
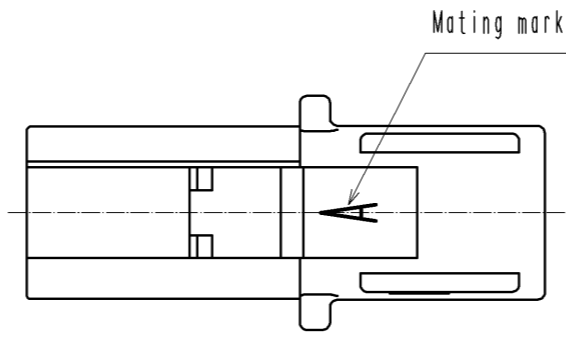
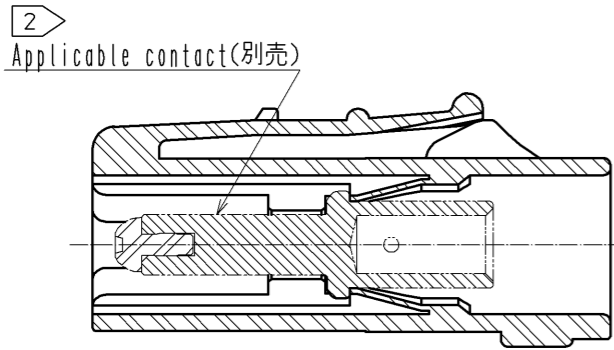
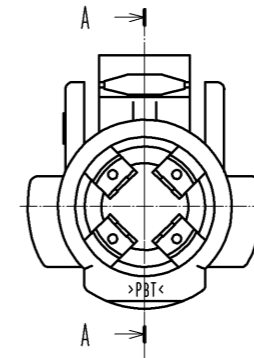
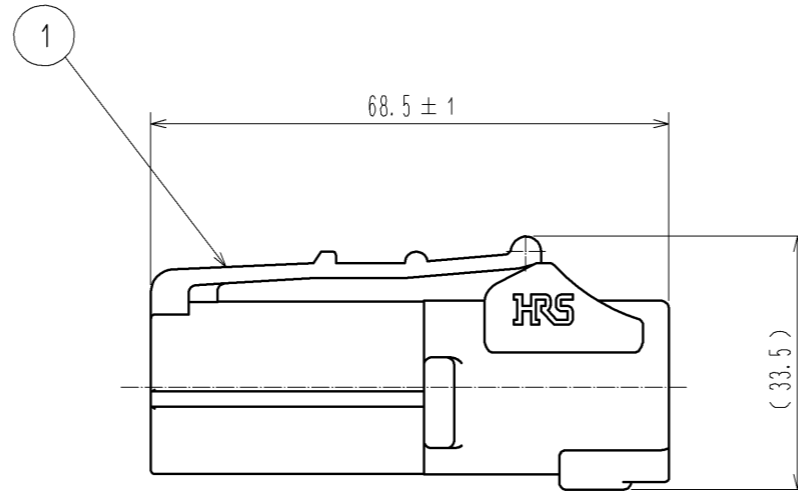
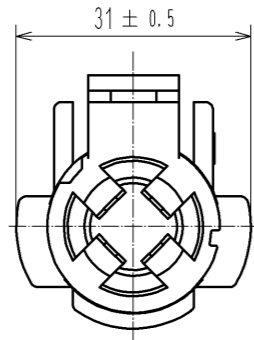


APPLICABLE STANDARD						
RATING	OPERATING TEMPERATURE RANGE	-25°C TO +105°C (1)		STORAGE TEMPERATURE RANGE	-10°C TO +60°C	
	VOLTAGE	AC 600 V, DC 600 V		—	—	
	CURRENT	90A ( WITH 22mm <sup>2</sup> CABLE)		APPLICABLE CABLE	22 (16.78 TO 26.66) mm <sup>2</sup>	
SPECIFICATIONS						
ITEM	TEST METHOD		REQUIREMENTS		QT	AT
<b>CONSTRUCTION</b>						
GENERAL EXAMINATION	VISUALLY AND BY MEASURING INSTRUMENT.		ACCORDING TO DRAWING.		X	X
MARKING	CONFIRMED VISUALLY.				X	X
<b>ELECTRIC CHARACTERISTICS</b>						
CONTACT RESISTANCE	CONTACT SHALL BE MEASURED AT DC 1A.		0.5 mΩ MAX		X	X
INSULATION RESISTANCE	500 V DC.		1000 MΩ MIN.		X	X
VOLTAGE PROOF	3310 V AC. FOR 1 min.		NO FLASHOVER OR BREAKDOWN.		X	X
<b>MECHANICAL CHARACTERISTICS</b>						
CONTACT INSERTION AND WITHDRAWAL FORCES	- BY STEEL GAUGE.		INSERTION AND WITHDRAWAL FORCES : - N MIN.		-	-
CONNECTOR INSERTION AND WITHDRAWAL FORCES	MEASURED BY APPLICABLE CONNECTOR. WITHOUT LOCKING DEVICE.		INSERTION AND WITHDRAWAL FORCES : 70 N MAX. (INITIAL MEASUREMENTS)		X	-
CONTACT RETENTION FORCE	PULL A TERMINAL BY 150 N FROM TERMINAL AREA.		DO NOT MOVE THE TERMINAL.		X	-
MECHANICAL OPERATION	30 TIMES INSERTIONS AND EXTRACTIONS.		①NO DAMAGE, CRACK AND LOOSENESS OF PARTS. ②CONTACT RESISTANCE :1 mΩ MAX ③INSERTION AND WITHDRAWAL FORCES :100 N 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/s <sup>2</sup> DURATIONS OF PULSE 11 ms.		① NO ELECTRICAL DISCONTINUITY OF 10 μs. ② NO DAMAGE, CRACK AND LOOSENESS, OF PARTS.		X	-
CONTACT RETENTION FORCE	PULL A TERMINAL BY 150N FROM TERMINAL AREA.		NO DAMAGE.		X	-
<b>ENVIRONMENTAL CHARACTERISTICS</b>						
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 <sup>(2)</sup> → +105 → R/T °C TIME 30 → 2 TO 3 → 30 → 2 TO 3 min UNDER 5 CYCLES.		① INSULATION RESISTANCE: 1000 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 RUIN THE FUNCTION.		X	-
DRY HEAT	EXPOSED AT +105°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	-
	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE	
						
