Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

APPLICABLE STANDARD				
RATING	OPERATING TEMPERATURE RANGE	-15 ℃ TO +60 ℃	STORAGE TEMPERATURE RANGE	-15 ℃ TO +60 ℃
	VOLTAGE	AC 100 V , DC 140 V	———	———
	CURRENT	1 A	———	———

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(1)	CONTACT SHALL BE MEASURED AT DC 1 A	(CONTACT NO,1-10,13-16,19,20 : AWG30) 615 mΩ MAX.	○	○
	CONTACT SHALL BE MEASURED AT DC 1 A	(CONTACT NO,11,12,17,18 : AWG28) 405 mΩ MAX	○	○
	GROUND SHALL BE MEASURED AT DC 1 A	158 mΩ MAX.	○	○
INSULATION RESISTANCE	250 V DC.	200 mΩ MIN.	○	○
VOLTAGE PROOF	300 V AC FOR 1 min.	NO FLASHOVER OR BREAKDOWN.	○	○
MECHANICAL CHARACTERISTICS				
CONTACT INSERTION AND WITHDRAWAL FORCES	— BY STEEL GAUGE.	INSERTION AND WITHDRAWAL FORCES : — N	—	—
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR. LOCKING DEVICE.	INSERTION AND WITHDRAWAL FORCES :5 TO 50 N.	○	—
MECHANICAL OPERATION	1000 TIMES INSERTIONS AND EXTRACTIONS.	CONTACT RESISTANCE:(NO,1-10,13-16,19,20) 635 mΩ MAX.	○	—
		CONTACT RESISTANCE:(NO,11,12,17,18) 425 mΩ MAX.	○	—
		GROUND RESISTANCE: 198 mΩ MAX.	○	—
VIBRATION	FREQUENCY: 10 TO 55 Hz,SINGLE AMPLITUDE 1.5 mm, — m/s^2 AT 2h, FOR 3 DIRECTIONS.	1)NO ELECTRICAL DISCONTINUITY OF 1 μs. 2)NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	○	—
SHOCK	490 m/s^2 DURATION OF PULSE 11 ms AT 3 TIMES FOR 6 DIRECTIONS.	1) NO ELECTRICAL DISCONTINUITY OF 1 μs. 2) NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.	○	—
ENVIRONMENTAL CHARACTERISTICS				
DAMP HEAT (STEADY STATE)	EXPOSED AT 40 ℃, 90 TO 95 %, 96 h.	1) INSULATION RESISTANCE: 2 MΩ MIN (AT HIGH HUMIDITY). 2) INSULATION RESISTANCE: 20 MΩ MIN (AT DRY). 3) NO DAMAGE.CRACK AND LOOSENESS OF PARTS.	○	—
RAPID CHANGE OF TEMPERATURE	TEMPERATURE -15→ R/T → +15 → R/T ℃ TIME 30 → 10 TO 15 → 30 → 10 TO 15 min UNDER 5 CYCLES.	1) INSULATION RESISTANCE: 200 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.	○	—
DRY HEAT	EXPOSED AT + 60 ℃ , 96 h.	NO DAMAGE,CRACK AND LOOSENESS OF PARTS.	○	—
COLD	EXPOSED AT - 15 ℃ , 96 h.	NO DAMAGE,CRACK AND LOOSENESS OF PARTS.	○	—
SEALING	EXPOSED AT A DEPTH OF OF – m FOR — h.	NO WATER PENETRATION INSIDE CONNECTOR.	—	—
AIRTIGHTNESS	APPLY AIR PRESSURE – Pa FOR – h TO INSIDE CONNECTOR.	NO ARI BUBBLES INSIDE CONNECTOR.	—	—

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
⚠1					

REMARK
(1) CONTACT RESISTANCE INCLUDES BULX RESISTANCE OF USED WIRE.

Unless otherwise specified, refer to JIS C 5402.

