











Tools




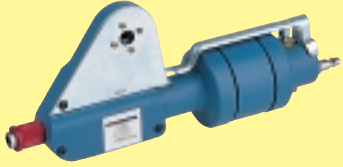



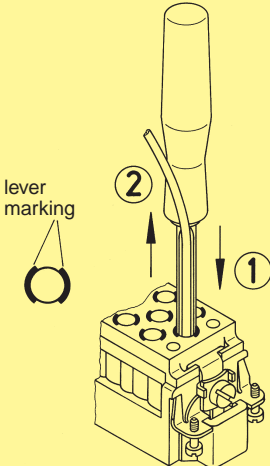
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Identification	Part No.	Drawing	Dimensions in mm
HARTING- crimping tool	09 99 000 0110	Wire gauge 0.14 - 1.5 mm ²	
Locator	09 99 000 0111		 order separately
HARTING- Service crimping tool with locator	09 99 000 0021	Wire gauge 0.14 - 1.5 mm ²	
BUCHANAN- crimping tool	09 99 000 0001	Wire gauge 0.37 - 2.5 mm ²	
Locator	09 99 000 0311		 order separately
Crimping tool depth adjustment gauge	09 99 000 0203 ¹⁾ 09 99 000 0125 09 99 000 0007 09 99 000 0008	0.14 + 0.25 mm ² ø 1.00 0.37 mm ² ø 1.30 0.5-1 + 2.5 mm ² ø 1.55 1.5 mm ² ø 1.80	
For FOC contacts: crimping tool Crimping tool depth adjustment gauge	20 99 000 1032 20 99 001 1032	ø 1.45	
HARTING- pneumatic crimping tool	09 99 000 0314		
Locator	09 99 000 0311		 order separately
Crimping tool depth adjustment gauge	09 99 000 0125 09 99 000 0007 09 99 000 0008	0.37 mm ² ø 1.30 0.5-1 + 2.5 mm ² ø 1.55 1.5 mm ² ø 1.80	
Table fixing and foot switch for pneumatic crimping tool	09 99 000 0309		
HARTING- semi-automatic crimping device		Wire gauge 0.14 - 1.5 mm ²	
Main drive foot-operated 230 V/50 Hz	09 99 000 0246		
crimping head	09 99 000 0254		 order separately
Locator	09 99 000 0111		 order separately
Insertion tool for crimp contacts	09 99 000 0059		
		For crimp contacts with wires of less than 0.75 mm ² it is recommended that an insertion tool is used. Contacts should be inserted from the wiring side and pushed down until a positive locking is achieved.	
Removal tool for crimp contacts			 .. 0012
Removal tool	09 99 000 0012		 .. 0004
Replacement-tip for removal tool	09 99 000 0004		 .. 0052
Removal tool	09 99 000 0052		A removal tool is necessary if contacts are to be replaced in the insert. It is inserted from the mating face and pushed over the contact until a stop is noticeable. Additional pressure unlocks the contact and pushes it out of the wiring side. In case of the removal tool (. . 0052) the unlocking process is achieved by pressure on the central rod.





¹⁾ For wire gauge 0.14 and 0.25 mm² use only male contact 09 15 000 6107 or female contact 09 15 000 6207.

Identification	Part No.	Drawing	Dimensions in mm
HARTING- crimping tool	09 99 000 0110	Wire gauge 0.5 - 2.5 mm ²	
Locator	09 99 000 0112		order separately
HARTING- Service crimping tool with locator	09 99 000 0021	Wire gauge 0.5 - 2.5 mm ²	
BUCHANAN- crimping tool	09 99 000 0001	Wire gauge 0.5 - 4 mm ²	
Locator	09 99 000 0310		order separately
Crimping tool depth adjustment gauge	09 99 000 0007 09 99 000 0008 09 99 000 0006	Wire gauge 0.5 - 1 mm ² ø 1.55 1.5 - 2.5 mm ² ø 1.80 3/4 mm ² ø 2.00	
HARTING- pneumatic crimping tool	09 99 000 0314		
Locator	09 99 000 0310		order separately
Crimping tool depth adjustment gauge	09 99 000 0007 09 99 000 0008 09 99 000 0006	Wire gauge 0.5 - 1 mm ² ø 1.55 1.5 - 2.5 mm ² ø 1.80 4 mm ² ø 2.00	
Table fixing and foot switch for pneumatic crimping tool	09 99 000 0309		
HARTING- semi-automatic crimping device	09 99 000 0246	Wire gauge 0.5 - 2.5 mm ²	
Main drive foot-operated 230 V/50 Hz	09 99 000 0254		
crimping head	09 99 000 0112		order separately
Locator	09 99 000 0112		
Insertion tool for crimp contacts	09 99 000 0059		
			For crimp contacts wires of less than 0.75 mm ² it is recommended that an insertion tool is used. Contacts should be inserted from the wiring side and pushed down until a positive locking is achieved.
Crimp contact removal for Han EE, Han Q 5/0 and Han E-modules	09 99 000 0319		
			A removal tool is necessary if contacts are to be replaced in the insert. The tool is inserted from the wiring side until a stop is noticeable(see page 06.15). The wire with the crimp contact can then be pulled out from the same side of the insert.
Crimp contact removal for Han E and Han A			Crimp contacts in Han A and Han E inserts can be removed with the aid of a screwdriver (3 mm width). The retention clip is opened (3 mm) at the longitudinal side of the insert. The contact can then be withdrawn from the insert from the termination side. Han E inserts have an additional possibility of removal. A cross-slotted screwdriver (size 0 acc. DIN 5260) has to be inserted from the termination side into the corresponding hole of the contact which has to be removed. Insert tool till stop is noticeable. The contact retention clip is released. The contact can then be withdrawn from the insert from the termination side.

