

## 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)

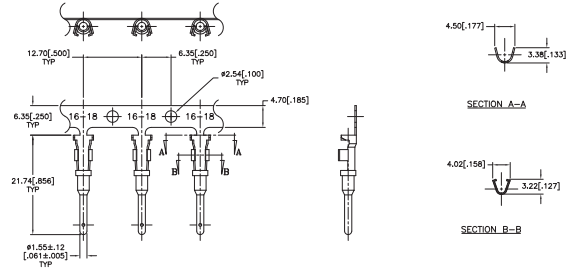


## STAMPED AND FORMED CONTACTS, PG 2 of 2

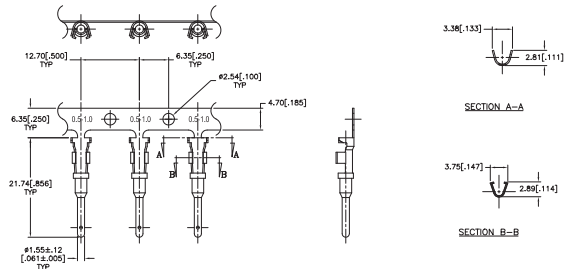
Click on blue underlined part numbers to be taken to their spec sheets.

### 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

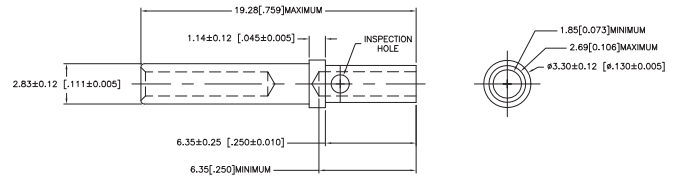


**PART NUMBER:** [AT62-201-16XX](#)  
**DESCRIPTION:** CONTACT, SOCKET, SOLID MACHINED, SIZE 16  
**MATERIAL:**  
 CONTACT BODY: COPPER ALLOY  
 HOOD: STAINLESS STEEL  
**PLATING SUFFIX CODE:**  
 XX=141 NICKEL PLATING  
 XX=31 GOLD PLATING  
**CONTACT GENERAL DATA SPECIFICATION:** S2-15217  
**AVAILABLE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



ROCKSOLID™ CONTACTS

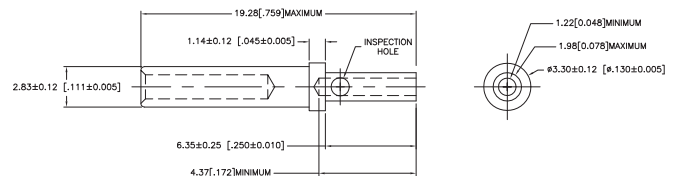
**PART NUMBER:** [65-54942-14](#)  
**DESCRIPTION:** CONTACT, SOCKET, ROCKSOLID, SIZE 16  
**AWG RANGE:** 14AWG  
**MATERIAL:** COPPER ALLOY  
**PLATING:** GOLD  
**CONTACT GENERAL DATA SPECIFICATION:** S2-15217  
**AVAILABLE CRIMPERS:** CA-5D12 & CA-5E12  
**CRIMPER SPECIFICATIONS:** S2-15219 & S2-15220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



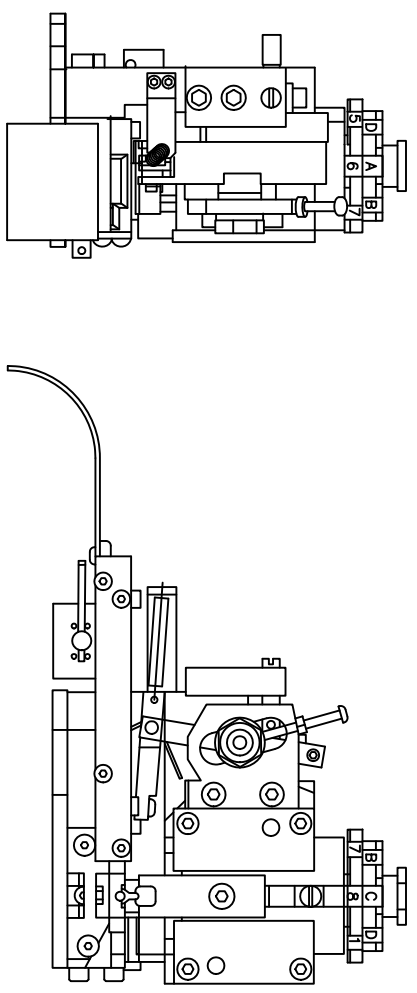
**PART NUMBER:** [65-54942-16](#)  
**DESCRIPTION:** CONTACT, SOCKET, ROCKSOLID, SIZE 16  
**AWG RANGE:** 16AWG  
**MATERIAL:** COPPER ALLOY  
**PLATING:** GOLD  
**CONTACT GENERAL DATA SPECIFICATION:** S2-15217  
**AVAILABLE CRIMPERS:** CA-5D12 & CA-5E12  
**CRIMPER SPECIFICATIONS:** S2-15219 & S2-15220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



