

5-Pin, Metal-Shell Circular Connectors, Military-Type

Product Facts

- Field installable and repairable
- Environmentally sealed
- Bayonet locking cap
- Single dot polarization helps prevent mismatching
- Accepts any MIL-C-38999 backshell arrangement
- Three insert polarizations available
- Rated for 10 KVDC and 10 amps
- Withstands 15 KVDC hipot test
- Safe handling of high voltage — no exposed contacts
- Lightweight, compact design
- Size 16 gold plated contacts with 10 ampere rating accommodates wire range 24-16 AWG [0.2-1.4 mm<sup>2</sup>] and may be hand tool crimped, machine crimped, or soldered
- Can be panel or bulkhead mounted or used in free-hanging applications
- Preassembled connectors furnished with attached leads of virtually any color/length combination
- Removable inserts interchangeable between shell halves
- Positions numbered for easy circuit identification
- Backshell available for bundle shielding
- Operating and storage temperature range: -67°F to +257°F [-55°C to +125°C]

Material and Finish

**Shells** — Aluminum chromate coating over nickel plating

**Inserts** — Glass reinforced polyester  
**Bayonet Coupling Rings** — Glass reinforced polyester

**O Ring Seals** — Silicone rubber

**Pin and Socket Contacts** — Brass; .00050 [0.013] min. gold plated per MIL-G-45204

**Backshell** — Brass; plated chromate over nickel



AMP 5-Pin Metal Shell Connectors are designed for high voltage circuits, especially in critical applications and harsh environments, such as shipboard applications. The connector is exceptionally lightweight and compact and can be used within a temperature range of -67°F to +257°F [-55°C to +125°C].

The connector incorporates many features for electrical, mechanical and environ-

mental integrity. Such features include: flame retardant, glass-filled thermoplastic polyester inserts; two sets of gold plated size 16 contacts which have a 10 ampere rating and will accommodate a wire size range of 24-16 AWG [0.2-1.4mm<sup>2</sup>]; three insert polarizations; full protection of pins and sockets to permit safer high voltage handling; and resilient seals inside each pin shroud which provide positive sealing for the mated connector.

Tyco Electronics supplies the connector either pre-assembled or in kit form. Each conveniently packaged kit includes an appropriate number of pins and sockets that can be hand tool crimped, machine crimped or soldered to wire. Pre-assembled connectors can be furnished with leads of virtually any length. All are tested for highest quality and meets applicable performance specifications.

Kits

Description	Part Numbers			
	Kit with Contacts for 16 AWG [1.25-1.4 mm <sup>2</sup> ]		Kit with Contacts for 20 AWG [0.5-0.6 mm <sup>2</sup> ]	
	Non-RoHS	RoHS	Non-RoHS	RoHS
Receptacle, Flange-Mount with Socket Contacts	863754-1	5-863754-1	864062-1	5-864062-1
Plug with Pin Contacts	863753-1	—	864063-1	5-864063-1
Receptacle, Flange-Mount with Pin Contacts	863755-1	5-863755-1	864064-1	—
Plug with Socket Contacts	863752-1	5-863752-1	864065-1	—

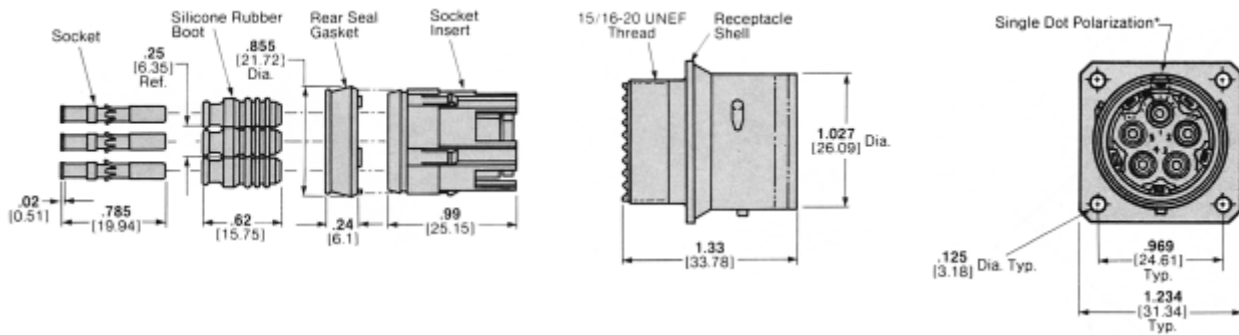
**Note:** Backshell is not included with any kits; any MIL-C-38999 backshell may be used or AMP Part Number 864639-2.