Identification	Part No.	Drawing	Dimensions in mm
<p>BUCHANAN- crimping tool</p> <p>Locator</p> <p>Crimping tool depth adjustment gauge</p>	<p>09 99 000 0001</p> <p>09 99 000 0308</p> <p>09 99 000 0008 09 99 000 0006</p>	<p>Wire gauge 1.5 - 4 mm²</p>  <p>Wire gauge 1.5 + 2.5 mm² ø 1.80 4 mm² ø 2.00</p> <p>↑  order separately</p>	
<p>HARTING- crimping tool</p> <p>Locator as spare part</p>	<p>09 99 000 0303</p> <p>09 99 000 0304</p>	<p>Wire gauge 4 - 6 mm²</p>  <p>Locator is supplied with the tool</p>	
<p>HARTING- pneumatic crimping tool</p> <p>Crimping tool depth adjustment gauge</p> <p>Locator</p>	<p>09 99 000 0307</p> <p>09 99 000 0008 09 99 000 0006 09 99 000 0009</p> <p>09 99 000 0308</p>	<p>Wire gauge 1.5 + 2.5 mm² ø 1.80 4 mm² ø 2.00 6 mm² ø 2.40</p>  <p>↑  order separately</p>	
<p>Tools</p> <p>Table fixing and foot switch for pneumatic crimping tool</p>	<p>09 99 000 0309</p>		
<p>Removal tool for crimp contacts</p> <p>Removal tool</p>	<p>09 99 000 0305</p>	 <p>A removal tool is necessary to remove the contacts. For each „C“ contact cavity, the location of the internal locking levers are marked on the wiring side with two black arcs. The sides of the tool must be first properly aligned so that the edges of the tool engage both levers simultaneously and then inserted until a stop is noticeable. Once it has been inserted, the tool must not be turned. The wire together with the tool can then be pulled out from the wiring side of the insert.</p> 	

Stock items in bold type

Identification	Part No.	Drawing	Dimensions in mm
HARTING- crimping tool for coaxial contacts	09 99 000 0194	 Use the middle crimping position	
BUCHANAN- crimping tool for FOC contacts (1 mm POF) Crimping tool depth adjustment gauge \varnothing 1.8 mm for contacts in the multi-contact-module	20 99 000 1032 20 99 002 1032	 Note: This tool is only for FOC contacts	
HARTING- crimping tool for FOC contacts (1 mm POF) width \varnothing 3.0 mm	20 99 000 1033		
Removal tool for contacts in the multi-contact-module	09 99 000 0174	 order separately 	
Removal jacket	09 99 000 0320	 Note: By removal of Han contacts change this jacket against the existing removal jacket at the tool.	
Removal tools for single modules	09 99 000 0318		
for double modules	09 99 000 0321		
Removal tool for Quintax contacts	09 99 000 0323		
Stripping tool	09 99 000 0159	 For wires 0.08 up to 10 mm ²	

Identification	Part No.	Drawing	Dimensions in mm
Electro-hydraulic semi-automatic crimping tool with case, rechargeable battery and loader 230 V version 110 V version	09 99 000 0350 09 99 000 0351		
Crimping dies with locator Han D 0.14 - 1.5 mm ² Han D 1.5 - 2.5 mm ² Han E 0.5 - 1.5 mm ² Han E 2.5 - 4.0 mm ² Han C 1.5 - 2.5 mm ² Han C 4.0 - 6.0 mm ²	09 99 000 0352 09 99 000 0353 09 99 000 0354 09 99 000 0355 09 99 000 0356 09 99 000 0357		
Net adapter 230 V version 110 V version	09 99 000 0360 09 99 000 0361		
Supplementary rechargeable battery	09 99 000 0358		

Tools

Characteristics

Mobile semi-automatic crimping tool which can be powered from the mains voltage or rechargeable batteries giving a high degree of flexibility