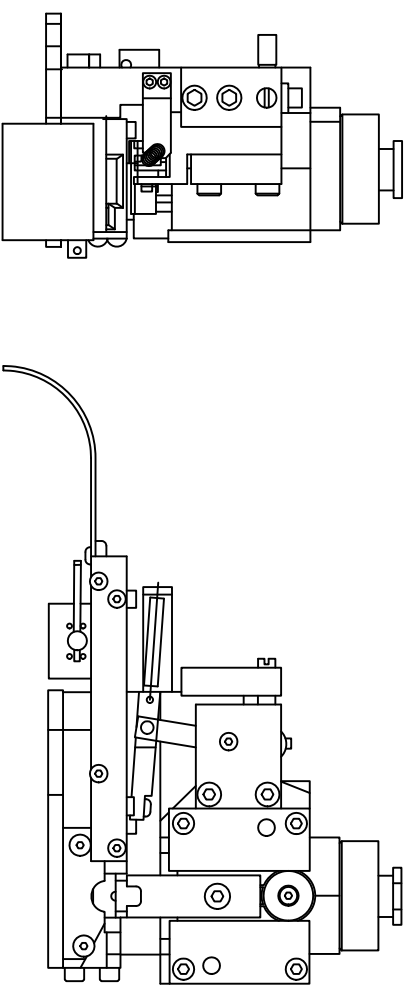
**PART NUMBER:** [65-54942-20](#)  
**DESCRIPTION:** CONTACT, SOCKET, ROCKSOLID, SIZE 16  
**AWG RANGE:** 20AWG  
**MATERIAL:** COPPER ALLOY  
**PLATING:** GOLD  
**CONTACT GENERAL DATA SPECIFICATION:** S2-15217  
**AVAILABLE CRIMPERS:** CA-5D12 & CA-5E12  
**CRIMPER SPECIFICATIONS:** S2-15219 & S2-15220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



REVISIONS					
REV. ZONE	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NUMBER 016571	6/12/08	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
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.	SIGNATURES		
2) Hole diameters are in inches.	DATE	DATE	
3) Pl. DEC 20.00	ENGINEER: BERNU	6/9/09	
4) Pl. DEC 20.00	CHECKED: TONE	6/9/09	
5) Fabrication Standards Per:	ENGINEER: BERNU	6/9/09	
6) Pl. 1000	APPROVAL: BERNU	6/9/09	
7) Pl. 1000	CUSTOMER:	CRIMPER INFORMATION	
8) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
9) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
10) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
11) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
12) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
13) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
14) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
15) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
16) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
17) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
18) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
19) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
20) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
21) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
22) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
23) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
24) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
25) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
26) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
27) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
28) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
29) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
30) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
31) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
32) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
33) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
34) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
35) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
36) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
37) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
38) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
39) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
40) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
41) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
42) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
43) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
44) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
45) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
46) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
47) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
48) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	
49) Pl. 1000	CUSTOMER:	MFX-3950 & MFX-3953	
50) Pl. 1000	APPROVAL:	MFX-3950 & MFX-3953	

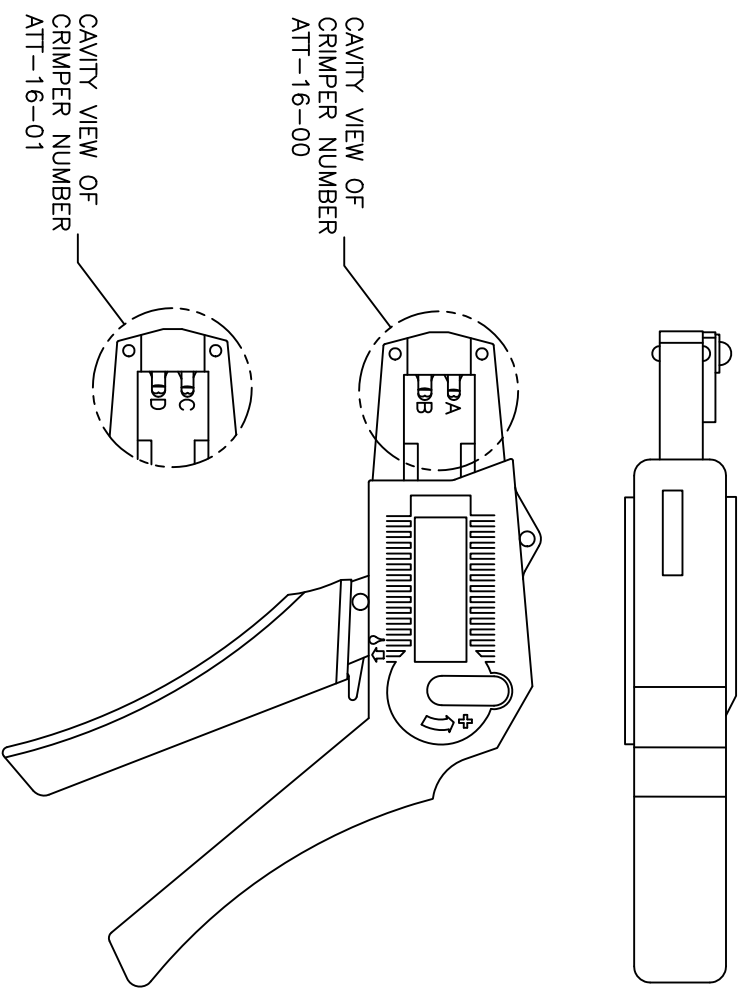
REVISIONS					
REV	ECO	DESCRIPTION	DATE	BY	APPR
A1	-	RELEASE NUMBER 016571	6/12/09	B.D.B.	M.R.F.

USE CRIMPER NUMBER:  
ATT-16-00 WITH CAVITY A & B

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

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

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



CAVITY VIEW OF  
CRIMPER NUMBER  
ATT-16-00

CAVITY VIEW OF  
CRIMPER NUMBER  
ATT-16-01

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

- NOTES (UNLESS OTHERWISE SPECIFIED):
- ALL DIMENSIONS IN INCHES [MILLIMETERS]
  - FOR PLATING CODES \*\* SEE CONTACT DATA DRAWINGS.
  - THIS TOOL IS FOR CRIMPING SIZE 16 CONTACTS ONLY TO WIRES LISTED IN THE CHARTS.
  - DEUTSCH IPD CROSS REFERENCE PART NUMBERS ARE DTT-16-00 AND DTT-16-01.

