GENERAL RECOMMENDATION OF USE
FOR 45° SHIELDS G4 WITH DRAKA CABLE

1 - INTRODUCTION

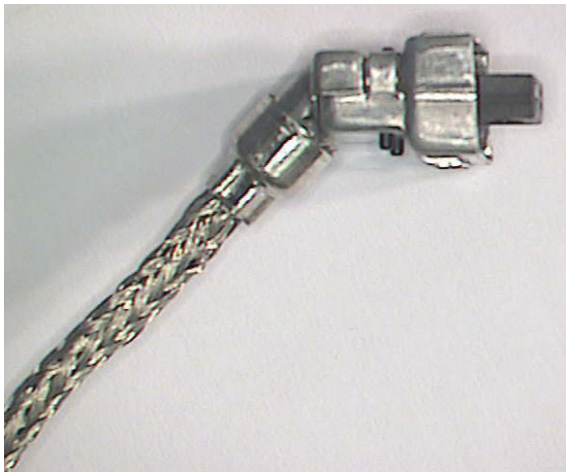
1.1. Objective

This specification describes the mandatory procedure to be followed during the assembly of the harness with the 45° shields with
Draka cable for :

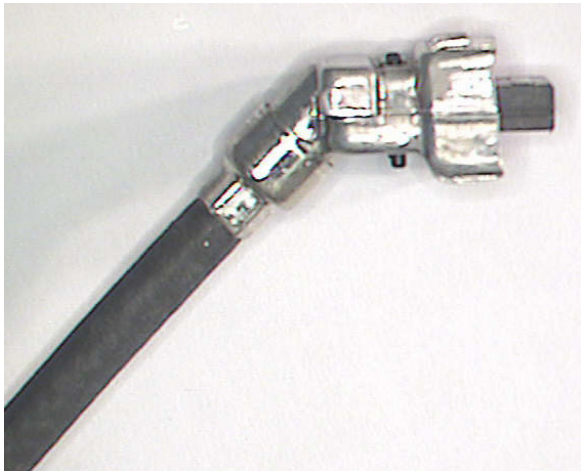
a) positioning the ferrule before crimping,

b) crimping the ferrule,

c) crimping the two upper shield legs down the lower shields.



WITH BRAID CABLE



WITH DRAKA CABLE

1.2. Components

a) MQS socket housings 4 positions loaded with 3 contacts which are crimped on the cable wires according general recommendation 411-15677.

Note : either the “Draka cable” or the “braid cable” are self supplied by the customer.

“Draka cable” reference number of Draka Deutschland is FLR91XCC33X according specification data sheet number DF055-1999, issue B/24.08.00/Ve/Ot.

b) Ferrule (Tyco part number 0-953903-1)

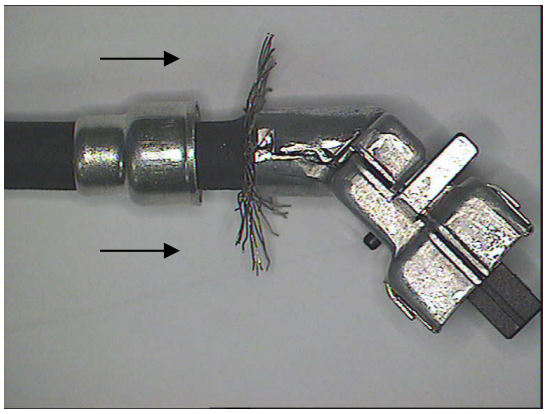
c) Upper 45° shield assembly (Tyco part number 0-1379633-1)

d) Lower 45° shield assembly (Tyco part number 0-1379634-1)

2 - PROCEDURES

2.1. Recommendation when positioning the ferrule before crimping

The pre-assembly of the cable with the connector is realized according general recommendation of use n° 411-15677. Then the ferrule must be manually pre-inserted over the braid on the shields chimney (as shown picture 1). **Braid strands repartition must be homogeneous all around the chimney** (For the Draka cable, only the upper layer of strands has to cover the shields chimney).



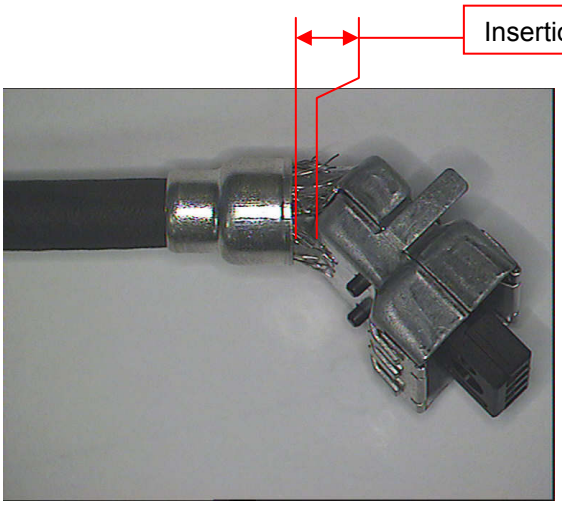
Picture 1

Caution must be taken when inserting the ferrule with the manual tool to avoid damaging the braid strands :

- direction of the insertion force has to coincide with the alignment of the ferrule with the shields chimney.

