

Circular Hybrid Connector Straight

1. INTRODUCTION

This specification contains the regulations to assemble and handle Circular Hybrid Connector (CHC)

2. CAUTION

Do not connect or disconnect connectors under load

To protect against shock, ensure that conductors and their associated connectors are separated from opposite polarity components

3. DESCRIPTION

Male Side



Bulkhead Housing Ass'y
PN 1103436-1



Bulkhead housing with Solder unit Series
PN 1108846-1

Female Side



Connector Housing Ass'y
PN 2290258-1



Accessory, Cable Clamp crown
PN 2290260-1



Accessory Kit, Spacer Sleeve
PN 2287892-1



Accessory, Shielding element for Crown
PN 2290270-1



Accessory Kit, Cable Gland
PN 2287895-1



Male Insert Assembly, Crimp, 8-pos., Type III+
PN 1103428-1



Female Insert, Crimp, 8-pos., Type III+
PN 1245611-1



Male Insert Assembly, Crimp, 12-pos., Type III+
PN 1103431-1



Female Insert, Crimp, 12-pos., Type III+
PN 1245615-1



Male Insert, Crimp, 4-pos., 22 DF Contacts
PN 1103426-1



Female Insert, Crimp, 4-pos., 22 DF Contacts
PN 1103427-1



Male contact for Ethernet
PN 1658670-2 (0.08 ~ 0.4 mm²)



Female contact for Ethernet
PN 1658686-2 (0.08 ~ 0.4 mm²)



Male contact for Insert
PN 66361-4 (0.8 ~ 2.0 mm²)
PN 163086-2 (0.2 ~ 0.6 mm²)



Female contact for Insert
PN 66360-4 (0.8 ~ 2.0 mm²)
PN 163088-2 (0.2 ~ 0.6 mm²)



CAT-5e Hybrid Cable
PN's 1103536-1, 1103536-2, 1103536-3

4. ADDITIONAL DOCUMENTS

4.1	Customer Drawings	Base Housing Ass'y, Design Metal	C-1103436
		Female Insert Ass'y, 12 Pos., Type III+Contacts	C-1103432
		Male Insert Ass'y, 12 Pos., Type III+Contacts	C-1103431
		Male Insert Ass'y 4-pos.;22 DF Contacts, PCB	C-1103430
		Male Insert Ass'y 8-pos.,Type III+ Contacts	C-1103428
		Female Insert Ass'y 8-pos.,Type III+ Contacts	C-1103429
		Male Insert Ass'y 4-pos.;22 DF Contacts	C-1103426
		Female Insert Ass'y 4 pos.;22 DF Contacts	C-1103427
		Bulkhead Hsg. Ass'y with Solder Unit, 8+4-pos., Design Metal	C-1108846
		CAT-5e Hybrid Cable	C-1103536
4.2	Product Specifications	Circular Hybrid Connector Straight	108-94485
		Contact, Type III+, Stamped and Formed	108-10042
		Optimate Contact	108-19063
		Contact, Coaxion, Subminiature	108-12011
4.3	Application Specifications	Contact style Type III+ crimp	114-19000
		Contact Sub-Min Coaxion	408-1379
		Contact 22 DF crimp	114-10001
4.4	Standards	DIN EN 61984 connectors and connecting devices DIN IEC 60664 Insulation coordination for electrical equipment (to 1000V) DIN EN 60999-1 electrical copper conductors- Safety requirements for the clamping units for conductors from 0,2mm ² to 35mm ²	

5. TOOLS

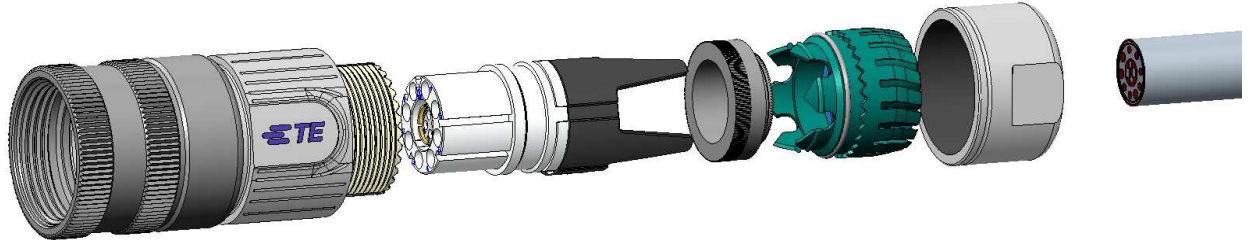
5.1	Wire Stripper and Cutter	Economy	PN 0-149049-1
		Automatic	PN 0-734185-1
5.2	Crimping Tool Type III+ Series	Pro Crimper Hand Toll	PN 0-58495-1
		Straight Action Hand Tool	PN 0-91519-1
5.3	Crimping Tool Contact 22 DF	Pro Crimper Hand tool	PN 0-90800-1
5.4	Crimping Tool Ethernet	Hand Tool For Circular Ethernet Connector	PN 6-1579014-0
5.4	Crimping tool Sub-Min Coaxion	Hand tool	PN 0-69656-1
5.5	Insert / Extraction Tool	Insertion tool contact Type III+ and contact LWL(Optics)	PN 0-1102855-6
			PN 0-0200893-1
		Extraction tool contact Type III+ and contact LWL(Optics)	PN 0-1102855-1
			PN 0-0539972-1
5.6	Extraction Tool	Extraction Tool Male Insert 1103426	PN 9-1579018-7
		Extraction Tool Female Insert 1103427	PN 9-1579018-8