QUANTITY	PART NUMBER	DESCRIPTION	ITER#
MATERIALS LIST			
<b>SINE Systems Corporation</b> A Subsidiary of Amphenol Corporation 44724 Morley Drive Clinton Township, MI 48036			
INSTRUCTIONS, ATT-16-00 & 01 CRIMPER, HAND, STAMPED CONTACTS		SIZE: PCD# N01DWS N02 B 16K44	REVISION A1
THE USE OF THIS DOCUMENT IS UNLIMITED. DESIGN FEATURES, SPECIFIC DATA SHOWN, METHOD AND THE PROPERTY OF AMPHENOL CORP. ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. HERSON LAW DOCUMENTS REFERENCED HERON LAW. © 2009 DEUTSCH INDUSTRIAL PRODUCTS.		APPROVAL: <b>BERNIE</b> 6/8/09 CUSTOMER:	DATE: 6/8/09 CHECKED: <b>FORC</b> ENGINEER: <b>BERNIE</b> DESIGNED: <b>BERNIE</b>
UNLESS OTHERWISE SPECIFIED 1) All dimensions are in inches. 2) Tolerances are as follows: 3) Plating: .0005 4) Hole Reference = A		MATERIAL SPECIFICATIONS: N/A	PROCESS SPECIFICATIONS: N/A
NEXT ASST:		SCALE: NONE	SHEET 1 OF 1

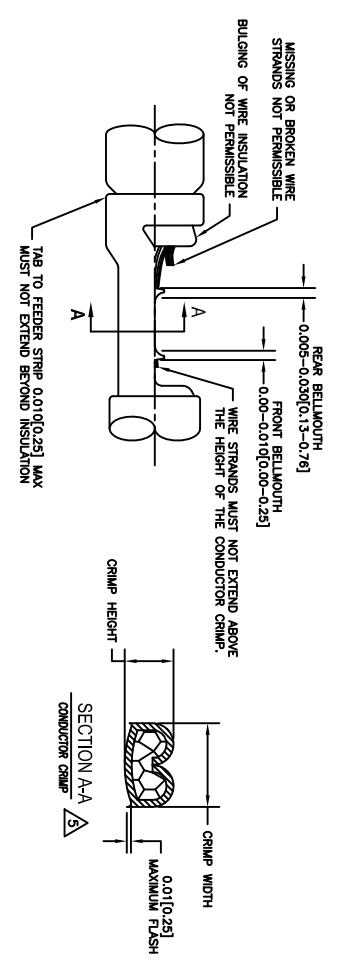
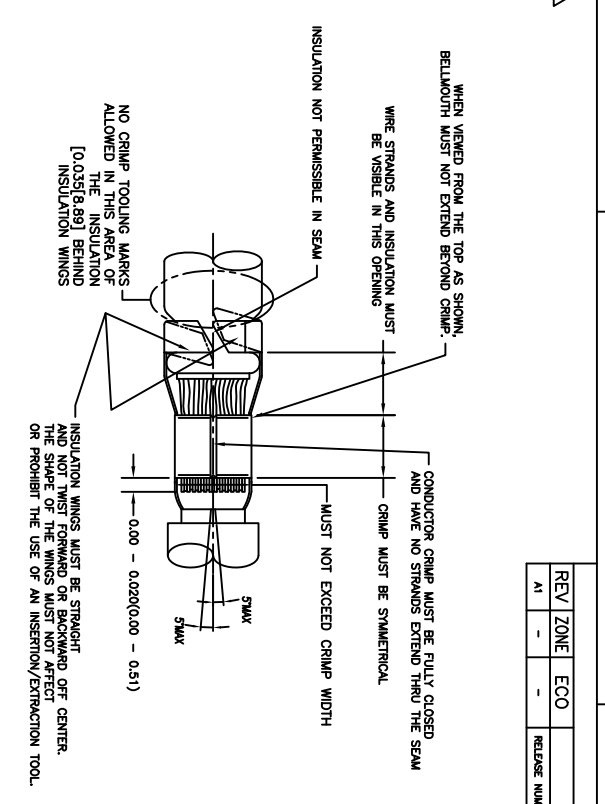
REVISIONS			
REV	ZONE	ECO	DESCRIPTION
A1	-	-	RELEASE NUMBER 016871
DATE	6/12/09	BY	B.D.B.
APP		M.F.F.	

STAMPED CONTACT PART NUMBER 1008=PIN 1008=SOCKET	SIZE	CONDUCTOR WIRE SIZE	CRIMP HEIGHT	CRIMP WIDTH	CONDUCTOR PUNCH NUMBER	CONDUCTOR ANVIL NUMBER	CRIMP TENSILE REFERENCE (LBS/IN)
A780-14-011x A782-14-011x INSULATION RANGE 0.095-0.150(2.41-3.81)	16	14 AWG 2.00mm <sup>2</sup> 1.50mm <sup>2</sup> 16 AWG 1.00mm <sup>2</sup> 18 AWG 0.75mm <sup>2</sup>	0.055(1.40) 0.055(1.40) 0.055(1.39) 0.050(1.27) 0.048(1.24) 0.045(1.14)	±0.003 NCH ±0.08 mm	AT17-002-0200 AT17-101-0200	AT17-101-0200	28(111)
A780-16-011x A782-16-011x INSULATION RANGE 0.075-0.140(1.91-3.56)	16	14 AWG 2.00mm <sup>2</sup> 1.50mm <sup>2</sup> 16 AWG 1.00mm <sup>2</sup> 18 AWG 0.75mm <sup>2</sup>	0.055(1.40) 0.055(1.40) 0.051(1.35) 0.050(1.27) 0.048(1.24) 0.045(1.21)		AT17-002-0200 AT17-101-0200	AT17-101-0200	28(111)
A780-18-011x A782-18-011x INSULATION RANGE 0.055-0.100(1.40-2.54)	16	16 AWG 1.00mm <sup>2</sup> 18 AWG 0.75mm <sup>2</sup> 20 AWG 0.50mm <sup>2</sup>	0.050(1.27) 0.048(1.24) 0.048(1.24) 0.048(1.22) 0.045(1.14)		AT17-003-0200 AT17-103-0200	AT17-103-0200	28(111) [5(67)]

