



# F120-Z, F160-Z Weld Pincers

Thanks to their floating bearing with locking cylinder and their excellent follow-up properties the F-series weld pincers are designed for a wide range of resistance welding applications. Maximum reliability and ease of maintenance generate an outstanding cost of ownership and a very long product life in operation. The weld pincer F-series is designed for welding of materials which require precise and reliable welds continuously. Both weld pincer types deliver outstanding weld process stability and consistent reproducibility

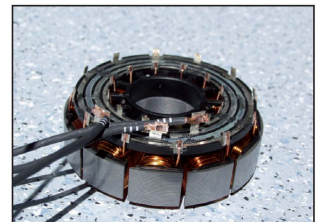
## CONFIGURATION OPTIONS

The F120-Z and F160-Z weld pincers are designed to be used in combination with a variety of electrodes, force sensors and displacement sensors.

## TYPICAL APPLICATIONS



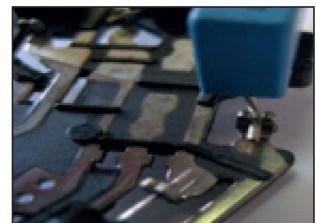
*Radiator connector*



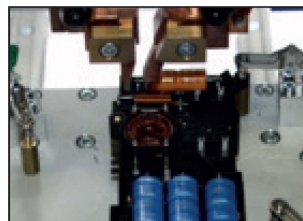
*Radiator motor*



*UE*



*Weld Capacitor*



*Power Steering*

## TECHNICAL SPECIFICATIONS

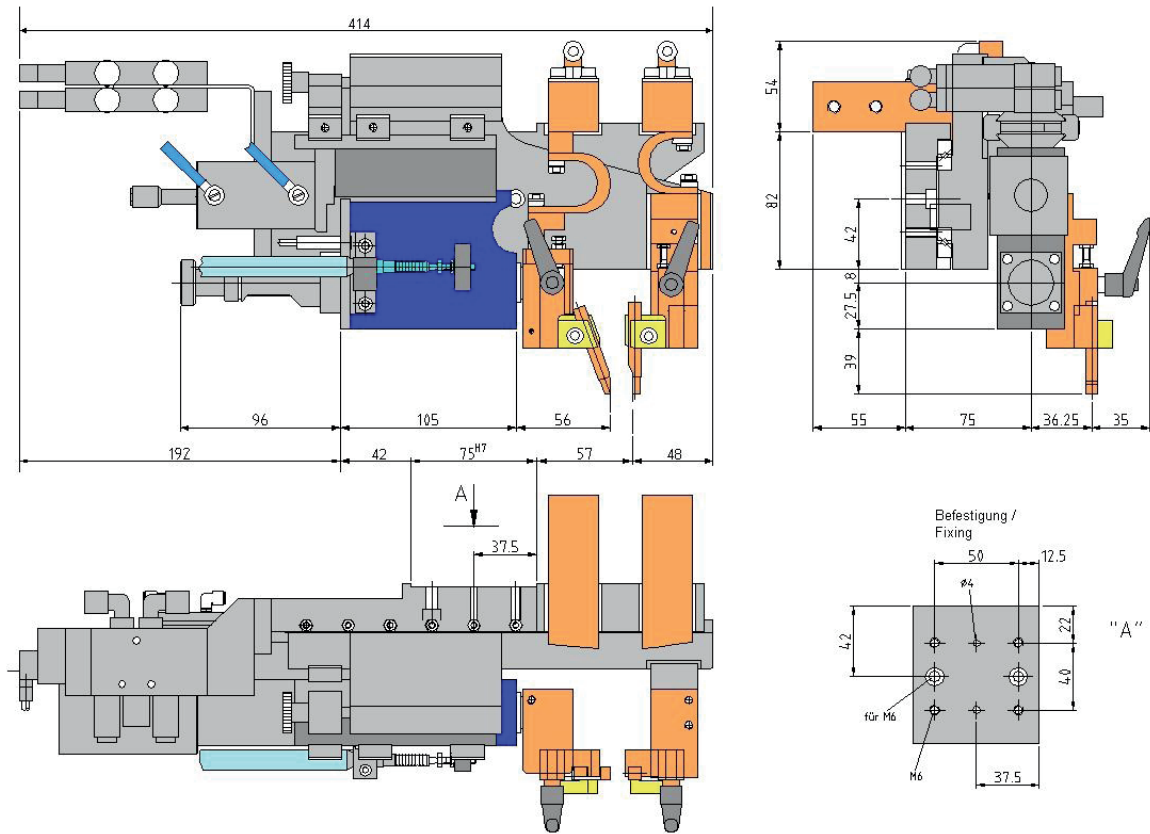
	F120-Z	F160-Z
<b>Configuration</b>	spring types 1 to 3 for force ranges 15 to 150 N; float mounting weld pincers with quick-change system for electrodes locking cylinder	spring types 1 to 4 for force ranges 50 to 550 N; float mounting weld pincers with quick-change system for electrodes locking cylinder
<b>Max. Variations</b>	Electrodes 0° (left), 20° (right), 20° (horizontal) and 20° (vertical)	
<b>Options</b>	Add-on set – displacement sensor; support cylinder for programmable force setting; conversion kit to spring 0 (small force) with light current band	Add-on set – displacement sensor; support cylinder for programmable force setting; support cylinder for programmable force setting
<b>Maximum Rating</b>	5 kA (2 kA with light current band)	
<b>Closing Stroke</b>	pneumatic	
<b>Welding Pressure</b>	via pneumatic pre-tensioned spring	
<b>Weld Force max</b>	15 to 150 N (option: spring 0 for 1.2 to 15 N)	50 to 550 N
<b>Air Pressure Supply</b>	max 6 bar	
<b>Weld Force Adjustment</b>	adjustable screws on the scale housing or automatically with support cylinder	
<b>Electrode Shape</b>	square electrodes 7.5 x 7.5 mm	
<b>Electrode Holder</b>	quick change holder	
<b>Weld Cables</b>	2x95mm <sup>2</sup> , 700mm long	4x95mm <sup>2</sup> , 700mm long
<b>Environment Temp.</b>	0-40°C	
<b>Legal Approval</b>	CE compliant	

