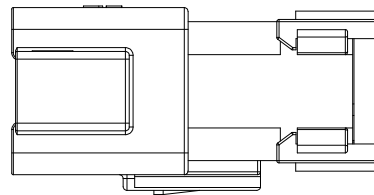
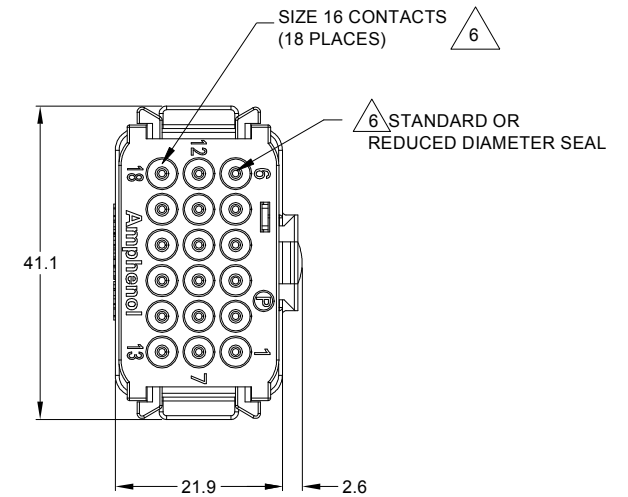
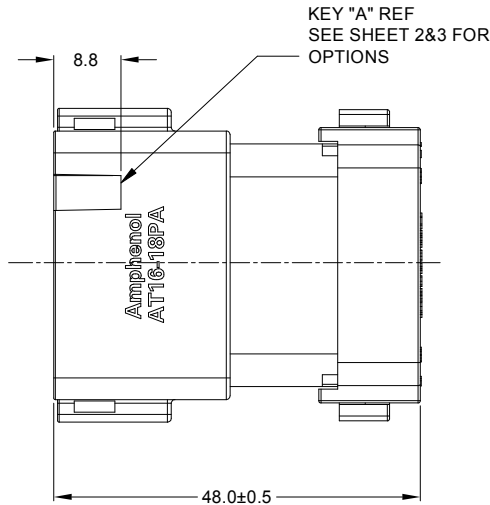
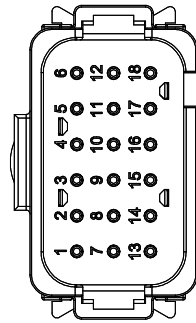


| REVISIONS |     |                            |           |       |       |
|-----------|-----|----------------------------|-----------|-------|-------|
| REV       | ECO | DESCRIPTION                | DATE      | BY    | APPR  |
| B1        | -   | RELEASE DRAWING            | 30JUN2020 | ZENIN | TOMMY |
| B2        | -   | TOTAL LENGTH SHORTEN 1.5mm | 12OCT2020 | ZENIN | TOMMY |



NOTES: UNLESS OTHERWISE SPECIFIED

- MATERIAL:  
HOUSING: THERMOPLASTIC; COLOR: SEE CHART  
END CAP: THERMOPLASTIC; COLOR: BLACK  
STRAIN RELIEF CAP: THERMOPLASTIC; COLOR: BLACK  
SEALS: SILICONE RUBBER; COLOR: RED, RD COLOR: GREEN
- MODIFICATIONS: END CAP, STRAIN RELIEF CAP (OPT),  
REDUCED DIAMETER SEAL, STANDARD DIAMETER SEAL (OPT).
- SPECIFICATIONS:  
3.1 CURRENT RATING: 13 AMPS  
3.2 OPERATING TEMPERATURE: -55°C TO +125°C  
3.3 DIELECTRIC WITHSTANDING VOLTAGE: LESS THAN 2 MILLIAMPS CURRENT LEAKAGE @ 1500 VOLTS AC.  
3.4 INSULATION RESISTANCE: 1000 MEGOHMS MIN @ 25°C.  
3.5 MOISTURE RESISTANCE:  
IP68(1M OF WATER FOR A PERIOD OF 24 HOURS , MATED CONDITION)  
IP69K(MATED CONDITION)  
3.6 MATING CYCLE DURABILITY: 100 CYCLES  
3.7 RoHS COMPLIANT
- MATING PART: AT16-18SX-\* PLUG  
( X = A,B,C,D,E KEYS; \* = MODIFICATIONS AND COLORS )
- ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