CROSS REFERENCE

SINE PART NUMBER	DEUTSCH PART NUMBER
MX-3950	DC116-02-00
AT17-002-0200	1017-002-0200
AT17-003-0200	1017-003-0200
AT17-101-0200	1017-101-0200
AT17-103-0200	1017-103-0200
AT17-210-0200	1017-210-0200
AT17-211-0200	1017-211-0200
AT17-213-0200	1017-213-0200
AT17-214-0200	1017-214-0200
AT17-217-0200	1017-217-0200
AT17-218-0200	1017-218-0200
AT17-310-0200	1017-310-0200
AT17-311-0200	1017-311-0200
AT17-313-0200	1017-313-0200
AT17-304-0200	1017-304-0200
AT17-317-0200	1017-317-0200

INSULATION DIAMETER RANGE	INSULATION PUNCH NUMBER	INSULATION ANVIL NUMBER
0.120-0.150 [3.05-3.81]	AT17-210-0200	AT17-310-0200
0.105-0.125 [2.67-3.18]	AT17-211-0200	AT17-311-0200
0.085-0.111 [2.16-2.82]	AT17-213-0200	AT17-313-0200
0.075-0.105 [1.91-2.67]	AT17-214-0200	AT17-304-0200
0.065-0.094 [1.62-2.39]	AT17-217-0200	AT17-317-0200
0.050-0.075 [1.27-1.91]	AT17-218-0200	AT17-318-0200



NOTES: UNLESS OTHERWISE SPECIFIED

1. ALL DIMENSIONS ARE IN INCHES(mm).
2. FORCES ARE IN POUNDS(LBS) AND NEWTONS(N).
3. "X"= PLATING SUFFIX. SEE INDIVIDUAL CONTACT DRAWING.
4. WIRE STRIP LENGTH: 0.775±0.02(19.45±0.54). BROKEN OR MISSING CONDUCTOR STRANDS ARE NOT ACCEPTABLE.
5. USE A BLADE MICROMEETER (0.100(2.54) MIN APERTURE 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(2.54) 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 TEFION INSULATION MAY BE AN EXCEPTION). INSULATION CRIMP SHALL NOT AFFECT REMOVAL TOOL PERFORMANCE AND SHALL NOT DAMAGE CONNECTOR BROWNEI SEAL.
9. CONDUCTOR TYPE ARE PER SAE J1128(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	MATERIALS LIST	DESCRIPTION	ITEM
UNLESS OTHERWISE SPECIFIED				
1	MX-3950	ROTOR	4/7/09	
1	AT17-002-0200	CRIMP	6/8/09	
1	AT17-003-0200	CRIMP	6/8/09	
1	AT17-101-0200	CRIMP	6/8/09	
1	AT17-103-0200	CRIMP	6/8/09	
1	AT17-210-0200	CRIMP	6/8/09	
1	AT17-211-0200	CRIMP	6/8/09	
1	AT17-213-0200	CRIMP	6/8/09	
1	AT17-214-0200	CRIMP	6/8/09	
1	AT17-217-0200	CRIMP	6/8/09	
1	AT17-218-0200	CRIMP	6/8/09	
1	AT17-310-0200	CRIMP	6/8/09	
1	AT17-311-0200	CRIMP	6/8/09	
1	AT17-313-0200	CRIMP	6/8/09	
1	AT17-304-0200	CRIMP	6/8/09	
1	AT17-317-0200	CRIMP	6/8/09	
1	AT17-318-0200	CRIMP	6/8/09	

