# 2. CUTTING-, STRIPPING AND CRIMPING TOOLS

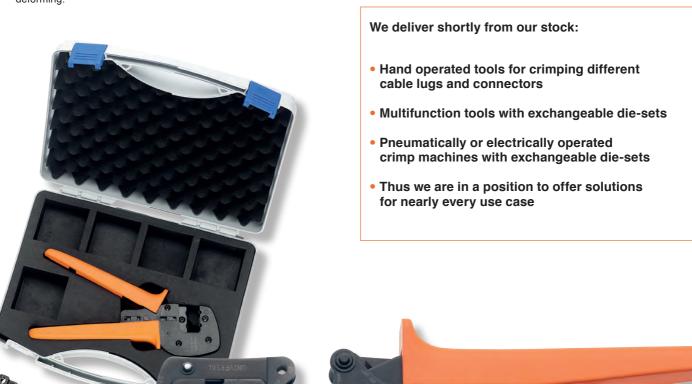
## 2.4 Hand operated tools, multifunction tools as well as machines suitable for crimping insulated and uninsulated cable lugs and connectors

Electrical connections or wiring operations are normally done by using prefabricated leadings with crimped cable lugs or connectors.

The requirements of such connections are in dependence of the used cable lugs or connectors regulated in different norms. Some information are specified in the technical appendix of this catalogue on page 205. The technical regulation give us information about the necessary mechanical as well as electrical characteristics of crimp connections. Generally crimp connections must be done in a way that no unacceptable heating resp. unacceptable increasing of the resistance take place. So a solderless crimp connection is defined as a non detachably electrical and mechanical connection between a conductor and a cable lug or connector. The process includes a malleable permanent material deforming.

To fulfill the requirements in dependence of the frequency of use, druseidt offers tools or machines in different levels of price and performance.

The different druseidt multifunction tools with exchangeable die-sets offer the possibility to crimp various kinds of connectors by using only one tool. Especially they are well suited for mobile application or repair works or in all other cases where no serial-production is required.



### Crimping tools for insulated cable lugs and connectors







Part-No.	cross-section range	description	length	weight kg/pcs.
05103	0,1 - 0,5 mm²	Crimping tool with ratchet	170 mm	0,32
12600/N	0,5 - 6 mm²	Crimping tool with ratchet and double crimping	230 mm	0,53
12601	0,5 - 6 mm²	Crimping tool with ratchet and double crimping	260 mm	0,62

Remark: Part-No. 05103 simply tool for insulated and uninsulated "Mini" cable lugs 0,1-0,5 mm².

Part-No. 12600/N Handy tool with a good ratio in price and performance. Well suited for installation works.

Part-No. 12601 High quality crimping tool with an excellent power gear ratio. Applicable also for continuous works in small series.



Part-No.	cross-section range	description	length	weight kg/pcs.			
05180	0,5 - 6 mm²	Crimping tool with ratchet and double crimping	220 mm	0,48			
05186	Stripping and cutting unit 0,5-6 mm² for 05180						
12602	10 - 16 mm <sup>2</sup> Crimping tool with ratchet		245 mm	0,48			

information: Part-No. 05180 Universal tool with a good ratio in price and performance. As an accessory the stripping and cutting clip Part-No. 05186 can be mounted in the handles. Part-No. 12602 simply tool for cross-section range 10 + 16 mm².

### **Profi Crimp Set**

with 5 pcs. exchangeable die sets in a handy plastic suitcase















Part-No.	content/scope of supply								
12858	- Basic tool - Die set for BNC/TNC connectors								
1200	- Die set for cable end sleeves 0,5-16 mm²	- RG 55, 58, 59, 62 174, 8279 and others LWL							
	- Die set for insulated cable lugs 0,5-6 mm <sup>2</sup> (hexagonal 6,48 - 5,4 - 4,76 - 1,72)								
	- Die set for uninsulated cable lugs 0,5-10 mm <sup>2</sup> - Screw-driver with screws								
	- Die set for crimping connectors 0,5-6 mm²	- Plastic suitcase							
Remark: Well suited for service works in industry and industrial art. Tool in handy design with 5 die sets for the most usual applications in a handy tool-case.									



