



MIG/MAG Welding Torches "ABIMIG® GRIP LW"

Air cooled • Rating 170 A up to 480 A

ABIMIG® GRIP LW air-cooled MIG torches combine ergonomics and feel with our innovative light weight cables which provide perfect balance and reduce wrist, arm, shoulder and back strain. The "GRIP" insert and ball joint in the handle guarantees secure grip and optimal handling.

All torches are carefully designed to provide comfortable and precise operation.

- Low Weight Bikox® cables up to 50% weight savings
- Screw-on long-life gas nozzle
- Multi-function tip holder (gas diffuser, gas nozzle holder and contact tip holder in one piece) – reduces stock requirements
- Laminar gas provides excellent gas coverage for best welding results
- Replaceable gas nozzle seat "extends" operating cycle of the torch neck and reduces maintenance costs

ABIMIG® Grip 2 LW

Technical data (EN 60 974-7):

Ratina:

 Duty cycle:
 35%
 60%

 CO2
 270 A
 240 A

 Mixed gases
 220 A
 170 A

M21 (DIN EN 439)

Wire size: 0.8 - 1.2 mm (.030" - .045")

ABIMIG® Grip 3 LW

Technical data (EN 60 974-7):

Rating:

 Duty cycle:
 35%
 60%

 CO2
 350 A
 300 A

 Mixed gases
 320 A
 270 A

M21 (DIN EN 439)

Wire size: 0.9 - 1.6mm (.035" - .062")

ABIMIG® Grip 4 LW

Technical data (EN 60 974-7):

Rating:

 Duty cycle:
 35%
 60%

 CO2
 480 A
 390 A

 Mixed gases
 400 A
 300 A

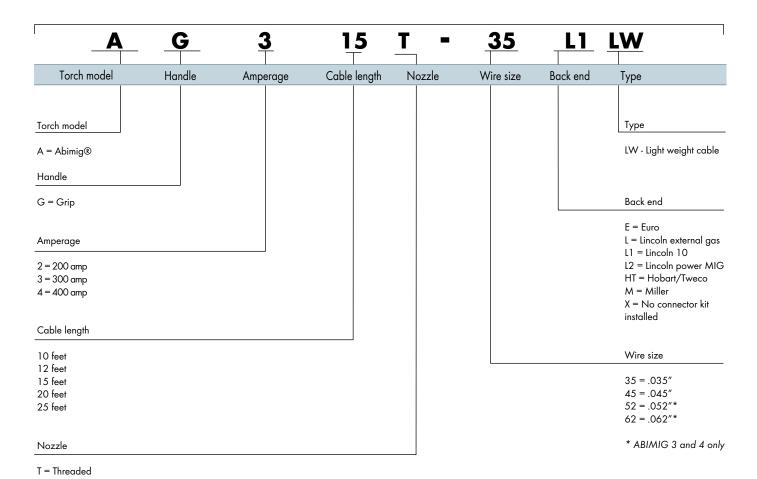
M21 (DIN EN 439)

Wire size: 0.9 - 1.6 mm (.035'' - .062'')



ABIMIG® GRIP 2 LW, 3 LW and 4 LW

Ordering instructions for complete ABIMIG® Grip LW MIG guns



Presently, very little scientific research exists concerning the design of welding torches and the health effects experienced by professional welders at work.

The research:

ABICOR® BINZEL has undertaken the following study in cooperation with the Justus Liebig University of Giessen - Department of Sport Medicine:

- Use of standard 350 Amp torch vs. the new ABICOR BINZEL 350 Amp light weight torch
- Tested with more than 20 experienced professional welders
- Welding in 2 positions
- Measuring all relevant muscle activity during welding (arm, shoulder, neck and back) with 8 channel EMG technology* and video recording
- Measuring blood pressure, heart rate and lactate scale
- Examination of subjective stress and exertion through use of the Borg scale **
- *Technique for evaluating and recording the electrical activity produced by skeletal muscles.
- **The Borg scale is used to document the effects of exertion.



