



HF FAKRA II 90° (RIGHT ANGLED) PLUG CONNECTOR, ACCORDING FAKRA II

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1. GENERAL

1.1. PURPOSE

THIS SPECIFICATION DESCRIBES THE RIGHT-ANGLED COAX CONNECTORS:

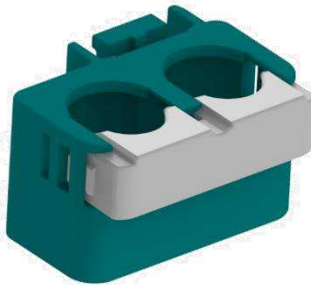
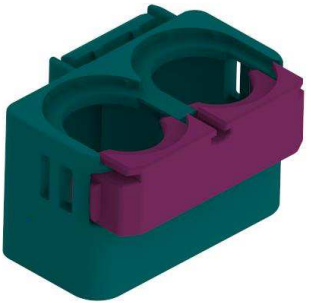
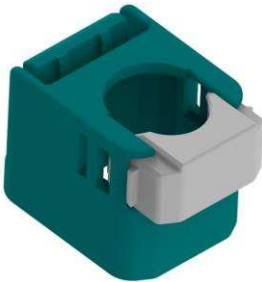
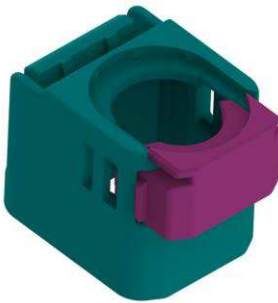
- MATING AND UNMATING OPERATIONS
- INSERTION AND REMOVAL OF TERMINAL

1.2. CUSTOMER DRAWING

THIS APPLICATION SPECIFICATION IS BASED ON THE LATEST VALID CUSTOMER DRAWING:

2315709	PLUG HOUSING (FEMALE) ASSEMBLY, 2WAY, RIGHT ANGLED, COAX FAKRA II
2364018	PLUG HOUSING (FEMALE) ASSEMBLY, 2 WAY, RIGHT ANGLED, COAX FAKRA II
2330270	PLUG HOUSING (FEMALE) ASSEMBLY, 1 WAY, RIGHT ANGLED, COAX FAKRA II
2372929	PLUG HOUSING (FEMALE) ASSEMBLY, 1 WAY, RIGHT ANGLED, COAX FAKRA II

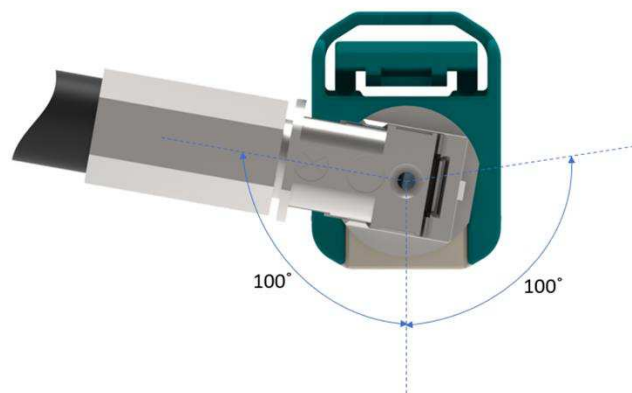
2. FAKRA II 90° (RIGHT ANGLED) CONNECTOR FAMILY OVERVIEW

DESCRIPTION	PLUG (FEMALE) HOUSING
2 WAY 90° CABLE EXIT FREE TURNABLE (PN 2315709-4,2315709-8/ 2364018-4,2364018-8)	
2 WAY 90° CABLE EXIT WITH CLICKING FEATURE FOR EVERY 45° (PN 2-2315709-X / 3-2315709-Y 2-2364018-X / 3-2364018-Y)	
1 WAY 90° CABLE EXIT, FREE TURNABLE (2330270-1, -2, -3, -4, -9)	
1 WAY 90° CABLE EXIT WITH CLICKING FEATURE FOR EVERY 45° (2-2330270-X / 3-2330270-Y) (2-2372929-X / 3-2372929-Y)	

3. FEMALE 90° (RIGHT ANGLED) TERMINAL SYSTEM OVERVIEW

DESCRIPTION	FEMALE CONTACT SYSTEM
FAKRA II CONTACT SYSTEM (1719252-X,1719655-X,2141946-X*)	
FAKRA AUTOMAT CONTACT SYSTEM (2272590-X)	

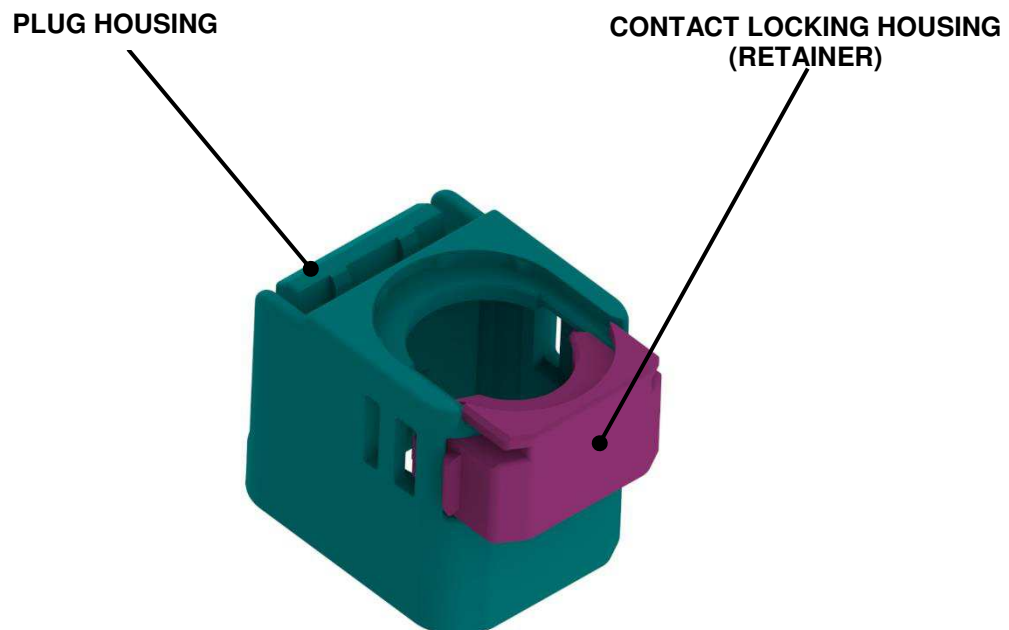
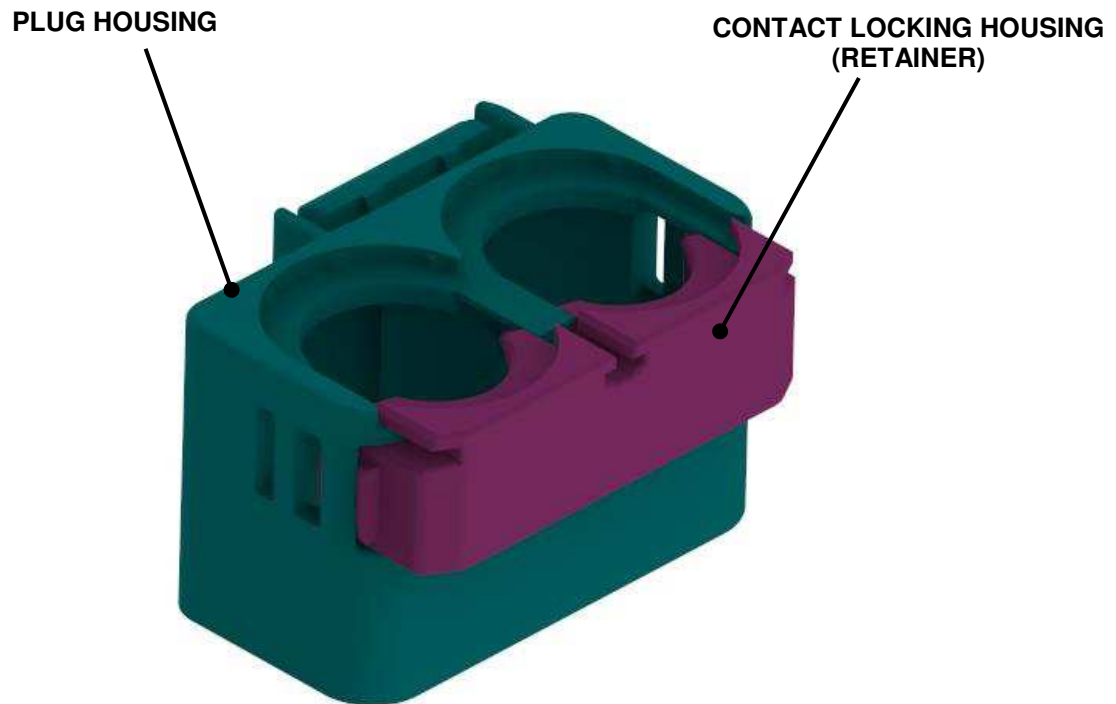
NOTE: * 2141946-X is not a free turntable version. It has an approximately 100° of rotation on either side only.



