

ix Industrial 8A-1 plug A3-I22



Image is for illustration purposes only. Please refer to product description.

| | |
|--------------------|---|
| Part number | 09 45 181 2588 XL |
| Specification | ix Industrial 8A-1 plug A3-I22 |
| HARTING eCatalogue | https://b2b.harting.com/09451812588XL |

Identification

| | |
|----------------|------------------------|
| Category | Connectors |
| Series | HARTING ix Industrial® |
| Identification | Data |
| Element | Cable connector |
| Specification | Angled top |

Version

| | |
|--------------------|--|
| Termination method | IDC termination |
| Shielding | Fully shielded, 360° shielding contact |
| Number of contacts | 8 |
| Coding | Type A |
| Pack contents | Bulk packaging |

Technical characteristics

| | |
|------------------------------|--|
| Conductor cross-section | AWG 22/7 |
| Wire outer diameter | 1.4 ... 1.6 mm |
| Rated current | 1.5 A |
| Rated current | 3 A when used with 4 contacts (1,2,6,7) |
| Rated voltage | 50 V AC 60 V DC |
| Transmission characteristics | Cat. 6 _A Class E _A up to 500 MHz |



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Technical characteristics

| | |
|--|---|
| Data rate | 10 Mbit/s |
| | 100 Mbit/s |
| | 1 Gbit/s |
| | 2.5 Gbit/s |
| | 5 Gbit/s |
| | 10 Gbit/s |
| Insulation resistance | >500 MΩ |
| Contact resistance | ≤30 mΩ |
| Shielding resistance | ≤100 mΩ |
| Limiting temperature | -40 ... +85 °C |
| Storage temperature | -30 ... +60 °C |
| Relative humidity | 95 % Non-condensing (operation) |
| | 95 % Non-condensing (storage/transport) |
| Insertion force | ≤25 N |
| Withdrawal force | ≤25 N |
| Mating cycles | ≥5,000 |
| Degree of protection acc. to IEC 60529 | IP20 |
| Cable diameter | 5.5 ... 7.2 mm |
| Test voltage $U_{r.m.s.}$ | 0.5 kV |
| Retention force | ≥80 N locking |

Material properties

| | |
|---|--|
| Material (insert) | Polyamide (PA) |
| Colour (insert) | Black |
| | Grey |
| Material (shielding) | Stainless steel |
| | Ni ≥ 1 µm Termination side (shielding case) |
| | Ni ≥ 0.2 µm Termination side (shielding shell) |
| Material (contacts) | Copper alloy |
| Surface (contacts) | Au ≥ 0.2 µm over Ni ≥ 2 µm Mating side |
| | Au ≥ 0.03 µm over Ni ≥ 2 µm Termination side |
| Material (hood/housing) | Polycarbonate (PC) |
| Colour (hood/housing) | Grey |
| Material flammability class acc. to UL 94 | V-0 |
| RoHS | compliant |
| ELV status | compliant |
| China RoHS | e |



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Material properties

| | |
|--------------------------------------|----------------|
| REACH Annex XVII substances | Not contained |
| REACH ANNEX XIV substances | Not contained |
| REACH SVHC substances | Not contained |
| California Proposition 65 substances | Yes |
| California Proposition 65 substances | Lead Nickel |

Specifications and approvals

| | |
|----------------|--|
| Specifications | IEC 61076-3-124 |
| | EN 45545-2 |
| | IEEE 802.3af Power over Ethernet (PoE) |
| | IEEE 802.3at Power over Ethernet (PoE+) |
| | IEEE 802.3bt Power over Ethernet (4PPoE) |
| UL / CSA | UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079 |
| PROFINET | Yes |

Commercial data

| | |
|--------------------------------|---|
| Packaging size | 100 |
| Net weight | 11 g |
| Country of origin | Japan |
| European customs tariff number | 85366990 |
| GTIN | 5713140282803 |
| ETIM | EC002636 |
| eCl@ss | 27440114 Rectangular connector (for field assembly) |

Contact configuration



| ix Industrial | 10/100 Mbit/s | 1/10 Gbit/s | TIA | | PROFINET |
|---------------|---------------|-------------|--------------|--------------|----------|
| | | | 568 A | 568 B | |
| 1 | TX+ | BI_DA+ | White/Green | White/Orange | Yellow |
| 2 | TX- | BI_DA- | Green | Orange | Orange |
| 3 | N.C | N.C | N.C | N.C | N.C |
| 4 | N.C | BI_DC+ | Blue | Blue | N.C |
| 5 | N.C | BI_DC- | White/Blue | White/Blue | N.C |
| 6 | RX+ | BI_DB+ | White/Orange | White/Green | White |
| 7 | RX- | BI_DB- | Orange | Green | Blue |
| 8 | N.C | N.C | N.C | N.C | N.C |
| 9 | N.C | BI_DD+ | White/Brown | White/Brown | N.C |
| 10 | N.C | BI_DD- | Brown | Brown | N.C |



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Environmental specifications

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| Rapid change of temperature (IEC 60512-11d) | 10 cycles between -55°C and 85°C with 30 minutes dwell at temp. extremes and 2 to 3 minutes transition between temperatures |
| Dry heat (IEC 60512-11i) | +85°C, 500 h |
| Damp heat cycles (IEC 60068-2-38) | 25°C to 65°C; cold sub-cycle: -10°C; relative humidity 93%; 10 cycles, 1 cycle/24h |
| Cold (IEC 60512-11j) | -55°C, 240h |
| Flow mixed gas test (IEC 60068-2-60) | 4 d, Method 4 (mated and unmated) |
| Corrosion salt mist | Exposed at 5% salt water, 35°C, 48h (unmated); no heavy corrosion of contacts |
| Vibration, sinusoidal (IEC 60512-test 6d) | 10 to 500 Hz; 0.35 mm, 50 m/s ² , 2h / 3 axis; no contact disturbances ≥ 1µs |
| Mechanical shock (IEC 60512-test 6d) | half-sine shock 300 m/s ² , 11 ms 3 shocks / both directions / 3 axis - totally 18 shocks no contact disturbances ≥ 1µs |
| Fretting Corrosion | 490 m/s ² , 30 times/min at 1000 times no contact disturbances ≥ 1µs |