

1. APPLICATION

THIS DOCUMENT DEFINES CABLE ASSEMBLY METHOD FOR TM21DP-TM-88P.

2. TARGET PRODUCT

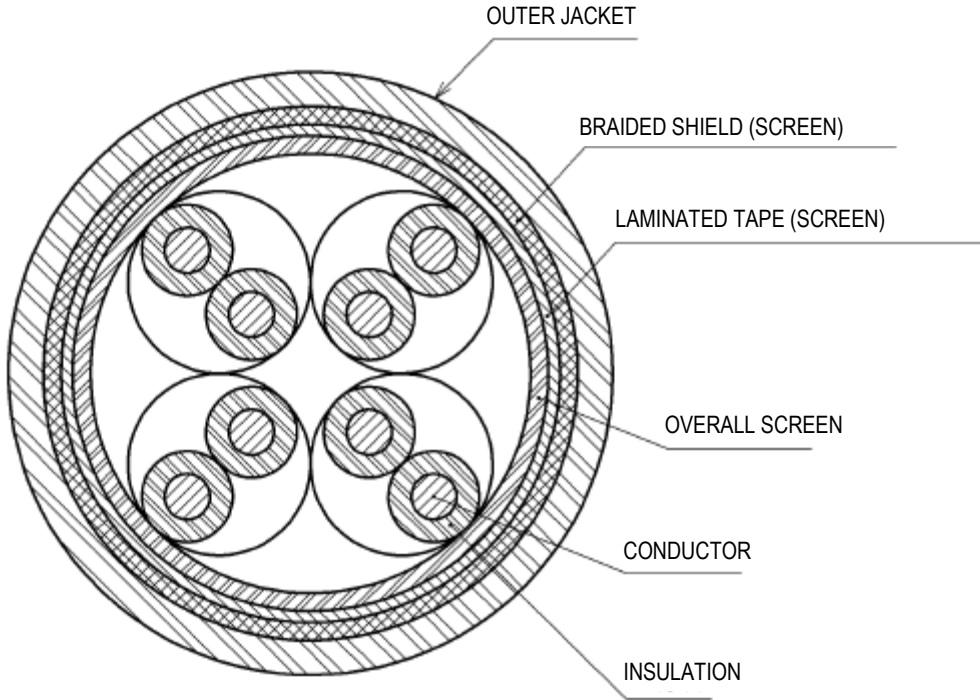
	PRODUCT NAME	PRODUCT CODE
CONNECTOR	TM21DP - TM - 88P	CL222 - 2941 - 3 - 00
GUIDE PLATE	TM21P - 88P(22)	CL222 - 2862 - 9 - 22
COVER	TM21P - 88P(**)	CL222 - 2862 - 9 - ** *1

*1 CONTACT OUR SALES FOR DETAILS OF COVER COLOR.

3. CONFORMING CABLE

CONDUCTOR SIZE:	AWG#24~27 STRANDED WIRE
INSULATION DIAMETER	φ0.9 TO φ1.0
OUTER JACKET DIAMETER:	φ6.6 mm
SCREEN:	TINNED ANNEALED COPPER WIRE BRAID SHIELD, LAMINATED TAPE

CABLE STRUCTURE (EXAMPLE)