- do not push to strong the ferrule against the shield chimney edge in order to avoid cutting the braid strands.

After the manual tool insertion has been done, the dimension between the ferrule and the upper shield (see picture 2) has to be between 1mm minimum and 1.4mm maximum.



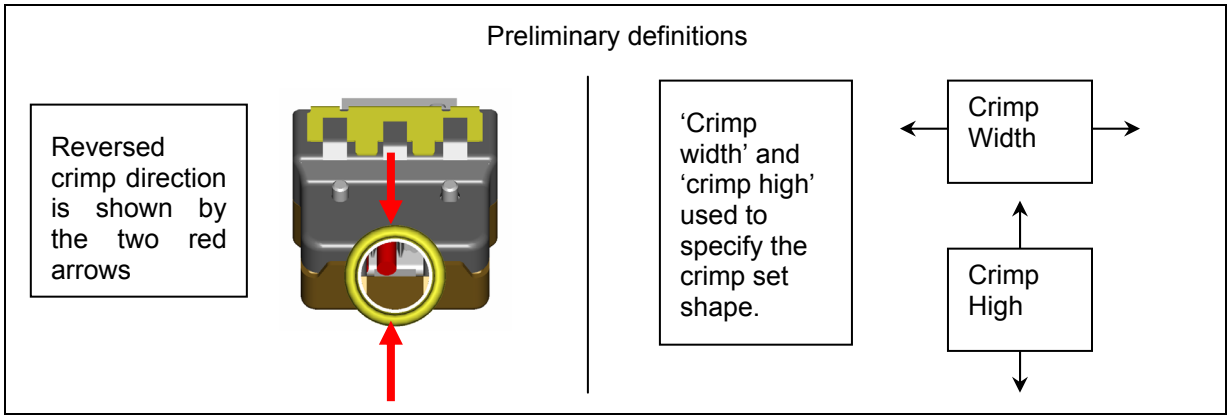
Picture 2

Picture 3

After the ferrule insertion the exceeded length of strands going out of the ferrule has to be cut to obtain the parts with the ferule ready to be crimped (as shown picture 3).

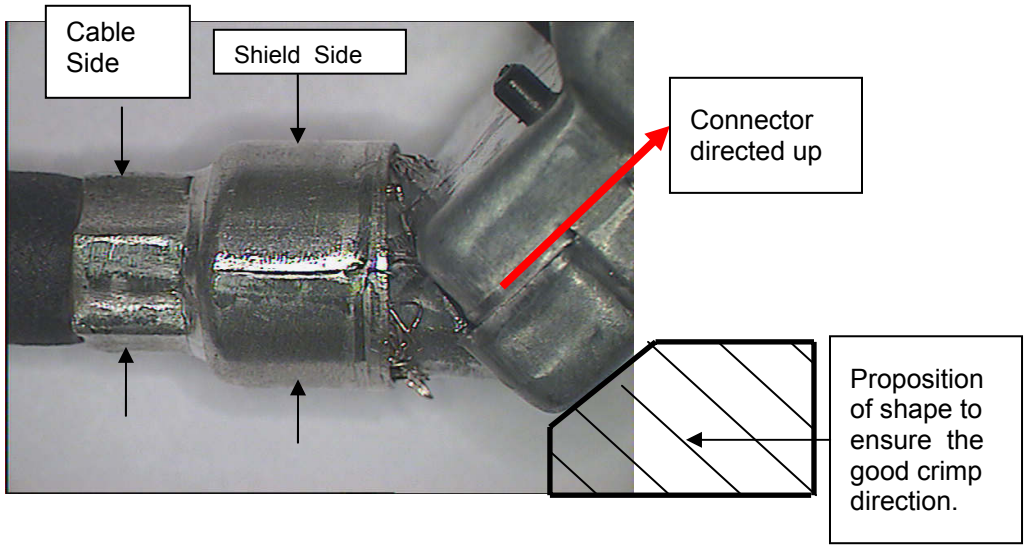
2.2. Procedure for crimping the ferrule

Important : This step has to be done before crimping the two shields legs.



Picture 4

When the part is ready, the ferrule must be crimp with two different kinds of set depending of the ferrule side as indicated picture 5.