Sitting measuring position



Standing measuring position



Position of electrodes and cabling



EMG-data

MIG/MAG Welding Torches "ABIMIG® GRIP LW"

Air cooled • Rating 170 A up to 480 A

Wear parts	AB	IMIG® GR	IP 2 LW	AB	IMIG® GI	RIP 3 LW	AB	IMIG® GR	IP 4 LW
	ØA	L1	Ø 22	Ø B	L2	Ø 25	øc	13	Ø 25
Gas nozzle (5 pcs.)	ØA	L1		Ø B	L2		øс	L3	
Conical recess	Ø 1/2"	70 mm	N2T-R-50*	Ø 1/2"	72 mm	N3T-R-50	Ø 1/2"	85 mm	N4T-50
Conical recess	Ø 9/16"	70 mm	N2T-R-56	Ø 5/8"	72 mm	N3T-R-62*	Ø 5/8"	85 mm	N4T-62*
Conical recess	Ø 5/8"	70 mm	N2T-R-62	Ø 3/4"	72 mm	N3T-R-75	Ø 3/4"	85 mm	N4T-75
Conical flush	Ø 1/2"	67mm	N2T-F-50	Ø 9/16"	69 mm	N3T-F-56	-	_	-
Conical flush	Ø 9/16"	67mm	N2T-F-56	Ø 5/8"	69 mm	N3T-F-62	_	_	_

^{*} Designates factory standard.

Wear parts		ABIMIG® GRIP 2 LW Std.	ABIMIG® GRIP 3	*ABIMIG® GRIP 4 LW	
		Ø 8 28 mm	Ø 10	Ø 12 35	mm
Contact	tip (25 pcs.)	M6	M8	M8 / M10	(optional)
E-Cu	Ø .030"	140.0051	140.0114	140.0114	-
	Ø .035"	140.0169	140.0214	140.0214	-
	Ø .040"	140.0242	140.0313	140.0313	-
	Ø .045"	140.0379	140.0442	140.0442	-
	Ø .052"	-	140.0533	140.0533	-
	Ø .062"	-	140.0587	140.0587	-
	Ø .078"	-	140.0653	140.0653	-
	Ø .094"	-	140.0677	140.0677	_
E-Cu for	AIØ .030"	141.0001	141.0003	141.0003	-
	Ø .035"	141.0004	141.0043	141.0043	-
	Ø .040"	141.0006	141.0008	141.0008	-
	Ø .045"	141.0010	141.0075	141.0075	-
	Ø .052"	-	141.0055	141.0055	-
	Ø .062"	-	141.0022	141.0022	-
CuCrZr	Ø .030"	140.0054	140.0117	140.011 <i>7</i>	-
	Ø .035"	140.01 <i>7</i> 2	140.0217	140.0217	*140.1248
	Ø .040"	140.0245	140.0316	140.0316	*140.0348
	Ø .045"	140.0382	140.0445	140.0445	*140.0481
	Ø .052"	-	140.0536	140.0536	*140.0547
	Ø .062"	-	140.0590	140.0590	*140.0616
	Ø .078"	-	140.0656	140.0656	*140.0665
	Ø .094"	-	140.0679	140.0679	*140.0698

^{*} Note: M6 tip is standard on ABIMIG® Grip 2 LW. M8 tip is standard on ABIMIG® Grip 3 and 4 LW. M10 tips requires tip holder H4T-10-C and are optional for ABIMIG® Grip 4 LW. Additional configurations are available. Contact customer service for details. 1-800-542-4867

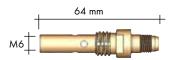
ABIMIG® GRIP 2 LW, 3 LW, and 4 LW

Wear parts

ABIMIG® GRIP 2 LW

ABIMIG® GRIP 3 LW

ABIMIG® GRIP 4 LW



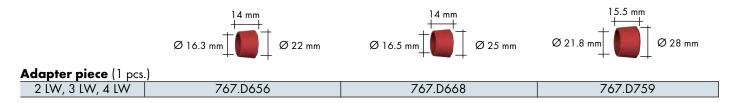




Contact tip holder (10 pcs.)

	2 LW, 3 LW, 4 LW	H2T-6-C	H3T-8-C	H4T-8-C*
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^{*} Optional HD M10 available P/N H4T-10-C





Liner		2 LW/ 3 LW for 15 ft	2 LW / 3 LW for 25 ft	4 LW for 15 ft	4 LW for 25 ft
Liner	Ø .035"045"	SI-3545-17PT	SI-3545-28PT	SI4-3545-17PT	SI4-3545-28PT
	Ø .052"062"	SI-5262-17PT**	SI-5262-28PT**	SI4-5262-17PT	SI4-5262-28PT
	Ø .078"094"	_	-	SI4-7894-17PT	SI4-7894-28PT
Combi PA	Ø .035"045"	128.9047	-	128.9047*	-
liner	Ø .052"062"	128.9050	-	128.9050*	-
Carbon	Ø .035"045"	127.9003	-	127.9003*	-
PTFE liner	Ø .052"062"	127.9006	_	127.9010*	_

^{* 4} LW Requires collet spacer P/N 130.9006, sold separately.

