

SYQ-002 Aviation Crimp Tool Instruction

GENERAL INFORMATION

This crimping tool is used to crimping the XKE and XC series $\varnothing 1.50$ / $\varnothing 2.00$ / $\varnothing 3.00$ contacts and wires in electronic connectors.

Crimp Range

GAGING LIMITS OF INDENTERS		
SEL. NO	INSPECTION GAGE(mm/in)	
	GO	NO GO
1	0.92/0.036	1.04/0.041
2	1.00/0.039	1.12/0.044
3	1.15/0.045	1.27/0.050
4	1.33/0.052	1.45/0.057
5	1.51/0.059	1.63/0.064
6	1.63/0.064	1.74/0.069
7	1.74/0.069	1.86/0.073
8	1.85/0.073	1.98/0.078
9	1.98/0.078	2.10/0.083
10	2.10/0.083	2.30/0.091



Crimping Sample

Application Range

XKE and XC Series Contacts				
Contacts Sizes	Wire Sectional Area. (mm ²)	Wire Size (AWG)	Selector NO.	
$\varnothing 1.5$	RED	0.4	22	2
	RED	0.5	21	3
	RED	0.6	20	4
	RED	1.0	17	6
	BLUE	0.5	21	1
	BLUE	0.6	20	2
	BLUE	1.0	17	3
	BLUE	1.2	16	5
$\varnothing 2$	RED	1.0	17	5
	RED	1.2	16	6
	RED	1.5	15	7
	BLUE	1.0	17	1
	BLUE	1.5	15	3
	BLUE	2.5	13	5
$\varnothing 3$	RED	2.5	13	9
	RED	4.0	11	10
	BLUE	2.5	13	7
	BLUE	4.0	11	8
	BLUE	6	9	9

The wires for crimping should be in Standard Size; The material of the contacts is partially annealed copper alloy.

WORKING PRINCIPLES

1. The crimp tool consists of two parts: the crimping tool frame and the turret head. The crimping tool frame ensures indentation depth and crimp quality; The turret head ensures the indentation in the right position in the axial direction of the contacts.
2. The crimp tool adopts curve propulsion mechanism, its applied force transfers through four curves in the head cavity of the right plier handle to the four indenters. The four indenters do the centripetal linear motion, which makes its front-end teeth crimp the contact to complete the crimping process. The cycle controlled precision ratchet assures the consistency of impression and the

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Instruction

crimping quality of wires and contacts.

3. The crimp tool has a quality assurance mechanism: the crimp handle can not be opened when the crimping is not completed.

CAUTIONS

1. If a large-diameter contact strayed into the crimp hole for crimping by mistake or the crimp hole is stuck by a hard object, continuing the crimp operation would make the indenters or other mechanical parts damaged. Please loosen the fastening screws and at the same time remove the cylindrical pin which connected with the right crimp handle. When the box of rack and pawl is removed from the tool frame, the crimp tool opens. Adjust the box of rack and pawl, put it into the tool frame again, and then tighten fastening screws. Finally, use the cylindrical pin to fix the rack and the right handle. Try several times, if the left and right handles can be closed and opened freely, use the GO-NOGO gage to check the indenters in each selector No.. If diameters in each selector No. qualified, the tool can be used again.

2. Do not insert any hard steel contacts or solid cylindrical contacts into the crimp hole for crimping, or it will damage the rack and related mechanical parts.

3. Keep clean the work surface of the cam and also the surface between the cam and the adjustable handle, or it will affect the depth of the indentation or even reduce the crimping quality.

4. Pay attention to the action of the pawl and rack. Stop using the tool if found any anomalies.

5. After use, keep the crimp tool and other units clean and properly stored into the box or bag to prevent dust and impurities into the tool frame to affect crimp performance.

6. If the crimp tool will not be used for a long time, please use anti-rust oil for oil seal.

The following is a physical photograph of the crimp tool:

