









APPLICABLE STANDARD					
Rating	Operating temperature range	-25°C to +85°C	Storage temperature range	-10°C to +60°C	
	Voltage	AC 50 V , DC 60 V	Wire size	-	
	Current	2 A	Applicable cable	-	
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		Contact resistance : 30 mΩ MAX ⁽³⁾ Body resistance : 100 mΩ MAX ⁽³⁾	X	-
	Contact shall be Measured at DC - A		- mΩ MAX.	-	-
Insulation resistance 	100 V DC.		100 MΩ MIN.	X	X
Voltage proof	1000 V AC for 1 min.		No flashover or breakdown.	X	X
Insertion Loss (IL)	Measured in the range of 1 to 500 MHz.		0.02 √ (f) dB max. (Whenever the formula results in a value less than 0.1 dB, the requirement shall revert to 0.1 dB.)	X	-
Return Loss (RL)	Measured in the range of 1 to 500 MHz.		68 - 20log(f) dB min. (Whenever the formula results in a value greater than 30 dB, the requirement shall revert to 30 dB.)	X	-
Near end Crosstalk (NEXT)	Measured in the range of 1 to 500 MHz.		94 - 20log(f) dB min. (1MHz to 250MHz) 46.04 - 30log(f/250) dB min. (250MHz to 500MHz) (Whenever the formula results in a value greater than 75 dB, the requirement shall revert to 75 dB.)	X	-
Far end crosstalk (FEXT)	Measured in the range of 1 to 500 MHz.		83.1 - 20log(f) dB min. (Whenever the formula results in a value greater than 75 dB, the requirement shall revert to 75 dB.)	X	-
Transverse Conversion Loss (TCL)	Measured in the range of 1 to 500 MHz.		68 - 20log(f) dB min. (Whenever the formula results in a value greater than 50 dB, the requirement shall revert to 50 dB.)	X	-
Transverse Conversion Transfer Loss (TCTL)	Measured in the range of 1 to 500 MHz.		68 - 20log(f) dB min. (Whenever the formula results in a value greater than 50 dB, the requirement shall revert to 50 dB.)	X	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
	3	DIS-C-00018121	KN. IKEHARA	KI. NAGANUMA	20240807
REMARK			APPROVED	TP. KOMATSU	20230120
Notes(1) R/T : room temperature			CHECKED	KI. NAGANUMA	20230120
(2) Sealing and air tightness are tested in mated condition with an applicable connector.			DESIGNED	KN. IKEHARA	20230120
 (3) Cable conductor resistance is not included.			DRAWN	KN. IKEHARA	20230120
Unless otherwise specified, refer to IEC 60512.(JIS C 5402)					
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.	ELC-391834-40-00	
	SPECIFICATION SHEET		PART NO.	LF10WBRBH-8SD (40)	
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL0136-0058-0-40	 1/2

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In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

SPECIFICATIONS					
ITEM	TEST METHOD	REQUIREMENTS	QT	AT	
MECHANICAL CHARACTERISTICS					
Contact insertion and withdrawal forces	$\phi 0.53 \pm 0.003$ by steel gauge.	Insertion and withdrawal forces : 0.15 N MIN.	X	-	
Connector insertion and withdrawal forces	Measured by applicable connector without locking device.	Insertion and withdrawal forces : 50 N MAX.	X	-	
Mechanical operation	1000 times insertions and extractions.	Contact resistance : 45 m Ω MAX ⁽³⁾ Body resistance : 100 m Ω MAX ⁽³⁾	X	-	
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 μ s. ② No damage, crack and looseness, of parts.	X	-	
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 μ s. 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 100 N.	X	-	
(Delete)		-	-	-	
ENVIRONMENTAL CHARACTERISTICS					
Damp heat (steady state)	Exposed at 40 °C, 90 to 95 %, 96 h.	① Insulation resistance: 10 m Ω min (At high humidity). ② Insulation resistance: 100 m Ω 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 m Ω 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 ruin 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 (Terminal)	Solder temperature, +380 \pm 5 °C, for immersion duration, 5 \pm 1 s.	No deformation of case of excessive looseness of the terminals.	X	-	
Solderability (Terminal)	Soldered at solder temperature, +350 \pm 10 °C for immersion duration, 2 to 3 s.	Solder surface to be free from pin-hole. No wetting and other defects.	X	-	
Solderability (Shell)	Soldered at solder temperature, +380 \pm 10 °C for immersion duration, 4 to 5 s.	Solder surface to be free from pin-hole. No wetting and other defects.	X	-	
Sealing ⁽²⁾	Exposed at a depth of 2 m for 14 days.	No water penetration inside connector.	X	-	
Air tightness ⁽²⁾	Apply air pressure 17.6 KPa for 0.5 min to inside connector.	No air bubbles inside connector.	X	-	
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