

# Industrial grade L7-20 locking devices

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



AHL720P



AHL720C



AHL720R



AHL720FO

### **Description**

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





L7-20R

# L7-20P

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
☐ AHL720P	Ultra grip plug	20	277	Black & white
☐ AHL720C	Ultra grip connector	20	277	Black & white
☐ AHL720R	Single receptacle	20	277	Black
☐ AHIGL720R	Single receptacle, isolated ground	20	277	Orange
☐ AHL720F0	Flanged outlet	20	277	Black & white
☐ AHL720FI	Flanged inlet	20	277	Black & white



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# **Plug & Connector**

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

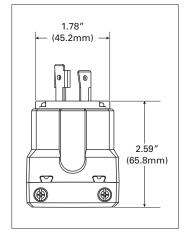
Table 2. Specifications

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**



1.78" ← (45.2mm) →

3.61" (91.7mm)

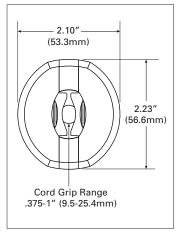


Figure 1. AHL720P

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**

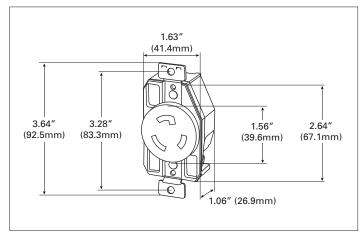


Figure 4. AHL720R

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# Flanged Outlet & Inlet

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

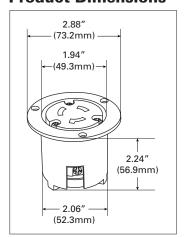
Table 6. Specifications

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
<b>Environmental Specifications</b>	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**





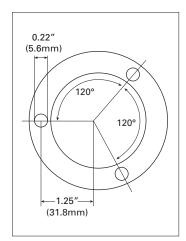


Figure 5. AHL720FO

Figure 6. AHL720FI

Figure 7. Top View

# Industrial grade L7-20 locking devices

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# **Certifications & Compliances**

Catalog No.		¢(ՄL) us	(II)	€	F (l) S	<b>_</b>	<b>₹</b>
AHL720P		•				•	•
AHL720C		•				•	•
AHL720R			•	•	•	•	•
AHIGL720R			•	•			•
AHL720F0			•	•		•	•
AHL720FI		•					•
KEY:	c (UL) us	cULus		(II)	UL	<b>@</b>	CSA

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

F®s Fed Spec

NAFTA

ROHS

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

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