	· ·		kg/pcs.					
05160	Basic tool with ratchet	460 mm	0,46					
Deliverable	Deliverable die sets							
05161	Die set for insulated cable lugs 0,5-2,5 mm²							
05162	Die set for insulated cable lugs 0,1-0,5 and 6 mm²							
05163	Die set for cable lugs DIN 46234 0,5-6 mm²							
05164	Die set for cable lugs DIN 46234 4-10 mm²							
05165	Die set for cable end sleeves 0,25-10 mm <sup>2</sup>							
05166	Die set for cable end sleeves 16-25 mm²							
05167	Die set for cable end sleeves 35-50 mm <sup>2</sup>							
05168	Die set for coax cable RG 58/59/62/71							
05169	Die set for machined pin and socket contacts 0,14-4 mm²							
05170	Die set for machined pin and socket contacts 6-10 mm²							
05171	Die set for uninsulated tabs and receptacles 2,8 mm							
05172	Die set for uninsulated tabs and receptacles 4,8 mm							
05173	Die set for uninsulated tabs and receptacles 6,3 mm							
05174	Die set for solar connectors MC3							
05175	Die set for solar connectors MC4							
05176	Die set for solar connectors Tyco Solarlok							

Remark: Universal crimping tool with a multiplicity selection of die sets. The parallel stroke mechanism guaranteed high quality crimping connections. The different die sets have been connected by a pin and are easy and quick exchangeable. To protect them while storaged we'll deliver the dies in little plastic boxes. The user-friendly design combined with the extensive number of die sets realize a flexible working by using only one basic tool.

#### Solar-Kit



Part-No.	content/scope of supply						
05178	1 Piece Crimping tool with ratchet 05160 without die sets						
	1 Piece Die set for solar connector MC 3						
	1 Piece Die set for solar connector MC 4						
	1 Piece Die set for solar connector Tyco Solarlock						
	1 Piece Stripping tool for solar cables 2,5-6 mm², adjusted for 7 mm and 8,5 mm stripping length						
Remark: Sp	ecial tool kit applicable for the crimping of the most established solar connectors and stripping of solar cables.						

### **Universal tools**

for crimping coax-connectors and uninsulated tabs and receptacles



Part-No.	range of application	description	length	weight kg/pcs.	
12855/N	RG 55/58/59/62/71/174/8279 u.a.	Crimping tool with ratchet	230 mm	0,53	
05116/N	0,5- 6 mm²	Crimping tool with ratchet and double crimpings	230 mm	0,53	

Remark: Part-No. 12855/N Universal crimping tool for BNC- and TNC-connectors, outside-Ø 6,48/5,41/4,76/1,72. Applicable for crimping the inner contact as well as the outer sleeve. Part-No. 05116/N Universal crimping tool applicable for the crimping of uninsulated tabs and receptacles.

### Precision crimping tools with linear crimping

for uninsulated tabs and receptacles

#### Advantages of the linear crimping process

No twisting of the contacts and symmetric curling of the crimping claws. The linear crimping process offers a machine-like crimping performance and perfect precisioned crimpings for highest demands. The following described tools are equipped with double crimping precision dies and offer a crimping of wire and insulation in one step.

The universal crimping head Part-No. 12620 enables a crimping of a great part of contacts (flat and round terminals etc.) which are on the market. Additionally to the standardized crimping heads it is possible to order special heads for D-Sub-contacts or telephone plugs etc. on request.



Best-Nr.	cross-section range	description
12615	-	basic tool without crimping heads
12616	-	plastic suitcase for basis tool and 5 die sets
12617	0,5 - 1,0 mm <sup>2</sup>	crimping head for uninsulated tabs and receptacles 2,8 mm
12618	0,5 - 1,5 mm <sup>2</sup>	crimping head for uninsulated tabs and receptacles 4,8 mm
12619	0,5 - 2,5 mm <sup>2</sup>	crimping head for uninsulated tabs and receptacles 6,3 mm
12620	0.5 - 2.5 mm <sup>2</sup>	universal crimping head



Part-No.	cross-section range	description	length	weight
30475	0,5 - 1,0 mm²	m <sup>2</sup> for uninsulated tabs and receptacles 2,8 mm		0,50 kg
30477	1,0 - 2,5 mm²	for uninsulated tabs and receptacles 6,3 mm	350 mm	0,50 kg
30480	0,5 - 1,0 mm²	for flag type receptacles Part-No. 04945	210 mm	0,50 kg
30481	0,5 - 1,5 mm²	for flag type receptacles Part-No. 04940	210 mm	0,50 kg

### Electromechanically battery operated crimping tool

with exchangeable crimping dies up to 50 mm² cross-section

Electromechanical tool with Li-lon battery in a light and compact design. Precise tap positioning of contacts. With quick stop (no overrun of the tool), emergency unlock and reset function.

