





Contents

	Page
Tools for contacts Han D [®]	99.02
Tools for contacts Han E [®]	99.04
Tools for contacts Han [®] C	99.06
Tools for other contacts	99.08
Tools for FOC contacts	99.10
Tools for Han [®] high current contacts	99.12
Summary Han [®] Crimping tools	99.14
Crimping machine TK	99.16
Crimping machine TC-C01	99.18

Identification	Part number	Drawing	Dimensions in mm
HARTING Service crimping tool with locator set for Han D [®] , Han E [®]	09 99 000 0021	Wire gauge Han D [®] 0.14 ... 1.5 mm ²	
BUCHANAN crimping tool	09 99 000 0001	Wire gauge 0.14 ... 2.5 mm ²	
Locator Han D [®]	09 99 000 0311		
Multiple crimping tool depth adjustment gauge	09 99 000 0379	Wire gauge 0.14 mm ² Ø 1.00 ¹⁾ 0.25 mm ² Ø 1.00 ¹⁾ 0.37 mm ² Ø 1.30 0.5 ... 1.0 mm ² Ø 1.55 1.5 mm ² Ø 1.80 2.5 mm ² Ø 1.55	
HARTING crimping tool with locator for Han D [®] , Han E [®] , Han [®] C	09 99 000 0110	Wire gauge Han D [®] 0.14 ... 1.5 mm ²	
HARTING Pneumatic crimping tool CP 600	09 99 000 0810		
Crimp die Han D [®] , Han E [®] , Han [®] C	09 99 000 0813	Wire gauge Han D [®] 0.14 ... 1.5 mm ²	
Footswitch	09 99 000 0811		
Table fixing	09 99 000 0812		




Tools

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 number	Drawing	Dimensions in mm
Insertion tool for crimp contacts	09 99 000 0059	 <p>For crimp contacts with wires of less than 0.75 mm² 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.</p>	
Removal tool for crimp contacts			
Removal tool	09 99 000 0012		
Replacement-tip for removal tool	09 99 000 0004		
Removal tool	09 99 000 0052	 <p>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.</p>	

Identification	Part number	Drawing	Dimensions in mm
HARTING Service crimping tool with locator set for Han D [®] , Han E [®]	09 99 000 0021	Wire gauge Han E [®] 0.5 ... 2.5 mm ²	
BUCHANAN crimping tool	09 99 000 0001	Wire gauge 0.14 ... 4 mm ²	
Locator Han E [®]	09 99 000 0310		
Multiple crimping tool depth adjustment gauge	09 99 000 0379	Wire gauge 0.14 ... 0.37 mm ² Ø 1.00 0.5 ... 1.0 mm ² Ø 1.55 1.5 ... 2.5 mm ² Ø 1.80 3.0 ... 4.0 mm ² Ø 2.00	
HARTING crimping tool with locator for Han D [®] , Han E [®] , Han [®] C	09 99 000 0110	Wire gauge Han E [®] 0.5 ... 4 mm ²	
HARTING Pneumatic crimping tool CP 600	09 99 000 0810		
Crimp die Han D [®] , Han E [®] , Han [®] C	09 99 000 0813	Wire gauge Han E [®] 0.5 ... 4 mm ²	
Footswitch	09 99 000 0811		
Table fixing	09 99 000 0812		


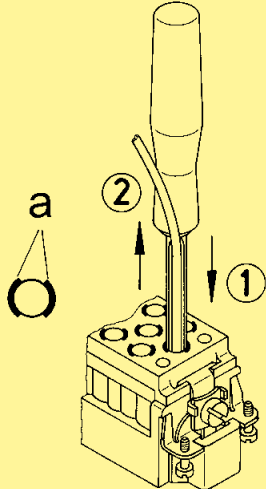
Tools

Identification	Part number	Drawing	Dimensions in mm
Insertion tool for crimp contacts	09 99 000 0059	 <p>For crimp contacts with wires of less than 0.75 mm² 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.</p>	
Insertion tool for Han [®] ES inserts	09 99 000 0367		
Removal tool for crimp contacts for Han [®] EE, Han [®] Q 5/0, Han [®] Q 8/0, Han E [®] and Han A [®]	09 99 000 0319	 <p>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. The wire with the crimp contact can then be pulled out from the same side of the insert.</p>	