4. Cable Connection Tool

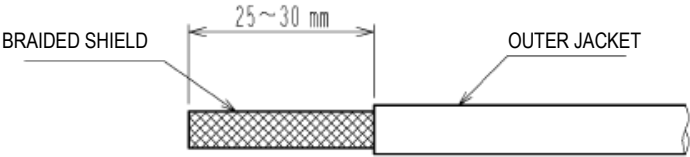
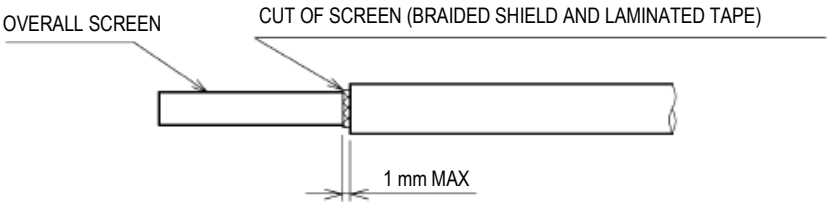
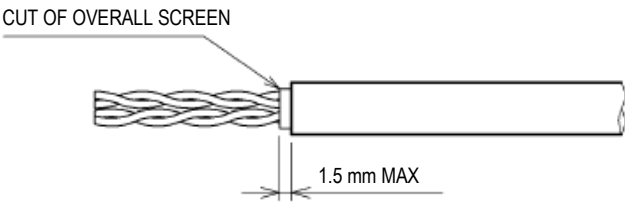
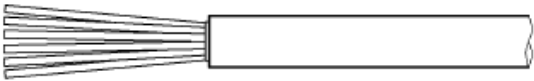
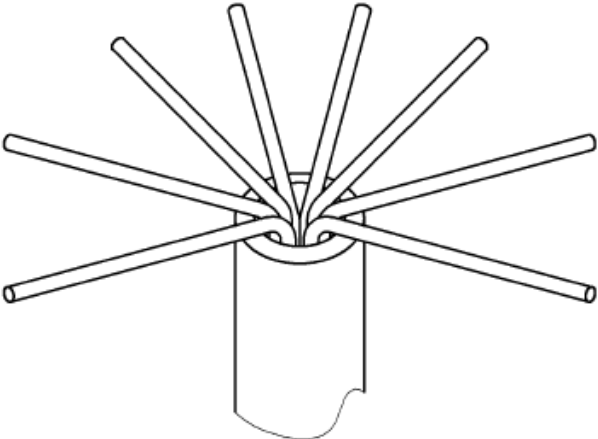
Tool Name	Tool CL Number
HT601/TM21P - 88P	CL902 - 2133 - 1 *2

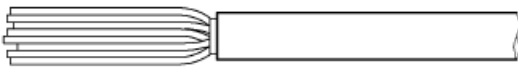
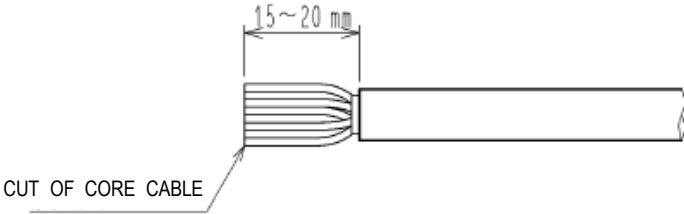
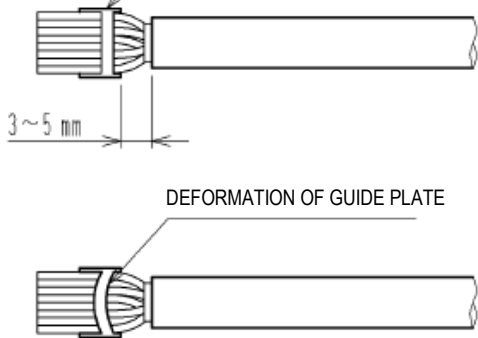
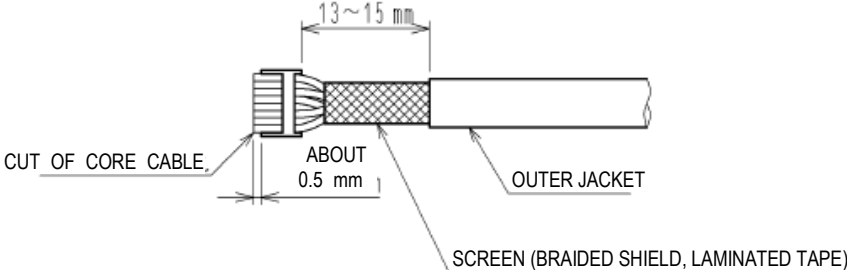
*2 THIS IS ALSO USED FOR CABLE SWAGING PROCESS.

