DC16-02-00
A177-002-0200	1017-002-0200
A177-003-0200	1017-003-0200
A177-101-0200	1017-101-0200
A177-103-0200	1017-103-0200
A177-210-0200	1017-210-0200
A177-211-0200	1017-211-0200
A177-213-0200	1017-213-0200
A177-214-0200	1017-214-0200
A177-217-0200	1017-217-0200
A177-218-0200	1017-218-0200
A177-310-0200	1017-310-0200
A177-311-0200	1017-311-0200
A177-313-0200	1017-313-0200
A177-304-0200	1017-304-0200
A177-317-0200	1017-317-0200
A177-318-0200	1017-318-0200

NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS ARE IN INCHES(mm).
2. FORCES ARE IN POUNDS(LBS) AND NEWTONS(N).
3. "X"= PLATING SUFFX. SEE INDIVIDUAL CONTACT DRAWING.
4. WIRE STRIP LENGTH: 0.175±0.029(4.45±0.64). BROKEN OR MISSING CONDUCTOR STRANDS ARE NOT ACCEPTABLE.
5. USE A BLADE MICROMETER (0.0002-54) MIN SPINDLE AND 0.060(0.010)(1.50(0.040) ANVIL) TO MEASURE THE CONDUCTOR CRIMP. SEE SECTION AA.
6. CRIMP TENSILE STRENGTH IS DETERMINED AT A PULL RATE SPEED OF 1.00 INCH(25.4) PER MINUTE. INSULATION WINGS ARE REMOVED FOR TEST. ACTUAL CRIMP TENSILE STRENGTH DEPENDS ON WIRE/CONDUCTOR SIZE. VALUES ON THIS SPECIFICATION ARE FOR REFERENCE ONLY.
7. INSULATION DIAMETER RANGE IS DETERMINED BY CONNECTOR AND ITS WIRE SEAL SIZE. SEE CONNECTOR DRAWING FOR INSULATION RANGE.
8. INSULATION CRIMP DIAMETER SHOULD BE THE EQUAL OR LESS THAN THE DIAMETER OF THE WIRE INSULATION (HARD OR TEFLON INSULATION MAY BE AN EXCEPTION). INSULATION CRIMP SHALL NOT AFFECT REMOVAL TOOL PERFORMANCE AND SHALL NOT DAMAGE CONNECTOR CROMMET SEAL.
9. CONDUCTOR TYPE ARE PER SAE J128(AWG) AND ISO 6722(METRIC)
10. FOR CONTACT MATERIAL AND PERFORMANCE DATA, SEE DRAWING S2-15217.
11. REFER TO S2-15223 AND S2-15224 AND CROSS REFERENCE CHARTS FOR CRIMP TOOL DATA.



ALL REFERENCES TO DEUTSCH PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO DEUTSCH INDUSTRIAL PRODUCTS.

QUANTITY		PART NUMBER		DESCRIPTION		ITEM
MATERIALS LIST						
UNLESS OTHERWISE SPECIFIED		SIGNATURES		DATE		
1) All dimensions are in inches.		DRAWN:		4/7/09		
2) 1 PL. DEC. 50.00 1/16 Precision 51/16		ORDERED:		6/8/09		
3) 1 PL. DEC. 50.00 1/16 Precision 51/16		ENGINEER:		6/8/09		
4) 1 PL. DEC. 50.00 1/16 Precision 51/16		APPROVAL:		6/8/09		
MATERIAL SPECIFICATIONS:		CUSTOMER:				
N/A						
PROCESS SPECIFICATIONS:		THE USE OF THIS DOCUMENT IS LIMITED TO THE SPECIFICATIONS, AND PERFORMANCE PROPERTY OF AMPHENOL CORP. ALL DIMENSIONS ARE SUBJECT TO REMOVAL. DIMENSIONS NOTED OTHERWISE ARE CONSIDERED REVISION DATA.				
N/A						
NEXT ASSY:		SIZE FROM DRAWING NO:		SCALE: NONE		
		C 10K44		S2-15222		
		S2-15222		SHEET 1 OF 1		
		REVISION:		A1		

SINE Systems Corporation

A Subsidiary of Amphenol Corporation
44724 Moley Drive
Clinton Township, MI 48036

CRIMP DATA, STAMPED CONTACTS
FOR CRIMPER MFX-3950

REVISIONS				
REV	ZONE	ECO	DESCRIPTION	DATE
A1	-	-	RELEASE NUMBER 016571	6/12/09
BY	APP			
B.D.B.	M.F.F.			

