

49.5 -198

18 POSITION RECEPTACLE, PIN, PANELMATE, AT SERIES 34.0 **©**≠ **©** ∞ **©** № တြေး စာမာ ဝေယ 75.7±0.5 61.0 405050 .0<2 0 ± 0 % GASKET M5x0.8-6H THREAD SCREWS RECOMMEND TORQUE VALUES 1.5-2.0N.m

REVISIONS

DATE

30JUN2020

BY

ZENIN TOMMY

APPR

DESCRIPTION

RELEASE DRAWING

REV

A1

ECO

NOTES: UNLESS OTHERWISE SPECIFIED

1. 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

2. MODIFICATIONS: FLANGE, GASKET, END CAP, STRAIN RELIEF CAP (OPT), REDUCED DIAMETER SEAL, STANDARD SEAL (OPT).

- 3. 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
- 4. MATING PART: AT16-18SX-* PLUGS (X = A,B,C,D,E KEYS; * = MODIFICATIONS AND COLORS)
- 5. ALL DIMENSIONS ARE FOR REFERENCE USE ONLY.

6 CONTACT SIZE AND REAR SEAL WIRE RANGE

REDUCED DIAMETER SEAL:

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

STANDARD SEAL

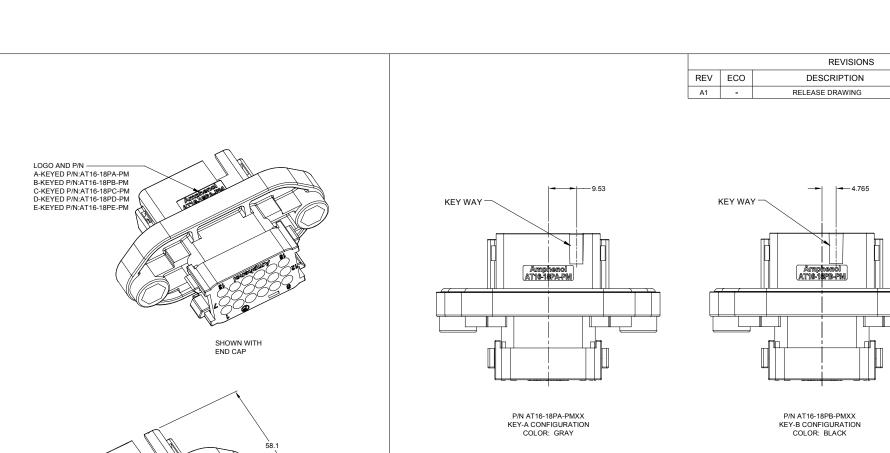
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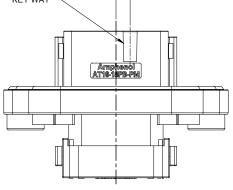
| CONTACT | T MIN. INSUL MAX. INSUL | | TYPICAL |
|---------|-------------------------|----------------------|-------------|
| SIZE | O.D. | O.D. | WIRE RANGE |
| 16 | 2.24 mm (.088 in) | 3.68 mm (.145 in) | 14 - 20 AWG |

| | | | | | | | | ı | | |
|--|----------------|---------------------------------------|---|--|--|----------------|----------------------------|---|--|------|
| | SEE | CHART | | | | | | | | |
| | PART N | IUMBEF | ₹ | | DESCRIPTION | | DESCRIPTION | | | ITEM |
| QUANTITY | | | MA | TERI | ALS | 3 LI | ST | | | |
| UNLESS OTHER | WISE SPECIFIED | SIGI | NATURI | S DATE | | | mphanal | | | |
| 2) Tolerances are of 1 PL DEC ±0.30 | | DRAWN: | ZENIN.DEN | G 28/JUN/20 | | | Amphenol | | | |
| 2 PL DEC ±0.15 3 PL DEC ±0.08 | Angles ±1° | CHECKED: | ORIONLLI | 29/JUN/20 | Sine Systems - www.amphenol-sine.com | | | | | |
| 3) Note reference | - <u>x</u> | ENGINEER: | | | 44724 Morley Drive | | | | | |
| MATERIAL SPECIFICA | TIONS: | APPROVAL: | TOMMY.XII | 30/JUN/20 | | | Clinton Township, MI 48036 | | | |
| | | CUSTOMER: | | | 18 POSITION RECEPTACLE, PIN, PANELMATE | | MATE | | | |
| | | | NG IS SUPPLI | ED FOR IGN FEATURES. | AT SERIES | | | | | |
| PROCESS SPECIFICA | HUNS: | SHOWN HER THE AMPHEN OF REPRODI | EON ARE THI NOL CORPOR UCTION ARE | BERFORMANCE DATA HE PROPERTY OF RATION. NO RIGHTS IMPLIED. ALL CT TO NORMA | | AT16-18PX-PMXX | A1 | | | |
| NEXT ASSY: | | MANUFACTU | | | SCALE: NONE SHEET 1 OF 3 | | 3 | | | |



