

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	AWG#26~#30 Sheathing Outer Diameter MAXφ1	
	CURRENT	2 A	APPLICABLE CABLE	φ 7.3±0.2	
SPECIFICATIONS					
ITEM		TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION					
GENERAL EXAMINATION		VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	×	×
MARKING		CONFIRMED VISUALLY.		×	×
ELECTRIC CHARACTERISTICS					
CONTACT RESISTANCE		CONTACT SHALL BE MEASURED AT DC 1 A	30 mΩ MAX.	×	×
INSULATION RESISTANCE		100 V DC.	1000 MΩ MIN.	×	×
VOLTAGE PROOF		300 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	×	×
MECHANICAL CHARACTERISTICS					
CONTACT INSERTION AND WITHDRAWAL FORCES		φ 0.53±0.003 BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : 0.15 N MIN.	×	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES		MEASURED BY APPLICABLE CONNECTOR WITHOUT LOCKING DEVICE.	INSERTION AND WITHDRAWAL FORCES : 50 N MAX.	×	—
MECHANICAL OPERATION		1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 30 mΩ MAX.	×	—
VIBRATION		FREQUENCY: 10 → 55 → 10 (Hz) (1CYC,5min), SINGLE AMPLITUDE 0.75 mm, AT 10 CYC,FOR 3 DIRECTIONS.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
SHOCK		IN OPPOSITE DIRECTIONS OF EACH 3 DIMENSION AXIS FOR 3 TIMES AT 490 m/s ² DURATIONS OF PULSE 11 ms.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	×	—
BREAKING STRENGTH		MAX 100N SHALL BE APPLIED TO CABLE IN UP AND DOWN, LEFT AND RIGHT DIRECTIONS WHEN MATED.	NO BREAKAGE MAX 100N.	×	—
CONTACT RETENTION		AFTER INCORPORATING THE CRIMPED AND CONFORMING CONTACTS, A TENSILE LOAD IS APPLIED TO THE WIRE AND MEASURED.	20 N MIN.	×	—
ENVIRONMENTAL CHARACTERISTICS					
DAMP HEAT (STEADY STATE)		EXPOSED AT 40 °C, 90 TO 95 %, 96 h.	① INSULATION RESISTANCE: 10 MΩ MIN (AT HIGH HUMIDITY). ② INSULATION RESISTANCE: 100 MΩ MIN (AT DRY). ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
RAPID CHANGE OF TEMPERATURE		TEMPERATURE -55→ R/T ⁽¹⁾ → +85 → R/T °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.	① INSULATION RESISTANCE: 100 MΩ MIN. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
CORROSION SALT MIST		EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION RUIN THE FUNCTION.	×	—
DRY HEAT		EXPOSED AT + 85 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
COLD		EXPOSED AT - 55 °C, 96 h.	NO DAMAGE, CRACK AND LOOSENESS OF PARTS.	×	—
SEALING ⁽²⁾		EXPOSED AT A DEPTH OF 1.8 m FOR 48 h.	NO WATER PENETRATION INSIDE CONNECTOR.	×	—
AIR TIGHTNESS ⁽²⁾		APPLY AIR PRESSURE 17.6kPa FOR 0.5min TO INSIDE CONNECTOR.	NO AIR BUBBLES INSIDE CONNECTOR.	×	—
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
Q					
NOTES Unless otherwise specified, refer to IEC 60512 (JIS C 5402).			APPROVED	TP. KOMATSU	20231227
			CHECKED	EJ. KUNII	20231227
			DESIGNED	MK. WADA	20231227
			DRAWN	MK. WADA	20231227
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC-381174-00-00
HRS	SPECIFICATION SHEET		PART NO.	LF10WBP-12SC	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0136-0041-0-00	△ 1/1