

































cutters

Cutters - summary

Type of cut	Order code	length mm	cutting force kg	copper wire Ø mm	awg	safety clip order code	type of clip	
flush cut	 TR 20 M	134	3	0.81	20	TR 20 M A	AF	
	 TR 20 SM	134	3	0.81	20	TR 20 SM A	AF	
	 TR 25 P	135	3.5	1.02	18	TR 25 P A	AF	
	 TR 25	138	5	1.30	16	TR 25 A	AF	
	 TR E 03 NB	138	3	1.30	16	TR E 03 NB A	AF	
	 TR 25 L	165	3	1.30	16	TR 25 L A	AF	
	 TR 25 L 25	160	3	1.30	16	TR 25 L 25 A	AF	
	 TR 30	138	5.5	1.30	16	TR 30 A	AL	
	 TR 30 58 R	138	6.5	1.63	14	TR 30 58 R A	AL	
	 TR 58 R	137	9	2.05	12	TR 58 R A	AL	
	 TRR 58 G	160	1.5	2.59	10	-	-	
	 TR 5000 R	138	8	2.00	12	TR 5000 R A	AF	
	 TR 5000 PR	138	5	1.60	14	TR 5000 PR A	AF	
	rounded flush cut	 TR 25 B	138	5	1.02	18	TR 25 B A	AF
		 TR 30 B	138	5.5	1.02	18	TR 30 B A	AL
 TRR 58 B		160	3	2.05	12	-	-	
 TR 5000 PG		138	5	1.02	18	TR 5000 PG A	AF	
chamfered cut	 TR 30 58	138	8.5	1.63	14	TR 30 58 A	AL	
	 TR 58	137	11	2.05	12	TR 58 A	AL	
	 TRR 58	160	15	2.59	10	TRR 58 A	AL	
	 TR 5000	138	12	2.05	12	TR 5000 A	AF	
	 TR 5000 P	138	8	1.63	14	TR 5000 P A	AF	
	 TRR 5000	138	14	2.59	10	TRR 5000 A	AF	
	reverse cut	 TR 25 15	138	5	1.30	16	-	-
 TR 25 15 L		160	3	1.30	16	-	-	
flush cut (in high density areas)	 TR 20 VM	136	2	0.64	22	-	-	
	 TR 30 V	144	3	1.02	18	-	-	
	 TR 5000 V	147	3.5	1.30	16	-	-	
	 TR 25 50	135	5	1.30	16	-	-	
	 TR 20 50 M	131	2	0.64	22	-	-	
	 TR 5000 W	147	3.5	1.30	16	-	-	



Type of cut	Order code	length mm	cutting force kg	copper wire Ø mm	copper wire awg	safety clip order code	type of clip
flush cut (at 1-1,3-1,5 mm from surface)	TR 30 10	138	5.5	1.30	16	-	-
	TR 5000 10	147	5.5	1.30	16	-	-
	TR 5000 13	147	5.5	1.30	16	-	-
	TR 5000 15	147	5.5	1.30	16	-	-
	TR 30 15 V	144	3	1.02	18	-	-
	TR 30 15	138	5.5	1.30	16	-	-
	TR 50 15	138	8	1.63	14	-	-
IC pin cut	TR 30 T	137	2.5	1.02	18	-	-
	TR 20 TM	130	2	0.64	22	-	-
vertical flush cut	TR 5045 V	147	3	1.30	16	-	-

Cutters - description

PHOTO	NOTES	TECHNICAL SPECIFICATIONS								
	<p>TR 20 M Tool for a flush cut. The reduced size and refined and anatomic style of this tool make it ideal for work in tight places and for delicate electronic work. Thickness 2mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>134</td> <td>3</td> <td>0.81</td> <td>20</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	134	3	0.81	20	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
134	3	0.81	20							
	<p>TR 20 SM Tool for a flush cut. Same characteristics as the TR 20 M, but with rounded edges. Thickness 2mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>134</td> <td>3</td> <td>0.81</td> <td>20</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	134	3	0.81	20	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
134	3	0.81	20							
	<p>TR 25 P Tool for a flush cut with particularly sharp cutting edges. Purposely designed for very delicate work in electronics. Thickness 2.5mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>138</td> <td>3.5</td> <td>1.02</td> <td>18</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	138	3.5	1.02	18	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
138	3.5	1.02	18							