Light and ergonomically designed tool head guarantees good handling

Dies suitable for HARTING Han® C-/D-/E-contacts

Parallel crimping action


Easily interchangeable die sets

Dies also suitable for standard cable lugs and coaxial contacts

Technical details

Mains power or battery	230 V or 110 V NiCd 12
Battery's capacity	1.4 mAh (250 crimpings)
Number of loadings	1 000
Loading time	15 min.
Crimping cycles	1 – 3 sec.
Pressing force	15 kN
Weight of tool head	750 g
Length of hose	2.2 m
Handle diameter	41 mm
Total weight incl. tool head and battery	6.6 kg
Dimensions	350 x 185 x 130 mm

Stock items in bold type

Identification	Part No.	Drawing	Dimensions in mm
HARTING- automatic crimping machine TK	09 98 000 6000		
Change unit – E – for contacts Han E 09 33	09 98 000 6002		
Crimping tool depth adjustment gauge	09 98 600 6331 09 98 600 6332 09 98 600 6333 09 98 600 6334 09 98 600 6335	Wire gauge 0.5 - 1 mm ² ø 1.55 AWG 16 ø 1.60 AWG 14 ø 1.70 1.5 + 2.5 mm ² ø 1.80 3 + 4 mm ² ø 2.00	
Change unit – D – for contacts Han D 09 15	09 98 000 6001		
Crimping tool depth adjustment gauge	09 98 600 6328 09 98 600 6329 09 98 600 6330 09 98 600 6331 09 98 600 6332 09 98 600 6334	Wire gauge 0.25 - 0.37 mm ² ø 1.00 0.37 mm ² ø 1.30 AWG 14 ø 1.45 0.5-1 + 2.5 mm ² ø 1.55 AWG 16 ø 1.60 1.5 mm ² ø 1.80	

Tools

Characteristics







- Stationary crimping machine
- Efficient procedure
- For all HARTING machine turned male and female contacts of Han D and Han E types
- Stripping and crimping in one working cycle
- Selective processing of male and female contacts
- Excellent crimping quality

Technical details

Drive	electro-pneumatic
Main power	230 V, 50 Hz
Air pressure	6 bar
Cycle time	approx. 2 sec./crimp
Loading	700 contacts
Changing time	approx. 5 min.
Dimensions	555 x 440 x 400 mm
Weight	approx. 60 kg

Summary Han Crimping tools



Identification		mm ²	AWG	Part No.																				
Crimp contacts				Crimping tool						Crimping machine				Crimping tool depth adjustment gauge				Contact removal tool						
Series				09 99 000 0001	09 99 000 0110	09 99 000 0021	09 99 000 0303	09 99 000 0194	20 99 000 1032	20 99 000 1033	09 99 000 0246	09 99 000 0307	09 99 000 0314	09 99 000 0350	09 98 000 6000	09 99 000 0006	09 99 000 0007	09 99 000 0008	09 99 000 0009	09 99 000 0125	09 99 000 0203	20 99 001 1032	20 99 002 1032	
Han C	Power contacts Han C 09 32	1.5	16	x							x	x	x				x							
		2.5	14	x							x	x	x				x							
	 	4.0	12	x			x				x	x	x		x									
		6.0	10				x				x		x					x						
Han D	Signal contacts Han D 09 15	0.14	26	x ³⁾	x	x					x		x ³⁾	x							x ³⁾			
		0.25	24	x ³⁾	x	x					x		x ³⁾	x	x ³⁾						x ³⁾			
	 	0.37	22	x	x	x					x		x	x	x					x				
		0.5	20	x	x	x					x		x	x	x		x							
		0.75	18	x	x	x					x		x	x	x		x							
		1.0	18	x	x	x					x		x	x	x		x							
		1.5	16	x	x	x					x		x	x	x			x						
		2.5	14	x									x	x	x		x							
	FOC contacts 1 mm POF	—	—						x													x		
Han E	Power contacts Han E 09 33	0.5	20	x	x	x					x		x	x	x		x							
		0.75	18	x	x	x					x		x	x	x		x							
	 	1.0	18	x	x	x					x		x	x	x		x							
		1.5	16	x	x	x					x		x	x	x			x						
		2.5	14	x	x	x					x		x	x	x			x						
		3.0	12	x									x	x	x	x								
		4.0	12	x									x	x	x	x								
	Coaxial contacts							x																
	FOC contacts (DIN 41 626)								x ¹⁾	x ¹⁾												x		

Identification	Part No.																						
Locator Han C	09 99 000 0308	x									x	x											
	09 99 000 0304				x																		
Han D	09 99 000 0311	x										x											
	09 99 000 0022			x																			
	09 99 000 0111		x							x													
Han E	09 99 000 0310	x										x											
	09 99 000 0022			x																			
	09 99 000 0112		x							x													
FOC contacts (DIN 41 626)	20 99 000 1036							x ²⁾															

1) both tools are necessary
 2) to adjustment female contacts only
 3) for wire gauges 0.14 and 0.25 mm² use only male contact 09 15 000 6107 or female contact 09 15 000 6207