Sep.1.2022 Copyright 2022 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

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	MAX AWG#26
	CURRENT	2 A	APPLICABLE CABLE	φ7.3±0.2

SPECIFICATIONS

ITEM	TEST METHOD	REQUIREMENTS	QT	AT
CONSTRUCTION				
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.	ACCORDING TO DRAWING.	X	X
MARKING	CONFIRMED VISUALLY.		X	X
ELECTRIC CHARACTERISTICS				
CONTACT RESISTANCE	CONTACT SHALL BE MEASURED AT DC 1 A	15 mΩ MAX.	X	X
INSULATION RESISTANCE	100 V DC.	1000 MΩ MIN.	X	X
VOLTAGE PROOF	300 V AC. FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	X	X
MECHANICAL CHARACTERISTICS				
CONTACT INSERTION AND WITHDRAWAL FORCES	φ0.53±0.003 BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : 0.15 N MIN.	X	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR.	INSERTION AND WITHDRAWAL FORCES LOCKING DEVICE WITH UNLOCK : 50 N MAX. LOCKING DEVICE WITH LOCK : — N MAX.	X	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE: 30 mΩ MAX.	X	—
VIBRATION	FREQUENCY: 10 → 55 → 10 (Hz) (1CYC,5min), SINGLE AMPLITUDE 0.75 mm, AT 10 CYC,FOR 3 DIRECTIONS.	①NO ELECTRICAL DISCONTINUITY OF 10 μs. ②NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
SHOCK	IN OPPOSITE DIRECTIONS OF EACH 3 DEMENSION AXIS FOR 3 TIMES AT 490 m/s² DURACTIONS OF PULSE 11 ms.	① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	X	—
BREAKING STRENGTH	MAX 100 N SHALL BE APPLIED TO CABLE IN UP AND DOWN,LEFT AND RIGHT DIRECTIONS WHEN MATED.	NO BREAKAGE MAX 100N.	X	—
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.	X	—
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.	X	—
CORROSION SALT MIST	EXPOSED IN 5 % SALT WATER SPRAY FOR 48 h.	NO HEAVY CORROSION RUINS THE FUNCTION.	X	—
DRY HEAT	EXPOSED AT + 85 °C,96 h.	NO DAMAGE,CRACK AND LOOSENESS OF PARTS.	X	—
COLD	EXPOSED AT − 55 °C,96 h.	NO DAMAGE,CRACK AND LOOSENESS OF PARTS.	X	—
RESISTANCE TO SOLDERING HEAT	SOLDER TEMPERATURE, +350±10°C, FOR IMMERSION DURATION, 5±1 s.	NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINALS.	X	—
SOLDERABILITY	SOLDERED AT SOLDER TEMPERATURE, +350±10°C FOR IMMERSION DURATION, 2 TO 3 s.	SOLDER SURFACE TO BE FREE FROM PIN-HOLE, NO WETTING AND OTHER DEFECTS.	X	—
SEALING(2)	EXPOSED AT A DEPTH OF 1.8 m FOR 48 h.	NO WATER PENETRATION INSIDE CONNECTOR.	X	—
AIR TIGHTNESS(2)	APPLY AIR PRESSURE 17.6kPa FOR 0.5min TO INSIDE CONNECTOR.	NO AIR BUBBLES INSIDE CONNECTOR.	X	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠					

REMARK

NOTES(1) R/T : ROOM TEMPERATURE

(2) SEALING AND AIRTIGHTNESS SHALL BE TESTED BY APPLICABLE CONNECTOR.

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

APPROVED	HY.KOBAYASHI	18.02.22
CHECKED	HY.KOBAYASHI	18.02.22
DESIGNED	TY.SUZUKI	18.02.21
DRAWN	HM.SAITO	18.02.19

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

DRAWING NO. ELC-116732-31-00

HRS	SPECIFICATION SHEET	PART NO.	LF10WBPD-12S(31)	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL136-0015-6-31 ⚠1	1/1

FORM HD0011-2-1