3.1. COMPATIBILITY OF CONTACT SYSTEMS TO PLUG CONNECTOR

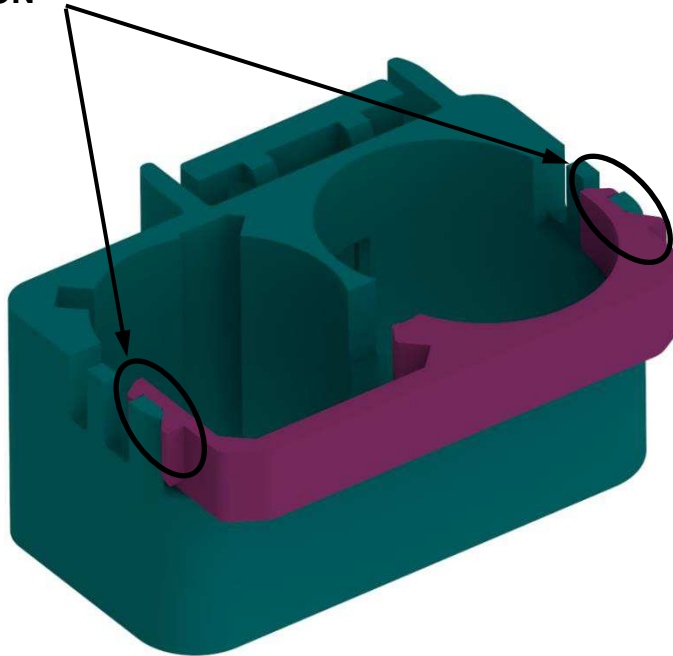
PLUG CONNECTOR	FAKRA II CONTACT SYSTEM	FAKRA AUTOMAT CONTACT SYSTEM
2 WAY 90° CABLE EXIT FREE TURNABLE (PN 2315709-4, -8/ 2364018-4, -8)	✓	✓
2 WAY 90° CABLE EXIT WITH CLICKING FEATURE FOR EVERY 45° (PN 2-2315709-X / 3-2315709-Y) (2-2364018-X / 3-2364018-Y)	✗	✓
1 WAY 90° CABLE EXIT FREE TURNABLE PN (2330270-1, -2, -3, -4, -9)	✓	✓
1 WAY 90° CABLE EXIT WITH CLICKING FEATURE FOR EVERY 45° (PN 2-2330270-X / 3-2330270-Y) (2-2372929-X / 3-2372929-Y)	✗	✓