Process monitoring on multifunction display (battery charge level, service interval display, overheating/overload warning). Short, compact work area. Universal applicable through multiplicity designs of die-sets.

- Low maintenance electromechanical drive with Li-Ion-battery technology
- · Light and handy tool with automatic sequence control
- Combinable with a multiplicity of number of die-sets in standard-design
- Cycle monitoring on multifunction display and motor quick-stop for guaranteed process safety
- · LED illuminated work area
- Ergonomic working height and low noise level



Part-No.	Cross-section range mm <sup>2</sup>	Description/Scope of supply
12230	0,10 - 50,0	1 standard set consisting out of: 1 pcs. crimping tool without die-sets 1 pcs. Li-lon-battery 12 V/1,5 Ah 1 pcs. battery charger 230 V 1 pcs. plastic case with inlet
Accessorie	es	
12231		1 pcs. Li-lon battery 12 V/1,5 Ah loading time ca. 30 min.
12232		1 pcs. Li-lon battery 12 V/3 Ah loading time ca. 60 min.
12233		1 Stck. replacement battery charger 230 V
Technical of	lata	

- recillical data
- Cross-section range 0,10-50 mm²
- Li-Ion battery 12 V 1,5 Ah or 3 Ah
- Crimping force 15 kN Dimensions (L x W x H) 142 x 50 x 274 mm
- Crimping-cycle ca. 2,5 sec. Weight 2 kg
- Remark: If necessary we deliver the tools also with battery charger for UK, USA or Oceania/Australia.

### Deliverable crimping dies for electromechanically battery operated crimping tool Part-No. 12230

















Exchangeable crimping dies

Crimping dies with locator

Part-No.	cross-sec	ction-r	ange	Description
12240	0,5	-	6	For insulated cable lugs and connectors
12241	10	-	16	For insulated cable lugs and connectors
12242	0,5	-	10	For cable lugs DIN 46234
12243	16	-	25	For cable lugs DIN 46234
12244	1,5	-	10	Universal die set for uninsulated butt connectrs usual in trade design 1,5/2,5 + 4 mm² druseidt Part-No. 13687/13688 und 13689 as well as connectors acc. to DIN 46267 part 1 6 + 10 mm² druseidt Part-No. 01964/65
12245	0,25	-	6	For uninsulated and insulated cable end sleeves DIN 46228 page 1 + 4
12246	10	-	25	For uninsulated and insulated cable end sleeves DIN 46228 page 1 + 4
12247	35	-	50	For uninsulated and insulated cable end sleeves DIN 46228 page 1 + 4
12248	2 x 6	- :	2 x 16	For insulated TWIN cable end sleeves
12249	0,1	-	2,5	For uninsulated receptacles 2,8 mm and 4,8 mm
12249/A				Locator for die set Part-No. 12249
12250	0,5	-	6	For uninsulated receptacles 4,8 und 6,3 mm
12250/A				Locator for die set Part-No. 12250
12239	0,5	-	6	For uninsulated ring terminals DIN 46225 design A
12251		-		For coaxial connectors RG 58/59 and RG 62/71, crimp dimensions 5,4/6,48/1,72 mm
12258	2,5	-	6	For solar connectors MC 4
12258/A				Locator for die set Part-Nr. 12258
12252	4	-	10	Für solar connectors MC 4
12252/A				Locator for die set Part-No. 12252
12259	2,5	-	6	For solar connectors MC 3
12259/A				Locator for die set Part-No. 12259
12265	4	-	10	For solar connectors MC 3
12265/A				Locator for die set Part-No. 12265
12269	1,5	-	6	For solar connectors Tyco
12269/A				Locator for die-set Part-No. 12269
12253	0,14	-	4	For turned pin- and socket contacts
12253/A				Locator for die set Part-No. 12253
12235	1,5	-	6	For turned pin- and socket contacts
12235/A				Locator for die set Part-No. 12235
12236	4	-	10	For turned pin- and socket contacts
12236/A				Locator for die set Part-No. 12236
12237	10	+	16	For turned pin- and socket contacts incl. locator
12238	6	+	25	For turned pin- and socket contacts incl. locator
12224		-		For Western jacks 4-, 6-, 8-pin
12225		-		For short Molex jacks 4-, 6-, 8-pin
12226		-		For Stewart plugs 4-, 6-, 8-pin

### Multifunctional crimping devices

deliverable as hand operated tool and electrically or pneumatically operated machines

The offered tool 12430 as well as the machines 12408 and 12425 works with the same die sets. The high and constant quality of the crimping performance is the result of the dies combined by the linear crimping process. The machines were created with a newly developed safety mechanism. Consequently there is no need to specify any safety covers to protect the operator. Two sizes of stabilized tool-cases for the hand operated tool offer the possibility to work with and to store a different number of die sets.