Light weight – Welds great! Scientifically proven.

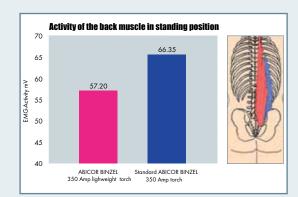
ABICOR BINZEL Making welding more comfortable!



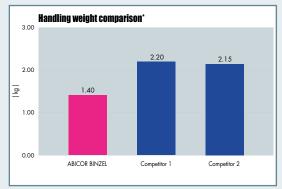
ABIMIG® GRIP LW won the 1st prize "Le sacre de l'innovation 2010" for the most innovative product at the "Industrie" Exhibition Paris

The results:

- Significantly reduced stress on back muscles
- Significantly reduced lactate scale less exertion for the welder



- Reduced stress levels in all measured muscle groups
- Reduced feeling of exertion when using light weight torches as documented by Borg scale results

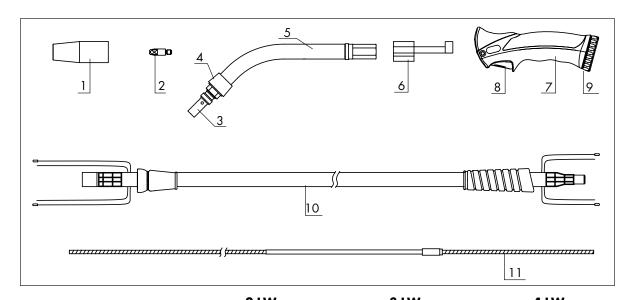


*Handling weight measured in 5 ft working height.

^{** .052&}quot; - .062" is not recommended for 2 LW.

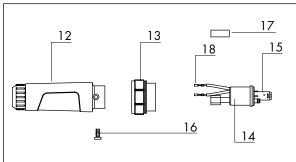
MIG/MAG Welding Torch "ABIMIG® GRIP LW"

Body Cable Assembly



		2 LW	3 LW	4 LW	
Item No.	Description	Part No.	Part No.	Part No.	
1	Nozzle	See pg 4	See pg 4	See pg 4	
2	Contact Tip	See pg 4	See pg 4	See pg 4	
3	Tip holder/Diffuser	See pg 5	See pg 5	See pg 5	
4	Adapter Piece	See pg 5	See pg 5	See pg 5	
5	Swanneck Assembly	767.D651	767.D707	767.D793	
6	Body Torch Plastic	400.0044	400.0044	400.1333	
7	Handle Complete with Trigger	180.0127	180.0127	180.0132	
8	Trigger only	185.0101	185.0101	185.0107	
9	Retaining Ring Swivel	400.1122	400.1122	400.1122	
10	Bikox 10 ft (4 LW cable shown)	160.H238	160.H244	160.H053	
	Bikox 12 ft	160.H240	160.H246	160.H250	
	Bikox 15 ft	160.H242	160.H248	160.H252	
11	Liner (4 LW liner shown)	See pg 5	See pg 5	See pg 5	
N/S	Contact Tip Wrench	191.0001	191.0001	191.0001	

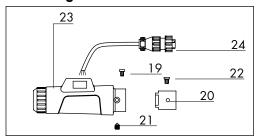
Direct Plug Connector: Euro



		2 LW/3 LW	4 LW
Item No.	Description	Part No.	Part No.
12	Rear Housing Complete, Euro	500.D508	500.D508
13	Adaptor Nut	500.0213	500.0213
14	Adaptor Block, Euro	501.0003	501.0003
15	Nut Liner Retaining	501.0082	501.0082
1 <i>7</i>	Plastic Liner Collet Spacer	N/A	130.9006
18	Connector Female	175.0033	175.0033

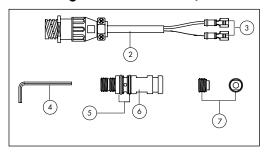
Connectors

Direct Plug Connector



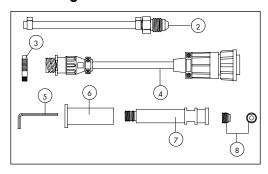
		2 LW/3 LW	4 LW
Item No.	Description	Part No.	Part No.
19	Screw Slotted Head, M4 x 6	000.0552	000.0552
20	Adapter Block Direct	501.D333	501.D333
21	Set Screw Hex Head M5x5	009.0136	000.0552
22	Gas Seal	001.D092	001.D092
23	Rear Housing Complete, Direct	501.D501	501.D501
24	Trigger Lead	175.D098	175.D098