△ CONTACT SIZE AND REAR SEAL WIRE RANGE

REDUCED DIAMETER SEAL:

| CONTACT SIZE | MIN. INSUL O.D.   | MAX. INSUL O.D.   | TYPICAL WIRE RANGE |
|--------------|-------------------|-------------------|--------------------|
| 16           | 1.35 mm (.053 in) | 3.05 mm (.120 in) | 14 - 20 AWG        |

STANDARD SEAL:

| CONTACT SIZE | MIN. INSUL O.D.   | MAX. INSUL O.D.   | TYPICAL WIRE RANGE |
|--------------|-------------------|-------------------|--------------------|
| 16           | 2.24 mm (.088 in) | 3.68 mm (.145 in) | 14 - 20 AWG        |

|                                      |                |  |  |
|--------------------------------------|----------------|--|--|
| SEE CHART                            |                | 934447111,934447121,934447131,934447141,934447151,934447511,934447521,934447531,934447541,934447551  |  |
| PART NUMBER                          |                | DESCRIPTION  |  |
| QUANTITY                             | MATERIALS LIST |  |  |
| UNLESS OTHERWISE SPECIFIED           |                | SIGNATURES   |  |
| 1) All dimensions are in metric(mm). |                | DATE   |  |
| 2) Tolerances are as follows:        |                | DRAWN: ZENIN,DENG 12OCT20  |  |
| 1 PL DEC ±0.30                       |                | CHECKED: ORIONLI 12OCT20   |  |
| 2 PL DEC ±0.15                       |                | ENGINEER:  |  |
| 3 PL DEC ±0.08                       |                | APPROVAL: TOMMY,XIE 12OCT20  |  |
| 3) Note reference = △                |                | CUSTOMER:  |  |
| MATERIAL SPECIFICATIONS:             |                | THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |  |
| PROCESS SPECIFICATIONS:              |                | SIZE B C- AT16-18PX-XXXXXX REVISION B2   |  |
| NEXT ASSY:                           |                | SCALE NONE SHEET 1 OF 3  |  |

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

18 POSITION RECEPTACLE, PIN,AT SERIES

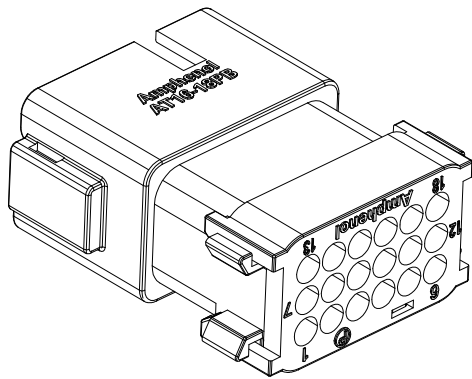
TITLE: 18 POSITION RECEPTACLE, PIN,AT SERIES