SHOWN WITH STRAIN RELIEF

KEY-A CONFIGURATION STRAIN RELIEF PART NUMBER SEAL AT16-18PA-PM11 NO REDUCED DIA. AT16-18PA-PM15 YES REDUCED DIA. AT16-18PA-PM12 NO STANDARD AT16-18PA-PM16 YES STANDARD



APPR

18 POSITION RECEPTACLE, PIN, PANELMATE, AT SERIES

AT16-18PX-PMXX

REV: A1

ZENIN TOMMY

DATE

30/JUN/20

KEY-B CONFIGURATION STRAIN PART NUMBER SEAL RELIEF AT16-18PB-PM11 NO REDUCED DIA. AT16-18PB-PM15 YES REDUCED DIA. AT16-18PB-PM12 NO STANDARD

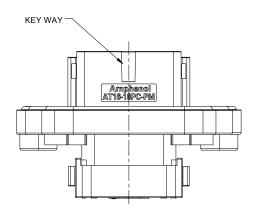
YES

STANDARD

AT16-18PB-PM16

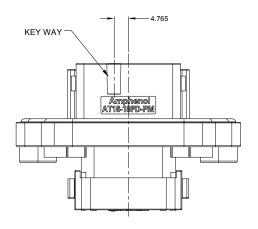
| | PART N | IUMBEF | UMBER DESCRIPTION | | | SCRIPTION | ITEM | |
|---|----------------------------|---|--|---|---|-----------|---|--|
| QUANTITY | | MATERIA | | | RIALS LIST | | | |
| UNLESS OTHER 1) All dimensions at 2) Tolerances are 1 1 PL DEC ±0.30 | as follows: | SIGI DRAWN: | VATURES ZENIN.DENG | 28/JUN/20 | - Amnanai | | | |
| 2 PL DEC ±0.15 3 PL DEC ±0.08 3) Note reference | Fractions ±1/64 Angles ±1° | CHECKED: ENGINEER: | ORIONLI | 29/JUN/20 | | S | ine Systems - www.amphenol-sine.com 44724 Morley Drive | |
| MATERIAL SPECIFICA | TIONS: | APPROVAL: CUSTOMER: | TOMMYXIE | 30/JUN/20 | Clinton Township, MI 48036 18 POSITION RECEPTACLE, PIN,PANELMATE | | ATE | |
| PROCESS SPECIFICA | TIONS: | INFORMATIO | NG IS SUPPLIED F N ONLY. DESIGN ONS AND PERFO | FEATURES, | AT SERIES | | | |
| | | SHOWN HER THE AMPHEN OF REPRODU DIMENSIONS | EON ARE THE PR NOL CORPORATION JCTION ARE IMPL ARE SUBJECT TO | OPERTY OF ON. NO RIGHTS LIED. ALL O NORMAI | B C- AT16-18PX-PMXX A | | 41 | |
| NEXT ASS'Y: | | MANUFACTU | RING VARIATIONS | S. | SCALE: NONE SHEET 2 OF 3 | | 3 | |

| | | REVISIONS | | | |
|-----|-----|-----------------|-----------|-------|-------|
| REV | ECO | DESCRIPTION | DATE | BY | APPR |
| A1 | - | RELEASE DRAWING | 30/JUN/20 | ZENIN | TOMMY |



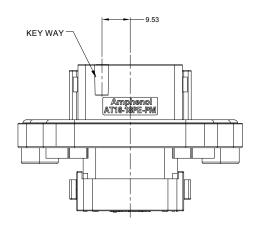
P/N AT16-18PC-PMXX KEY-C CONFIGURATION COLOR: GREEN

| KEY-C CONFIGURATION | | | | | |
|---------------------|------------------|--------------|--|--|--|
| PART NUMBER | STRAIN RELIEF | SEAL | | | |
| AT16-18PC-PM11 | NO | REDUCED DIA. | | | |
| AT16-18PC-PM15 | YES | REDUCED DIA. | | | |
| AT16-18PC-PM12 | NO | STANDARD | | | |
| AT16-18PC-PM16 | YES | STANDARD | | | |



