

# TIG CATALOG 4.2



**TIG Welding Technology for all  
Metalworking Industries.**





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# TIG Welding Torches "ABITIG® GRIP"

## air and liquid cooled

ABITIG® GRIP – the complete solution in the field of TIG welding torches. This range represents a logical development of the ABITIG® torch range, which has distinguished itself by its consistent implementation of modular design and optimum ergonomics.

The torches in various ratings, both air and liquid cooled, are fitted with a uniform ergonomic handle with "GRIP" and optimised cable assembly management, into which numerous switch and control functions can be integrated. All consumables are compatible to the international "SR-Standard".

The flexible cable assemblies are available with modular and robust machine-side connections.

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle – individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for most available TIG welding power sources
- Consumables compatible to the international standard



### ABITIG® GRIP 9

#### Technical data (EN 60 974-7):

|                      |                     |
|----------------------|---------------------|
| Type of cooling:     | air cooled          |
| Rating:              | 110 A DC<br>80 A AC |
| Duty cycle:          | 35%                 |
| Tungsten electrodes: | Ø 0.5–1.6 mm        |

### ABITIG® GRIP 20 / ABITIG® GRIP 20 SC

#### Technical data (EN 60 974-7):

|                      |  |
|----------------------|--|
| Type of cooling:     | liquid cooled <sup>1</sup>                 |
| Rating:              | 240 A DC / 320 A DC<br>170 A AC / 220 A AC |
| Duty cycle:          | 100%                                       |
| Tungsten electrodes: | Ø 0.5–3.2 mm                               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.




Technical data based on cable assembly lengths of up to 8.00 m.

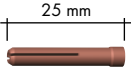
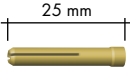
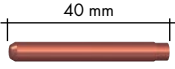
| Torch complete       |               |                          | Torch body         |            |
|----------------------|---------------|--------------------------|--------------------|------------|
| Type                 | Cooling       | Part-No.                 | Version            | Part-No.   |
| ABITIG® GRIP 9       | air cooled    | see comment <sup>2</sup> | Standard; 46.0 mm  | 712.5020   |
| ABITIG® GRIP 9 F     | air cooled    | see comment <sup>2</sup> | Flexible; 46.0 mm  | 712.5030   |
| ABITIG® GRIP 20 / SC | liquid cooled | see comment <sup>2</sup> | Standard; 46.0 mm  | 712.3020   |
| ABITIG® GRIP 20 F    | liquid cooled | see comment <sup>2</sup> | Flexible; 46.0 mm  | 712.3030   |
| ABITIG® GRIP 20 F    | liquid cooled | see comment <sup>2</sup> | Flexible; 75.0 mm  | 712.3040.1 |
| ABITIG® GRIP 20 F    | liquid cooled | see comment <sup>2</sup> | Flexible; 110.0 mm | 712.3050.1 |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).


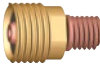

# ABITIG® GRIP 9, ABITIG® GRIP 20, ABITIG® GRIP 20 SC

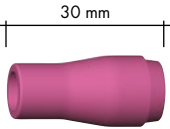
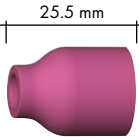
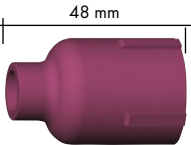
## Wear parts

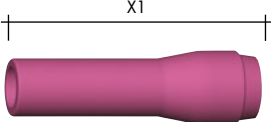

|                           |   |  |   |
|---------------------------|---|--|---|
|                           |  |  |  |
| <b>Back cap</b> (10 pcs.) | <b>Short</b>  | <b>Medium</b>  | <b>Long</b>   |
|                           | 701.0240 / 41V33  | 701.0244 / 41V35   | 701.0247 / 41V24  |

|                         |   |  |   |
|-------------------------|---|--|---|
|                         |  |  |  |
| <b>Collet</b> (10 pcs.) | <b>Standard version</b>   | <b>Brass version</b>   | <b>Jumbo version</b>  |
| Ø 0.5 mm                | 701.0249 / 13N20  | 701.1060   | 701.1225 / 13N20L   |
| Ø 1.0 mm                | 701.0250 / 13N21  | 701.1061   | 701.1226 / 13N21L   |
| Ø 1.2 mm                | 701.0254 / -  | -  | -   |
| Ø 1.6 mm                | 701.0251 / 13N22  | 701.1019   | 701.1227 / 13N22L   |
| Ø 2.0 mm                | 701.0255 / -  | -  | -   |
| Ø 2.4 mm                | 701.0252 / 13N23  | 701.1020   | 701.1228 / 13N23L   |
| Ø 3.2 mm                | 701.0253 / 13N24  | 701.1063   | 701.1229 / 13N24L   |

|                                  |   |   |
|----------------------------------|---|---|
|                                  |  |  |
| <b>Insulating ring / Adaptor</b> | <b>Insulating ring</b> (10 pcs.)  | <b>Adaptor</b> (5 pcs.)   |
|                                  | 702.0055 / 598882   | 701.1234 / 54N63-20   |

|                                 |   |  |   |
|---------------------------------|---|--|---|
|                                 |  |  |  |
| <b>Collet body</b><br>(10 pcs.) | <b>Standard version</b>   | <b>Standard version with gas lens</b>  | <b>Jumbo version with gas lens</b>  |
| Ø 0.5-1.0 mm                    | 701.0275 / 13N26  | 701.0301 / 45V42   | 701.1230 / 45V0204S   |
| Ø 1.2 mm                        | 701.0279 / -  | 701.0313 / -   | -   |
| Ø 1.6 mm                        | 701.0276 / 13N27  | 701.0307 / 45V43   | 701.1231 / 45V116S  |
| Ø 2.0 mm                        | 701.0280 / -  | 701.0315 / -   | -   |
| Ø 2.4 mm                        | 701.0277 / 13N28  | 701.0309 / 45V44   | 701.1232 / 45V64S   |
| Ø 3.2 mm                        | 701.0278 / 13N29  | 701.0311 / 45V45   | 701.1233 / 995795S  |

|   |   |  |   |
|---|---|--|---|
|   |  |  |  |
| <b>Gas nozzle, ceramic</b><br>(10 pcs.) | <b>Standard version</b>   | <b>Standard version for gas lens</b>   | <b>Jumbo version for gas lens</b>   |
| No. 4 Ø 6.5 mm                          | 701.0281 / 13N08  | 701.0317 / 53N58   | -   |
| No. 5 Ø 8.0 mm                          | 701.0282 / 13N09  | 701.0318 / 53N59   | -   |
| No. 6 Ø 9.5 mm                          | 701.0283 / 13N10  | 701.0319 / 53N60   | 701.1199 / 57N75  |
| No. 7 Ø 11.0 mm                         | 701.0284 / 13N11  | 701.0320 / 53N61   | -   |
| No. 8 Ø 12.5 mm                         | 701.0285 / 13N12  | 701.0322 / 53N61S  | 701.1200 / 57N74  |
| No. 10 Ø 16.0 mm                        | 701.0286 / 13N13  | -  | 701.1201 / 53N88  |
| No. 12                                  | -   | -  | 701.1121 / 53N87  |

|   |  |   |
|---|--|---|
|   |  |  |
| <b>Gas nozzle, ceramic</b><br>(10 pcs.) | <b>Standard version</b>  | <b>Jumbo version for gas lens<sup>1</sup></b>   |
| No. 4 Ø 6.5 mm 48 mm                    | 701.0289 / 796F71  | 701.1202 / 53N89  |
| No. 5 Ø 8.0 mm 48 mm                    | 701.0290 / 796F72  |   |
| No. 6 Ø 9.5 mm 48 mm                    | 701.0291 / 796F73  |   |
| No. 4 Ø 6.5 mm 63 mm                    | 701.0293 / 796F75  |   |
| No. 5 Ø 8.0 mm 63 mm                    | 701.0294 / 796F76  |   |
| No. 4 Ø 6.5 mm 89 mm                    | 701.0296 / 796F79  |   |

<sup>1</sup> not suitable for high frequency

# TIG Welding Torches "ABITIG® GRIP"

## air and liquid cooled



**ABITIG® GRIP handle system – see page 44–45**

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle – individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for most available TIG welding power sources
- Consumables compatible to the international standard

### ABITIG® GRIP 17

#### Technical data (EN 60 974-7):

Type of cooling: air cooled  
 Rating: 140 A DC  
 100 A AC  
 Duty cycle: 35%  
 Tungsten electrodes: Ø 0.5–2.4 mm

### ABITIG® GRIP 18

#### Technical data (EN 60 974-7):

Type of cooling: liquid cooled<sup>1</sup>  
 Rating: 320 A DC  
 230 A AC  
 Duty cycle: 100%  
 Tungsten electrodes: Ø 0.5–4.0 mm

<sup>1</sup>Torch input pressure:  
 Min. 2.5 bar (max. 3.5 bar);  
 Min. flow rate: 0.9 l/min.

### ABITIG® GRIP 26

#### Technical data (EN 60 974-7):

Type of cooling: air cooled  
 Rating: 180 A DC  
 130 A AC  
 Duty cycle: 35%  
 Tungsten electrodes: Ø 0.5–4.0 mm

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type              | Cooling       | Part-No.                 | Version           | Torch body Part-No. |
|-------------------|---------------|--------------------------|-------------------|---------------------|
| ABITIG® GRIP 17   | air cooled    | see comment <sup>2</sup> | Standard; 65.0 mm | 712.1020            |
| ABITIG® GRIP 17 F | air cooled    | see comment <sup>2</sup> | Flexible; 65.0 mm | 712.1030            |
| ABITIG® GRIP 18   | liquid cooled | see comment <sup>2</sup> | Standard; 69.0 mm | 712.2020            |
| ABITIG® GRIP 18 F | liquid cooled | see comment <sup>2</sup> | Flexible; 69.0 mm | 712.2030            |
| ABITIG® GRIP 18 K | liquid cooled | see comment <sup>2</sup> | Short; 59.0 mm    | 712.2230            |
| ABITIG® GRIP 26   | air cooled    | see comment <sup>2</sup> | Standard; 79.0 mm | 712.4020            |
| ABITIG® GRIP 26 F | air cooled    | see comment <sup>2</sup> | Flexible; 79.0 mm | 712.4030            |
| ABITIG® GRIP 26 K | air cooled    | see comment <sup>2</sup> | Short; 59.0 mm    | 712.4230            |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# ABITIG® GRIP 17, ABITIG® GRIP 18, ABITIG® GRIP 26

## Wear parts



**Back cap** (10 pcs.)

**Short**

**Long**

712.1053

712.1051



**Collet** (10 pcs.)

**Version (50 mm)**

**Version (52 mm)**

|          |                  |                   |
|----------|------------------|-------------------|
| Ø 0.5 mm | 702.0005 / 10N21 | 701.0169 / 10N21D |
| Ø 1.0 mm | 702.0006 / 10N22 | 701.0171 / 10N22D |
| Ø 1.2 mm | 702.0007 / -     | 701.0170 / -      |
| Ø 1.6 mm | 702.0008 / 10N23 | 701.0172 / 10N23D |
| Ø 2.0 mm | 702.0012 / -     | 701.0176 / -      |
| Ø 2.4 mm | 702.0009 / 10N24 | 701.0173 / 10N24D |
| Ø 3.2 mm | 702.0010 / 10N25 | 701.0174 / 10N25D |
| Ø 4.0 mm | 702.0011 / 54N20 | 701.0175 / 54N20D |



**Insulating ring / Adaptor**

**Insulating ring** (10 pcs.)

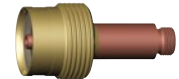
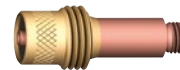
**Adaptor** (10 pcs.)

**Adaptor** (5 pcs.)

703.0012 / 18CG

701.0130 / 54N01

701.1122 / 54N63



**Collet body**

**Standard version**  
(10 pcs.)

**Standard version  
with gas lens** (10 pcs.)

**Jumbo version  
with gas lens** (5 pcs.)

|              |                   |                  |                   |
|--------------|-------------------|------------------|-------------------|
| Ø 0.5-1.2 mm | 701.0190 / 10N30  | 701.0201 / 45V24 | -                 |
| Ø 1.6 mm     | 701.0191 / 10N31  | 701.0203 / 45V25 | 701.1116 / 45V116 |
| Ø 2.0 mm     | 701.0196 / 10N32  | 701.0207 / 45V26 | -                 |
| Ø 2.4 mm     | 701.0196 / 10N32  | 701.0207 / 45V26 | 701.1117 / 45V64  |
| Ø 3.2 mm     | 701.0197 / 10N28  | 701.0209 / 45V27 | 701.1118 / 995795 |
| Ø 4.0 mm     | 701.0198 / 406488 | 701.0211 / 45V28 | 701.1208 / 45V63  |

47 mm

42 mm

48 mm



**Gas nozzle, ceramic**  
(10 pcs.)

**Standard version**

**Standard version  
for gas lens**

**Jumbo version  
for gas lens**

|                  |                               |                  |                  |
|------------------|-------------------------------|------------------|------------------|
| No. 4 Ø 6.5 mm   | 701.0107 / 10N50              | 701.0420 / 54N18 | -                |
| No. 5 Ø 8.0 mm   | 701.0108 / 10N49              | 701.0421 / 54N17 | -                |
| No. 6 Ø 9.5 mm   | 701.0109 / 10N48              | 701.0422 / 54N16 | 701.1199 / 57N75 |
| No. 7 Ø 11.0 mm  | 701.0110 / 10N47              | 701.0423 / 54N15 | -                |
| No. 8 Ø 12.5 mm  | 701.0111 / 10N46              | 701.0424 / 54N14 | 701.1200 / 57N74 |
| No. 10 Ø 16.0 mm | 701.0113 / 10N45              | -                | 701.1201 / 53N88 |
| No. 12 Ø 19.5 mm | 701.0114 / 10N44 <sup>1</sup> | 701.0426 / 54N19 | 701.1121 / 53N87 |

<sup>1</sup> 50 mm long

76 mm

76 mm

34 mm



**Gas nozzle, ceramic**  
(10 pcs.)

**Standard version**

**Standard version  
for gas lens**

**Jumbo version  
for gas lens<sup>2</sup>**

|                 |                   |                   |                  |
|-----------------|-------------------|-------------------|------------------|
| No. 5 Ø 8.0 mm  | 701.0115 / 10N49L | 701.0427 / 54N17L | -                |
| No. 6 Ø 9.5 mm  | 701.0116 / 10N48L | 701.0428 / 54N16L | -                |
| No. 7 Ø 11.0 mm | 701.0117 / 10N47L | 701.0429 / 54N15L | -                |
| Ø 24.0 mm       | -                 | -                 | 701.1202 / 53N89 |

<sup>2</sup> not suitable for high frequency

# TIG Welding Torches "ABITIG® GRIP"

## air and liquid cooled

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle – individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for all available TIG welding power sources
- Consumables compatible to the international standard



### ABITIG® GRIP 24 G

#### Technical data (EN 60 974-7):

|                      |                     |
|----------------------|---------------------|
| Type of cooling:     | air cooled          |
| Rating:              | 110 A DC<br>80 A AC |
| Duty cycle:          | 35%                 |
| Tungsten electrodes: | Ø 0.5–1.6 mm        |

### ABITIG® GRIP 24 W

#### Technical data (EN 60 974-7):

|                      |                            |
|----------------------|----------------------------|
| Type of cooling:     | liquid cooled <sup>1</sup> |
| Rating:              | 140 A DC<br>100 A AC       |
| Duty cycle:          | 100%                       |
| Tungsten electrodes: | Ø 0.5–2.4 mm               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type              | Cooling       | Part-No.                 | Version           | Torch body Part-No. |
|-------------------|---------------|--------------------------|-------------------|---------------------|
| ABITIG® GRIP 24 G | air cooled    | see comment <sup>2</sup> | Standard; 55.0 mm | 712.7020            |
| ABITIG® GRIP 24 W | liquid cooled | see comment <sup>2</sup> | Standard; 55.0 mm | 712.7120            |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).



# ABITIG® GRIP 24 G, ABITIG® GRIP 24 W

## Wear parts



**Insulating sleeve**

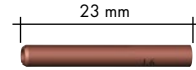
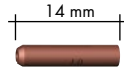
**Insulating sleeve / Insulator** (10 pcs.)