STAMPED CONTACT PART NUMBER 1000=PIN 1000=SOCKET	SIZE	CRIMP HEIGHT	CRIMP WIDTH	CONDUCTOR PUNCH NUMBER	CONDUCTOR ANVIL NUMBER	CRIMP TENSILE REFERENCE
A160-14-011x A162-14-011x INSULATION RANGE 0.095-0.150(2.41-3.81)	14 AWG	0.055(1.40)	0.094(2.39)			
	2.00mm ²	0.055(1.40)	0.094(2.39)			
	1.50mm ²	0.053(1.35)	0.094(2.39)			
	16 AWG	0.050(1.27)	0.094(2.39)	A117-408-0200	A117-183-0200	29(111)
A160-16-011x A162-16-011x INSULATION RANGE 0.075-0.140(1.91-3.56)	16 AWG	0.050(1.27)	0.094(2.39)			
	1.00mm ²	0.050(1.27)	0.094(2.39)			
	18 AWG	0.049(1.24)	0.094(2.39)			
	0.75mm ²	0.049(1.24)	0.094(2.39)			
A160-16-065x A162-16-065x INSULATION RANGE 0.055-0.100(1.40-2.54)	16 AWG	0.050(1.27)	0.079(2.01)			
	1.00mm ²	0.050(1.27)	0.079(2.01)			
	18 AWG	0.049(1.24)	0.079(2.01)			
	20 AWG	0.048(1.22)	0.079(2.01)			

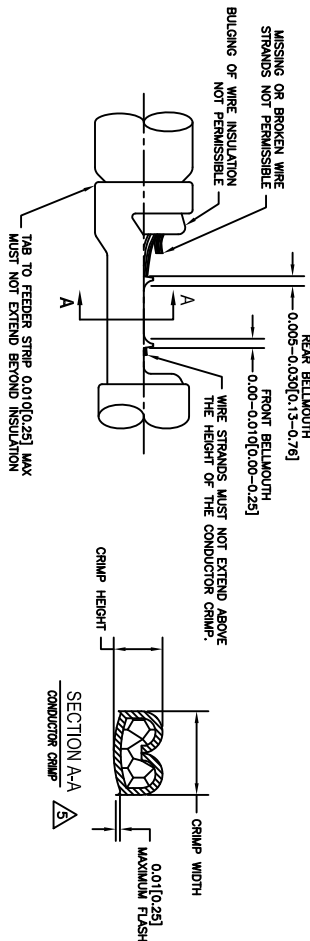
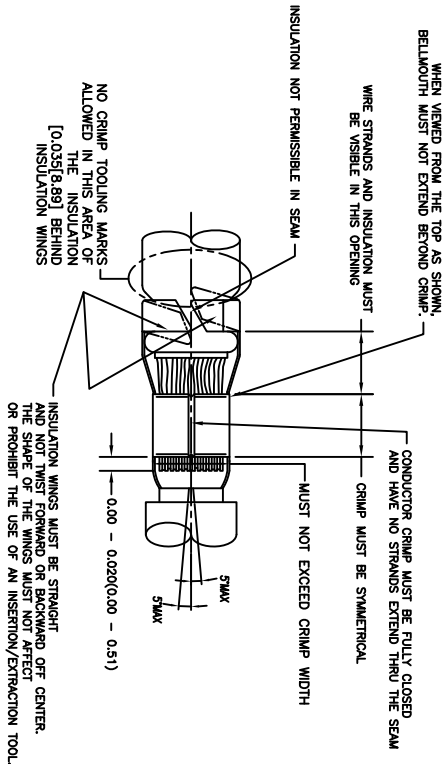
CROSS REFERENCE

INSULATION DIAMETER RANGE	INSULATION PUNCH NUMBER	INSULATION ANVIL NUMBER
0.120-0.150	A117-225-0200	A117-325-0200
0.105-0.125	A117-226-0200	A117-326-0200
0.085-0.111	A117-227-0200	A117-327-0200
0.075-0.105	A117-228-0200	A117-328-0200
0.063-0.094	A117-229-0200	A117-329-0200
0.050-0.075	A117-230-0200	A117-330-0200

SINE PART NUMBER	DEUTSCH PART NUMBER
MPX-3953	DCT1620-02-00
A117-083-0200	1017-083-0200
A117-082-0200	1017-082-0200
A117-183-0200	1017-183-0200
A117-182-0200	1017-182-0200
A117-225-0200	1017-225-0200
A117-226-0200	1017-226-0200
A117-227-0200	1017-227-0200
A117-228-0200	1017-228-0200
A117-229-0200	1017-229-0200
A117-230-0200	1017-230-0200
A117-325-0200	1017-325-0200
A117-326-0200	1017-326-0200
A117-327-0200	1017-327-0200
A117-328-0200	1017-328-0200
A117-329-0200	1017-329-0200
A117-330-0200	1017-330-0200

NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS ARE IN INCHES(mm).
2. FORCES ARE IN POUNDS(LBS) AND NEWTONS(N).
3. "X"= PLATING SUFFX. SEE INDIVIDUAL CONTACT DRAWING.
4. WIRE STRIP LENGTH: 0.175±0.029(4.43±0.64). BROKEN OR MISSING CONDUCTOR STRANDS ARE NOT ACCEPTABLE.
5. USE A BLADE MICROMETER (0.100(2.54) MIN SPINDLE AND 0.060(0.010(1.50(0.040) ANVIL) TO MEASURE THE CONDUCTOR CRIMP. SEE SECTION AA.
6. CRIMP TENSILE STRENGTH IS DETERMINED AT A PULL RATE SPEED OF 1.00 INCH(25.4) PER MINUTE. INSULATION WINGS ARE REMOVED FOR TEST. ACTUAL CRIMP TENSILE STRENGTH DEPENDS ON WIRE/CONDUCTOR SIZE. VALUES ON THIS SPECIFICATION ARE FOR REFERENCE ONLY.
7. INSULATION DIAMETER RANGE IS DETERMINED BY CONNECTOR AND ITS WIRE SEAL SIZE. SEE CONNECTOR DRAWING FOR INSULATION RANGE.
8. INSULATION CRIMP DIAMETER SHOULD BE THE EQUAL OR LESS THAN THE DIAMETER OF THE WIRE INSULATION (HARD OR TEFLON INSULATION MAY BE AN EXCEPTION). INSULATION CRIMP SHALL NOT AFFECT REMOVAL TOOL PERFORMANCE AND SHALL NOT DAMAGE CONNECTOR CROMMET SEAL.
9. CONDUCTOR TYPE ARE PER SAEJ1128(AWG) AND ISO 6122(METRIC)
10. FOR CONTACT MATERIAL AND PERFORMANCE DATA, SEE DRAWING S2-15217.
11. REFER TO S2-15223 AND S2-15224 AND CROSS REFERENCE CHARTS FOR CRIMP TOOL DATA.

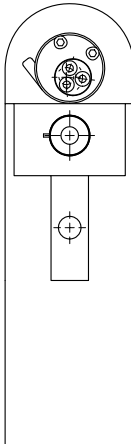


ALL REFERENCES TO DEUTSCH PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO DEUTSCH INDUSTRIAL PRODUCTS.

QUANTITY		PART NUMBER		DESCRIPTION		ITEM
UNLESS OTHERWISE SPECIFIED		SIGNATURES		DATE		
1) All dimensions are in inches.		DRAWN: POKR		4/7/09		
2) 1/16 DEC 50.00 Precision 51/64		ORDERED: POKR		6/8/09		
3) 1/32 DEC 50.00 Precision 51/64		APPROVED: BERUM		6/8/09		
4) 1/64 DEC 50.00 Precision 51/64		APPROVED: BERUM		6/8/09		
5) Reduction Standards Per: S2-20020		CUSTOMER: BERUM		6/8/09		
6) Material Specifications: N/A		THE USE OF THIS DRAWING IS LIMITED TO THE SPECIFICATIONS, AND PERFORMANCE PROPERTY OF AMPHENOL CORP. ALL DIMENSIONS ARE SUBJECT TO REMOVAL. DIMENSIONS RETAINED HEREON MAY CONTRADICT UNITED STATES DATA.		CRIMP DATA, STAMPED CONTACTS FOR CRIMPER MPX-3953		
PROCESS SPECIFICATIONS:		SIZE: TYPICAL NOMINAL: S2-15221		SCALE: NONE		
NEXT ASSY:		C 10K44		S2-15221		
		SHEET 1 OF 1				

REVISIONS				DATE	BY	APP
REV	ZONE	ECO	DESCRIPTION	6/12/09	B.D.B.	M.F.F.
A1	-	-	RELEASE NUMBER 016571			

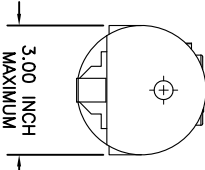
CONTACT LOCATOR "TURRET"
THREE POSITION FOR SIZE
12, 16 & 20 MALE AND
FEMALE CONTACTS



"TURRET"
RELEASE LATCH

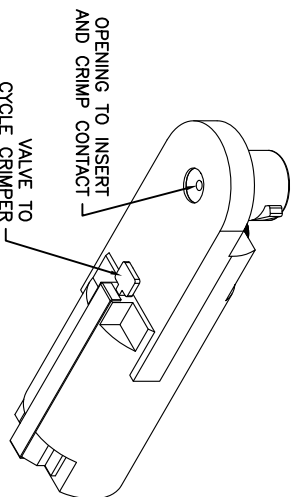
SELECTOR FOR
CRIMP SETTING

THREADED HOLE FOR
ATTACHMENT OF
BENCH MOUNT FIXTURE



THREADED OPENING
FOR COMPRESSED
AIR FITTING

- NOTES:
1. THE CA-5E12 IS A COMPRESSED AIR OPERATED HAND CRIMPER FOR ELECTRICAL CONTACTS. IT IS ADJUSTABLE TO 3 CONTACT SIZES (12, 16 & 20) AND 8 INDENTER CRIMP POSITIONS FOR DIFFERENT WIRE SIZES (12AWG THRU 26 AWG).
 2. 80-120 PSI COMPRESSED AIR.
 3. WEIGHT: 3.1 LBS
 4. SELECTING CONTACT SIZE: PRESS THE RELEASE LATCH ON SIDE OF THE CONTACT LOCATOR "TURRET". ROTATE TO THE DESIRED CONTACT SIZE. THE TOP OF THE "TURRET" IS EMBOSSED WITH THE CONTACT SIZES.
 5. SELECTING WIRE SIZE: GRASP THE SELECTOR AND ROTATE TO THE DESIRED NUMBER.