Identification	Part number	Drawing	Dimensions in mm
BUCHANAN crimping tool	09 99 000 0001	Wire gauge 0.14 ... 4 mm ²	
Locator Han [®] C	09 99 000 0308		
Multiple crimping tool depth adjustment gauge	09 99 000 0379	Wire gauge 1.5 mm ² Ø 1.80 2.5 mm ² Ø 1.80 4 mm ² Ø 2.00	
HARTING crimping tool with locator for Han D [®] , Han E [®] , Han [®] C	09 99 000 0110	Wire gauge Han [®] C 1.5 ... 4 mm ²	
HARTING crimping tool with locator for Han [®] C	09 99 000 0303	Wire gauge 4 ... 6 mm ²	
Locator as spare part	09 99 000 0304		
HARTING crimping tool for Han [®] C	09 99 000 0377	Wire gauge 6 ... 10 mm ²	
HARTING Pneumatic crimping tool CP 600	09 99 000 0810		
Crimp die Han [®] C	09 99 000 0814	Wire gauge Han [®] C 6 ... 10 mm ²	
Footswitch	09 99 000 0811		
Table fixing	09 99 000 0812		

Stock items in bold type

Tools

Identification	Part number	Drawing	Dimensions in mm
<p>Removal tool for crimp contacts</p> <p>Removal tool</p> <p>1.5 ... 6 mm² 09 99 000 0305</p> <p>10 mm² 09 99 000 0381</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 ①. 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 ②.</p>  <p>a ... lever marking</p>	

Identification	Part number	Drawing	Dimensions in mm
HARTING crimping tool for coaxial contacts	09 99 000 0194	 Use the middle crimping position.	
HARTING crimping tool for wire end ferrules 10 mm ²	09 99 000 0374		
Removal tools for contacts in the multi-contact module	09 99 000 0328		
Insertion / removal tool for D-Sub crimp contacts	09 99 000 0368		
Removal tools for locking sleeves in the HV module	09 99 000 0327		
Removal tools for Quintax contact	09 99 000 0323		
Stripping tool	09 99 000 0159	 For stranded fine wires and solid wires 0.08 up to 10 mm ²	

Identification	Part number	Drawing	Dimensions in mm
Hexagonal driver for axial screw			
with grip			
40 A contacts (SW 2)	09 99 000 0313		
100 A contacts (SW 4)	09 99 000 0363		
200 + 350 A contacts (SW 5)	09 99 000 0364		
650 A contacts (SW 8)	09 99 000 0365		
Bit 1/4"			
40 A contacts (SW 2)	09 99 000 0369		
70 A contacts (SW 2.5)	09 99 000 0375		
adapter 3/8"			
100 A contacts (SW 4)	09 99 000 0370		
200 + 350 A contacts (SW 5)	09 99 000 0371		
650 A contacts (SW 8)	09 99 000 0372		

Identification	Part number	Drawing	Dimensions in mm
<p>Polishing tool</p> <p>DIN 41 626</p> <p>POF¹⁾ cable \varnothing 2.2</p>	<p>20 99 000 1092</p> <p>20 99 000 1093</p>		<p>7</p> <p>\varnothing 2.5</p> <p>20</p> <p>\varnothing 2.2</p>
<p>Fibre stripper</p> <p>0.3 mm</p> <p>1 mm</p> <p>0.18 / 0.3 mm</p>	<p>20 99 000 1041</p> <p>20 99 000 1045</p> <p>20 99 000 1046</p>		
<p>Crimping tool</p> <p>for following 1 mm POF¹⁾ contacts</p> <p>Han D®, Han E®</p> <p>DIN 41 626</p> <p>Ferrule</p> <p>F-SMA, -ST</p>	<p>20 99 000 1035</p>		
<p>HARTING crimping tool</p> <p>for F.O. connector (glass fibre)</p> <p>SW 4.3 mm</p> <p>SW 3.8 mm</p> <p>SW 4.95 mm</p>	<p>20 99 000 1033</p>		<p>for crimping the strain relief to the connector</p> <p>F.O. cable for glass fibre</p>
<p>HARTING crimping tool</p> <p>for F.O. connector (plastic fibre)</p> <p>SW 6.95 mm</p> <p>SW 4.95 mm</p> <p>SW 3.0 mm</p>	<p>20 99 000 1031</p>		<p>for crimping the strain relief to the connector</p> <p>F.O. cable for glass fibre</p>
<p>Epoxy adhesive</p> <p>glass fibre</p>	<p>20 80 001 9902</p>		<p>2 ml EPO-TEK 360 with hardener (10:1), 4 g foil pack</p>