701.0458 / 53N22



**Insulator for gas lens**

701.0459 / 53N66



**Collet** (10 pcs.)

**Standard version**

**Standard version for gas lens**

|          |                   |                     |
|----------|-------------------|---------------------|
| Ø 0.5 mm | -                 | -                   |
| Ø 1.0 mm | 701.0453 / 53N16  | 701.0462 / 53N63    |
| Ø 1.2 mm | 701.0455 / -      | -                   |
| Ø 1.6 mm | 701.0454 / 53N14  | 701.0463 / 54N64    |
| Ø 2.0 mm | 701.0456 / -      | 701.0466 / -        |
| Ø 2.4 mm | 701.0457 / 24C332 | 701.0465 / 24GLC332 |

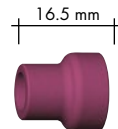


**Collet body** (10 pcs.)

**Standard version**

**Standard version with gas lens**

|          |                    |                  |
|----------|--------------------|------------------|
| Ø 0.5 mm | 701.0479 / 53N17   | 701.0301 / 45V41 |
| Ø 1.0 mm | 701.0480 / 53N18   | 701.0301 / 45V42 |
| Ø 1.2 mm | 701.0483 / -       | 701.0313 / -     |
| Ø 1.6 mm | 701.0481 / 53N19   | 701.0307 / 45V43 |
| Ø 2.0 mm | 701.0484 / -       | 701.0315 / -     |
| Ø 2.4 mm | 701.0482 / 24CB332 | 701.0309 / 45V44 |

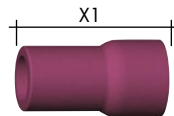


**Gas nozzle, ceramic**  
(10 pcs.)

**Standard version**

**Standard version for gas lens**

|                 |                  |                  |
|-----------------|------------------|------------------|
| No. 4 Ø 6.5 mm  | 701.0468 / 53N24 | 701.0317 / 53N58 |
| No. 5 Ø 8.0 mm  | 701.0469 / 53N25 | 701.0318 / 53N59 |
| No. 6 Ø 9.5 mm  | 701.0470 / 53N27 | 701.0319 / 53N60 |
| No. 7 Ø 11.0 mm | -                | 701.0320 / 53N61 |



**Gas nozzle, ceramic**  
(10 pcs.)

**Standard version**

|                         |                   |
|-------------------------|-------------------|
| No. 4L Ø 6.5 mm 29.0 mm | 701.0471 / 53N28  |
| No. 6L Ø 9.5 mm 29.0 mm | 701.0472 / 53N26  |
| No. 4L Ø 6.5 mm 62.5 mm | 701.0473 / 53N24L |
| No. 5L Ø 8.0 mm 91.5 mm | 701.0474 / 53N27L |

# TIG Welding Torches "ABITIG® GRIP" liquid cooled

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types - offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle - individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for all available TIG welding power sources
- Consumables compatible to the international standard



## ABITIG® GRIP 12-1

### Technical data (EN 60 974-7):

|                      |                            |
|----------------------|----------------------------|
| Type of cooling:     | liquid cooled <sup>1</sup> |
| Rating:              | 350 A DC<br>250 A AC       |
| Duty cycle:          | 100%                       |
| Tungsten electrodes: | Ø 1.6-4.0 mm               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.



**ABITIG® GRIP handle system -  
see page 44-45**


| Torch complete    |               | Torch body               |                   |          |
|-------------------|---------------|--------------------------|-------------------|----------|
| Type              | Cooling       | Part-No.                 | Version           | Part-No. |
| ABITIG® GRIP 12-1 | liquid cooled | see comment <sup>2</sup> | Standard; 70.0 mm | 712.0020 |



<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches - this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

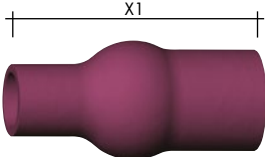
# ABITIG® GRIP 12-1

## Wear parts

|                           |   |   |
|---------------------------|---|---|
|                           |  |  |
| <b>Back cap</b> (10 pcs.) | <b>Short</b><br>712.0053  | <b>Long</b><br>712.0051   |

|                         |  |
|-------------------------|--|
|                         |  |
| <b>Collet</b> (10 pcs.) | <b>Standard version</b>  |
| Ø 1.6 mm                | 712.0062   |
| Ø 2.4 mm                | 712.0063   |
| Ø 3.2 mm                | 712.0064   |
| Ø 4.0 mm                | 712.0065   |

|                              |   |   |
|------------------------------|---|---|
|                              |  |  |
| <b>Collet body</b> (10 pcs.) | <b>Standard version</b>   | <b>Standard version with gas lens</b>   |
| Ø 1.6 mm                     | 712.0072  | 712.0101  |
| Ø 2.4 mm                     | 712.0073  | 712.0102  |
| Ø 3.2 mm                     | 712.0074  | 712.0103  |
| Ø 4.0 mm                     | 712.0075  | 712.0104  |

|   |  |
|---|--|
|   |  |
| <b>Gas nozzle, ceramic</b><br>(10 pcs.) | <b>Standard version</b>  |
| <b>X1</b>                               |  |
| No. 4 Ø 6.5 mm 43 mm                    | 704.0046 / 130.00  |
| No. 5 Ø 8.0 mm 43 mm                    | 704.0047 / 131.00  |
| No. 6 Ø 9.5 mm 43 mm                    | 704.0048 / 132.00  |
| No. 7 Ø 11.0 mm 43 mm                   | 704.0049 / 133.00  |
| No. 8 Ø 12.5 mm 43 mm                   | 704.0050 / 134.00  |
| No. 9 Ø 14.5 mm 43 mm                   | 704.0051 / 135.00  |
| No. 10 Ø 16.0 mm 43 mm                  | 704.0052 / 136.00  |
| No. 11 Ø 17.5 mm 48 mm                  | 704.0053 / 137.00  |

# TIG Welding Torches "ABITIG® GRIP" liquid cooled

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types - offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle - individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for all available TIG welding power sources
- Consumables compatible to the international standard



## ABITIG® GRIP 18 SC

### Technical data (EN 60 974-7):

|                      |                            |
|----------------------|----------------------------|
| Type of cooling:     | liquid cooled <sup>1</sup> |
| Rating:              | 400 A DC<br>280 A AC       |
| Duty cycle:          | 100%                       |
| Tungsten electrodes: | Ø 0.5-4.8 mm               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.9 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type               | Cooling       | Part-No.                 | Version           | Torch body | Part-No. |
|--------------------|---------------|--------------------------|-------------------|------------|----------|
| ABITIG® GRIP 18 SC | liquid cooled | see comment <sup>2</sup> | Standard; 75.0 mm |            | 712.6020 |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches - this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# ABITIG® GRIP 18 SC

## Wear parts

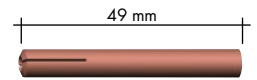
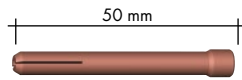


### Back cap (10 pcs.)

#### Short

#### Long

|  |          |          |
|--|----------|----------|
|  | 712.1053 | 712.1051 |
|--|----------|----------|



### Collet (10 pcs.)

#### Standard version

#### HL version<sup>1</sup>

|          |                  |                    |
|----------|------------------|--------------------|
| Ø 0.5 mm | 702.0005 / 10N21 | -                  |
| Ø 1.0 mm | 702.0006 / 10N22 | -                  |
| Ø 1.6 mm | 702.0008 / 10N23 | -                  |
| Ø 2.4 mm | 702.0009 / 10N24 | -                  |
| Ø 3.2 mm | 702.0010 / 10N25 | 712.6064 / 10N25HD |
| Ø 4.0 mm | -                | 712.6065 / 54N20HD |
| Ø 4.8 mm | -                | 712.6066 / 18C36   |



### Insulating ring (5 pcs.)

#### Insulating ring

|  |                 |
|--|-----------------|
|  | 712.6043 / 18NG |
|--|-----------------|



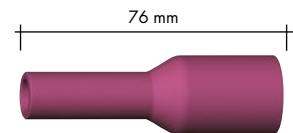
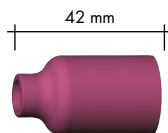
### Collet body (10 pcs.)

#### Standard version

#### Standard version with gas lens

#### HL version<sup>1</sup>

|              |                   |                   |                   |
|--------------|-------------------|-------------------|-------------------|
| Ø 0.5 mm     | -                 | 712.6099 / 18GL02 | -                 |
| Ø 1.0 mm     | -                 | 712.6100 / 18GL04 | -                 |
| Ø 1.6 mm     | -                 | 712.6101 / 18GL16 | -                 |
| Ø 2.4 mm     | -                 | 712.6102 / 18GL32 | -                 |
| Ø 3.2 mm     | -                 | 712.6103 / 18GL18 | -                 |
| Ø 4.0 mm     | -                 | 712.6104 / 18GL53 | -                 |
| Ø 4.8 mm     | -                 | 712.6105 / 18GL36 | -                 |
| Ø 0.5–3.2 mm | 712.6074 / NCB-53 | -                 | -                 |
| Ø 3.2–4.8 mm | -                 | -                 | 712.6076 / NCB-36 |



### Gas nozzle, ceramic

(10 pcs.)

#### Standard version

#### Standard version

|                  |                  |                   |
|------------------|------------------|-------------------|
| No. 4 Ø 6.5 mm   | 701.0420 / 54N18 | -                 |
| No. 5 Ø 8.0 mm   | 701.0421 / 54N17 | 701.0427 / 54N17L |
| No. 6 Ø 9.5 mm   | 701.0422 / 54N16 | 701.0428 / 54N16L |
| No. 7 Ø 11.0 mm  | 701.0423 / 54N15 | 701.0429 / 54N15L |
| No. 8 Ø 12.5 mm  | 701.0424 / 54N14 | -                 |
| No. 12 Ø 19.5 mm | 701.0426 / 54N19 | -                 |

<sup>1</sup> Please note: HL = Heavy duty version

# TIG Welding Torches "ABITIG®" with rotary valve

## air cooled



- Rotary valve for regulating gas mounted directly on the torch body
- Light and flexible cable assemblies for all common TIG welding power sources
- Consumables compatible to the international standard

### ABITIG® 9 V / FV<sup>1</sup>

#### Technical data (EN 60 974-7):

|                      |                     |
|----------------------|---------------------|
| Type of cooling:     | air cooled          |
| Rating:              | 110 A DC<br>80 A AC |
| Duty cycle:          | 35%                 |
| Tungsten electrodes: | Ø 0.5–1.6 mm        |

### ABITIG® 17 V / FV<sup>1</sup>

#### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 140 A DC<br>100 A AC |
| Duty cycle:          | 35%                  |
| Tungsten electrodes: | Ø 0.5–2.4 mm         |

### ABITIG® 26 V / FV<sup>1</sup>

#### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 180 A DC<br>130 A AC |
| Duty cycle:          | 35%                  |
| Tungsten electrodes: | Ø 0.5–4.0 mm         |

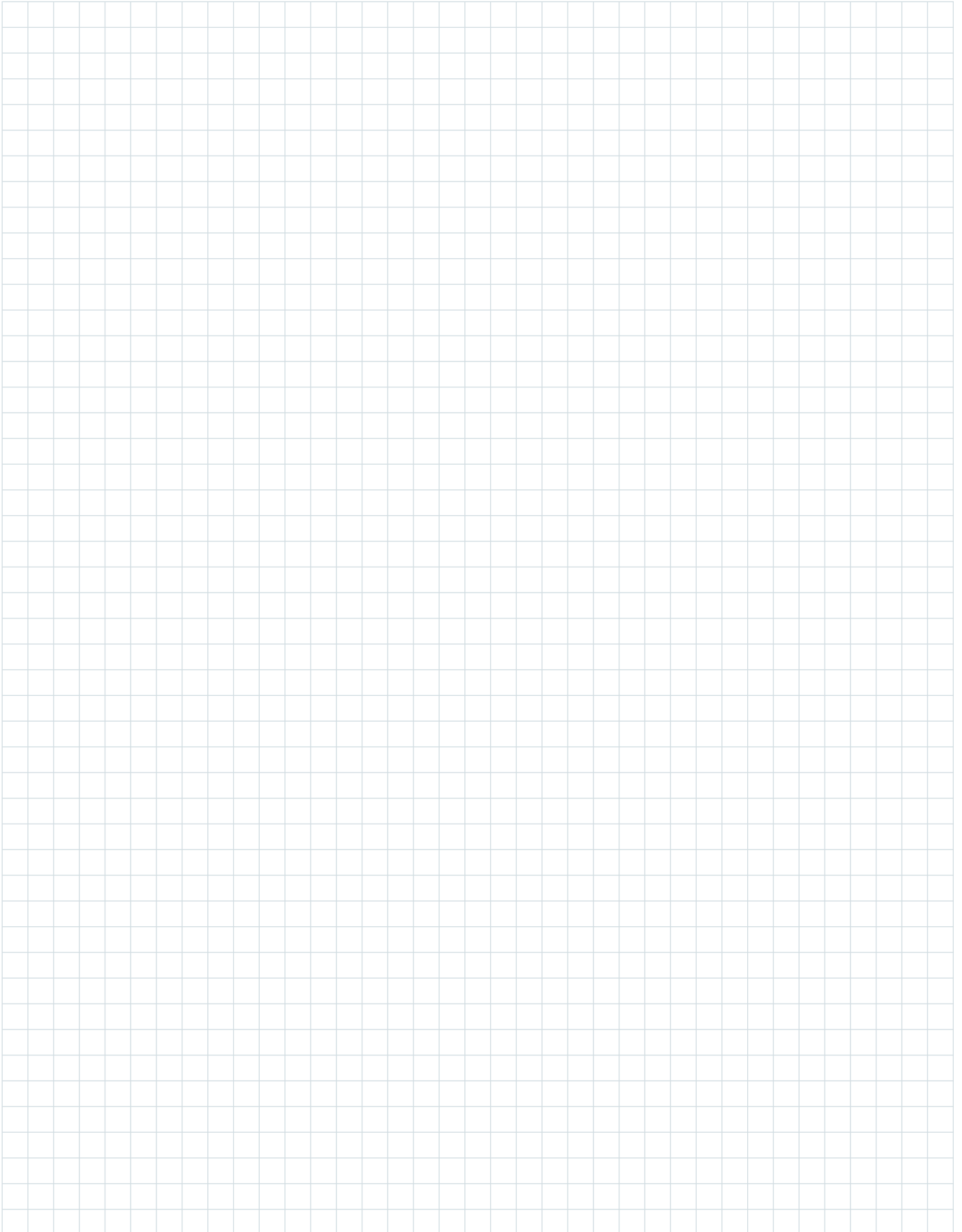
<sup>1</sup> FV = Torch body (with rotary valve)  
Flexible

| Torch complete<br>Type | Version <sup>2</sup>      | Part-No.  |           | Torch body        |            |
|------------------------|---------------------------|-----------|-----------|-------------------|------------|
|                        |                           | 4 m       | 8 m       | Type              | Part-No.   |
| ABITIG® 9 V            | Rotary valve / Plug 10-25 | 706.5057  | 706.5058  | Standard; 60.0 mm | 705.0007   |
| ABITIG® 9 FV           | Rotary valve / Plug 10-25 | on demand | on demand | Flexible; 78.0 mm | 703.0311.1 |
| ABITIG® 17 V           | Rotary valve / Plug 10-25 | 706.1057  | 706.1058  | Standard; 65.0 mm | 705.0038   |
| ABITIG® 17 V           | Rotary valve / Plug 35-50 | 706.1037  | 706.1038  | Standard; 65.0 mm | 705.0038   |
| ABITIG® 17 FV          | Rotary valve / Plug 10-25 | 706.1157  | 706.1158  | Flexible; 80.0 mm | 703.0010   |
| ABITIG® 17 FV          | Rotary valve / Plug 35-50 | 706.1137  | 706.1138  | Flexible; 80.0 mm | 703.0010   |
| ABITIG® 26 V           | Rotary valve / Plug 35-50 | 706.4037  | 706.4038  | Standard; 80.0 mm | 705.0091   |
| ABITIG® 26 FV          | Rotary valve / Plug 35-50 | 706.4137  | 706.4138  | Flexible; 80.0 mm | 703.0290   |

<sup>2</sup> Power cable / gas hose separate, gas hose with G1/4" union nut. Other versions available on request.

Wear parts - back cap, collet, collet body, adaptor, insulating ring and gas nozzle - are identical with those of the same type for ABITIG® torches.

# Notes



# TIG Welding Torch "ABITIG® GRIP Little"

## air and liquid cooled

After having been welcomed by TIG welders all over the world for many years, the ABITIG® GRIP Little product range provides perfect access and optimum handling and now has been extended by adding the ABITIG® GRIP Little 90 as well as the ABITIG® GRIP Little 180 W torches.

