

Industrial grade L7-20 locking devices

| | |
|-----------------|--------------|
| Project Name: | Prepared By: |
| Project Number: | Date: |
| Catalog Number: | Type: |

Description

NEMA L7-20 20A, 277V/AC, 2P-3W



L7-20R L7-20P



AHL720P



AHL720C



AHL720R



AHL720FO

Design features for plug & connector

- All nylon construction
- EPDM gasket seals cord hole from dust and debris
- Back wire terminal clamps for easy secure wiring
- Individual wiring compartments with tapered channel for easy insertion of wires
- Clear cover over wiring compartments allows easy inspection of wiring terminations
- Rating printed on side of device
- Largest-in-class grommet size allows for entire cord size range

Design features for receptacles

- Rugged glass filled nylon body
- Clearly marked rating, NEMA configuration and approval listings on receptacle face
- One piece brass contacts offer superior performance and minimal heat rise
- Back and side wiring terminal clamps for easy, secure wiring

Design features for flanged inlet & outlet

- All nylon construction
- Mounting holes interchangeable with competitive units
- Back wire terminal clamps for easy, secure wiring
- Individual wiring compartments with tapered channel for easy insertion of wires

Table 1. NEMA L7-20 Industrial Grade Locking Devices

| Catalog No. | Description | Amps | Volts | Color |
|------------------------------------|------------------------------------|------|-------|---------------|
| <input type="checkbox"/> AHL720P | Ultra grip plug | 20 | 277 | Black & white |
| <input type="checkbox"/> AHL720C | Ultra grip connector | 20 | 277 | Black & white |
| <input type="checkbox"/> AHL720R | Single receptacle | 20 | 277 | Black |
| <input type="checkbox"/> AHIGL720R | Single receptacle, isolated ground | 20 | 277 | Orange |
| <input type="checkbox"/> AHL720FO | Flanged outlet | 20 | 277 | Black & white |
| <input type="checkbox"/> AHL720FI | Flanged inlet | 20 | 277 | Black & white |

Compliances, specifications and availability are subject to change without notice.



Powering Business Worldwide

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Plug & Connector

NEMA L7-20 20A, 277V/AC, 2P-3W

Table 2. Specifications

| Catalog No. | NEMA L7-20 Plug & Connector |
|-------------------------------------|--|
| NEMA Config | NEMA L7-20 |
| Wiring Type | Back wire |
| Environmental Specifications | Flammability: Meets UL94 requirements; V2 rated Temperature Rating: -40°C to 60°C (-40°F to 140°F) |
| Electrical Specifications | Dielectric Voltage: Twice the device rating + 1000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 50 cycles of overload at 150% of rated current (DC) |
| Mechanical Specifications | Terminal Accommodation: #14 - #8 AWG Voltage Ratings: Permanently marked on device |

Table 3. Materials

| Catalog No. | NEMA L7-20 Plug & Connector |
|---------------------------|---|
| NEMA Config | NEMA L7-20 |
| Outer Shell | Nylon |
| Interior Body | Nylon |
| Terminal Retainer | Polycarbonate |
| Blades | Brass |
| Line Contacts | Bronze, tin plated |
| Terminal Clamps | Steel, tin plated |
| Terminal Screws | #10-32 brass, zinc plated (neutral screw) |
| Ground Screw | #10-32 brass |
| Assembly Screws | Steel, nickel plated |
| Gasket/Dust Shield | EPDM |
| Cord Clamp Screws | Steel, nickel plated |
| Cord Clamp | Nylon |