PHOTO	NOTES	TECHNICAL SPECIFICATIONS
	<p>TR 25 Tool for a flush cut. Lightweight and easy to handle. Purposely designed for work in electronics. Thickness 2.5mm Dissipative version available.</p>	
	<p>TRE 03 NB Tool for a flush cut. Purposely designed as the simplified version of the TR 25 but with the same main characteristics. Thickness 2.5mm. Dissipative version available.</p>	
	<p>TR 25 L Tool for a flush cut. Same characteristics as TR 25, but specially designed with longer handles to reduce the force needed by the operator. Thickness 2.5mm. Dissipative version available.</p>	
	<p>TR 25 L 25 Tool for a flush cut. The special 25° angle permits the use in poorly accessible areas and its longer handles reduce the force needed by the operator. Thickness 2.5mm. Dissipative version available.</p>	
	<p>TR 30 Tool for a flush cut. An upgraded version of the TR 25, with stronger blades. Thickness 3.0mm Dissipative version available.</p>	
	<p>TR 30 58 R Tool for a flush cut. Also particularly suitable for the cutting of ferrous material, due to the special tratment of the blades. Thickness 3.0mm Dissipative version available.</p>	

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	3	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
165	3	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
160	3	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	5.5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	6.5	1.63	14



PHOTO	NOTES	TECHNICAL SPECIFICATIONS								
	<p>TR 58 R Tool for a flush cut. The special treatment of the blades make this tool particularly suitable for the cutting of ferrous material. Thickness 3.0mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>137</td> <td>9</td> <td>2.05</td> <td>12</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	137	9	2.05	12	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
137	9	2.05	12							
	<p>TRR 58 G Tool for a flush cut very strong, suitable, apart from work in electronics, also for use by goldsmiths in the cutting rubber seal. Thickness 3.0mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>160</td> <td>1.5</td> <td>2.59</td> <td>10</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	160	1.5	2.59	10	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
160	1.5	2.59	10							
	<p>TR 5000 R Strong flush cutting tool. Due to the perfect joint between the quality ground faces of the two halves, it is possible to lengthen the life and maintain the perfect functioning of the tool. Thickness 5.0mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>138</td> <td>8</td> <td>2.00</td> <td>12</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	138	8	2.00	12	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
138	8	2.00	12							
	<p>TR 5000 PR Strong flush cutting tool with pointed cutting blades. Due to the perfect joint between the quality ground faces of the two halves, it is possible to lengthen the life and maintain the perfect functioning of the tool. Thickness 5.0mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>138</td> <td>5</td> <td>1.60</td> <td>14</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	138	5	1.60	14	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
138	5	1.60	14							
	<p>TR 25 B Tool for a flush finished cut. Lightweight and easy to handle with swelled blades, leaving the cut well finished. Suitable for work with plastic. Thickness 2.5mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>138</td> <td>5</td> <td>1.02</td> <td>18</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	138	5	1.02	18	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
138	5	1.02	18							
	<p>TR 30 B Tool for a flush finished cut. Lightweight and easy to handle with swelled blades, leaving the cut well finished. Suitable for work with plastic. Thickness 3.0mm. Dissipative version available.</p>									
	<table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>138</td> <td>5.5</td> <td>1.02</td> <td>18</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	138	5.5	1.02	18	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
138	5.5	1.02	18							