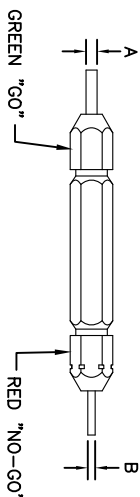
OPENING TO INSERT
AND CRIMP CONTACT

VALVE TO
CYCLE CRIMPER

GAGE PART NO.	A GO DIA.	B NO-GO DIA.	SELECTOR NUMBER
G125	.0390	.0440	4

GAGING INSTRUCTIONS

CAUTION!
DO NOT CRIMP GAGE!

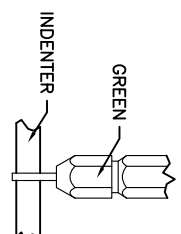


GREEN "GO"

RED "NO-GO"

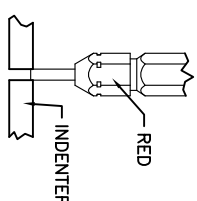
"GO" GAGING: OPERATE TOOL TO FULLY CLOSED POSITION. INSERT "GO" GAGE END AS SHOWN. GAGE MUST PASS FREELY BETWEEN INDENTER TIPS.

"NO-GO" GAGING: OPERATE TOOL TO FULLY CLOSED POSITION. INSERT "NO-GO" GAGE END AS SHOWN. THE "NO-GO" MAY PARTIALLY ENTER THE INDENTER OPENING, BUT MUST NOT PASS COMPLETELY THROUGH THE OPENING.



GREEN

SELECTOR NUMBER	A GO DIA.	B NO-GO DIA.
1	.0280	.0330
2	.0320	.0370
3	.0360	.0410
4	.0390	.0440
5	.0450	.0500
6	.0520	.0570
7	.0590	.0640
8	.0680	.0730



RED

INDENTER

CONTACT SIZE		SELECTOR NUMBER							
LOCATOR POSITION	26 WIRE	24 WIRE	22 WIRE	20 WIRE	18 WIRE	16 WIRE	14 WIRE	12 WIRE	
20-20	RED	1	2	3	4				
16-22	BLUE	4	5	6					
16-20	BLUE	1	2	3	4				
16-16	BLUE				4	5	6		
12-16	YELLOW				4	5	6		
12-12	YELLOW						7	8	

