

Commercial Single Line Connectors

Product Facts

- All parts made of UL Recognized, 94V-0 rated, plastic material
- Designed to exceed minimum creepage and clearance for specified voltages per applicable international specifications
- Available with or without leads
- Maximum flexibility of application through elimination of predetermined lead lengths
- Machine applied terminations provide for lowest applied cost



The AMP family of Commercial Single Line Connectors provides solutions to high-voltage connection problems at low applied cost. The connectors are excellent for commercial application in industrial environments. Ease of application makes them suitable for large-volume production applications. Crimp, snap-in contacts can be machine terminated or hand-tool crimped.

Housings are self-extinguishing plastic, UL rated 94V-0. 10 KVDC connectors accept 20–24 AWG [0.2–0.6 mm²] wires. 20 KVDC connectors have contacts which accept 22–20 AWG [0.3–0.6 mm²] and 18–16 AWG [0.8–1.4 mm²] conductors. Connectors rated for 30 KVDC offer three choices of contact sizes to cover the 16–8 AWG [1.25–8 mm²] range.

Performance Specifications

All Series

Altitude — Sea level to 10,000 feet [3048 m]

Temperature — 59°F to +185°F [15°C to +85°C]

Product Specification — 108-36034

10 KVDC Connectors

Voltage — 10 KVDC

Current — 5 amperes, continuous, rms

Dielectric Withstanding Test — 15 KVDC for 3 minutes at sea level, 77°F [25°C]

Instruction Sheet — Part Number 867443-1

20 KVDC Connectors

Voltage — 8 KVAC, rms, 60 Hz; 20 KVDC

Current — 7.5 amperes, continuous, rms

Dielectric Withstanding Test — 12 KVAC, rms, 60 Hz for 3 minutes at sea level, 77°F [25°C]; 30 KVDC for 3 minutes at sea level, 77°F [25°C]

Instruction Sheets —

Plugs — Part Number 862749-1

Receptacles — Part Number 862755-1

30 KVDC Connectors

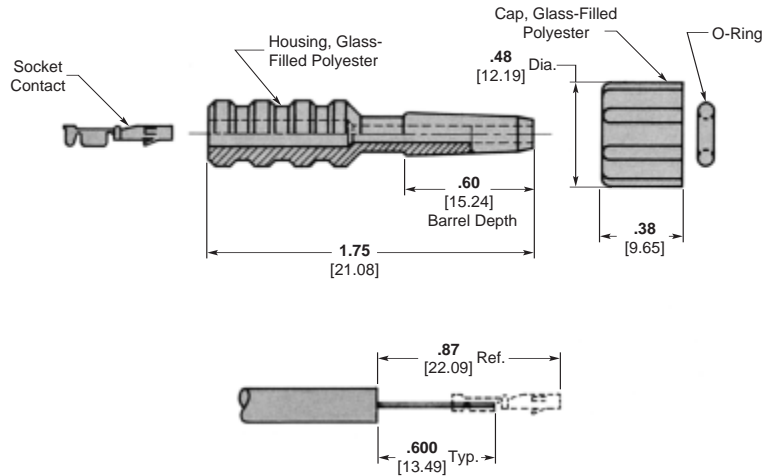
Voltage — 12 KVAC, rms, 60 Hz; 30 KVDC

Current — 25 amperes, continuous, rms

Dielectric Withstanding Test — 16 KVAC, rms, 60 Hz for 3 minutes at sea level, 77°F [25°C]; 40 KVDC for 3 minutes at sea level, 77°F [25°C]

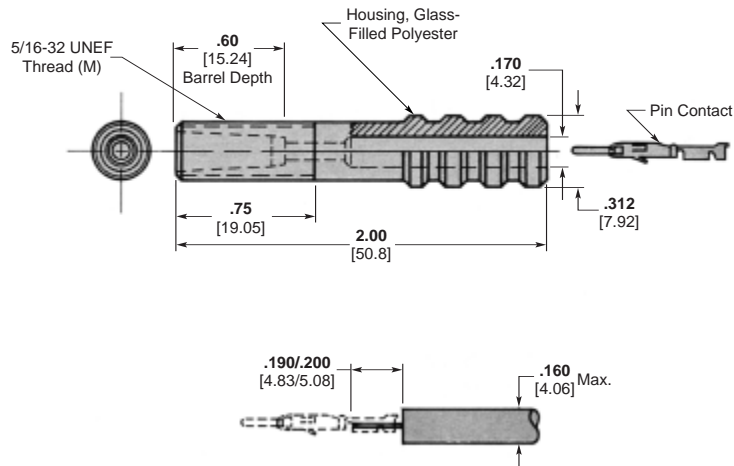
Commercial Single Line 10 KVDC Connectors

Plug Kits



Recommended Wire Preparation
(Ref. Socket Contact Part Number 203802-6)