DWG NO.: AT16-18PX-XXXXXX

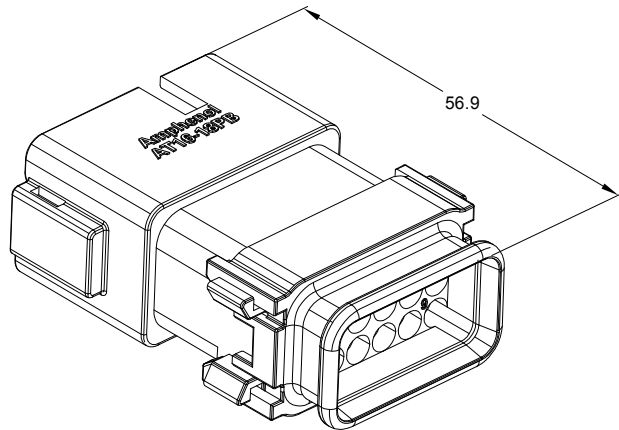
REV: B2

SH: 1

OF: 3

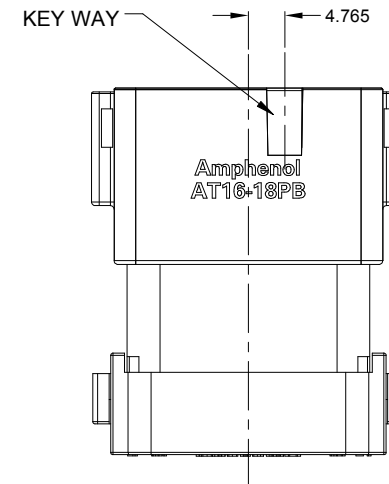
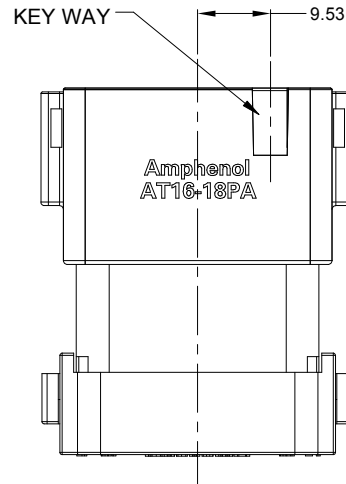


SHOWN WITH  
END CAP



SHOWN WITH  
STRAIN RELIEF

| REVISIONS |     |                            |           |       |       |
|-----------|-----|----------------------------|-----------|-------|-------|
| REV       | ECO | DESCRIPTION                | DATE      | BY    | APPR  |
| B1        | -   | RELEASE DRAWING            | 30JUN2020 | ZENIN | TOMMY |
| B2        | -   | TOTAL LENGTH SHORTEN 1.5mm | 12OCT2020 | ZENIN | TOMMY |



| KEY-A CONFIGURATION |               |       |              |
|---------------------|---------------|-------|--------------|
| PART NUMBER         | STRAIN RELIEF | COLOR | SEAL         |
| AT16-18PA-K004      | NO            | BLACK | REDUCED DIA. |
| AT16-18PA-EK02      | NO            | GRAY  | REDUCED DIA. |
| AT16-18PA-SR02      | YES           | BLACK | REDUCED DIA. |
| AT16-18PA-EKSR02    | YES           | GRAY  | REDUCED DIA. |
| AT16-18PA-K005      | NO            | BLACK | STANDARD     |
| AT16-18PA-EK03      | NO            | GRAY  | STANDARD     |
| AT16-18PA-SR03      | YES           | BLACK | STANDARD     |
| AT16-18PA-EKSR03    | YES           | GRAY  | STANDARD     |

| KEY-B CONFIGURATION |               |       |              |
|---------------------|---------------|-------|--------------|
| PART NUMBER         | STRAIN RELIEF | COLOR | SEAL         |
| AT16-18PB-K004      | NO            | BLACK | REDUCED DIA. |
| AT16-18PB-SR02      | YES           | BLACK | REDUCED DIA. |
| AT16-18PB-K005      | NO            | BLACK | STANDARD     |
| AT16-18PB-SR03      | YES           | BLACK | STANDARD     |

| SEE CHART  |             | DESCRIPTION  |  | ITEM |
|--|-------------|--|--|------|
| QUANTITY   | PART NUMBER | MATERIALS LIST   |  |      |
| <b>UNLESS OTHERWISE SPECIFIED</b><br>1) All dimensions are in metric(mm).<br>2) Tolerances are as follows:<br>1 PL DEC ±0.30 Fractions ±1/64<br>2 PL DEC ±0.15 Angles ±1°<br>3 PL DEC ±0.08<br>3) Note reference = |             |  |  |      |
| SIGNATURES   |             | DATE   |  |      |
| DRAWN: ZENINDENG   |             | 12OCT20  |  |      |
| CHECKED: ORIONLI   |             | 12OCT20  |  |      |
| ENGINEER:  |             |  |  |      |
| APPROVAL: TOMMYXIE   |             | 12OCT20  |  |      |
| MATERIAL SPECIFICATIONS:   |             | CUSTOMER:  |  |      |
| PROCESS SPECIFICATIONS:  |             | THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |  |      |
| NEXT ASSY:   |             | SCALE: NONE  |  |      |

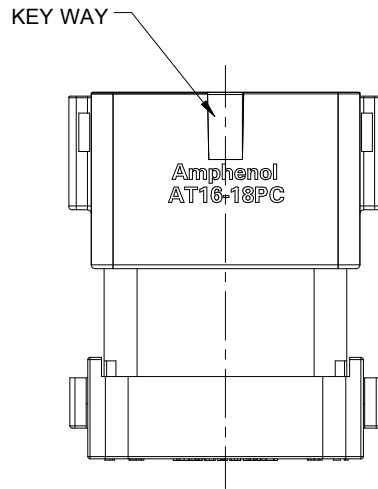
**SINE Systems Corporation**  
 A Subsidiary of Amphenol Corporation  
 44724 Morley Drive  
 Clinton Township, MI 48036