Tools

¹⁾POF = Polymer optical fibre


Identification	Part number	Drawing	Dimensions in mm
<p>Polishing paper</p> <p>for POF¹⁾ grain size 1000</p> <p>for GI 9 μ-grain size</p> <p>for GI 1 μ-grain size</p>	<p>20 80 001 9911</p> <p>20 80 001 9912</p> <p>20 80 001 9913</p>	<p>Range of delivery</p> <p>Each part number means 5 pieces.</p>	

¹⁾POF = Polymer optical fibre

Identification	Part number	Drawing	Dimensions in mm																																																															
HARTING crimping tool Hydraulic handtool; Pressing force: 130 kN <ul style="list-style-type: none"> fast forward action storage box weight: 6.4 kg Length: 620 mm 	09 99 000 0385																																																																	
Die holder	09 99 000 0389																																																																	
Crimp dies DIN 46 235 (supplied as a pair) use in combination with die holder	09 99 000 0398 09 99 000 0386 09 99 000 0387 09 99 000 0388 09 99 000 0391 09 99 000 0392 09 99 000 0393 09 99 000 0394		<table border="1"> <thead> <tr> <th>Part number</th> <th>Wire gauge</th> <th>acc. to DIN 46 235</th> <th>a</th> <th>b</th> <th>c</th> <th>d</th> </tr> </thead> <tbody> <tr> <td>09 99 000 0398</td> <td>10 mm²</td> <td>B6 DIN</td> <td>5.5</td> <td>2.1</td> <td>8</td> <td>13</td> </tr> <tr> <td>09 99 000 0386</td> <td>16 mm²</td> <td>B8 DIN</td> <td>8</td> <td>3.2</td> <td>8</td> <td>13</td> </tr> <tr> <td>09 99 000 0387</td> <td>25 mm²</td> <td>B10 DIN</td> <td>10</td> <td>3.8</td> <td>10</td> <td>13</td> </tr> <tr> <td>09 99 000 0388</td> <td>35 mm²</td> <td>B12 DIN</td> <td>12</td> <td>4.7</td> <td>10</td> <td>13</td> </tr> <tr> <td>09 99 000 0391</td> <td>50 mm²</td> <td>B14 DIN</td> <td>14</td> <td>5.5</td> <td>10</td> <td>13</td> </tr> <tr> <td>09 99 000 0392</td> <td>70 mm²</td> <td>B16 DIN</td> <td>16</td> <td>6</td> <td>13</td> <td>13</td> </tr> <tr> <td>09 99 000 0393</td> <td>95 mm²</td> <td>B18 DIN</td> <td>18</td> <td>7.3</td> <td>15</td> <td>15</td> </tr> <tr> <td>09 99 000 0394</td> <td>120 mm²</td> <td>B20 DIN</td> <td>20</td> <td>8</td> <td>15</td> <td>15</td> </tr> </tbody> </table>	Part number	Wire gauge	acc. to DIN 46 235	a	b	c	d	09 99 000 0398	10 mm ²	B6 DIN	5.5	2.1	8	13	09 99 000 0386	16 mm ²	B8 DIN	8	3.2	8	13	09 99 000 0387	25 mm ²	B10 DIN	10	3.8	10	13	09 99 000 0388	35 mm ²	B12 DIN	12	4.7	10	13	09 99 000 0391	50 mm ²	B14 DIN	14	5.5	10	13	09 99 000 0392	70 mm ²	B16 DIN	16	6	13	13	09 99 000 0393	95 mm ²	B18 DIN	18	7.3	15	15	09 99 000 0394	120 mm ²	B20 DIN	20	8	15	15
Part number	Wire gauge	acc. to DIN 46 235	a	b	c	d																																																												
09 99 000 0398	10 mm ²	B6 DIN	5.5	2.1	8	13																																																												
09 99 000 0386	16 mm ²	B8 DIN	8	3.2	8	13																																																												
09 99 000 0387	25 mm ²	B10 DIN	10	3.8	10	13																																																												
09 99 000 0388	35 mm ²	B12 DIN	12	4.7	10	13																																																												
09 99 000 0391	50 mm ²	B14 DIN	14	5.5	10	13																																																												
09 99 000 0392	70 mm ²	B16 DIN	16	6	13	13																																																												
09 99 000 0393	95 mm ²	B18 DIN	18	7.3	15	15																																																												
09 99 000 0394	120 mm ²	B20 DIN	20	8	15	15																																																												
Crimp die Wire gauge 240 mm ²	09 99 000 0801																																																																	


