

# ix Industrial 10A-1 plug A1-I26



Part number	09 45 181 2581 XL
Specification	ix Industrial 10A-1 plug A1-I26
HARTING eCatalogue	https://b2b.harting.com/09451812581XL

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

### Identification

Category	Connectors
Series	HARTING ix Industrial <sup>®</sup>
Identification	Data
Element	Cable connector
Specification	Angled bottom

### Version

Termination method	IDC termination
Shielding	Fully shielded, 360° shielding contact
Number of contacts	8
further contacts	+ 2x GND
Coding	Type A
Pack contents	Bulk packaging

### Technical characteristics

Conductor cross-section	AWG 28/7 AWG 26/7
Wire outer diameter	0.95 1.05 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 <sub>A</sub> Class E <sub>A</sub> up to 500 MHz



### 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 <sub>r.m.s.</sub>	0.5 kV
Retention force	≥80 N locking

# Material properties

Material (insert)	Polyamide (PA)
Colour (insert)	Black
Material (contacts)	Copper alloy
Surface (contacts)	Au over Ni Mating side (≥ 0.2 µm)  Au over Ni Termination side (≥ 0.03 µm)  Ni Termination side (shielding case ≥ 1 µm)  Ni Termination side (shielding shell ≥ 0.2 µm)
Material flammability class acc. to UL 94	V-0
RoHS	compliant
ELV status	compliant
China RoHS	е
REACH Annex XVII substances	Not contained
REACH ANNEX XIV substances	Not contained
REACH SVHC substances	Not contained
California Proposition 65 substances	Yes



# Material properties

California Proposition 65 substances	Lead
	Nickel

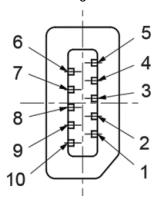
## Specifications and approvals

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	5.03 g
Country of origin	Japan
European customs tariff number	85366990
GTIN	5713140223233
eCl@ss	27440114 Rectangular connector (for field assembly)

## Contact configuration





	1/10	TIA		DOOGINGT	
	Gbit/s	568 A	568 B	PROFINET	
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

Environmental Specifications	
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 3minutes 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/s², 2h / 3 axis; no contact disturbances ≥ 1µs
Mechanical shock (IEC 60512-test 6d)	half-sine shock 300 m/s <sup>2</sup> , 11 ms 3 shocks / both directions / 3 axis - totally 18 shocks no contact disturbances $\geq$ 1 $\mu$ s
Fretting Corrosion	490 m/s², 230 times/min at 1000 times no contact disturbances ≥ 1μs