chanhvinh.com

Product data sheet
09 45 181 9020 XL
ix Industrial 10B-1 plug A1-S

Pushing Performance
Since 1945

ix Industrial 10B-1 plug A1-S



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

Part number	09 45 181 9020 XL
Specification	ix Industrial 10B-1 plug A1-S
HARTING eCatalogue	https://b2b.harting.com/09451819020XL

Identification

Category	Connectors
Series	HARTING ix Industrial®
Identification	Signal
Element	Cable connector
Specification	Angled bottom

Version

Termination method	Solder termination
Shielding	Fully shielded, 360° shielding contact
Number of contacts	10
Coding	Type B
Pack contents	Bulk packaging

Technical characteristics

Conductor cross-section	AWG 28/7 ... AWG 22/7
Wire outer diameter	≤1.55 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
Insulation resistance	>500 MΩ
Contact resistance	≤30 mΩ
Shielding resistance	≤100 mΩ

chanhvinh.com

Product data sheet
09 45 181 9020 XL
ix Industrial 10B-1 plug A1-S

HARTING
Pushing Performance
Since 1945

Technical characteristics

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
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	e
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)

chanhvinh.com

Product data sheet
09 45 181 9020 XL
ix Industrial 10B-1 plug A1-S

Pushing Performance
Since 1945

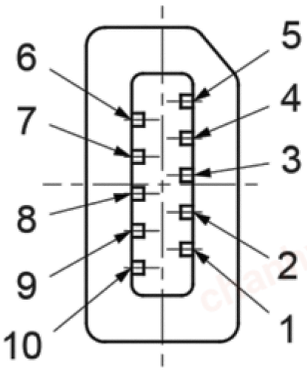
Specifications and approvals

UL / CSA	UL 1977 ECBT2.E102079 CSA-C22.2 No. 182.3 ECBT8.E102079

Commercial data

Packaging size	100
Net weight	4.88 g
Country of origin	Japan
European customs tariff number	85366990
GTIN	5713140223325
eCl@ss	27440114 Rectangular connector (for field assembly)

Contact configuration



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/s², 11 ms 3 shocks / both directions / 3 axis - totally 18 shocks no contact disturbances ≥ 1µs
Fretting Corrosion	490 m/s², 230 times/min at 1000 times no contact disturbances ≥ 1µs