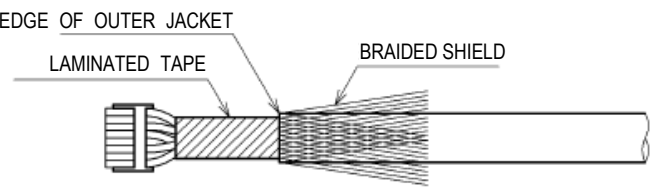
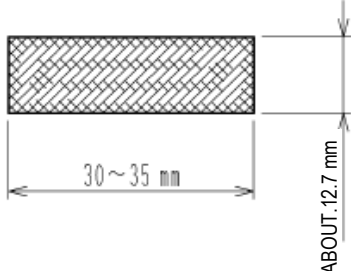
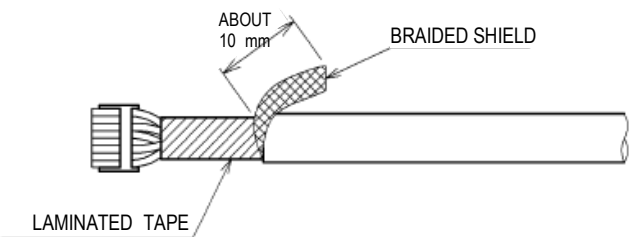
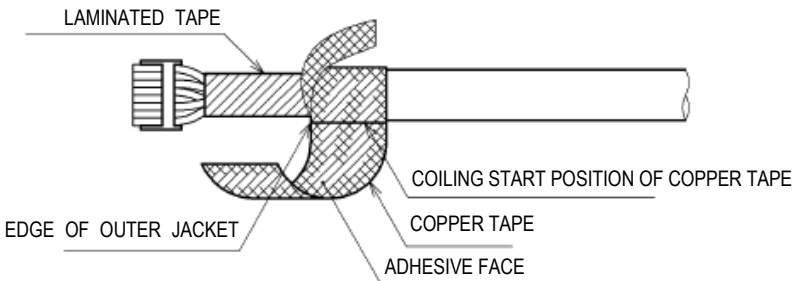
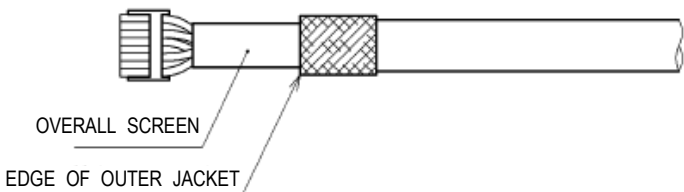
5. WORK PROCEDURE

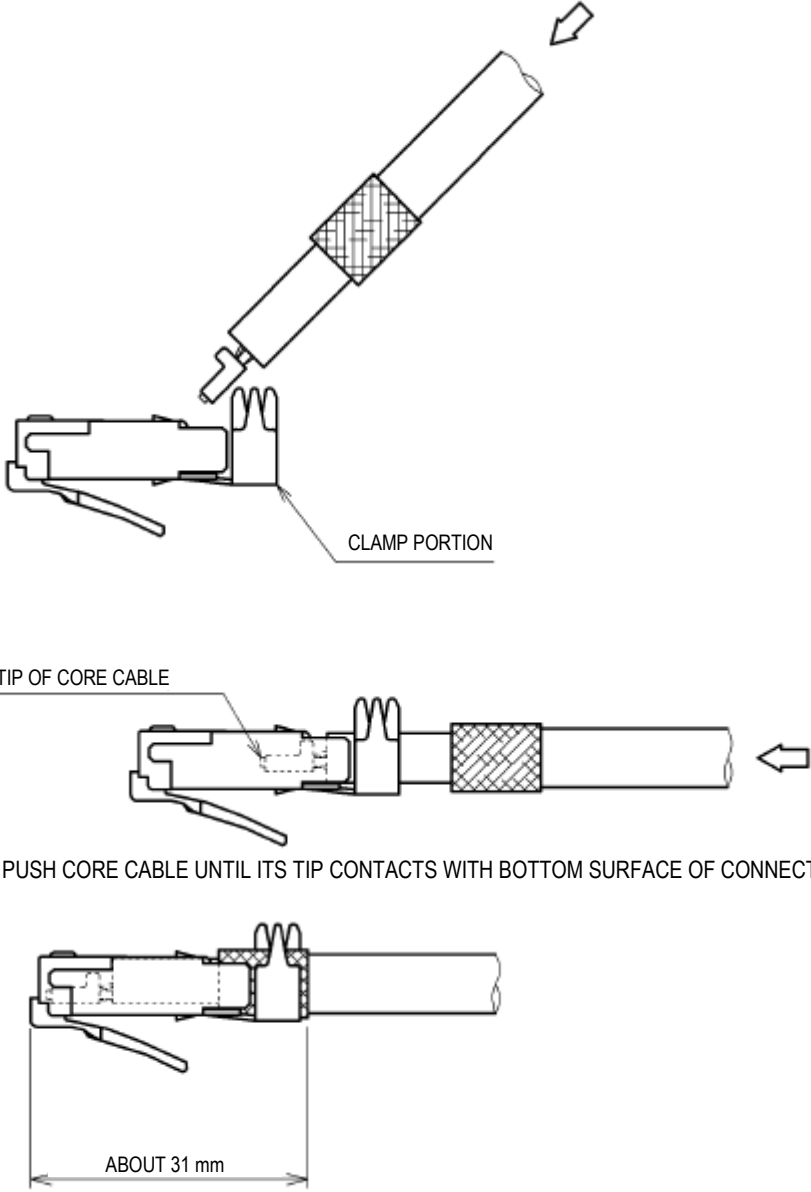
REFER TO PAGES 2 TO 8.