**SINE SYSTEMS CORPORATION**  
A Subsidiary of Amphenol Corporation  
44724 Moley Drive  
Clinton Township, MI 48036

**CRIMP DATA, STAMPED CONTACTS FOR CRIMPER MX-3950**

SIZE: 17501128(AWG) 67222(METRIC)  
SCALE: NONE  
S2-15222  
SHEET 1 OF 1

REVISONS		DESCRIPTION	DATE	BY	APPR
REV	ZONE	ECO	RELEASE NUMBER	B.O.B.	M.F.F.
A1	-	-	016971	6/12/09	

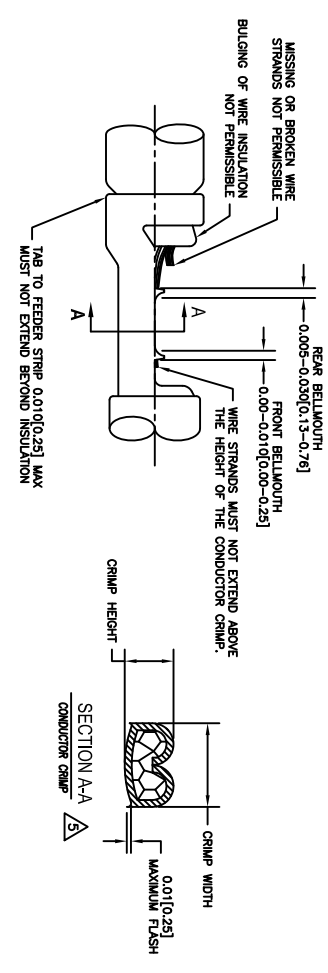
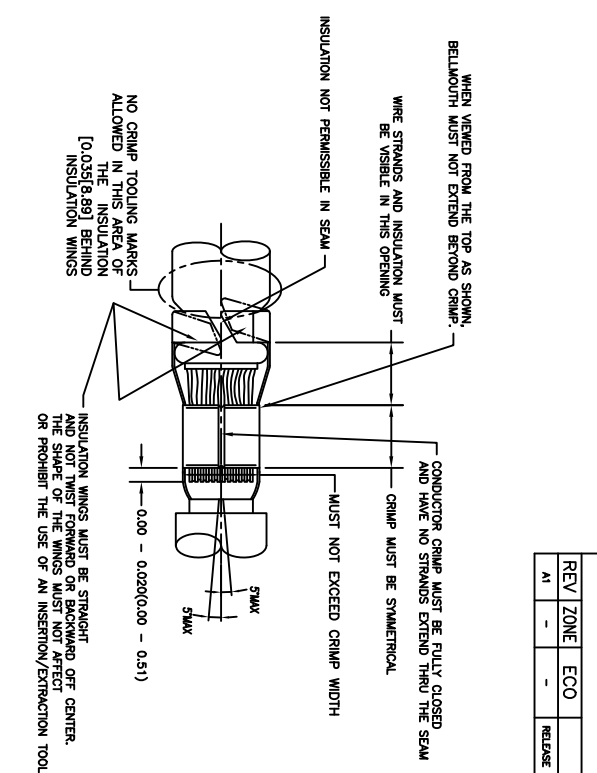
STAMPED CONTACT PART NUMBER (1009=PIN 1009=SOCKET)	SIZE	CONDUCTOR WIRE SIZE	CRIMP HEIGHT +0.001/-0.002 INCH (+0.025/-0.05 mm)	CRIMP WIDTH ±0.013 INCH (±0.08 mm)	CONDUCTOR PUNCH NUMBER	CONDUCTOR ANVIL NUMBER	CRIMP TENSILE REFERENCE (LBS/IN)
A160-14-011x A162-14-011x INSULATION RANGE 0.095-0.150(2.41-3.81)	16	14 AWG 2.00mm <sup>2</sup> 1.50mm <sup>2</sup> 16 AWG 0.650(1.27) 1.00mm <sup>2</sup> 18 AWG 0.404(1.24) 0.75mm <sup>2</sup>	0.055(1.40) 0.055(1.40) 0.053(1.33) 0.050(1.27) 0.050(1.27) 0.048(1.24) 0.048(1.24)	0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39)		A117-4083-0200 A117-183-0200	29(111)
A160-16-011x A162-16-011x INSULATION RANGE 0.075-0.140(1.91-3.59)	16	14 AWG 2.00mm <sup>2</sup> 1.50mm <sup>2</sup> 16 AWG 0.650(1.27) 1.00mm <sup>2</sup> 18 AWG 0.404(1.24) 0.75mm <sup>2</sup>	0.055(1.40) 0.055(1.40) 0.053(1.33) 0.050(1.27) 0.050(1.27) 0.048(1.24) 0.048(1.24)	0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39) 0.094(2.39)		A117-4083-0200 A117-183-0200	29(111)
A160-16-066x A162-16-066x INSULATION RANGE 0.055-0.100(1.40-2.54)	16	16 AWG 1.00mm <sup>2</sup> 18 AWG 0.75mm <sup>2</sup> 20 AWG 0.50mm <sup>2</sup>	0.050(1.27) 0.050(1.27) 0.048(1.24) 0.048(1.24) 0.046(1.14)	0.079(2.01) 0.079(2.01) 0.079(2.01) 0.079(2.01) 0.079(2.01)		A117-4082-0200 A117-182-0200	29(111) 19(67)

CROSS REFERENCE

INSULATION DIAMETER RANGE	INSULATION PUNCH NUMBER	INSULATION ANVIL NUMBER	SINE PART NUMBER	DEUTSCH PART NUMBER
0.120-0.150 [3.05-3.81]	A117-225-0200	A117-326-0200	MPX-3953	DCT1620-02-00
0.105-0.125 [2.67-3.18]	A117-226-0200	A117-326-0200	A117-083-0200	1017-083-0200
0.085-0.111 [2.16-2.82]	A117-227-0200	A117-327-0200	A117-082-0200	1017-082-0200
0.075-0.105 [1.91-2.67]	A117-228-0200	A117-328-0200	A117-183-0200	1017-183-0200
0.063-0.094 [1.62-2.39]	A117-229-0200	A117-329-0200	A117-182-0200	1017-182-0200
0.050-0.075 [1.27-1.91]	A117-230-0200	A117-330-0200	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 SUFFIX. SEE INDIVIDUAL CONTACT DRAWING.
4. WIRE STRIP LENGTH: 0.175±0.029(4.43±0.54). BROKEN OR MISSING CONDUCTOR STRANDS ARE NOT ACCEPTABLE. 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.
5. CRIMP TENSILE STRENGTH IS DETERMINED AT A PULL RATE SPEED OF 1.00 INCH(2.54) 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.
6. INSULATION DIAMETER RANGE IS DETERMINED BY CONNECTOR AND ITS WIRE SEAL SIZE. SEE CONNECTOR DRAWING FOR INSULATION RANGE.
7. INSULATION CRIMP DIAMETER SHOULD BE THE EQUAL OR LESS THAN THE DIAMETER OF THE WIRE INSULATION (HARD OR TEFION INSULATION MAY BE AN EXCEPTION). INSULATION CRIMP SHALL NOT AFFECT REMOVAL TOOL PERFORMANCE AND SHALL NOT DAMAGE CONNECTOR GROMMET SEAL.
8. CONDUCTOR TYPE ARE PER SAE J1128(AWG) AND ISO 6122(METRIC)
9. FOR CONTACT MATERIAL AND PERFORMANCE DATA, SEE DRAWING S2-15217.
10. REFER TO S2-15223 AND S2-15224 AND CROSS REFERENCE CHARTS FOR CRIMP TOOL DATA.