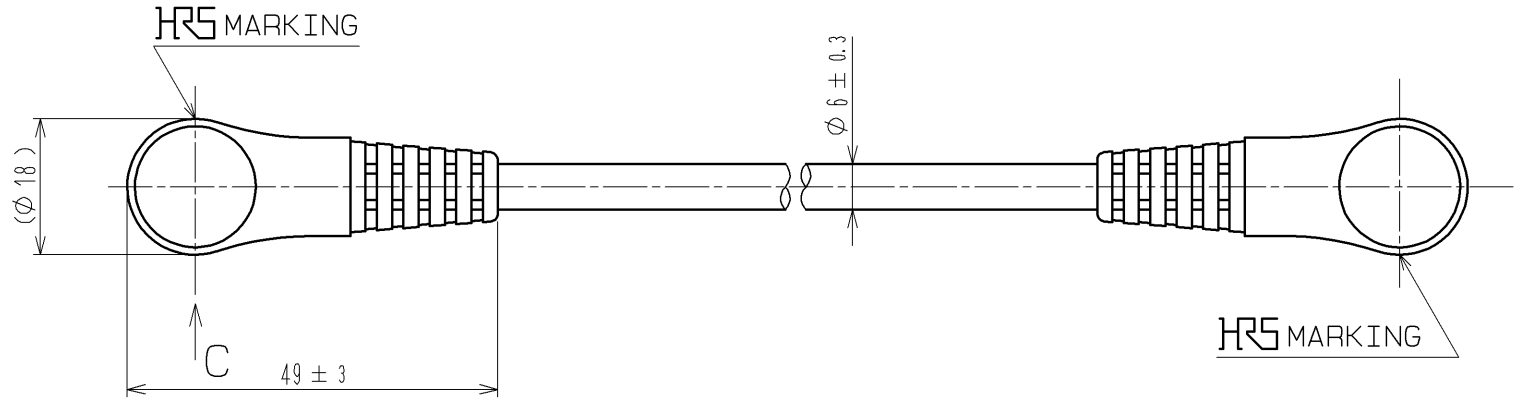
APPROVED	HO. HASHIMOTO	12. 12. 06
CHECKED	TS. FURUYA	12. 12. 06
DESIGNED	MK. OGURA	12. 11. 30
DRAWN	MK. OGURA	12. 11. 30

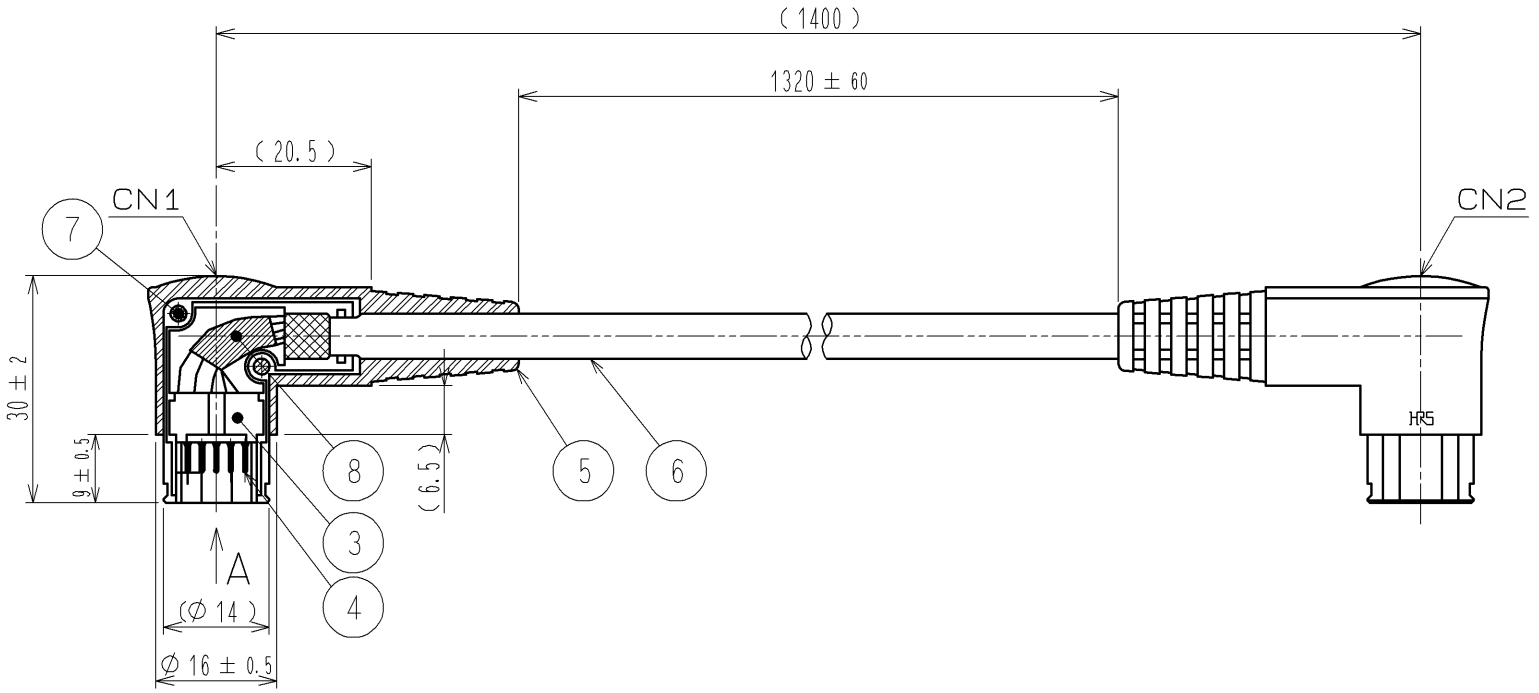
Note QT:Qualification Test AT:Assurance Test X:Applicable Test