6. PACKAGING

Quantities and details see customer drawings

7. ASSEMBLY

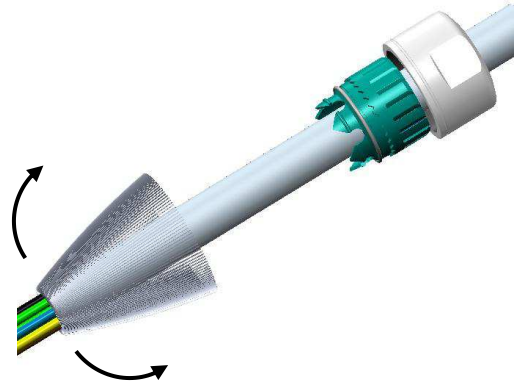
Wire stripping lengths for 8+4 Inserts



7.1



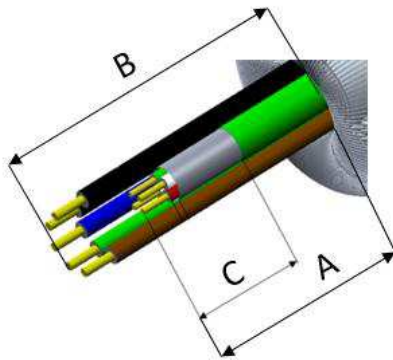
7.2



7.3



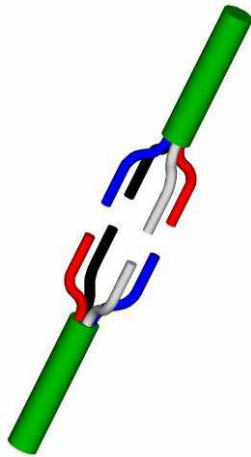
7.4



Dimension	A Signal (4x)	B Power (8x)	C Signal (4x)
Straight (mm)	45 +/-1	41 +/-1	19 +/-1

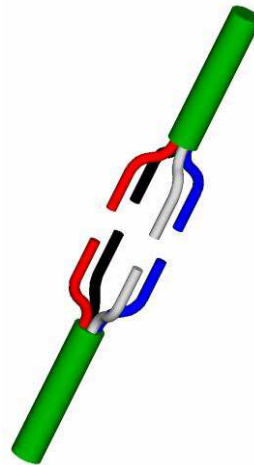
Cable direction is essential for wire-to-wire connection (Marking on cable required) :

Wrong cable direction:

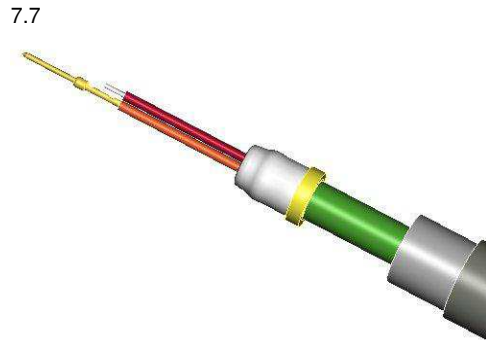
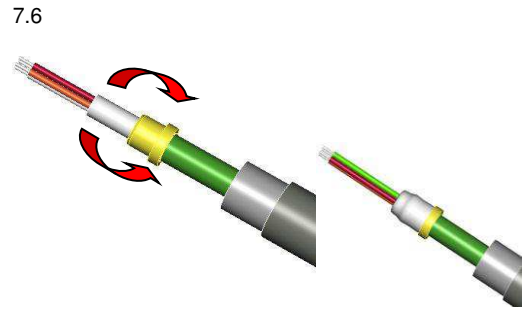
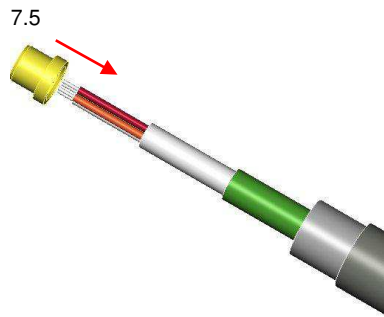