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.			
2) Dimensions in parentheses are for reference only.			
3) Part .005 .0005 .001 Angles 3:1/4"			
4) Part .005 .0005 .001 Angles 3:1/4"			
5) Part .005 .0005 .001 Angles 3:1/4"			
6) Part .005 .0005 .001 Angles 3:1/4"			
7) Part .005 .0005 .001 Angles 3:1/4"			
8) Part .005 .0005 .001 Angles 3:1/4"			
9) Part .005 .0005 .001 Angles 3:1/4"			
10) Part .005 .0005 .001 Angles 3:1/4"			
11) Part .005 .0005 .001 Angles 3:1/4"			
12) Part .005 .0005 .001 Angles 3:1/4"			
13) Part .005 .0005 .001 Angles 3:1/4"			
14) Part .005 .0005 .001 Angles 3:1/4"			
15) Part .005 .0005 .001 Angles 3:1/4"			
16) Part .005 .0005 .001 Angles 3:1/4"			
17) Part .005 .0005 .001 Angles 3:1/4"			
18) Part .005 .0005 .001 Angles 3:1/4"			
19) Part .005 .0005 .001 Angles 3:1/4"			
20) Part .005 .0005 .001 Angles 3:1/4"			
21) Part .005 .0005 .001 Angles 3:1/4"			
22) Part .005 .0005 .001 Angles 3:1/4"			
23) Part .005 .0005 .001 Angles 3:1/4"			
24) Part .005 .0005 .001 Angles 3:1/4"			
25) Part .005 .0005 .001 Angles 3:1/4"			
26) Part .005 .0005 .001 Angles 3:1/4"			
27) Part .005 .0005 .001 Angles 3:1/4"			
28) Part .005 .0005 .001 Angles 3:1/4"			
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30) Part .005 .0005 .001 Angles 3:1/4"			
31) Part .005 .0005 .001 Angles 3:1/4"			
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39) Part .005 .0005 .001 Angles 3:1/4"			
40) Part .005 .0005 .001 Angles 3:1/4"			
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42) Part .005 .0005 .001 Angles 3:1/4"			
43) Part .005 .0005 .001 Angles 3:1/4"			
44) Part .005 .0005 .001 Angles 3:1/4"			
45) Part .005 .0005 .001 Angles 3:1/4"			
46) Part .005 .0005 .001 Angles 3:1/4"			
47) Part .005 .0005 .001 Angles 3:1/4"			
48) Part .005 .0005 .001 Angles 3:1/4"			
49) Part .005 .0005 .001 Angles 3:1/4"			
50) Part .005 .0005 .001 Angles 3:1/4"			
51) Part .005 .0005 .001 Angles 3:1/4"			
52) Part .005 .0005 .001 Angles 3:1/4"			
53) Part .005 .0005 .001 Angles 3:1/4"			
54) Part .005 .0005 .001 Angles 3:1/4"			
55) Part .005 .0005 .001 Angles 3:1/4"			
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57) Part .005 .0005 .001 Angles 3:1/4"			
58) Part .005 .0005 .001 Angles 3:1/4"			
59) Part .005 .0005 .001 Angles 3:1/4"			
60) Part .005 .0005 .001 Angles 3:1/4"			
61) Part .005 .0005 .001 Angles 3:1/4"			
62) Part .005 .0005 .001 Angles 3:1/4"			
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64) Part .005 .0005 .001 Angles 3:1/4"			
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67) Part .005 .0005 .001 Angles 3:1/4"			
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69) Part .005 .0005 .001 Angles 3:1/4"			
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71) Part .005 .0005 .001 Angles 3:1/4"			
72) Part .005 .0005 .001 Angles 3:1/4"			
73) Part .005 .0005 .001 Angles 3:1/4"			
74) Part .005 .0005 .001 Angles 3:1/4"			
75) Part .005 .0005 .001 Angles 3:1/4"			
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77) Part .005 .0005 .001 Angles 3:1/4"			
78) Part .005 .0005 .001 Angles 3:1/4"			
79) Part .005 .0005 .001 Angles 3:1/4"			
80) Part .005 .0005 .001 Angles 3:1/4"			
81) Part .005 .0005 .001 Angles 3:1/4"			
82) Part .005 .0005 .001 Angles 3:1/4"			
83) Part .005 .0005 .001 Angles 3:1/4"			
84) Part .005 .0005 .001 Angles 3:1/4"			
85) Part .005 .0005 .001 Angles 3:1/4"			
86) Part .005 .0005 .001 Angles 3:1/4"			
87) Part .005 .0005 .001 Angles 3:1/4"			
88) Part .005 .0005 .001 Angles 3:1/4"			
89) Part .005 .0005 .001 Angles 3:1/4"			
90) Part .005 .0005 .001 Angles 3:1/4"			
91) Part .005 .0005 .001 Angles 3:1/4"			
92) Part .005 .0005 .001 Angles 3:1/4"			
93) Part .005 .0005 .001 Angles 3:1/4"			
94) Part .005 .0005 .001 Angles 3:1/4"			
95) Part .005 .0005 .001 Angles 3:1/4"			
96) Part .005 .0005 .001 Angles 3:1/4"			
97) Part .005 .0005 .001 Angles 3:1/4"			
98) Part .005 .0005 .001 Angles 3:1/4"			
99) Part .005 .0005 .001 Angles 3:1/4"			
100) Part .005 .0005 .001 Angles 3:1/4"			

SINE Systems Corporation

A Subsidiary of Amphenol Corporation
44724 Moley Drive
Canton Township, MI 48036

INSTRUCTIONS FOR CA-5E12
CRIMPER, PNEUMATIC

SIZE 1/2" DIA. 1/2" DIA. 1/2" DIA.

SCALE NONE

S2-15220

SHEET 1 OF 1

REVISIONS			
REV	ZONE	ECO	DESCRIPTION
1	-	-	RELEASE NUMBER 016571
DATE	6/12/09	BY	M.S.F.

CONTACT LOCATOR
"TURRET"
THREE POSITIONS FOR
SIZE 12, 16 & 20 MALE
AND FEMALE CONTACTS

"TURRET" RELEASE LATCH

6.25 INCH
MAXIMUM
OPEN

2.30 INCH
MAXIMUM
CLOSED

SELECTOR FOR CRIMP
SETTING

1.125 INCH MAX.

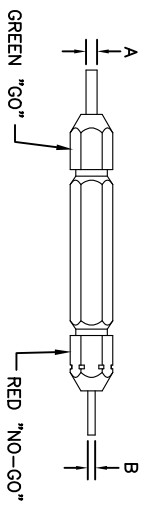
9.75 INCH MAXIMUM

1.00 INCH MAX.

GAGE PART NO.	A GO DIA.	B NO-GO DIA.	SELECTOR NUMBER
G125	.0390	.0440	4

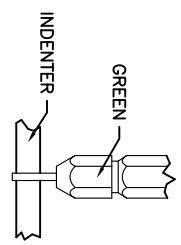
GAGING INSTRUCTIONS

CAUTION!
DO NOT CRIMP GAGE!

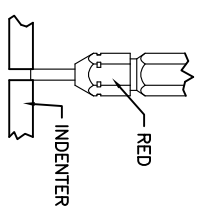


"GO" GAGING: OPERATE TOOL TO FULLY CLOSED POSITION. INSERT "GO" GAGE END AS SHOWN. GAGE MUST PASS FREELY BETWEEN INDENTER TIPS.