4. PLUG FEMALE HOUSING ASSEMBLY (SHOWN ON 2 WAY & 1 WAY PLUG HSG)

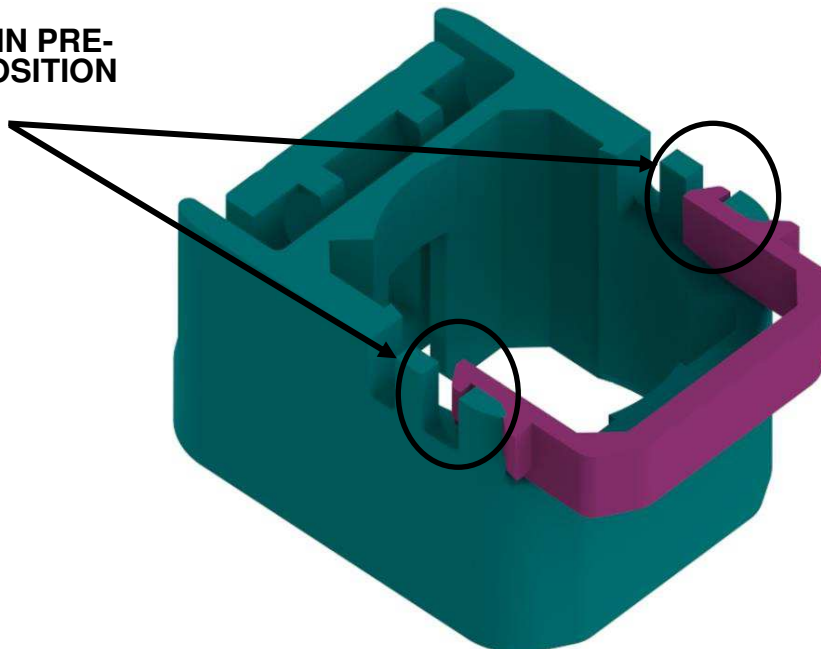


4.1. DELIVERY STATUS- FOR 2 WAY & 1 WAY PLUG HSG

RETAINER IN PRE-
LOCKED POSITION



RETAINER IN PRE-
LOCKED POSITION

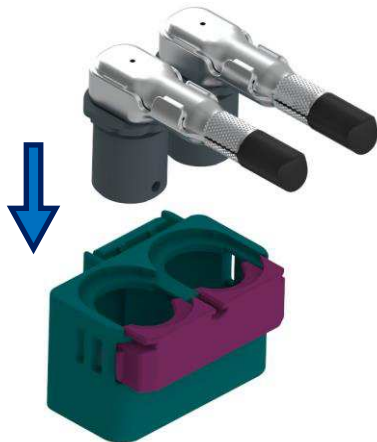


4.2. FEMALE TERMINAL LOADING (SHOWN ON 2WAY PLUG HSG)

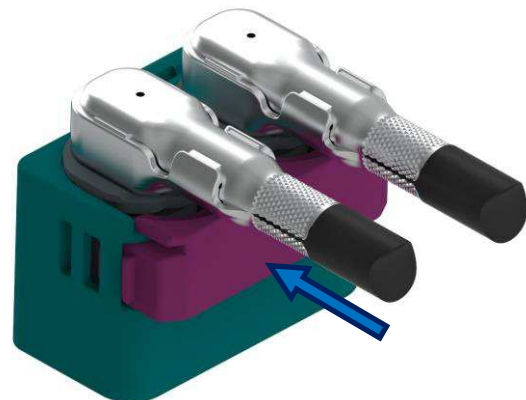


ONLY POSSIBLE WITH RETAINER IN PRELOCKED POSITION

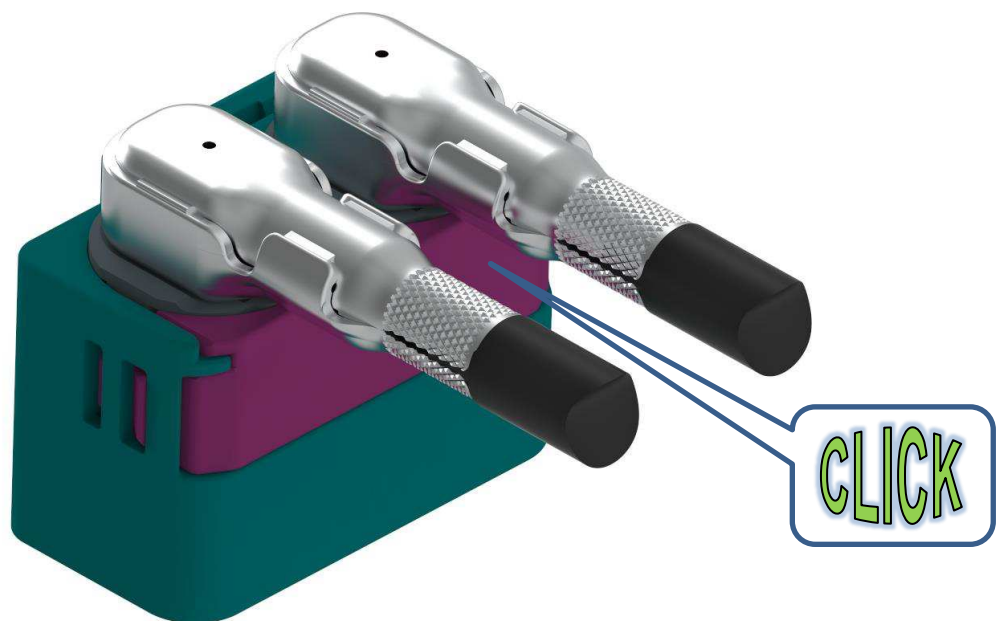
1. TERMINAL INSERTION
DIRECTION



2. RETAINER PUSHING
DIRECTION



3. RETAINER IN ENDLOCK POSTION,
TERMINAL IS FIXED



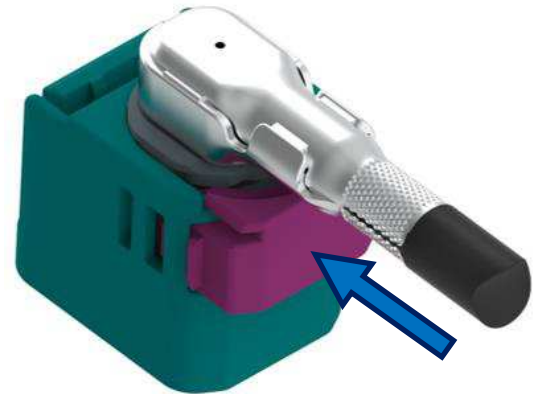
4.3 FEMALE TERMINAL LOADING (SHOWN ON 1 WAY PLUG HSG)

! ONLY POSSIBLE WITH RETAINER IN PRELOCKED POSITION (3.1)

