



## AM 12 A

### Welding gun

For welding Hex<sup>Nut</sup> nuts with magnetic rotating arc (manual nut welding)

#### Technical data

<b>Welding range</b>	Welding nuts of type Hex <sup>Nut</sup> M6 - M12				
<b>Metal sheet thickness</b>	1 to 3 mm (other sheet thicknesses on request)				
<b>Dimensions of welding element</b>	<b>Dimension</b>	<b>M6</b>	<b>M8</b>	<b>M10</b>	<b>M12</b>
	Height - Hex <sup>Nut</sup>	8	8	9	11
	WAF	WAF 14	WAF 14	WAF 17	WAF 19
<b>Bore diameter</b>	Bore diameter - metal sheet (based on DIN EN ISO 4032)	10.6 <sup>+0.1...+0.4</sup>	10.6 <sup>+0.1...+0.4</sup>	12.6 <sup>+0.1...+0.4</sup>	14.9 <sup>+0.1...+0.4</sup>
<b>Tightening torque</b>	Tightening torque in Nm ( $\mu=0.18$ )	3.8	9.5	19.0	33.0
<b>Welding element material</b>	A2-50				
<b>Welding element type</b>	MARC welding nut - type Hex <sup>Nut</sup>				
<b>Welding sequence <sup>1)</sup></b>	Up to 4 welding nuts/min <small><sup>1)</sup> The maximum welding sequence is limited by a number of parameters.</small>				
<b>Length compensation</b>	3 mm, automatic				
<b>Lift</b>	Adjustment range 3 mm, lockable				
<b>Spring force</b>	Adjustable, arresting				
<b>Welding cable</b>	16.40' (5 m)				
<b>IP-Code</b>	IP 20				
<b>Workplace noise level</b>	Up to 90 dB (A) may occur during welding				
<b>Dimension L x W x H</b>	12.60" x 2.76" x 7.87" (320 x 70 x 200 mm) without cable, with leg assembly				
<b>Weight</b>	Approx. 1.98 lbs (0.9 kg) without cable				
<b>Order No.</b>	<b>93-20-242</b>				
	<b>Complete equipment for AM 12 A:</b>				
	93-40-0030068	for Hex <sup>Nut</sup> M6			
	93-40-003008	for Hex <sup>Nut</sup> M8			
	93-40-003010	for Hex <sup>Nut</sup> M10			
	93-40-003012	for Hex <sup>Nut</sup> M12			



## General information

### Application

- Welding of welding nuts of type Hex<sup>Nut</sup>
- For welding on perforated and unperforated metal sheets
- Especially suitable for the workshop and assembly area

### Process variants

- **MARC welding with magnetic rotating arc**

## Advantages

### Description

- Uniform and minimal heat input (low distortion)
- Very short welding time ( $\leq 1$  second) and, thus, short cycle times in production
- No welding fillers necessary
- Minimum upsetting force
- Small welding seam
- Only one-sided accessibility to the work piece required
- Extremely clean process (minimal welding fumes)
- No reworking on workpiece or welding element (thread)

### Configuration

- Rigid casing made of impact-resistant plastic
- Torsion-resistant basic shell (casing) to accommodate all function elements and accessories (e.g., foot ring)
- Zero-play ball linear bearing for guiding the welding piston
- Sealed welding piston guidance
- Ergonomic design
- Compact dimensions
- Integrated lift and spring-loaded adjustment
- Mechanical structure tested in production

### Safety

- Lock-in spring adjustment
- Lift lockable
- High level of security to prevent the selected settings being changed inadvertently
- Guidance system protected against spatters
- Temperature monitoring

### Welding

- Individual adjustment options for optimum welding results
- Reproducible piston movement with minimized rebound for optimum welding quality via lift damper
- Optimum handling and fatigue-free operation
- Welding on painted sheets possible (clean, smooth and flat surfaces and grounding required)
- Automatic length compensation

Technical status 09/14  
(Technical data may change)