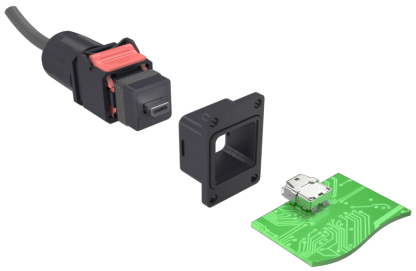
ix Industrial™ IP6X Rectangular Push–Pull Connectors and Cables, NDH Series

SEALED *IX INDUSTRIAL*™ LATCHING INTERFACE FOR RUGGED APPLICATIONS

The *ix Industrial*™ 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*™ receptacles



TARGET MARKETS



FEATURES	BENEFITS
▪ IEC 61076–3–124 mating interface	▪ Meets all performance parameters of standard *ix Industrial* interconnect
▪ IP6X sealed	▪ Protects the mated interface and equipment from dust and water ingress
▪ 2 Stage locking latch	▪ Lock engages to prevent unlatching for extra security
▪ Robust, ergonomic design	▪ Impact and vibration resistant; easy to operate
▪ Small, lightweight form factor	▪ Minimal space required in both vertical and horizontal directions; easy to install and use and does not add excess weight to equipment
▪ Mates to IP20 receptacle	▪ Easy integration for designers
▪ Cable termination	▪ 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, UL 94 V–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: 25 N max., per EIA 364–13B
- Mechanical Shock: 300 m/s2 half–sine shock pulses, 11ms, per IEC 60512–6–3, Test 6c 50G max., per TP9240888; Half sine shock 5g, 30 ms, per DIN EN 61373 Class 1, Cat b
- Vibration, Sinusoidal: 10 Hz – 500 Hz, 0.35 mm, 50 m/s2, per IEC 60512–6–4, Test 6d Automotive Std per TP240862
- Vibration, Random: 5.72 m/s2; No contact disturbances ≥ 1µs per DIN EN 61373 Class 1, Cat b
- Mating Cycles1: 250 cycles, per EIA 364–09C

ELECTRICAL PERFORMANCE

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

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBERS

Description	Part Numbers
ix Industrial™ ethernet receptacle, Type–A vertical	ND9–AS2X–00
ix Industrial™ ethernet receptacle, Type–A right angle horizontal–style	ND9–AS3X–00
ix Industrial™ ethernet receptacle, Type–B vertical	ND9–BS2X–00
ix Industrial™ ethernet receptacle, Type–B right angle horizontal–style	ND9–BS3X–00
ix Industrial™ ethernet verio™, RJ45 IP67 dust cover	NDH–D200
ix Industrial™ ethernet bulkhead	NDH–N200
ix Industrial™ ethernet, Hood and plug kit, Type–A, 22–28 AWG solder pad termination	NDH–N3AX
ix Industrial™ ethernet, Hood and plug kit, Type–B, 22–28 AWG solder pad termination	NDH–N3BX
ix Industrial™ ethernet, Hood and plug kit, Type–A, 24–25 AWG IDC termination	NDH–N3DX
ix Industrial™ ethernet, Hood and plug kit, Type–A, 26–28 AWG IDC termination	NDH–N3GX
ix Industrial™ ethernet, Hood and plug kit, Type–B, 24–25 AWG IDC termination	NDH–N3EX
ix Industrial™ ethernet, Hood and plug kit, Type–B, 26–28 AWG IDC termination	NDH–N3HX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–A, 22–28 AWG solder pad termination	NDH–N6AX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–B, 22–28 AWG solder pad termination	NDH–N6BX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–A, 24–25 AWG IDC termination	NDH–N6DX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–A, 26–28 AWG IDC termination	NDH–N6GX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–B, 24–25 AWG IDC termination	NDH–N6EX
ix Industrial™ ethernet, Bulkhead, hood and plug kit, Type–B, 26–28 AWG IDC termination	NDH–N6HX

WHERE INNOVATION CONNECTS
Scan to learn more ▶

CMIOIP6XRECPP0226EA4

Disclaimer
Please note that the above information is subject to change without notice.