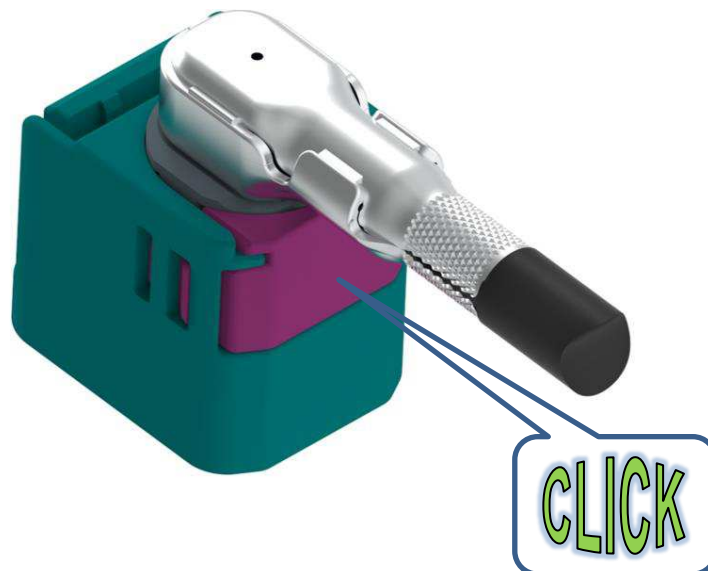
1. TERMINAL INSERTION
DIRECTION



2. RETAINER PUSHING
DIRECTION

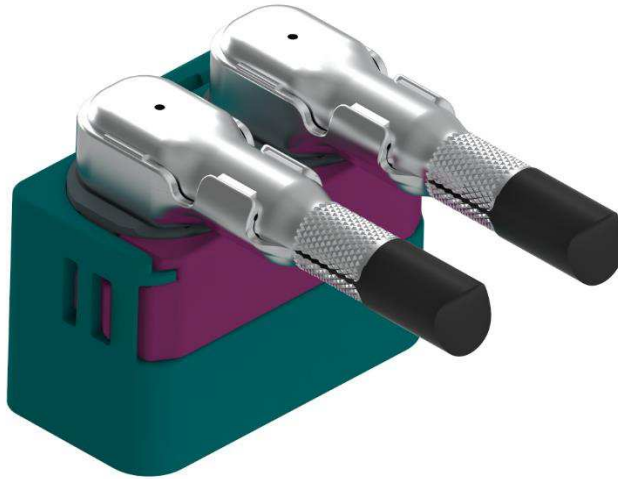


3. RETAINER IN ENDLOCK POSITION,
TERMINAL IS FIXED



4.4 FEMALE TERMINAL POSITION BEFORE LOCKING RETAINER (FOR 2 WAY PLUG HSG)

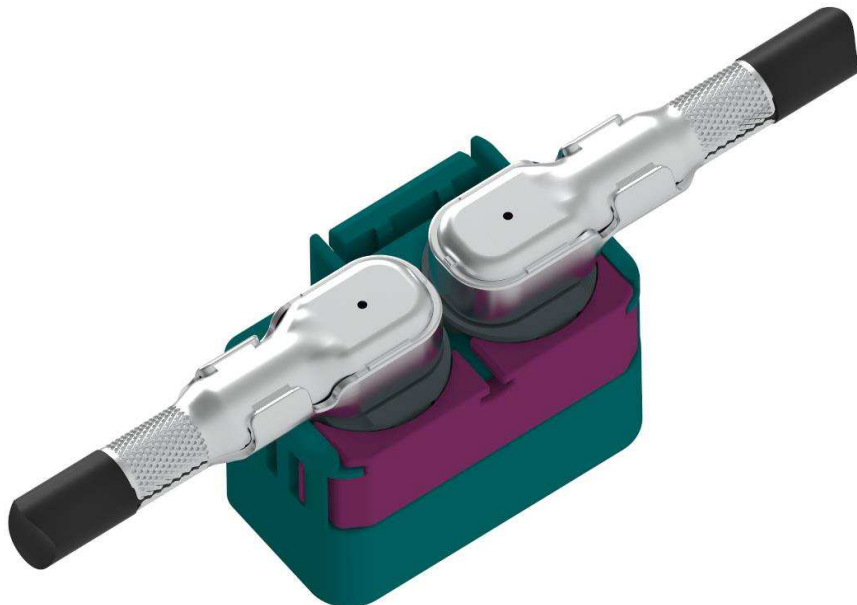
0° POSITION



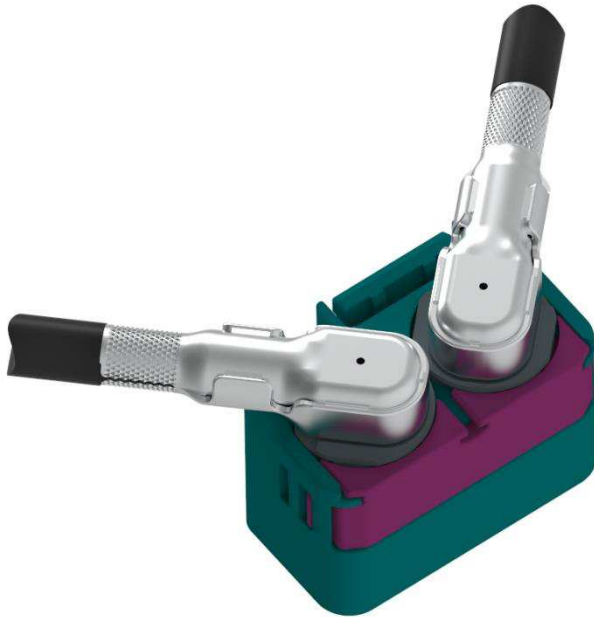
45° POSITION



90° POSITION



135° POSITION



180° POSITION



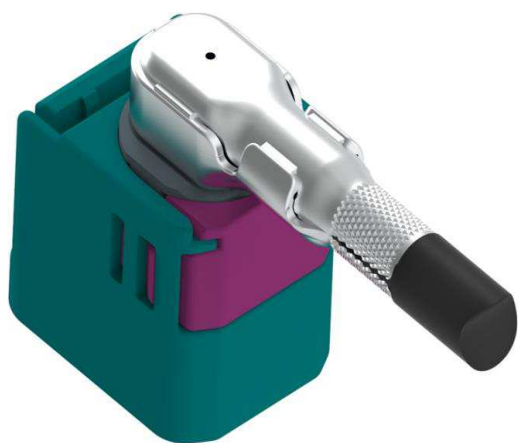
ANGULAR POSITIONS APPLIES FOR BOTH FEMALE TERMINAL



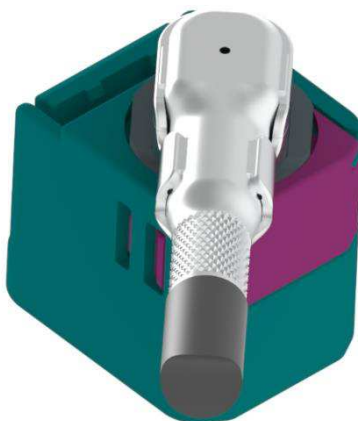
MAX. ANGULAR POSITION (45°) OF TERMINALS WHEN ROTATED TOGETHER

4.5. FEMALE TERMINAL POSITION BEFORE LOCKING RETAINER (FOR 1 WAY PLUG HSG)

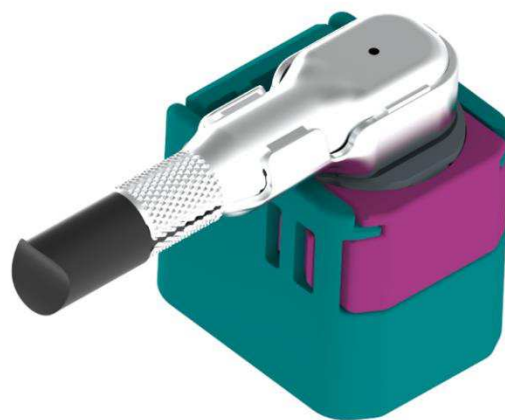
0° / 360° POSITION



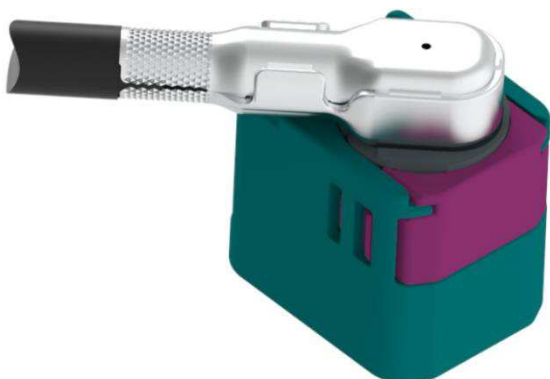
45° POSITION