The new ABITIG® GRIP Little 90 and 180 W torches with their small, ergonomic handle are the ideal solution in cases of particularly restricted access or demanding quality requirements. Nobody has to do without the well-known benefits of this torch series:

- Ergonomic "GRIP" handles for a reliable grip and a perfect feel
- Modular switching and control functions in the handle – personalised and user-friendly
- Excellent HF security
- Lightweight and flexible cable-hose assemblies with modular connectors to most standard TIG welding equipment at the machine end
- Optimised service life due to a significantly larger current and process temperature transfer area
- Reduced stocking requirements – just three spare parts



**ABITIG® GRIP handle system – see page 44–45**

### ABITIG® GRIP Little 90

#### Technical data (EN 60 974-7):

|                      |                    |
|----------------------|--------------------|
| Type of cooling:     | air cooled         |
| Rating:              | 90 A DC<br>60 A AC |
| Duty cycle:          | 35%                |
| Tungsten electrodes: | Ø 1.0–1.6 mm       |

### ABITIG® GRIP Little 180 W

#### Technical data (EN 60 974-7):

|                      |                            |
|----------------------|----------------------------|
| Type of cooling:     | liquid cooled <sup>1</sup> |
| Rating:              | 180 A DC<br>130 A AC       |
| Duty cycle:          | 100%                       |
| Tungsten electrodes: | Ø 1.0–3.2 mm               |

<sup>1</sup>Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type                      | Cooling       | Part-No.                 | Version           | Torch body Part-No. |
|---------------------------|---------------|--------------------------|-------------------|---------------------|
| ABITIG® GRIP Little 90    | air cooled    | see comment <sup>2</sup> | Standard; 60.0 mm | 770.0040.1          |
| ABITIG® GRIP Little 180 W | liquid cooled | see comment <sup>2</sup> | Standard; 60.0 mm | 772.0040.1          |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).



# ABITIG® GRIP Little 90, ABITIG® GRIP Little 180 W

## Wear parts



**Back cap** (10 pcs.)

**Short**

**Standard**

771.0053

771.0051



**Spring** (10 pcs.)

771.0037



**Electrode holder/  
Gas diffuser** (5 pcs.)

**Electrode holder**

**Gas diffuser**

**Gas diffuser  
cylindrical**

Ø 1.0 mm

771.0061

771.0111

-

Ø 1.6 mm

771.0062

771.0112

-

Ø 2.0 mm

771.0067

771.0117

-

Ø 2.4 mm

771.0063

771.0113

771.0123

Ø 3.2 mm

771.0064

771.0114

771.0124



**Gas nozzle, ceramic**

**Standard**

**Standard**

(10 pcs.)

Ø 6.0 mm (No. 1)

771.0081

-

Ø 8.0 mm (No. 2)

771.0082

-

Ø 10.5 mm (No. 3)

771.0083

771.0083



**Gas nozzle, ceramic**

**Long**

**Long**

(10 pcs.)

Ø 6.0 mm (No. 1)

771.2171

-

Ø 8.0 mm (No. 2)

771.2172

-

Ø 10.5 mm (No. 3)

771.2173

771.2173

# TIG Welding Torches "ABITIG® GRIP"

## air and liquid cooled

The ABITIG® GRIP line "ABICOR BINZEL-Style", air and liquid cooled, offer leading edge performance in a comfortable and light weight package. The cooling system guarantees long service life and enables the use of smaller tungsten electrodes through optimised heat dissipation.

The reduction in the quantity of consumables to only three components (back cap, electrode holder / gas diffuser and threaded gas nozzle) simplifies use and helps reduce stocking costs.

The innovative torch design prevents the heat from the gas nozzle reaching the torch body. This protects the torch, increases service life and further reduces operating costs.

The intelligent ABITIG® GRIP handle offers increased comfort due to the integration of numerous switching and control functions. Furthermore it is well protected against high frequency (HF) flashover.

- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle – individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for most available TIG welding power sources
- Reduced storage costs with only three consumable parts



### ABITIG® GRIP 150 / ABITIG® GRIP 150 F

#### Technical data (EN 60 974-7) (with gas nozzle 36 mm):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 150 A DC<br>105 A AC |
| Duty cycle:          | 35%                  |
| Tungsten electrodes: | Ø 1.0-2.4 mm         |

### ABITIG® GRIP 260 W / ABITIG® GRIP 260 W SC

#### Technical data (EN 60 974-7):

|                      |  |
|----------------------|--|
| Type of cooling:     | liquid cooled <sup>1</sup>                 |
| Rating:              | 260 A DC / 340 A DC<br>185 A AC / 240 A AC |
| Duty cycle:          | 100%                                       |
| Tungsten electrodes: | Ø 1.0-3.2 mm                               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

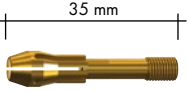
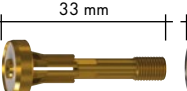
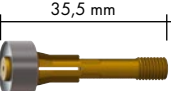
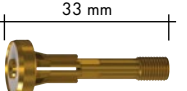
| Torch complete          |               |                          | Torch body        |          |
|-------------------------|---------------|--------------------------|-------------------|----------|
| Type                    | Cooling       | Part-No.                 | Version           | Part-No. |
| ABITIG® GRIP 150        | air cooled    | see comment <sup>2</sup> | Standard; 60.0 mm | 776.0010 |
| ABITIG® GRIP 150 F      | air cooled    | see comment <sup>2</sup> | Flexible; 60.0 mm | 776.0130 |
| ABITIG® GRIP 260 W / SC | liquid cooled | see comment <sup>2</sup> | Standard; 60.0 mm | 777.0010 |


<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# ABITIG® GRIP 150, ABITIG® GRIP 260 W, ABITIG® GRIP 260 W SC



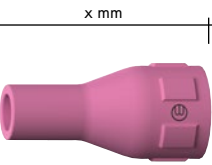
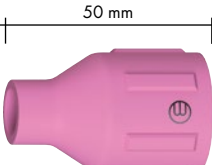
## Wear parts

|                           |   |  |   |
|---------------------------|---|--|---|
|                           |  |  |  |
| <b>Back cap (10 pcs.)</b> | <b>Short</b>  | <b>Medium</b>  | <b>Long</b>   |
|                           | 776.0053  | 771.0051   | 772.0051.10   |

|   |   |   |  |   |
|---|---|---|--|---|
|   |  |  |  |  |
| <b>Electrode holder / Gas diffuser (5 pcs.)</b> | <b>Electrode holder</b>   | <b>Gas diffuser</b>   | <b>Gas diffuser</b>  | <b>Gas diffuser</b>   |
| Ø 1.0 mm  | 776.0061  | 776.0171  | 777.0171.5   | 776.0171  |
| Ø 1.6 mm  | 776.0062  | 776.0172  | 777.0172.5   | 776.0172  |
| Ø 2.0 mm  | 776.0067  | 776.0177  | 777.0177.5   | 776.0177  |
| Ø 2.4 mm  | 776.0063  | 776.0173  | 777.0173.5   | 776.0173  |
| Ø 3.2 mm  | 776.0064  | 776.0174  | 777.0174.5   | 776.0174  |

|              |  |  |
|--------------|--|--|
|              |  |  |
|              | <b>Standard version</b>  | <b>for gas diffuser</b>  |
|              | (10 pcs.)  | (1 pc.)  |
| Insulator    | 776.1043   | 776.0443   |
| Adaptor ring | -  | 776.0441   |

|                               |  |   |   |
|-------------------------------|--|---|---|
|                               |  |  |  |
| <b>Gas diffuser 4 (1 pc.)</b> |  | <b>Standard</b>   | <b>Multilayer</b>   |
| Ø 1.6 mm                      |  | 775.0122  | 775.0127.1  |
| Ø 2.4 mm                      |  | 775.0123  | 775.0128.1  |
| Ø 3.2 mm                      |  | 775.0124  | 775.0129.1  |

|                                      |   |   |  |   |
|--------------------------------------|---|---|--|---|
|                                      |  |  |  |  |
| <b>Gas nozzle, ceramic (10 pcs.)</b> | <b>Standard version</b>   | <b>Ball version</b>   | <b>Standard version</b>  | <b>For gas diffuser</b>   |
|                                      |   |   | x = 36 mm x = 60 mm  |   |
| Ø 6.5 mm                             | 777.0081  | 770.0081.10   | 777.2171 777.2175  | -   |
| Ø 8.0 mm                             | 777.0082  | 770.0082.10   | 777.2172 777.2176  | -   |
| Ø 9.5 mm                             | 777.0083  | 770.0083.10   | 777.2173 -   | -   |
| Ø 11.0 mm                            | 777.0084  | 770.0084.10   | 777.2174 -   | -   |
| Ø 12.5 mm                            | -   | -   | - -  | 778.1183  |
| Ø 16.0 mm                            | -   | -   | - -  | 778.1184  |
| Ø 19.5 mm                            | -   | -   | - -  | 778.1188  |
| Ø 24.3 mm                            | -   | -   | - -  | 778.1189 <sup>3</sup>   |

<sup>3</sup> Without figure: cylindrical form, length 34.0 mm; not suitable for high frequency.

# TIG Welding Torches "ABITIG® GRIP"

## air and liquid cooled



- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle – individually and ergonomically
- Short ball joint for optimum movement radius and ideal handling
- Light and flexible cable assemblies with modular machine-side connections for most available TIG welding power sources
- Reduced storage costs with only three consumable parts

### ABITIG® GRIP 200 / ABITIG® GRIP 200 F

#### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 200 A DC<br>140 A AC |
| Duty cycle:          | 35%                  |
| Tungsten electrodes: | Ø 1.6–3.2 mm         |

### ABITIG® GRIP 450 W / WK / WKF

#### Technical data (EN 60 974-7):

|                      |  |
|----------------------|--|
| Type of cooling:     | liquid cooled <sup>1</sup>                 |
| Rating:              | 420 A DC / 400 A DC<br>300 A AC / 280 A AC |
| Duty cycle:          | 60% / 100%                                 |
| Tungsten electrodes: | Ø 1.6–4.8 mm                               |

### ABITIG® GRIP 450 W SC

#### Technical data (EN 60 974-7):

|                      |  |
|----------------------|--|
| Type of cooling:     | liquid cooled <sup>1</sup>                 |
| Rating:              | 480 A DC / 450 A DC<br>340 A AC / 320 A AC |
| Duty cycle:          | 60% / 100%                                 |
| Tungsten electrodes: | Ø 1.6–4.8 mm                               |

<sup>1</sup> Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type                 | Cooling       | Part-No.                 | Version                  | Torch body | Part-No.   |
|----------------------|---------------|--------------------------|--------------------------|------------|------------|
| ABITIG® GRIP 200     | air cooled    | see comment <sup>2</sup> | Standard; 80.0 mm        |            | 774.0010   |
| ABITIG® GRIP 200 F   | air cooled    | see comment <sup>2</sup> | Flexible; 80.0 mm        |            | 774.0130   |
| ABITIG® GRIP 200 K   | air cooled    | see comment <sup>2</sup> | Short; 60.0 mm           |            | 774.0230   |
| ABITIG® GRIP 450 W   | liquid cooled | see comment <sup>2</sup> | Standard; 80.0 mm        |            | 775.0010   |
| ABITIG® GRIP 450 WK  | liquid cooled | see comment <sup>2</sup> | Short; 60.0 mm           |            | 775.0230   |
| ABITIG® GRIP 450 WF  | liquid cooled | see comment <sup>2</sup> | Flexible; 80.0 mm        |            | 775.0238.1 |
| ABITIG® GRIP 450 WKF | liquid cooled | see comment <sup>2</sup> | Short; flexible; 60.0 mm |            | 775.0233.1 |

The torch bodies (standard and short) for ABITIG® 450 W SC are identical with those for ABITIG® 450 W. The complete torches differ only in terms of the layout of the cable assembly.

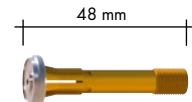
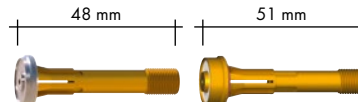
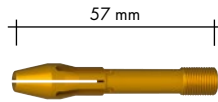
<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# ABITIG® GRIP 200, ABITIG® GRIP 450 W, ABITIG® GRIP 450 W SC

## Wear parts



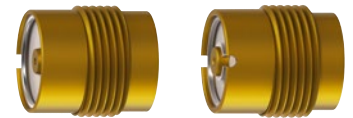
|                 |                                    |                                     |                                   |
|-----------------|------------------------------------|-------------------------------------|-----------------------------------|
| <b>Back cap</b> | <b>Short</b> (10 pcs.)<br>773.0053 | <b>Medium</b> (1 pc.)<br>773.0055.1 | <b>Long</b> (10 pcs.)<br>773.0051 |
|-----------------|------------------------------------|-------------------------------------|-----------------------------------|



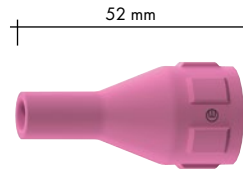
| <b>Electrode holder / Gas diffuser</b> (5 pcs.) | <b>Electrode holder</b> | <b>Gas diffuser</b> | <b>Gas diffuser</b> | <b>Gas diffuser</b> |
|---|-------------------------|---------------------|---------------------|---------------------|
| Ø 1.6 mm  | 775.0062                | 773.0172            | 773.0112.5          | 773.0172            |
| Ø 2.0 mm  | 775.0067                | 773.0177            | -                   | 773.0177            |
| Ø 2.4 mm  | 775.0063                | 773.0173            | 773.0113            | 773.0173            |
| Ø 3.2 mm  | 775.0064                | 773.0174            | 773.0114            | 773.0174            |
| Ø 4.0 mm  | 775.0065                | 773.0175            | -                   | 773.0175            |
| Ø 4.8 mm  | 775.0066                | 773.0176            | -                   | 773.0176            |



|                  |   |   |
|------------------|---|---|
| <b>Insulator</b> | <b>Standard version</b> (10 pcs.)<br>775.1043 | <b>For gas diffuser</b> (1 pc.)<br>775.1143 |
|------------------|---|---|



| <b>Gas diffuser 4</b> (1 pc.) | <b>Standard</b> | <b>Multilayer</b> |
|-------------------------------|-----------------|-------------------|
| Ø 1.6 mm                      | 775.0122        | 775.0127.1        |
| Ø 2.4 mm                      | 775.0123        | 775.0128.1        |
| Ø 3.2 mm                      | 775.0124        | 775.0129.1        |
| Ø 4.0 mm                      | 775.0125        | 775.0130.1        |
| Ø 4.8 mm                      | 775.0126        | -                 |



| <b>Gas nozzle, ceramic</b> (10 pcs.) | <b>Standard version</b> |           | <b>Standard version</b> | <b>For gas diffuser</b> |
|--------------------------------------|-------------------------|-----------|-------------------------|-------------------------|
|                                      | x = 26 mm               | x = 37 mm |                         |                         |
| Ø 7.5 mm                             | -                       | 775.0081  | 775.2171                | -                       |
| Ø 10.0 mm                            | 775.0152 <sup>3</sup>   | 775.0082  | 775.2172                | -                       |
| Ø 12.5 mm                            | -                       | -         | -                       | 778.1183                |
| Ø 13.0 mm                            | 775.0153 <sup>3</sup>   | 775.0083  | 775.2173                | -                       |
| Ø 13.0 mm (boosted)                  | -                       | 775.0183  | -                       | -                       |
| Ø 15.0 mm                            | -                       | 775.0084  | 775.2174                | -                       |
| Ø 15.0 mm (boosted)                  | -                       | 775.0184  | -                       | -                       |
| Ø 16.0 mm                            | -                       | -         | -                       | 778.1184                |
| Ø 19.5 mm                            | -                       | -         | -                       | 778.1188                |
| Ø 24.3 mm                            | -                       | -         | -                       | 778.1189 <sup>4</sup>   |

<sup>3</sup> Only in combination with gas diffuser 48 mm (773.0172-773.0177).

<sup>4</sup> Without figure: cylindrical form, length 34.0 mm; not suitable for high frequency.

# TIG Welding Torch "ABITIG® GRIP" liquid cooled

In the upper performance level ABITIG® GRIP 500 W is the ideal solution and exceeds the product portfolio of the ABITIG® GRIP torch series in an optimal way. High performance welding for all thick sheet TIG welding applications.

This powerful torch offers all known advantages of the ABITIG® GRIP torch series:

- Best arc characteristics and reliable gas coverage up to 500 A
- Ergonomic "GRIP" handles for a reliable grip and a perfect feel

- Modular switching and control functions in the handle – personalised and user-friendly
- Short ball joint provides maximum mobility, flexibility and ideal handling
- Excellent HF security
- Lightweight and flexible cable-hose assemblies with modular connectors to all standard TIG welding equipment at the machine end
- Optimised service life due to a significantly larger current and process temperature transfer area
- Reduced stocking requirements – just three spare parts



## ABITIG® GRIP 500 W

### Technical data (EN 60 974-7):

|                      |                            |
|----------------------|----------------------------|
| Type of cooling:     | liquid cooled <sup>1</sup> |
| Rating:              | 500 A DC<br>350 A AC       |
| Duty cycle:          | 100%                       |
| Tungsten electrodes: | Ø 1.6–6.4 mm               |

<sup>1</sup>Torch input pressure:  
Min. 2.5 bar (max. 3.5 bar);  
Min. flow rate: 0.7 l/min.