Product Dimensions

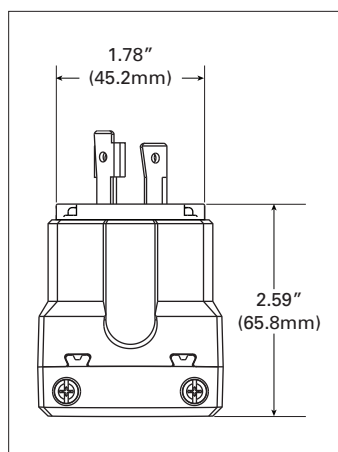


Figure 1. AHL720P

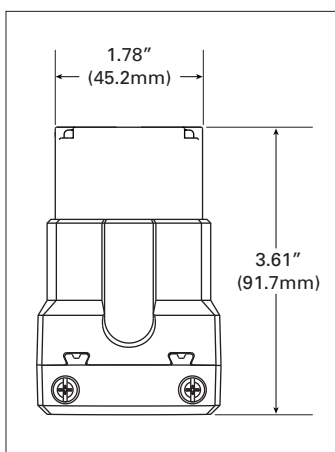


Figure 2. AHL720C

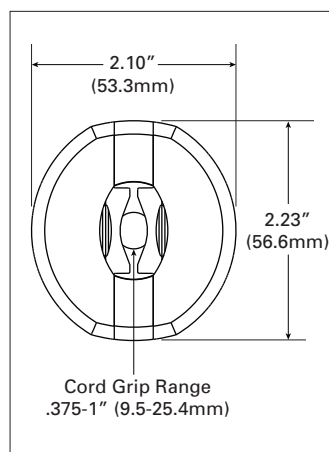


Figure 3. Base Angle

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Single Receptacles

NEMA L7-20 20A, 277V/AC, 2P-3W

Table 4. Specifications

| Catalog No. | NEMA L7-20 Single Receptacles | NEMA L7-20 Isolated Ground Single Receptacles |
|-------------------------------------|--|---|
| NEMA Config | NEMA L7-20 | NEMA L7-20 |
| Wiring Type | Back & side wire | Back & side wire |
| Environmental Specifications | Flammability: Meets UL94 requirements; V0 rated Temperature Rating: -40°C to 60°C (-40°F to 140°F) | Flammability: Meets UL94 requirements; V0 rated Temperature Rating: -40°C to 60°C (-40°F to 158°F) |
| Electrical Specifications | Dielectric Voltage: ≤300V: 2000V, 301-600V: 3000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 250 cycles of overload @ 200% of rated current (DC) | Dielectric Voltage: ≤300V: 2000V, 301-600V: 3000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 50 cycles of overload @ 150% of rated current (DC) |
| Mechanical Specifications | Terminal Accommodation: #14 - #8 AWG Voltage Ratings: Permanently marked on device | Terminal Accommodation: #14 - #8 AWG Voltage Ratings: Permanently marked on device |

Table 5. Materials

| Catalog No. | NEMA L7-20 Single Receptacles | NEMA L7-20 Isolated Ground Single Receptacles |
|-------------------------------|---|---|
| NEMA Config | NEMA L7-20 | NEMA L7-20 |
| Face | Glass-filled nylon | Glass-filled nylon |
| Base | Glass-filled nylon | Glass-filled nylon |
| Mounting Strap | 0.050" thick steel, zinc plated | 0.050" thick steel, zinc plated |
| Line Contacts | 0.041" thick brass | 0.041" thick brass |
| Terminal Screws | #10-32 brass, nickel plated (neutral screw) | #10-32 brass, nickel plated (neutral screw) |
| Ground Screw | #10-32 brass (green) | #10-32 brass (green) |
| Terminal Clamps/Plates | 0.041" thick brass | 0.041" thick brass |
| Ground Contacts | 0.041" thick brass | 0.041" thick brass |
| Back Plate | 0.041" thick brass, nickel plated | 0.041" thick brass, nickel plated |
| Mounting Screws | Steel, zinc plated | Steel, zinc plated |