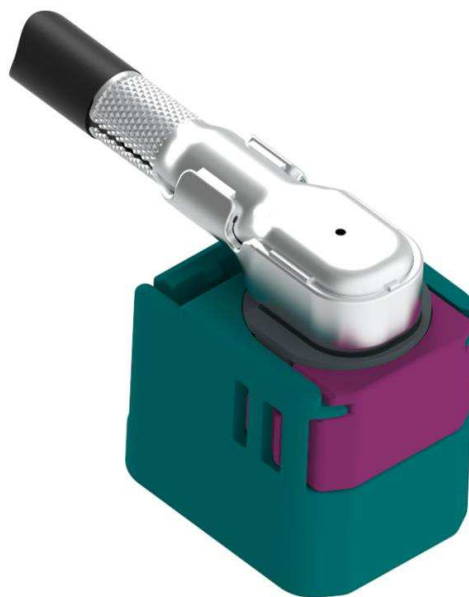
90° POSITION



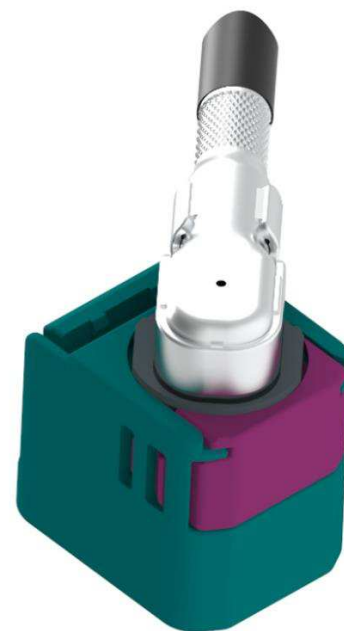
135° POSITION



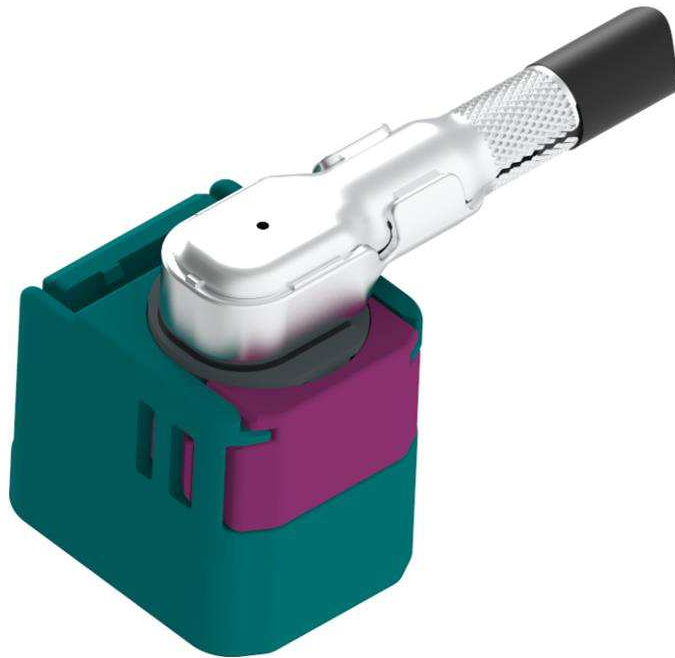
180° POSITION



225° POSITION



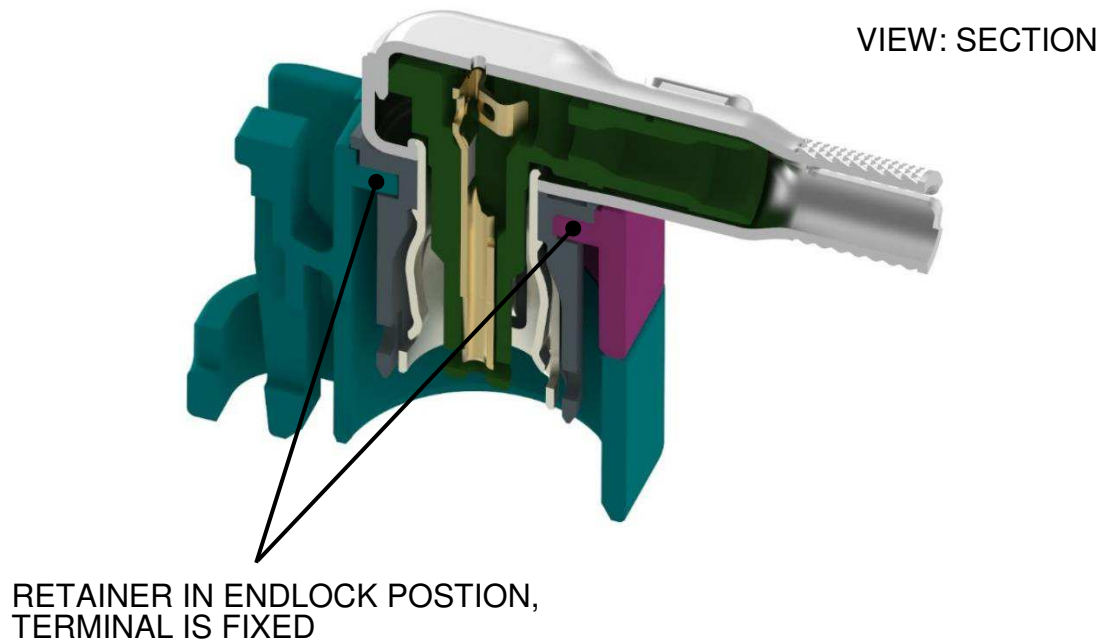
270° POSITION



315° POSITION

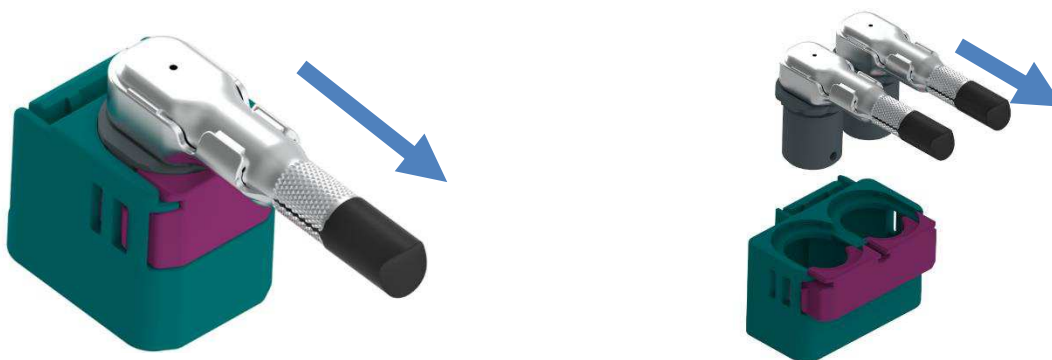


4.6. RETAINER IN ENDLOCKED POSITION (SHOWN ON 2WAY & 1WAY PLUG HSG)



RETAINER MUST BE FULLY
INSERTED INTO THE HOUSING;
IF NOT FULLY INSERTED, THE TERMINAL
WILL BE MISPLACED

4.7 DISENGAGEMENT OF RETAINER (ONLY FOR TESTING PURPOSE)

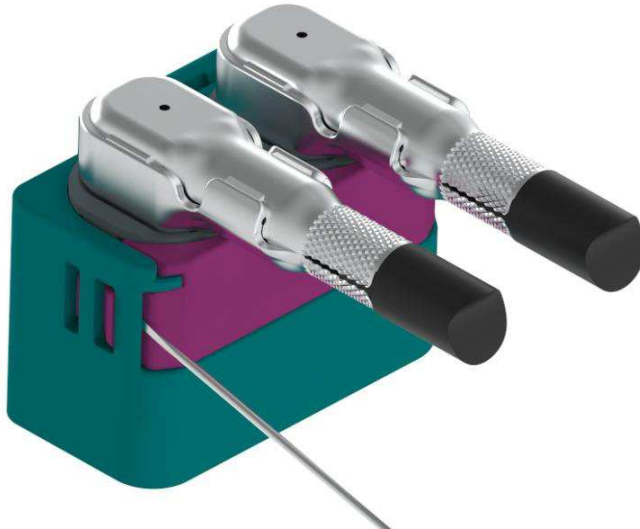


WITH RETAINER IN FINAL LOCK POSITION, THE CABLES
HAVE TO BE PULLED IN THE SPECIFIED DIRECTION TO
MEASURE THE DIS-ENGAGEMENT FORCE OF RETAINER
LOCKS FROM FINAL LOCKING POSITION.

BECAUSE THE RETAINER DESIGN IS NON-SERVICEABLE
OR NOT MEANT FOR RE-USE.