When working with the hand tool in combination with a machine the system enables a stationary as well as working inside of switch gears or switch boxes. The electrically operated machine part-no. 12408 is characterized by an easy and quick exchange of the tool head and die sets in a short machine cycle time. It is possible to crimp the connectors in one as well as in two steps.

The machine is equipped with an adjustable double step mechanism. That means that the crimping contact will be fixed in the first and the crimping procedure and the reverse of the dies will be done in the second step. Activation with safety foot pedal. Assembling of all offered die sets in the fast-change-clamp of the tool head part-no. 12409.

So the system offers a cost-effective as well as a working in a wide



Don't No.	d			weight					
Part-No.	description			kg/pcs.					
Hand opera	Hand operated tool								
12430	basic tool without die set	75	220	40	0,58				
12431	plastic tool-case for basic tool and 5 die sets								
12432	plastic tool-case for basic tool and 13 die sets								
Electrically	operated machine								
12408/N	crimping machine 230 V AC with safety foot pedal without tool head and crimping dies	390	260	200	13,00				
12409/N	basic crimping head without crimping dies								
Description	of the die sets on page 159.								

### Pneumatically operated safety crimping machine

These pneumatically operated crimping machine needs, just as the electrically one, no safety covers to protect the operator. The machine was created with the newly developed and patent protected safety mechanism. By means of a fitted safety valve, crimping is not released where the size of the opening between the impact surfaces of the dies exceeds 5,9 mm. Consequently there is no need to specify any safety covers. Activation with safety double foot pedal is standard.

So the productivity is additionally increased and the hands of the operator remain free to insert the contacts and conductors. Crimp force starting at 9 kN and exponentially increasing to max. 120 kN at die closure at 6 bar. Electronic piece counter, safety double foot pedal, a colour coded quadruple connecting hose and a tool-mounting-set are standard and scope of delivery. The multiplicity fields of applications offer a wide range of crimping activities.



Part-No.	cross-section range	description		dimensions mm			
	mm²	'	В	L	Н	kg/pcs.	
12425		pneumatically operated crimping machine with tool-adapter and safety double foot pedal	280	160	280	26,00	
Deliverable	die sets for hand opera	ated tool 12430 electrically operated machine 12408 and pneumatically operated mac	hine 124	25			
12433	0,5 - 6,0	die set for insulated lugs/connectors					
12434	0,1 - 10,0	die set for cable lugs DIN 46234					
12445	10,0	die set for cable lugs DIN 46234					
12447	16,0	die set for cable lugs DIN 46234	e set for cable lugs DIN 46234				
12436	0,14 - 10,0	die set for cable end sleeves DIN 46228 page 1 + 4	set for cable end sleeves DIN 46228 page 1 + 4				
12426	10,0 - 25,0	die set for cable end sleeves DIN 46228 page 1 + 4					
12427	35,0 - 50,0	die set for cable end sleeves DIN 46228 page 1 + 4					
12437	0,5 - 1,0	die set for uninsulated receptacles 2,8 mm					
12438	0,5 - 2,5	die set for uninsulated receptacles 4,8 mm					
12439	0,5 - 6,0	die set for uninsulated receptacles 6,3 mm					
Additional di	e sets e.g. for solar conn	ectors, machined pin and socket connectors etc. on request.					

### Crimping tools for uninsulated cable lugs and connectors







Part-No.	cross-section range mm²	description		weight kg/pcs.	
05103	0,10 - 0,5	crimping tool with ratchet	170 mm	0,32	
12645/N	0,50 - 10,0	crimping tool with ratchet	230 mm	0,53	
30445	0,75 - 10,0	crimping tool with ratchet	270 mm	0,50	
Remark: Part-No. 05103 simply tool for insulated and uninsulated "Mini" cable lugs 0,1-0,5 mm². Part-No. 12645 N/30445 universal tools, well suited for installation works.					



Part-No.	cross-section range mm²	description		weight kg/pcs.	
05182	0,1 - 16	crimping tool with ratchet	220 mm	0,47	
05186		ping and cutting unit 0,5-6 mm² for 05182			
30446	1,5 - 16	crimping tool with ratchet	315 mm	0,61	
05126	10,0 - 25	crimping tool with ratchet	260 mm	0,62	

Remark: All tools for crimping cable lugs according to DIN 46234, 46230 resp. connectors DIN 46341 Part 1 design A + B or connectors with similar dimensions. Part-No. 05182 as an accessory the stripping and cutting clip Part-No. 05186 can be mounted in the handles.