No twisting allowed
(increases NEXT)

Correct cable direction:

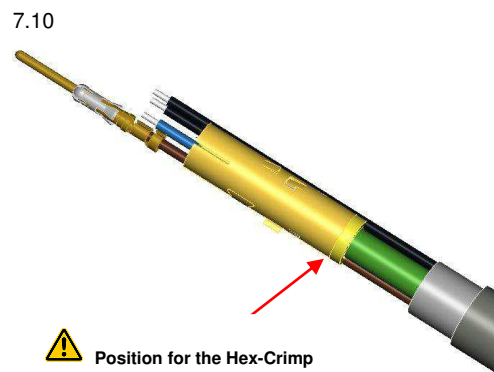
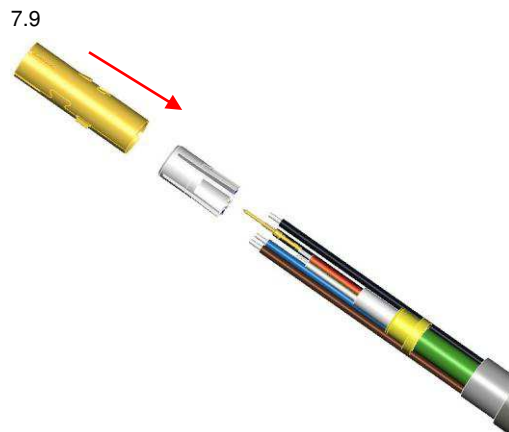


Mounting crimp contact



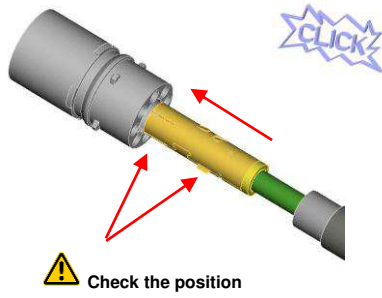
Application Specification for contact 22 DF crimp 114-10001

Application Specification for Type III+ crimp contact 114-19000

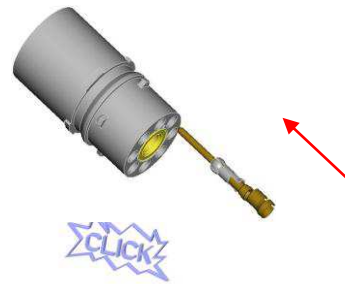


Die Set for Hex-Crimp: PN 4-1105653-8

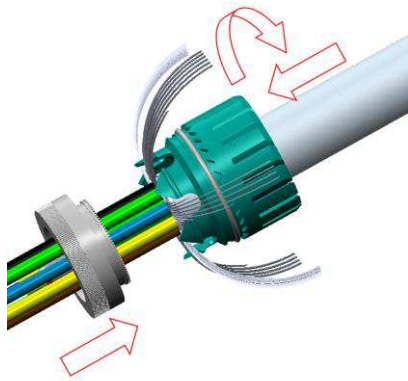
7.11



7.12



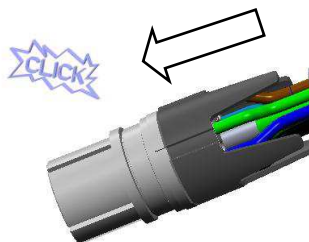
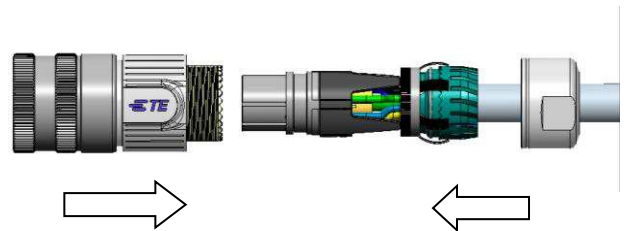
	Insert tool PN
Type III+ contact	0-1102855-6