Technical data based on cable assembly lengths of up to 8.00 m.

#### Torch complete

| Type               | Cooling       | Part-No.                 | Version           | Torch body | Part-No.   |
|--------------------|---------------|--------------------------|-------------------|------------|------------|
| ABITIG® GRIP 500 W | liquid cooled | see comment <sup>2</sup> | Standard; 79.0 mm |            | 775.0041.1 |

<sup>2</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# ABITIG® GRIP 500 W

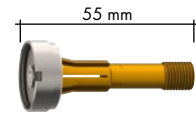
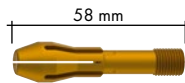
## Wear parts



|                         |                            |                               |
|-------------------------|----------------------------|-------------------------------|
| <b>Back cap</b> (1 pc.) | <b>Short</b><br>775.0053.1 | <b>Standard</b><br>775.0051.1 |
|-------------------------|----------------------------|-------------------------------|



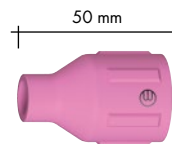
|                          |                                |
|--------------------------|--------------------------------|
| <b>Insulator</b> (1 pc.) | <b>Insulator</b><br>775.0058.1 |
|--------------------------|--------------------------------|



|   |                         |                     |
|---|-------------------------|---------------------|
| <b>Electrode holder/<br/>Gas diffuser</b> (1 pc.) | <b>Electrode holder</b> | <b>Gas diffuser</b> |
| Ø 1.6 mm  | 779.6044                | 779.6058            |
| Ø 2.0 mm  | 779.6049                | 779.6063            |
| Ø 2.4 mm  | 779.6045                | 779.6059            |
| Ø 3.2 mm  | 779.6046                | 779.6060            |
| Ø 4.0 mm  | 779.6047                | 779.6061            |
| Ø 4.8 mm  | 779.6048                | 779.6062            |
| Ø 6.4 mm  | 779.6050                | 779.6064            |



|   |   |                          |
|---|---|--------------------------|
| <b>Gas nozzle, ceramic</b><br>(10 pcs.) |   | <b>Short<sup>3</sup></b> |
| Ø 24.0 mm                               | - | 778.1189                 |



|   |                 |
|---|-----------------|
| <b>Gas nozzle, ceramic</b><br>(10 pcs.) | <b>Standard</b> |
| Ø 12.5 mm                               | 778.1183        |
| Ø 16.0 mm                               | 778.1184        |
| Ø 19.5 mm                               | 778.1188        |

<sup>3</sup> Not suitable for high frequency.

# TIG Welding Torches "ABITIG® GRIP Little"

## air and liquid cooled

The welding torch line ABITIG® GRIP Little – particularly suited to those everyday, less accessible welding jobs. Maximum flexibility with no compromises.

The torches of various ratings, both air and liquid cooled, are combined with a standardized ergonomic handle with "GRIP" and optimised cable

assembly management, into which standard switching and control functions can be integrated.

In addition the flexible cable assemblies are available with modular and robust machine-side connections.



### Technical data (EN 60 974-7):

#### TIG Welding Torches "ABITIG® GRIP Little" (air cooled)

| Type                            | Rating (A) |     | Duty cycle (%) | Tungsten electrodes (Ø in mm) |
|---------------------------------|------------|-----|----------------|-------------------------------|
|                                 | DC         | AC  |                |                               |
| ABITIG® GRIP Little 9 / 9 F     | 110        | 80  | 35             | 0.5-1.6                       |
| ABITIG® GRIP Little 17 / 17 F   | 140        | 100 | 35             | 0.5-2.4                       |
| ABITIG® GRIP Little 24 G        | 110        | 80  | 35             | 0.5-1.6                       |
| ABITIG® GRIP Little 90          | 90         | 60  | 35             | 1.0-1.6                       |
| ABITIG® GRIP Little 150 / 150 F | 140        | 100 | 35             | 1.0-2.4                       |

#### TIG Welding Torches "ABITIG® GRIP Little" (liquid cooled)

| Type                          | Rating (A) |     | Duty cycle (%) | Tungsten electrodes (Ø in mm) |
|-------------------------------|------------|-----|----------------|-------------------------------|
|                               | DC         | AC  |                |                               |
| ABITIG® GRIP Little 20 / 20 F | 220        | 150 | 100            | 0.5-3.2                       |
| ABITIG® GRIP Little 24 W      | 140        | 100 | 100            | 0.5-2.4                       |
| ABITIG® GRIP Little 180 W     | 180        | 130 | 100            | 1.0-3.2                       |
| ABITIG® GRIP Little 260 W     | 240        | 170 | 100            | 1.0-3.2                       |

Subject to change without notice.



- One ergonomic handle with "GRIP" for all ABITIG® GRIP torch types – offers high gripability and optimum feel
- Modular switching and control functions integrated into the handle
- Excellent protection against high frequency flashover

- Light and flexible cable assemblies (High-Flex-Leather) with modular machine-side connections for most available TIG welding power sources
- Consumables (Types 9 / 17 / 20 / 24) compatible to the international standard
- Air cooled up to 140 A – at 35% duty cycle
- Liquid cooled up to 240 A – at 100% duty cycle

**ABITIG® GRIP Little handle system – even smaller, even lighter (see page 44–45)**



- 1 ABITIG® 9 / 9 F
- 2 ABITIG® 17 / 17 F
- 3 ABITIG® 20 / 20 F
- 4 ABITIG® 24 G
- 5 ABITIG® 24 W
- 6 ABITIG® 90
- 7 ABITIG® 150 / 150 F
- 8 ABITIG® 180 W
- 9 ABITIG® 260 W

### Torch complete

| Type                       | Handle              | Part-No.                 | Torch body                   |
|----------------------------|---------------------|--------------------------|------------------------------|
| ABITIG® 9 <sup>1</sup>     | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 46.0 mm 705.0001   |
| ABITIG® 9 F <sup>1</sup>   | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible; 46.0 mm 703.0001   |
| ABITIG® 17 <sup>1</sup>    | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 65.0 mm 705.0033   |
| ABITIG® 17 F <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible; 62.0 mm 703.0009   |
| ABITIG® 20 <sup>1</sup>    | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 46.0 mm 705.0058   |
| ABITIG® 20 F <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible; 46.0 mm 703.0302   |
| ABITIG® 20 F <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible; 75.0 mm 703.0305   |
| ABITIG® 20 F <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible 110.0 mm 703.0306   |
| ABITIG® 24 G <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 55.0 mm 705.0075   |
| ABITIG® 24 W <sup>1</sup>  | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 55.0 mm 705.0080   |
| ABITIG® 90 <sup>2</sup>    | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 60.0 mm 770.0040.1 |
| ABITIG® 150 <sup>1</sup>   | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 46.0 mm 770.0010.1 |
| ABITIG® 150 F <sup>1</sup> | ABITIG® GRIP Little | see comment <sup>3</sup> | Flexible; 46.0 mm 770.0130.1 |
| ABITIG® 180 W <sup>2</sup> | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 60.0 mm 772.0040.1 |
| ABITIG® 260 W <sup>1</sup> | ABITIG® GRIP Little | see comment <sup>3</sup> | Standard; 46.0 mm 772.0010.1 |

<sup>1</sup> Wear parts see "ABITIG® GRIP" torches of similar design (Page 4–13 and 18–21).

<sup>2</sup> Wear parts see page 16 and 17.

<sup>3</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. Please use the TIG torch overview for the order of complete torches – this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# TIG Machine Torches "ABITIG® MT"

## air and liquid cooled

The compact designed machine torches of the ABITIG®-MT series represent an effective solution for welding operations with simple geometries.

With a wide range of current options, the torches are available in both air and liquid cooled options, with side mounted cable assemblies.

- Compact in design
- Rugged cable assemblies suitable for all established welding machines
- Ideally suited for welding operations with simple geometries



ABITIG® 150 MT

ABITIG® 260 W MT

### ABITIG® 150 MT

#### Technical data (EN 60 974-7):

Type of cooling: air cooled  
 Rating: 150 A DC  
 110 A AC  
 Duty cycle: 60%  
 Tungsten electrodes: Ø 1.0-3.2 mm

### ABITIG® 260 W MT

#### Technical data (EN 60 974-7):

Type of cooling: liquid cooled  
 Rating: 260 A DC  
 180 A AC  
 Duty cycle: 100%  
 Tungsten electrodes: Ø 1.0-3.2 mm

| Torch complete   |               |                          | Torch body         |          |
|------------------|---------------|--------------------------|--------------------|----------|
| Type             | Cooling       | Part-No.                 | Type               | Part-No. |
| ABITIG® 150 MT   | air cooled    | see comment <sup>1</sup> | Standard; 214.0 mm | 778.1020 |
| ABITIG® 260 W MT | liquid cooled | see comment <sup>1</sup> | Standard; 214.0 mm | 779.1020 |

<sup>1</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. For the order of complete torches please indicate the cable assembly length and the machine side connection.

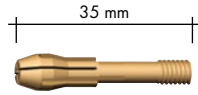
# ABITIG® 150 MT, ABITIG® 260 W MT

## Wear parts

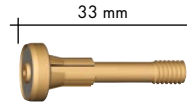


**Guide tube** (1 pc.)

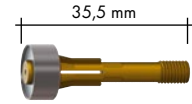
779.1030



**Electrode holder**



**Gas diffuser**



**Gas diffuser**

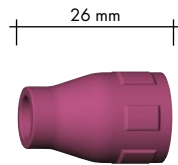
**Electrode holder / Gas diffuser** (5 pcs.)

|          |          |          |            |
|----------|----------|----------|------------|
| Ø 1.0 mm | 776.0061 | 776.0171 | 777.0171.5 |
| Ø 1.6 mm | 776.0062 | 776.0172 | 777.0172.5 |
| Ø 2.0 mm | 776.0067 | 776.0177 | 777.0177.5 |
| Ø 2.4 mm | 776.0063 | 776.0173 | 777.0173.5 |
| Ø 3.2 mm | 776.0064 | 776.0174 | 777.0174.5 |

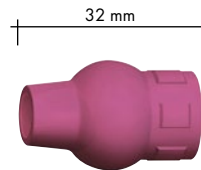


**Insulator** (1 pc.)

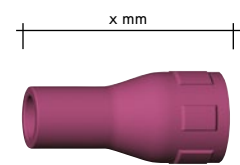
779.1043



**Standard version**



**Ball version**



**Long version**

(10 pcs.)

| Ø         |          |             | x mm      |           |
|-----------|----------|-------------|-----------|-----------|
|           |          |             | x = 36 mm | x = 60 mm |
| Ø 6.5 mm  | 777.0081 | 770.0081.10 | 777.2171  | 777.2175  |
| Ø 8.0 mm  | 777.0082 | 770.0082.10 | 777.2172  | 777.2176  |
| Ø 9.5 mm  | 777.0083 | 770.0083.10 | 777.2173  | -         |
| Ø 11.0 mm | 777.0084 | 770.0084.10 | 777.2174  | -         |

# TIG Machine Torches "ABITIG® MT"

## air and liquid cooled



ABITIG® 200 MT

ABITIG® 300 W MT

- Compact in design
- Rugged cable assemblies suitable for all established welding machines
- ABITIG® 200 MT / 300 W MT with adjustable tungsten electrode
- Ideally suited for welding operations with simple geometries

### ABITIG® 200 MT

#### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 200 A DC<br>140 A AC |
| Duty cycle:          | 60%                  |
| Tungsten electrodes: | Ø 1.6–4.0 mm         |

### ABITIG® 300 W MT

#### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 300 A DC<br>210 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.6–4.8 mm         |

| Torch complete   |               |                          | Torch body         |          |
|------------------|---------------|--------------------------|--------------------|----------|
| Type             | Cooling       | Part-No.                 | Type               | Part-No. |
| ABITIG® 200 MT   | air cooled    | see comment <sup>1</sup> | Standard; 249.0 mm | 778.2020 |
| ABITIG® 300 W MT | liquid cooled | see comment <sup>1</sup> | Standard; 249.0 mm | 779.2020 |

<sup>1</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. For the order of complete torches please indicate the cable assembly length and the machine side connection.

# ABITIG® 200 MT, ABITIG® 300 W MT

## Wear parts



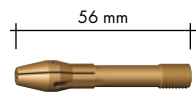
**Guide tub** (1 pc.)

778.1030

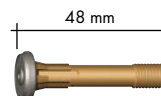
**Collet** (1 pc.)



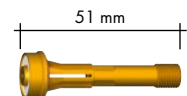
778.1140



**Electrode holder**



**Gas diffuser**



**Gas diffuser**

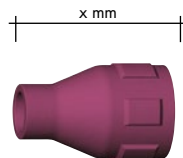
**Electrode holder / Gas diffuser** (5 pcs.)

|          |          |          |            |
|----------|----------|----------|------------|
| Ø 1.6 mm | 775.0062 | 773.0172 | 773.0112.5 |
| Ø 2.0 mm | 775.0067 | 773.0177 | -          |
| Ø 2.4 mm | 775.0063 | 773.0173 | 773.0113   |
| Ø 3.2 mm | 775.0064 | 773.0174 | 773.0114   |
| Ø 4.0 mm | 775.0065 | 773.0175 | -          |
| Ø 4.8 mm | 775.0066 | 773.0176 | -          |

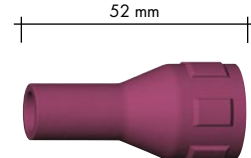


**Insulator** (1 pc.)

775.1043



**Standard version**



**Long version**

**Gas nozzle, ceramic**

|                     | x = 26 mm | x = 37 mm |          |
|---------------------|-----------|-----------|----------|
| (10 pcs.)           |           |           |          |
| Ø 7.5 mm            | -         | 775.0081  | 775.2171 |
| Ø 10.0 mm           | 775.0152  | 775.0082  | 775.2172 |
| Ø 12.5 mm           | -         | -         | -        |
| Ø 13.0 mm           | 775.0153  | 775.0083  | 775.2173 |
| Ø 13.0 mm (boosted) | -         | 775.0183  | -        |
| Ø 15.0 mm           | -         | 775.0084  | 775.2174 |
| Ø 15.0 mm (boosted) | -         | 775.0184  | -        |
| Ø 16.0 mm           | -         | -         | -        |
| Ø 19.5 mm           | -         | -         | -        |

Further options, e. g. the "Jumbo" version up to NS 24 or metal gas nozzles, please see chapter 10 of our spare parts list - this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).



**Setting gauge** (1 pc.)

778.1157

# TIG Machine Torches "ABITIG® MT"

## air and liquid cooled



- Compact in design
- Rugged cable assemblies suitable for all established welding machines
- Ideally suited for welding operations with simple geometries

### ABITIG® 400 W MT

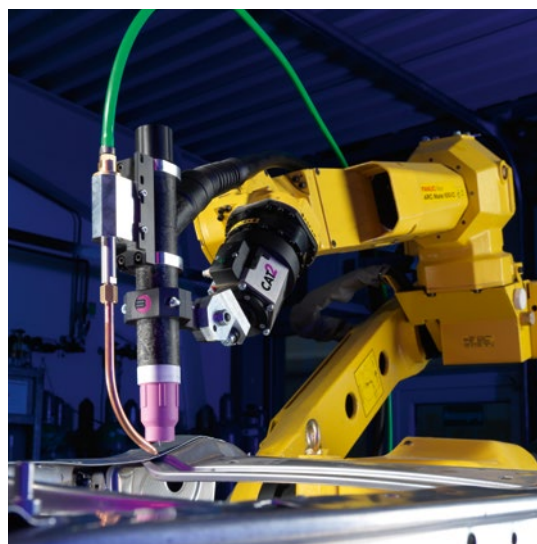
#### Technical data (EN 60 974-7):

Type of cooling: liquid cooled  
 Rating: 400 A DC  
 280 A AC  
 Duty cycle: 100%  
 Tungsten electrodes: Ø 1.6–4.8 mm

### ABITIG® 500 W MT

#### Technical data (EN 60 974-7):

Type of cooling: liquid cooled  
 Rating: 500 A DC  
 350 A AC  
 Duty cycle: 100%  
 Tungsten electrodes: Ø 1.6–6.4 mm



ABITIG® 500 W MT with cold wire feeding (see page 38).

| Torch complete   |               |                          | Torch body         |          |
|------------------|---------------|--------------------------|--------------------|----------|
| Type             | Cooling       | Part-No.                 | Type               | Part-No. |
| ABITIG® 400 W MT | liquid cooled | see comment <sup>1</sup> | Standard; 228.0 mm | 779.4020 |
| ABITIG® 500 W MT | liquid cooled | see comment <sup>1</sup> | Standard; 265.0 mm | 779.6020 |

<sup>1</sup> Due to the highly differing types of connections on the machine side we cannot list order numbers for complete torches. For the order of complete torches please indicate the cable assembly length and the machine side connection.