Receptacle Kit

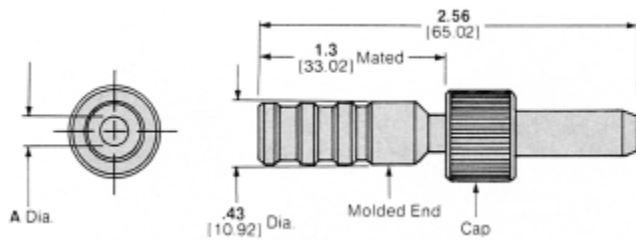


Recommended Wire Preparation
(Ref. Pin Contact Part Number 203816-6)

Voltage Rating	Description	Wire Size		Max. Ins. Dia.	Contact Type	Kit Part Number	Tooling Part Number	
		AWG	mm ²				Hand Tool	Extraction Tool
10 KVDC	Plug Kits*	20-24	0.2-0.6	.105 2.66	Type XI Socket	867157-1	91544-1	91038-3
				.160 4.06	Type XI Socket	867157-2	91544-1	91038-3
	Receptacle Kit*	20-24	0.2-0.6	.160 4.06	Type XI Pin	867156-1	91544-1	91038-3

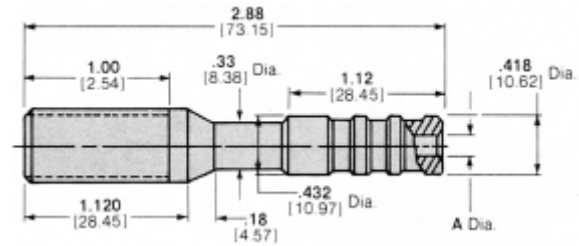
* Contact included with kit.

Plug Kits

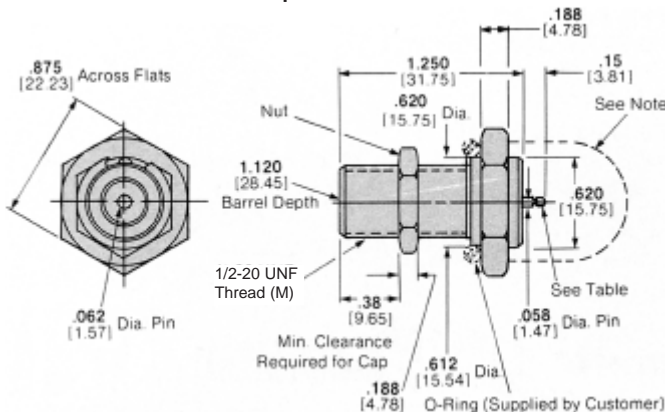


These plugs mate with receptacles shown on this page.

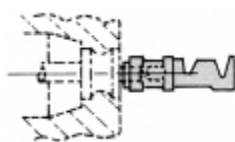
Free-Hanging Receptacle Kits



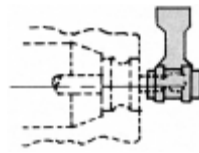
Bulkhead-Mounted Receptacle Kits



Note: If bulkhead and mounting hardware are metal at ground potential, the back end of the receptacle must be protected against arc-over and break-down.

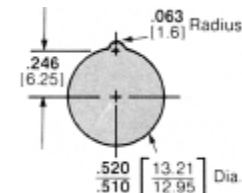
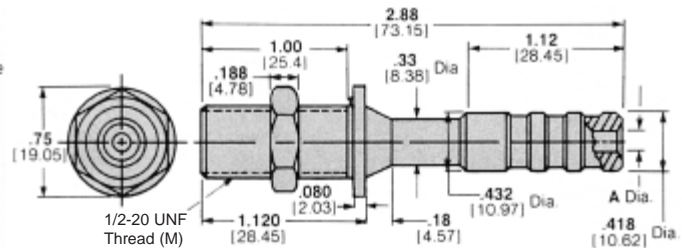


Straight Socket
Part Number 60789-1



Right-Angle Socket
Part Number 61276-2

Bulkhead-Mounted Receptacle Kits With Rear Insulation Collar



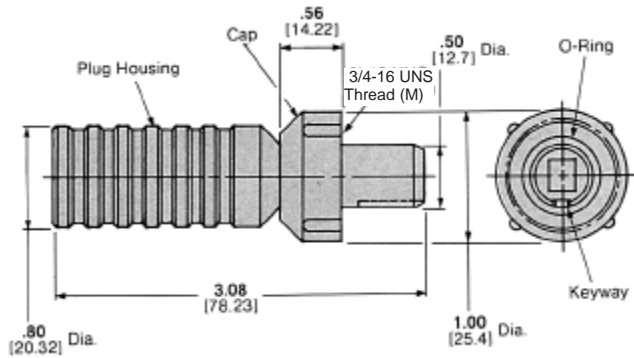
Recommended Panel Cutout for Bulkhead Mounting

