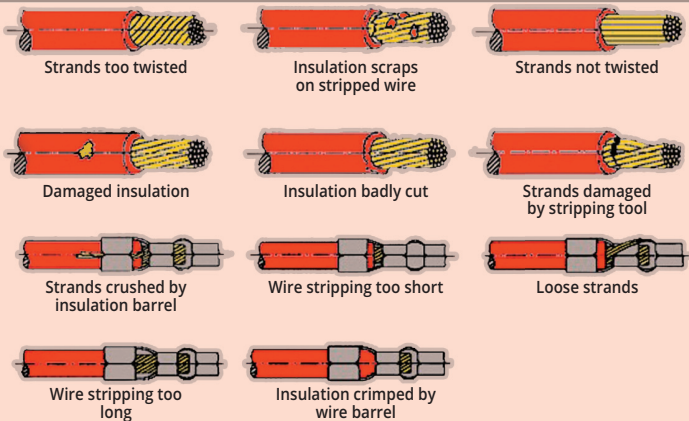


Mecal GUIDE TO QUALITY CRIMPING

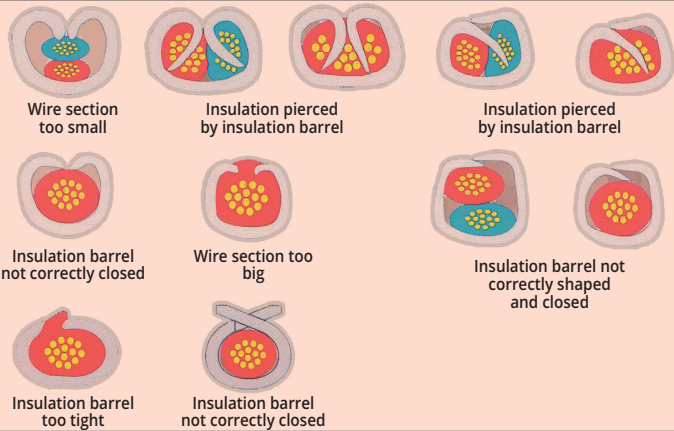
The following information is referred to standard crimping

General appearance

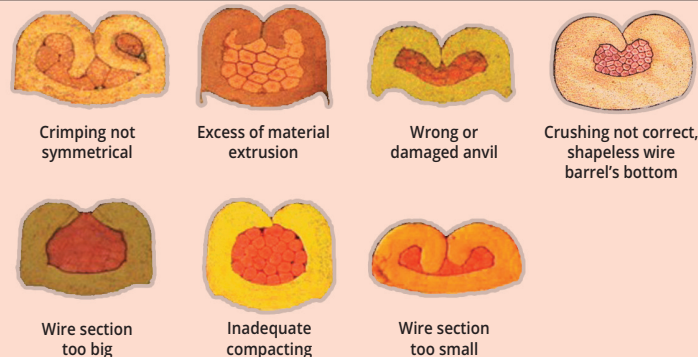
Unacceptable



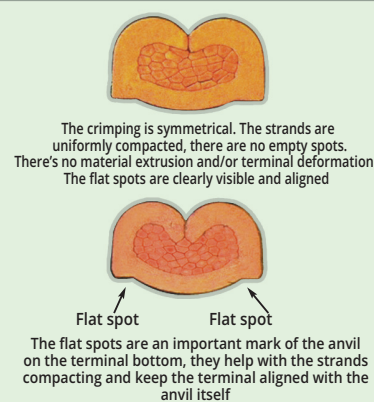
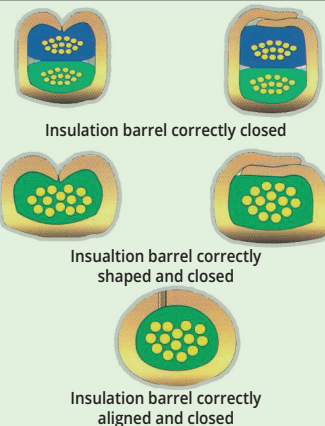
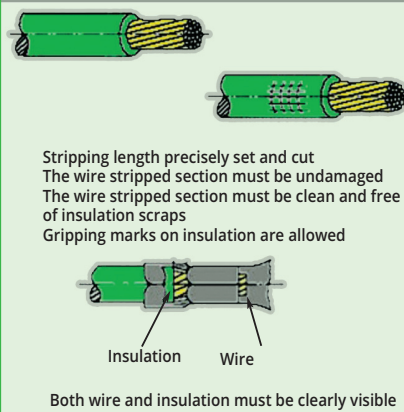
Insulation crimping



Wire crimping



Acceptable



Terminal has been cutted according to Mecal internally approved procedure

Checks and evaluations

Description	Rif.
Bent left or right (max)	3°
Bent up or down (max)	3°
Torsion (max)	3°
Bellmouth	0,2-0,5 mm
Cut-off (max)	0,5 mm
Wire overlay (min)	0,5 mm

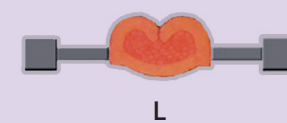
The material extrusion is acceptable when $h \leq t$

The tips of the barrel can not touch the terminal bottom

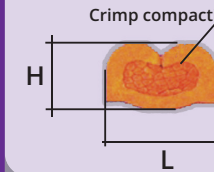
Crimping height measurement



Crimping width measurement



H/L ratio and crimp compacting



The H/L ratio is acceptable when within a min of 55% and a max of 70%

The crimp compacting is the difference between the cross section of the wire + terminal before and after the crimping itself. It is acceptable when within a min of 17% and a max of 24%

Measurements

Pull test

Automotive

Wire sect mm ²	Min pulling force in Newton		
	Class 1	Class 2	Class 3
0,35	----	34	----
0,5	60	80	80
0,75	70	120	120
1	80	160	160
1,27	----	160	----
1,5	90	200	200
2	----	230	----
2,5	100	250	250
3	----	300	----
4	----	350	350
6	----	450	500
10	----	800	1500
16	----	1400	2400
25	----	1900	3000
35	----	2270	4200
50	----	2800	6000
70	----	3500	8400
95	----	4200	11400

Electronics/white goods

Wire section AWG	mm ²	Min pulling force in Newton	
		Class 1	Class 2
30	0,03	3	5
28	0,08	10	20
26	0,12	20	30
24	0,2	30	34
22	0,33	34	60
20	0,5	60	90
18	0,75	90	130
16	1,25	130	150
14	2	150	---

Class 1: Terminals with $\varnothing \leq 2,9$ mm/Ampere ≤ 5 A
Class 2: Terminals with $\varnothing > 2,9$ mm/Ampere > 5 A
Class 3: Cylindrical terminals (to be coined)

Ref:
DIN EN 60352-2
Mecal Specifications