	COUNT	DESCRIPTION OF REVISIONS	DESIGNED	CHECKED	DATE
△					
名 称 TITLE			HRS HIROSE ELECTRIC CO.,LTD.		
TM21DP-TM-88P CABLING MANUAL			APPROVED	NM. NISHIMATSU	17. 09. 21
			CHECKED	NM. NISHIMATSU	17. 09. 21
			DESIGNED	TS. ITO	17. 09. 21
			WRITTEN	TS. ITO	17. 09. 21
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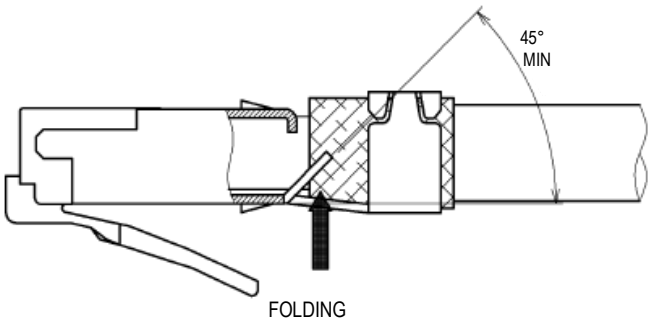
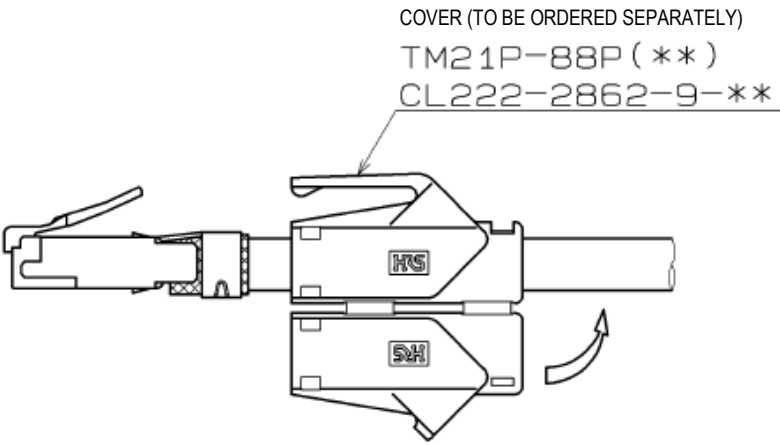
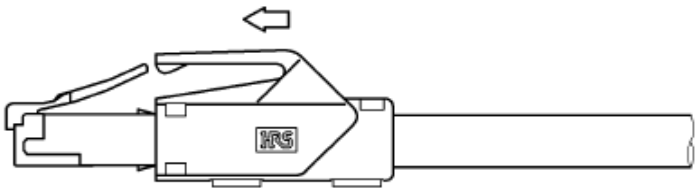
PROCEDURE	WORK CONTENTS
1. CABLE TERMINAL TREATMENT (1)	1 - 1. STRIP OUTER JACKET.  1 - 2. CUT THE BRAIDED SHIELD AND LAMINATED TAPE AT THE EDGE OF THE OUTER JACKET.  1 - 3. CUT THE OVERALL SCREEN AT THE EDGE OF THE OUTER JACKET SO AS NOT TO DAMAGE INTERNAL CORE WIRES.  2. CORE CABLE FORMING 2 - 1. RAVEL OUT THE TWISTED-PAIR CABLE TO THE END OF THE OUTER JACKET AND STRAIGHTEN IT SO THAT IT CAN BE EASILY INSTALLED ONTO THE GUIDE PLATE.  2 - 2. SPREAD CORE CABLE RADially FROM THE BASE ACCORDING TO CONNECTOR PIN ASSIGNMENT. AT THIS POINT, SPREAD THEM FROM THE BASE SO THAT WIRES ARE NOT CROSSED EACH OTHER AT A POSITION HIGHER THAN EDGE OF THE OUTER JACKET. 