# ABITIG® 400 W MT, ABITIG® 500 W MT

## Wear parts

### ABITIG® 400 W MT

### ABITIG® 500 W MT

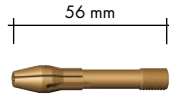
#### Guide tube (1 pc.)



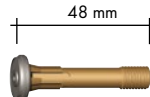
779.4030



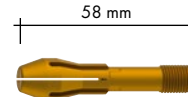
779.6026



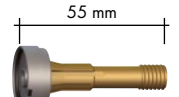
56 mm



48 mm



58 mm



55 mm

#### Electrode holder / Gas diffuser

#### Electrode holder (5 pcs.)

#### Gas diffuser (5 pcs.)

#### Electrode holder (1 pc.)

#### Gas diffuser (1 pc.)

|          |          |          |
|----------|----------|----------|
| Ø 1.6 mm | 775.0062 | 773.0172 |
| Ø 2.0 mm | 775.0067 | 773.0177 |
| Ø 2.4 mm | 775.0063 | 773.0173 |
| Ø 3.2 mm | 775.0064 | 773.0174 |
| Ø 4.0 mm | 775.0065 | 773.0175 |
| Ø 4.8 mm | 775.0066 | 773.0176 |
| Ø 6.4 mm | -        | -        |

|          |          |
|----------|----------|
| 779.6044 | 779.6058 |
| 779.6049 | 779.6063 |
| 779.6045 | 779.6059 |
| 779.6046 | 779.6060 |
| 779.6047 | 779.6061 |
| 779.6048 | 779.6062 |
| 779.6050 | 779.6064 |

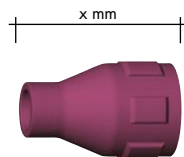
#### Insulator (1 pc.)



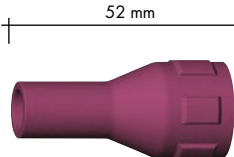
779.4043



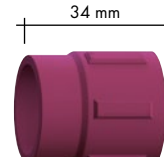
779.6033



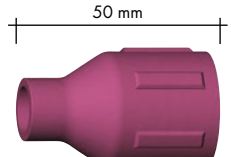
x mm



52 mm



34 mm



50 mm

#### Gas nozzle, ceramic (10 pcs.)

#### Standard version (x = 26 mm x = 37 mm)

#### Long version

#### Standard version

#### Long version

|                     |          |          |          |
|---------------------|----------|----------|----------|
| Ø 7.5 mm            | -        | 775.0081 | 775.2171 |
| Ø 10.0 mm           | 775.0152 | 775.0082 | 775.2172 |
| Ø 12.5 mm           | -        | -        | -        |
| Ø 13.0 mm           | 775.0153 | 775.0083 | 775.2173 |
| Ø 13.0 mm (boosted) | -        | 775.0183 | -        |
| Ø 15.0 mm           | -        | 775.0084 | 775.2174 |
| Ø 15.0 mm (boosted) | -        | 775.0184 | -        |
| Ø 16.0 mm           | -        | -        | -        |
| Ø 19.5 mm           | -        | -        | -        |
| Ø 24.0 mm           | -        | -        | -        |

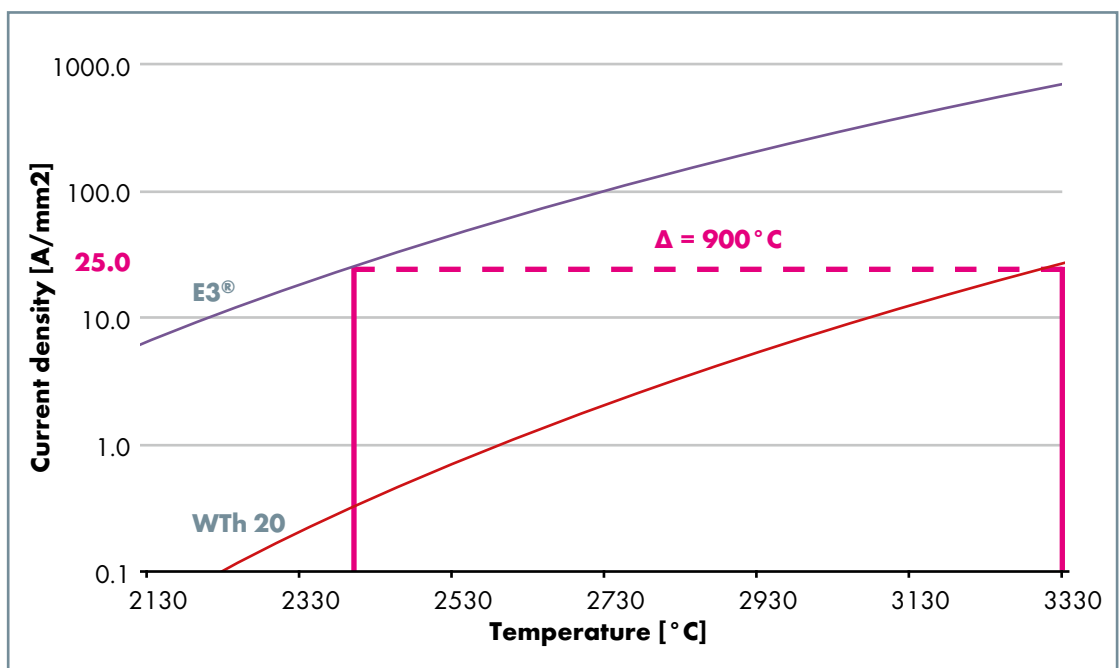
|          |          |
|----------|----------|
| -        | -        |
| -        | -        |
| -        | 778.1183 |
| -        | -        |
| -        | -        |
| -        | -        |
| -        | -        |
| -        | 778.1184 |
| -        | 778.1188 |
| 778.1189 | -        |

Further options please see chapter 10 of our spare parts list - this you can find in the download area of our website [www.binzel-abicor.com](http://www.binzel-abicor.com).

# Tungsten electrodes

- The welder is no longer exposed to radiation
- Reduced environmental impact. Remaining pieces and grinding dust are no longer treated as hazardous
- No special safeguards required for storage and transport
- Electrode tip remains "cooler" than thoriated types
- Superior repeatable ignition characteristics
- Increased arc stability
- Reduced burn off
- Higher current carrying capacity
- Lower degradation to the electrode tip
- Increased application flexibility

## Higher electrical rating



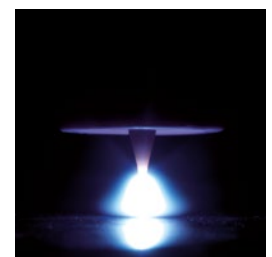
At the same current density E3® electrodes operate at approx. 900°C less than the WTh electrodes and therefore have a higher current carrying capacity.

## Durability by comparison

The heat-affected zone of the electrode tip is visually reduced with E3® electrodes. Accordingly, the burn off of the E3® electrode tips is reduced and the durability increased.

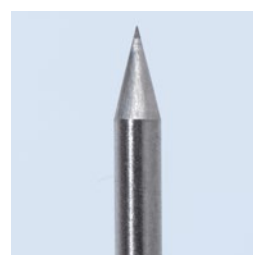


E3®



WTh 20

The visual appearance of the E3® electrodes after 150 ignitions show less erosion than the WTh 20 electrodes after 150 ignitions. E3® electrodes provide improved ignitions even after a longer period of use.



E3®



WTh 20



**E3<sup>®2</sup>**

Electrodes with rare earth (mixed oxides). In comparison to thoriated electrodes this electrode is less harmful to the environment and not radioactive. The electrodes offer excellent ignition characteristics and consistent welding properties. They are universal and suitable for all applications in the whole range of DC and AC welding for non-alloyed and high-alloyed steel, aluminium, titanium, nickel, copper and magnesium alloys. Because of their great ignition properties they are also suitable for automated welding. Due to the low electrode temperature, they offer an increased current carrying capacity and longer service life than thoriated electrodes.

Colour-coding: **E3<sup>®</sup> = purple**

**WLa 10 / 15 / 20**

Lanthanated electrodes are suitable for applications in DC and AC welding. Their main areas of application are the welding of non-alloyed and high-alloyed steel, aluminium, titanium, nickel, copper and magnesium alloys. These electrodes are also suitable for the use in micro-plasma welding. Ignition characteristics are enhanced with increased amounts of lanthanum oxide (La<sub>2</sub>O<sub>3</sub>). The overall service life and current carrying capacity is lower than the E3<sup>®</sup> electrodes.

Colour-coding: **WLa 10 = black / WLa 15 = gold / WLa 20 = blue**

**WCe 20**

By adding cerium oxide (CeO<sub>2</sub>), these electrodes have an increased capacity compared to pure tungsten electrodes, however the WCe electrodes have a lower capacity than the E3<sup>®</sup> and WL electrodes. Main areas of application are in the DC and AC welding of non-alloyed and high-alloyed steel, aluminium, titanium, nickel, copper and magnesium alloys in the low and middle current range.

Colour-coding: **WCe 20 = grey**

**WP**

Undoped electrodes – consist of pure tungsten. The main area of application for this type of electrode is the AC welding of aluminium alloys with excellent arc stability. The WP-electrodes are not suitable for DC welding.

Colour-coding: **WP = green**

**WZr 08**

Tungsten electrodes with the addition of zirconium have a lower risk of contaminating the weld from deposits of tungsten. The main area of application for this electrode is AC welding. They are limited in their suitability for DC welding.

Colour-coding: **WZr 08 = white**

**Tungsten electrodes per DIN EN ISO 6848 (10 pcs.)**

| <b>Length: 175 mm<sup>1</sup><br/>Electrodes-Ø</b> | <b>E3<sup>®2</sup><br/>purple</b> | <b>WLa 10<br/>black</b> | <b>WLa 15<br/>gold</b> | <b>WLa 20<br/>blue</b> | <b>WCe 20<br/>grey</b> | <b>WP<br/>green</b> | <b>WZr 08<br/>white</b> |
|--|-----------------------------------|-------------------------|------------------------|------------------------|------------------------|---------------------|-------------------------|
| 1.0 mm   | 700.0304.10                       | 700.0157.10             | 700.1183.10            | 700.0219.10            | 700.0166.10            | 700.0003.10         | 700.0028.10             |
| 1.6 mm   | 700.0306.10                       | 700.0158.10             | 700.1184.10            | 700.0220.10            | 700.0167.10            | 700.0007.10         | 700.0030.10             |
| 2.0 mm   | 700.0307.10                       | 700.0159.10             | 700.1185.10            | 700.0221.10            | 700.0168.10            | 700.0009.10         | 700.0032.10             |
| 2.4 mm   | 700.0308.10                       | 700.0160.10             | 700.1186.10            | 700.0222.10            | 700.0169.10            | 700.0012.10         | 700.0034.10             |
| 3.2 mm   | 700.0310.10                       | 700.0162.10             | 700.1187.10            | 700.0223.10            | 700.0170.10            | 700.0016.10         | 700.0036.10             |
| 4.0 mm   | 700.0311.10                       | 700.0163.10             | 700.0255.10            | 700.0242.10            | 700.0171.10            | 700.0018.10         | 700.0037.10             |

<sup>1</sup> Tungsten electrodes in 150 mm length on demand.

<sup>2</sup> According to DIN EN ISO 6848..



# Wire Feeder System "ABIDRIVE V2"

## ABIDRIVE V2 – precise wire feeding for professional welding seam results

The new wire feeding unit ABIDRIVE V2 of ABICOR BINZEL equipped with the special 4-roller drive offers a constantly precise wire feeding for manual and automated TIG welding. With the intuitive menu guidance, individual settings of wire feeding are simple. The detailed customization possibilities to each welding task lead to an optimal result.

Together with the air cooled manual TIG welding torches ABITIG® GRIP 200, the liquid cooled manual TIG torches ABITIG® GRIP 260 W / 450 W and the liquid cooled TIG machine welding torches ABITIG® 260 W / 400 W / 500 W MT, the wire feeding unit ABIDRIVE V2 forms the ideal system for welding long TIG seams in a time-saving, comfortable and process-safe manner.

The wire feeding system can be easily adapted to various TIG welding machines via customized intermediate cable assemblies.

## The advantages of the compact and robust ABIDRIVE V2 at a glance:

- Wire speed adjustable from 0.2 to 8.0 m/min
- Fine adjustment of wire speed in steps of 0.02 m/min
- 2 driven wire feeding rolls for minimal slippage and maximum feed constancy
- Individually customizable wire retraction
- Finely adjustable interval function to define the seam shaping and optics
- Optional remote controllers (potentiometer or up/down) – for automated TIG welding
- Commercial standard connections / quick couplings



## Technical data

### ABIDRIVE V2 (230 V)

#### Technical data (IEC 60974)

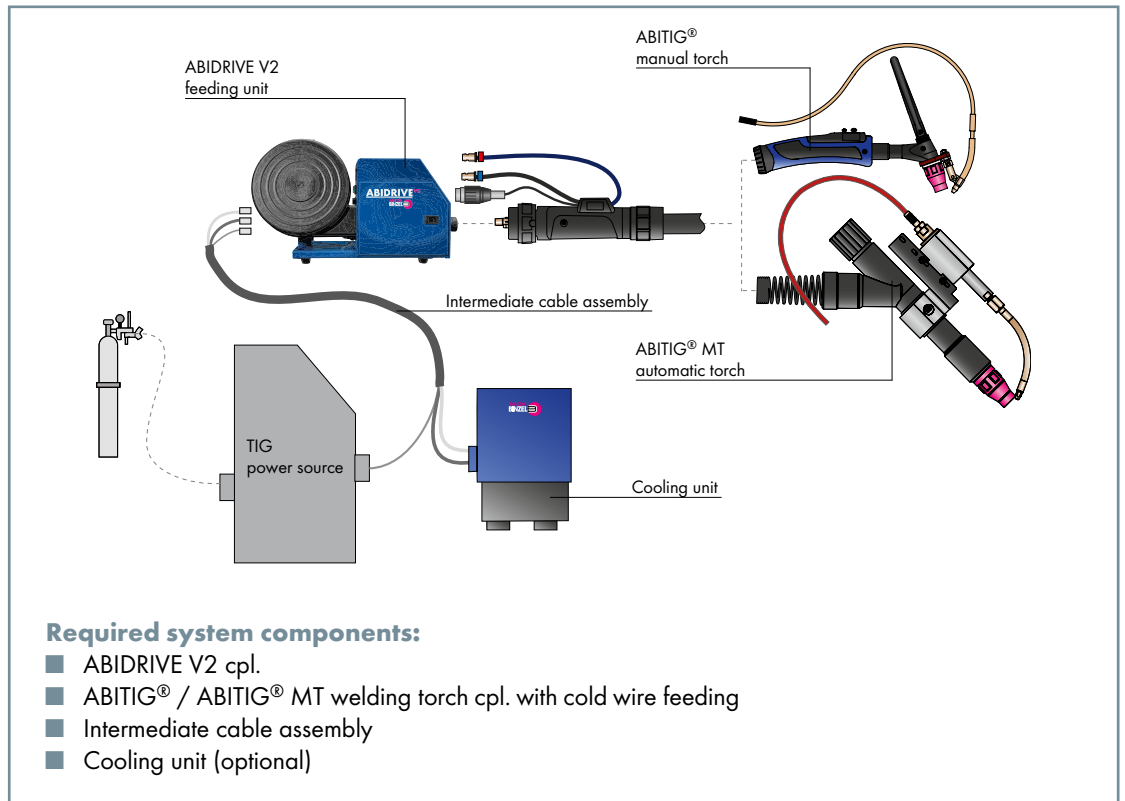
|                     |   |
|---------------------|---|
| Inlet voltage:      | 230 V/50 Hz ± 10 %                            |
| Welding current:    | 300 A (100% duty cycle and direct connection) |
| Delay fuse:         | 2 AT  |
| Wire speed:         | 0.2–8.0 m/min                                 |
| Wire diameter:      | 0.8–1.6 mm                                    |
| Protection class:   | IP21s   |
| Weight:             | 17 kg   |
| Size in mm (L/W/H): | 674x260x408                                   |