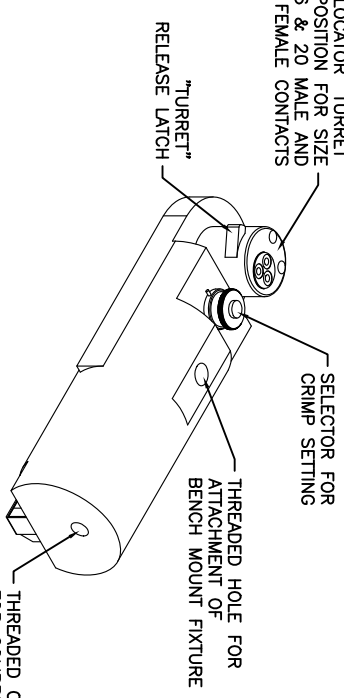
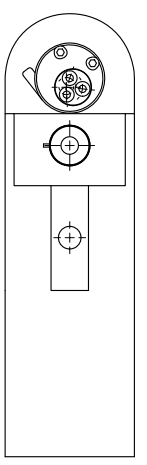
ALL REFERENCES TO DEUTSCH PRODUCTS OR SPECIFICATIONS ARE FOR COMPARISON PURPOSES ONLY, AND REFER TO DEUTSCH INDUSTRIAL PRODUCTS.

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.	SIGNATURES		
2) 1 Pt. DEC 54.00 1 Ampere 31/4	DATE	DATE	
3) Reduction Standard Per: Alpha 3.1"	DESIGNER: POTR	4/7/09	
4) Max. S2-20020	CHECKER: RONE	6/8/09	
APPROVAL: BERNI	APPROVAL: BERNI	6/8/09	
PROCESS SPECIFICATIONS:	THE USE OF THIS DRAWING IS SPECIFIC TO THE PART AND PERFORMANCE OF THE PART. ANY CHANGE TO THE PART OR PERFORMANCE OF THE PART MUST BE APPROVED BY THE ORIGINAL DESIGNER AND THE USER. ALL DIMENSIONS ARE SUBJECT TO NORMAL DOCUMENTS RETENTION HERON LAW.		
MA	CUSTOMER: MA		
CRIMP DATA, STAMPED CONTACTS FOR CRIMPER MPX-3953			
SIZE	SCALE	SCALE	REVISION
10K44	S2-15221	S2-15221	A1
1	1	1	1

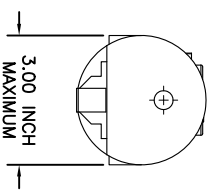


REVISONS		DESCRIPTION	DATE	BY	APPR
REV	ZONE	ECO	RELEASE NUMBER 016571	6/12/09	B.D.B.
AI	-	-			M.R.F.

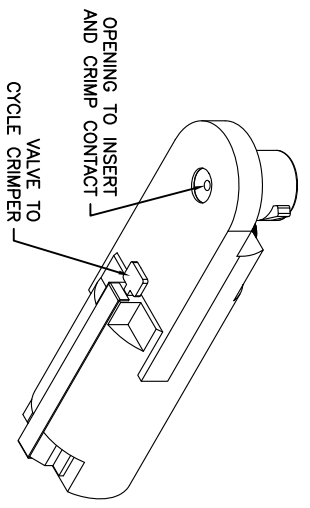
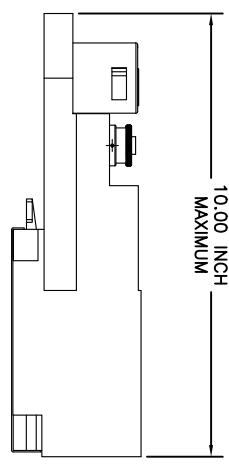
CONTACT LOCATOR "TURRET"  
THREE POSITION FOR SIZE  
12, 16 & 20 MALE AND  
FEMALE CONTACTS



THREADED OPENING  
FOR COMPRESSED  
AIR FITTING

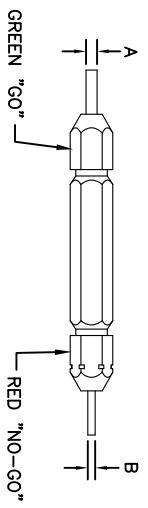


10.00 INCH  
MAXIMUM

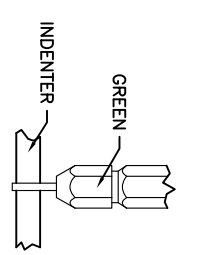


GAGE PART NO.	A GO DIA.	B NO-GO DIA.	SELECTOR NUMBER
G125	.0390	.0440	4

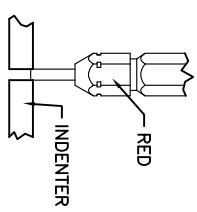
**GAGING INSTRUCTIONS**  
CAUTION!  
DO NOT CRIMP GAGE!



"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



- 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).
- 80-120 PSI COMPRESSED AIR.
- WEIGHT: 3.1 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: GRASP THE SELECTOR AND ROTATE TO THE DESIRED NUMBER.