PHOTO	NOTES	TECHNICAL SPECIFICATIONS
	<p>TRR 58 B Strong tool for a flush cut. Swelled surface of the blades enables a well finished cut. Thickness 3.0mm. Dissipative version available.</p>	
	<p>TR 5000 PG Strong flush cutter with pointed, well finished cutting blades. The swelling in the cutting edges enables very well finished cutting. Suitable for trimming in the plastic field. Thickness 5.0mm. Dissipative version available.</p>	
	<p>TR 30 58 Chamfered cutting tool. the special treatment of the blades also make this tool particularly suitable for the cutting of ferrous material. Thickness 3.0mm. Dissipative version available.</p>	
	<p>TR 58 Tool for a chamfered cut. A stronger version of the TR 30 58 model, maintaining the same characteristics. Thickness 3.0mm. Dissipative version available.</p>	
	<p>TRR 58 Strong tool for a chamfered cut. Particularly suitable for cutting material of a resistant nature. Thickness 3.0mm. Dissipative version available.</p>	
	<p>TR 5000 Strong chamfered cutting tool. Due to the perfect joint between the quality ground faces of the two halves, it is possible to lengthen the life and to maintain the perfect functioning of the tool. Thickness 5.0mm. Dissipative version available.</p>	

PHOTO

NOTES

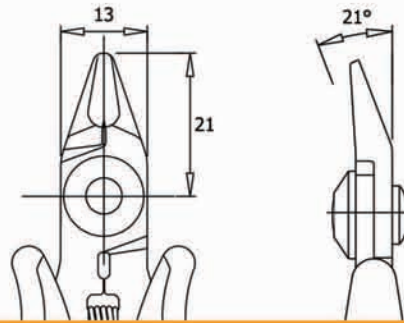
TECHNICAL SPECIFICATIONS



TR 5000 P

Strong chamfered cutting tool with pointed cutting blades. Due to the perfect joint between the quality ground faces of the two halves, it is possible to lengthen the life and maintain the perfect functioning of the tool. Thickness 5mm. Dissipative version available.

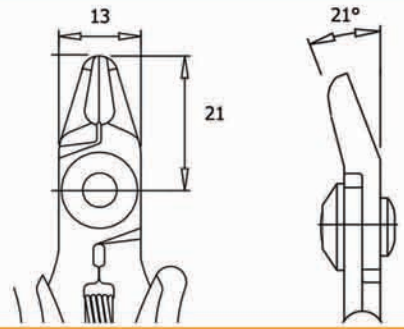
length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	8	1.63	14



TRR 5000

Strong chamfered cutting tool. Ideal to cut materials of a resistant nature. Thickness 5mm. Dissipative version available.

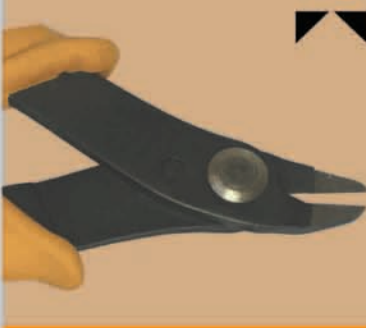
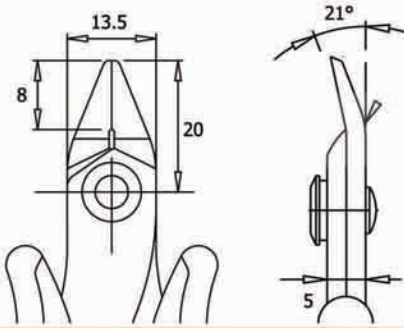
length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	14	2.59	10



TR 25 15

Tool with reverse cut. Terminal wire cut at 1.5mm from the surface. Thickness 2.5mm. Dissipative version available.

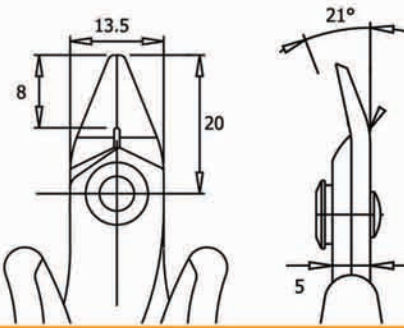
length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	5	1.30	16



TR 25 15 L

Tool with reverse cut. Same characteristics as TR 25 15, but designed with longer handles reduce the force needed by the operator. Thickness 2.5mm. Dissipative version available.