### ABIDRIVE V2 (115 V)

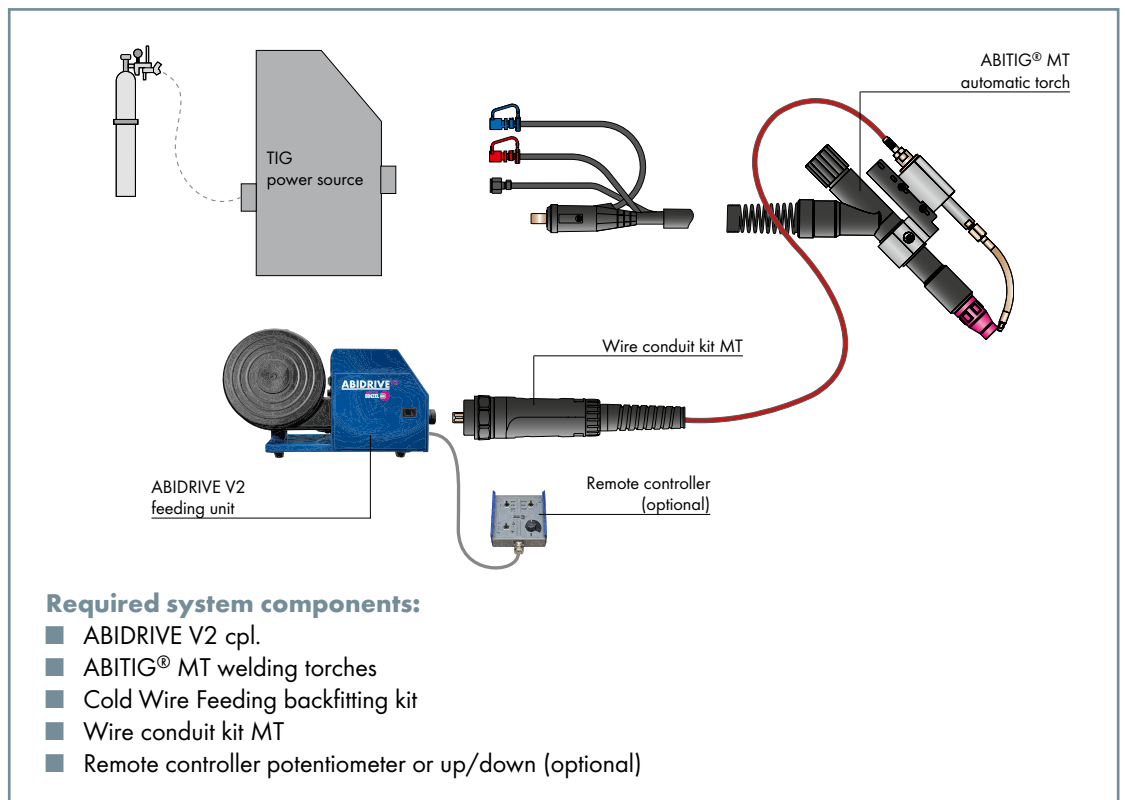
#### Technical data (IEC 60974)

|                     |   |
|---------------------|---|
| Inlet voltage:      | 115 V/50 Hz ± 10 %                            |
| Welding current:    | 300 A (100% duty cycle and direct connection) |
| Delay fuse:         | 2 AT  |
| Wire speed:         | 0.2–8.0 m/min                                 |
| Wire diameter:      | 0.8–1.6 mm                                    |
| Protection class:   | IP21s   |
| Weight:             | 17 kg   |
| Size in mm (L/W/H): | 674x260x408                                   |

**System overview  
direct connection  
ABIDRIVE V2**



**System overview  
direct connection  
power source**



# Wire Feeder System "ABIDRIVE V2"

ABIDRIVE V2 cpl.



## Wire Feeder System ABIDRIVE V2

| Description  | Details | Part-No.   |
|--|---------|------------|
| Wire Feeder System ABIDRIVE V2 (without wire feed rolls) | 230 V   | 525.2002.1 |
| Wire Feeder System ABIDRIVE V2 (without wire feed rolls) | 115 V   | 525.2003.1 |

## Drive rolls

### Drive rolls (1 pc.)

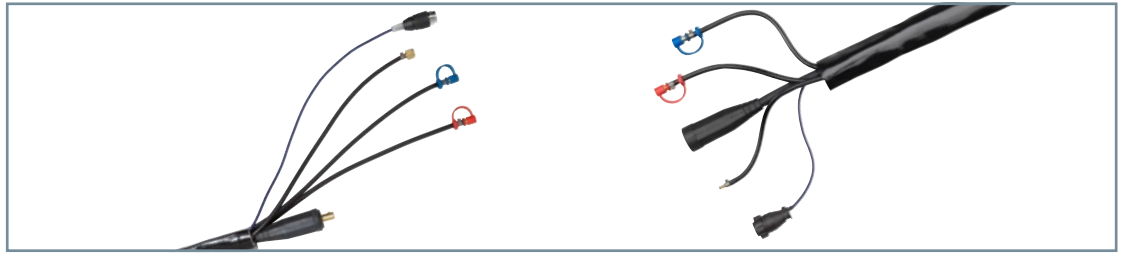
| Description             | Details                        | Part-No.   |
|-------------------------|--------------------------------|------------|
| Wire feed roll 1.0 cpl. | 4x U-groove driven             | 525.2053.1 |
| Wire feed roll 1.2 cpl. | 4x U-groove driven             | 525.2004.1 |
| Wire feed roll 1.6 cpl. | 4x U-groove driven             | 525.2005.1 |
| Wire feed roll 0.8 cpl. | 2x V-groove / 2x smooth        | 525.2008.1 |
| Wire feed roll 1.0 cpl. | 2x V-groove / 2x smooth        | 525.2009.1 |
| Wire feed roll 1.2 cpl. | 2x V-groove / 2x smooth        | 525.2010.1 |
| Wire feed roll 1.6 cpl. | 2x V-groove / 2x smooth        | 525.2011.1 |
| Wire feed roll 0.8 cpl. | 2x V-groove / 2x smooth driven | 525.2012.1 |
| Wire feed roll 1.0 cpl. | 2x V-groove / 2x smooth driven | 525.2013.1 |
| Wire feed roll 1.2 cpl. | 2x V-groove / 2x smooth driven | 525.2014.1 |
| Wire feed roll 1.6 cpl. | 2x V-groove / 2x smooth driven | 525.2015.1 |
| Wire feed roll 0.8      | 2x V-groove w/o pressure roll  | 525.2049.1 |
| Wire feed roll 1.0      | 2x V-groove w/o pressure roll  | 525.2050.1 |
| Wire feed roll 1.2      | 2x V-groove w/o pressure roll  | 525.2051.1 |
| Wire feed roll 1.6      | 2x V-groove w/o pressure roll  | 525.2052.1 |

## Options / Spare parts

### Options / Spare parts

| Description       | Details       | Part-No.   |
|-------------------|---------------|------------|
| Remote control V2 | Up/Down       | 525.2042.1 |
| Remote control V2 | Potentiometer | 525.2043.1 |
| Drive gear        | Plastics      | 525.2044.1 |

## Intermediate cable assembly



### TIG intermediate cable assembly (L=2.00 m), air cooled

| Current                      | Control cable   | Inert gas | Coolant |        | Details  | Part-No.   |
|------------------------------|-----------------|-----------|---------|--------|----------|------------|
|                              |                 |           | Inlet   | Return |          |            |
| BCS-11 BLS-46B<br>BHC-00     | Amphenol 7 pol. | G1/4" IG  | -       | -      | Kemppi®  | 525.2022.1 |
| BCS-06 BLS-15A<br>BHC-00     | Tuchel 9 pol.   | G3/8" IG  | -       | -      | Fronius® | 525.2024.1 |
| Plug 50-70 BLS-01B<br>BHC-05 | Tuchel 5 pol.   | NW 2,7mm  | -       | -      | Lorch®   | 525.2056.1 |

### TIG intermediate cable assembly (L=2.00 m), liquid cooled

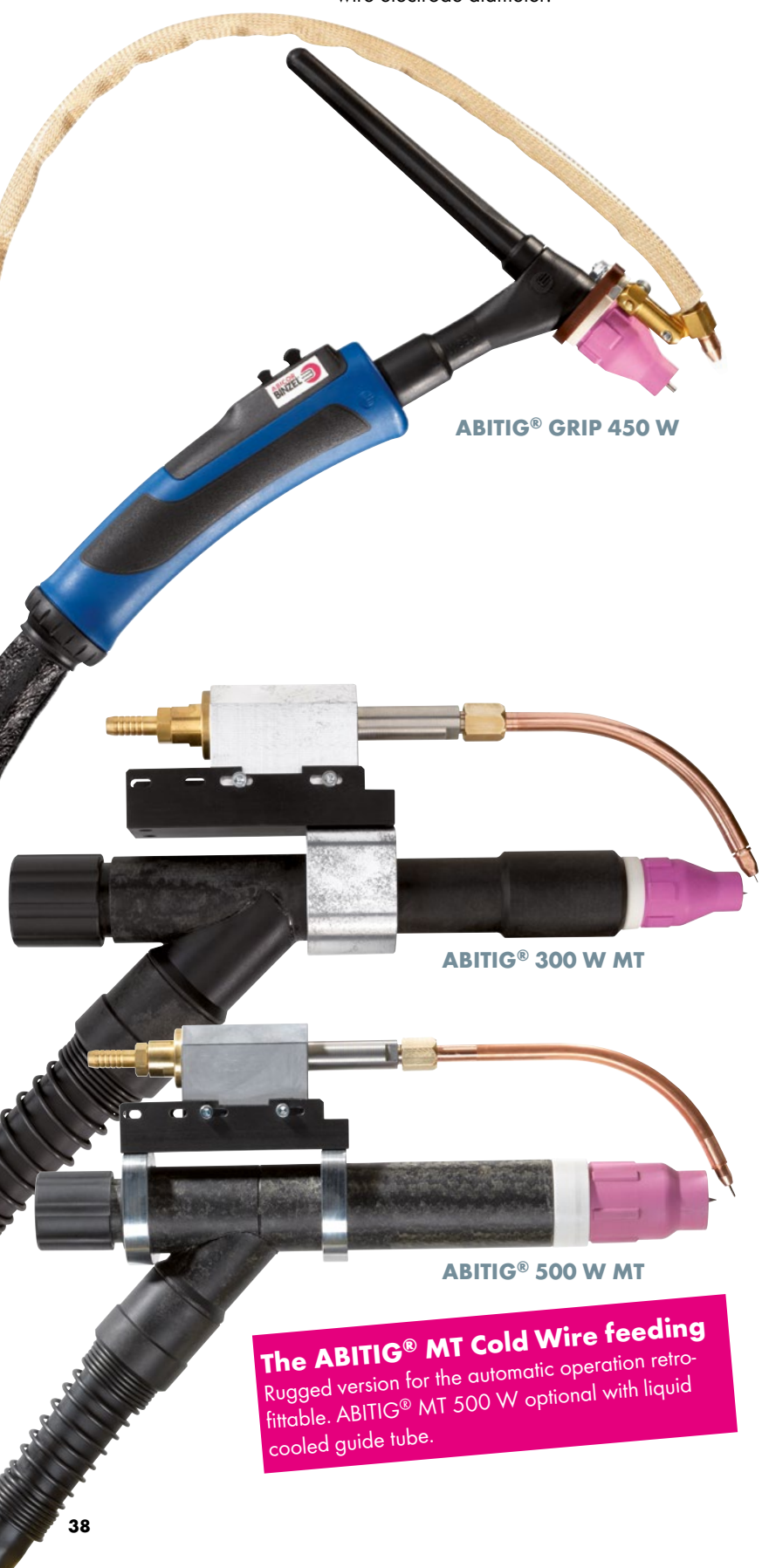
| Current                      | Control cable            | Inert gas               | Coolant  |          | Details            | Part-No.   |
|------------------------------|--------------------------|-------------------------|----------|----------|--------------------|------------|
|                              |                          |                         | Inlet    | Return   |                    |            |
| Plug 50-70<br>BLS-37 BHC-11  | Burndy 8 pol.            | G1/4" IG                | ND 5 mm  | ND 5 mm  | EWM®               | 525.2017.1 |
| Plug 50-70<br>BLS-01A BHC-11 | Tuchel 5 pol.            | G1/4" IG                | ND 5 mm  | ND 5 mm  | EWM®               | 525.2018.1 |
| Plug 50-70<br>BLS-01B BHC-16 | Tuchel 5 pol.            | ND 2.7 mm               | ND 5 mm  | ND 5 mm  | Lorch®             | 525.2019.1 |
| Plug 50-70<br>BLS-03A BHC-16 | Rundsteckverb.<br>7 pol. | ND 2.7 mm               | ND 5 mm  | ND 5 mm  | Rehm®              | 525.2020.1 |
| BCS-11 BLS-46B<br>BHC-12     | Amphenol 7 pol.          | G1/4" IG                | ND 5 mm  | ND 5 mm  | Kemppi®            | 525.2021.1 |
| BCS-03 BLS-01A<br>BHC-12     | Tuchel 5 pol.            | WZ-0                    | ND 5 mm  | ND 5 mm  | Merkle®            | 525.2023.1 |
| Plug 50-70<br>BLS-01B BHC-11 | Tuchel 5 pol.            | G1/4" IG                | ND 5 mm  | ND 5 mm  | Jäckle®/<br>Lorch® | 525.2025.1 |
| BCS-36 BLS-15A<br>BHC-12     | Tuchel 9 pol.            | central<br>Fronius-ZA   | ND 5 mm  | ND 5 mm  | Fronius®           | 525.2026.1 |
| BCS-06 BLS-10A<br>BHC-15     | Amphenol<br>4 pol.       | G1/4" IG                | G3/8" IG | G3/8" IG | Kemppi®            | 525.2027.1 |
| Plug 50-70<br>BLS-09A BHC-21 | Amphenol<br>2 pol.       | G1/8" IG                | ND 5 mm  | ND 5 mm  | ESAB®              | 525.2028.1 |
| BCS-19 BLS-04A<br>BHC-00     | Tuchel 5 pol.            | central<br>Oerlikon-ZA  | central  | central  | Oerlikon®          | 525.2029.1 |
| BCS-25 BLS-04A<br>BHC-12     | Tuchel 5 pol.            | central<br>Oerlikon BSB | ND 5 mm  | ND 5 mm  | Oerlikon®          | 525.2030.1 |
| BCS-07 BLS-99A<br>BHC-12     |                          | ZA 9 pol.               | ND 5 mm  | ND 5 mm  | Esab®/<br>Selco®   | 525.2031.1 |
| Plug 50-70<br>BLS-01B BHC-30 | Tuchel 5 pol.            | G1/4" IG                | G3/8" IG | M12x1    | ESS®               | 525.2032.1 |
| BCS-37 BLS-01A<br>BHC-12     | Tuchel 5 pol.            | Merkle TCG              | ND 5 mm  | ND 5 mm  | Merkle®            | 525.2033.1 |
| Plug 50-70<br>BLS-01B BHC-26 | Tuchel 5 pol.            | G3/8" IG                | ND 5 mm  | ND 5 mm  | Cloos®             | 525.2036.1 |
| Plug 50-70<br>BLS-64B BHC-20 | Amphenol 6 pol.          | ND 5 mm                 | ND 5 mm  | ND 5 mm  | CEA®               | 525.2057.1 |

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# TIG Welding Torches "ABITIG®" and "ABITIG® MT" with cold wire feed

- The ABITIG® Cold Wire Feeding can be perfectly adjusted to any application due to the three-dimensional positioning and the individually exchangeable feeding nozzles, adjusted to the wire electrode diameter.

- Precise, easy three-dimensional positioning of the cold wire feeding
- Light dead weight provides a fatigue-free working
- Highly flexible wire feeding hose inside the cable assembly - no restrictions during handling
- Higher welding speeds compared to the manual feeding of welding material
- Exact welding wire feeding



ABITIG® GRIP 450 W

ABITIG® 300 W MT

ABITIG® 500 W MT

**The ABITIG® MT Cold Wire feeding**  
Rugged version for the automatic operation retro-fittable. ABITIG® MT 500 W optional with liquid cooled guide tube.