REMARK			APPROVED	SU. OBARA	14. 02. 04	
NOTES(1) OPERATING TEMPERATURE RANGE INCLUDES THE TEMPERATURE RISE BY CURRENT CARRYING.			CHECKED	HY. KOBAYASHI	14. 02. 04	
(2) R/T : ROOM TEMPERATURE.			DESIGNED	HS. KAWASHIMA	14. 02. 04	
(3) ABOVE SPECIFICATIONS SHOWS THE VALUES IN ASSEMBLED CONDITION WITH APPLICABLE CRIMP CONTACTS.						
(4) THIS CONNECTOR IS DESIGNED TO BE USED UNDER STATIONARY CONDITIONS.			DRAWN	HS. KAWASHIMA	14. 02. 04	
PLEASE AVOID APPLICATIONS THAT VIBRATION IS APPLIED.						
Unless otherwise specified, refer to JIS C 5402(IEC 60512).						
Note QT:Qualification Test AT:Assurance Test X:Applicable Test			DRAWING NO.		ELC4-118305-10	
	SPECIFICATION SHEET		PART NO.	EM12MP-1PCA (10)		
	HIROSE ELECTRIC CO., LTD.		CODE NO.	CL138-0031-5-10		 1/1

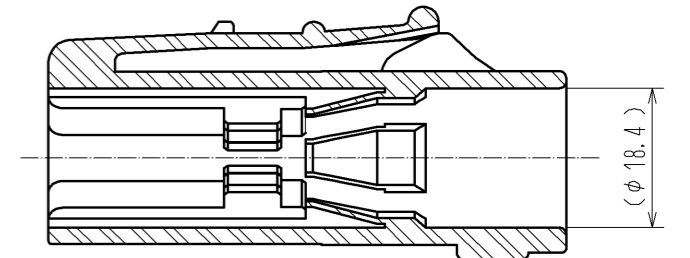
The state applicable contact assembled



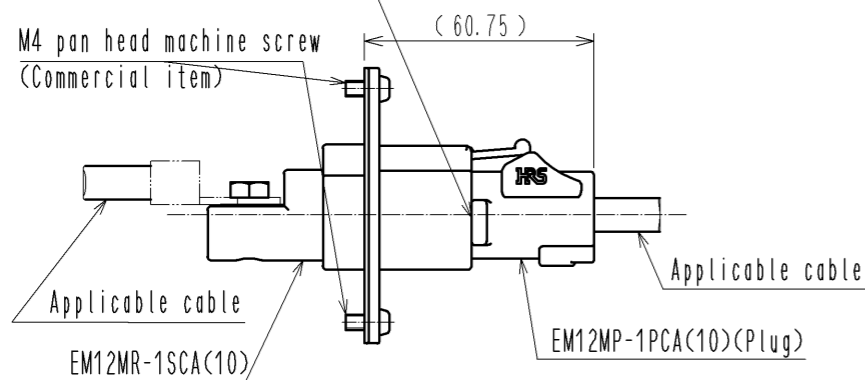
- Notes
- ⚠ WARNING 1 This connector is not hot pluggable.
  - ② Applicable crimp contacts:  
EV1-PC-112(02)(CL139-0004-9-02)  
EV1-PC1-112(02)(CL139-0005-1-02)
  - ⚠ WARNING ③ Make sure that the connector is inserted to the end and locked when mated. Confirm that the connector is not unintentionally released by pulling the cable with light force to prevent incomplete mating condition.



A-A



Dimension in mated condition (1:2)  
When mated, the plug is to be at this indicated position.



1	PBT	UL94V-0 (Red)					
NO.	MATERIAL	FINISH . REMARKS	NO.	MATERIAL	FINISH . REMARKS		
UNITS	⊕	SCALE	△	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
mm		1 : 1					
<b>HRS</b> HIROSE ELECTRIC CO., LTD.		APPROVED : SU. OBARA	14. 02. 04	DRAWING NO. EDC3-118305-10			
		CHECKED : HY. KOBAYASHI	14. 02. 04	PART NO. EM12MP-1PCA(10)			
		DESIGNED : HS. KAWASHIMA	14. 02. 04	CODE NO. CL138-0031-5-10			
		DRAWN : HS. KAWASHIMA	14. 02. 04			1/1	