

# RJ45 IP6X Rectangular Push–Pull Connectors and Cables, NDH Series

## SEALED RJ45 LATCHING INTERFACE FOR RUGGED APPLICATIONS

The RJ45 IP6X Rectangular Push–Pull connector and cable solution provides Cat5E Ethernet connectivity using the IEC 60603–7 mating interface, and full sealing to IP65, IP66 and IP67 specifications. Intended for use in industrial Ethernet applications requiring additional environmental protection, it is suitable for any indoor and outdoor rugged/harsh environments.

- Weather proof – IP6X, UV resistant
- Push–Pull positive locking latch
- Small, lightweight, ergonomic form factor
- Field terminable IDC plugs provide installation flexibility
- Field terminable plug kits or premade cable assemblies



### TARGET MARKETS



### FEATURES

- IEC 60603–7 mating interface
- IP6X sealing
- 2 Stage locking latch
- Robust, ergonomic design
- Small, lightweight form factor
- Mates to IP20 receptacle
- Cable termination

### BENEFITS

- Meets all performance parameters of standard RJ45 interconnect
- Protects the mated interface and equipment from dust and water ingress
- Lock engages to prevent unlatching providing extra security
- Impact and vibration resistant; easy to operate
- Minimal space required in both vertical and horizontal directions; easy to install and use and does not add excess weight to equipment
- Easy integration for designers
- Field installable or factory certified cable assembly

## TECHNICAL INFORMATION

### MATERIAL

- Contacts: Brass alloy plated with Gold over Nickel (mating area)
- Housings, Covers, Inserts: High Temperature resistant thermoplastic
- Wire: 24, 26 and 28AWG Copper, metal braid/shield, PVC insulation
- Gasket and Grommet: Silicone, Rubber

### MECHANICAL PERFORMANCE

- Insertion/Withdrawal Force: 30N max., per EIA 364–13B
- Mechanical Shock: 300m/s<sup>2</sup> half-sine shock pulses, 11ms, per IEC 60512–6–3, Test 6c
- Vibration Random: 11.95 g's, PSD 0.1g<sup>2</sup>/Hz, per EIA–36428/6d, Condition V, Letter D
- Mating Cycles: 100 cycles, per EIA 364–2, test 6d

### ELECTRICAL PERFORMANCE

- Current Rating: 1.5A
- Insulation Resistance: 500MΩ min.
- Dielectric Withstanding Voltage: 1000V AC

### PACKAGING

- Tray & Bulk pack (Plug Connector Kit Components)
- Carton (Cables)
- Tape & Reel (SMT Receptacles)
- Bulk Pack (Bulkhead)

### SPECIFICATIONS

- Amphenol Specification: : S6218C

### ENVIRONMENTAL

- Operating Temperature Range: –40°C to +85°C
- Thermal Shock: 10 cycles between –55° and +85°C, per IEC 60512–11–4, Test 11d
- Humidity: 10 cycles, 24hrs/cycle @ 93% humidity, low temperature +25°C, high temperature +65°C, cold sub-cycle –10°C, per IEC 60068–2–38, Test Z/AD

### APPROVALS AND CERTIFICATIONS

- RoHS per EU Directive 2011/65/EU and Amendments

### TARGET MARKETS/APPLICATIONS



Traffic Control  
Monitoring Systems



Mobile Communication Systems



Industrial Internet of Things (IoT)  
Machine to Machine (M2M)  
Robotics  
Transportation  
Sensors, Actuators & Network Nodes  
Test Equipment  
Building Automation



Healthcare/Medical Equipment

## PART NUMBERS

Description	Part Numbers
RJ45 Ethernet Connector, 8 contact, shielded, tab down	RJULE–4X183–01
RJ45 IP6X Rectangular Push–Pull Ethernet Plug Kit	NDH–R100
RJ45 IP6X Rectangular Push–Pull Ethernet Hood & Pigtail Cable Assembly	NDH–R4AX–AXXA
RJ45 IP6X Rectangular Push–Pull Ethernet Bulkhead, Hood & Pigtail Cable Assembly	NDH–R5AX–AXXA
RJ45 IP6X Rectangular Push–Pull Ethernet Hood	NDH–R3AX
RJ45 IP6X Rectangular Push–Pull Ethernet Bulkhead, Hood	NDH–R6AX
RJ45 IP6X Rectangular Push–Pull Ethernet Bulkhead	NDH–N200