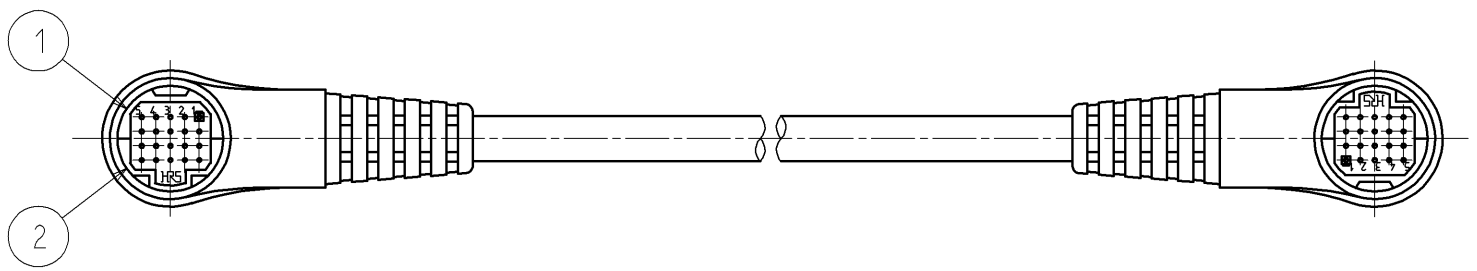
DRAWING NO. ELC4-349413-00

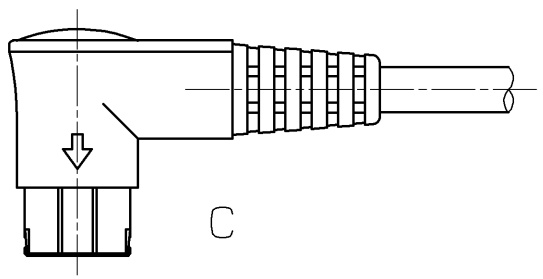
HRS	SPECIFICATION SHEET	PART NO.	HR12A-14LA20PSD1400	
	HIROSE ELECTRIC CO., LTD.	CODE NO.	CL112-3477-8-00 ⚠1	1/1

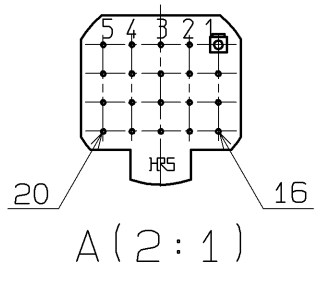
RoHS(6 substances conformity) 2018/04/05 04:48:53(JST) Rachelle Sheffer
DRAWING FOR REFERENCE:This is subject to change without notice
In cases where the application will demand a high level of reliability, such as automotive, please contact a company representative for further information.