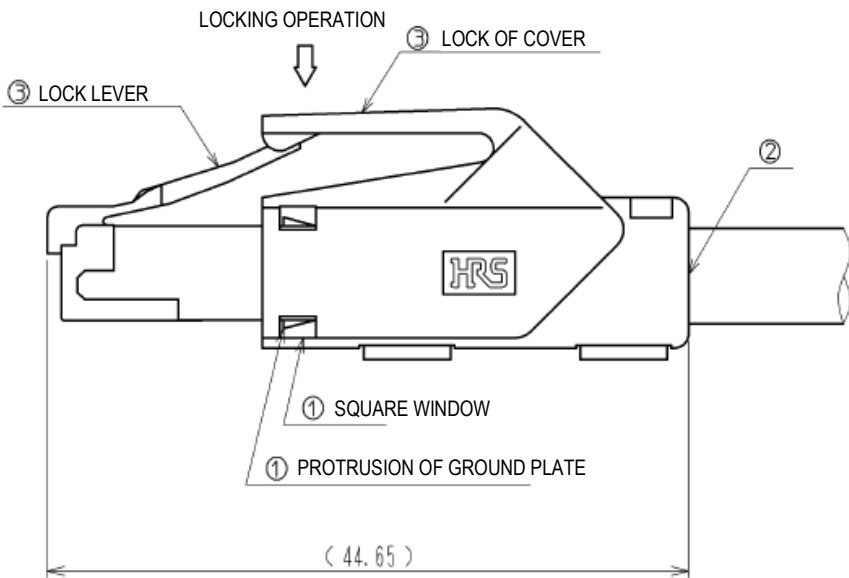
PROCEDURE	WORK CONTENTS
3. CABLE ARRANGEMENT	3 - 1. ARRANGE CORE CABLE ACCORDING TO CONNECTOR PIN ASSIGNMENT.  3 - 2. CUT TIP OF CABLE TO KEEP IT ALIGNED SO AS TO EASILY INSTALL THE GUIDE PLATE.  3 - 3. INSTALL THE GUIDE PLATE WITH A CLEARANCE OF 3 TO 5 mm FROM THE EDGE OF THE OUTER JACKET. AT THIS POINT, CARE MUST BE TAKEN NOT TO DEFORM THE GUIDE PLATE ABNORMALLY. IF THE GUIDE PLATE IS DEFORMED, PERFORM THE RADIAL FORMING AGAIN BECAUSE RADIAL FORMING DESCRIBED IN 2 - 2 "CORE CABLE FORMING" MAY BE INSUFFICIENT. GUIDE PLATE (TO BE ORDERED SEPARATELY) TM21P-88P (22) CL222-2862-9-22  4. CABLE TERMINAL TREATMENT (2) 4 - 1. STRIP THE OUTER JACKET WITH A CLEARANCE OF 13 TO 15 mm FROM THE GUIDE PLATE, AND THEN CUT TIP OF CABLE TO KEEP IT ALIGNED AT POSITION ABOUT 0.5 mm FROM THE TIP OF THE GUIDE PLATE. 

