


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 $\phi$ 1 MAX		
	Current	2A	Applicable Cable	$\phi$ 8.7 $\pm$ 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 m $\Omega$ MAX.	X	-
Insulation Resistance		Measured at 100 V DC.		1000 M $\Omega$ 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 - steel gauge.		Insertion and extraction forces: - 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 m $\Omega$ 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 $\mu$ s. 2) No damage, cracks or looseness of parts.	X	-
Shock		Acceleration: 490 m/s <sup>2</sup> , 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 $\mu$ s. 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 M $\Omega$ MIN. (At high humidity) 2) Insulation resistance: 100 M $\Omega$ MIN. (When dry) 3) No damage, cracks or looseness of parts.	X	-
Rapid Change of Temperature		Temperature: -55 $\rightarrow$ R/T <sup>(1)</sup> $\rightarrow$ +85 $\rightarrow$ R/T °C Time: 30 $\rightarrow$ 2 to 3 $\rightarrow$ 30 $\rightarrow$ 2 to 3 min for 5 cycles.		1) Insulation resistance: 100 M $\Omega$ 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°C for 96 hours.		No damage, cracks or looseness of parts.	X	-
Cold		Subjected to -55°C for 96 hours.		No damage, cracks or looseness of parts.	X	-
Sealing <sup>(2)</sup>		Subjected to a depth of 1.8 m for 48 hours.		No water penetration into the connector.	X	-
Air Tightness <sup>(2)</sup>		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	
0						
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	K.I. NAGANUMA	20240111
				DESIGNED	Y.J. KOGA	20240111
				DRAWN	KR. SUZUKI	20240111
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-380041-00-00	
<b>HRS</b>	SPECIFICATION SHEET		PART NO.	LF13WBP-20PC		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0136-0040-0-00		1/1