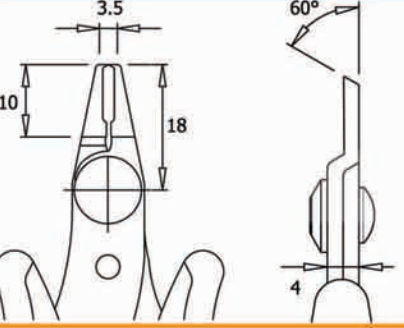
length mm	cutting force kg	copper wire Ø mm	copper wire awg
160	3	1.30	16



TR 20 VM

Tool for a front, flush cut. The reduced size and the special 30° angle permits the tool to be easily used in otherwise poorly accessible areas. Thickness 2.0mm. Dissipative version available.

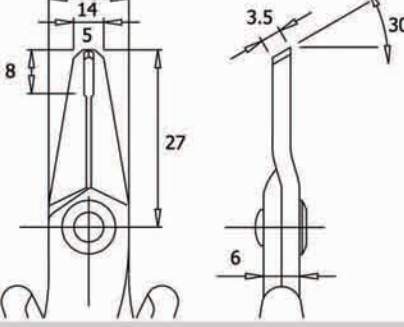
length mm	cutting force kg	copper wire Ø mm	copper wire awg
136	2	0.64	22



TR 30 V

Tool for a front, clean, flush cut. The special 30° angle permits the tool to be easily used in otherwise poorly accessible areas. Thickness 3.0mm. Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
144	3	1.02	18



cutters



PHOTO	NOTES	TECHNICAL SPECIFICATIONS
	<p>TR 5000 V Special 30° angled tool for a front, flush cut, enabling work in a poorly accessible areas. Same as TR 30 V with thickness of 5mm. Dissipative version available.</p>	
	<p>TR 25 50 Tool for a flush cut, with inclined 48° blades, for specific work in electronics. Dissipative version available.</p>	
	<p>TR 20 50 M Particularly thin nose tool for a flush cut with inclined 48° blades. Ideal for reaching places otherwise difficult. Thickness 2.0mm. Dissipative version available.</p>	
	<p>TR 5000 W Tool for a front, flush cut, enabling work in very dense areas with possibility to set the cutting height from the surface (from 0 to 5mm). Thickness 5.0mm. Dissipative version available.</p>	
	<p>TR 30 10 Tool for a clean, flush cut. Specially designed for cutting component wires 1mm from the surface. Thickness 3.0mm. Dissipative version available.</p>	
	<p>TR 5000 10 Specially designed tool for front cutting, suitable for access in dense areas of PCBs. It cuts the component lead at 1mm from the surface. Thickness 5.0mm. Dissipative version available.</p>	

length mm	cutting force kg	copper wire Ø mm	copper wire awg
147	3.5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
135	5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
131	2	0.64	22

length mm	cutting force kg	copper wire Ø mm	copper wire awg
147	3.5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	5.5	1.30	16

length mm	cutting force kg	copper wire Ø mm	copper wire awg
147	5.5	1.30	16

PHOTO

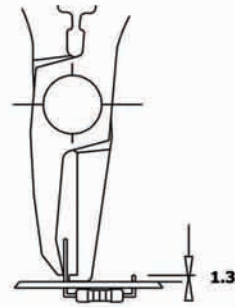
NOTES

TECHNICAL SPECIFICATIONS



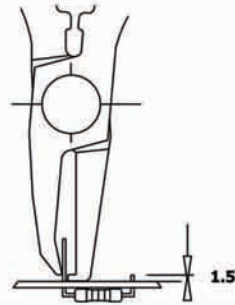
TTR 5000 13
Specially designed tool for front cutting, suitable for access in dense areas of PCBs. It cuts the component lead at 1.3mm from the surface.
Thickness 5mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
147	5.5	1.30	16