PROCEDURE	WORK CONTENTS
	4 - 2. RAVEL OUT BRAIDED SHIELD TO END OF THE OUTER JACKET.  4 - 3. LENGTH OF COPPER TAPE MUST BE RELATIVE TO THAT IN WHICH EXTERNAL DIAMETER IS ABOUT $\phi 6.8$ mm WITH COPPER TAPE WINDED AROUND CABLE. (REFERENCE: 30 TO 35 mm FOR $\phi 6.6$ mm CABLE)  4 - 4. WITH DRESSED BRAIDED SHIELD BUNDLED ON THE EDGE OF THE OUTER JACKET, CUT OVERALL SCREEN BY ABOUT 10 mm.  4 - 5. COIL COPPER TAPE WITH WIDTH OF ABOUT 12.7 mm ONE TURN.  4 - 6. COIL REMAINING OF COPPER TAPE WITH BUNDLED OVERALL SCREE SANDWICHED, PEEL LAMINATED TAPE AT THE EDGE OF THE OUTER JACKET. 

PROCEDURE	WORK CONTENTS
5. INSTALL GUIDE PLATE INTO CONNECTOR	INSTALL THE GUIDE PLATE AS SHOWN SO THAT THE GUIDE PLATE DOES NOT CONTACT CLUMP PORTION. AFTER TIP OF THE GUIDE PLATE IS INSTALLED, PUSH THE GUIDE PLATE STRAIGHT INTO BOTTOM SURFACE OF CONNECTOR.  CLAMP PORTION TIP OF CORE CABLE PUSH CORE CABLE UNTIL ITS TIP CONTACTS WITH BOTTOM SURFACE OF CONNECTOR. ABOUT 31 mm

PROCEDURE	WORK CONTENTS
6. IDC TERMINATION	6 - 1. CHECK IF THE TIP OF THE CORE CABLE CONTACTS WITH THE TIP OF THE CONNECTOR BODY AND MAKE IDC OF THE TERMINAL WITH HIROSE IDC TOOLING. AT THIS POINT, USE UPPER SUB INSERT II AND LOWER SUB INSERT II FOR HIROSE IDC TOOLING. WHEN MAKING IDC, PERFORM WORK WHILE PUSHING CABLE IN THE DIRECTION OF THE ARROW SO THAT CABLE CONTACTS WITH TIP OF CONNECTOR BODY. MAKE SURE THAT THE GUIDE PLATE IS PUSHED TO THE STOP POSITION OF THE GUIDE PLATE AS SHOWN BELOW. 6 - 2. MAKE SURE THAT IDC HEIGHT IS AS SHOWN BELOW.
7. CLAMPING AND FOLDING PART OF GROUND PLATE	7 - 1. CLAMP CABLE WITH HIROSE CLAMPING TOOLING. AT THIS POINT, USE UPPER SUB INSERT II AND LOWER SUB INSERT II FOR HIROSE IDC TOOLING. CABLE CLAMP HEIGHT C/H: 6.5 TO 6.9 mm CABLE TENSILE FORCE 78.4 N (8 Kg) MIN

PROCEDURE	WORK CONTENTS
	7 - 2. FOLD PART OF THE GROUND PLATE WITH THE HIROSE CLAMPING TOOLING. FOLDING ANGLE MUST BE 45° OR MORE. CARE MUST BE TAKEN NOT TO PINCH THE CORE CABLE DURING FOLDING. 
8. ATTACHMENT OF COVER	8 - 1. ATTACH THE OPENED COVER TO THE CABLE, AND THEN CLOSE THE COVER. COVER (TO BE ORDERED SEPARATELY) TM21P-88P (**) CL222-2862-9- **  8 - 2. INSERT THE CLOSED COVER INTO THE CONNECTOR BODY, WHICH RESULTS IN COMPLETED PRODUCT. 

PROCEDURE	WORK CONTENTS
	8 - 3. CONFIRM THE FOLLOWING THREE POINTS FOR COMPLETED PRODUCT (1) PROTRUSION OF THE GROUND PLATE IS FULLY HOOKED ON SQUARE WINDOW. (2) COPPER TAPE IS NOT EXPOSED FROM REAR OF COVER. (3) LOCKING OPERATION OF COVER ENSURES THAT LOCK LEVER OF CONNECTOR BODY FUNCTIONS.  LOCKING OPERATION ③ LOCK LEVER ③ LOCK OF COVER ② ① SQUARE WINDOW ① PROTRUSION OF GROUND PLATE (44.65)