

## Crimping technology for tubular terminals

Made as: straight ring terminals (KOR; KOR.../2X; KM; KM.../2x; KER; KWR type acc. to Ergom), and angle terminals (K90R; K45R; K90M; K45M type acc. to Ergom), butt connectors (KL; ZM; KT; KX; KLZ type acc. to Ergom)

**Materials:** all types Cu tube – M1 E or E-Cu copper tube acc. to DIN 40500 Teil 2,3 or DIN 1787.

**Surface:** KOR; KOR.../2X; KER; KWR; K90R; K45R; KL; KX; KLZ: tin-plated.  
KM; KM.../2x; K90M; K45M; ZM: uncoated.

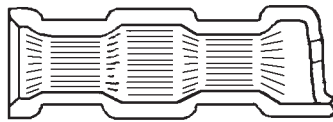
There is a code stamped on the ring terminal, e.g. 70-8, which indicates the joint size for which the terminal is adjusted (in this case M8) and the rated terminal cross-section (70 mm<sup>2</sup>). It is similarly in the double ring terminal. For example the code 50/2 x 10 means that the rated cross-section is 50 mm<sup>2</sup>, it has two holes for M10 screw joint.

### Application:

Straight ring terminals and angle ring terminals are used for connecting wire by means of a screw joint to bus-bar, switchgear, etc. The butt connectors serve to join two wires of the same cross-section to so called "butt" (KL, ZM, KX, KT) or "splice" (KLZ). The joint made with these connectors cannot be stressed mechanically.

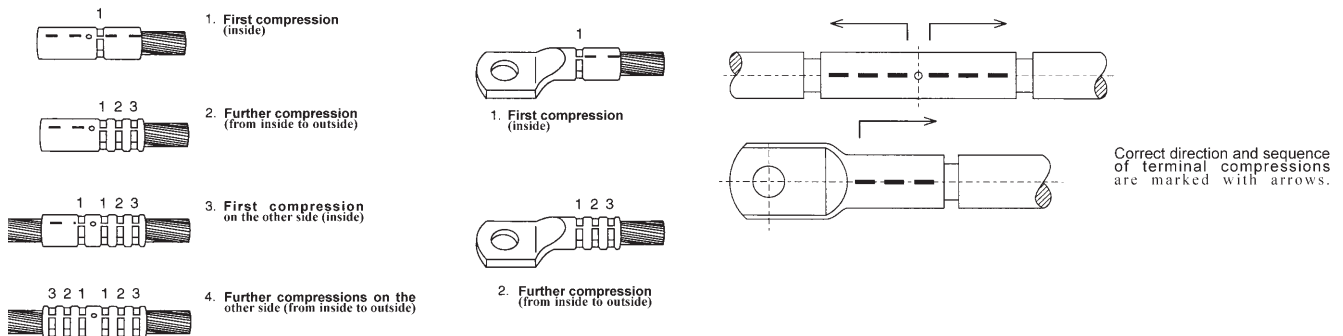
### Crimping technology:

Terminals are crimped using tools with so called "hexagon" Crimping dies.



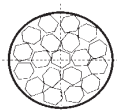
Owing to such compressing shape the joint with very high mechanical and electrical parameters is achieved. However, such joints need several compressions of terminal. The higher compression number the better the joint is.

It is very important in the case of power joints where transmission of large power and currents is required. The "hexagon" compression needs still considerable force to crimp a terminal so in case of such compression (even small wire cross-section) ZAE ERGOM recommends the use of hydraulic tools or hand-tools with a higher mechanical ratio (operated with both hands). In order to achieve a joint of required quality it is recommended to compress terminals to "hexagon" in the following way:

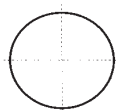


All marked (recommended) crimp must be made. Please pay attention to use a proper die for the cross-section to which it is designed.

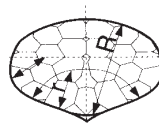
### Types of cable wires



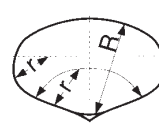
round multiwire  
(rm)



round one-wire  
(re)



sectored multiwire  
(sm)



sectored one-wire  
(se)