Picture 5

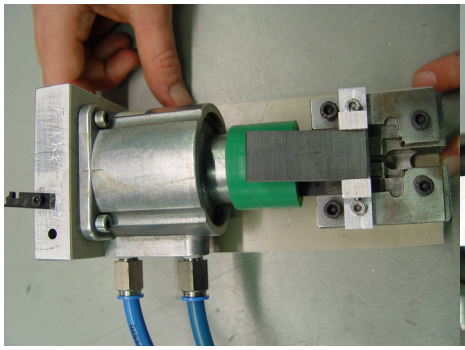
For the 'cable side' the crimp shape is an hexagon of 5.8mm high. The Connect Systems die-set reference number is '190-5.8D'.

For the 'Shield side' the crimp shape is an oval of 8.2mm Width and 8.7mm High. The Connect Systems die-set reference number is '190-8.2-8.7'.

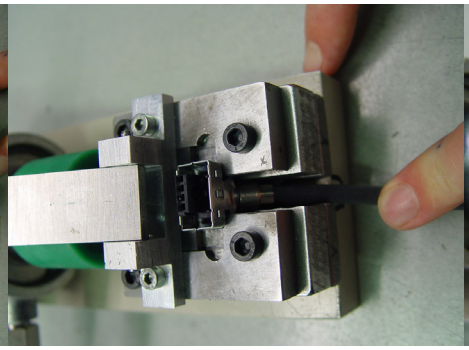
The two crimp sets must work together **in one step** in the '**Reversed direction'** with the **connector directed up** (direction defined picture 4 and 5). To ensure the good crimp orientation "a go / no go" shape can be added under the connector position as suggested picture 5.

2.3. Procedure for crimping the two shield legs.

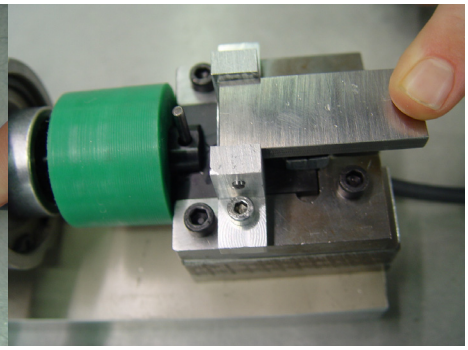
Important : This step has to be done after crimping the ferrule on the Connect Systems tool number '391-1' (see picture 6,7, 8).



Picture 6



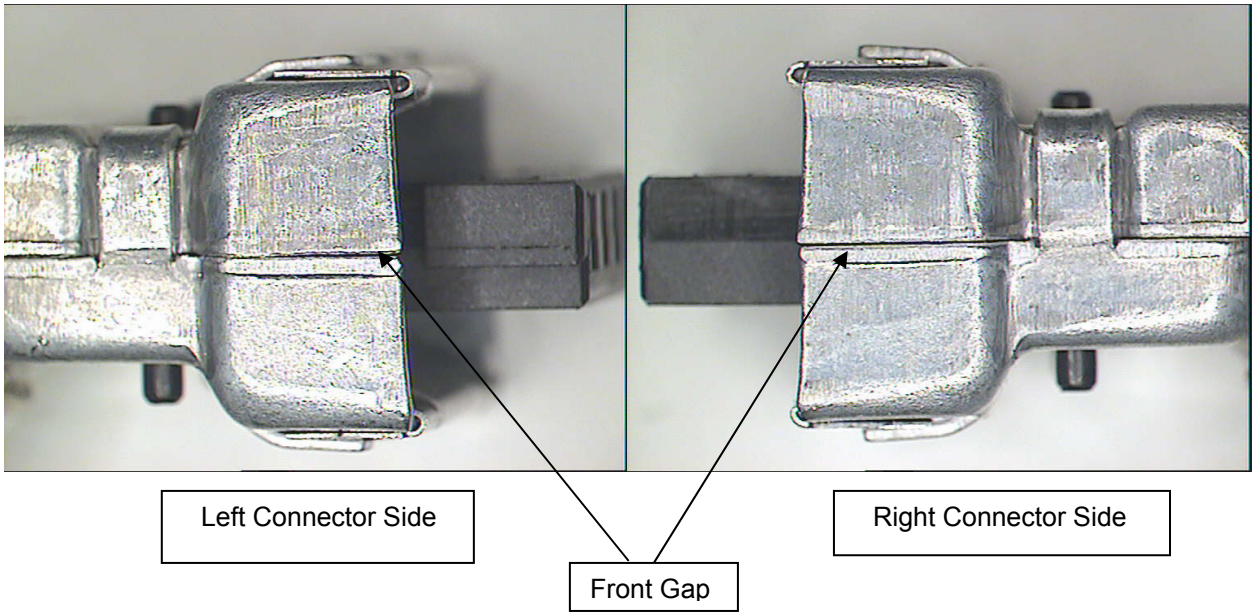
Picture 7



Picture 8

When crimping the two shield legs, upper and lower shield must be positioned in order to close the gap between shields.

After the two legs crimping the allowed remaining front gap for both connector side must be less than 0.2mm as shown on picture 9 and picture 10.



Picture 9 **Picture 10**