"NO-GO" GAGING: OPERATE TOOL TO FULLY CLOSED POSITION. INSERT "NO-GO" GAGE END AS SHOWN. THE "NO-GO" MAY PARTIALLY ENTER THE INDENTER OPENING, BUT MUST NOT PASS COMPLETELY THROUGH THE OPENING.



SELECTOR NUMBER	A GO DIA.	B NO-GO DIA.
1	.0280	.0330
2	.0320	.0370
3	.0360	.0410
4	.0390	.0440
5	.0450	.0500
6	.0520	.0570
7	.0590	.0640
8	.0680	.0730



CONTACT SIZE		SELECTOR NUMBER							
20-20	RED	1	2	3	4				
16-22	BLUE	4	5	6					
16-20	BLUE	1	2	3	4				
16-16	BLUE				4	5	6		
12-16	YELLOW				4	5	6		
12-12	YELLOW						7	8	

- NOTES:
- THE CA-5D12 IS A HAND OPERATED CRIMPER FOR ELECTRICAL CONTACTS. IT IS ADJUSTABLE TO 3 CONTACT SIZES (12, 16 & 20) AND 8 INDENTER CRIMP POSITIONS FOR DIFFERENT WIRE SIZES (12AWG THRU 26 AWG).
 - WEIGHT: 1.64 LBS
 - SELECTING CONTACT SIZE: PRESS THE RELEASE LATCH ON SIDE OF THE CONTACT LOCATOR "TURRET". ROTATE TO THE DESIRED CONTACT SIZE. THE TOP OF THE "TURRET" IS EMBOSSED WITH THE CONTACT SIZES.
 - SELECTING WIRE SIZE: REMOVE THE LOCKING CLIP. GRASP THE SELECTOR AND ROTATE TO THE DESIRED NUMBER.

QUANTITY		PART NUMBER		DESCRIPTION		ITEM								
MATERIALS LIST														
SIGNATURES														
DRAWN: BERLIN		DATE: 6/3/09		SINE Systems Corporation A Subsidiary of Amphenol Corporation 44724 Moley Drive Canton Township, MI 48036										
CHECKED: FINCE		DATE: 6/3/09												
ENGINEER: BERLIN		DATE: 6/3/09												
APPROVAL: BERLIN														
CUSTOMER: BERLIN														
THE USE OF THIS DRAWING IS SPECIFIC TO THE PART AND THE PROPERTY OF AMPHENOL CORP. ALL DOCUMENTS RETURNED HEREON MAY CONTAIN UNCLASSIFIED DATA.														
PROCESS SPECIFICATIONS:		SIZE TYPICAL		INSTRUCTIONS FOR CA-5D12 CRIMPER, HAND, MACHINED CONTACTS										
N/A		C 10K44		S2-15219										
NEXT ASSY:		SCALE: NONE		S2-15219										
				SHEET 1 OF 1										

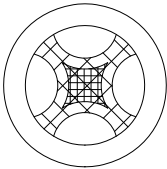
REVISIONS				
REV	ZONE	ECO	DESCRIPTION	
1			RELEASE NUMBER 016571	
DATE	BY	APPR		
6/12/09	B.D.B.	M.R.F.		

CONTACT P/N	SIZE TYPE	WIRE SIZE	REF. ONLY TENSILE LBS[N]
AT60-202-16XX	16PIN	1.5mm ² 16AWG	35[156]
AT62-201-16XX	16SOC	1.0mm ² 18AWG	25[111]
A		0.75mm ² 20AWG	20[89]
		0.50mm ²	

RECOMMENDED STRIP LENGTH		
CONTACT SIZE	STRIP LENGTH INCH[MM]	
16	0.250-0.312[6.35-7.92]	

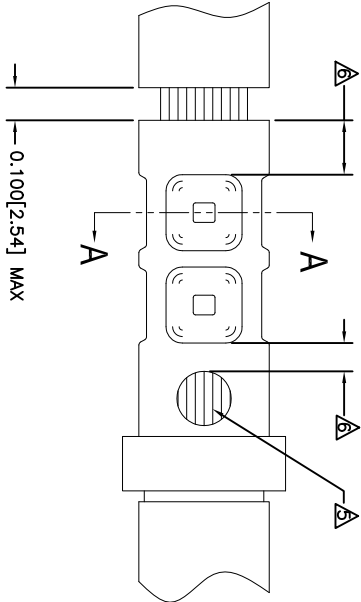
CRIMP TOOLING					
CONTACT SIZE	CRIMP TOOL PART NUMBER	CONTACT LOCATOR "TURRET" POSITION	WIRE SELECTOR NUMBER	GO GAGE INCH[MM]	"NOGO" GAGE INCH[MM]
16	CA-5D12	BLUE	6	0.052[1.32]	0.057[1.45]
16	CA-5E12	BLUE	4	0.039[.991]	0.044[1.12]