18 POSITION RECEPTACLE, PIN,AT SERIES

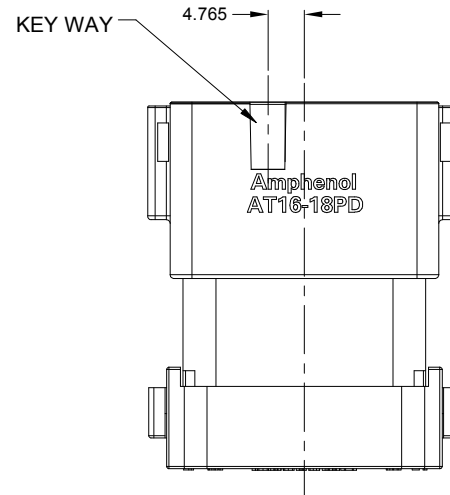
|              |          |                  |          |
|--------------|----------|------------------|----------|
| SIZE         | FSCM NO. | DWG NO.          | REVISION |
| B C-         |          | AT16-18PX-XXXXXX | B2       |
| SHEET 2 OF 3 |          |                  |          |

TITLE: 18 POSITION RECEPTACLE, PIN,AT SERIES  
 DWG NO.: AT16-18PX-XXXXXX  
 REV: B2  
 SH: 2  
 OF: 3

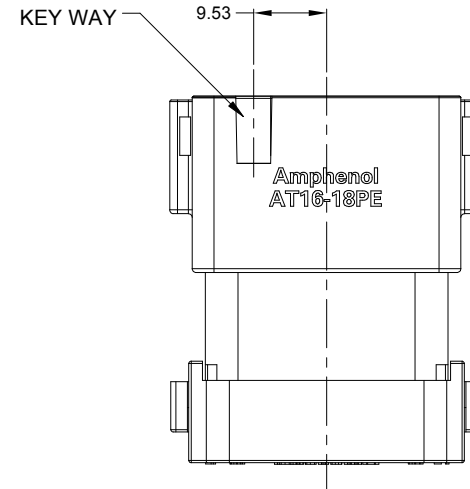
| REVISIONS |     |                            |           |       |       |
|-----------|-----|----------------------------|-----------|-------|-------|
| REV       | ECO | DESCRIPTION                | DATE      | BY    | APPR  |
| B1        | -   | RELEASE DRAWING            | 30JUN2020 | ZENIN | TOMMY |
| B2        | -   | TOTAL LENGTH SHORTEN 1.5mm | 12OCT2020 | ZENIN | TOMMY |



| KEY-C CONFIGURATION |               |       |              |
|---------------------|---------------|-------|--------------|
| PART NUMBER         | STRAIN RELIEF | COLOR | SEAL         |
| AT16-18PC-K004      | NO            | BLACK | REDUCED DIA. |
| AT16-18PC-EK02      | NO            | GREEN | REDUCED DIA. |
| AT16-18PC-SR02      | YES           | BLACK | REDUCED DIA. |
| AT16-18PC-EKSR02    | YES           | GREEN | REDUCED DIA. |
| AT16-18PC-K005      | NO            | BLACK | STANDARD     |
| AT16-18PC-EK03      | NO            | GREEN | STANDARD     |
| AT16-18PC-SR03      | YES           | BLACK | STANDARD     |
| AT16-18PC-EKSR03    | YES           | GREEN | STANDARD     |



| KEY-D CONFIGURATION |               |       |              |
|---------------------|---------------|-------|--------------|
| PART NUMBER         | STRAIN RELIEF | COLOR | SEAL         |
| AT16-18PD-K004      | NO            | BLACK | REDUCED DIA. |
| AT16-18PD-EK02      | NO            | BROWN | REDUCED DIA. |
| AT16-18PD-SR02      | YES           | BLACK | REDUCED DIA. |
| AT16-18PD-EKSR02    | YES           | BROWN | REDUCED DIA. |
| AT16-18PD-K005      | NO            | BLACK | STANDARD     |
| AT16-18PD-EK03      | NO            | BROWN | STANDARD     |
| AT16-18PD-SR03      | YES           | BLACK | STANDARD     |
| AT16-18PD-EKSR03    | YES           | BROWN | STANDARD     |





