



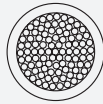

## Workplace Solutions

# Cut it. Strip it. Crimp it.

## Technical data

## Description of cable

The main component of a cable is the conductor, which is an electrically conductive transmission medium, usually consisting of copper. The conductor can be divided into different conductor classes. The conductor classes are standardised in DIN EN 60228 (VDE 0295).

			
<b>Class 1</b> Solid conductor	<b>Class 2</b> stranded conductor	<b>Class 5</b> finely stranded conductor	<b>Class 6</b> finely stranded conductor

## Cutting

The process chain for cable processing always starts with cutting the conductor. It is important to ensure that a clean, square and above all crush-free cut is made.



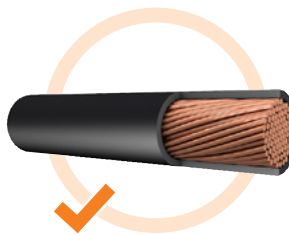
Sheared-off conductor



Pulled out conductor



Crushed cable



Example of a clean cut

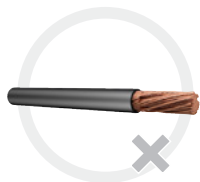


## Stripping

After cutting the conductor, it is prepared for crimping. First, a predetermined length of insulation is removed without damaging the conductor. The subsequent contact point or the wire-end ferrule to be processed determines how much of the conductor insulation needs to be removed. Care must also be taken here to make sure that the cable is stripped to a high quality standard. Stripping errors that must be avoided are listed in DIN IEC 60352-2.



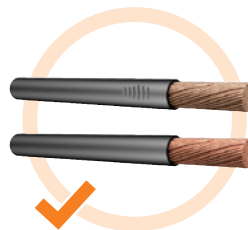
Damaged conductor insulation



Damaged or cut-off individual wires



Excessively twisted individual wires



Correctly stripped conductor

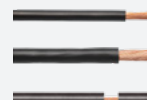


### Sheathing



AM 25  
9001540000

### Stripping

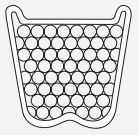
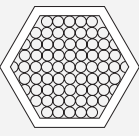




Stripax®  
9005000000

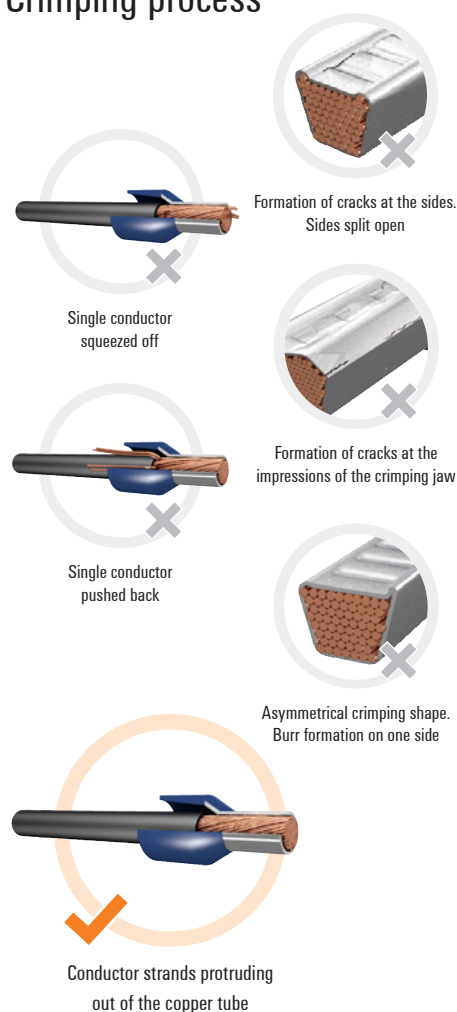
# Crimping

## Crimp shapes

There is a wide range of press shapes available on the market for crimping wire-end ferrules. It is not possible to specify in general which is the most suitable press shape. Each press shape offers individual advantages as well as disadvantages. These must be weighed up in relation to their subsequent application.

	<ul style="list-style-type: none"> <li>+ Low deformation under load at the clamping point</li> <li>+ Smooth continuous surface</li> <li>- No neutral insertion direction</li> </ul>
	<ul style="list-style-type: none"> <li>+ Neutral position due to virtually circular cross-section</li> <li>+ Ideal for circular connection compartments</li> <li>- No smooth surface</li> </ul>
	<ul style="list-style-type: none"> <li>+ Maximum contact area</li> <li>+ Ideal for square connection compartments</li> <li>- No smooth surface</li> </ul>
	<ul style="list-style-type: none"> <li>+ Minimal deformation under load in the contact point</li> <li>+ Smooth continuous surface</li> <li>+ Press shape corresponds with EN 60947-1</li> <li>- Position is not neutral</li> </ul>

## Crimping process



## Overview of extraction strengths

Different standards require different extraction forces. A short overview of the most important standards can be found here:

mm <sup>2</sup>	0,2	0,34	0,5	0,75	1	1,5	2,5	4	6	10	16	25	35
AWG	24	22	20	18	-	16	14	12	10	8	6	4	2
DIN 60999-1	10 N	15 N	20 N	30 N	35 N	40 N	50 N	60 N	80 N	90 N	100 N	135 N	190 N
DIN 60947-1													
DIN 46228-1/4*													
UL 486 F*	10 N	15 N	20 N	30 N	35 N	40 N	50 N	60 N	80 N	90 N	100 N	135 N	190 N
DIN 60352-2	28 N	40 N	60 N	85 N	108 N	150 N	230 N	310 N	360 N	380 N			

\* Suitable for wire end ferrules

## Standards and approvals



Weidmüller Wire end ferrules



Weidmüller Crimping tools



Approval