P/N AT16-18PD-PMXX KEY-D CONFIGURATION COLOR: BROWN

| KEY-D CONFIGURATION | | | | | | |
|---------------------|------------------|--------------|--|--|--|--|
| PART NUMBER | STRAIN RELIEF | SEAL | | | | |
| AT16-18PD-PM11 | NO | REDUCED DIA. | | | | |
| AT16-18PD-PM15 | YES | REDUCED DIA. | | | | |
| AT16-18PD-PM12 | NO | STANDARD | | | | |
| AT16-18PD-PM16 | YES | STANDARD | | | | |



P/N AT16-18PE-PMXX KEY-E CONFIGURATION COLOR: GRAY

| KEY-E CO | KEY-E CONFIGURATION | | | | | | |
|----------------|---------------------|--------------|--|--|--|--|--|
| PART NUMBER | STRAIN RELIEF | SEAL | | | | | |
| AT16-18PE-PM11 | NO | REDUCED DIA. | | | | | |
| AT16-18PE-PM15 | YES | REDUCED DIA. | | | | | |
| AT16-18PE-PM12 | NO | STANDARD | | | | | |
| AT16-18PE-PM16 | YES | STANDARD | | | | | |

DESCRIPTION PART NUMBER ITEM ∽ MATERIALS LIST QUANTITY UNLESS OTHERWISE SPECIFIED SIGNATURES DATE **Amphenol** 1) All dimensions are in metric(mm).
2) Tolerances are as follows:
1 PL DEC ±0.30
2 PL DEC ±0.15
3 PL DEC ±0.08

Angles ±1° ZENIN.DENG 28/JUN/20 ORION.LI 29/JUN/20 Sine Systems - www.amphenol-sine.com 44724 Morley Drive Clinton Township, MI 48036 3) Note reference = X TOMMY.XIE 30/JUN/20 18 POSITION RECEPTACLE, PIN, PANELMATE THIS DRAWING IS SUPPLIED FOR INFORMATION ONLY, DESIGN FEATURES, INFORMATION ONLY, DESIGN FEATURES, SPECIFICATIONS AND PERFORMANCE DATA SHOWN HEREON ARE THE PROPERTY OF THE AMPHENOL CORPORATION NO RICHITS OF REPRODUCTION ARE IMPLIED. ALL DIMENSIONS ARE SUBJECT TO NORMAL MANUFACTURING VARIATIONS. AT SERIES PROCESS SPECIFICATIONS SIZE B C-AT16-18PX-PMXX A1 NEXT ASS'Y: SCALE: NONE sheet 3 оғ 3

18 POSITION RECEPTACLE, PIN, PANELMATE, AT SERIES

DWG N

AT16-18PX-PMXX

REV: A1 SH:

9. **63**

AT Series™ - Contact Size 16 Options

| | Machined Contacts, Sockets & Pins | | | | | |
|-------------------|---|------|----------|----------|--|--|
| Part Number | Description | Size | AWG | Туре | | |
| 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 | | 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) | | | |
| 53 | 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 | | | | |
| 4 | A114017 | Sealing Plug, Size 16, White | | | | |
| 1 | A114017-SR | Sealing Plug, Size 16, SR01 Series, Black | | | | |
| 1 | AT13-217-1605 | Locking Sealing Plug, Size 16, Grey | | | | |
| 1 | AT13-217-1605-SR | Locking Sealing Plug, Size 16, SR01 Series, Red | | | | |

| Stamped & Formed Contacts, Sockets & Pins | | | | | |
|---|--|------|-------|------------------|--|
| Part Number | Description | Size | AWG | Туре | |
| 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 | | 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 | | |
| | MFX-3950 | Crimp Die - Size 16, 18-20AWG (S&F contacts only) | | |
| | MFX-3953 | Crimp Die - Size 16, 16-18AWG (S&F contacts only) | | |
| | MFX-3975 | Crimp Die - Size 16, 14-16AWG (S&F contacts only) | | |
| | MFX-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) | | |