Tooling

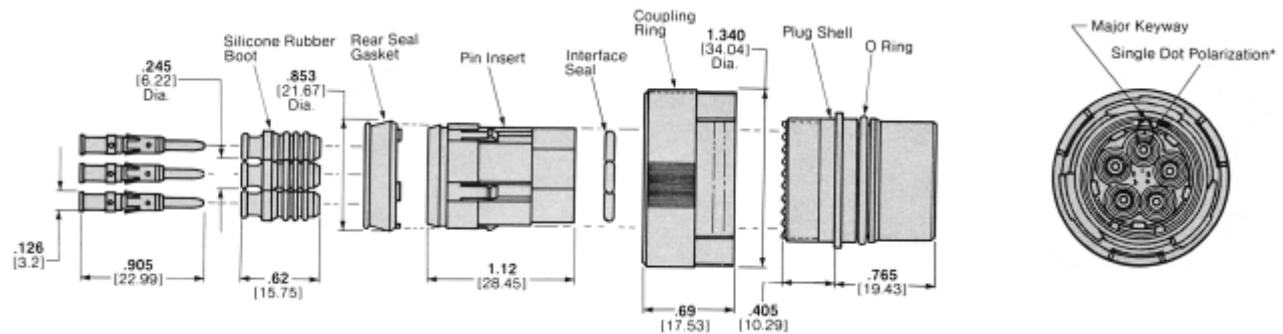
Tool Application	Manufacturer's Name	Part Numbers
Insert Removal	AMP	864437-1
Contact Removal	AMP	305183
Crimp Tool Contact Positioner	Daniels	TP-581
Crimp Tool	Daniels	M22520/1-01
Instruction Sheet	AMP	864886

For more information on 5-Pin Metal Shell Circular Connector to meet your specific requirements, consult Tyco Electronics.

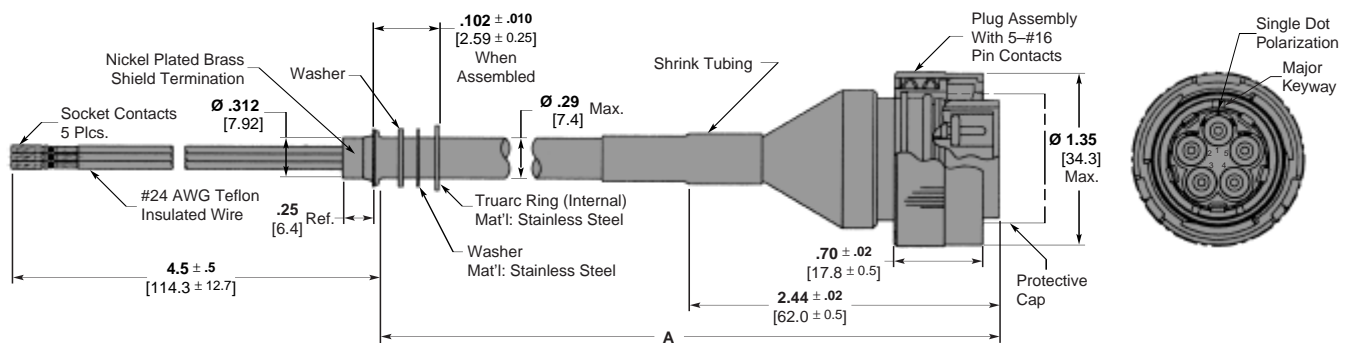
Receptacle



Plug



Shielded Cable Assembly



Dim. A	Part Number	Contact No.	Wire Color
$12.60 \pm .25$ 320.0 $\pm$ 6.4	864019-1	1	Yellow
$50.00 \pm 3.00$ $1270.0 \pm 76.2$ $- 0.00$ $- 0.0$	864019-2	2	Black
$17.50 \pm .50$ 444.5 $\pm$ 12.7	864019-3	3	Yellow
		4	Brown
		5	Red