Voltage Rating	Description	Wire Size		Max. Ins. Dia.	Contact Part Number	Kit Part Number	RoHS Kit Part Number	Tooling Part Number	
		AWG	mm ²					Hand Tool	Extraction Tool
20 KVDC	Plug Kits*	22-20	0.3-0.6	.185 4.7	66399-1	861610-1	5-861610-1	91523-1	861751-1
		18-16	0.8-1.4		66101-2	861610-3	5-861610-3	91505-1	861751-1
		—	—		none	861610-5	5-861610-5	—	861751-1
		22-20	0.3-0.6	.302 7.67	66399-1	861610-4	5-861610-4	91523-1	861751-1
		18-16	0.8-1.4		66101-2	861610-2	5-861610-2	91505-1	861751-1
		—	—		none	861610-6	—	—	861751-1
	Free-Hanging Receptacle Kits*	22-20	0.3-0.6	.185 4.7	66400-1	861753-1	5-861753-1	91523-1	861751-1
		18-16	0.8-1.4		66099-2	861753-3	—	91505-1	861751-1
		22-20	0.3-0.6	.302 7.67	66400-1	861753-4	5-861753-4	91523-1	861751-1
		18-16	0.8-1.4		66099-2	861753-2	5-861753-2	91505-1	861751-1
	Bulkhead-Mounted Receptacle Kits*	—	—	—	60789-1 (Straight)**	861611-2	—	91507-1	—
		—	—	—	61276-2 (Right-Angle)**	861611-3	—	91507-1	—
	Bulkhead-Mounted Receptacle Kits* (with Rear Insulation Collar)	22-20	0.3-0.6	.185 4.7	66400-1	862197-1	—	91523-1	861751-1
		18-16	0.8-1.4		66099-2	862197-3	—	91505-1	861751-1
		—	—	—	none	862197-5	—	—	861751-1
		22-20	0.3-0.6	.302 7.67	66400-1	862197-4	—	91523-1	861751-1
		18-16	0.8-1.4		66099-2	862197-2	—	91505-1	861751-1
		—	—	—	none	862197-6	—	—	861751-1

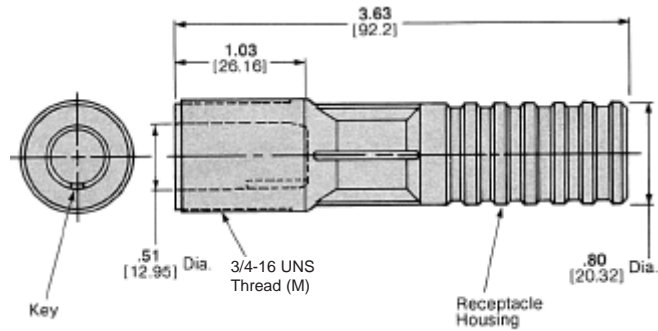
* Contact included with kit.

** Crimp-on Contacts.

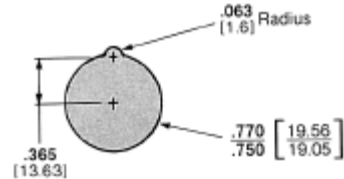
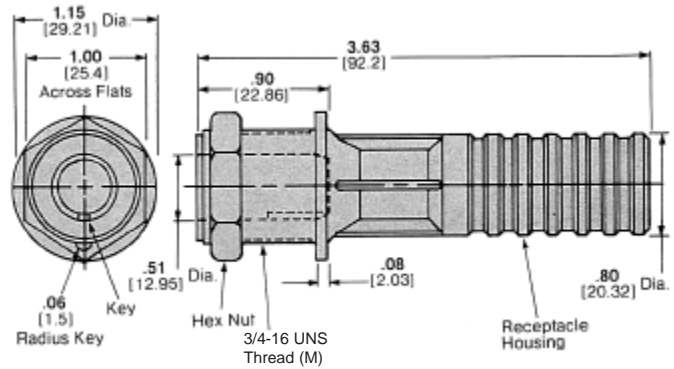
Plug Kits



Free-Hanging Receptacle Kit



Bulkhead-Mounted Receptacle Kits With Rear Insulation Collar



Recommended Panel Cutout for Bulkhead Mounting

Voltage Rating	Description	Wire Size		Max. Ins. Dia.	Contact Part Number		Kit Part Number		Tooling Part Number	
		AWG	mm ²		Non-RoHS	RoHS	Non-RoHS	RoHS	Die Set**	Extraction Tool
30 KVDC	Plug Kits*	10	5-6	.50 12.7	66741-8 (Type XII)	2-66741-1	863103-1	5-863103-1	90140-1	863558-1
		14-12	2-3		66740-8 (Type XII)	2-66740-1	863103-2	5-863103-2	90145-1	863558-1
		16	1.4		66740-8 (Type XII)	2-66740-1	863103-3	5-863103-3	90145-2	863558-1
	Free Hanging Receptacle Kits*	10	5-6	.50 12.7	66259-1 (Type XII)	66259-5	863104-1	5-863104-1	90140-1	863558-1
		16	1.4		66261-1 (Type XII)	—	863104-3	—	90145-2	863558-1
		10	5-6		66259-1 (Type XII)	66259-5	863350-1	5-863350-1	90140-1	863558-1
	Bulkhead-Mounted Receptacle Kits*	14-12	2-3	.50 12.7	66261-1 (Type XII)	66261-5	863350-2	5-863350-2	90145-1	863558-1
		16	1.4		66261-1 (Type XII)	66261-5	863350-3	5-863350-3	90145-2	863558-1

* Contact included with kit.

** Die Set for Hand Tool Part Number 69710-1 or 626 Pneumatic Tool System.