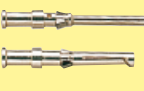

C ... Crimp zone acc. to EN 46 235
2 crimps

Stock items in bold type

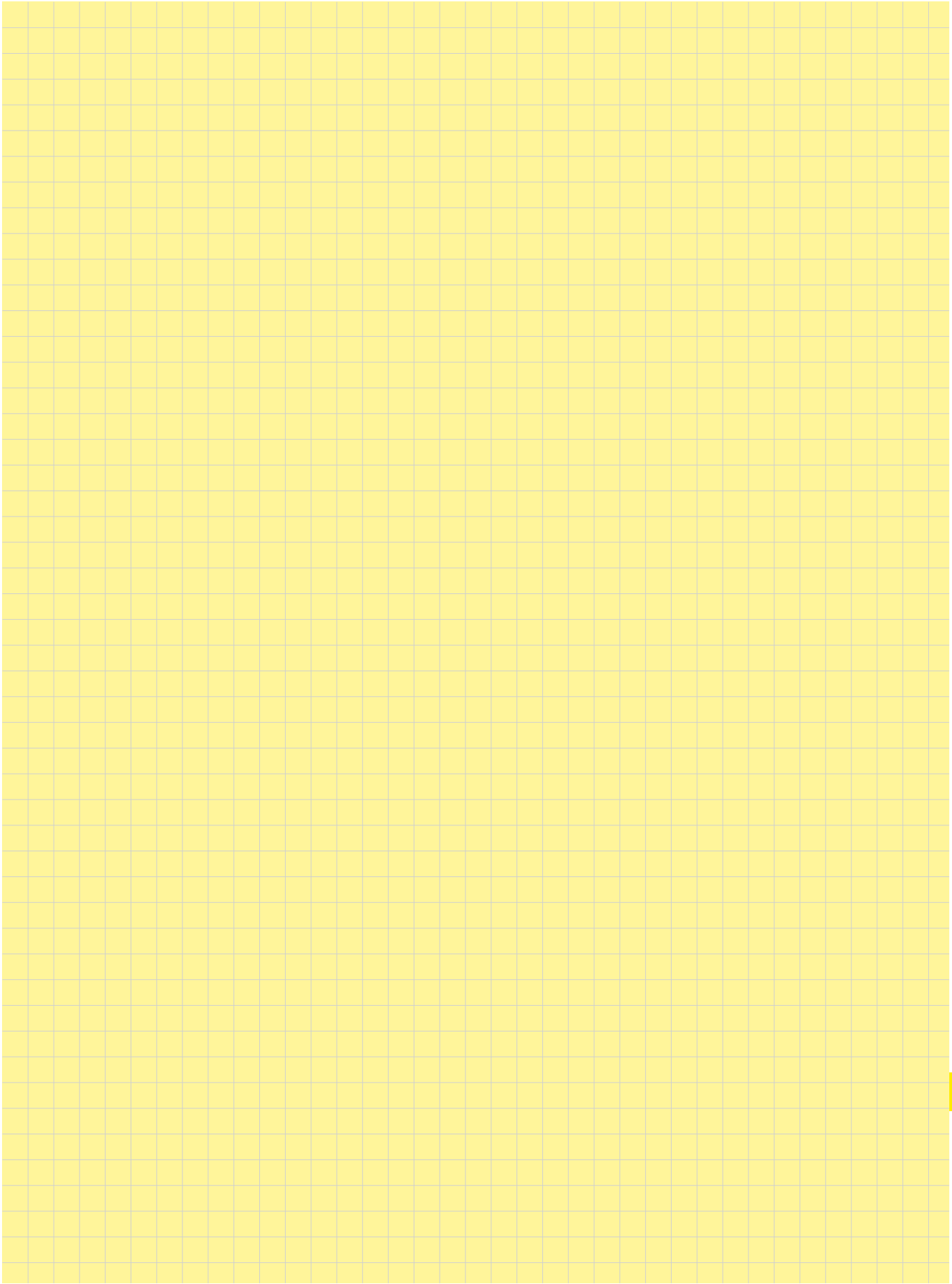
Identification	Part number	Drawing	Dimensions in mm
Removal tool for crimp contacts 100 A	09 99 000 0383		