CONTACT SIZE	LOCATOR "TURRET" POSITION	WIRE COLOR	SELECTOR NUMBER
20-20	RED	1	2
16-22	BLUE	4	5
16-20	BLUE	1	2
16-16	BLUE	4	5
12-16	YELLOW	4	5
12-12	YELLOW		7
			8

**MATERIALS LIST**

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
<p>UNLESS OTHERWISE SPECIFIED</p> <p>1) All dimensions are in inches.</p> <p>2) Pl. DEC 2000</p> <p>3) Pl. DEC 2000</p> <p>4) Pl. DEC 2000</p> <p>5) Revision Standard Per: A</p> <p>6) Rev. SS-20020</p> <p>7) Material Specification: NA</p> <p>8) Process Specifications: NA</p> <p>9) Next Ass't:</p>			
<p>SIGNATURES DATE</p> <p>DESIGNER: BERNU 6/2/09</p> <p>CHECKER: TONE 6/3/09</p> <p>APPROVAL: BERNU 6/3/09</p>			
<p>THE USE OF THIS DRAWING IS SPECIFIC TO THE DESIGN AND PERFORMANCE OF THE PART IDENTIFIED HEREIN. ANY REVISIONS OR ALTERATIONS TO THIS DRAWING MUST BE APPROVED BY THE ORIGINAL DESIGNER AND THE CUSTOMER. ALL DIMENSIONS REFERENCED HEREIN ARE IN UNITS OF INCHES UNLESS OTHERWISE SPECIFIED.</p>			
<p>SIZE: 10x14</p> <p>SCALE: NONE</p> <p>INSTRUCTIONS FOR CA-5E12 CRIMPER, PNEUMATIC</p>			
<p>REVISION A1</p>			



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

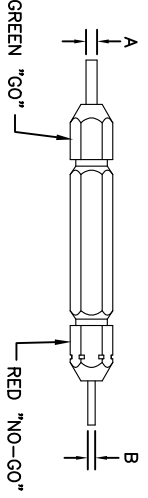
1.00 INCH MAX.

- 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.

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

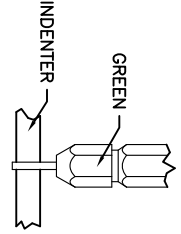
GAGING INSTRUCTIONS

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	.0880	.0730

CONTACT SIZE	LOCATOR "TURRET" POSITION COLOR	WIRE	AWG	WIRE	AWG	WIRE	AWG	WIRE	AWG	WIRE	AWG
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

SIGNATURES	DATE
DESIGN: BERNIM	6/3/09
CHECKED: NONE	6/3/09
ENGINEER: BERNIM	
APPROVAL: BERNIM	6/3/09

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

INSTRUCTIONS FOR CA-5D12  
CRIMPER, HAND, MACHINED CONTACTS

SIZE	SCALE	REV	DATE
10K44	NONE	A1	

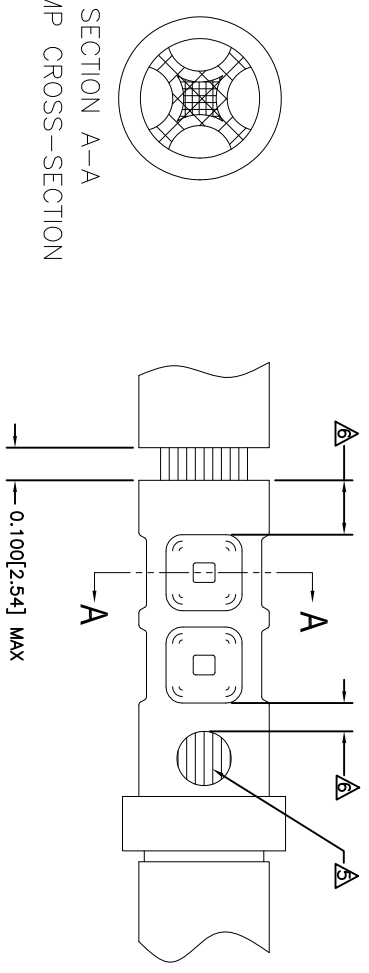
REVOLUTIONS		DESCRIPTION	DATE	BY	APPR
REV	ZONE	ECO	RELEASE NUMBER 016571	B.D.B.	M.R.F.
A1	-	-	6/12/09		

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

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]	REMARKS
16	CA-5D12 CA-5E12	BLUE	6	0.052[1.32]	0.057[1.45]	
16	CA-5D12 CA-5E12	BLUE	4	0.039[.991]	0.044[1.12]	SIZE 16 WITH 20 AWG WIRE

- NOTES: UNLESS OTHERWISE SPECIFIED
- 1. MINIMUM +/-0.0005 [0.013] TOLERANCE STEEL GAGE PINS. DO NOT CRIMP GAGE PINS. CLOSE DIE, THEN USE GAGE PINS.
  - 2. WHEN XX=31, CONTACT PLATING IS GOLD WHEN XX=141, CONTACT PLATING IS NICKEL
  - 3. PULL RATE OF 1.0 IN [25.4] PER MINUTE. ACTUAL STRENGTH DEPENDS ON WIRE SIZE.
  - 4. FOR CONTACT PERFORMANCE, MATERIAL SPECIFICATIONS AND APPLICATION DETAILS, SEE DRAWING S2-15217.
  - 5. CONDUCTOR STRANDS MUST BE VISIBLE THRU THE INSPECTION HOLE PRIOR TO CRIMP.
  - 6. PROPER CRIMP TOOLING WILL PRODUCE A CRIMP CENTERED BETWEEN THE INSPECTION HOLE AND CRIMP BARREL END.
  - 7. 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.
  - 8. THE CRIMP HEIGHT DIMENSION AFTER CRIMPING MAY VARY FROM THE VALUES LISTED FOR THE "GO-NOGO" PINS.