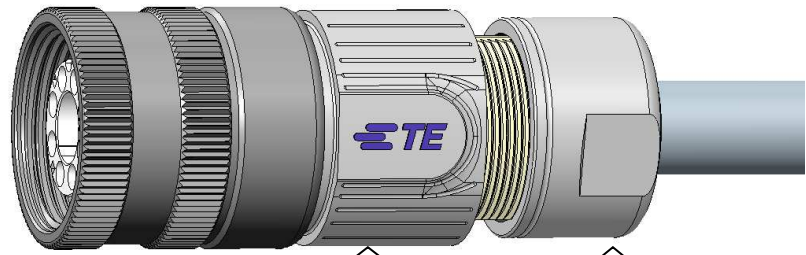
7.13



7.14



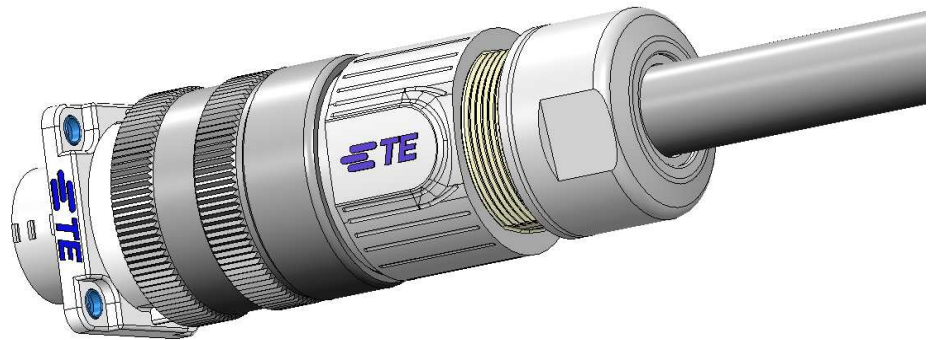
7.15



SW 27
M = 10 - 17 Nm

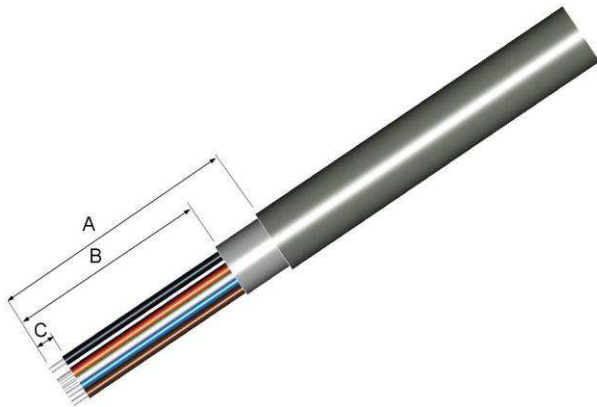


SW 26



M = 2 - 4 Nm

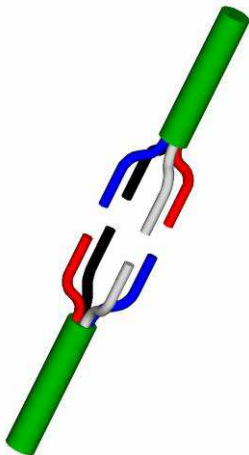
Wire stripping lengths for 11+1 insert



Dimension	A	B	C
Straight (mm)	40 +/-1	10 +/-1	4 +/-1

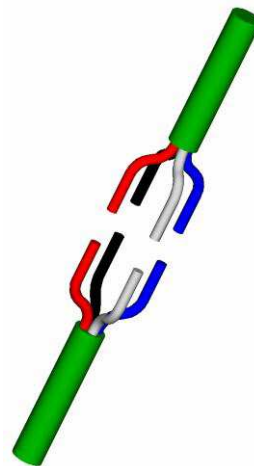
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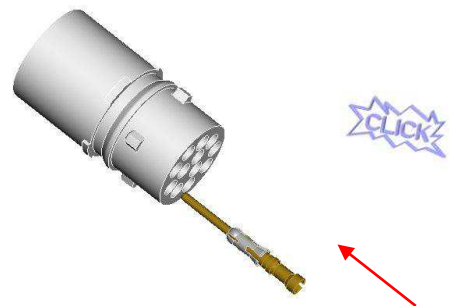


**No twisting allowed
(increases NEXT)**

Correct cable direction:

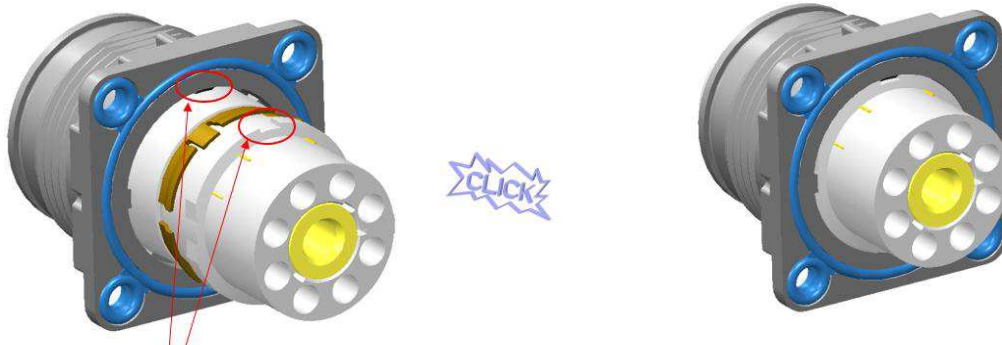



Mounting crimp contact



Application Specification for Type III+ crimp contact 114-19000

Mount Insert into Bulkhead Housing



 Check the right position
4 fixed positions (90° steps) possible

Panel Cut-Out dimensions (mm)