## WEIGHT & DIMENSIONS

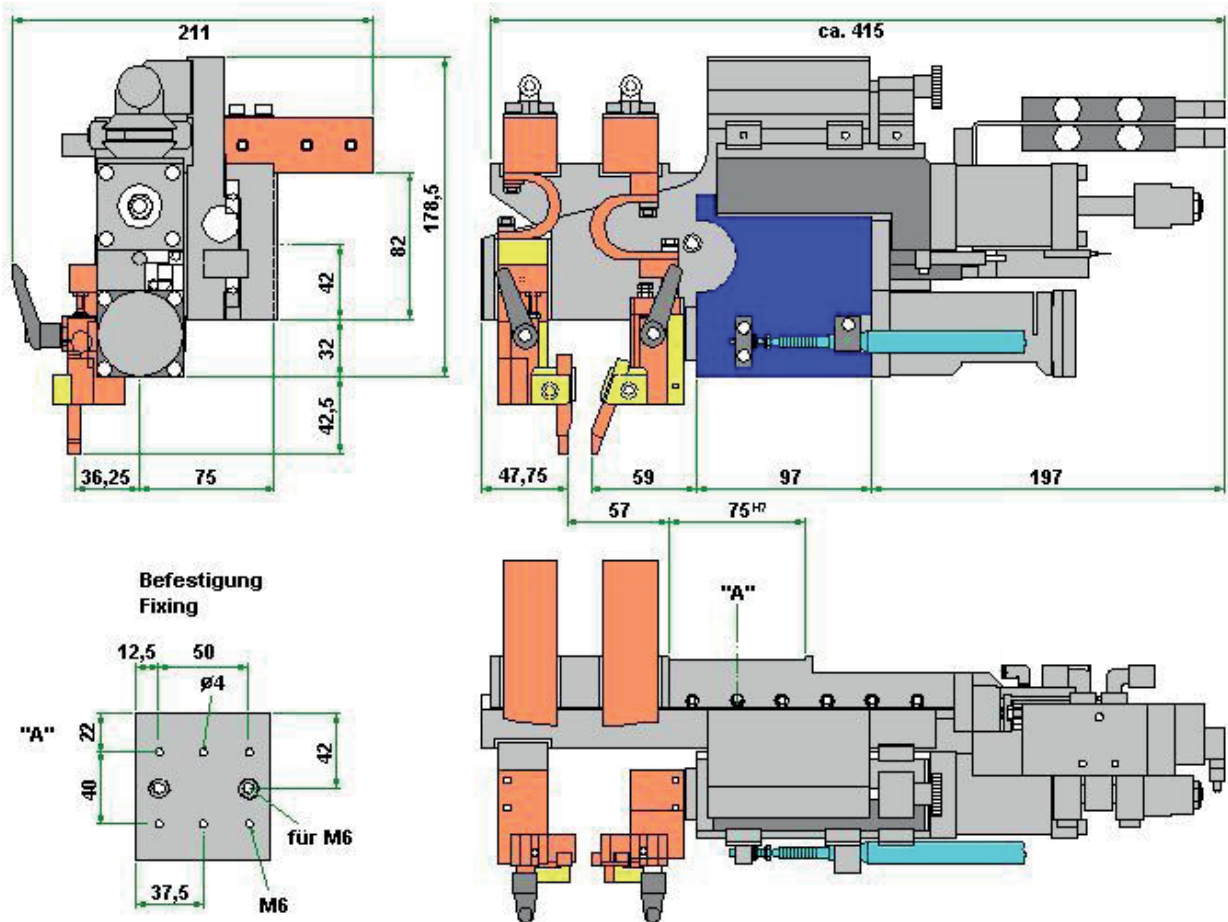
	F120- Z	F160- Z
<b>Weight</b>	approx. 11 kg w/o secondary cable	approx. 15 kg w/o secondary cable
<b>Dimensions (L x H x D)</b>	211x414x201 mm	221x415x211 mm

DRAWINGS

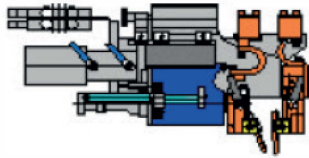
F120-Z



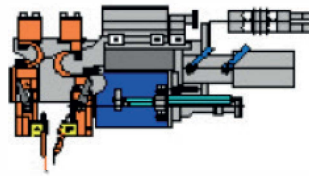
F160-Z



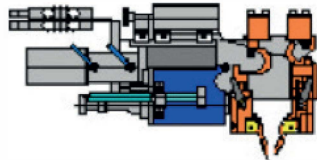
**Ausführung links**  
Left version



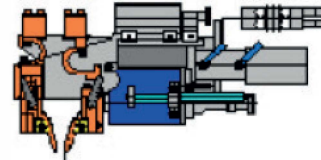
**Ausführung rechts**  
Right version



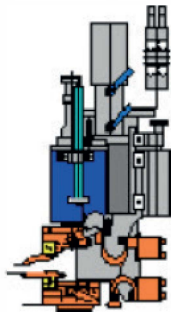
**beide Elektroden 20°, links**  
both electrodes 20°, left



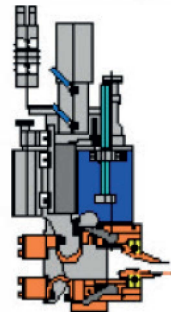
**beide Elektroden 20°, rechts**  
both electrodes 20°, right



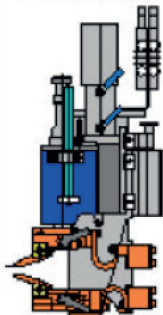
**links senkrecht**  
vertical left



**rechts senkrecht**  
vertical right



**links senkrecht,  
beide Elektroden 20°**  
vertical left,  
both electrodes 20°



**rechts senkrecht,  
beide Elektroden 20°**  
vertical right,  
both electrodes 20°

