














Aug.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
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APPLICABLE STANDARD		IEC 61076-3-124. Transmission performance is refer to IEC 11801-1 Class EA. 			
RATING	Operating Temperature Range	-40°C to +85°C(95%RH max)(note1,2)	Storage Temperature Range	-30°C to +60°C(95%RH max) (note1)	
	Voltage	50 V AC / 60 V DC	Current	1.5 A/pin (all pin) 3 A/pin (pin No.1,2,6,7)	
SPECIFICATIONS					
ITEM	TEST METHOD		REQUIREMENTS	QT	AT
CONSTRUCTION					
General Examination	Examined visually and with a measuring instrument.		According to drawing.	X	X
Marking	Confirmed visually.		According to drawing.	X	X
ELECTRIC CHARACTERISTICS					
Contact Resistance	Measured at 100 mA max (DC or 1000 Hz).		Contact : 30 mΩ max. (note3) Shield : 100 mΩ max. (note3)	X	—
Insulation Resistance	Measured at 500 V DC.		500 MΩ min.	X	—
Voltage Proof	500 V DC applied for 1 min. Current leakage 2mA max.		No breakdown. 	X	—
MECHANICAL CHARACTERISTICS					
Insertion and Withdrawal Forces	A maximum rate of 50 mm/min. Measured by applicable connector.		Insertion force 25 N max. Withdrawal force 25 N max.	X	—
Mechanical Operation	5000 times insertions and extractions. Mating speed : 10 mm/s max. Rest : 5s, min.(unmated)		1) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 2) No damage, cracks or looseness of parts.	X	—
Note					
1. Non-condensing. 2. The operation temperature includes the temperature rise by current carrying 3. The cable conductor resistance is not considered. 4. Electrical characteristics are applicable to the contacts and shield except for contacts No. 3 and 8.					
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	7	DIS-E-00011749	HY.MATSUDA	KI.KAGOTANI	20221201
REMARK			APPROVED	MN.KENJO	20210817
			CHECKED	KI.KAGOTANI	20210817
			DESIGNED	TS.ITO	20210812
			DRAWN	TS.ITO	20210812
Unless otherwise specified, refer to IEC 60512.					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-395607-00-00	
	SPECIFICATION SHEET		PART NO.	IX40G-A-10P-JC(7.0)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0251-0109-0-00	 1/3

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SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
Vibration ,sinusoidal	Frequency 10 to 500 Hz 0.35 mm, 50 m/s ² 2hrs in each of 3 mutually perpendicular axis.	1) No electrical discontinuity of 1μs. (note4) 2) No damage, cracks or looseness of parts.	X	—	
Fretting Corrosion	490 m/s ² , 30 times/min at 1000 times.	1) No electrical discontinuity of 1μs. (note4) 2) No damage, cracks or looseness of parts.	X	—	
Mechanical Shock	Subject mated specimens to 300 m/s ² half-sine shock pulses of 11 milliseconds duration, 3 shocks in both directions of 3 mutually perpendicular directions (totally 18 shocks)	1) No electrical discontinuity of 1μs. (note4) 2) Resistance: Contact : 80 mΩ max. (note4) Shield : 100 mΩ max. (note4) 3) No damage, cracks or looseness of parts.	X	—	
Effectiveness of the connector coupling device	Applying 80 N force for the mating axis direction in state in fitted with applicable connector for 60 s.	No unlocking, damage, cracks or looseness of parts.	X	—	
Locking device mechanical operations	10000 cycles 20 cycles/min max	1) Insertion and Withdrawal Forces Insertion force 25 N max. Withdrawal force 25 N max. 2) No damage, cracks or looseness of parts.	X	—	
ENVIRONMENTAL CHARACTERISTICS					
Rapid Change of Temperature	Subject mated specimens to 10 cycles between -55°C and 85°C with 30 minutes dwell at temp. extremes and 2 to 3 minutes transition between temperatures.	1) Voltage proof : 500 V DC applied for 1 min. Current leakage 2mA max. No breakdown.  2) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 3) Insulation resistance: 500 MΩ min. (at dry) 4) No damage, cracks or looseness of parts.	X	—	
Humidity / Temperature Cycling	Low temperature 25 °C; High temperature 65 °C; Cold sub-cycle - 10 °C; Relative humidity 93 % Duration 10 / each 24 h (IEC 60068-2-38,test Z / AD)	1) Voltage proof : 500 V DC applied for 1 min. Current leakage 2mA max. No breakdown.  2) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 3) Insulation resistance: 500 MΩ min. (at dry) 4) Insertion and Withdrawal Forces Insertion force 25 N max. Withdrawal force 25 N max. 5) No damage, cracks or looseness of parts.	X	—	
Damp Heat, Steady State	Subject mated specimens to a relative humidity of 93 % at a temperature of 40°C during 21 days.	1) Voltage proof : 500 V DC applied for 1 min. Current leakage 2mA max. No breakdown.  2) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 3) Insulation resistance: 500 MΩ min. (at dry) 4) Insertion and Withdrawal Forces Insertion force 25 N max. Withdrawal force 25 N max. 5) No damage, cracks or looseness of parts.	X	—	
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	SPECIFICATION SHEET		PART NO.	IX40G-A-10P-JC(7.0)	
	HIROSE ELECTRIC CO., LTD.		CODE NO	CL0251-0109-0-00	 2/3

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SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
ENVIRONMENTAL CHARACTERISTICS					
Dry Heat	Subject to +85 ± 2 °C, 21 days. (mating applicable connector)	1) Voltage proof : 500 V DC applied for 1 min. Current leakage 2mA max. No breakdown.  2) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 3) Insulation resistance: 500 MΩ min. (at dry) 4) Insertion and Withdrawal Forces Insertion force 25 N max. Withdrawal force 25 N max. 5) No damage, cracks or looseness of parts.	X	—	
Cold	Subject to -55 ± 3 °C, 10 days. (mating applicable connector)	1) Voltage proof : 500 V DC applied for 1 min. Current leakage 2mA max. No breakdown.  2) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 3) Insulation resistance: 500 MΩ min. (at dry) 4) Insertion and Withdrawal Forces Insertion force 25 N max. Withdrawal force 25 N max. 5) No damage, cracks or looseness of parts.	X	—	
Corrosion Salt Mist	Subject to 5 % salt water, 35 ± 2 °C, 48h. (leave under unmated condition.)	No heavy corrosion of contacts.	X	—	
Mixed Flowing Gas Corrosion	Test temperature : +25±1 °C, Relative humidity : 75±3 % H ₂ S : 10±5 ppb, NO ₂ : 200±50 ppb Cl ₂ : 10±5 ppb, SO ₂ : 200±20 ppb Leave the samples for 4 days with mated. The same is performed with unmated samples. (IEC 60512, method 4)	1) Resistance: Contact : 80 mΩ max. (note3) Shield : 100 mΩ max. (note3) 2) No damage, cracks or looseness of parts.	X	—	
Solderability	Temperature +350 ± 10 °C, 3 sec at soldering parts.	1) Wetting on solder surface. 2) No solder cluster.	X	—	
Resistance To Soldering Heat	Temperature +350 ± 10 °C, 5 sec at soldering parts.	No damage, cracks or looseness of parts.	X	—	
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