4.8. DEMOUNT TERMINAL OUT OF THE HOUSING (FOR 2 WAY PLUG HOUSING)

1. Dis-Engage Retainer from Housing

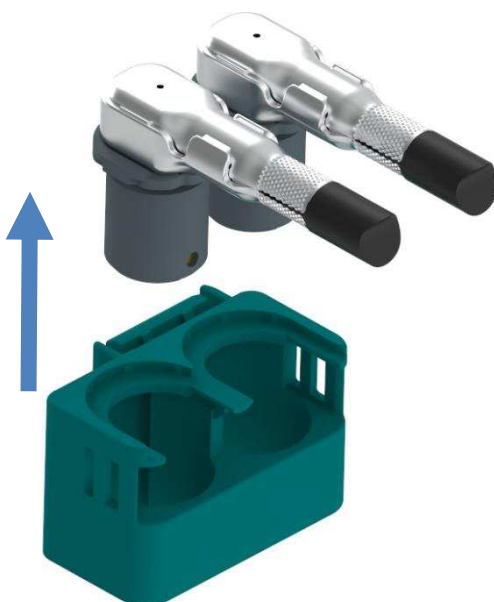


2. Pull the Cable Down



RETAINER HAS TO BE REMOVED BY PLYING WITH SMALL SLOTTED SCREWDRIVER. RETAINER CAN BE IN PRE-LOCK POSITION OR REMOVED COMPLETELY

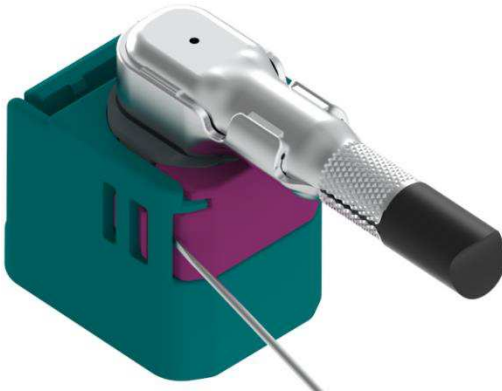
3. Demount Terminal out of Housing



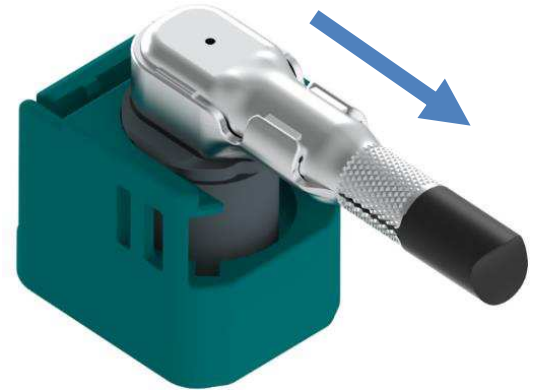
REMOVE THE HOUSING WITHOUT DAMAGING THE TERMINAL. AFTER THAT, USE A NEW HOUSING TO ENSURE THE FUNCTIONING OF MATING SYSTEM

4.9. DEMOUNT TERMINAL OUT OF THE HOUSING (FOR 1 WAY PLUG HOUSING)

1. Dis-Engage Retainer from Housing

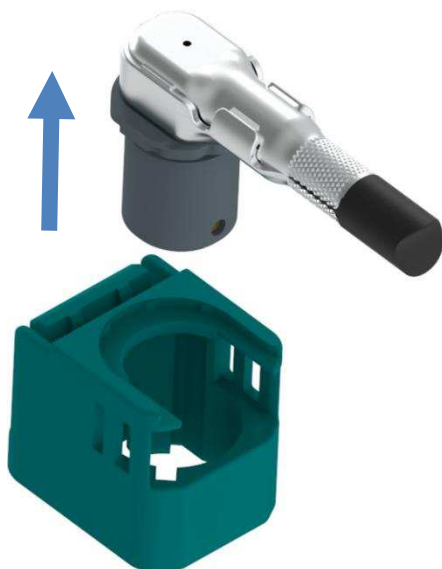


2. Pull the Cable Down



RETAINER HAS TO BE REMOVED BY PLYING WITH SMALL SLOTTED SCREWDRIVER. RETAINER CAN BE IN PRE-LOCK POSITION OR REMOVED COMPLETELY

3. Demount Terminal out of Housing



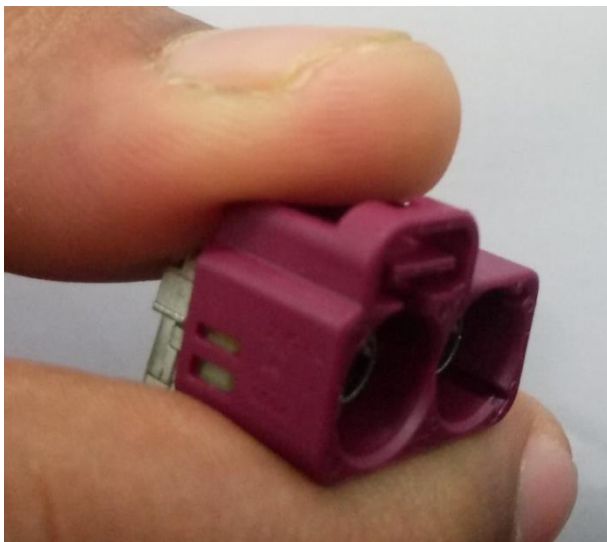
REMOVE THE HOUSING WITHOUT DAMAGING THE TERMINAL. AFTER THAT, USE A NEW HOUSING TO ENSURE THE FUNCTIONING OF MATING SYSTEM