- NOTES: UNLESS OTHERWISE SPECIFIED
- MINIMUM +/-0.0005 [0.013] TOLERANCE STEEL GAGE PINS. DO NOT CRIMP GAGE PINS. CLOSE DIE, THEN USE GAGE PINS.
 - WHEN XX=31, CONTACT PLATING IS GOLD WHEN XX=141, CONTACT PLATING IS NICKEL
 - PULL RATE OF 1.0 IN [25.4] PER MINUTE. ACTUAL STRENGTH DEPENDS ON WIRE SIZE.
 - FOR CONTACT PERFORMANCE, MATERIAL SPECIFICATIONS AND APPLICATION DETAILS, SEE DRAWING S2-15217.
 - CONDUCTOR STRANDS MUST BE VISIBLE THRU THE INSPECTION HOLE PRIOR TO CRIMP.
 - PROPER CRIMP TOOLING WILL PRODUCE A CRIMP CENTERED BETWEEN THE INSPECTION HOLE AND CRIMP BARREL END.
 - WIRE SIZES PER SAE J1128 AND J1560 [DIN 72551-6] REFERENCE INSTRUCTION MANUALS S2-15219 AND S2-15220 FOR CA-5D12 AND CA-5E12 HAND AND PNEUMATIC CRIMPER.
 - THE CRIMP HEIGHT DIMENSION AFTER CRIMPING MAY VARY FROM THE VALUES LISTED FOR THE "GO-NOGO" PINS.



SECTION A-A
CRIMP CROSS-SECTION

0.100[2.54] MAX



QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.	SIGNATURES	DATE	
2) All dimensions are in millimeters.	DRAWN: BERNU	6/3/09	
3) All dimensions are in both inches and millimeters.	CHECKED: RNOCE	6/3/09	
4) All dimensions are in both inches and millimeters.	ENGINEER: BERNU		
5) Fabrication Standards Per: SD-20020	APPROVAL: BERNU	6/3/09	
6) All dimensions are in both inches and millimeters.	CUSTOMER:		
MATERIAL SPECIFICATIONS:			
N/A			
PROCESS SPECIFICATIONS:			
N/A			
NEXT ASSY:			
THE USE OF THIS DRAWING IS LIMITED TO THE SPECIFICATIONS AND PERFORMANCE OF THE PARTS AND MATERIALS SHOWN HEREON. NO OTHER USES ARE PERMITTED WITHOUT THE WRITTEN PERMISSION OF AMPHENOL CORPORATION. ALL DIMENSIONS ARE SUBJECT TO REVISION. DOCUMENTS RETAINED HEREON MAY CONTAIN LIMITED RIGHTS DATA.			
SIZE FROM DRAWING NO:		S2-15218	
SCALE:		NONE	
SHEET 1 OF 1			

SINE Systems Corporation
A Subsidiary of Amphenol Corporation
44724 Moley Drive
Clinton Township, MI 48036

CRIMP INFORMATION
SOLID MACHINED CONTACTS

REVISIONS				
REV	ZONE	ECO	DESCRIPTION	DATE
A1	-	-	RELEASE NUMBER 016371	6/12/09
BY	APP			
B.D.B.	M.R.F.			

SOLID CONTACT SIZE	SOLID CONTACT PART NUMBERS		WIRE SIZE AWG(mm ²)	RECOMMENDED STRIP LENGTH INCH (mm)	MIN CONTACT RETENTION LBS (N)	REF CRIMP RETENTION LBS (N)	MAX RATED AMPS@125°C CONTINUOUS
	PN	SOCKET					
16	AT60-202-16**	AT62-201-16**	16-20 [1.5-0.5]	0.25-0.31 [6.35-7.92]	25 [111]	35-20 [156-89]	13

S&F CONTACT SIZE	STAMPED CONTACT PART NUMBERS		WIRE SIZE AWG (mm ²)	WIRE INSULATION O.D. RANGE	RECOMMENDED STRIP LENGTH INCH (mm)	MIN CONTACT RETENTION LBS (N)	REF CRIMP RETENTION LBS (N)	MAX RATED AMPS@125°C CONTINUOUS
	PN	SOCKET						
16	AT60-14-01**	AT62-14-01**	14-16 [2.0-1.0]	.100 - .150 [2.54 - 3.81]	0.150-0.200 [3.81-5.08]	25 [111]	25 [111]	13
16	AT60-16-01**	AT62-16-01**	16-18 [1.0-0.75]	.075 - .100 [1.90 - 2.54]	0.150-0.200 [3.81-5.08]	25 [111]	25 [111]	13
16	AT60-16-06**	AT62-16-06**	18-20 [0.75-0.50]	.065 - .095 [1.40 - 2.41]	0.150-0.200 [3.81-5.08]	25 [111]	25-15 [111+67]	13

CONTACT RESISTANCE STRENGTH (LESS DROP THROUGH WIRE)			
WIRE AWG	TEST CURRENT	MILLIVOLT DROP SOLID	MILLIVOLT DROP S&F
14	18	60	100
16	13	60	100
18	10	60	100
20	7.5	60	100