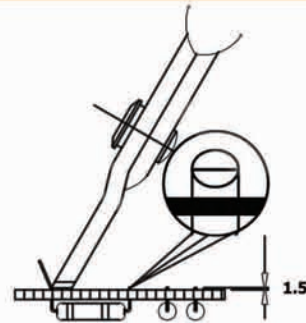
TR 5000 15
Specially designed tool for front cutting, suitable for access in dense areas of PCBs. It cuts the component lead at 1.5mm from the surface.
Thickness 5mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
147	5.5	1.30	16



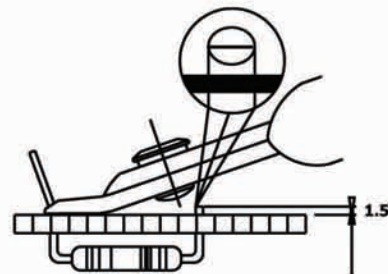
TR 30 15 V
Front cutting 30° angled tool. Specially designed for cutting component wires 1.5mm from the surface.
Thickness 3.0mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
144	3	1.02	18



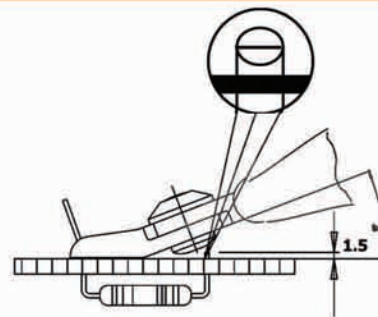
TR 30 15
Tool for a clean, flush cut. Specially designed for cutting component wires 1.5 mm from the surface.
Thickness 3.0mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
138	5.5	1.30	16



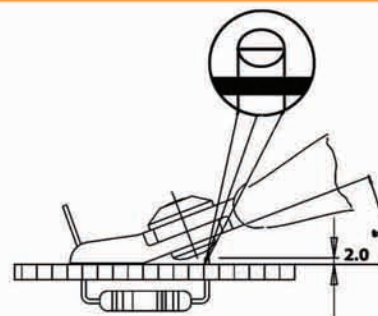
TR 50 15
Tool for a clean, flush cut. Specially designed for cutting component wires 1.5 mm from the surface.
Thickness 5.0mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
140	8.0	1.63	14



TR 50 20
Tool for a clean, flush cut. Specially designed for cutting component wires 2.0 mm from the surface.
Thickness 5.0mm.
Dissipative version available.

length mm	cutting force kg	copper wire Ø mm	copper wire awg
140	8.0	1.63	14



cutters



PHOTO	NOTES	TECHNICAL SPECIFICATIONS								
	<p>TR 30 T Specially designed tool for the cutting of integrated circuit pins. High precision, easy to use tool. Thickness 3mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>137</td> <td>2.5</td> <td>1.02</td> <td>18</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	137	2.5	1.02	18	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
137	2.5	1.02	18							
	<p>TR 20 TM Specially designed tool for the cutting of integrated circuit pins. The very small size of the cutting blades, specially angled at 48°, enables closely placed pins to be cut. Thickness 2mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>130</td> <td>2</td> <td>0.64</td> <td>22</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	130	2	0.64	22	
length mm	cutting force kg	copper wire Ø mm	copper wire awg							
130	2	0.64	22							
	<p>TR 5045 V Front, flush cutting, 45°angled. Thickness 5mm. Dissipative version available.</p> <table border="1"> <thead> <tr> <th>length mm</th> <th>cutting force kg</th> <th>copper wire Ø mm</th> <th>copper wire awg</th> </tr> </thead> <tbody> <tr> <td>147</td> <td>3</td> <td>1.30</td> <td>16</td> </tr> </tbody> </table>	length mm	cutting force kg	copper wire Ø mm	copper wire awg	147	3	1.30	16	
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147	3	1.30	16							