| KEY-E CONFIGURATION |               |       |              |
|---------------------|---------------|-------|--------------|
| PART NUMBER         | STRAIN RELIEF | COLOR | SEAL         |
| AT16-18PE-K004      | NO            | BLACK | REDUCED DIA. |
| AT16-18PE-EK02      | NO            | GRAY  | REDUCED DIA. |
| AT16-18PE-SR02      | YES           | BLACK | REDUCED DIA. |
| AT16-18PE-EKSR02    | YES           | GRAY  | REDUCED DIA. |
| AT16-18PE-K005      | NO            | BLACK | STANDARD     |
| AT16-18PE-EK03      | NO            | GRAY  | STANDARD     |
| AT16-18PE-SR03      | YES           | BLACK | STANDARD     |
| AT16-18PE-EKSR03    | YES           | GRAY  | STANDARD     |

| SEE CHART  |             | DESCRIPTION  |  | ITEM         |
|--|-------------|--|--|--------------|
| QUANTITY   | PART NUMBER | MATERIALS LIST   |  |              |
| <b>UNLESS OTHERWISE SPECIFIED</b><br>1) All dimensions are in metric(mm).<br>2) Tolerances are as follows:<br>1 PL DEC ±0.30<br>2 PL DEC ±0.15<br>3 PL DEC ±0.08<br>Fractions ±1/64<br>Angles ±1°<br>3) Note reference = |             |  |  |              |
| SIGNATURES   |             | DATE   |  |              |
| DRAWN: ZENINDENG   |             | 12OCT20  |  |              |
| CHECKED: ORIONLI   |             | 12OCT20  |  |              |
| ENGINEER:  |             |  |  |              |
| APPROVAL: TOMMYXIE   |             | 12OCT20  |  |              |
| CUSTOMER:  |             |  |  |              |
| MATERIAL SPECIFICATIONS:   |             | THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |  |              |
| PROCESS SPECIFICATIONS:  |             | THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY. DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION. NO RIGHTS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. |  |              |
| NEXT ASSY:   |             | SCALE NONE   |  |              |
|  |             | SINE Systems Corporation<br>A Subsidiary of Amphenol Corporation<br>44724 Morley Drive<br>Clinton Township, MI 48036   |  | REVISION     |
|  |             | 18 POSITION RECEPTACLE, PIN,AT SERIES  |  | B2           |
|  |             | SIZE B C- AT16-18PX-XXXXXX   |  | B2           |
|  |             | SCALE NONE   |  | SHEET 3 OF 3 |





TITLE: 18 POSITION RECEPTACLE, PIN,AT SERIES  
 DWG NO.: AT16-18PX-XXXXXX  
 REV: B2  
 SH: 3  
 OF: 3

# AT Series™ - Contact Size 16 Options



| Machined Contacts, Sockets & Pins |  |      |       |          |
|-----------------------------------|--|------|-------|----------|
| Part Number                       | Description                            | Size | AWG   | Type     |
| AT60-215-1631                     | Male Contact - Pin, Gold-plated        | 16   | 14    | Machined |
| AT62-209-1631                     | Female Contact - Socket, Gold-plated   | 16   | 14    | Machined |
| AT60-215-16141                    | Male Contact - Pin, Nickel-plated      | 16   | 14    | Machined |
| AT62-209-16141                    | Female Contact - Socket, Nickel-plated | 16   | 14    | Machined |
| AT60-202-1631                     | Male Contact - Pin, Gold-plated        | 16   | 16-20 | Machined |
| AT62-201-1631                     | Female Contact - Socket, Gold-plated   | 16   | 16-20 | Machined |
| AT60-202-16141                    | Male Contact - Pin, Nickel-plated      | 16   | 16-20 | Machined |
| AT62-201-16141                    | Female Contact - Socket, Nickel-plated | 16   | 16-20 | Machined |
| AT60-202-1631-22                  | Male Contact - Pin, Gold-plated        | 16   | 22-24 | Machined |
| AT62-201-1631-22                  | Female Contact - Socket, Gold-plated   | 16   | 22-24 | Machined |
| AT60-202-16141-22                 | Male Contact - Pin, Nickel-plated      | 16   | 22-24 | Machined |
| AT62-201-16141-22                 | Female Contact - Socket, Nickel-plated | 16   | 22-24 | Machined |

