



## DATA SHEET

# Single Pole High Power Connector

## RHINO 38999

**Amphenol Ltd combines the benefits of field proven Mil-DTL-38999 Series III circular connectors with hyperbolic contacts that extend the boundaries of high power connector technology. Designed to meet the latest military and industrial specifications, Rhino 38999 connectors also meet stringent safety requirements.**

As one of the foremost manufacturers of both connectors and interconnect systems specifically for applications within military, aerospace and industrial markets, Amphenol has recognised a distinct trend towards increased power and voltage requirements within such applications as military and electric drive vehicles, aircraft and intelligence bases stations.

The use of RADSOK contacts creates an electrical interface that exceeds typical interconnect requirements via a hyperbolic socket contact construction which distributes normal forces over a high percentage of the mating surface to ensure a smooth and even engagement force with exceptionally high performance under vibration. The large surface area of the socket contact also results in a very low contact resistance enabling much higher current ratings compared to other power contact designs.

High reliability applications including vehicular, aerospace, industrial, automation, mining, offshore and other harsh environments can all be addressed using the Rhino 38999 Series.

### Key Features

- **Technology** Current Rating up to 1000A , Operating Voltage up to 630V
- **Mechanical** 38999 Series III or Bulldog breakaway connector interface, jam-nut, flange mount and inline connections, 500+ mating cycle durability
- **Termination** Crimp, screw or flathead contact termination available. Straight or right angled backshells available for strain relief and 360° EMC/RFI screening
- **Safety** IP2X, plastic cap on pin contact to prevent shock
- **Environmental** Aluminium, Stainless Steel or Aluminium Bronze shells. Temperature range -55°C to +125°C, IP68 sealing, plating dependant, 500 Hrs Salt Spray.
- **RoHS Compliant** Zinc Cobalt and Zinc Nickel plating finishes available

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The Rhino 38999 Series provides IP2X finger protection on both plugs and receptacles. Flange Mount, Jam nut or Inline connections are offered with single pole high reliability, low contact resistance RADSOK contacts and durability up to 500 mating cycles.

Available in a variety of shell materials including aluminium, stainless steel and aluminium bronze, the connectors can be provided in standard 38999 Series III shells or the new Bulldog breakaway connector style. Overmoulded cable harnesses are also available.

## Ordering Information

eg. WPTV-06ZN21-340-#PNX(XXXX)

| Series | Style           | Plating                | Shell Size and Amp rating | # = Contact Termination            | Contact Type | Key Way | Accessory Style               |
|--------|-----------------|------------------------|---------------------------|------------------------------------|--------------|---------|-------------------------------|
| WPTV   | 00 = Wall Mount | ZN = Black Zinc Nickel | 13-85                     | 1 = Crimp                          | P = Pin      | N       | A = Locking ring only         |
|        |                 | RW = Cadmium           | 15-120                    | 2 = Threaded Post                  | S = Socket   | A       | B = Straight EMC backshell    |
|        | 06 = Plug       | RF = Nickel            | 17-185                    | 3 = Flat tail with cross hole      |              | B       | C = Right angle EMC backshell |
|        |                 | SS = Stainless Steel   | 21-340                    | 5 = Tapped hole with locking flats |              | C       |                               |
|        | 07 = Jam Nut    | RB = Aluminium Bronze  | 23-500                    | 6 = Reduced crimp                  |              | D       |                               |
|        |                 |                        | 25-1000                   | 7 = Extra reduced crimp            |              | E       |                               |
|        |                 |                        |                           | 8 = Further reduced crimp          |              |         |                               |
|        |                 |                        |                           |                                    |              |         |                               |

(XXXX) = Deviation code if applicable

(W586) = Low profile

## Typical Applications

- Harsh environment vehicles
- Hybrid and electric drive vehicles
- Military aircraft
- Naval systems
- C4I base stations
- Power distribution modules
- Communication towers
- Satellite communications
- Mass transit