MATERIAL SPECIFICATION AND PLATING ** CODES	
PIN: COPPER ALLOY	
SOCKET: COPPER ALLOY WITH STAINLESS STEEL SLEEVE	
SOLID MACHINED CONTACT PLATING OPTIONS:	
31= GOLD*	
141= NICKEL	
STAMPED CONTACT PLATING OPTIONS:	
22= NICKEL	
44= GOLD*	
88= SELECTIVE GOLD*	
GOLD* = PLATING IS AVAILABLE (RECOMMENDED) FOR ONLY (<5V) CIRCUIT APPLICATIONS	
MATERIALS AND PLATINGS ARE ROHS COMPLIANT	

NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS ARE INCHES(MM).

2. ALL FORCES ARE IN LBS(POUNDS) AND "N" (NEWTONS).

CONTACT RETENTION TEST PULL RATE SHALL BE 1.0 INCH(25.4) PER MINUTE MAXIMUM. WIRE SIZE WILL AFFECT THE TRUE STRENGTH OF THE CRIMP.

WIRE SIZES AND INSULATION RANGES ARE FOR REFERENCE ONLY. THE ACTUAL INSULATION RANGE DEPENDS ON CONNECTOR GROMMET SEALING SIZE.

SEE SPECIFICATIONS LISTED BELOW FOR INDIVIDUAL CRIMP INFORMATION:			
"SOLID" CONTACTS		"STAMPED" CONTACTS	
SIZE		SIZE	
S2-15218	16	S2-15222	16
		S2-15221	16/20

MAXIMUM RATED CURRENT IN CHART DEPENDS ON CONTACT SIZE. ACTUAL RATED CURRENT DEPENDS ON WIRE SIZE.

CONTACT FACTORY FOR ALL AVAILABLE PLATING ON SPECIFIC CONTACTS.

AMPHENOL SINE PERFORMANCE SPECIFICATIONS REQUIRE THE USE OF AMPHENOL SINE APPROVED TOOLING.

PART NUMBER		DESCRIPTION		ITEM
QUANTITY		MATERIALS LIST		
UNLESS OTHERWISE SPECIFIED				
1) All dimensions are in inches.		SIGNATURES		DATE
2) All dimensions are in millimeters.		DRAWN: POKR		4/5/09
3) Pl. DEC 30.00		CHECKED: POKR		6/3/09
4) Pl. DEC 30.00		ENGINEER: BERNIM		
5) Production Standards Per:		APPROVAL: BERNIM		6/3/09
6) Rev: SD-20020		CUSTOMER: BERNIM		
MATERIAL SPECIFICATIONS:		GENERAL DATA, CONTACTS		
N/A		STAMPED AND FORMED / MACHINED		
PROCESS SPECIFICATIONS:		THE USE OF THIS DOCUMENT IS LIMITED TO THE SPECIFICATIONS, AND PERFORMANCE PROPERTY OF AMPHENOL CORP. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. DOCUMENTS REFERENCED HEREON MAY CONTAIN LIMITED RIGHTS DATA.		
NEXT ASSY:		SIZE FROM HOLDING NO: S2-15217		
		SCALE: NONE		
		S2-15217		
		SHEET 1 OF 1		

Mouser Electronics

Authorized Distributor

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Amphenol:

[65-54757](#) [AT62-14-0144](#) [AT60-14-0144](#) [65-549-20](#) [AT62-16-0644](#) [AT60-16-0144](#) [AT60-16-0644](#) [AT62-16-0144](#)
[65-54942-16](#) [65-54942-14](#) [AT06-12SB-SS01](#) [AT06-12SC-MM01](#) [AT06-12SC-EC01](#) [AT06-12SC-SS01](#) [AT06-12SB-](#)
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[SS01](#) [AT06-6S-SS01](#) [AT06-3S-SS01](#) [AT06-2S-SS01](#) [AT06-4S-SS01](#) [AT04-12PB-MM01](#) [AT04-12PC-SS01](#) [AT04-](#)
[12PC-MM01](#) [AT04-12PB-EC01](#) [AT04-12PB-SS01](#) [AT04-12PC-EC01](#) [AT04-08PB-SS01](#) [AT04-08PB-MM01](#) [AT04-](#)
[08PD-SS01](#) [AT04-08PB-EC01](#) [AT04-08PA-SS01](#) [AT04-08PD-MM01](#) [AT04-08PD-EC01](#) [AT04-08PC-SS01](#) [AT04-](#)
[08PC-MM01](#) [AT04-08PC-EC01](#) [AT04-4P-SS01](#) [AT06-08SA-SS01](#) [AT06-08SB-MM01](#) [AT06-08SB-EC01](#) [AT04-](#)
[12PA-SS01](#) [AT04-6P-SS01](#) [AT04-12PD-EC01](#) [AT04-12PD-MM01](#) [AT04-2P-SS01](#) [AT04-12PD-SS01](#) [AT04-3P-SS01](#)