05186

### Crimping tools for tubular cable lugs and connectors in druseidt standard design crimping width 5 mm







12376 12377 12375

Part-No.	cross-section range mm²	crimping design	length	weight kg/pcs.
12375	6 - 50	WM-crimping	380 mm	1,30
12376	6 - 70	WM-crimping	515 mm	2,00
12377	10 - 120	WM-crimping	660 mm	4,10

Remark: Suitable for crimping of druseidt standardized tubular cable lugs and connectors according to the catalogue pages 30-34. The cross-section can be adjusted by turning the in-built-revolving dies. So there is no need of changing dies.

### Crimping tools for tubular cable lugs and connectors in druseidt Euro-type design

crimping width 5 mm







12372/50 12372 12373

Part-No.	cross-section range mm²	crimping design	length	weight kg/pcs.
12372/50	6 - 50	WM-crimping	380 mm	1,30
12372	6 - 70	WM-crimping	515 mm	2,00
12373	10 - 120	WM-crimping	660 mm	4,10

Remark: Suitable for crimping of tubular cable lugs and connectors in druseidt Euro-type design according to the catalogue pages 42-48. The cross-section can be adjusted by turning the in-built-revolving dies. So there is no need of changing dies.

### Crimping tool for tubular cable lugs in druseidt design for fine stranded cables

crimping width 5 mm







12370/50

12370/12374

12371

Part-No.	cross-sec Copper	tion range Alu	crimping design	lenghts	weight kg/pcs.		
For tubular cable lugs and connectors druseidt design for fine stranded cables							
12374	10 - 70 mm²	-	WM-crimping	515 mm	2,18		
For tubular cable lugs an connectors out of copper according to DIN 46235/DIN 46267 Part 1 / Aluminium DIN 46329/DIN 46267 Part 2							
12370/50	6 - 50 mm²	10 - 35 mm²	hexagonal crimping	380 mm	1,30		
12370	6 - 70 mm²	10 - 50 mm²	hexagonal crimping	515 mm	2,00		
12371	10 - 120 mm²	10 - 70 mm²	hexagonal crimping	660 mm	4,10		

Remark: Suitable for crimping of cable lugs and connectors in druseidt design for fine stranded cables acc. to catalogue pages 36-39 (Part-No. 12374) resp. 50-53 and 56-59 (Part-No. 12370/50-12371). The cross-section can be adjusted by turning the in-built-revolving dies. So there is no need of changing dies.

### Mechanical hand operated crimping tool with telescopic handles and exchangeable crimping dies 1,5 up to 240 mm<sup>2</sup>



Part-No.	cross-sec Copper	tion range Alu	Stainless steel	crimping design	lenghts (retracted/extended)	weight kg/pcs.
12869	6 - 240 mm <sup>2</sup>	16 - 185 mm²	1,5 - 35 mm²	Various	550/770 mm	3,30

**Remark:** Universal applicable hand operated mechanical crimping tool. Designed for using druseidt system die sets size II (half shell dies in small design). Wide range of application for conductor cross-section up to 240 mm². Quick changing of die sets by foldable crimping head with quick release. 360° rotable crimping head. The telescopic handles and the relatively low weight enable an fatique-free work.

#### Range of application/deliverable crimping dies

- Indent crimping 10-70 mm²
- for cable lugs DIN 46234 + DIN 46230
- Indent crimping 1,5-35 mm² for druseidt stainless steel cable lugs
   WM-crimping 10-240 mm²
- for tubular cable lugs and connectors
- druseidt standard desindruseidt Euro-type design
- WM-crimping 10-185 mm<sup>2</sup>
- for druseidt tubular cable lugs and connectors
  - druseidt design for fine stranded cables

- Hexagonal crimping 6-185/240 mm²
  - For cable lugs and connectors
  - Copper DIN 46235/DIN 46267 part 1
  - Aluminium DIN 46329/DIN 46267 part 2
- Round crimping dies 25/35-185/240 mm²
- Trapezoid crimping 10-240 mm<sup>2</sup>
- for cable end sleeves DIN 46228 part 1 + 4
- Trapezoid crimping 4-16 mm<sup>2</sup>

for Twin cable end sleeves 2 x 4 mm<sup>2</sup> up to 2 x 16 mm<sup>2</sup>

Selection charts for crimping dies with Part-No. and description are listed in this catalogue on pages 204 and 205.