Overview Han® crimping tools



Crimp contacts Series	Part number				mm ²	AWG	Crimping tools						Crimping machines						Tools		
	male contact silver plated	female contact silver plated	male contact silver plated	female contact gold plated			09 99 000 0001	09 99 000 0110	09 99 000 0021	09 99 000 0303	09 99 000 0377	20 99 000 1035	09 99 000 0813 ³⁾	09 99 000 0814 ³⁾	09 98 000 6001 ¹⁾	09 98 000 6002 ¹⁾	09 98 000 9001	09 98 000 9002	09 98 000 9003	adjustment gauge 09 99 000 0379 ²⁾	removal tools
Han® C Power contacts 09 32 000 	6104	6204			1.5	16	x	x										x	1.80	09 99 000 0305 09 99 000 0381	
	6105	6205			2.5	14	x	x											1.80		
	6107	6207			4.0	12	x	x											2.00		
	6108	6208			6.0	10															
	6109	6209			10.0	8															
Han D® Signal contacts 09 15 000 	6107	6207	6127	6227	0.14 - 0.25	26 - 24	x												1.00	09 99 000 0012 09 99 000 0052	
	6104	6204	6124	6224						x	x										
	6107	6207	6127	6227	0.37	22	x												1.00		
	6104	6204	6124	6224					x	x	x										
	6103	6203	6123	6223	0.5	20	x	x	x												1.55
	6105	6205	6125	6225	0.75	18	x	x	x												1.55
	6102	6202	6122	6222	1.0	18	x	x	x												1.55
	6101	6201	6121	6221	1.5	16	x	x	x												1.80
	6106	6206	6126	6226	2.5	14	x														1.55
Han D® F.O. contacts 20 10 001	Male contact 3211 3212 / 3213		Female contact 3221 3222		1 mm POF																
Han E® Power contacts 09 33 000 	6127	6227	6117	6217	0.14 - 0.37	26 - 22	x												1.00	09 99 000 0319	
	6121	6220	6122	6222	0.5	20	x	x	x												1.55
	6114	6214	6115	6215	0.75	18	x	x	x												1.55
	6105	6205	6118	6218	1.0	18	x	x	x												1.55
	6104	6204	6116	6216	1.5	16	x	x	x												1.80
	6102	6202	6123	6223	2.5	14	x	x	x												1.80
	6106	6206			3.0	12	x	x													2.00
	6107	6207	6119	6221	4.0	12	x	x													2.00
Han E® F.O. contacts 20 10 001	Male contact 3311		Female contact 3321		1 mm POF																
Description																					
Locator Han® C	09 99 000 0308						x														
	09 99 000 0304																				
Locator Han D®	09 99 000 0311						x														
	09 99 000 0022																				
Locator Han E®	09 99 000 0310						x														
	09 99 000 0022																				

1) For using changeable units 09 99 000 6001 / 6002 basic unit 09 99 000 6000 is required.
 2) Adjustment gauge with Ø 1.00 mm; 1.30 mm; 1.55 mm; 1.80 mm; 2.00 mm
 3) For using of tool head the basic unit CP 600 (09 99 000 0810) is required.



