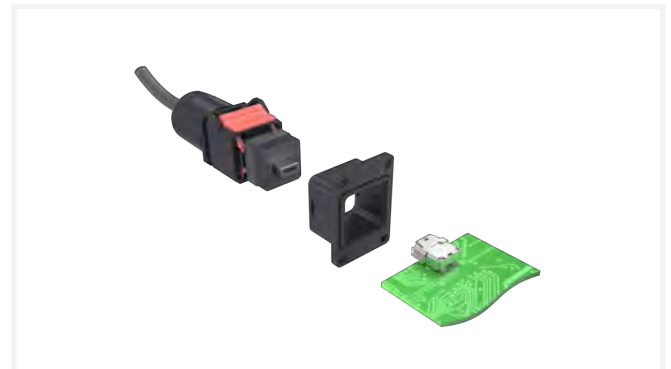


# *ix Industrial*<sup>™</sup> IP6X Rectangular Push–Pull Connectors and Cables, NDH Series

## SEALED *IX INDUSTRIAL*<sup>™</sup> LATCHING INTERFACE FOR RUGGED APPLICATIONS

The *ix Industrial*<sup>™</sup> IP6X Rectangular Push–Pull connector and cable solution provides Cat6A Ethernet connectivity using the IEC 61076–3–124 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 plug kits or pre–made cable assemblies
- Mates with standard IP20 *ix Industrial*<sup>™</sup> receptacles



### TARGET MARKETS



### FEATURES

- IEC 61076–3–124 mating interface
- IP6X sealed
- 2 Stage locking latch
- Robust, ergonomic design
- Small, lightweight form factor
- Mates to IP20 receptacle
- Cable termination

### BENEFITS

- Meets all performance parameters of standard *ix Industrial* interconnect
- Protects the mated interface and equipment from dust and water ingress
- Lock engages to prevent unlatching for 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: Copper alloy plated with gold or palladium nickel with gold flash over nickel (mating area)
- Housings, Covers, Inserts: High temperature resistant thermoplastic, UL94V-0
- EMI Shields: Stainless steel, matte tin or nickel plated
- Wire: 24, 26 and 28 AWG copper, metal braid / shield, PVC insulation
- Gasket and Grommet: Silicone, rubber

### MECHANICAL PERFORMANCE

- Insertion / Withdrawal Force: 25N max., per EIA 364-13B
- Mechanical Shock: 300m/s<sup>2</sup> half-sine shock pulses, 11ms, per IEC 60512-6-3, Test 6c 50G max., per TP9240888; Half sine shock 5g, 30ms, per DIN EN 61373 Class 1, Cat b
- Vibration, Sinusoidal: 10Hz – 500Hz, 0.35mm, 50m/s<sup>2</sup>, per IEC 60512-6-4, Test 6d Automotive Std per TP240862
- Vibration, Random: 5.72m/s<sup>2</sup>; No contact disturbances  $\geq 1\mu\text{s}$  per DIN EN 61373 Class 1, Cat b
- Mating Cycles: 250 cycles, per EIA 364-09C

### ELECTRICAL PERFORMANCE

- Current Rating: 1.5A @ 40°C (per IEC 60512-5-2, Test 5b)
- Voltage Rating: 50V AC max., 60V DC max.
- Initial Contact Resistance: 30m $\Omega$  max. (per IEC 60512-2-1, Test 2a)
- Shielding Resistance: 100m $\Omega$  max. (per IEC 60512-2-1, Test 2a)
- Insulation Resistance: 500M $\Omega$  min. @ 500V DC (per IEC 60512-3-1, Test 3a)
- Dielectric Withstanding Voltage: 500V DC (per IEC 60512-4-1, Test 4a, Method A)

### PACKAGING

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

### SPECIFICATIONS

- IEC-61076-3-124
- Amphenol Specification: S6212C

### ENVIRONMENTAL

- Operating Temperature Range: -55°C to +105°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
- UL E64911

### TOOLING INFORMATION

- P-ND9-AHT1-01: IX INDUSTRIAL™ HAND CRIMP TOOL FOR PLUG CONNECTORS

### TARGET MARKETS/APPLICATIONS



Traffic Control  
Monitoring Systems



Mobile Communication Systems



Industrial Internet of Things  
Machine to Machine  
Robotics  
Sensors, Actuators & Network Nodes  
Test Equipment  
Building Automation



Healthcare

## PART NUMBERS

Description	Part Numbers
<i>IX INDUSTRIAL™</i> ETHERNET RECEPTACLE, TYPE-A VERTICAL	ND9-AS2X-00
<i>IX INDUSTRIAL™</i> ETHERNET RECEPTACLE, TYPE-A RIGHT ANGLE HORIZONTAL-STYLE	ND9-AS3X-00
<i>IX INDUSTRIAL™</i> ETHERNET RECEPTACLE, TYPE-B VERTICAL	ND9-BS2X-00
<i>IX INDUSTRIAL™</i> ETHERNET RECEPTACLE, TYPE-B RIGHT ANGLE HORIZONTAL-STYLE	ND9-BS3X-00
<i>IX INDUSTRIAL™</i> ETHERNET BULKHEAD	NDH-N200
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-A, 22-28 AWG SOLDER PAD TERMINATION	NDH-N3AX
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-B, 22-28 AWG SOLDER PAD TERMINATION	NDH-N3BX
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-A, 24-25 AWG IDC TERMINATION	NDH-N3DX
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-A, 26-28 AWG IDC TERMINATION	NDH-N3GX
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-B, 24-25 AWG IDC TERMINATION	NDH-N3EX
<i>IX INDUSTRIAL™</i> ETHERNET, HOOD AND PLUG KIT, TYPE-B, 26-28 AWG IDC TERMINATION	NDH-N3HX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-A, 22-28 AWG SOLDER PAD TERMINATION	NDH-N6AX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-B, 22-28 AWG SOLDER PAD TERMINATION	NDH-N6BX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-A, 24-25 AWG IDC TERMINATION	NDH-N6DX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-A, 26-28 AWG IDC TERMINATION	NDH-N6GX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-B, 24-25 AWG IDC TERMINATION	NDH-N6EX
<i>IX INDUSTRIAL™</i> ETHERNET, BULKHEAD, HOOD AND PLUG KIT, TYPE-B, 26-28 AWG IDC TERMINATION	NDH-N6HX