| Tooling - Machined Contacts   |             |   |
|---|-------------|---|
| Part  | Part Number | Description   |
|  | CA-5D12     | Universal Hand Crimp Tool, Size 12/16/20 (Machined contacts only) |
|  | CA-5E12     | Pneumatic Crimp Tool, Size 12/16/20 (Machined contacts only)      |

| Contact Removal Tools   |               |   |
|---|---------------|---|
| Part  | Part Number   | Description   |
|   | ATRT-100      | Used for removal of contacts for A Series™ products |
|  | AT11-310-1605 | Contact Removal Tool, Plastic, Size 16              |

| Sealing Plugs   |                  |   |
|---|------------------|---|
| Part  | Part Number      | Description                                     |
|  | A114017          | Sealing Plug, Size 16, White                    |
|  | A114017-SR       | Sealing Plug, Size 16, SR01 Series, Black       |
|  | AT13-217-1605    | Locking Sealing Plug, Size 16, Grey             |
|  | AT13-217-1605-SR | Locking Sealing Plug, Size 16, SR01 Series, Red |

| Stamped & Formed Contacts, Sockets & Pins |  |      |       |                  |
|---|--|------|-------|------------------|
| Part Number                               | Description                            | Size | AWG   | Type             |
| AT60-14-0144                              | Male Contact - Pin, Gold-plated        | 16   | 14-16 | Stamped & Formed |
| AT62-14-0144                              | Female Contact - Socket, Gold-plated   | 16   | 14-16 | Stamped & Formed |
| AT60-14-0122                              | Male Contact - Pin, Nickel-plated      | 16   | 14-16 | Stamped & Formed |
| AT62-14-0122                              | Female Contact - Socket, Nickel-plated | 16   | 14-16 | Stamped & Formed |
| AT60-16-0144                              | Male Contact - Pin, Gold-plated        | 16   | 16-18 | Stamped & Formed |
| AT62-16-0144                              | Female Contact - Socket, Gold-plated   | 16   | 16-18 | Stamped & Formed |
| AT60-16-0122                              | Male Contact - Pin, Nickel-plated      | 16   | 16-18 | Stamped & Formed |
| AT62-16-0122                              | Female Contact - Socket, Nickel-plated | 16   | 16-18 | Stamped & Formed |
| AT60-16-0644                              | Male Contact - Pin, Gold-plated        | 16   | 18-20 | Stamped & Formed |
| AT62-16-0644                              | Female Contact - Socket, Gold-plated   | 16   | 18-20 | Stamped & Formed |
| AT60-16-0622                              | Male Contact - Pin, Nickel-plated      | 16   | 18-20 | Stamped & Formed |
| AT62-16-0622                              | Female Contact - Socket, Nickel-plated | 16   | 18-20 | Stamped & Formed |
| AT60-16-0844                              | Male Contact - Pin, Gold-plated        | 16   | 20-22 | Stamped & Formed |
| AT62-16-0844                              | Female Contact - Socket, Gold-plated   | 16   | 20-22 | Stamped & Formed |
| AT60-16-0822                              | Male Contact - Pin, Nickel-plated      | 16   | 20-22 | Stamped & Formed |
| AT62-16-0822                              | Female Contact - Socket, Nickel-plated | 16   | 20-22 | Stamped & Formed |

| Tooling - Stamped & Formed Contacts  |             |   |
|--|-------------|---|
| Part   | Part Number | Description   |
|   | MFY-3950    | Crimp Die - Size 16, 18-20AWG (S&F contacts only)       |
|  | MFY-3953    | Crimp Die - Size 16, 16-18AWG (S&F contacts only)       |
|  | MFY-3975    | Crimp Die - Size 16, 14-16AWG (S&F contacts only)       |
|  | MFY-3990    | Crimp Die - Size 16, 20-22AWG (S&F contacts only)       |
|  | ATT-16-00   | Hand Crimp Tool - Size 16, 14-16AWG (S&F contacts only) |
|  | ATT-16-01   | Hand Crimp Tool - Size 16, 18-20AWG (S&F contacts only) |
|  | ATT-1612-03 | Hand Crimp Tool - Size 16, 20-22AWG (S&F contacts only) |