5. MATING AND UNMATING OF THE COAX CONNECTOR (SHOWN ON 2WAY PLUG HSG)

5.1. PLUG CONNECTOR HANDLING METHOD (ONLY FOR 2 WAY PLUG HOUSING)

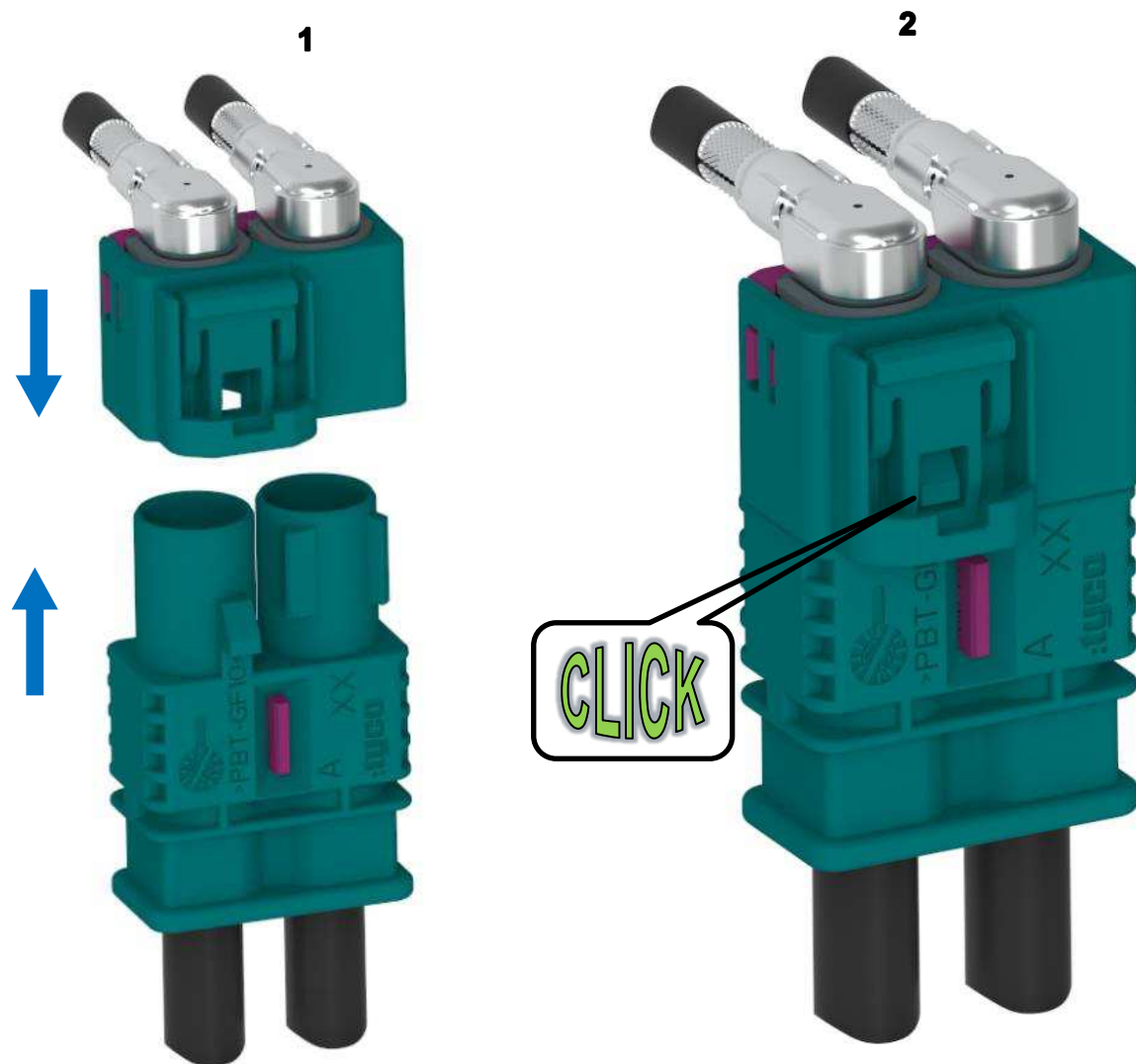


! IN CASE OF TENSION ON THE CABLE, THE PART HAS TO BE HANDLED WITH A SUPPORT ON RETAINER SURFACE (HIGHLIGHTED AREA)

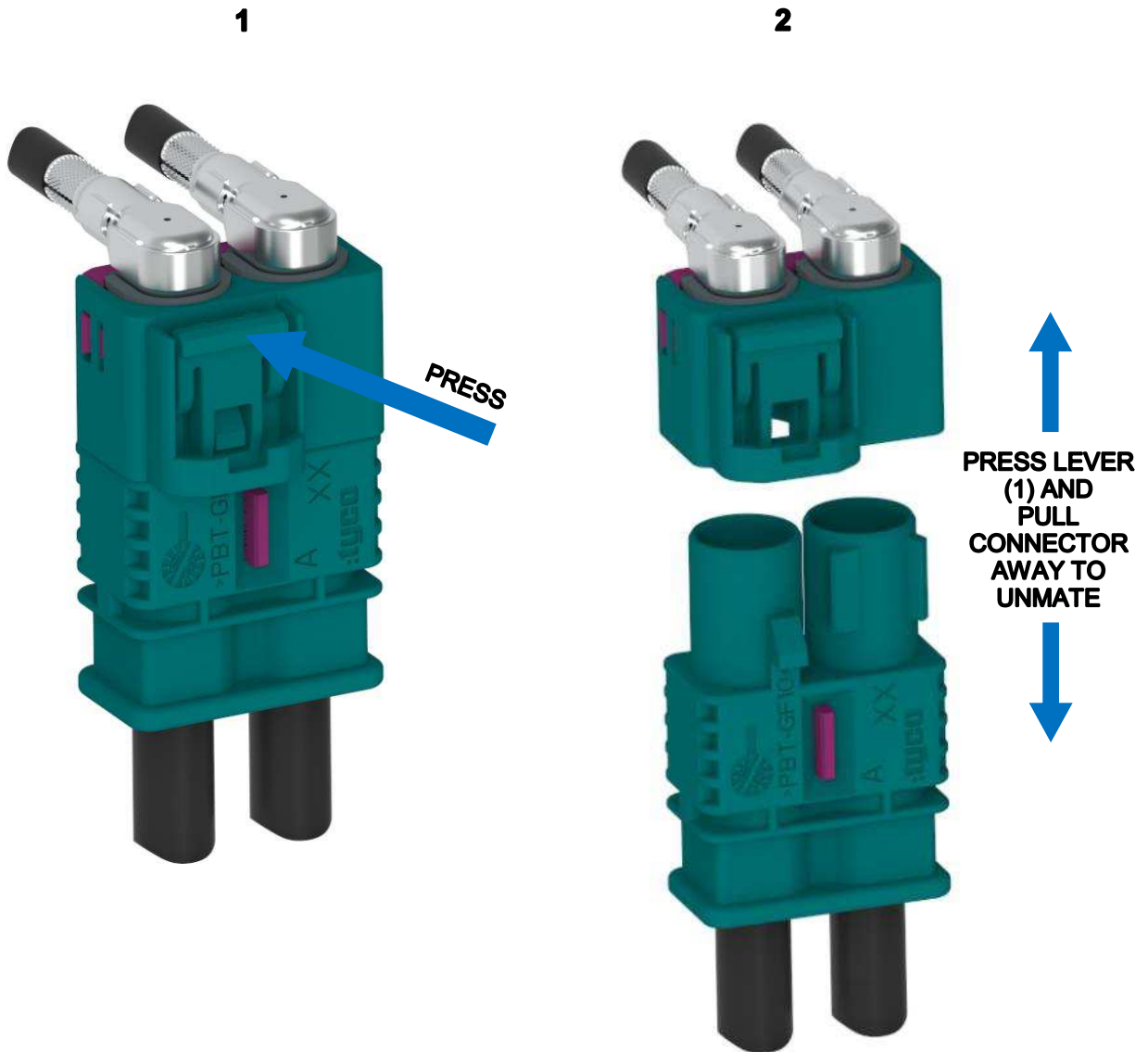


! IT IS RECOMMENDED TO NOT HAVE ANY KIND OF TENSION ON THE CABLE DURING THE PLUG-IN.