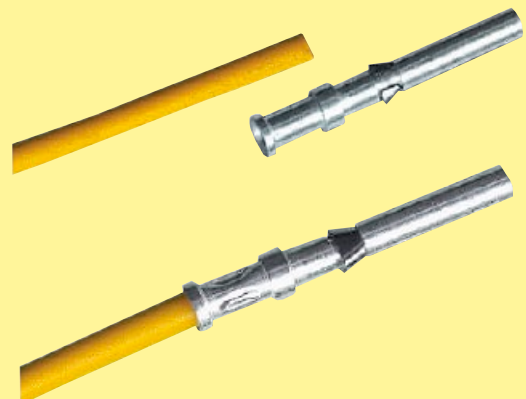


Features

- ❑ Fast stripping and crimping in one operation
- ❑ Basic unit in compact construction
- ❑ Simple handling due to ergonomic design
- ❑ For individual, turned male and female contacts (for the HARTING series Han D®, Han E®)
- ❑ Selective processing of male and female contacts (Wire gauge from 0.34 mm² to 4.0 mm², AWG 22 to AWG 12)
- ❑ Contact magazine with filling control
- ❑ Reproducible, top quality gas-tight crimp connections
- ❑ Infinitely variable adjustment parameters
 - Stripping depth
 - Stripping length
 - Crimping depth
 - Crimp contact feed rate
- ❑ Magazine empties automatically
- ❑ Low noise level
- ❑ For oil-free compressed air
- ❑ Air servicing unit with water separator and pressure reducer
- ❑ Very low setup effort
- ❑ Low maintenance costs

Technical characteristics

Dimensions:	
Height	400 mm
Width	555 mm
Depth	440 mm
Total weight:	Approx. 60 kg
Local noise level:	< 70 dB (A)
Drive:	Electro-pneumatic
Electrical connection:	230 V, 50 Hz
Power rating:	0.75 kW
Pneumatic pressure:	6 bar
Compressed air connection:	3 dm ³ / work cycle
Control system:	PLC
Work cycle trigger:	Sensor
Machine work cycle:	2 seconds (stripping and crimping)
Crimp type:	Four-notch crimping
Contact feed:	Vibratory bowl feed
Stroke counters:	Resettable daily counter and permanent counter



Identification

Part No.

Crimping machine TK

(Basic machine
without interchangeable unit)

09 98 000 6000

interchangeable units for Han D®
Han E®

09 98 000 6001

09 98 000 6002



Pack contents

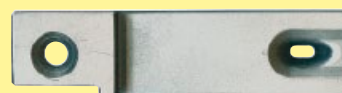
- Crimping machine TK
 - with one mounted interchangeable unit
 - with 2.0 m connection cable and grounding plug
 - with 2.0 m pneumatic hose with plug-in nipple N9
- Plug gauge for setting the crimping depth
- Centering bushing for positioning the plug gauges
- Drawer for insulation pieces
- Drawer for holding contacts when the magazine is emptied
- Tool set for adjustments
- 1 set of stripping blades
- Operating instructions
- Declaration of conformity

Options

Interchangeable unit
with plug gauges



Forming blades
with feeding funnel





Features

- Basic unit in compact construction for pre-stripped wire
- Simple handling due to ergonomic design
- For individual, turned male and female contacts
- Selective processing of male and female HARTING contacts (wire gauge from 0.14 mm² to 10.0 mm², AWG 26 to AWG 8)
- Automatic contact feed
- Reproducible, top quality gas-tight crimp connections
- Non-slip, anti-vibration adjustable feet for setting the height
- Low noise level
- Can be transported with carrying handle
- Removable electric and pneumatic supply connections
- Maintenance interval counter
- Minimal setup effort
- Crimping depth can be set without tools
- Low maintenance costs
- Low follow-up costs for maintenance and repair
- Easy replacement of wearing components

Technical characteristics

Dimensions:	
Height	345 mm
Width	230 mm
Depth	400 mm
Total weight:	app. 24 kg
Local noise level:	62 dB (A)
Electrical connection:	230 V, 50 Hz
Power rating:	0.20 kW
Compressed air connection:	6 bar
Control system:	PLC
Work cycle trigger:	Footswitch
Machine work cycle:	1 second
Crimp type:	Four-point crimping
Contact feed:	Vibratory bowl feed
Stroke counters:	Resettable daily counter and permanent counter



Identification

Part No.

Crimping machine TC-C01

for Han D® contacts
 Han E® contacts
 Han® C contacts
 Other

09 98 000 9001
 09 98 000 9002
 09 98 000 9003
 On request



Included in the delivery

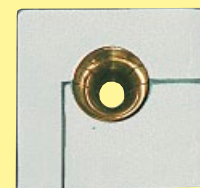
- Crimping machine TC-C01
 - with 2.5 m connection cable and grounding plug
 - with 2.5 m pneumatic hose, quick-release coupling and N6 plug-in nipple
- Footswitch
- Carrying handle
- Operating instructions
- Declaration of conformity

Options

Pneumatic maintenance unit



Wire guide



Working light



Tools