## ABITIG® 200 MT / ABITIG® GRIP 200

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | air cooled           |
| Rating:              | 200 A DC<br>140 A AC |
| Duty cycle:          | 35%                  |
| Tungsten electrodes: | Ø 1.6-3.2 mm         |

## ABITIG® 260 W MT / ABITIG® GRIP 260 W

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 260 A DC<br>180 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.0-3.2 mm         |

## ABITIG® 300 W MT

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 300 A DC<br>210 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.6-4.8 mm         |

## ABITIG® 400 W MT

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 400 A DC<br>280 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.6-4.8 mm         |

## ABITIG® GRIP 450 W

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 400 A DC<br>280 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.6-4.8 mm         |

## ABITIG® 500 W MT

### Technical data (EN 60 974-7):

|                      |                      |
|----------------------|----------------------|
| Type of cooling:     | liquid cooled        |
| Rating:              | 500 A DC<br>350 A AC |
| Duty cycle:          | 100%                 |
| Tungsten electrodes: | Ø 1.6-6.4 mm         |

# "ABITIG®" and "ABITIG® MT" with cold wire feed

## Torches cpl.

### TIG Manual Welding Torches ABITIG® with cold wire feed

| Type               |  | Part-No.   |
|--------------------|--|------------|
| ABITIG® GRIP 200   | 4 m BIS-75, GZ-0, with cold-wire <sup>1</sup>        | 525.2035.1 |
| ABITIG® GRIP 200   | 4 m BIS-V2, GZ-0, KD wire U/D <sup>1</sup>           | 525.2039.1 |
| ABITIG® GRIP 260 W | 4 m BIS-75, WZ-0 BHC-12, with cold wire <sup>1</sup> | 525.2034.1 |
| ABITIG® GRIP 260 W | 4 m BIS-V2, WZ-0 BHC-12, KD wire U/D <sup>1</sup>    | 525.2040.1 |
| ABITIG® GRIP 450 W | 4 m BIS-75, WZ-0 BHC-12, with cold wire <sup>1</sup> | 525.2001.1 |
| ABITIG® GRIP 450 W | 4 m BIS-V2, WZ-0 BHC-12, KD wire U/D <sup>1</sup>    | 525.2041.1 |

<sup>1</sup> incl. cold wire feeding tip 1.0 mm

### TIG Machine Welding Torches ABITIG® MT with cold wire feed

| Type             |                                      | Part-No.   |
|------------------|--------------------------------------|------------|
| ABITIG® 200 MT   | 4 m with cold wire feed <sup>2</sup> | 525.1015   |
| ABITIG® 260 W MT | 4 m with cold wire feed <sup>2</sup> | 525.1018   |
| ABITIG® 300 W MT | 4 m with cold wire feed <sup>2</sup> | 525.1023   |
| ABITIG® 400 W MT | 4 m with cold wire feed <sup>2</sup> | 525.1026   |
| ABITIG® 500 W MT | 4 m with cold wire feed <sup>2</sup> | 525.1042.1 |

<sup>2</sup> incl. cold wire feeding tip 1.0 mm

## Wear parts

### Cold wire feeding tip

(5 pcs.)

|          | ABITIG®  | ABITIG® MT |
|----------|----------|------------|
| Ø 0.8 mm | 729.0071 | 967.0329   |
| Ø 1.0 mm | 729.0072 | 967.0330   |
| Ø 1.2 mm | 729.0073 | 967.0331   |
| Ø 1.6 mm | -        | 967.0332   |

### Cold wire feeding

|            |  |                                    |
|------------|--|------------------------------------|
| ABITIG®    | Cold wire guide liner 2.0x4.5 mm (L=0.45 m)<br>Double nipple   | 729.0080<br>729.0057               |
| ABITIG® MT | Cold wire feeding tube for ABITIG® MT 260 W / 300 W / 400 W<br>Cold wire feeding tube for ABITIG® MT 500 W<br>optional:<br>Cold wire feeding tube for ABITIG® MT 500 W - liquid cooled | 779.6513.1<br>967.0326<br>779.6505 |

### Wire guides

|  |          |
|--|----------|
| Carbon PTFE core liner 2.0/4.0; Wire-Ø 1.0-1.2; for 4.00 m | 127.0007 |
| Polyamid core liner 2.0/4.0; Wire-Ø 1.0-1.2; for 4.00 m    | 128.0015 |
| Polyamid core liner 2.0x4.0; Wire-Ø 1.6; for 6.00 m        | 128.0017 |
| Polyamid core liner 2.3x4.7; Wire-Ø 1.6; for 6.00 m        | 128.0037 |

## Component kits

### Backfitting kits

|  |            |
|--|------------|
| Cold wire feeding cpl. for ABITIG® 260 W (Gas nozzle L = 26 mm) <sup>3</sup> | 729.0084   |
| Cold wire feeding cpl. for ABITIG® 450 W (Gas nozzle L = 37 mm) <sup>3</sup> | 729.0070   |
| Cold wire feeding cpl. for ABITIG® MT 260 W / 300 W / 400 W <sup>3</sup>     | 779.6514.1 |
| Cold wire feeding cpl. for ABITIG® MT 500 W <sup>3</sup>                     | 779.6500   |

<sup>3</sup> incl. cold wire feeding tip 1.0 mm

|   |          |
|---|----------|
| Wire conduit kit ABIDRIVE (L = 6.00 m) incl. fastening material<br>applicable for all retrofit kits | 525.1014 |
|---|----------|

## Accessories

### Torch mounts

|                                    |          |
|------------------------------------|----------|
| MT-25 for ABITIG® MT 260 W / 400 W | 780.0222 |
| MT-30 for ABITIG® MT 300 W         | 780.0145 |
| MT-35 for ABITIG® MT 500 W         | 780.0292 |

# Component kits

## I. Component kits ABITIG® 9 / 17 / 18 / 20 / 20 SC / 26

| Type                        | Electrode-Ø 1.6 | Electrode-Ø 2.4 | Electrode-Ø 3.2 |
|-----------------------------|-----------------|-----------------|-----------------|
| ABITIG® 9 (Collet body)     | 712.3151        | -               | -               |
| ABITIG® 9 (Gas lens)        | 712.3191        | -               | -               |
| ABITIG® 17 (Collet body)    | 712.2151        | 712.2152        | -               |
| ABITIG® 17 (Gas lens)       | -               | 712.2192        | -               |
| ABITIG® 18 (Collet body)    | -               | 712.2152        | 712.2153        |
| ABITIG® 18 (Gas lens)       | -               | 712.2192        | -               |
| ABITIG® 20 (Collet body)    | -               | 712.3152        | -               |
| ABITIG® 20 (Gas lens)       | -               | 712.3192        | -               |
| ABITIG® 20 SC (Collet body) | -               | 712.3152        | -               |
| ABITIG® 20 SC (Gas lens)    | -               | 712.3192        | -               |
| ABITIG® 26 (Collet body)    | -               | 712.2152        | 712.2153        |
| ABITIG® 26 (Gas lens)       | -               | 712.2192        | -               |

Component kit "Collet body" consisting of: Back cap long, collet, collet body and gas nozzle ceramic.

Component kit "Gas lens" consisting of: Back cap long, collet, collet body with gas lens and gas nozzle ceramic.

## II. Component kits ABITIG® 150 / 260 W / 260 W SC

| Type                                | Electrode-Ø 1.6 | Electrode-Ø 2.4 | Electrode-Ø 3.2 |
|-------------------------------------|-----------------|-----------------|-----------------|
| ABITIG® 150 (Electrode holder)      | 777.0182        | 777.0183        | -               |
| ABITIG® 150 (Gas diffuser)          | -               | 777.0193        | -               |
| ABITIG® 260 W (Electrode holder)    | 777.0182        | 777.0183        | -               |
| ABITIG® 260 W (Gas diffuser)        | -               | 777.0193        | -               |
| ABITIG® 260 W SC (Electrode holder) | 777.0182        | 777.0183        | -               |
| ABITIG® 260 W SC (Gas diffuser)     | -               | 777.0193        | -               |

Component kit "Electrode holder" consisting of: Back cap medium, electrode holder and gas nozzle ceramic.

Component kit "Gas diffuser" consisting of: Back cap medium, gas diffuser and gas nozzle ceramic.

## III. Component kits ABITIG® 200 / 450 W / 450 W SC

| Type                                | Electrode-Ø 2.4 | Electrode-Ø 3.2 | Electrode-Ø 4.8 |
|-------------------------------------|-----------------|-----------------|-----------------|
| ABITIG® 200 (Electrode holder)      | 774.0183        | -               | -               |
| ABITIG® 200 (Gas diffuser)          | 774.0193        | -               | -               |
| ABITIG® 450 W (Electrode holder)    | 774.0183        | -               | -               |
| ABITIG® 450 W (Gas diffuser)        | 774.0193        | -               | -               |
| ABITIG® 450 W SC (Electrode holder) | 774.0183        | -               | -               |
| ABITIG® 450 W SC (Gas diffuser)     | 774.0193        | -               | 774.0196        |

Component kit "Electrode holder" consisting of: Back cap long, electrode holder and gas nozzle ceramic.

Component kit "Gas diffuser" consisting of: Back cap long, gas diffuser and gas nozzle ceramic.



# Power cables, Control cables and Hoses

## I. Power cables ABITIG® GRIP

| Type             | Power cable standard |          |          | Power cable High Flex |            |            |
|------------------|----------------------|----------|----------|-----------------------|------------|------------|
|                  | 4 m                  | 8 m      | 12 m     | 4 m                   | 8 m        | 12 m       |
| ABITIG® 9        | 150.0084             | 150.0085 | 150.0086 | 150.0065              | 150.0066   | 150.0067   |
| ABITIG® 20       | 150.0015             | 150.0016 | 150.0017 | 150.0062              | 150.0063   | 150.0064   |
| ABITIG® 20 SC    | -                    | -        | -        | 150.0301.1            | 150.0302.1 | 150.0303.1 |
| ABITIG® 17       | 150.0084             | 150.0085 | 150.0086 | 150.0065              | 150.0066   | 150.0067   |
| ABITIG® 18       | 150.0018             | 150.0019 | 150.0020 | 150.0068              | 150.0069   | 150.0070   |
| ABITIG® 18 SC    | 150.0018             | 150.0019 | 150.0020 | 150.0068              | 150.0069   | 150.0070   |
| ABITIG® 26       | 150.0087             | 150.0088 | 150.0089 | 150.0059              | 150.0060   | 150.0061   |
| ABITIG® 24 G     | 150.0084             | 150.0085 | 150.0086 | 150.0065              | 150.0066   | 150.0067   |
| ABITIG® 24 W     | 150.0015             | 150.0016 | 150.0017 | 150.0062              | 150.0063   | 150.0064   |
| ABITIG® 12-1     | 150.0074             | 150.0075 | 150.0076 | 150.0071              | 150.0072   | 150.0073   |
| ABITIG® 150      | 150.0111             | 150.0112 | 150.0113 | 150.0040              | 150.0041   | 150.0190   |
| ABITIG® 260 W    | 150.0099             | 150.0100 | 150.0101 | 150.0164              | 150.0165   | 150.0166   |
| ABITIG® 260 W SC | -                    | -        | -        | 150.0305.1            | 150.0306.1 | 150.0307.1 |
| ABITIG® 200      | 150.0170             | 150.0171 | 150.0172 | 150.0036              | 150.0037   | 150.0114   |
| ABITIG® 450 W    | 150.0054             | 150.0055 | 150.0083 | 150.0167              | 150.0168   | 150.0169   |
| ABITIG® 450 W SC | -                    | -        | -        | 150.0203              | 150.0194   | 150.0204   |
| ABITIG® 500 W    | 150.0084             | 150.0085 | 150.0086 | 150.0065              | 150.0066   | 150.0067   |

Power cable for TIG welding torches ABITIG® with rotary valve and TIG machine torches on request.

## II. Power cables ABITIG® GRIP Little

| Type          | Power cable standard |            |            | Power cable High Flex |                       |            |
|---------------|----------------------|------------|------------|-----------------------|-----------------------|------------|
|               | 4 m                  | 8 m        | 12 m       | 4 m                   | 8 m                   | 12 m       |
| ABITIG® 9     | 150.0084             | 150.0085   | 150.0086   | 150.0065              | 150.0066              | 150.0067   |
| ABITIG® 20    | 150.0259.1           | 150.0260.1 | 150.0261.1 | 150.0255.1            | 150.0256.1            | 150.0257.1 |
| ABITIG® 17    | 150.0084             | 150.0085   | 150.0086   | 150.0065              | 150.0066              | 150.0067   |
| ABITIG® 24 G  | 150.0084             | 150.0085   | 150.0086   | 150.0065              | 150.0066              | 150.0067   |
| ABITIG® 24 W  | 150.0259.1           | 150.0260.1 | 150.0261.1 | 150.0255.1            | 150.0256.1            | 150.0257.1 |
| ABITIG® 90    | 150.0111             | 150.0112   | 150.0113   | 150.0040              | 150.0041              | 150.0190   |
| ABITIG® 150   | 150.0111             | 150.0112   | 150.0113   | 150.0040              | 150.0041              | 150.0190   |
| ABITIG® 180 W | 150.0267.1           | 150.0268.1 | 150.0269.1 | 150.0002 <sup>1</sup> | 150.0003 <sup>1</sup> | 150.0272.1 |
| ABITIG® 260 W | 150.0267.1           | 150.0268.1 | 150.0269.1 | 150.0002 <sup>1</sup> | 150.0003 <sup>1</sup> | 150.0272.1 |

<sup>1</sup> highly flexible PU version

## III. Control cables

| Type                     | Description                    | Details | Part-No. |
|--------------------------|--------------------------------|---------|----------|
| all torches <sup>2</sup> | Power cable 3 core             | 100 m   | 100.0100 |
| all torches <sup>2</sup> | Power cable 6 core             | 100 m   | 100.0112 |
| all torches <sup>2</sup> | Power cable 6 core (protected) | 100 m   | 100.0028 |

<sup>2</sup> apart from TIG welding torches ABITIG® GRIP with rotary valve and TIG machine torches

Spare parts mentioned are suitable for use with all ABITIG®, ABITIG® GRIP and ABITIG® GRIP Little TIG welding torches - unless specifically marked.

# Power cables, Control cables and Hoses

## IV. Outer hoses

| Type                           | Description        | Details | Part-No. |
|--------------------------------|--------------------|---------|----------|
| ABITIG® 9 / 20                 | Outer hose 22x1.25 | 40 m    | 109.0020 |
| ABITIG® 17 / 18 / 18 SC / 26   |                    |         |          |
| ABITIG® 24 G / 24 W            |                    |         |          |
| ABITIG® 12-1                   |                    |         |          |
| ABITIG® 90 / 180 W             |                    |         |          |
| ABITIG® 150 / 260 W            |                    |         |          |
| ABITIG® 200 / 450 W            |                    |         |          |
| ABITIG® 500 W                  |                    |         |          |
| ABITIG® 9 V                    |                    |         |          |
| ABITIG® 17 V / 17 FV           |                    |         |          |
| ABITIG® 20 SC                  | Outer hose 25x1.25 | 40 m    | 105.0019 |
| ABITIG® 260 W SC               |                    |         |          |
| ABITIG® 450 W SC               |                    |         |          |
| ABITIG® 26 V / 26 FV           |                    |         |          |
| ABITIG® 150 MT                 | Outer hose 22x1.25 | 40 m    | 109.0020 |
| ABITIG® 200 MT                 |                    |         |          |
| ABITIG® 260 W MT               |                    |         |          |
| ABITIG® 300 W MT               |                    |         |          |
| ABITIG® 400 W MT               |                    |         |          |
| ABITIG® 500 W MT               |                    |         |          |
| ABITIG® MT with cold wire feed | Outer hose 25x1.25 | 40 m    | 105.0019 |

## V. Leather hose and hose coupling

| Type                     | Description  | Part-No. |
|--------------------------|--|----------|
| all torches <sup>1</sup> | Leather hose 0.8 m   | 108.0028 |
| all torches <sup>2</sup> | Hose coupling complete for connecting leather and outer hose | 400.0391 |
| ABITIG® 20 SC            | Hose coupling complete for connecting leather and outer hose | 400.0392 |
| ABITIG® 260 W SC         |  |          |
| ABITIG® 450 W SC         |  |          |
| ABITIG® 500 W            |  |          |

<sup>1</sup> apart from TIG welding torches ABITIG® GRIP with rotary valve and TIG machine torches

<sup>2</sup> apart from TIG welding torches ABITIG® GRIP with rotary valve, TIG machine torches and ABITIG® GRIP 20 SC / 260 W SC / 450 W SC / 500 W

## VI. Gas hoses

| Type                     | Description      | Details | Part-No. |
|--------------------------|------------------|---------|----------|
| ABITIG® 20 / 20 SC       | Gas hose 3x1.5   | 100 m   | 102.0124 |
| ABITIG® 18 / 18 SC       |                  |         |          |
| ABITIG® 24 W             |                  |         |          |
| ABITIG® 12-1             |                  |         |          |
| ABITIG® 180 W            |                  |         |          |
| ABITIG® 260 W / 260 W SC |                  |         |          |
| ABITIG® 450 W / 450 W SC |                  |         |          |
| ABITIG® 500 W            |                  |         |          |
| ABITIG® 9 V              |                  |         |          |
| ABITIG® 17 V / 17 FV     |                  |         |          |
| ABITIG® 26 V / 26 FV     | Gas hose 4.9x1.5 | 100 m   | 109.0040 |
| ABITIG® 260 W MT         |                  |         |          |
| ABITIG® 300 W MT         | Gas hose 3x1.5   | 100 m   | 102.0124 |
| ABITIG® 400 W MT         |                  |         |          |
| ABITIG® 500 W MT         |                  |         |          |
| ABITIG® 500 W MT         |                  |         |          |

Spare parts mentioned are suitable for use with all ABITIG®, ABITIG® GRIP and ABITIG® GRIP Little TIG welding torches – unless specifically marked.