1 TABLE-1 WIRING

CONTACTNO.	READ WIRECOLOR		CONTACTNO.	READ WIRECOLOR	
1	RED	(AWG30)	11	BLACK	(AWG28)
2	ORANGE	(AWG30)	12	SKY BLUE	(AWG28)
3	YELLOW	(AWG30)	13	PINK(BLACK)	(AWG30)
4	GRAY	(AWG30)	14	VIOLET(BLACK)	(AWG30)
5	WHITE	(AWG30)	15	LEAF GREEN	(AWG30)
6	PINK	(AWG30)	16	SKY BLUE(BLACK)	(AWG30)
7	VIOLET	(AWG30)	17	BROWN	(AWG28)
8	RED(BLACK)	(AWG30)	18	BLUE	(AWG28)
9	ORANGE(BLACK)	(AWG30)	19	GRAY(BLACK)	(AWG30)
10	YELLOW(BLACK)	(AWG30)	20	WHITE(BLACK)	(AWG30)
			REF NO.①②	BRAIDED SHIELD	

2 TABLE-2 CABLE SPECIFICATIONS

COMPOSITION			
PVC INSULATION	COLOR DISTINCTION	RED, ORANGE, YELLOW, GRAY WHITE, PINK, VIOLET, RED(BLACK) ORANGE(BLACK), YELLOW(BLACK) GRAY(BLACK), WHITE(BLACK) PINK(BLACK), VIOLET(BLACK) LEAF GREEN, SKY BLUE(BLACK)	BROWN BLUE BLACK SKY BLUE
CONDUCTOR	OUTER DIAMETER	(φ0.7)	(φ0.75)
	COMPOSITION	φ0.1/7(AWG#30)	φ0.127/7(AWG#28)
	MATERIAL	TIN PLATED ANNEALED COPPER WIRE	
BRAIDED SHIELD	COMPOSITION	φ0.1/24/7	
	MATERIAL	TIN PLATED ANNEALED COPPER WIRE	
JACKET	OUTER DIAMETER	φ6± 0.3	
	MATERIAL	PVC	
	COLOR	BLACK	

NOTES
1. WIRING IS SHOWN IN THE TABLE-1.
2. CABLE SPECIFICATIONS ARE SHOWN IN THE TABLE-2.
3. THE POSITION OF REFERENCE NO.⑥ AND CN1, 2 ARE MATED BY THE SCREW. (THE POSITION OF CN1, 2 SHALL BE FREE.)
4. CN1 AND CN2 SHALL BE IN THE SAME SPECIFICATION.

NO.	MATERIAL	FINISH , REMARKS	NO.	MATERIAL	FINISH , REMARKS
4	PHOSPHOR BRONZE	SILVER PLATED	8		(CLOTH ADHESIVE TAPE)
3	PBT	(BLACK)UL94V-0	7	STEEL	NICKEL PLATED
2	ZINC ALLOY	NICKEL PLATED	6	2	(BLACK) UL2990 SHIELDED CABLE. 20 CONDUCTORS
1	ZINC ALLOY	NICKEL PLATED	5	PVC	(BLACK)UL94V-0

UNITS mm	SCALE 1 : 1	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE

HIROSE ELECTRIC CO., LTD.

APPROVED	HO. HASHIMOTO	12.12.06	DRAWING NO. EDC3-349413-00
CHECKED	TS. FURUYA	12.12.06	PART NO. HR12A-14LA20PSD1400
DESIGNED	MK. OGURA	12.11.30	
DRAWN	MK. OGURA	12.11.30	CODE NO. CL112-3477-8-00