Direct Plug Connector: Hobart/Tweco



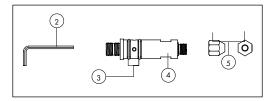
		2 LW	3 LW	4 LW
Item No.	Description	Part No.	Part No.	Part No.
2	Trigger Lead Jumper HT	175.9120	175.9120	1 <i>7</i> 5.9120
3	Connector Wire 1/4" Male	175.9074	175.9074	175.9074
4	Allen Wrench 2.5 mm	191.001 <i>7</i>	191.0017	191.001 <i>7</i>
5	O-Rings (2 required)	165.0025	165.0025	165.0025
6	Connector Plug HT	331.9003	331.9003	501.9246
7	Liner Nut HT/LN	272.9017	272.9017	272.9035

Direct Plug Connector: Lincoln



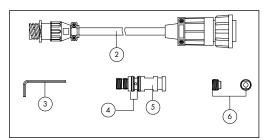
		2 LW	3 LW	4 LW
Item No.	Description	Part No.	Part No.	Part No.
2	Gas Hose Assembly	102.9149	102.9149	102.9149
3	Gas Fitting with M6 THD	353.0002	353.0002	353.0002
4	Trigger Lead Jumper LN	1 <i>75</i> .9121	175.9121	1 <i>75</i> .9121
5	Allen Wrench 2.5 mm	191.001 <i>7</i>	191.0017	191.001 <i>7</i>
6	Insulator Bushing	AC2030	AC2030	AC2030
7	Connector Plug L	501.9191	501.9191	501.9241
8	Liner Nut HT/LN	272.9017	272.9017	272.9035

Direct Plug Connector: Miller



		2 LW	3 LW	4 LW
Item No.	Description	Part No.	Part No.	Part No.
2	Allen Wrench 2.5 mm	191.001 <i>7</i>	191.0017	191.001 <i>7</i>
3	O-Rings (2 required)	165.9006	165.9006	165.9006
4	Connector Plug Miller	501.9183	501.9183	501.9245
5	Liner Nut MR	272.9018	272.9018	272.9036

Direct Plug Connector: Lincoln 10



		2 LW	3 LW	4 LW
Item No.	Description	Part No.	Part No.	Part No.
2	Trigger Lead Jumper LN	1 <i>7</i> 5.9121	1 <i>75</i> .9121	1 <i>7</i> 5.9121
3	Allen Wrench 2.5 mm	191.001 <i>7</i>	191.0017	191.001 <i>7</i>
4	O-Rings (2 required)	165.0025	165.0025	165.0025
5	Connector Plug HT	331.9003	331.9003	501.9246
6	Liner Nut HT/LN	272.9017	272.9017	272.9035

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WARNING!Please read all Safety Instructions

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WARNING

- Read and follow the manufacturer's instructions, employer's safety practices, and Material Safety Data Sheets (MSDSs).
- Only qualified personnel should install, use, or service this material and/or equipment



ELECTRIC SHOCK can kill.

- Always wear dry installing gloves
- Do not touch live electrical parts.
- Always disconnect power source before hooking up or changing electrodes, nozzles and other parts.



WELDING SPARKS can cause fire or explosion

- · Do not weld near flammable material
- Do not weld on closed containers.
- Remove combustibles from the work area and/or provide a fire watch.
- Avoid oily or greasy clothing as a spark may ignite them.



FUMES AND GASES can be hazardous to your health.

- · Keep your head out of the fumes
- Use enough ventilation or exhaust at the arc to keep fumes and gases from your breathing zone, and general area.
- Fumes from cutting and welding can deplete air quality, causing injury or death. Always wear an air supplied respirator in confined areas, or if breathing air is not safe.



LOUD NOISE can damage hearing.

 Always wear protective hearing devices to ensure protection when noise levels exceed OSHA standards.



ARC RAYS can injure eyes and burn skin

- Always wear correct eye, ear, and body protection
- Always wear a welding helmet with the proper grade filter lens. Protect yourself and others from spatter arc flash rays by using protective screens, barriers and welding curtains.
- Always wear protective gloves and clothing to cover exposed skin.
 This will aid in the prevention of arc and spatter burns.

Do Not Remove This Label.

ID 123-4567CI

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Read American National Standard Z49.1, "Safety in Welding, and Cutting, and Allied Processes," available from American Welding Society, 550 N.W. LeJune Rd., Miami, FL 33126; OSHA Safety and Health Standards, available from U.S. Goverment Printing Office, Washington, DC 20402.



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