QUANTITY	PART NUMBER	DESCRIPTION	ITEM
UNLESS OTHERWISE SPECIFIED			
1) All dimensions are in inches.			
2) For dimensions in millimeters, see drawing.			
3) Pl. SEE 30.00 [Angles 31/64]			
4) Pl. SEE 30.01 [Angles 31/64]			
5) Fabrication Standards Per:			
a) MIL-STD-20020			
b) MIL-STD-20020			
c) MIL-STD-20020			
d) MIL-STD-20020			
MATERIAL SPECIFICATIONS:			
MA			
PROCESS SPECIFICATIONS:			
NEXT ASSY:			

MATERIALS LIST		DESCRIPTION		ITEM
QTY	SIGNATURES	DATE		
1	BERNIM	6/3/09		
1	ROUC	6/3/09		
1	BERNIM	6/3/09		
1	BERNIM	6/3/09		
CUSTOMER:		DATE:		
MA		6/3/09		
THE USE OF THIS DRAWING IS LIMITED TO THE SPECIFIC APPLICATIONS AND PERFORMANCE SPECIFICATIONS AND PERFORMANCE PRESENTED ON THIS DRAWING. ALL DIMENSIONS ARE SUBJECT TO NORMAL DOCUMENTS REFERENCED HEREON UNLESS OTHERWISE NOTED.		THE USE OF THIS DRAWING IS LIMITED TO THE SPECIFIC APPLICATIONS AND PERFORMANCE SPECIFICATIONS AND PERFORMANCE PRESENTED ON THIS DRAWING. ALL DIMENSIONS ARE SUBJECT TO NORMAL DOCUMENTS REFERENCED HEREON UNLESS OTHERWISE NOTED.		
SIZE	FORM NUMBER	SCALE	NON	
C	10K44			
CRIMP INFORMATION		S2-15218		
SOLID MACHINED CONTACTS		S2-15218		
REVISION				
A1				

FILE: CRIMP INFORMATION SOLID CONTACTS

DWG NO: S2-15218

REV: A1

DATE: 6/3/09

SCALE: NONE

SHEET: 1 OF 1

1 2 3 4

REVOLUTIONS		DESCRIPTION	DATE	BY	APPR
REV	ZONE	ECO	6/12/08	B.D.B.	M.R.F.
AT	-	-	RELEASE NUMBER 016871		

SOLID CONTACT SIZE	SOLID CONTACT PART NUMBERS		WIRE SIZE AVG (mm <sup>2</sup> )	RECOMMENDED STRIP LENGTH INCH (mm)	MIN CONTACT RETENTION LBS (N)	REF CRIMP TENSILE LBS (N)	MAX RATED AMPS @ 125°C CONTINUOUS
	PIN	SOCKET					
16	AT60-202-16**	AT62-201-16**	16-20 [1.5-0.5]	0.25-0.31 [6.35-7.92]	25 [1111]	35-20 [156-89]	13

S&P CONTACT SIZE	STAMPED CONTACT PART NUMBERS		WIRE SIZE AVG (mm <sup>2</sup> )	WIRE INSULATION O.D. RANGE	RECOMMENDED STRIP LENGTH INCH (mm)	MIN CONTACT RETENTION LBS (N)	REF CRIMP TENSILE LBS (N)	MAX RATED AMPS @ 125°C CONTINUOUS
	PIN	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 [1111]	25 [1111]	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 [1111]	25 [1111]	13
16	AT60-16-06**	AT62-16-06**	18-20 [0.75-0.50]	.055 - .095 [1.40 - 2.41]	0.150-0.200 [3.81-5.08]	25 [1111]	25-15 [111+67]	13

CONTACT RESISTANCE STRENGTH (LESS DROP THROUGH WIRE)			
WIRE AWG	TEST CURRENT	MILLIVOLT DROP SOLID	MILLIVOLT DROP S&P
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: $\Delta$ 31= GOLD* 141= NICKEL	
STAMPED CONTACT PLATING OPTIONS: $\Delta$ 22= NICKEL 44= GOLD* 89= 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).
- $\Delta$  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.
- $\Delta$  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	SIZE	"STAMPED" CONTACTS	SIZE
	S2-15218	S2-15222	16
		S2-15221	16/20

- $\Delta$  MAXIMUM RATED CURRENT IN CHART DEPENDS ON CONTACT SIZE. ACTUAL RATED CURRENT DEPENDS ON WIRE SIZE.
- $\Delta$  CONTACT FACTORY FOR ALL AVAILABLE PLATING ON SPECIFIC CONTACTS.
- $\Delta$  AMPHENOL SINE PERFORMANCE SPECIFICATIONS REQUIRE THE USE OF AMPHENOL SINE APPROVED TOOLING.

QUANTITY	PART NUMBER	DESCRIPTION	ITEM
MATERIALS LIST			
UNLESS OTHERWISE SPECIFIED		SIGNATURES	
1) All dimensions are in inches.		DATE	DATE
2) Pl. SEE 30.00		ORDERED: RORR	4/5/09
3) Pl. SEE 30.00		ORDERED: RORR	6/3/09
4) Pl. SEE 30.00		ENGINEER: BERNI	6/3/09
5) Fabrication Standards Per: SS-20020		APPROVAL: BERNI	6/3/09
6) Material Specifications: NA		CUSTOMER: AMPHENOL	6/3/09
7) Process Specifications: NA		THE USE OF THIS DRAWING IS LIMITED TO THE SPECIFIC PARTS, MATERIALS, AND PERFORMANCE SPECIFICATIONS AND REQUIREMENTS PRESENT ON THIS DRAWING. ANY DIMENSIONS ARE SUBJECT TO NORMAL DOCUMENTS REFERENCED HEREON UNLESS OTHERWISE NOTED.	
8) Next Ass'y:		SIZE: Pcs/Kit: 10K/44	
		SCALE: NONE	
		S2-15217	
		SHEET: 1 OF 1	

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

**GENERAL DATA, CONTACTS STAMPED AND FORMED / MACHINED**