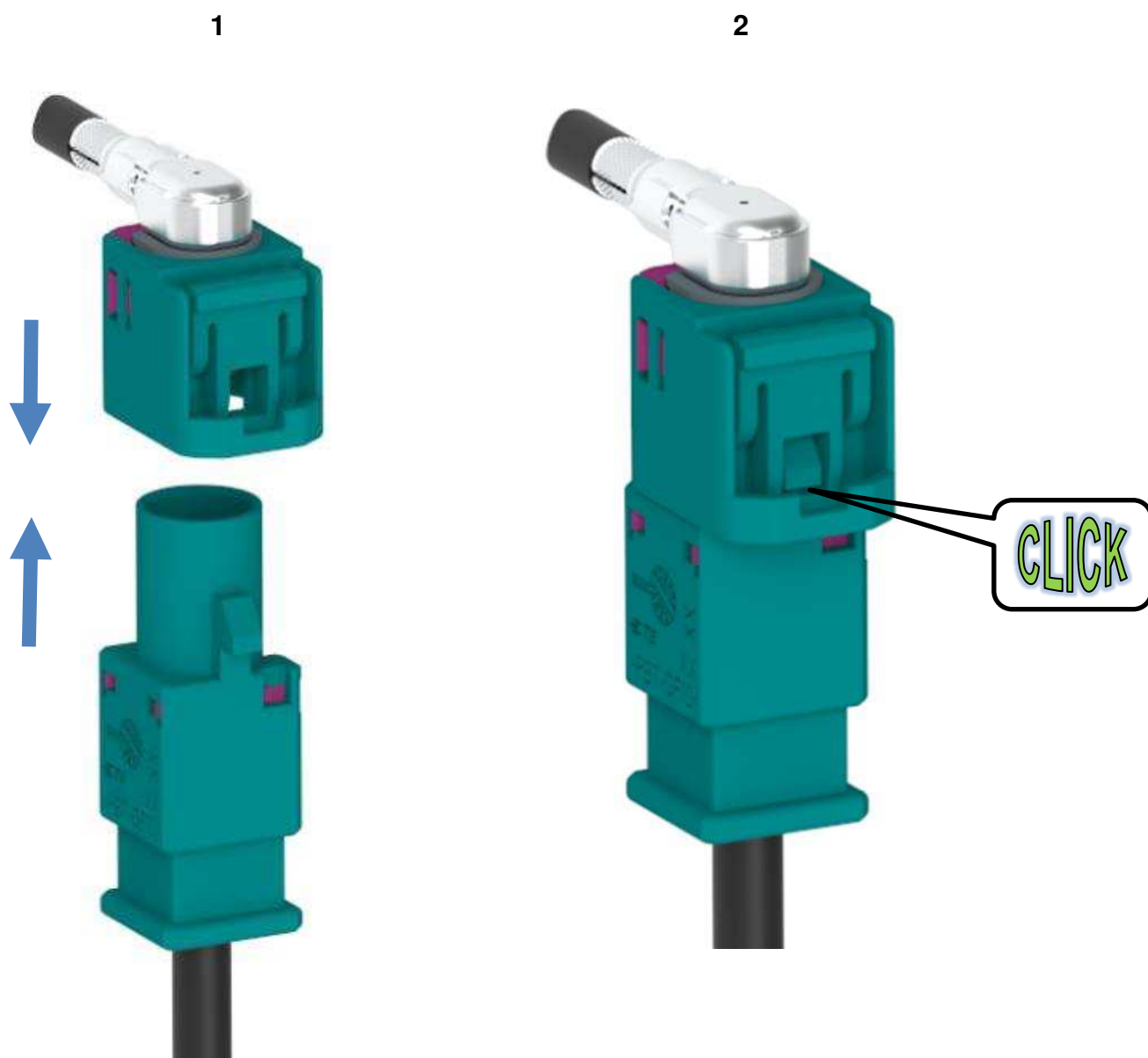
5.2. MATING (FOR 2 WAY PLUG HOUSING)



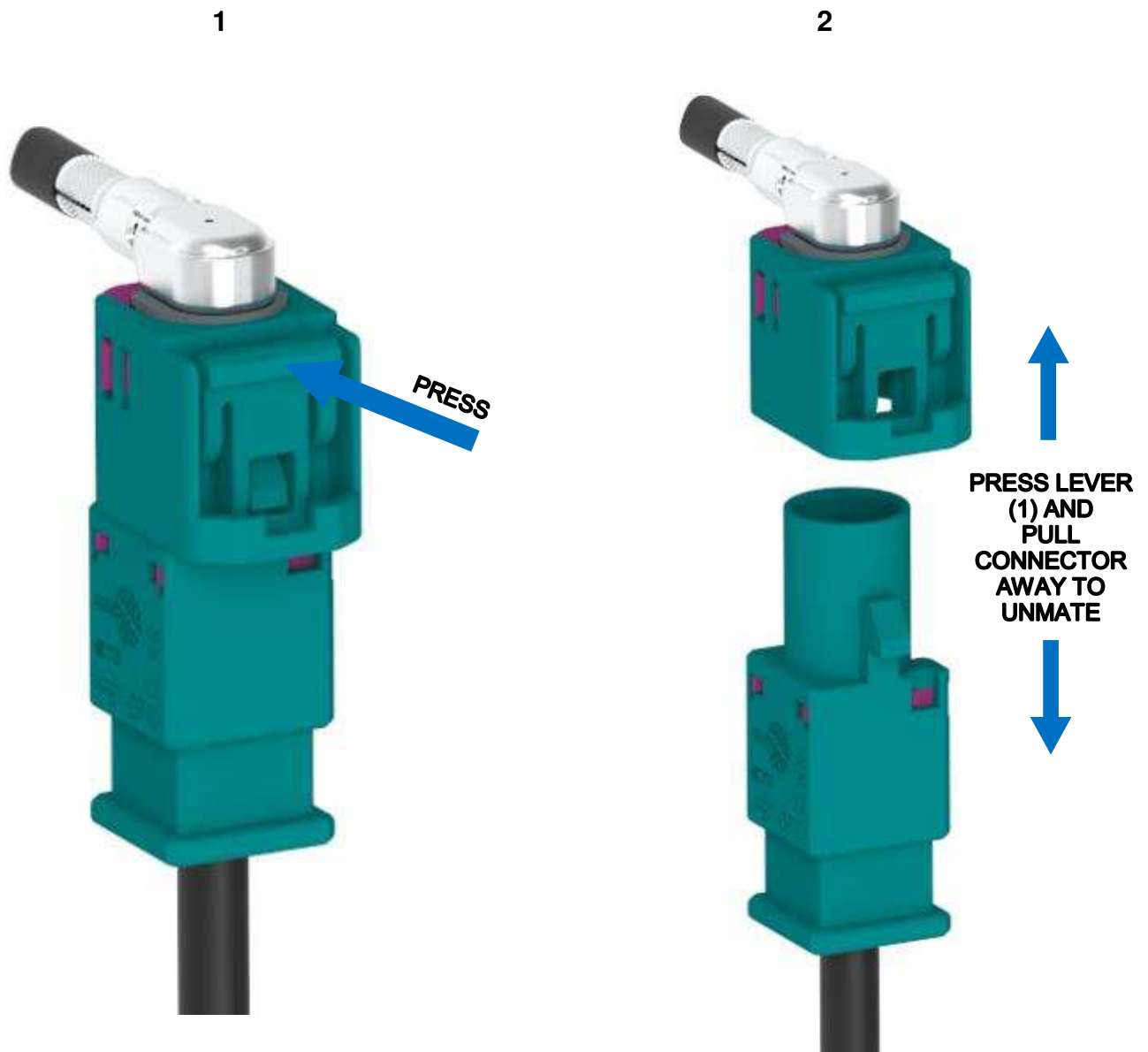
5.3. UNMATING (FOR 2 WAY PLUG HOUSING)



5.4. MATING (FOR 1 WAY PLUG HSG)



5.5. UNMATING (FOR 1 WAY PLUG HOUSING)



LTR	REVISION RECORD	DWN	APP	DATE
A	INITIAL RELEASE	Raghavendra Mujumdar	Srinivas Rathod	24JAN2020
A1	Special Note added for 2141946-X with Details for Cable rotation in Chapter 3, Sheet 5; Removed FAKRA II Contact System Clicking Feature Details in Row 2, Chapter 3, Sheet 5; Removed FAKRA II Contact System Clicking Feature Details Column 2, Chapter 3.1, Sheet 6	Raghavendra Mujumdar	Srinivas Rathod	01FEB2021