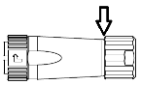
APPLICABLE STANDARD				
Rating	Operating Temperature Range	-25°C to +85°C	Storage Temperature Range	-10°C to +60°C
	Voltage	AC 30 V, DC 42 V	Wire Size	26 to 30 AWG Insulation outside diameter ϕ1 MAX
	Current	2A	Applicable Cable	ϕ8.7±0.2

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
General Examination	Examined visually and with a measuring instrument.	According to the drawing.	X	X
Marking	Confirmed visually.		X	X
ELECTRICAL CHARACTERISTICS				
Contact Resistance	Measured at DC 1A.	30 mΩ MAX.	X	-
Insulation Resistance	Measured at 100 V DC.	1000 MΩ MIN.	X	-
Voltage Proof	300 V AC applied for 1 min.	No flashover or breakdown.	X	-
MECHANICAL CHARACTERISTICS				
Contact Insertion and Extraction Forces	Measured with a ϕ0.53±0.003 steel gauge.	Insertion and extraction forces: 15 N MIN.	–	–
Connector Insertion and Withdrawal Forces	Measured with an applicable connector. (Without lock)	Insertion and withdrawal forces : 50 N MAX.	X	–
Mechanical Operation	Mated and unmated 1000 times.	Contact resistance: 50 mΩ MAX.	X	–
Vibration	Frequency: 10 Hz to 55 to 10 Hz every cycle (5 min per cycle) Single amplitude: 0.75 mm Performed over 10 cycles in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	–
Shock	Acceleration: 490 m/s^2, Half sine wave pulses of 11 ms. Performed 3 times in each of three mutually perpendicular directions.	1) No electrical discontinuity of more than 10 μs. 2) No damage, cracks or looseness of parts.	X	–
Contact Retention Force	Applying a pull force the wire after the applicable crimped contact is assembled the body.	20 N MIN.		–
Breaking Strength	Force is applied to the plug body in up, down, left and right directions while mated. 	No breakage at 100 N.	X	–
ENVIRONMENTAL CHARACTERISTICS				
Damp Heat, Steady State	Subjected to a temperature of +40°C, at a humidity of 90 to 95% for 96 hours.	1) Insulation resistance: 10 MΩ MIN. (At high humidity) 2) Insulation resistance: 100 MΩ MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	–
Rapid Change of Temperature	Temperature: -55 → R/T[(1)] → +85 → R/T °C Time: 30 → 2 to 3 → 30 → 2 to 3 min for 5 cycles.	1) Insulation resistance: 100 MΩ MIN. 2) No damage, cracks or looseness of parts.	X	–
Corrosion Salt Mist	Subjected to 5% salt spray for 48 hours.	No heavy corrosion which impairs functionality. (compatibility)	X	–
Dry Heat	Subjected to +85℃ for 96 hours.	No damage, cracks or looseness of parts.	X	–
Cold	Subjected to -55℃ for 96 hours.	No damage, cracks or looseness of parts.	X	–
Sealing[(2)]	Subjected to a depth of 1.8 m for 48 hours.	No water penetration into the connector.	X	–
Air Tightness[(2)]	17.6 kPa of air pressure applied to the inside of the mated connector for 30 seconds.	No air bubbles emitted from the inside of the connector.	X	–

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
A					

NOTES

(1) R/T : Room Temperature

(2) Sealing and Air Tightness are tested in mated condition with an applicable connector.

Unless otherwise specified, refer to IEC 60512. (JIS C 5402)

APPROVED	TP. KOMATSU	20240111
CHECKED	KI. NAGANUMA	20240111
DESIGNED	YJ. KOGA	20240111
DRAWN	KR. SUZUKI	20240111

Note QT:Qualification Test AT:Assurance Test X:Applicable Test

DRAWING NO. ELC-383070-00-00

HRS	SPECIFICATION SHEET	PART NO.	LF13WBP-20SC		
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL0136-0044-0-00	A	1/1

FORM HD0011-2-1