## VII. Water hose

| Type               | Description        | Version                |                 |
|--------------------|--------------------|------------------------|-----------------|
|                    |                    | PVC black<br>per 100 m | BRH<br>per 40 m |
| ABITIG® 20 / 20 SC | Water hose 3.9x1.5 | 109.0011               | 109.0059        |
| ABITIG® 18 / 18 SC |                    |                        |                 |
| ABITIG® 24 W       |                    |                        |                 |
| ABITIG® 12-1       |                    |                        |                 |
| ABITIG® 500 W      |                    |                        |                 |
| ABITIG® 260 W MT   |                    |                        |                 |
| ABITIG® 300 W MT   |                    |                        |                 |
| ABITIG® 400 W MT   |                    |                        |                 |
| ABITIG® 500 W MT   |                    |                        |                 |

## VIII. Hose clamps, marking washers and ceiling covers

| Type                                   | Part-No.<br>(20 pcs.) | for hose |          |          |          |
|--|-----------------------|----------|----------|----------|----------|
|  |                       | 102.0124 | 109.0011 | 109.0040 | 109.0059 |
| Hose clamp Ø=9.0 with ring (mark. 9.5) | 173.0001              |          |          | •        | •        |
| Hose clamp Ø=8.2 with ring (mark. 8.7) | 173.0005              |          | •        |          |          |
| Hose clamp Ø=7.5 with ring (mark. 8.0) | 173.0007              | •        |          |          |          |
| Marking washer red                     | 501.2166              |          | •        |          | •        |
| Marking washer blue                    | 501.2167              |          | •        |          | •        |
| Ceiling cover red                      | 501.2423              |          | •        |          | •        |
| Ceiling cover blue                     | 501.2424              |          | •        |          | •        |

# Handles and Modules

## I. Handles ABITIG® GRIP and control modules

| Type                                  | Description  | Details | Part-No.   |
|---------------------------------------|--|---------|------------|
| all ABITIG® GRIP torches <sup>1</sup> | Handle ABITIG® GRIP, without control module                              |         | 180.0130.1 |
| all ABITIG® GRIP torches <sup>1</sup> | Control module single push-button  | BIS-51  | 400.1275.1 |
|                                       | Control module single push-button with potentiometer 10 kΩ (3 pole)      | BIS-59  | 400.1281.1 |
|                                       | Control module double push-button  | BIS-52  | 400.1276.1 |
|                                       | Control module double push-button for high switching current (up to 2 A) | BIS-60  | 400.1280.1 |
|                                       | Control module double push-button with potentiometer 1 kΩ                | BIS-64  | 400.1327.1 |
|                                       | Control module double push-button with potentiometer 2.2 kΩ              | BIS-74  | 400.1328.1 |
|                                       | Control module double push-button with potentiometer 4.7 kΩ              | BIS-84  | 400.1329.1 |
|                                       | Control module double push-button with potentiometer 10 kΩ               | BIS-54  | 400.1278.1 |
|                                       | Control module double push-button with potentiometer 47 kΩ               | BIS-94  | 400.1330.1 |
|                                       | Control module double push-button with compensator                       | BIS-67  | 400.1282.1 |
|                                       | Control module UP / DOWN (device-dependent)                              | BIS-65  | 400.1279.1 |
|                                       | Control module UP / DOWN (compatible with Stel® / CEA®)                  | BIS-85  | 400.1367.1 |
|                                       | Control module UP / DOWN (compatible with Lorch®)                        | BIS-95  | 400.1277.1 |
|                                       | Control module UP / DOWN (compatible with CEA®)                          | BIS-98  | 400.1368.1 |
|                                       | Control module single push-button with rubber calotte                    | BIS-R1  | 400.1378.1 |

<sup>1</sup> apart from TIG welding torches ABITIG® GRIP with rotary valve and TIG machine torches

## II. Handles ABITIG® GRIP Little and control modules

| Type   | Description   | Details | Part-No.   |
|--|---|---------|------------|
| all ABITIG® GRIP Little torches <sup>1</sup> | Handle ABITIG® GRIP Little, without control module                  |         | 180.0131.1 |
| all ABITIG® GRIP Little torches <sup>1</sup> | Control module single push-button                                   | BIS-51  | 400.1296.1 |
|  | Control module single push-button (lower release force than BIS-51) | BIS-51  | 400.1647.1 |
|  | Control module double push-button                                   | BIS-52  | 400.1292.1 |
|  | Control module UP / DOWN (device-dependent)                         | BIS-55  | 400.1388.1 |
|  | Control module UP / DOWN (device-dependent)                         | BIS-65  | 400.1318.1 |
|  | Control module UP / DOWN (compatible with Stel® / CEA®)             | BIS-85  | 400.1375.1 |
|  | Control module UP / DOWN (compatible with Lorch®)                   | BIS-95  | 400.1354.1 |
|  | Lid (5 pcs.)  | BIS-57  | 400.1402.5 |

<sup>1</sup> apart from TIG welding torches ABITIG® GRIP with rotary valve and TIG machine torches

## III. Handles and rotary valves

| Type                       | Description  | Part-No. |
|----------------------------|--------------|----------|
| ABITIG® 9 V / 17 V / 17 FV | Handle       | 705.1440 |
|                            | Rotary valve | 705.0046 |
| ABITIG® 26 V / 26 FV       | Handle       | 705.0096 |
|                            | Rotary valve | 705.0097 |

## Handle ABITIG® GRIP Little



**BIS-51 /**  
**BIS-51** (lower release force)  
ED = Single push-button



**BIS-52**  
DD = Double push-button /  
Button short (in Torch-Price-List  
Standard, under DD)



**BIS-55**  
UD = UP / DOWN  
(device-dependent)



**BIS-65**  
UD = UP / DOWN  
(device-dependent)



**BIS-85**  
UD = UP / DOWN  
(compatible with Stel® / CEA®)



**BIS-95**  
UD = UP / DOWN  
(compatible with Lorch®)



**BIS-57**  
Lid (5 pcs.)



appropriate handle  
Part-No.: 180.0131.1

### Abbreviations for switch functions:

|                  |  |
|------------------|--|
| ED               | Single push-button   |
| DD               | Double push-button   |
| UD               | UP / DOWN (two switches)   |
| EDP <sup>1</sup> | Single push-button with potentiometer 10 kΩ,<br>other factors on request<br>(e.g. 1.0 kΩ, 2.2 kΩ, 4.7 kΩ, 47 kΩ) |
| DDP <sup>1</sup> | Double push-button with potentiometer 10 kΩ,<br>other factors on request<br>(e.g. 1.0 kΩ, 2.2 kΩ, 4.7 kΩ, 47 kΩ) |

<sup>1</sup>In the case of potentiometer regulation in the handle,  
an HF-filter is essential if the potentiometer cable runs  
through the remote control connector and is started with  
high voltage pulses. If there is no HF-filter, the HF pulses  
may damage the control electronics.

Please order the HF-control cable filter DGF 3 by using  
the Part-No. 184.0162.

## Handle ABITIG® GRIP



**BIS-51**  
ED = Single push-button



**BIS-52**  
DD = Double push-button /  
Button long



**BIS-54 / -64 / -74 / -84 / -94**  
DDP = Double push-button /  
Poti xx kΩ (see page 44)



**BIS-59**  
EDP = Single push-button /  
Poti 10 kΩ (compatible with  
Migatronic®, 3 pole)



**BIS-60**  
DD = Double push-button /  
Button long for high switching  
current up to 2 A



**BIS-65**  
UD = UP / DOWN  
(device-dependent)



**BIS-67**  
DD = Double push-button /  
Compensator



**BIS-85**  
UD = UP / DOWN  
(compatible with Stel® / CEA®)



**BIS-95**  
UD = UP / DOWN  
(compatible with Lorch®)



**BIS-98**  
UD = UP / DOWN  
(compatible with CEA®)

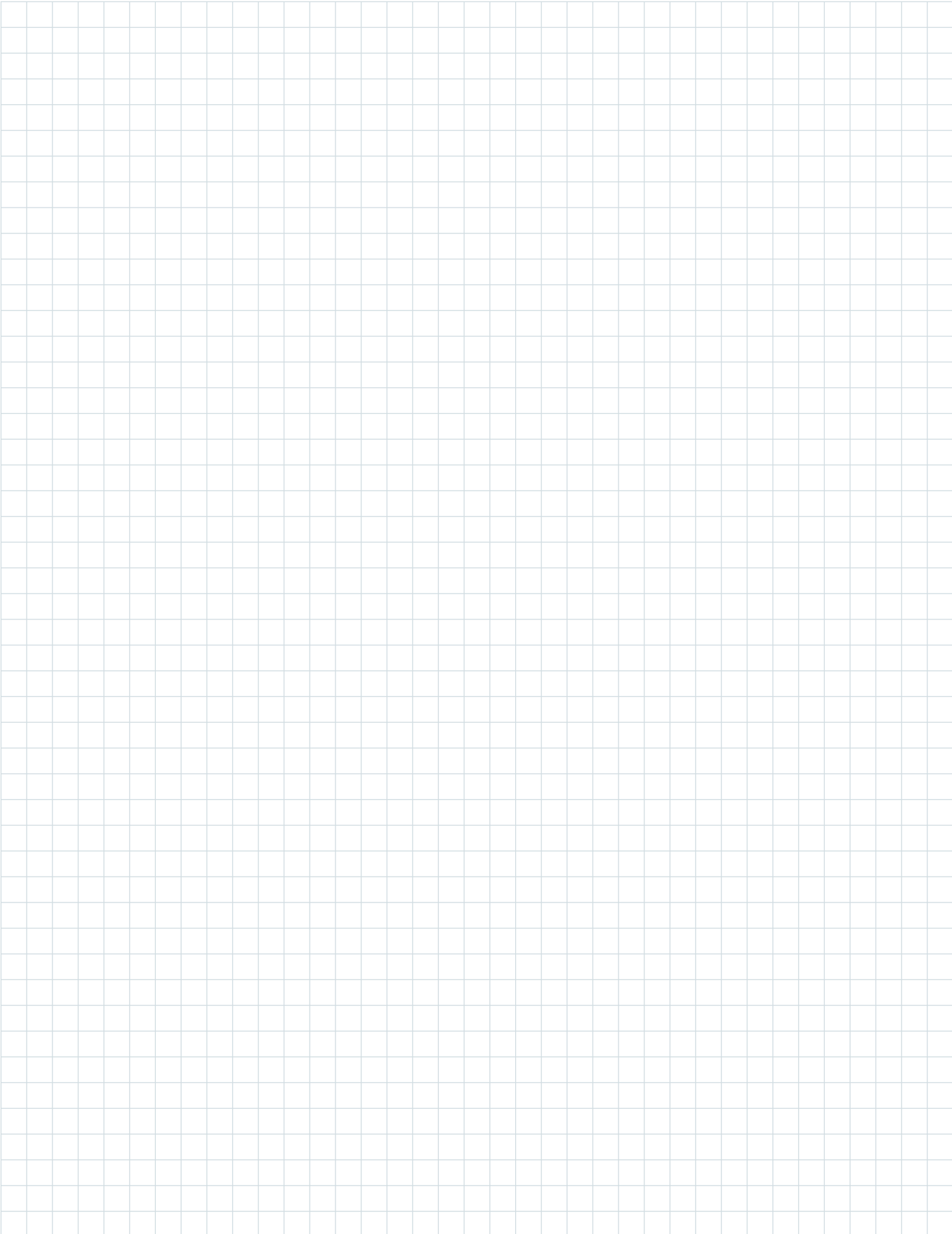


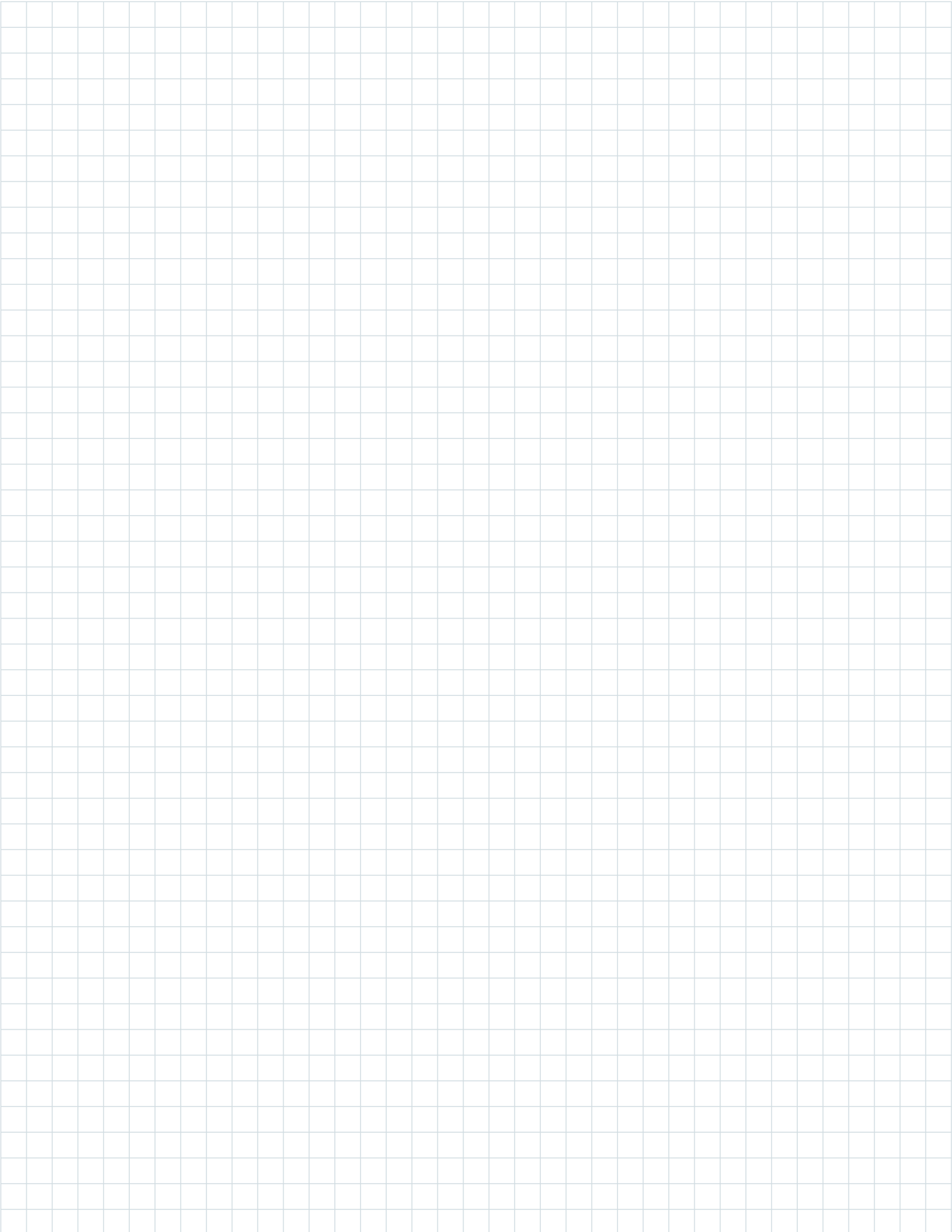
**BIS-R1**  
ED = Single push-button  
with rubber calotte



appropriate handle  
Part-No.: 180.0130.1

# Notes





## Our product range:

### ■ MIG/MAG

- Welding Torches
- Machine and Special Torches
- Push-Pull Welding Torches
- Fume Extraction Torches
- Central Adaptor System

### ■ TIG

- Welding Torches
- Machine and Special Torches

### ■ PLASMA

- Cutting Torches
- Welding Torches
- Machine and Special Torches

### ■ ROBOTIC SYSTEMS

- Robot Torches MIG/TIG/PLASMA
- Electronic Welding Regulator
- Laser Heads
- Seam Tracking Sensors
- TCP Programming Aid
- Robot Mounts
- Wire Cutting Station
- Torch Cleaning Station
- Wire Feeding Systems

### ■ Welding Accessories

- Fumes Extraction Systems
- Coolers
- Welding Cable Plug and Socket
- Anti Spatter Spray and Paste  
and so on ...



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