Product Dimensions

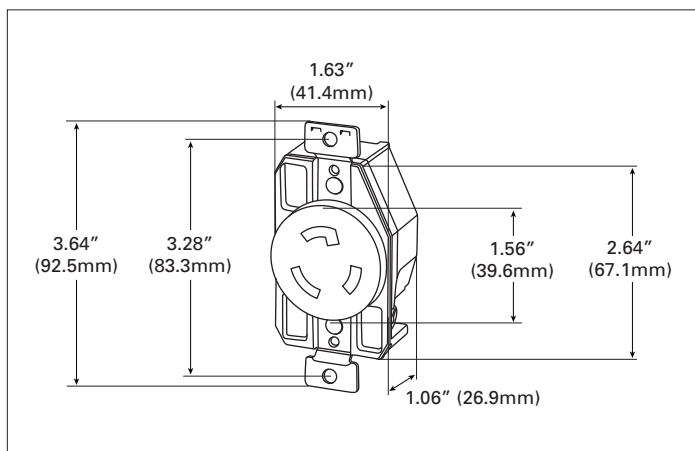


Figure 4. AHL720R

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| Catalog Number: | Type: |

Flanged Outlet & Inlet

NEMA L7-20 20A, 277V/AC, 2P-3W

Table 6. Specifications

| Catalog No. | NEMA L7-20 Flanged Outlet | NEMA L7-20 Flanged Inlet |
|-------------------------------------|---|---|
| NEMA Config | NEMA L7-20 | NEMA L7-20 |
| Wiring Type | Back wire | Back wire |
| Environmental Specifications | Flammability: Meets UL94 requirements; V2 rated Temperature Rating: -40°C to 60°C (-40°F to 140°F) | Flammability: Meets UL94 requirements; V2 rated Temperature Rating: -40°C to 60°C (-40°F to 140°F) |
| Electrical Specifications | Dielectric Voltage: ≤300V: 2000V, 301-600V: 3000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) after 50 cycles of overload @ 150% of rated current (DC) | Dielectric Voltage: ≤300V: 2000V, 301-600V: 3000V per UL498 Current Interrupting: Yes, at full-rated current Temperature Rise: Max. 30°C (86°F) @ maximum rated current (DC) |
| Mechanical Specifications | Terminal Accommodation: #14 - #8 AWG Voltage Ratings: Permanently marked on device | Terminal Accommodation: #14 - #8 AWG Voltage Ratings: Permanently marked on device |

Table 7. Materials

| Catalog No. | NEMA L7-20 Flanged Outlet | NEMA L7-20 Flanged Inlet |
|--------------------------|---|---|
| NEMA Config | NEMA L7-20 | NEMA L7-20 |
| Outer Shell | Nylon | Nylon |
| Interior Body | Nylon | Nylon |
| Terminal Retainer | Polycarbonate | Polycarbonate |
| Blades | N/A | 0.062" thick brass |
| Line Contacts | 0.031" thick bronze, tin plated | N/A |
| Terminal Clamps | Steel, tin plated | Steel, tin plated |
| Terminal Screws | #10-32 brass, nickel plated (neutral screw) | #10-32 brass, nickel plated (neutral screw) |
| Ground Screw | #10-32 brass (green) | #10-32 brass (green) |
| Assembly Screws | Steel, nickel plated | Steel, nickel plated |
| Mounting Screws | Steel, zinc plated | Steel, zinc plated |

Product Dimensions

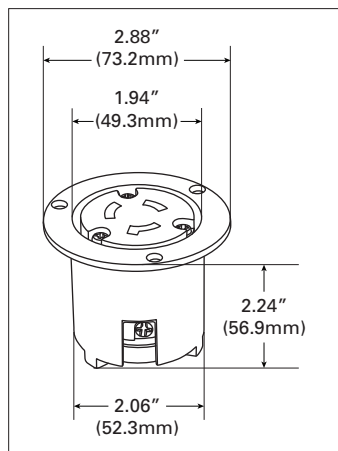


Figure 5. AHL720FO

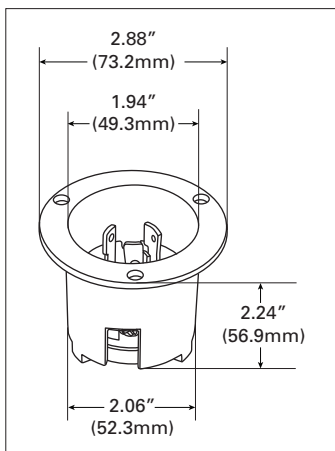


Figure 6. AHL720FI

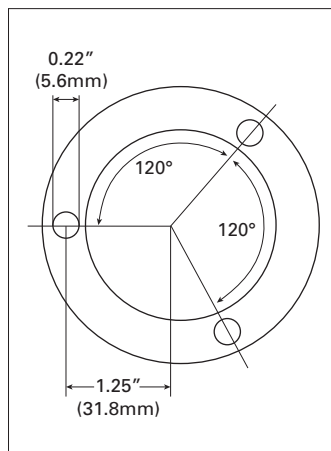








Figure 7. Top View


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| Project Name: | Prepared By: |
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| Catalog Number: | Type: |

Certifications & Compliances

| Catalog No. |  |  |  |  |  |  |
|-------------|---|---|---|---|---|---|
| AHL720P | • | | | | • | • |
| AHL720C | • | | | | • | • |
| AHL720R | | • | • | • | • | • |
| AHIGL720R | | • | • | | | • |
| AHL720FO | | • | • | | • | • |
| AHL720FI | • | | | | | • |

KEY:  cULus  UL  CSA  Fed Spec  NAFTA  ROHS

 Parts are manufactured and designed in accordance with article 4 of the European Union's RoHS2 directive 2011/65/EU

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